**3GPP TSG-RAN WG3 Meeting #128 R3-253325**

**Malta, MT, 19th – 23rd May, 2025**

**Agenda item:** 13.2

**Source:** Lenovo, Huawei, LG Electronics

**Title:** [TP to BLCR for TS 38.423] Inter-CU LTM in DC

**Document for:** Other

1. Introduction

This contribution provides text proposal for inter-CU LTM in DC to capture the agreements made in RAN3#128 meeting.

2. Text Proposal

<<<<<<<<<<<<<<<<<<<< Start of Changes >>>>>>>>>>>>>>>>>>>>

## 8.3 Procedures for Dual Connectivity

### 8.3.1 S-NG-RAN node Addition Preparation

#### 8.3.1.1 General

The purpose of the S-NG-RAN node Addition Preparation procedure is to request the S-NG-RAN node to allocate resources for dual connectivity operation for a specific UE. Possible parallel requests are identified by the PCell ID when the initiating NG-RAN node UE AP IDs are the same.

The procedure uses UE-associated signalling.

#### 8.3.1.2 Successful Operation



Figure 8.3.1.2-1: S-NG-RAN node Addition Preparation, successful operation

The M-NG-RAN node initiates the procedure by sending the S-NODE ADDITION REQUEST message to the S-NG-RAN node.

When the M-NG-RAN node sends the S-NODE ADDITION REQUEST message, it shall start the timer TXnDCprep.

The allocation of resources according to the values of the *Allocation and Retention Priority* IE included in the *QoS Flow Level QoS Parameters* IE for each QoS flow shall follow the principles specified for the PDU Session Resource Setup procedure in TS 38.413 [5].

The S-NG-RAN node shall choose the ciphering algorithm based on the information in the *UE Security Capabilities* IE and locally configured priority list of AS encryption algorithms and apply the key indicated in the *S-NG-RAN node Security Key* IE as specified in TS 33.501 [28].

If the *TSC Traffic Characteristics* IE is included for a QoS flow in the S-NODE ADDITION REQUEST message, the S-NG-RAN node shall behave the same as the NG-RAN node in the PDU Session Resource Setup procedure, specified in TS 38.413 [5].

If the *Additional QoS* *Flow Information* IE is included for a QoS flow in the S-NODE ADDITION REQUEST message, the S-NG-RAN node shall behave the same as the NG-RAN node in the PDU Session Resource Setup procedure, specified in TS 38.413 [5].

For each GBR QoS flow, if the *Alternative QoS Parameters Set List* IE is included in the *GBR QoS Flow Information* IE, the S-NG-RAN node shall, if supported, behave the same as the NG-RAN node in the PDU Session Resource Setup procedure specified in TS 38.413 [5].

For each PDU session, if the *Network Instance* IE is included in the *PDU Session Resource Setup Info – SN terminated* IE contained in the *PDU Session Resources To Be Added List* IE and the *Common Network Instance* IE is not present, the S-NG-RAN node shall, if supported, use it when selecting transport network resource as specified in TS 23.501 [7].

For each GBR QoS flow, if the *Offered GBR QoS Flow Information* IE is included in the *QoS Flows To Be Setup List* IE contained in the *PDU Session Resource Setup Info – SN terminated* IE, the S-NG-RAN node may request the M-NG-RAN node to configure the DRB to which that QoS flow is mapped with MCG resources.

For each PDU session, if the *Non-GBR Resources Offered* IE is included in the *PDU Session Resource Setup Info – SN terminated* IE contained in the *PDU Session Resources To Be Added List* IE and set to "true", the S-NG-RAN node may request the M-NG-RAN node to configure DRBs to which non-GBR QoS flows of the PDU session are mapped with MCG resources.

For each PDU session, if the *Common* *Network Instance* IE is included in the *PDU Session Resource Setup Info – SN terminated* IE contained in the *PDU Session Resources To Be Added List* IE, the S-NG-RAN node shall, if supported, use it when selecting transport network resource as specified in TS 23.501 [7].

Redundant transmission:

- For each PDU session, if the *Redundant UL NG-U UP TNL Information at UPF* IE is included in the *PDU Session Resource Setup Info – SN terminated* IE, the S-NG-RAN node shall, if supported, use it as the uplink termination point for the user plane data for this PDU session for the redundant transmission and it shall include the *Redundant DL NG-U UP TNL Information at NG-RAN* IE in the *PDU Session Resource Setup Response Info – SN terminated* IE as described in TS 23.501 [7].

- For each PDU session, if the *Redundant Common Network Instance* IE is included in the *PDU Session Resource Setup Info – SN terminated* IE the S-NG-RAN node shall, if supported, use it when selecting transport network resource for the redundant transmission as specified in TS 23.501 [7].

- For each PDU session for which the *Redundant QoS Flow Indicator* IE is include in *QoS Flows To Be Setup List* IE contained in the *S-NODE ADDITION REQUEST* message, the S-NG-RAN node shall, if supported, store and use it as specified in TS 23.501 [7].

- For each PDU session, if the *Redundant PDU Session Information* IE is included in the *PDU Session Resource Setup Info - SN terminated* IE in the S-NODE ADDITION REQUEST message, the S-NODE-RAN node shall, if supported, store the received information in the UE context and setup the redundant user plane resources for the concerned PDU session, as specified in TS 23.501 [7].

- For each PDU session resource successfully setup for which the *Redundant PDU Session Information* IE is included in the S-NODE ADDITION REQUEST message, the S-NG-RAN node shall, if supported, include the *Used RSN Information* IE in the *PDU Session Resource Setup Response Info – SN terminated* IE in the S-NODE ADDITION REQUEST ACKNOWLEDGE message. If the *PDU Session Pair ID* IE is included in the *Redundant PDU Session Information* IE, the S-NG-RAN node may store and use it to identify the paired PDU sessions.

If the S-NODE ADDITION REQUEST message contains the *Selected PLMN* IE, the S-NG-RAN node may use it for RRM purposes. If the S-NODE ADDITION REQUEST message also contains the *Selected NID* IE, the S-NG-RAN node may decide to use the SNPN identified by the *Selected PLMN* IE and *Selected NID* IE for its own usage.

If the S-NODE ADDITION REQUEST message contains the *Expected UE Behaviour* IE, the S-NG-RAN node shall, if supported, store this information and may use it to optimize resource allocation.

If the S-NODE ADDITION REQUEST message contains the *Mobility Restriction List* IE, the S-NG-RAN node, if supported, shall store this information and use it to select an appropriate SCG.

If the S-NODE ADDITION REQUEST message contains the *Index to RAT/Frequency Selection Priority* IE, the S-NG-RAN node may use it for RRM purposes.

If the S-NG-RAN node is a gNB and the S-NODE ADDITION REQUEST message contains the *PCell ID* IE, the S-NG-RAN node shall search for the target NR cell among the NR neighbour cells of the PCell indicated, as specified in the TS 37.340 [8].

If the S-NODE ADDITION REQUEST message contains the *S-NG-RAN node PDU Session Aggregate Maximum Bit Rate* IE, the S-NG-RAN node may use it for RRM purposes.

If the S-NODE ADDITION REQUEST message contains the *MR-DC Resource Coordination Information* IE, the S-NG-RAN node should forward it to lower layers and it may use it for the purpose of resource coordination with the M-NG-RAN node, or to coordinate with sidelink resources used in the M-NG-RAN node. The S-NG-RAN node shall consider the value of the received *UL Coordination Information* IE valid until reception of a new update of the IE for the same UE. The S-NG-RAN node shall consider the value of the received *DL Coordination Information* IE valid until reception of a new update of the IE for the same UE. If the *E-UTRA Coordination Assistance Information* IE or the *NR Coordination Assistance Information* IE is contained in the *MR-DC Resource Coordination Information* IE, the S-NG-RAN node shall, if supported, use the information to determine further coordination of resource utilisation between the S-NG-RAN node and the M-NG-RAN node.

If the S-NODE ADDITION REQUEST message contains the *NE-DC TDM Pattern* IE, the S-NG-RAN node should forward it to lower layers and use it for the purpose of single uplink transmission. The S-NG-RAN node shall consider the value of the received *NE-DC TDM Pattern* IE valid until reception of a new update of the IE for the same UE.

If the S-NODE ADDITION REQUEST message contains the *QoS Flow Mapping Indication* IE, the S-NG-RAN node may take it into account that only the uplink or downlink QoS flow is mapped to the DRB.

For each bearer for which allocation of the PDCP entity is requested at the S-NG-RAN node:

- the M-NG-RAN node may propose to apply forwarding of downlink data by including the *DL Forwarding* IE within *PDU Session Resource Setup Info – SN terminated* IE of the S-NODE ADDITION REQUEST message. For each bearer that it has decided to admit, the S-NG-RAN node may include the *DL Forwarding GTP Tunnel Endpoint* IE within the *PDU Session Resource Setup Response Info – SN terminated* IE of the S-NODE ADDITION REQUEST ACKNOWLEDGE message to indicate that it accepts the proposed forwarding of downlink data for this bearer.

- the S-NG-RAN node may include for each bearer in the *PDU Session Resource Setup Response Info – SN terminated* IE the *UL Forwarding GTP Tunnel Endpoint* IE to indicates it request data forwarding of uplink packets to be performed for that bearer.

- the M-NG-RAN node shall include *RLC Mode* IE for each bearer offloaded from M-NG-RAN node to S-NG-RAN node in the *DRBs to QoS Flow Mapping List* IE within the *PDU Session Resource Setup Info – SN terminated* IE of the S-NODE ADDTION REQUEST message, and the *RLC Mode* IE indicates the mode that the M-NG-RAN used for the DRB when it was hosted at the M-NG-RAN node.

For each bearer for which the PDCP entity is at the M-NG-RAN node:

- the M-NG-RAN node shall include the *RLC mode* IE for each bearer in the *DRBs To Be Setup List* IE within the *PDU Session Resource Setup Info – MN terminated* IE of the S-NODE ADDTION REQUEST message to indicate the RLC mode has been configured at the M-NG-RAN node, so that the S-NG-RAN node shall configure the same RLC mode for this MN terminated split bearer.

The M-NG-RAN node may also propose to apply forwarding of UL data when offloading QoS flows for which in-order delivery is requested by including the *UL Forwarding* *Proposal* IE in the *Data Forwarding and Offloading Info from source NG-RAN node* IE within the *PDU Session Resource Setup Info – SN terminated* IE of the S-NODE ADDITION REQUEST message. The S-NG-RAN node may include the *PDU Session level UL data Forwarding UP TNL Information* IE in the *Data Forwarding Info from target NG-RAN node* IE within the *PDU Session Resource Setup Response Info – SN terminated* IE of the S-NODE ADDITION REQUEST ACKNOWLEDGE message to indicate that it accepts the proposed forwarding.

If the *Masked IMEISV* IE is contained in the S-NODE ADDITION REQUEST message the S-NG-RAN node shall, if supported, use it to determine the characteristics of the UE for subsequent handling.

If the *UE Radio Capability ID* IE is contained in the S-NODE ADDITION REQUEST message, the S-NG-RAN node shall, if supported, store this information in the UE context and use it as defined in TS 23.501 [7] and TS 23.502 [13].

The S-NG-RAN node shall report to the M-NG-RAN node, in the S-NODE ADDITION REQUEST ACKNOWLEDGE message, the result for all the requested PDU session resources in the following way:

- A list of PDU session resources which are successfully established shall be included in the *PDU Session Resources Admitted To Be Added List* IE.

- A list of PDU session resources which failed to be established shall be included in the *PDU Session Resources Not Admitted List* IE.

Upon reception of the S-NODE ADDITION REQUEST ACKNOWLEDGE message the M-NG-RAN node shall stop the timer TXnDCprep.

If the S-NODE ADDITION REQUEST ACKNOWLEDGE message contains the *MR-DC Resource Coordination Information* IE, the M-NG-RAN node may use it for the purpose of resource coordination with the S-NG-RAN node. The M-NG-RAN node shall consider the value of the received *UL Coordination Information* IE valid until reception of a new update of the IE for the same UE. The M-NG-RAN node shall consider the value of the received *DL Coordination Information* IE valid until reception of a new update of the IE for the same UE. If the *E-UTRA Coordination Assistance Information* IE or the *NR Coordination Assistance Information* IE is contained in the *MR-DC Resource Coordination Information* IE, the M-NG-RAN node shall, if supported, use the information to determine further coordination of resource utilisation between the M-NG-RAN node and the S-NG-RAN node.

The S-NG-RAN node may include for each bearer in the *DRBs To Be Setup List* IE in the S-NODE ADDITION REQUEST ACKNOWLEDGE message the *PDCP SN Length* IE to indicate the PDCP SN length for that DRB.

If the *S-NG-RAN node UE XnAP ID* IE is contained in the S-NODE ADDITION REQUEST message, the S-NG-RAN node shall, if supported, store this information and use it as defined in TS 37.340 [8].

If the S-NODE ADDITION REQUEST message contains the *PDCP SN Length* IE, the S-NG-RAN node shall, if supported, store this information and use it for lower layer configuration of the concerned MN terminated bearer.

If the S-NODE ADDITION REQUEST message contains the *SN Addition Trigger Indication* IE, the S-NG-RAN node shall include the *RRC config indication* IE in the S-NODE ADDITION REQUEST ACKNOWLEDGE message to inform the M-NG-RAN node if the S-NG-RAN node applied full or delta configuration, as specified in TS 37.340 [8].

If the S-NODE ADDITION REQUEST message contains the *S-NG-RAN node Maximum Integrity Protected Data Rate* *Uplink* IE or the *S-NG-RAN node Maximum Integrity Protected Data Rate Downlink* IE, the S-NG-RAN node shall use the received information when enforcing the maximum integrity protected data rate for the UE.

If the *Security Indication* IE is included in the *PDU Session Resource Setup Info – SN terminated* IE of the S-NODE ADDITION REQUEST message, the behaviour of the S-NG-RAN node shall be the same as specified for the same IE in the *PDU Session Resources To Be Setup List* IE in the Handover Preparation procedure, for the concerned PDU session, and the S-NG-RAN node shall include the *Security Result* IE in the *PDU Session Resource Setup Response Info – SN terminated* IE. If either the S-NG-RAN node or the M-NG-RAN node is an ng-eNB, the S-NG-RAN node shall behave as specified in TS 33.501 [28].

If the *Security Result* IE is included in the *PDU Session Resource Setup Info – SN terminated* IE of the S-NODE ADDITION REQUEST message, the S-NG-RAN node may take the information into account when deciding whether to perform user plane integrity protection or ciphering for the DRBs that it establishes for the concerned PDU session, except if the *Split Session Indicator* IE is included in the *PDU Session Resource Setup Info – SN terminated* IE and set to "split", in which case it shall perform user plane integrity protection or ciphering according to the information in the *Security Result* IE*.*

The S-NG-RAN node may include the *Location Information at S-NODE* IE in the S-NODE ADDITION REQUEST ACKNOWLEDGE message, if respective information is available at the S-NG-RAN node.

If the *Location Information at S-NODE reporting* IE set to "pscell" is included in the S-NODE ADDITION REQUEST, the S-NG-RAN node shall, start providing information about the current location of the UE. If the *Location Information at S-NODE* IE is included in the S-NODE ADDITION REQUEST ACKNOWLEDGE, the M-NG-RAN node shall store the included information so that it may be transferred towards the AMF.

If the *Default DRB Allowed* IE is included in the *PDU Session Resource Setup Info – SN terminated* IE of the S-NODE ADDITION REQUEST message and set to "true", the S-NG-RAN node may configure the default DRB for the PDU session.

If the S-NODE ADDITION REQUEST ACKNOWLEDGE message includes the *DRB IDs taken into use* IE, the M-NG-RAN node, if applicable, shall act as specified in TS 37.340 [8].

If *Trace Activation* IE has previously been received for this UE, it shall be included in the S-NODE ADDITION REQUEST message. If the *Trace Activation* IE is included in the S-NODE ADDITION REQUEST message, the S-NG-RAN node shall, if supported, initiate the requested trace function as described in TS 32.422 [23].

If the *Trace Activation* IE is included in the S-NODE ADDITION REQUEST message which includes

- the *MDT Activation* IE set to "Immediate MDT and Trace", then the S-NG-RAN node shall if supported, initiate the requested trace session and MDT session as described in TS 32.422 [23].

- the *MDT Activation* IE set to "Immediate MDT Only", the S-NG-RAN node shall, if supported, initiate the requested MDT session as described in TS 32.422 [23] and the S-NG-RAN node shall ignore the *Interfaces To Trace* IE, and the *Trace Depth* IE.

- the *MDT Location Information* IE, within the *MDT Configuration* IE, the S-NG-RAN node shall, if supported, store this information and take it into account in the requested MDT session.

- the *MDT Activation* IE set to "Immediate MDT Only", and if the *Signalling based MDT PLMN List* IE is included in the *MDT Configuration* IE, the S-NG-RAN node may use it to propagate the MDT Configuration as described in TS 37.320 [43].

NOTE: If the Signalling based MDT PLMN List within the MDT Configuration-EUTRA is not available in the M-NG-RAN node, it includes the current serving PLMN in the *Signalling based MDT PLMN List* IE within the *MDT Configuration-EUTRA* IE.

- the *Bluetooth Measurement Configuration* IE, within the *MDT Configuration* IE, the S-NG-RAN node shall, if supported, take it into account for MDT Configuration as described in TS 37.320 [43].

- the *WLAN Measurement Configuration* IE, within the *MDT Configuration* IE, the S-NG-RAN node shall, if supported, take it into account for MDT Configuration as described in TS 37.320 [43].

- the *Sensor Measurement Configuration* IE, within the *MDT Configuration* IE, the S-NG-RAN node shall take it into account for MDT Configuration as described in TS 37.320 [43].

- the *MDT Configuration* IE and if the S-NG-RAN node is a gNB at least *the MDT Configuration-NR* IE shall be present, while if the S-NG-RAN Node is an ng-eNB at least the *MDT Configuration-EUTRA* IE shall be present.

If the *Area Scope* IE is not present in the *MDT Configuration* IE, the S-NG-RAN node shall consider that the MDT Configuration is applied to all PLMNs indicated in the MDT PLMN List, as described in TS 32.422 [23].

If the *Requested Fast MCG recovery via SRB3* IE set to "true" is included in the S-NODE ADDITION REQUEST message and the S-NG-RAN node decides to configure fast MCG link recovery via SRB3 as specified in TS 37.340 [8], the S-NG-RAN node shall, if supported, include the *Available fast MCG recovery via SRB3* IE set to "true" in the S-NODE ADDITION REQUEST ACKNOWLEDGE message.

If the *QoS Monitoring Request* IE is included in the *QoS Flow Level QoS Parameters* IE for a QoS flow contained in the *DRBs To Be Setup List* IE of the *PDU Session Resource Setup Info – MN terminated* IE, the S-NG-RAN node shall, if supported, use it to configure lower layers for the purpose of delay measurement and QoS monitoring as specified in TS 23.501 [7]. If the *QoS Monitoring Reporting Frequency* IE is included in the *QoS Flow Level QoS Parameters* IE for a QoS flow contained in the *DRBs To Be Setup List* IE of the *PDU Session Resource Setup Info – MN terminated* IE, the S-NG-RAN node shall, if supported, use it for RAN part delay reporting.

For each QoS flow which has been successfully established in the S-NG-RAN node, if the *QoS Monitoring Request* IE was included in the *QoS Flow Level QoS Parameters* IE contained in the *PDU Session Resource Setup Info – SN terminated* IE, the S-NG-RAN node shall store this information, and shall, if supported, perform delay measurement and QoS monitoring as specified in TS 23.501 [7]. If the *QoS Monitoring Reporting Frequency* IE was included in the *QoS Flow Level QoS Parameters* IE contained in the *PDU Session Resource Setup Info – SN terminated* IE, the S-NG-RAN node shall store this information, and shall, if supported, use it for RAN part delay reporting. In case such a QoS flow is included in the *DRBs To Be Setup List* IE of the *PDU Session Resource Setup Response Info – SN terminated* IE, the M-NG-RAN node shall, if supported, use it to configure lower layers for the purpose of delay measurement and QoS monitoring. If the *QoS Monitoring Reporting Frequency* IE is included in the *DRBs To Be Setup List* IE of the *PDU Session Resource Setup Response Info – SN terminated* IE, the M-NG-RAN node shall, if supported, use it for RAN part delay reporting.

For each DRB configured as MN-terminated split bearer/SCG bearer, if the *QoS Mapping Information* IE is included in the *DRBs Admitted List* IE in the *PDU Session Resource Setup Response Info – MN terminated* IE of the S-NODE ADDITION REQUEST ACKNOWLEDGE message, the M-NG-RAN node shall, if supported, use it to set DSCP and/or IPv6 flow label fields for the downlink IP packets which are transmitted from M-NG-RAN node to S-NG-RAN node through the GTP tunnels indicated by the *UP Transport Layer Information* IE.

If the *Source NG-RAN Node ID* IE is included in the S-NODE ADDITION REQUEST message, the S-NG-RAN node shall, if supported, use it to decide the direct data path availability with the indicated source NG-RAN node, and if the direct data forwarding path is available, include the *Direct Forwarding Path Availability* IE set to "direct path available" in the S-NODE ADDITION REQUEST ACKNOWLEDGE message.

If for a given QoS Flow the *Source DL Forwarding IP Address* IE or both, the *Source DL Forwarding IP Address* IEand the *Source Node DL Forwarding IP Address* IE are included within the *Data Forwarding and* *Offloading Info from source NG-RAN node* IE in the *PDU Session Resource Setup Info – SN terminated* IE contained in the S-NODE ADDITION REQUEST message, the S-NG-RAN node shall, if supported, store this information and use it as part of its ACL functionality configuration actions, if such ACL functionality is deployed.

If for a given QoS Flow the *Source DL Forwarding IP Address* IE is included within the *QoS Flows Mapped To DRB List* IE in the *PDU Session Resource Setup Response Info – SN terminated* IE contained in the S-NODE ADDITION REQUEST ACKNOWLEDGE message, the M-NG-RAN node shall, if supported, store this information and use it as part of its ACL functionality to identify source TNL address for data forwarding in case of subsequent handover preparation, if such ACL functionality is deployed.

If the *Management Based MDT PLMN List* IE is contained in the S-NODE ADDITION REQUEST message, the S-NG-RAN node shall, if supported, store the received information in the UE context, and use this information to allow subsequent selection of the UE for management based MDT defined in TS 32.422 [23].

Upon reception of the S-NODE ADDITION REQUEST message, the S-NG-RAN node shall, if supported, start collecting SCG information and continue for as long as the UE stays in one of its cells.

If the *UE History Information* IE is included in the S-NODE ADDITION REQUEST message, the S-NG-RAN node shall, if supported, store this information.

If the *UE History Information from the UE* IE is included in the S-NODE ADDITION REQUEST message, the S-NG-RAN node shall, if supported, store this information.

If the *PSCell Change History* IE set to "reporting full history" is included in the S-NODE ADDITION REQUEST message, the S-NG-RAN node shall, if supported, signal the latest SCG UE History Information upon each PSCell change, to the M-NG-RAN node, using the S-NG-RAN node initiated S-NG-RAN node Modification procedure.

If the *IAB Node Indication* IE set to "true" is contained in the S-NODE ADDITION REQUEST message, the S-NG-RAN node shall, if supported, consider that dual connectivity operation is requested for an IAB-node. In addition:

- If the *No PDU Session Indication* IE is contained in the S-NODE ADDITION REQUEST message, the S-NG-RAN node shall, if supported, consider the UE as an IAB-node which does not have any PDU sessions activated, and ignore the *PDU Session Resources To Be Added List* IE, and shall not take any action with respect to PDU session setup. Subsequently, the M-NG-RAN node shall, if supported, ignore the *PDU Session Resources Admitted To Be Added List* IE in the S-NODE ADDITION REQUEST ACKNOWLEDGE message.

- If the *F1-terminating IAB-donor Indicator* IE set to "true" is contained in the S-NODE ADDITION REQUEST message, the S-NG-RAN node shall, if supported, assume that it will become the F1-terminating IAB-donor of the IAB-node, and act as described in TS 38.401 [2].

If the *CHO Information SN Addition* IE is included in the S-NODE ADDITION REQUEST message, the S-NG-RAN node shall consider that the S-NG-RAN node Addition Preparation procedure has been triggered as part of a conditional handover. It may use the *Source M-NG-RAN node ID* IE and the *Source M-NG-RAN node UE XnAP ID* IE to identify other active S-NG-RAN node Addition Preparations related to this UE. If the *PCell ID* IE is also included in the S-NODE ADDITION REQUEST message, then the S-NG-RAN node shall, if supported, include the *PCell ID* IE within the *CHO Information SN Addition Acknowledge* IE of the S-NODE ADDITION REQUEST ACKNOWLEDGE message. If the *Estimated Arrival Probability* IE is contained in the *CHO Information SN Addition* IE included in the S-NODE ADDITION REQUEST message, then the S-NG-RAN node may use the information to allocate necessary resources for the UE. If the *Direct Forwarding Path Availability with source M-NG-RAN node* IE set to "direct path available" is included in the S-NODE ADDITION REQUEST ACKNOWLEDGE message, the M-NG-RAN node shall, if supported, consider that the direct forwarding path is available between the target S-NG-RAN node and the source M-NG-RAN node.

If the *SCG Activation Request* IE is included in the S-NODE ADDITION REQUEST message, the S-NG-RAN node may use it to configure SCG resources as specified in TS 37.340 [8], and shall, if supported, include the *SCG Activation Status* IE in the S-NODE ADDITION REQUEST ACKNOWLEDGE message. If the *SCG Activation Request* IE in the S-NODE ADDITION REQUEST message is set to "Activate SCG", the S-NG-RAN node shall, if supported, activate the SCG resources and set the *SCG Activation Status* IE in the S-NODE ADDITION REQUEST ACKNOWLEDGE message to "SCG activated".

If the *Conditional PSCell Addition Information Request* IE is included in the S-NODE ADDITION REQUEST message, the S-NG-RAN node shall, if supported, consider that the request concerns CPAC, as described in TS 37.340 [8]. Accordingly, the S-NG-RAN node shall, if supported, include the *Conditional PSCell Addition Information Acknowledge* IE in the S-NODE ADDITION REQUEST ACKNOWLEDGE message.

If *the S-CPAC Request Information* IE is contained in the *Conditional PSCell Addition Information Request* IE included in the S-NODE ADDITION REQUEST message, the S-NG-RAN node shall, if supported, consider that the procedure is triggered for S-CPAC preparation. If the S-NG-RAN node accepts the request as a S-CPAC preparation, it shall include the *Candidate PSCell with Other Information List* IE in the *Conditional PSCell Addition Information Acknowledge* IE.

If the *S-CPAC Reference Configuration Request* IE set to "request" is contained in the *Conditional PSCell Addition Information Request* IE included in the S-NODE ADDITION REQUEST message, the S-NG-RAN node shall, if supported, provide the SCG reference configuration for S-CPAC.

If the *S-CPAC Multiple Target S-NG-RAN Node List* IE is contained within the *S-CPAC Request Information* IE in the *Conditional PSCell Addition Information Request* IE included in the S-NODE ADDITION REQUEST message, the S-NG-RAN node shall, if supported, consider that the information pertains to a list of PSCells suggested for other candidate SN(s) may also be prepared for S-CPAC, and act as described in TS 37.340 [8].

If the *Conditional PSCell Addition Information Acknowledge* IE is included in the S-NODE ADDITION REQUEST ACKNOWLEDGE message, the M-NG-RAN node shall, if supported, consider the indicated PSCells are selected by the target SN as candidate PSCells for CPAC or S-CPAC.

If the S-NG-RAN node applied a complete candidate configuration for a specific PSCell, e.g., as part of preparation of S-CPAC, the S-NG-RAN node shall inform the M-NG-RAN node by including the *S-CPAC Complete Candidate Configuration Indicator* IE in the *Candidate PSCell with Other Information Item* IE in the *Conditional PSCell Addition Information Acknowledge* IE in the S-NODE ADDITION REQUEST ACKNOWLEDGE message.

If the *CG-CandidateList* is included in the *S-NG-RAN node to M-NG-RAN node Container* IE in the S-NODE ADDITION REQUEST ACKNOWLEDGE message, the M-NG-RAN node shall, if supported, use it for the purpose of CPAC or S-CPAC.

If the *Estimated Arrival Probability* IE is contained in the *Conditional PSCell Addition Information Request* IE included in the S-NODE ADDITION REQUEST message, then the candidate target S-NG-RAN node may use the information to allocate necessary resources for the incoming CPAC or S-CPAC procedure.

If the *S-NG-RAN node UE Slice Maximum Bit Rate* IE for a specific S-NSSAI is included in the S-NODE ADDITION REQUEST message, the S-NG-RAN node shall, if supported, store and use the received S-NG-RAN node UE Slice Maximum Bit Rate for all PDU sessions associated with the S-NSSAI for the concerned UE as defined in TS 23.501 [7].

If the S-NODE ADDITION REQUEST ACKNOWLEDGE message includes the *SN Mobility Information* IE, the M-NG-RAN node shall, if supported, store this information and use it as defined in TS 37.340 [8].

If the *QMC Coordination Request* IE is contained in the S-NODE ADDITION REQUEST message, the S-NG-RAN node may use it as specified in TS 37.340 [8], and shall, if supported, include the *QMC Coordination Response* IE in the S-NODE ADDITION REQUEST ACKNOWLEDGE message.

If the *Source SN to Target SN QMC Information* IE is contained in the S-NODE ADDITION REQUEST message, the S-NG-RAN node shall, if supported, use it for QoE measurements handling, as specified in TS 37.340 [8].

If the *Source M-NG-RAN node ID* IE is included in the S-NODE ADDITION REQUEST message, the S-NG-RAN node may use it to deduce direct data path availability with the source M-NG-RAN node, and if the direct data forwarding path is available, may include the *Direct Forwarding Path Availability with source M-NG-RAN node* IE in the S-NODE ADDITION REQUEST ACKNOWLEDGE message.

If the S-NODE ADDITION REQUEST message contains the *IAB Authorization status* IE, the S-NG-RAN node shall, if supported, store it and use it as defined in TS 38.401[2].

If the *LTM Candidate PSCell Addition Information Request* IE is included in the S-NODE ADDITION REQUEST message, the S-NG-RAN node shall, if supported, consider that the M-NG-RAN node has requested the LTM information for the UE in the S-NG-RAN node and include the *LTM Candidate PSCell Addition Information Acknowledge* IE in the S-NODE ADDITION REQUEST ACKNOWLEDGE message.

**Interactions with the S-NG-RAN node Reconfiguration Completion procedure:**

If the S-NG-RAN node admits at least one PDU session resource, the S-NG-RAN node shall start the timer TXnDCoverall when sending the S-NODE ADDITION REQUEST ACKNOWLEDGE message to the M-NG-RAN node except for a request for conditional configuration. The reception of the S-NODE RECONFIGURATION COMPLETE message shall stop the timer TXnDCoverall if TXnDCoverall is running.

**Interaction with the Activity Notification procedure**

Upon receiving an S-NODE ADDITION REQUEST message containing the *Desired Activity Notification Level* IE, the S-NG-RAN node shall, if supported, use this information to decide whether to trigger subsequent Activation Notification procedures according to the requested notification level.

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

### 8.3.3 M-NG-RAN node initiated S-NG-RAN node Modification Preparation

#### 8.3.3.1 General

This procedure is used to enable an M-NG-RAN node to request an S-NG-RAN node to either modify the UE context at the S-NG-RAN node or to query the current SCG configuration for supporting delta signalling in M-NG-RAN node initiated S-NG-RAN node change, or to provide the S-RLF-related information to the S-NG-RAN node.

The procedure uses UE-associated signalling.

#### 8.3.3.2 Successful Operation



Figure 8.3.3.2-1: M-NG-RAN node initiated S-NG-RAN node Modification Preparation, successful operation

The M-NG-RAN node initiates the procedure by sending the S-NODE MODIFICATION REQUEST message to the S-NG-RAN node.

When the M-NG-RAN node sends the S-NODE MODIFICATION REQUEST message, it shall start the timer TXnDCprep.

The S-NODE MODIFICATION REQUEST message may contain

- within the *UE Context Information* IE;

- PDU session resources to be added within the *PDU Session Resources To Be Added Item* IE;

- PDU session resources to be modified within the *PDU Session Resources To Be Modified Item* IE;

- PDU session resources to be released within the *PDU Session Resources To Be Released Item* IE;

- the *S-NG-RAN node Security Key* IE;

- the *S-NG-RAN node UE Aggregate Maximum Bit Rate* IE;

- the *M-NG-RAN node to S-NG-RAN node Container* IE;

- the *PDCP Change Indication* IE;

- the *SCG Configuration Query* IE;

- the *Requested split SRBs IE*;

- the *Requested split SRBs release* IE;

- the *Requested fast MCG recovery via SRB3 IE*;

- the *Requested fast MCG recovery via SRB3 Release* IE;

- the *Additional DRB IDs* IE;

- the *MR-DC Resource Coordination Information* IE.

If the S-NODE MODIFICATION REQUEST message contains the *Selected PLMN* IE, the S-NG-RAN node may use it for RRM purposes. If the S-NODE MODIFICATION REQUEST message also contains the *Selected NID* IE, the S-NG-RAN node may decide to use the SNPN identified by the *Selected PLMN* IE and *Selected NID* IE for its own usage.

If the S-NODE MODIFICATION REQUEST message contains the *Mobility Restriction List* IE, the S-NG-RAN node shall

- replace the previously provided Mobility Restriction List by the received Mobility Restriction List in the UE context;

- use this information to select an appropriate SCG.

If the *S-NG-RAN node UE Aggregate Maximum Bit Rate* IE is included in the S-NODE MODIFICATION REQUEST message, the S-NG-RAN node shall:

- replace the previously provided S-NG-RAN node UE Aggregate Maximum Bit Rate by the received S-NG-RAN node UE Aggregate Maximum Bit Rate in the UE context;

- use the received S-NG-RAN node UE Aggregate Maximum Bit Rate for Non-GBR Bearers for the concerned UE as defined in TS 37.340 [8].

If the *S-NG-RAN node UE Slice Maximum Bit Rate* IE is included in the S-NODE MODIFICATION REQUEST message, the S-NG-RAN node shall, if supported:

- store and replace the previously provided S-NG-RAN node UE Slice Maximum Bit Rate, if any, by the received S-NG-RAN node UE Slice Maximum Bit Rate for each S-NSSAI for the concerned UE;

- use the received S-NG-RAN node UE Slice Maximum Bit Rate for all PDU sessions associated with the S-NSSAI for the concerned UE as defined in TS 23.501 [7].

If the S-NODE MODIFICATION REQUEST message contains the *Index to RAT/Frequency Selection Priority* IE, the S-NG-RAN node may use it for RRM purposes.

If the S-NODE MODIFICATION REQUEST message contains the *S-NG-RAN node PDU Session Aggregate Maximum Bit Rate* IE, the S-NG-RAN node may use it for RRM purposes.

If the S-NODE MODIFICATION REQUEST message contains the *MR-DC Resource Coordination Information* IE, the S-NG-RAN node should forward it to lower layers and it may use it for the purpose of resource coordination with the M-NG-RAN node, or to coordinate with sidelink resources used in the M-NG-RAN node. The S-NG-RAN node shall consider the value of the received *UL Coordination Information* IE valid until reception of a new update of the IE for the same UE. The S-NG-RAN node shall consider the value of the received *DL Coordination Information* IE valid until reception of a new update of the IE for the same UE. If the *E-UTRA Coordination Assistance Information* IE or the *NR Coordination Assistance Information* IE is contained in the *MR-DC Resource Coordination Information* IE, the S-NG-RAN node shall, if supported, use the information to determine further coordination of resource utilisation between the S-NG-RAN node and the M-NG-RAN node.

If the S-NODE MODIFICATION REQUEST message contains the *NE-DC TDM Pattern* IE, the S-NG-RAN node should forward it to lower layers and use it for the purpose of single uplink transmission. The S-NG-RAN node shall consider the value of the received *NE-DC TDM Pattern* IE valid until reception of a new update of the IE for the same UE.

The allocation of resources according to the values of the *Allocation and Retention Priority* IE included in the *QoS Flow Level QoS Parameters* IE for each QoS flow shall follow the principles specified for the PDU Session Resource Setup procedure in TS 38.413 [5].

If the *Additional QoS* *Flow Information* IE is included for a QoS flow in the S-NODE MODIFICATION REQUEST message, the S-NG-RAN node shall behave the same as the NG-RAN node in the PDU Session Resource Setup procedure, specified in TS 38.413 [5].

For each GBR QoS flow, if the *Alternative QoS Parameters Set List* IE is included in the *GBR QoS Flow Information* IE, the S-NG-RAN node shall, if supported, behave the same as the NG-RAN node in the PDU Session Resource Setup procedure specified in TS 38.413 [5].

If the *TSC Traffic Characteristics* IE is included for a QoS flow in the S-NODE MODIFICATION REQUEST message, the S-NG-RAN node shall behave the same as the NG-RAN node in the PDU Session Resource Setup procedure, specified in TS 38.413 [5].

For each PDU session, if the *Network Instance* IE is included in the *PDU Session Resource Setup Info – SN terminated* IE and in the *PDU Session Resource Modification Info – SN terminated* IE and the *Common Network Instance* IE is not present, the S-NG-RAN node shall, if supported, use it when selecting transport network resource as specified in TS 23.501 [7].

For each PDU session, if the *Common* *Network Instance* IE is included in the *PDU Session Resource Setup Info – SN terminated* IE and in the *PDU Session Resource Modification Info – SN terminated* IE, the S-NG-RAN node shall, if supported, use it when selecting transport network resource as specified in TS 23.501 [7].

For each GBR QoS flow, if the *Offered GBR QoS Flow Information* IE is included in the *QoS Flows To Be Setup List* IE contained in the *PDU Session Resource Setup Info – SN terminated* IE, the S-NG-RAN node may request the M-NG-RAN node to configure the DRB to which that QoS flow is mapped with MCG resources.

For each PDU session, if the *Non-GBR Resources Offered* IE is included in the *PDU Session Resource Modification Info – SN terminated* IE contained in the *PDU Session Resources To Be Added List* IE and set to "true", the S-NG-RAN node may request the M-NG-RAN node to configure the DRBs to which non-GBR QoS flows of the PDU session are mapped with MCG resources.

If at least one of the requested modifications is admitted by the S-NG-RAN node, the S-NG-RAN node shall modify the related part of the UE context accordingly and send the S-NODE MODIFICATION REQUEST ACKNOWLEDGE message back to the M-NG-RAN node.

The M-NG-RAN node shall include *RLC Mode* IE for each bearer offloaded from M-NG-RAN node to S-NG-RAN node in the *DRBs to QoS Flow Mapping List* IE within the *PDU Session Resource Setup Info – SN terminated* IE of the S-NODE MODIFICATION REQUEST message, and the *RLC Mode* IE indicates the mode that the M-NG-RAN used for the DRB when it was hosted at the M-NG-RAN node.

The S-NG-RAN node shall include the PDU sessions for which resources have been either added or modified or released at the S-NG-RAN node either in the *PDU Session Resources Admitted To Be Added List* IE or the *PDU Session Resources Admitted To Be Modified List* IE or the *PDU Session Resources Admitted To Be Released List* IE. The S-NG-RAN node shall include the PDU sessions that have not been admitted in the *PDU Session Resources Not Admitted List* IE with an appropriate cause value.

If the M-NG-RAN node requests transfer of the PDCP hosting from the S-NG-RAN node to the M-NG-RAN node for a PDU session, in which case the S-NODE MODIFICATION REQUEST message contains an PDU session resource to be released which is configured with the SCG bearer option within the *PDU Session Resources To Be Released List* IE, the S-NG-RAN node shall include the *RLC Mode* IE within the *DRBs To Be Released List* IE in the *PDU Session Resources admitted to be released List – SN terminated* IE in the S-NODE MODIFICATION REQUEST ACKNOWLEDGE message. The *RLC Mode* IE indicates the RLC mode that the S-NG-RAN node uses for the DRB.

If the *QoS Flow Mapping Indication* IE is included in the S-NODE MODIFICATION REQUEST message for a QoS flow to be modified, the S-NG-RAN node may replace and take it into account that only the uplink or downlink QoS flow is mapped to the DRB.

If the S-NODE MODIFICATION REQUEST message contains for a PDU session resource to be modified which is configured with the SN terminated bearer option, the *UL NG-U UP TNL Information at UPF* IE the S-NG-RAN node shall use it as the new UL NG-U address.

If the S-NODE MODIFICATION REQUEST message contains for a PDU session resource to be modified which is configured with the MN terminated bearer option, the *MN UL PDCP UP TNL Information* IE the S-NG-RAN node shall use it as the new UL Xn-U address.

Redundant transmission:

- If the S-NODE MODIFICATION REQUEST message contains for a PDU session resource to be modified which is configured with the SN terminated bearer option, the *Redundant UL NG-U UP TNL Information at UPF* IE, the S-NG-RAN node shall, if supported, use it as the new UL NG-U address for the redundant transmission as specified in TS 23.501 [7].

- For each PDU session, if the *Redundant Common Network Instance* IE is included in the *PDU Session Resource Setup Info – SN terminated* IE or in the *PDU Session Resource Modification Info – SN terminated* IE, the S-NG-RAN node shall, if supported, use it when selecting transport network resource for the redundant transmission as specified in TS 23.501 [7].

- For each PDU session, if the *Redundant QoS Flow Indicator* IE is set to false for all QoS flows, the S-NG-RAN node shall, if supported, stop the redundant transmission and release the redundant tunnel for the concerned PDU Session as specified in TS 23.501 [7].

- For each PDU session for which the *Redundant QoS Flow Indicator* IE is included in the *S-NODE MODIFICATION REQUEST* message, the S-NG-RAN node shall, if supported, store and use it as specified in TS 23.501 [7].

- For each PDU session, if the *Redundant PDU Session Information* IE is included in the *PDU Session Resource Setup Info - SN terminated* IE in the S-NODE MODIFICATION REQUEST message, the S-NODE-RAN node shall, if supported, store the received information in the UE context and setup the redundant user plane for the concerned PDU session, as specified in TS 23.501 [7]. If the *PDU Session Pair ID* IE is included in the *Redundant PDU Session Information* IE, the S-NG-RAN node may store and use it to identify the paired PDU sessions.

- For each PDU session resource successfully setup for which the *Redundant PDU Session Information* IE is included in the S-NODE MODIFICATION REQUEST message, the S-NG-RAN node shall, if supported, include the *Used RSN Information* IE in the *PDU Session Resource Setup Response Info – SN terminated* IE in the S-NODE MODIFICATION REQUEST ACKNOWLEDGE message.

If the S-NODE MODIFICATION REQUEST message contains the *QoS flows To Be Released List* within the *PDU Session Resource Modification Info – SN terminated* IE, the S-NG-RAN node may propose to apply forwarding of UL data for the QoS flows for which in-order delivery is requested by including the *UL Forwarding* *Proposal* IE in the *Data Forwarding and Offloading Info from source NG-RAN node* IE within the *PDU Session Resource Modification Response Info – SN terminated* IE of the S-NODE MODIFICATION REQUEST ACKNOWLEDGE message.

For a PDU session resource to be modified which is configured with the SN terminated bearer option the S-NG-RAN node may include in the S-NODE MODIFICATION REQUEST ACKNOWLEDGE message the *DL NG-U UP TNL Information at NG-RAN* IE.

For a PDU session resource to be modified which is configured with the MN terminated bearer option the S-NG-RAN node may include in the S-NODE MODIFICATION REQUEST ACKNOWLEDGE message the *SN DL SCG UP TNL Information* IE.

If the *PDCP Change Indication* IE is included in the S-NODE MODIFICATION REQUEST message, the S-NG-RAN node shall act as specified in TS 37.340 [8].

Upon reception of the S-NODE MODIFICATION REQUEST ACKNOWLEDGE message the M-NG-RAN node shall stop the timer TXnDCprep. If the S-NODE MODIFICATION REQUEST ACKNOWLEDGE message has included the *S-NG-RAN node to M-NG-RAN node Container* IE, the M-NG-RAN node is then defined to have a Prepared S-NG-RAN node Modification for that Xn UE-associated signalling.

If the *SCG Configuration Query* IE is included in the S-NODE MODIFICATION REQUEST message, the S-NG-RAN node shall provide corresponding radio configuration information within the *S-NG-RAN node to M-NG-RAN node Container* IE and may provide the corresponding data forwarding related information within the *PDU Session Resources with Data Forwarding List* IE as specified in TS 37.340 [8].

For each bearer for which allocation of the PDCP entity is requested at the S-NG-RAN node:

- if applicable, the M-NG-RAN node may propose to apply forwarding of downlink data by including the DL Forwarding IE within the PDU Session Resource Setup Info – SN terminated IE of the S-NODE MODIFICATION REQUEST message. For each bearer that it has decided to admit, the S-NG-RAN node may include the *DL Forwarding GTP Tunnel Endpoint* IE within the *PDU Session Resource Setup Response Info – SN terminated* IE of the S-NODE MODIFICATION REQUEST ACKNOWLEDGE message to indicate that it accepts the proposed forwarding of downlink data for this bearer.

- the S-NG-RAN node may include for each bearer in the PDU Session Resource Setup Response Info – SN terminated IE the UL Forwarding GTP Tunnel Endpoint IE to indicate it requests data forwarding of uplink packets to be performed for that bearer.

The M-NG-RAN node may propose to apply forwarding of UL data when offloading QoS flows for which in-order delivery is requested by including the *UL Forwarding Proposal* IE in the *Data Forwarding and Offloading Info from source NG-RAN node* IE within the *PDU Session Resource Setup Info – SN terminated* IE or *PDU Session Resource Modification Info – SN terminated* IE of the S-NODE MODIFICATION REQUEST message. The S-NG-RAN node may include the *PDU Session level UL data Forwarding UP TNL Information* IE in the *Data Forwarding Info from target NG-RAN node* IE within the *PDU Session Resource Setup Response Info – SN terminated* IE or *PDU Session Resource Modification Response Info – SN terminated* IE of the S-NODE MODIFICATION REQUEST ACKNOWLEDGE message to indicate that it accepts the proposed forwarding.

If the S-NODE MODIFICATION REQUEST message contains the *Requested Split SRBs* IE, the S-NG-RAN node may use it to add split SRBs. If the S-NODE MODIFICATION REQUEST message contains the *Requested Split SRBs* *release* IE, the S-NG-RAN node may use it to release split SRBs.

If the *Requested Fast MCG recovery via SRB3* IE set to "true" is included in the S-NODE MODIFICATION REQUEST message and the S-NG-RAN decides to configure fast MCG link recovery via SRB3 as specified in TS 37.340 [8], the S-NG-RAN node shall, if supported, include the *Available fast MCG recovery via SRB3* IE set to "true" in the S-NODE MODIFICATION REQUEST ACKNOWLEDGE message. If the *Requested Fast MCG recovery via SRB3 Release* IE set to "true" is included in the S-NODE MODIFICATION REQUEST message and the S-NG-RAN decides to release fast MCG link recovery via SRB3, the S-NG-RAN node shall, if supported, include the *Release fast MCG recovery via SRB3* IE set to "true" in the S-NODE MODIFICATION REQUEST ACKNOWLEDGE message.

If the *Lower Layer presence status change* IE set to "release lower layers" is included in the S-NODE MODIFICATION REQUEST message, the S-NG-RAN node shall act as specified in TS 37.340 [8].

If the *Lower Layer presence status change* IE set to "re-establish lower layers" is included in the S-NODE MODIFICATION REQUEST message, the S-NG-RAN node shall act as specified in TS 37.340 [8].

If the *Lower Layer presence status change* IE set to "suspend lower layers" is included in the S-NODE MODIFICATION REQUEST message, the S-NG-RAN node shall act as specified in TS 37.340 [8].

If the *Lower Layer presence status change* IE set to "resume lower layers" is included in the S-NODE MODIFICATION REQUEST message, the S-NG-RAN node shall act as specified in TS 37.340 [8].

The M-NG-RAN node may include for each bearer in the *DRBs To Be Modified List* IE in the S-NODE MODIFICATION REQUEST message the *RLC Status* IE to indicate that RLC has been reestablished at the M-NG-RAN node and the S-NG-RAN node may trigger PDCP data recovery.

If the S-NODE MODIFICATION REQUEST message contains the *PDCP SN Length* IE in the *DRBs To Be Setup List* IE, the S-NG-RAN node shall, if supported, store this information and use it for lower layer configuration of the concerned MN terminated bearer.

If the *PDCP Duplication Configuration* IE in the *PDU Session Resource Modification Info – MN terminated* IE is contained in the S-NODE MODIFICATION REQUEST message and set to "configured", the S-NG-RAN node shall, if supported, add the RLC entity of secondary path and the RLC entity of all additional path(s) for the indicated DRB. And if the S-NODE MODIFICATION REQUEST message contains the *Duplication Activation* IE, the S-NG-RAN node shall, if supported, store this information and use it for the purpose of PDCP duplication.

If the S-NODE MODIFICATION REQUEST message contains *RLC Duplication Information* IE, the S-NG-RAN node shall, if supported, store this information and use it for the purpose of PDCP duplication for the indicated DRB with more than two RLC entities.

If the *PDCP Duplication Configuration* IE in the *PDU Session Resource Modification Info – MN terminated* IE is contained in the S-NODE MODIFICATION REQUEST message and set to "de-configured", the S-NG-RAN node shall, if supported, delete the RLC entity of secondary path and the RLC entity of all additional path(s) for the indicated DRB.

The S-NG-RAN node may include for each bearer in the *DRBs To Be Setup List* IE in the S-NODE MODIFICATION REQUEST ACKNOWLEDGE message the *PDCP SN Length* IE to indicate the PDCP SN length for that DRB.

The S-NG-RAN node may include the *QoS Flow Mapping Indication* IE for a QoS flow in the S-NODE MODIFICATION REQUEST ACKNOWLEDGE message to indicate that only the uplink or downlink QoS flow is mapped to the DRB.

If the *Additional DRB* IDs IE is included in the S-NODE MODIFICATION REQUEST message, the S-NG-RAN node shall store this information and use it together with previously provided DRB IDs if any, for SN terminated bearers.

If the S-NODE MODIFICATION REQUEST message contains the *S-NG-RAN node Maximum Integrity Protected Data Rate Uplink* IE or the *S-NG-RAN node Maximum Integrity Protected Data Rate Downlink* IE, the S-NG-RAN node shall use the received information when enforcing the maximum integrity protected data rate for the UE.

If the *Security Indication* IE is included in the *PDU Session Resource Setup Info – SN terminated* IE of the S-NODE MODIFICATION REQUEST message, the behaviour of the S-NG-RAN node shall be the same as specified for the same IE in the *PDU Session Resources To Be Setup List* IE in the Handover Preparation procedure, for the concerned PDU session, and the S-NG-RAN node shall include the *Security Result* IE in the *PDU Session Resource Setup Response Info – SN terminated* IE. If either the S-NG-RAN node or the M-NG-RAN node is an ng-eNB, the S-NG-RAN node shall behave as specified in TS 33.501 [28].

If the *Security Result* IE is included in the *PDU Session Resource Setup Info – SN terminated* IE of the S-NODE MODIFICATION REQUEST message, the S-NG-RAN node may take the information into account when deciding whether to perform user plane integrity protection or ciphering for the DRBs that it establishes for the concerned PDU session, except if the *Split Session Indicator* IE is included in the *PDU Session Resource Setup Info – SN terminated* IE and set to "split", in which case it shall perform user plane integrity protection or ciphering according to the information in the *Security Result* IE*.*

The S-NG-RAN node may include the *Location Information at S-NODE* IE in the S-NODE MODIFICATION REQUEST ACKNOWLEDGE message, if respective information is available at the S-NG-RAN node.

If the *Location Information at S-NODE reporting* IE set to "pscell" is included in the S-NODE MODIFICATION REQUEST, the S-NG-RAN node shall start providing information about the current location of the UE. If the *Location Information at S-NODE* IE is included in the S-NODE MODIFICATION REQUEST ACKNOWLEDGE, the M-NG-RAN node shall store the included information so that it may be transferred towards the AMF.

If the *S-NSSAI* IE is included in the *PDU Session Resources To Be Modified List* IE in the S-NODE MODIFICATION REQUEST message, the S-NG-RAN node shall replace the previously *S-NSSAI* IE by the received *S-NSSAI I*E.

If the S-NODE MODIFICATION REQUEST ACKNOWLEDGE message contains the *MR-DC Resource Coordination Information* IE, the M-NG-RAN node may use it for the purpose of resource coordination with the S-NG-RAN node. The M-NG-RAN node shall consider the value of the received *UL Coordination Information* IE valid until reception of a new update of the IE for the same UE. The M-NG-RAN node shall consider the value of the received *DL Coordination Information* IE valid until reception of a new update of the IE for the same UE. If the *E-UTRA Coordination Assistance Information* IE or the *NR Coordination Assistance Information* IE is contained in the *MR-DC Resource Coordination Information* IE, the M-NG-RAN node shall, if supported, use the information to determine further coordination of resource utilisation between the M-NG-RAN node and the S-NG-RAN node.

If the S-NODE MODIFICATION REQUEST message contains the *PCell ID* IE, the S-NG-RAN node may search for the target cell among the neighbour cells of the PCell indicated, as specified in the TS 37.340 [8].

If the S-NG-RAN node applied a full configuration or delta configuration, e.g., as part of mobility procedure involving a change of DU, the S-NG-RAN node shall inform the M-NG-RAN node by including the *RRC config indication* IE in the S-NODE MODIFICATION REQUEST ACKNOWLEDGE message.

If the *Default DRB Allowed* IE is included in the *PDU Session Resource Setup Info – SN terminated* IE or *PDU Session Resource Modification Info – SN terminated* IE of the S-NODE MODIFICATION REQUEST message and set to "true", the S-NG-RAN node may configure the default DRB for the PDU session.

If the *Default DRB Allowed* IE is included in the *PDU Session Resource Setup Info – SN terminated* IE or *PDU Session Resource Modification Info – SN terminated* IE of the S-NODE MODIFICATION REQUEST message and set to "false", the S-NG-RAN node shall not configure the default DRB for the PDU session and the S-NG-RAN node shall reconfigure the default DRB into a normal DRB if it has configured the default DRB before.

If the S-NODE MODIFICATION REQUEST ACKNOWLEDGE message includes the *DRB IDs taken into use* IE, the M-NG-RAN node, if applicable, shall act as specified in TS 37.340 [8].

If the *QoS Monitoring Request* IE is included in the *QoS Flow Level QoS Parameters* IE for a QoS flow contained in the *DRBs To Be Setup List* IE or the *DRBs To Be Modified List* IE within the *PDU Session Resource Setup Info – MN terminated* IE or the *PDU Session Resource Modification Info – MN terminated* IE, the S-NG-RAN node shall, if supported, use it to configure lower layers for the purpose of delay measurement and QoS monitoring as specified in TS 23.501 [7]. If the *QoS Monitoring Reporting Frequency* IE is included in the *QoS Flow Level QoS Parameters* IE for a QoS flow contained in the *DRBs To Be Setup List* IE or the *DRBs To Be Modified List* IE within the *PDU Session Resource Setup Info – MN terminated* IE or the *PDU Session Resource Modification Info – MN terminated* IE, the S-NG-RAN node shall, if supported, use it for RAN part delay reporting.

For each QoS flow which has been successfully added or modified in the S-NG-RAN node, if the *QoS Monitoring Request* IE was included in the *QoS Flow Level QoS Parameters* IE contained in the *PDU Session Resource Setup Info – SN terminated* IE or the *PDU Session Resource Modification Info – SN terminated* IE, the S-NG-RAN node shall store this information, and shall, if supported, perform delay measurement and QoS monitoring as specified in TS 23.501 [7]. If the *QoS Monitoring Reporting Frequency* IE was included in the *QoS Flow Level QoS Parameters* IE contained in the *PDU Session Resource Setup Info – SN terminated* IE or the *PDU Session Resource Modification Info – SN terminated* IE, the S-NG-RAN node shall store this information, and shall, if supported, use it for RAN part delay reporting. In case such a QoS flow is included in the *DRBs To Be Setup List* IE or the *DRBs To Be Modified List* IE within the *PDU Session Resource Setup Response Info – SN terminated* IE or the *PDU Session Resource Modification Response Info – SN terminated* IE, the M-NG-RAN node shall, if supported, use it to configure lower layers for the purpose of delay measurement and QoS monitoring. If the *QoS Monitoring Reporting Frequency* IE is included in the *DRBs To Be Setup List* IE or the *DRBs To Be Modified List* IE within the *PDU Session Resource Setup Response Info – SN terminated* IE or the *PDU Session Resource Modification Response Info – SN terminated* IE, the M-NG-RAN node shall, if supported, use it for RAN part delay reporting.

If the *PDU Session Expected UE Activity Behaviour* IE is included in the *PDU Session Resources To Be Added List* IE or the *PDU Session Resources To Be Modified List* IE of the S-NODE MODIFICATION REQUEST message, the S-NG-RAN node shall, if supported, use it for the concerned PDU session as specified in TS 23.501 [7].

If the *User Plane Failure Indication* IE is included in the *PDU Session Resources To Be Modified List* IE of the S-NODE MODIFICATION REQUEST message, the S-NG-RAN node shall, if supported, allocate the new NG-U DL endpoint address for the concerned GTP-U tunnel PDU session as specified in TS 23.527 [57].

If the M-NG-RAN node receives in the S-NODE MODIFICATION REQUEST ACKNOWLEDGE message within the *PDU Session Resource Modification Response Info –MN terminated* IE a DRBs Admitted to be Setup or Modified Item with DRB ID(s) that it has not requested to be setup or modified, the M-NG-RAN node shall ignore the contained information.

For each DRB configured as MN-terminated split bearer/SCG bearer, if the *QoS Mapping Information* IE is included in the *DRBs Admitted List* IE in the *PDU Session Resource Setup Response Info – MN terminated* IE of the S-NODE MODIFICATION REQUEST ACKNOWLEDGE message, the M-NG-RAN node shall, if supported, use it to set DSCP and/or IPv6 flow label fields for the downlink IP packets which are transmitted from M-NG-RAN node to S-NG-RAN node through the GTP tunnels indicated by the *UP Transport Layer Information* IE.

For each DRB configured as MN-terminated split bearer/SCG bearer, if the *QoS Mapping Information* IE is included in the *DRBs Admitted to be Setup or Modified List* IE in the *PDU Session Resource Modification Response Info – MN terminated* IE of the S-NODE MODIFICATION REQUEST ACKNOWLEDGE message, the M-NG-RAN node shall, if supported, use it to set DSCP and/or IPv6 flow label fields for the downlink IP packets which are transmitted from M-NG-RAN node to S-NG-RAN node through the GTP tunnels indicated by the *UP Transport Layer Information* IE.

For each DRB configured as SN-terminated split bearer/MCG bearer, if the *QoS Mapping Information* IE is included in the *DRBs To Be Modified List* IE in the *PDU Session Resource Modification Info – SN terminated* IE of the S-NODE MODIFICATION REQUEST message, the S-NG-RAN node shall, if supported, use it to set DSCP and/or IPv6 flow label fields for the downlink IP packets which are transmitted from S-NG-RAN node to M-NG-RAN node through the GTP tunnels indicated by the *UP Transport Layer Information* IE.

If the *Security Indication* IE is included in the *PDU Session Resource Modification Info – SN terminated* IE of the S-NODE MODIFICATION REQUEST message, the S-NG-RAN node shall, if supported, replace any existing security indication, and enable/disable ciphering or integrity protection as specified in TS 38.331 [10], for the concerned PDU session, and the S-NG-RAN node shall include the *Security Result* IE in the *PDU Session Resource Modification Response Info – SN terminated* IE. If either the S-NG-RAN node or the M-NG-RAN node is an ng-eNB, the S-NG-RAN node shall behave as specified in TS 33.501 [28].

If the *Target Node ID* IE is included in the S-NODE MODIFICATION REQUEST message, the S-NG-RAN node shall, if supported, include the *Direct Forwarding Path Availability* IE set to "direct path available" in the S-NODE MODIFICATION REQUEST ACKNOWLEDGE message if the direct forwarding path is available between the S-NG-RAN node and the indicated target node.

If the *PSCell History Information Retrieve* IE set to "query" is included in the S-NODE MODIFICATION REQUEST message, the S-NG-RAN node shall, if supported, use this information as specified in TS 37.340 [8].

If the *UE History Information from the UE* IE is included in the S-NODE MODIFICATION REQUEST message, the S-NG-RAN node shall, if supported, store this information.

If the *SCG UE History Information* IE is included in the S-NODE MODIFICATION REQUEST ACKNOWLEDGE message, the M-NG-RAN node shall, if supported, use the information to update UE History Information with PSCell history.

If the *CHO Information SN Modification* IE is included in the S-NODE MODIFICATION REQUEST message, the S-NG-RAN node shall consider that the M-NG-RAN node initiated S-NG-RAN node Modification Preparation procedure has been triggered as part of a conditional handover. If the *Estimated Arrival Probability* IE is contained in the *CHO Information SN Modification* IE included in the S-NODE MODIFICATION REQUEST message, then the S-NG-RAN node may use the information to allocate necessary resources for the UE.

If the *SCG Activation Request* IE is included in the S-NODE MODIFICATION REQUEST message, the S-NG-RAN node may use it to configure SCG resources as specified in TS 37.340 [8], and shall, if supported, include the *SCG Activation Status* IE in the S-NODE MODIFICATION REQUEST ACKNOWLEDGE message.

If the *Conditional PSCell Change Information Update* IE is included in the S-NODE MODIFICATION REQUEST message, the S-NG-RAN node shall, if supported, consider that the request provides the list of PSCells prepared at the target S-NG-RAN node, as described in TS 37.340 [8].

If the *Conditional PSCell Addition Information Modification Request* IE is included in the S-NODE MODIFICATION REQUEST message, the S-NG-RAN node shall, if supported, consider that the request concerns an update of the previous CPAC preparation or an S-CPAC if source SN is configured as a candidate SN, as described in TS 37.340 [8]. Accordingly, the S-NG-RAN shall, if supported, include the *Conditional PSCell Addition Information Modification Acknowledge* IE in the S-NODE MODIFICATION REQUEST ACKNOWLEDGE message.

If the *S-CPAC Request Information* IE is contained in the *Conditional PSCell Addition Information Modification Request* IE included in the S-NODE MODIFICATION REQUEST message, the S-NG-RAN node shall, if supported, consider that the procedure is triggered for S-CPAC preparation or modification.

If the S-NG-RAN node applied a complete candidate configuration for a specific PSCell, e.g., as part of preparation or modification of S-CPAC, the S-NG-RAN node shall inform the M-NG-RAN node by including the *S-CPAC Complete Candidate Configuration Indicator* IE in the *Candidate PSCell with Other Information Item* IE in the *Conditional PSCell Addition Information Modification Acknowledge* IE in the S-NODE MODIFICATION REQUEST ACKNOWLEDGE message.

If the *S-CPAC Reference Configuration Request* IE set to "request" is contained in the *Conditional PSCell Addition Information Modification Request* IE included in the S-NODE MODIFICATION REQUEST message, the S-NG-RAN node shall, if supported, provide the SCG reference configuration for S-CPAC.

If the *S-CPAC Multiple Target S-NG-RAN Node List* IE is contained within the *S-CPAC Request Information* IE in the *Conditional PSCell Addition Information Modification Request* IE included in the S-NODE MODIFICATION REQUEST message, the S-NG-RAN node shall, if supported, consider that the information pertains to a list of PSCells suggested for other candidate SN(s) may also be prepared for S-CPAC, and act as described in TS 37.340 [8].

If the *S-CPAC Inter-SN Execution Notification* IE set to "executed" is contained in the *Conditional PSCell Addition Information Modification Request* IE included in the S-NODE MODIFICATION REQUEST message, the S-NG-RAN node shall, if supported, consider that the UE has been moved to another candidate SN due to inter-SN S-CPAC execution and may stop data transmission to the UE. If the *Data Forwarding and Offloading Info from source NG-RAN node* IE within the *PDU Session Resource Modification Info – SN terminated* IE is also included for some PDU session in the *PDU Session Resources To Be Modified List* IE of the S-NODE MODIFICATION REQUEST message, the S-NG-RAN node may include the *Data Forwarding Info from target NG-RAN node* IE within the *PDU Session Resource Modification Response Info – SN terminated* IE of the corresponding PDU sessions in the *PDU Session Resources Admitted To Be Modified List* IE of the S-NODE MODIFICATION REQUEST ACKNOWLEDGE message to provide the new data forwarding address information for S-CPAC.

If the *CG-CandidateList* is included in the *S-NG-RAN node to M-NG-RAN node Container* IE in the S-NODE MODIFICATION REQUEST ACKNOWLEDGE message, the M-NG-RAN node shall, if supported, use it for the purpose of CPAC or S-CPAC.

If the *Estimated Arrival Probability* IE is contained in the *Conditional PSCell Addition Information Modification Request* IE included in the S-NODE MODIFICATION REQUEST message, then the candidate target S-NG-RAN node may use the information to allocate necessary resources for the incoming CPAC or S-CPAC procedure.

If for a given QoS Flow the *Source DL Forwarding IP Address* IE is included within the *Data Forwarding and* *Offloading Info from source NG-RAN node* IE in the *PDU Session Resource Setup Info – SN terminated* IE and/or in the *PDU Session Resource Modification Info – SN terminated* IE contained in the S-NODE MODIFICATION REQUEST message, the S-NG-RAN node shall, if supported, store this information and use it as part of its ACL functionality configuration actions, if such ACL functionality is deployed.

If for a given QoS Flow the *Source DL Forwarding IP Address* IE is included within the *QoS Flows Mapped To DRB List* IE in the *PDU Session Resource Setup Response Info – SN terminated* IE and/or in the *PDU Session Resource Modification Response Info – SN terminated* IE contained in the S-NODE MODIFICATION REQUEST ACKNOWLEDGE message, the M-NG-RAN node shall, if supported, store this information and use it as part of its ACL functionality to identify source TNL address for data forwarding in case of subsequent handover preparation, if such ACL functionality is deployed.

If the *Management Based MDT PLMN Modification List* IE is contained in the S-NODE MODIFICATION REQUEST message, the S-NG-RAN node shall, if supported, overwrite any previously stored Management Based MDT PLMN List information in the UE context and use the received information to determine subsequent selection of the UE for management based MDT defined in TS 32.422 [23].

If the *QMC Coordination Request* IE is contained in the S-NODE MODIFICATION REQUEST message, the S-NG-RAN node may use it as specified in TS 37.340 [8], and shall, if supported, include the *QMC Coordination Response* IE in the S-NODE MODIFICATION REQUEST ACKNOWLEDGE message.

If the *Source SN to Target SN QMC Information Inquiry* IE set to "true" is contained in the S-NODE MODIFICATION REQUEST message, the S-NG-RAN node shall, if supported, include the *Source SN to Target SN QMC Information* IE in the S-NODE MODIFICATION REQUEST ACKNOWLEDGE message.

If the S-NODE MODIFICATION REQUEST message contains the *IAB Authorization status* IE, the S-NG-RAN node shall, if supported, store it and use it as defined in TS 38.401[2].

If the *LTM Candidate PSCell Information Update Request* IE is included in the S-NODE MODIFICATION REQUEST message, the S-NG-RAN node shall, if supported, consider that the request provides the list of PSCells prepared at the S-NG-RAN node and include the *LTM Candidate PSCell Information Update Acknowledge* IE in the S-NODE MODIFICATION REQUEST ACKNOWLEDGE message.

If the *LTM Candidate PSCell Addition Information Modification Request* IE is included in the S-NODE MODIFICATION REQUEST message, the S-NG-RAN node shall, if supported, consider that the request concerns an update of the previous LTM preparation. Accordingly, the S-NG-RAN shall, if supported, include the *LTM Candidate PSCell Addition Information Modification Acknowledge* IE in the S-NODE MODIFICATION REQUEST ACKNOWLEDGE message.

**Interactions with the S-NG-RAN node Reconfiguration Completion procedure:**

If the S-NG-RAN node admits a modification of the UE context requiring the M-NG-RAN node to report about the success of the RRC connection reconfiguration procedure, the S-NG-RAN node shall start the timer TXnDCoverall when sending the S-NODE MODIFICATION REQUEST ACKNOWLEDGE message to the M-NG-RAN node except for a request for conditional configuration. The reception of the S-NG-RAN node RECONFIGURATION COMPLETE message shall stop the timer TXnDCoverall if TXnDCoverall is running.

**Interaction with the Activity Notification procedure**

Upon receiving an S-NODE MODIFICATION REQUEST message containing the *Desired Activity Notification Level* IE, the S-NG-RAN node shall, if supported, use this information to decide whether to trigger subsequent Activity Notification procedures, or stop or modify ongoing triggering of these procedures due to a previous request.

**Interaction with the Xn-U Address Indication procedure**

For QoS flow mapped to DRBs configured with an SN terminated bearer option and removed from the SDAP in the S-NG-RAN node the S-NG-RAN node may provide data forwarding related information in the S-NODE MODIFICATION REQUEST ACKNOWLEDGE within the *Data Forwarding and offloading Info from source NG-RAN node* IE, in which case the M-NG-RAN node may decide to provide data forwarding addresses to the S-NG-RAN node and trigger the Xn-U Address Indication procedure as specified in TS 37.340 [8].

For QoS flow offloading from the S-NG-RAN node to the M-NG-RAN, the S-NG-RAN node may provide the data forwarding related information in the S-NODE MODIFICATION REQUEST ACKNOWLEDGE within the *Data Forwarding and offloading Info from source NG-RAN node* IE, in which case the M-NG-RAN node may decide to provide data forwarding addresses to the S-NG-RAN node and trigger the Xn-U Address Indication procedure as specified in TS 37.340 [8].

**Interactions with the S-NG-RAN node initiated S-NG-RAN node Modification:**

If the *SN triggered* IE set to "TRUE" is included in the S-NODE MODIFICATION REQUEST message, the S-NG-RAN node shall consider that the procedure has been initiated in response to the previously initiated S-NG-RAN node initiated S-NG-RAN node Modification procedure.

**Interaction with the Path Switch Request procedure as specified in TS 38.413 [5]:**

For a split PDU session, if the *Integrity Protection Indication* IE and/or the *Confidentiality Protection Indication* IE included in the PATH SWITCH REQUEST ACKNOWLEDGE message is set to "preferred", the M-NG-RAN node may keep the current UP integrity protection and ciphering policy.

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

### 8.3.4 S-NG-RAN node initiated S-NG-RAN node Modification

#### 8.3.4.1 General

This procedure is used by the S-NG-RAN node to modify the UE context in the S-NG-RAN node.

The procedure uses UE-associated signalling.

#### 8.3.4.2 Successful Operation



Figure 8.3.4.2-1: S-NG-RAN node initiated S-NG-RAN node Modification, successful operation.

The S-NG-RAN node initiates the procedure by sending the S-NODE MODIFICATION REQUIRED message to the M-NG-RAN node.

When the S-NG-RAN node sends the S-NODE MODIFICATION REQUIRED message, it shall start the timer TXnDCoverall.

The S-NODE MODIFICATION REQUIRED message may contain

- the *S-NG-RAN node to M-NG-RAN node Container* IE.

- PDU session resources to be modified within the *PDU Session Resources To Be Modified Item* IE;

- PDU session resources to be released within the *PDU Session Resources To Be Released Item* IE;

- the *PDCP Change Indication* IE;

- the Spare DRB IDs IE;

- the *Required Number of DRB IDs* IE;

- the *QoS Flow Mapping Indication* IE;

- the *MR-DC Resource Coordination Information* IE.

If the M-NG-RAN node receives a S-NODE MODIFICATION REQUIRED message containing the *PDCP Change Indication* IE, the M-NG-RAN node shall act as specified in TS 37.340 [8].

If the S-NODE MODIFICATION REQUIRED message contains the *MR-DC Resource Coordination Information* IE, the M-NG-RAN node may use it for the purpose of resource coordination with the S-NG-RAN node. The M-NG-RAN node shall consider the value of the received *UL Coordination Information* IE valid until reception of a new update of the IE for the same UE. The M-NG-RAN node shall consider the value of the received *DL Coordination Information* IE valid until reception of a new update of the IE for the same UE. If the *E-UTRA Coordination Assistance Information* IE or the *NR Coordination Assistance Information* IE is contained in the *MR-DC Resource Coordination Information* IE, the M-NG-RAN node shall, if supported, use the information to determine further coordination of resource utilisation between the M-NG-RAN node and the S-NG-RAN node.

If the M-NG-RAN node receives an S-NODE MODIFICATION REQUIRED message containing the *Spare DRB IDs* IE, the M-NG-RAN node may take those into consideration to be used for MN-terminated bearers.

If the M-NG-RAN node receives an S-NODE MODIFICATION REQUIRED message containing the *Required Number of DRB IDs* IE, the M-NG-RAN node shall provide new DRB IDs to be used by the S-NG-RAN node for SN-terminated bearers , if such DRB IDs are available, in the *Additional DRB IDs* IE included in the S-NODE MODIFICATION CONFIRM message.

If the M-NG-RAN node is able to perform the modifications requested by the S-NG-RAN node, the M-NG-RAN node shall send the S-NODE MODIFICATION CONFIRM message to the S-NG-RAN node. The S-NODE MODIFICATION CONFIRM message may contain the *M-NG-RAN node to S-NG-RAN node Container* IE.

If the *PDCP Duplication Configuration* IE in the *PDU Session Resource Modification Required Info – SN terminated* IE is contained in the S-NODE MODIFICATION REQUIRED message and set to "configured", the M-NG-RAN node shall, if supported, add the RLC entity of secondary path and the RLC entity of all additional path(s) for the indicated DRB. And if the S-NODE MODIFICATION REQUIRED message contains the *Duplication Activation* IE, the M-NG-RAN node shall, if supported, store this information and use it for the purpose of PDCP duplication.

If the S-NODE MODIFICATION REQUIRED message contains the *RLC Duplication Information* IE, the S-NG-RAN node shall, if supported, store this information and use it for the purpose of PDCP duplication for the indicated DRB with more than two RLC entities.

If the *PDCP Duplication Configuration* IE in the *PDU Session Resource Modification Required Info – SN terminated* IE is contained in the S-NODE MODIFICATION REQUIRED message and set to "de-configured", the M-NG-RAN node shall, if supported, delete the RLC entity of secondary path and the RLC entity of all additional path(s) for the indicated DRB.

The S-NG-RAN node may include for each DRB in the *DRBs To Be Modified List* IE in the S-NODE MODIFICATION REQUIRED message the *RLC Status* IE to indicate that RLC has been reestablished at the S-NG-RAN node and the M-NG-RAN node may trigger PDCP data recovery.

If the S-NODE MODIFICATION REQUIRED message contains the *QoS flows To Be Released List* within the *PDU Session Resource Modification Info – SN terminated* IE, the S-NG-RAN node may also propose to apply forwarding of UL data for which in-order delivery is requested by including the *UL Forwarding* *Proposal* IE in the *Data Forwarding and Offloading Info from source NG-RAN node* IE within the *PDU Session Resource Modification Required Info – SN terminated* IE of the S-NODE MODIFICATION REQUIRED message. The M-NG-RAN node may include the *PDU Session level UL data Forwarding UP TNL Information* IE in the *Data Forwarding Info from target NG-RAN node* IE within the *PDU Session Resource Modification Confirm Info – SN terminated* IE of the S-NODE MODIFICATION CONFIRM message to indicate that it accepts the proposed forwarding.

Upon reception of the S-NODE MODIFICATION CONFIRM message the S-NG-RAN node shall stop the timer TXnDCoverall.

If the S-NODE MODIFICATION CONFIRM message contains the *MR-DC Resource Coordination Information* IE, the S-NG-RAN node should forward it to lower layers and it may use it for the purpose of resource coordination with the M-NG-RAN node, or to coordinate with sidelink resources used in the M-NG-RAN node. The S-NG-RAN node shall consider the value of the received *UL Coordination Information* IE valid until reception of a new update of the IE for the same UE. The S-NG-RAN node shall consider the value of the received *DL Coordination Information* IE valid until reception of a new update of the IE for the same UE. If the *E-UTRA Coordination Assistance Information* IE or the *NR Coordination Assistance Information* IE is contained in the *MR-DC Resource Coordination Information* IE, the S-NG-RAN node shall, if supported, use the information to determine further coordination of resource utilisation between the S-NG-RAN node and the M-NG-RAN node.

If the S-NODE MODIFICATION REQUIRED message contains a PDU session resource to be released which is configured with the SCG bearer option within the *PDU sessions to be released List – SN terminated* IE, the S-NG-RAN node shall include the *RLC Mode* IE within the *DRBs To Be Released List* IE in the *PDU Session to be released List – SN terminated* IE in the S-NODE MODIFICATION REQUIRED message. The *RLC Mode* IE indicates the RLC mode used in the S-NG-RAN node for the DRB.

If the *Location Information at S-NODE* IE is included in the S-NODE MODIFICATION REQUIRED, the M-NG-RAN node shall store the included information so that it may be transferred towards the AMF.

If the *QoS Flows Mapped To DRB List* IE is included in the S-NODE MODIFICATION REQUIRED message for a DRB to be modified, the M-NG-RAN node shall replace any existing QoS flow mapping for that DRB with the one received.

If the S-NG-RAN node applied a full configuration or delta configuration, e.g., as part of mobility procedure involving a change of DU, the S-NG-RAN node shall inform the M-NG-RAN node by including the *RRC config indication* IE in the S-NODE MODIFICATION REQUIRED message.

If the S-NODE MODIFICATION CONFIRM message includes the *DRB IDs taken into use* IE, the S-NG-RAN node shall, if applicable, act as specified in TS 37.340 [8]

If the *SCG Indicator* IE is contained in the S-NODE MODIFICATION REQUIRED message and it is set to "released", the M-NG-RAN node shall, if supported, deduce that the SCG is removed.

For each DRB configured as MN-terminated split bearer/SCG bearer, if the *QoS Mapping Information* IE is included in the *DRBs To Be Modified List* IE in the *PDU Session Resource Modification Required Info – MN terminated* IE of the S-NODE MODIFICATION REQUIRED message, the M-NG-RAN node shall, if supported, use it to set DSCP and/or IPv6 flow label fields for the downlink IP packets which are transmitted from M-NG-RAN node to S-NG-RAN node through the GTP tunnels indicated by the *UP Transport Layer Information* IE.

For each DRB configured as SN-terminated split bearer/MCG bearer, if the *QoS Mapping Information* IE is included in the *DRBs Admitted to be Setup or Modified List* IE in the *PDU Session Resource Modification Confirm Info – SN terminated* IE of the S-NODE MODIFICATION CONFIRM message, the S-NG-RAN node shall, if supported, use it to set DSCP and/or IPv6 flow label fields for the downlink IP packets which are transmitted from S-NG-RAN node to M-NG-RAN node through the GTP tunnels indicated by the *UP Transport Layer Information* IE.

If the S-NG-RAN node receives in the S-NODE MODIFICATION CONFIRM message within the *PDU Session Resource Modification Confirm Info – SN terminated* IE a *DRBs Admitted to be Setup or Modified Item* IE with DRB ID(s) that it has not requested to be setup or modified, the S-NG-RAN node shall ignore the contained information.

If the S-NODE MODIFICATION REQUIRED message includes the *SCG UE History Information* IE, the M-NG-RAN node shall, if supported, use the information to update UE History Information with PSCell history.

If the *SCG Activation Request* IE is included in the S-NODE MODIFICATION REQUIRED message, the M-NG-RAN node shall consider that the S-NG-RAN node is about to reconfigure the SCG resources as specified in TS 37.340 [8].

If the *CPAC Information Required* IE is included in the S-NODE MODIFICATION REQUIRED message, the M-NG-RAN node shall, if supported, consider that the request provides the configuration update for the list of PSCells prepared at the candidate SN, as described in TS 37.340 [8].

If the S-NG-RAN node applied a complete candidate configuration for a specific PSCell, e.g., as part of modification of S-CPAC, the S-NG-RAN node shall inform the M-NG-RAN node by including the *S-CPAC Complete Candidate Configuration Indicator* IE in the *Candidate PSCell with Other Information Item* IE in the *CPAC Information Required* IE in the S-NODE MODIFICATION REQUIRED message.

If the *CG-CandidateList* is included in the *S-NG-RAN node to M-NG-RAN node Container* IE in the S-NODE MODIFICATION REQUIRED message, the M-NG-RAN node shall, if supported, use it for the purpose of CPAC or S-CPAC.

If the *S-CPAC Request* IE set to "initiation" is included in the S-NODE MODIFICATION REQUIRED message, the M-NG-RAN node shall, if supported, consider that the procedure is triggered for intra-SN S-CPAC preparation in MN RRC format, as described in TS 37.340 [8].

If the *SCG Reconfiguration Notification* IE is included in the S-NODE MODIFICATION REQUIRED message the M-NG-RAN node shall, if supported, consider the request is sent to coordinate CHO or MN-initiated CPC with SCG reconfigurations:

- If the *SCG Reconfiguration Notification* IE is set to "executed", the M-NG-RAN node shall, if supported, consider that a reconfiguration of the SCG resources using SRB3 has been executed. If the *S-NG-RAN node to M-NG-RAN node Container* IE is also included in the S-NODE MODIFICATION REQUIRED message, the M-NG-RAN node shall, if supported, consider that the received SCG configuration has already been applied in the UE and should not be forwarded to the UE.

- If the *SCG Reconfiguration Notification* IE is set to "executed-deleted", the M-NG-RAN node shall, if supported, consider that a reconfiguration with sync of the SCG resources has been executed and earlier CHO or MN-initiated CPC configuration has been deleted in the UE. If the *S-NG-RAN node to M-NG-RAN node Container* IE is also included in the S-NODE MODIFICATION REQUIRED message, the M-NG-RAN node shall, if supported, consider that the received SCG configuration has already been applied in the UE and should not be forwarded to the UE.

- If the *SCG Reconfiguration Notification* IE is set to "deleted", the M-NG-RAN node shall, if supported, consider that an earlier CHO or MN-initiated CPC configuration will be deleted in the UE when the SCG configuration provided in the *S-NG-RAN node to M-NG-RAN node Container* IE is delivered to the UE and executed.

If the *SPR availability in UE* IE set to "spr-available" is included in the S-NODE MODIFICATION REQUIRED message, the M-NG-RAN node may consider that the UE has generated an SPR for a PSCell change, and may retrieve the SPR from the UE.

If the *QMC Coordination Request* IE is contained in the S-NODE MODIFICATION REQUIRED message, the M-NG-RAN node may use it to determine how to configure the management-based QoE measurements and reporting, as specified in TS 37.340 [8], and shall, if supported, include the *QMC Coordination Response* IE in the S-NODE MODIFICATION CONFIRM message.

If the S-NODE MODIFICATION REQUIRED message contains the *User Plane Error Indicator* IE within the *PDU Sessions List To be Released - UPError* IE set to "GTP-U Error Indication Received", the M-NG-RAN node shall, if supported, consider that the PDU session is released due to GTP-U Error Indication received over the NG-U tunnel, and inform the SMF as specified in 3GPP TS 23.527 [57].

If the *LTM Information Required* IE is included in the S-NODE MODIFICATION REQUIRED message, the M-NG-RAN node shall, if supported, consider that the request provides the configuration update for the list of PSCells prepared at the candidate SN, as described in TS 37.340 [8].

**Interaction with the M-NG-RAN node initiated S-NG-RAN node Modification Preparation procedure:**

If applicable, as specified in TS 37.340 [8], the S-NG-RAN node may receive, after having initiated the S-NG-RAN node initiated S-NG-RAN node Modification procedure, the S-NODE MODIFICATION REQUEST message including the *measGapConfig* contained in the *CG-ConfigInfo* message as defined in TS 38.331 [10] within the *M-NG-RAN node to S-NG-RAN node Container* IE.

If applicable, the S-NG-RAN node may receive, after having initiated the S-NG-RAN node initiated S-NG-RAN node Modification procedure, the S-NODE MODIFICATION REQUEST message including the *SN triggered* IE.

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

8.3.5 S-NG-RAN node initiated S-NG-RAN node Change

8.3.5.1 General

This procedure is used by the S-NG-RAN node to trigger the change of the S-NG-RAN node.

The procedure uses UE-associated signalling.

8.3.5.2 Successful Operation

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**Figure 8.3.5.2-1: S-NG-RAN node initiated S-NG-RAN node Change, successful operation.**

The S-NG-RAN node initiates the procedure by sending the S-NODE CHANGE REQUIRED message to the M-NG-RAN node including the *Target S-NG-RAN node ID* IE. When the S-NG-RAN node sends the S-NODE CHANGE REQUIRED message, it shall start the timer TXnDCoverall.

The S-NODE CHANGE REQUIRED message may contain

- the *S-NG-RAN node to M-NG-RAN node Container* IE.

If the M-NG-RAN node is able to perform the change requested by the S-NG-RAN node, the M-NG-RAN node shall send the S-NODE CHANGE CONFIRM message to the S-NG-RAN node. For DRBs configured with the PDCP entity in the S-NG-RAN node, the M-NG-RAN node may include data forwarding related information in the *Data Forwarding Info from target NG-RAN node* IE.

If the S-NODE CHANGE CONFIRM message includes the *DRB IDs taken into use* IE, the S-NG-RAN node shall, if applicable, act as specified in TS 37.340 [8].

The S-NG-RAN node may start data forwarding and stop providing user data to the UE and shall stop the timer TXnDCoverall upon reception of the S-NODE CHANGE CONFIRM message.

If the S-NODE CHANGE REQUIRED message includes the *SCG UE History Information* IE, the M-NG-RAN node shall, if supported, use the information to update UE History Information with PSCell history.

If the S-NODE CHANGE REQUIRED message includes the *SN Mobility Information* IE, the M-NG-RAN node shall, if supported, store this information and use it as defined in TS 37.340 [8].

If the S-NODE CHANGE REQUIRED message includes the *Source PSCell* *ID* IE, the M-NG-RAN node shall, if supported, store the information and act as specified in TS 38.300 [9].

The M-NG-RAN node may also provide configuration information in the *M-NG-RAN node to S-NG-RAN node Container* IE.

If the *Conditional PSCell Change Information Required* IE is included in the S-NODE CHANGE REQUIRED message, the M-NG-RAN node shall, if supported, consider that the requirement concerns CPAC, as described in TS 37.340 [8]. If *the S-CPAC Request* IE set to "initiation" is also contained in the *Conditional PSCell Change Information Required* IE included in the S-NODE CHANGE REQUIRED message, the M-NG-RAN node shall, if supported, consider that the procedure is triggered for S-CPAC preparation, as described in TS 37.340 [8]. The *S-NG-RAN node to M-NG-RAN node Container* IE within the *Conditional PSCell Change Information Required* IE contains at least the suggested PSCell list for each candidate target S-NG-RAN node. Accordingly, the M-NG-RAN node may include the *Conditional PSCell Change Information Confirm* IE in the S-NODE CHANGE CONFIRM message. If the *CPAC Preparation Type* IE is included in the *Conditional PSCell Change Information Confirm* IE for a candidate target S-NG-RAN node, the S-NG-RAN node shall, if supported, consider that the candidate target S-NG-RAN node accepted the S-CPAC request and that the S-NG-RAN node may remain prepared for S-CPAC after PSCell change execution to that candidate target S-NG-RAN node, as described in TS 37.340 [8].

If the *Estimated Arrival Probability* IE is contained in the *Conditional PSCell Change Information Required* IE included in the S-NODE CHANGE REQUIRED message, the M-NG-RAN node shall, if supported, forward this information to the candidate target S-NG-RAN node, then the candidate target S-NG-RAN node may use the information to allocate necessary resources for the incoming CPAC or S-CPAC procedure.

If the *Multiple Target S-NG-RAN Node List* IE is included in the S-NODE CHANGE REQUIRED message, if multiple Target S-NG-RAN nodes are prepared, the M-NG-RAN node may include the *Additional List of PDU Session Resource Change Confirm Info – SN Terminated* IE in the S-NODE CHANGE CONFIRM message to provide different data forwarding addresses for different Target S-NG-RAN nodes.

If the *Source SN to Target SN QMC Information* IE is contained in the S-NODE CHANGE REQUIRED message, the M-NG-RAN node shall, if supported, use it for QoE measurements handling, as specified in TS 37.340 [8].

If the *LTM Candidate PSCell Change Information Required* IE is included in the S-NODE CHANGE REQUIRED message, the M-NG-RAN node shall, if supported, consider that the S-NG-RAN node has requested the LTM information, as specified in TS 37.340 [8]. If *the LTM Request Indication* IE set to "initiation" is also contained in the *LTM Candidate PSCell Change Information Required* IE included in the S-NODE CHANGE REQUIRED message, the M-NG-RAN node shall, if supported, consider that the procedure is triggered for inter-SN SCG LTM preparation, as described in TS 37.340 [8]. The *S-NG-RAN node to M-NG-RAN node Container* IE within the *LTM Candidate PSCell Change Information Required* IE contains at least the suggested PSCell list for each candidate target S-NG-RAN node. Accordingly, the M-NG-RAN node may include the *LTM Candidate PSCell Change Information Confirm* IE in the S-NODE CHANGE CONFIRM message.

**Interaction with M-NG-RAN node initiated S-NG-RAN node Release:**

If the M-NG-RAN node receives the S-NODE CHANGE REQUIRED message indicating releasing target S-NG-RAN node(s) and cancelling all prepared PSCells in the target S-NG-RAN node(s), the M-NG-RAN shall, if supported, trigger the M-NG-RAN node initiated S-NG-RAN node release procedure to the target S-NG-RAN node(s) and cancel all the prepared PSCells at the target S-NG-RAN node(s).

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

### 9.1.2 Messages for Dual Connectivity Procedures

#### 9.1.2.1 S-NODE ADDITION REQUEST

This message is sent by the M-NG-RAN node to the S-NG-RAN node to request the preparation of resources for dual connectivity operation for a specific UE.

Direction: M-NG-RAN node → S-NG-RAN node.

| IE/Group Name | Presence | Range | IE type and reference | Semantics description | Criticality | Assigned Criticality |
| --- | --- | --- | --- | --- | --- | --- |
| Message Type | M |  | 9.2.3.1 |  | YES | reject |
| M-NG-RAN node UE XnAP ID | M |  | NG-RAN node UE XnAP ID 9.2.3.16 | Allocated at the M-NG-RAN node | YES | reject |
| UE Security Capabilities | M |  | 9.2.3.49 |  | YES | reject |
| S-NG-RAN node Security Key | M |  | 9.2.3.51 | This IE is ignored if the *S-CPAC Request Information* IE is present in the *Conditional PSCell Addition Information Request* IE or the *LTM Candidate PSCell Addition Information Request* IE is present. | YES | reject |
| S-NG-RAN node UE Aggregate Maximum Bit Rate | M |  | UE Aggregate Maximum Bit Rate  9.2.3.17 | The UE Aggregate Maximum Bit Rate is split into M-NG-RAN node UE Aggregate Maximum Bit Rate and S-NG-RAN node UE Aggregate Maximum Bit Rate which are enforced by M-NG-RAN node and S-NG-RAN node respectively. | YES | reject |
| Selected PLMN | O |  | PLMN Identity  9.2.2.4 | The selected PLMN of the SCG in the S-NG-RAN node. | YES | ignore |
| Mobility Restriction List | O |  | 9.2.3.53 |  | YES | ignore |
| Index to RAT/Frequency Selection Priority | O |  | 9.2.3.23 |  | YES | reject |
| **PDU Session Resources To Be Added List** |  | *1* |  |  | YES | reject |
| **>PDU Session Resources To Be Added Item** |  | *1 .. <maxnoofPDUSessions>* |  | NOTE: If neither the  *PDU Session Resource Setup Info – SN terminated* IE  nor the  *PDU Session Resource Setup Info – MN terminated* IE is present in a *PDU Session Resources To Be Added Item* IE, abnormal conditions as specified in clause 8.3.1.4 apply. | – |  |
| >>PDU Session ID | M |  | 9.2.3.18 |  | – |  |
| >>S-NSSAI | M |  | 9.2.3.21 |  | – |  |
| >>S-NG-RAN node PDU Session Aggregate Maximum Bit Rate | O |  | PDU Session Aggregate Maximum Bit Rate 9.2.3.69 |  | – |  |
| >>PDU Session Resource Setup Info – SN terminated | O |  | 9.2.1.5 |  | – |  |
| >>PDU Session Resource Setup Info – MN terminated | O |  | 9.2.1.7 |  | – |  |
| M-NG-RAN node to S-NG-RAN node Container | M |  | OCTET STRING | Includes the *CG-ConfigInfo* message as defined in subclause 11.2.2 of TS 38.331 [10] | YES | reject |
| S-NG-RAN node UE XnAP ID | O |  | NG-RAN node UE XnAP ID  9.2.3.16 | Allocated at the S-NG-RAN node | YES | reject |
| Expected UE Behaviour | O |  | 9.2.3.81 |  | YES | ignore |
| Requested Split SRBs | O |  | ENUMERATED (srb1, srb2, srb1&2, ...) | Indicates that resources for Split SRBs are requested. | YES | reject |
| PCell ID | O |  | Global NG-RAN Cell Identity  9.2.2.27 |  | YES | reject |
| Desired Activity Notification Level | O |  | 9.2.3.77 |  | YES | ignore |
| Available DRB IDs | C-ifSNterminated |  | DRB List  9.2.1.29 | Indicates the list of DRB IDs that the S-NG-RAN node may use for SN-terminated bearers. | YES | reject |
| S-NG-RAN node Maximum Integrity Protected Data Rate Uplink | O |  | Bit Rate  9.2.3.4 | The S-NG-RAN node Maximum Integrity Protected Data Rate Uplink is a portion of the UE’s Maximum Integrity Protected Data Rate in the Uplink, which is enforced by the S-NG-RAN node for the UE’s SN terminated PDU sessions. If the *S-NG-RAN node Maximum Integrity Protected Data Rate Downlink* IE is not present, this IE applies to both UL and DL. | YES | reject |
| S-NG-RAN node Maximum Integrity Protected Data Rate Downlink | O |  | Bit Rate  9.2.3.4 | The S-NG-RAN node Maximum Integrity Protected Data Rate Downlink is a portion of the UE’s Maximum Integrity Protected Data Rate in the Downlink, which is enforced by the S-NG-RAN node for the UE’s SN terminated PDU sessions. | YES | reject |
| Location Information at S-NODE reporting | O |  | ENUMERATED (pscell, ...) | Indicates that the user’s Location Information at S-NODE is to be provided. | YES | ignore |
| MR-DC Resource Coordination Information | O |  | 9.2.2.33 | Information used to coordinate resource utilisation between M-NG-RAN node and S-NG-RAN node. | YES | ignore |
| Masked IMEISV | O |  | 9.2.3.32 |  | YES | ignore |
| NE-DC TDM Pattern | O |  | 9.2.2.38 |  | YES | ignore |
| SN Addition Trigger Indication | O |  | ENUMERATED (SN change, inter-MN HO, intra-MN HO, ...) | This IE indicates the trigger for S-NG-RAN node Addition Preparation procedure | YES | reject |
| Trace Activation | O |  | 9.2.3.55 |  | YES | ignore |
| Requested Fast MCG recovery via SRB3 | O |  | ENUMERATED (true, ...) | Indicates that the resources for fast MCG recovery via SRB3 are requested. | YES | ignore |
| UE Radio Capability ID | O |  | 9.2.3.138 |  | YES | reject |
| Source NG-RAN Node ID | O |  | Global NG-RAN Node ID  9.2.2.3 | The NG-RAN Node ID of the source NG-RAN node, or the source SN in e.g. NR-DC to NR-DC (conditional) handover. | YES | ignore |
| Management Based MDT PLMN List | O |  | MDT PLMN List  9.2.3.133 |  | YES | ignore |
| UE History Information | O |  | 9.2.3.64 |  | YES | ignore |
| UE History Information from the UE | O |  | 9.2.3.110 |  | YES | ignore |
| PSCell Change History | O |  | ENUMERATED (reporting full history, ...) |  | YES | ignore |
| IAB Node Indication | O |  | ENUMERATED (true, ...) |  | YES | reject |
| No PDU Session Indication | O |  | ENUMERATED (true, ...) | This IE applies only if the UE is an IAB-MT. | YES | ignore |
| **CHO Information SN Addition** | O |  |  |  | YES | reject |
| >Source M-NG-RAN node ID | M |  | Global NG-RAN Node ID 9.2.2.3 |  | – |  |
| >Source M-NG-RAN node UE XnAP ID | M |  | NG-RAN node UE XnAP ID 9.2.3.16 | Allocated at the source M-NG-RAN node | – |  |
| >Estimated Arrival Probability | O |  | INTEGER (1..100) |  | – |  |
| SCG Activation Request | O |  | 9.2.3.154 |  | YES | ignore |
| **Conditional PSCell Addition Information Request** | O |  |  |  | YES | reject |
| >Maximum Number of PSCells To Prepare | M |  | INTEGER (1..8, ...) | Indicates the maximum number of PSCells that the target SN may prepare. | – |  |
| >Estimated Arrival Probability | O |  | INTEGER (1..100) | Indicates the arrival probability for the UE towards the candidate target SN. | – |  |
| >S-CPAC Request Information | O |  | 9.2.3.192 | Indicates that SN addition is for S-CPAC preparation. | YES | reject |
| >S-CPAC Reference Configuration Request | O |  | ENUMERATED (request, …) | Indicates that the reference configuration for S-CPAC is requested. | YES | ignore |
| S-NG-RAN node UE Slice Maximum Bit Rate | O |  | UE Slice Maximum Bit Rate List  9.2.3.167 | This IE indicates the S-NG-RAN node portion of the UE Slice Aggregate Maximum Bit Rate as specified in TS 23.501 [7] | YES | reject |
| F1-terminating IAB-donor Indicator | O |  | ENUMERATED (true, ...) | This IE applies only if the UE is an IAB-MT. | YES | reject |
| Selected NID | O |  | NID  9.2.2.65 | This IE, together with the *Selected PLMN* IE, indicates the SNPN proposed for the SCG to the S-NG-RAN node. | YES | ignore |
| QMC Coordination Request | O |  | 9.2.3.197 | This IE contains information for managing configuration and reporting of one or more QoE and/or RAN visible QoE measurements at the S-NG-RAN node subject to addition. | YES | ignore |
| Source SN to Target SN QMC Information | O |  | QMC Configuration Information  9.2.3.156 | This IE contains S-NG-RAN node-related QMC Configuration Information to be forwarded to the target S-NG-RAN node. | YES | ignore |
| Source M-NG-RAN node ID | O |  | Global NG-RAN Node ID  9.2.2.3 | The NG-RAN Node ID of the source M-NG-RAN node in e.g. NR-DC to NR-DC handover. | YES | ignore |
| IAB Authorization Status | O |  | ENUMERATED (authorized, not authorized, …) | Indicates the IAB node´s authorization status. | YES | ignore |
| **LTM Candidate PSCell Addition Information Request** | O |  |  |  | YES | reject |
| >LTM Request Indication | O |  | ENUMERATED (request, ...) |  | – |  |
| >CSI Resource Configuration | O |  | 9.2.1.xx8 |  | – |  |
| >Suggested LTM Candidate PSCell List | O |  | 9.2.3.xx3 |  | – |  |
| >Maximum Number of PSCells To Prepare | M |  | INTEGER (1..8, …) | Indicates the maximum number of PSCells that the target SN may prepare. | – |  |
| >SCG Reference Configuration Request | O |  | ENUMERATED (request, …) | Indicates that the reference configuration for LTM is requested. | – |  |
| >LTM Configuration ID Mapping List | O |  | 9.2.1.xx5 |  | – |  |
| >LTM Security Configuration List | O |  | 9.2.3.xx1 | Indicates the security configurations for LTM, which will replace the previous configuration if any. | – |  |

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| Range bound | Explanation |
| maxnoofPDUSessions | Maximum no. of PDU sessions. Value is 256 |
| maxnoofLTMCells | Maximum no. of Cells configured for LTM allowed towards one UE, the maximum value is 8. |

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| Condition | Explanation |
| ifSNterminated | This IE shall be present if there is at least one *PDU Session Resource Setup Info – SN terminated* in the *PDU Session Resources To Be Added List* IE. |

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

#### 9.1.2.2 S-NODE ADDITION REQUEST ACKNOWLEDGE

This message is sent by the S-NG-RAN node to confirm the M-NG-RAN node about the S-NG-RAN node addition preparation.

Direction: S-NG-RAN node → M-NG-RAN node.

| IE/Group Name | Presence | Range | IE type and reference | Semantics description | Criticality | Assigned Criticality |
| --- | --- | --- | --- | --- | --- | --- |
| Message Type | M |  | 9.2.3.1 |  | YES | reject |
| M-NG-RAN node UE XnAP ID | M |  | NG-RAN node UE XnAP ID  9.2.3.16 | Allocated at the M-NG-RAN node | YES | reject |
| S-NG-RAN node UE XnAP ID | M |  | NG-RAN node UE XnAP ID  9.2.3.16 | Allocated at the S-NG-RAN node | YES | reject |
| **PDU Session Resources Admitted To Be Added List** |  | *1* |  |  | YES | ignore |
| **>PDU Session Resources Admitted To Be Added Item** |  | *1 .. <maxnoofPDUSessions>* |  | NOTE: If neither the  *PDU Session Resource Setup Response Info – SN terminated* IE  nor the  *PDU Session Resource Setup Response Info – MN terminated* IE is present in a *PDU Session Resources Admitted to be Added Item* IE, abnormal conditions as specified in clause 8.3.1.4 apply. | – |  |
| >>PDU Session ID | M |  | 9.2.3.18 |  | – |  |
| >>PDU Session Resource Setup Response Info – SN terminated | O |  | 9.2.1.6 |  | – |  |
| >>PDU Session Resource Setup Response Info – MN terminated | O |  | 9.2.1.8 |  | – |  |
| **PDU Session Resources Not Admitted List** | O |  |  |  | YES | ignore |
| >PDU Session Resources Not Admitted List – SN terminated | O |  | PDU Session Resources Not Admitted List  9.2.1.3 |  | – |  |
| >PDU Session Resources Not Admitted List – MN terminated | O |  | PDU Session Resources Not Admitted List  9.2.1.3 |  | – |  |
| S-NG-RAN node to M-NG-RAN node Container | M |  | OCTET STRING | Includes the *CG-Config* message or the *CG-CandidateList* message as defined in subclause 11.2.2 of TS 38.331 [10]. | YES | reject |
| Admitted Split SRBs | O |  | ENUMERATED (srb1, srb2, srb1&2, ...) | Indicates admitted SRBs | YES | reject |
| RRC Config Indication | O |  | 9.2.3.72 |  | YES | reject |
| Criticality Diagnostics | O |  | 9.2.3.3 |  | YES | ignore |
| Location Information at S-NODE | O |  | Target Cell Global ID  9.2.3.25 | Contains information to support localisation of the UE | YES | ignore |
| MR-DC Resource Coordination Information | O |  | 9.2.2.33 | Information used to coordinate resource utilisation between M-NG-RAN node and S-NG-RAN node. | YES | ignore |
| Available fast MCG recovery via SRB3 | O |  | ENUMERATED (true, ...) | Indicates the fast MCG recovery via SRB3 is enabled. | YES | ignore |
| Direct Forwarding Path Availability | O |  | ENUMERATED (direct path available, …) | Indicates direct forwarding path is available between the target S-NG-RAN node and source NG-RAN node for intra-system handover, or between the target S-NG-RAN node and the source SN in e.g.NR-DC to NR-DC (conditional) handover. | YES | ignore |
| SCG Activation Status | O |  | 9.2.3.155 |  | YES | ignore |
| **Conditional PSCell Addition Information Acknowledge** | O |  |  |  | YES | ignore |
| **>Candidate PSCell List** |  | *1* |  | Ignored, if the *Candidate PSCell with Other Information List* IE is included. | – |  |
| **>>Candidate PSCell Item** |  | *1 .. <maxnoofPSCellCandidate>* |  |  | – |  |
| >>>PSCell ID | M |  | NR CGI  9.2.2.7 |  | – |  |
| **>****Candidate PSCell with Other Information List** |  | *0..1* |  |  | YES | reject |
| **>>Candidate PSCell with Other Information Item** |  | *1 .. <maxnoofPSCellCandidate>* |  |  | – |  |
| >>>PSCell ID | M |  | NR CGI  9.2.2.7 |  | – |  |
| >>>S-CPAC Complete Candidate Configuration Indicator | O |  | Complete Candidate Configuration Indicator  9.2.3.194 |  | – |  |
| SN Mobility Information | O |  | BIT STRING (SIZE (32)) | Information related to PSCell change; T-SN provides it in order to enable later analysis of the conditions that led to wrong PSCell change. | YES | ignore |
| QMC Coordination Response | O |  | 9.2.3.198 | This IE contains the response of the S-NG-RAN node to the QMC coordination request. | YES | ignore |
| **CHO Information SN Addition Acknowledge** | O |  |  |  | YES | reject |
| >PCell ID | O |  | Global NG-RAN Cell Identity  9.2.2.27 | PCell indicated in the corresponding S-NODE ADDITION REQUEST message. | – |  |
| Direct Forwarding Path Availability with source M-NG-RAN node | O |  | ENUMERATED (direct path available, …) | Indicates direct forwarding path is available between the target S-NG-RAN node and source M-NG-RAN node. | YES | ignore |
| LTM Candidate PSCell Addition Information Acknowledge | O |  |  |  | YES | ignore |
| >LTM Candidate PSCell List | O |  | 9.2.3.xx4 |  | – |  |

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| --- | --- |
| Range bound | Explanation |
| maxnoofPDUSessions | Maximum no. of PDU sessions. Value is 256 |
| maxnoofPSCellCandidate | Maximum no, of PSCell candidate. Value is 8 |
| maxnoofLTMCells | Maximum no. of Cells configured for LTM allowed towards one UE, the maximum value is 8. |

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

#### 9.1.2.5 S-NODE MODIFICATION REQUEST

This message is sent by the M-NG-RAN node to the S-NG-RAN node to either request the preparation to modify S-NG-RAN node resources for a specific UE, or to query for the current SCG configuration, or to provide the S-RLF-related information to the S-NG-RAN node.

Direction: M-NG-RAN node → S-NG-RAN node.

| IE/Group Name | Presence | Range | IE type and reference | Semantics description | Criticality | Assigned Criticality |
| --- | --- | --- | --- | --- | --- | --- |
| Message Type | M |  | 9.2.3.1 |  | YES | reject |
| M-NG-RAN node UE XnAP ID | M |  | NG-RAN node UE XnAP ID  9.2.3.16 | Allocated at the M-NG-RAN node | YES | reject |
| S-NG-RAN node UE XnAP ID | M |  | NG-RAN node UE XnAP ID  9.2.3.16 | Allocated at the S-NG-RAN node | YES | reject |
| Cause | M |  | 9.2.3.2 |  | YES | ignore |
| PDCP Change Indication | O |  | 9.2.3.74 |  | YES | ignore |
| Selected PLMN | O |  | PLMN Identity  9.2.2.4 | The selected PLMN of the SCG in the S-NG-RAN node. | YES | ignore |
| Mobility Restriction List | O |  | 9.2.3.53 |  | YES | ignore |
| SCG Configuration Query | O |  | 9.2.3.27 |  | YES | ignore |
| **UE Context Information** |  | *0..1* |  |  | YES | reject |
| >UE Security Capabilities | O |  | 9.2.3.49 |  | – |  |
| >S-NG-RAN node Security Key | O |  | 9.2.3.51 | This IE is ignored if the *LTM Candidate PSCell Addition Information Modification Request* IE is present. | – |  |
| >S-NG-RAN node UE Aggregate Maximum Bit Rate | O |  | UE Aggregate Maximum Bit Rate  9.2.3.17 |  | – |  |
| >Index to RAT/Frequency Selection Priority | O |  | 9.2.3.23 |  | – |  |
| >Lower Layer presence status change | O |  | 9.2.3.60 |  | – |  |
| **>PDU Session Resources To Be Added List** |  | *0..1* |  |  | – |  |
| **>>PDU Session Resources To Be Added Item** |  | *1 .. <maxnoofPDUSessions>* |  | NOTE: If neither the  *PDU Session Resource Setup Info – SN terminated* IE  nor the  *PDU Session Resource Setup Info – MN terminated* IE is present in a *PDU Session Resources To Be Added Item* IE, abnormal conditions as specified in clause 8.3.3.4 apply. | – |  |
| >>>PDU Session ID | M |  | 9.2.3.18 |  | – |  |
| >>>S-NSSAI | M |  | 9.2.3.21 |  | – |  |
| >>>S-NG-RAN node PDU Session Aggregate Maximum Bit Rate | O |  | PDU Session Aggregate Maximum Bit Rate  9.2.3.69 |  | – |  |
| >>>PDU Session Resource Setup Info – SN terminated | O |  | 9.2.1.5 |  | – |  |
| >>>PDU Session Resource Setup Info – MN terminated | O |  | 9.2.1.7 |  | – |  |
| >>>PDU Session Expected UE Activity Behaviour | O |  | Expected UE Activity Behaviour  9.2.3.82 | Expected UE Activity Behaviour for the PDU Session. | YES | ignore |
| **>PDU Session Resources To Be Modified List** |  | *0..1* |  |  | – |  |
| **>>PDU Session Resources To Be Modified Item** |  | *1 .. <maxnoofPDUSessions>* |  | NOTE: If neither the  *PDU Session Resource Modification Info – SN terminated* IE  nor the  *PDU Session Resource Modification Info – MN terminated* IE is present in a *PDU Session Resources To Be Modified Item* IE, abnormal conditions as specified in clause 8.3.3.4 apply. | – |  |
| >>>PDU Session ID | M |  | 9.2.3.18 |  | – |  |
| >>>S-NG-RAN node PDU Session Aggregate Maximum Bit Rate | O |  | PDU Session Aggregate Maximum Bit Rate  9.2.3.69 |  | – |  |
| >>>PDU Session Resource Modification Info – SN terminated | O |  | 9.2.1.9 |  | – |  |
| >>>PDU Session Resource Modification Info – MN terminated | O |  | 9.2.1.11 |  | – |  |
| >>>S-NSSAI | O |  | 9.2.3.21 |  | YES | reject |
| >>>PDU Session Expected UE Activity Behaviour | O |  | Expected UE Activity Behaviour  9.2.3.82 | Expected UE Activity Behaviour for the PDU Session. | YES | ignore |
| >>>User Plane Failure Indication | O |  | 9.2.3.210 |  | YES | ignore |
| >PDU Session Resources To Be Released List | O |  | PDU Session List with Cause  9.2.1.26 |  | – |  |
| M-NG-RAN node to S-NG-RAN node Container | O |  | OCTET STRING | Includes the *CG-ConfigInfo* message as defined in subclause 11.2.2. of TS 38.331 [10]. | YES | ignore |
| Requested Split SRBs | O |  | ENUMERATED (srb1, srb2, srb1&2, ...) | Indicates that resources for Split SRBs are requested. | YES | ignore |
| Requested Split SRBs release | O |  | ENUMERATED (srb1, srb2, srb1&2, ...) | Indicates that resources for Split SRBs are requested to be released. | YES | ignore |
| Desired Activity Notification Level | O |  | 9.2.3.77 |  | YES | ignore |
| Additional DRB IDs | O |  | DRB List  9.2.1.29 | Indicates additional list of DRB IDs that the S-NG-RAN node may use for SN-terminated bearers. | YES | reject |
| S-NG-RAN node Maximum Integrity Protected Data Rate Uplink | O |  | Bit Rate  9.2.3.4 | The S-NG-RAN node Maximum Integrity Protected Data Rate Uplink is a portion of the UE’s Maximum Integrity Protected Data Rate in the Uplink, which is enforced by the S-NG-RAN node for the UE’s SN terminated PDU sessions. If the *S-NG-RAN node Maximum Integrity Protected Data Rate Downlink* IE is not present, this IE applies to both UL and DL. | YES | reject |
| S-NG-RAN node Maximum Integrity Protected Data Rate Downlink | O |  | Bit Rate  9.2.3.4 | The S-NG-RAN node Maximum Integrity Protected Data Rate Downlink is a portion of the UE’s Maximum Integrity Protected Data Rate in the Downlink, which is enforced by the S-NG-RAN node for the UE’s SN terminated PDU sessions. | YES | reject |
| Location Information at S-NODE reporting | O |  | ENUMERATED (pscell, ...) | Indicates that the user’s Location Information at S-NODE is to be provided. | YES | ignore |
| MR-DC Resource Coordination Information | O |  | 9.2.2.33 | Information used to coordinate resource utilisation between M-NG-RAN node and S-NG-RAN node. | YES | ignore |
| PCell ID | O |  | Global NG-RAN Cell Identity  9.2.2.27 |  | YES | reject |
| NE-DC TDM Pattern | O |  | 9.2.2.38 |  | YES | ignore |
| Requested Fast MCG recovery via SRB3 | O |  | ENUMERATED (true, ...) | Indicates that the resources for fast MCG recovery via SRB3 are requested. | YES | ignore |
| Requested Fast MCG recovery via SRB3 Release | O |  | ENUMERATED (true, ...) | Indicates that resources for fast MCG recovery via SRB3 are requested to be released. | YES | ignore |
| SN triggered | O |  | ENUMERATED (TRUE, ...) |  | YES | ignore |
| Target Node ID | O |  | Global NG-RAN Node ID  9.2.2.3 | Indicates the target node ID of the handover procedure decided by the M-NG-RAN node. | YES | ignore |
| PSCell History Information Retrieve | O |  | ENUMERATED (query, ...) | Indicates that the SN UE history information is requested. | YES | ignore |
| UE History Information from the UE | O |  | 9.2.3.110 |  | YES | ignore |
| **CHO Information SN Modification** | O |  |  |  | YES | ignore |
| >Conditional Reconfiguration | M |  | ENUMERATED (intra-MN-CHO, ...) |  | – |  |
| >Estimated Arrival Probability | O |  | INTEGER (1..100) |  | – |  |
| SCG Activation Request | O |  | 9.2.3.154 |  | YES | ignore |
| **Conditional PSCell Addition Information Modification Request** | O |  |  | This IE may be sent to the candidate SN. | YES | ignore |
| >Maximum Number of PSCells To Prepare | O |  | INTEGER (1..8, ...) | Indicates the maximum number of PSCells that the candidate SN may prepare. | – |  |
| >Estimated Arrival Probability | O |  | INTEGER (1..100) | Indicates the arrival probability for the UE towards the candidate SN. |  |  |
| >S-CPAC Request Information | O |  | 9.2.3.192 | Indicates that SN modification is for S-CPAC preparation or modification. | YES | reject |
| >S-CPAC Reference Configuration Request | O |  | ENUMERATED (request, …) | Indicates that the reference configuration for S-CPAC is requested. | YES | ignore |
| >S-CPAC Inter-SN Execution Notification | O |  | ENUMERATED (executed, …) | Indicates that inter-SN S-CPAC was executed. | YES | reject |
| **Conditional PSCell Change Information Update** | O |  |  | This IE may be sent to the source SN in SN-initiated inter-SN CPC, or sent to a candidate SN in S-CPAC. | YES | ignore |
| **>Multiple Target S-NG-RAN Node List** |  | *1* |  |  | – |  |
| **>>Multiple Target S-NG-RAN Node Item** |  | *1 .. <maxnoofTargetSNs>* |  |  | – |  |
| >>>Target S-NG-RAN node ID | M |  | Global NG-RAN Node ID  9.2.2.3 |  | – |  |
| **>>>Candidate PSCell List** |  | *1* |  |  | – |  |
| **>>>>Candidate PSCell Item** |  | *1 .. <maxnoofPSCellCandidate>* |  |  | – |  |
| >>>>>PSCell ID | M |  | NR CGI  9.2.2.7 |  | – |  |
| S-NG-RAN node UE Slice Maximum Bit Rate | O |  | UE Slice Maximum Bit Rate List  9.2.3.167 | This IE indicates the S-NG-RAN node portion of the UE Slice Aggregate Maximum Bit Rate as specified in TS 23.501 [7] | YES | ignore |
| Management Based MDT PLMN Modification List | O |  | MDT PLMN Modification List  9.2.3.169 |  | YES | ignore |
| Selected NID | O |  | NID  9.2.2.65 | This IE, together with the *Selected PLMN* IE, indicates the SNPN proposed for the SCG to the S-NG-RAN node. | YES | ignore |
| QMC Coordination Request | O |  | 9.2.3.197 | This IE contains information for managing configuration and reporting of one or more QoE and/or RAN visible QoE measurements at the S-NG-RAN node subject to modification. | YES | ignore |
| Source SN to Target SN QMC Information Inquiry | O |  | ENUMERATED (true, ...) | This IE contains a request for S-NG-RAN node-related QMC Configuration Information. The information is to be forwarded to the target S-NG-RAN node. | YES | ignore |
| IAB Authorization Status | O |  | ENUMERATED (authorized, not authorized, …) | Indicates the IAB node´s authorization status. | YES | Ignore |
| **LTM Candidate PSCell Information Update Request** | O |  |  |  | YES | ignore |
| >CSI Resource Configuration | O |  | 9.2.1.xx8 |  | – |  |
| >LTM Configuration ID Mapping List | O |  | 9.2.1.xx5 |  | – |  |
| **>Multiple Target S-NG-RAN Node List** |  | *1* |  |  | – |  |
| **>>Multiple Target S-NG-RAN Node Item** |  | *1 .. <maxnoofTargetSNs>* |  |  | – |  |
| >>>LTM Candidate PSCell List | O |  | 9.2.3.xx4 |  | – |  |
| **LTM Candidate PSCell Addition Information Modification Request** | O |  |  | This IE may be sent to the candidate SN. | YES | ignore |
| >Maximum Number of PSCells To Prepare | O |  | INTEGER (1..8, ...) | Indicates the maximum number of PSCells that the candidate SN may prepare. | – |  |
| >SCG Reference Configuration Request | O |  | ENUMERATED (request, …) | Indicates that the reference configuration for LTM is requested. | – |  |
| >LTM Security Configuration List | O |  | 9.2.3.xx1 | Indicates the security configurations for LTM, which will replace the previous configuration if any. | – |  |
| >Suggested LTM Candidate PSCell List | O |  | 9.2.3.xx3 |  | – |  |

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| --- | --- |
| Range bound | Explanation |
| maxnoofPDUSessions | Maximum no. of PDU sessions. Value is 256 |
| maxnoofPSCellCandidate | Maximum no. of PSCell candidates. Value is 8 |
| maxnoofTargetSNs | Maximum no. of the target S-NG-RAN nodes. Value is 8 |
|  |  |

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

#### 9.1.2.6 S-NODE MODIFICATION REQUEST ACKNOWLEDGE

This message is sent by the S-NG-RAN node to confirm the M-NG-RAN node’s request to modify the S-NG-RAN node resources for a specific UE.

Direction: S-NG-RAN node → M-NG-RAN node.

| IE/Group Name | Presence | Range | IE type and reference | Semantics description | Criticality | Assigned Criticality |
| --- | --- | --- | --- | --- | --- | --- |
| Message Type | M |  | 9.2.3.1 |  | YES | reject |
| M-NG-RAN node UE XnAP ID | M |  | NG-RAN node UE XnAP ID  9.2.3.16 | Allocated at the M-NG-RAN node | YES | ignore |
| S-NG-RAN node UE XnAP ID | M |  | NG-RAN node UE XnAP ID  9.2.3.16 | Allocated at the S-NG-RAN node | YES | ignore |
| **PDU Session Resources Admitted List** |  | *0..1* |  |  | YES | ignore |
| **>PDU Session Resources Admitted To Be Added List** |  | *0..1* |  |  | – |  |
| **>>PDU Session Resources Admitted To Be Added Item** |  | *1 .. <maxnoofPDUSessions>* |  | NOTE: If neither the  *PDU Session Resource Setup Response Info – SN terminated* IE  nor the  *PDU Session Resource Setup Response Info – MN terminated* IE is present in a *PDU Session Resources Admitted To Be Added Item* IE, abnormal conditions as specified in clause 8.3.3.4 apply. | – |  |
| >>>PDU Session ID | M |  | 9.2.3.18 |  | – |  |
| >>>PDU Session Resource Setup Response Info – SN terminated | O |  | 9.2.1.6 |  | – |  |
| >>>PDU Session Resource Setup Response Info – MN terminated | O |  | 9.2.1.8 |  | – |  |
| **>PDU Session Resources Admitted To Be Modified List** |  | *0..1* |  |  | – |  |
| **>>PDU Session Resources Admitted To Be Modified Item** |  | *1 .. <maxnoofPDUSessions>* |  | NOTE: If neither the  *PDU Session Resource Modification Response Info – SN terminated* IE  nor the  *PDU Session Resource Modification Response Info – MN terminated* IE is present in a *PDU Session Resources Admitted To Be Modified Item* IE, abnormal conditions as specified in clause 8.3.3.4 apply. | – |  |
| >>>PDU Session ID | M |  | 9.2.3.18 |  | – |  |
| >>>PDU Session Resource Modification Response Info – SN terminated | O |  | 9.2.1.10 |  | – |  |
| >>>PDU Session Resource Modification Response Info – MN terminated | O |  | 9.2.1.12 |  | – |  |
| **>PDU Session Resources Admitted To Be Released List** |  | *0..1* |  |  | – |  |
| >>PDU Session Resources admitted to be released List – SN terminated | O |  | PDU Session List with data forwarding request info  9.2.1.24 |  | – |  |
| >>PDU Session Resources admitted to be released List – MN terminated | O |  | PDU Session List with Cause  9.2.1.26 |  | – |  |
| **PDU Session Resources Not Admitted** | O |  |  |  | YES | ignore |
| >PDU Session List | O |  | 9.2.1.27 | Ignored if the *PDU Session Resources Not Admitted List* IE is included | – |  |
| >PDU Session Resources Not Admitted List | O |  | 9.2.1.3 |  | YES | ignore |
| S-NG-RAN node to M-NG-RAN node Container | O |  | OCTET STRING | Includes the *CG-Config* message or the *CG-CandidateList* message as defined in subclause 11.2.2 of TS 38.331 [10]. | YES | ignore |
| Admitted Split SRBs | O |  | ENUMERATED (srb1, srb2, srb1&2, ...) | Indicates admitted SRBs | YES | ignore |
| Admitted Split SRBs release | O |  | ENUMERATED (srb1, srb2, srb1&2, ...) | Indicates admitted SRBs release | YES | ignore |
| Criticality Diagnostics | O |  | 9.2.3.3 |  | YES | ignore |
| Location Information at S-NODE | O |  | Target Cell Global ID  9.2.3.25 | Contains information to support localisation of the UE | YES | ignore |
| MR-DC Resource Coordination Information | O |  | 9.2.2.33 | Information used to coordinate resource utilisation between M-NG-RAN node and S-NG-RAN node. | YES | ignore |
| **PDU Session Resources with Data Forwarding List** |  | *0..1* |  |  | YES | ignore |
| >PDU Session Resources with Data Forwarding List – SN terminated | M |  | PDU Session List with data forwarding request info  9.2.1.24 |  | – |  |
| RRC Config Indication | O |  | 9.2.3.72 |  | YES | reject |
| Available fast MCG recovery via SRB3 | O |  | ENUMERATED (true, ...) | Indicates the fast MCG recovery via SRB3 is enabled. | YES | ignore |
| Release fast MCG recovery via SRB3 | O |  | ENUMERATED (true, ...) | Indicates the fast MCG recovery via SRB3 is released. | YES | ignore |
| Direct Forwarding Path Availability | O |  | ENUMERATED (direct path available,…) | Indicates direct path is available between the S-NG-RAN node and the target NG-RAN node. | YES | ignore |
| SCG UE History Information | O |  | 9.2.3.151 |  | YES | ignore |
| SCG Activation Status | O |  | 9.2.3.155 |  | YES | ignore |
| **Conditional PSCell Addition Information Modification Acknowledge** | O |  |  | This IE may be sent from the target SN. | YES | ignore |
| **>Candidate PSCell List** |  | *1* |  | Ignored, if the *Candidate PSCell with Other Information List* IE is included. | – |  |
| **>>Candidate PSCell Item** |  | *1 .. <maxnoofPSCellCandidate>* |  |  | – |  |
| >>>PSCell ID | M |  | NR CGI  9.2.2.7 |  | – |  |
| **>Candidate PSCell with Other Information List** |  | *0..1* |  |  | YES | reject |
| **>>Candidate PSCell with Other Information Item** |  | *1 .. <maxnoofPSCellCandidate>* |  |  | – |  |
| >>>PSCell ID | M |  | NR CGI  9.2.2.7 |  | – |  |
| >>>S-CPAC Complete Candidate Configuration Indicator | O |  | Complete Candidate Configuration Indicator  9.2.3.194 |  | – |  |
| QMC Coordination Response | O |  | 9.2.3.198 | This IE contains the response of the S-NG-RAN node to the QMC coordination request. | YES | ignore |
| Source SN to Target SN QMC Information | O |  | QMC Configuration Information  9.2.3.156 | This IE contains S-NG-RAN node-related QMC Configuration Information to be forwarded to the target S-NG-RAN node. | YES | Ignore |
| **LTM Candidate PSCell Addition Information Modification Acknowledge** | O |  |  |  | YES | ignore |
| **>LTM Candidate PSCell List** | O |  | 9.2.3.xx4 |  | – |  |
|  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  |
| **LTM Candidate PSCell Information Update Acknowledge** | O |  |  |  | YES | ignore |
| >CSI Resource Configuration | O |  | 9.2.1.xx8 |  | – |  |
| >LTM Configuration ID Mapping List | O |  | 9.2.1.xx5 |  | - |  |

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| --- | --- |
| Range bound | Explanation |
| maxnoofPDUSessions | Maximum no. of PDU sessions. Value is 256 |
| maxnoofPSCellCandidate | Maximum no. of PSCell candidates. Value is 8 |
|  |  |

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

#### 9.1.2.8 S-NODE MODIFICATION REQUIRED

This message is sent by the S-NG-RAN node to the M-NG-RAN node to request the modification of S-NG-RAN node resources for a specific UE.

Direction: S-NG-RAN node → M-NG-RAN node.

| IE/Group Name | Presence | Range | IE type and reference | Semantics description | Criticality | Assigned Criticality |
| --- | --- | --- | --- | --- | --- | --- |
| Message Type | M |  | 9.2.3.1 |  | YES | reject |
| M-NG-RAN node UE XnAP ID | M |  | NG-RAN node UE XnAP ID  9.2.3.16 | Allocated at the M-NG-RAN node | YES | reject |
| S-NG-RAN node UE XnAP ID | M |  | NG-RAN node UE XnAP ID  9.2.3.16 | Allocated at the S-NG-RAN node | YES | reject |
| Cause | M |  | 9.2.3.2 |  | YES | ignore |
| PDCP Change Indication | O |  | 9.2.3.74 |  | YES | ignore |
| **PDU Session Resources To Be Modified List** |  | *0..1* |  |  | YES | ignore |
| **>PDU Session Resources To Be Modified Item** |  | *1 .. <maxnoofPDUSessions>* |  | NOTE: If neither the  *PDU Session Resource Modification Required Info – SN terminated* IE  nor the  *PDU Session Resource Modification Required Info – MN terminated* IE is present in a *PDU Session Resources To Be Modified Item* IE, abnormal conditions as specified in clause 8.3.4.4 apply. | – |  |
| >>PDU Session ID | M |  | 9.2.3.18 |  | – |  |
| >>PDU Session Resource Modification Required Info – SN terminated | O |  | 9.2.1.20 |  | – |  |
| >>PDU Session Resource Modification Required Info – MN terminated | O |  | 9.2.1.22 |  | – |  |
| **PDU Session Resources To Be Released List** |  | *0..1* |  |  | YES | ignore |
| **>PDU Session Resources To Be Released Item** |  | *1 .. <maxnoofPDUSessions>* |  |  | – |  |
| >PDU sessions to be released List – SN terminated | O |  | PDU Session List with data forwarding request info  9.2.1.24 |  | – |  |
| >PDU sessions to be released List – MN terminated | O |  | PDU Session List with Cause  9.2.1.26 |  | – |  |
| S-NG-RAN node to M-NG-RAN node Container | O |  | OCTET STRING | Includes the *CG-Config* message or the *CG-CandidateList* message as defined in subclause 11.2.2 of TS 38.331 [10]. | YES | ignore |
| Spare DRB IDs | O |  | DRB List  9.2.1.29 | Indicates the list of unnecessary DRB IDs that had been used by the S-NG-RAN node. | YES | ignore |
| Required Number of DRB IDs | O |  | Number of DRB IDs  9.2.3.78 | Indicates the number of DRB IDs that the S-NG-RAN node requests more. | YES | ignore |
| Location Information at S-NODE | O |  | Target Cell Global ID  9.2.3.25 | Contains information to support localisation of the UE | YES | ignore |
| MR-DC Resource Coordination Information | O |  | 9.2.2.33 | Information used to coordinate resource utilisation between M-NG-RAN node and S-NG-RAN node. | YES | ignore |
| RRC Config Indication | O |  | 9.2.3.72 |  | YES | reject |
| Available fast MCG recovery via SRB3 | O |  | ENUMERATED (true, ...) | This IE is not used in this version of the specification. | YES | ignore |
| Release fast MCG recovery via SRB3 | O |  | ENUMERATED (true, ...) | This IE is not used in this version of the specification. | YES | ignore |
| SCG Indicator | O |  | ENUMERATED(released,...) |  | YES | ignore |
| SCG UE History Information | O |  | 9.2.3.151 |  | YES | ignore |
| SCG Activation Request | O |  | 9.2.3.154 |  | YES | ignore |
| **CPAC Information Required** | O |  |  | This IE may be sent from the candidate SN. | YES | ignore |
| **>Candidate PSCell List** |  | *1* |  | Indicates the full list of candidate PSCells prepared at the candidate S-NG-RAN node.  Ignored, if the *Candidate PSCell with Other Information List* IE is included. | – |  |
| **>>Candidate PSCell Item** |  | *1 .. <maxnoofPSCellCandidate>* |  |  | – |  |
| >>>PSCell ID | M |  | NR CGI  9.2.2.7 |  | – |  |
| **>Candidate PSCell with Other Information List** |  | *0..1* |  |  | YES | reject |
| **>>Candidate PSCell with Other Information Item** |  | *1 .. <maxnoofPSCellCandidate>* |  |  | – |  |
| >>>PSCell ID | M |  | NR CGI  9.2.2.7 |  | – |  |
| >>>S-CPAC Complete Candidate Configuration Indicator | O |  | Complete Candidate Configuration Indicator  9.2.3.194 |  | – |  |
| SCG Reconfiguration Notification | O |  | ENUMERATED (executed, ..., executed-deleted, deleted) |  | YES | ignore |
| SPR availability in UE | O |  | ENUMERATED (spr-available, …) | Indicates if an SPR is available in the UE. | YES | ignore |
| QMC Coordination Request | O |  | 9.2.3.197 | This IE contains information for managing configuration and reporting of one or more QoE and/or RAN visible QoE measurements at the S-NG-RAN node that requests modification. | YES | ignore |
| S-CPAC Request | O |  | ENUMERATED (initiation, ...) | Indicates that SN modification is for S-CPAC preparation. This IE may be sent from the source SN. | YES | reject |
| PDU Sessions List To Be Released - UPError | O |  | 9.2.1.41 |  | YES | ignore |
| **LTM Information Required** | O |  |  | This IE may be sent from the candidate SN. | YES | ignore |
| >Candidate PSCell List |  | *1* |  | Indicates the full list of candidate PSCells prepared at the candidate S-NG-RAN node. | – |  |
| **>>Candidate PSCell Item** |  | *1 .. <maxnoofLTMCells>* |  |  | – |  |
| >>>PSCell ID | M |  | NR CGI  9.2.2.7 |  | – |  |

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| --- | --- |
| Range bound | Explanation |
| maxnoofPDUSessions | Maximum no. of PDU sessions. Value is 256 |
| maxnoofPSCellCandidate | Maximum no, of PSCell candidate. Value is 8 |
| maxnoofLTMCells | Maximum no. of Cells configured for LTM allowed towards one UE, the maximum value is 8. |

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

#### 9.1.2.11 S-NODE CHANGE REQUIRED

This message is sent by the S-NG-RAN node to the M-NG-RAN node to trigger the change of the S-NG-RAN node.

Direction: S-NG-RAN node → M-NG-RAN node.

| IE/Group Name | Presence | Range | IE type and reference | Semantics description | Criticality | Assigned Criticality |
| --- | --- | --- | --- | --- | --- | --- |
| Message Type | M |  | 9.2.3.1 |  | YES | reject |
| M-NG-RAN node UE XnAP ID | M |  | NG-RAN node UE XnAP ID  9.2.3.16 | Allocated at the M-NG-RAN node | YES | reject |
| S-NG-RAN node UE XnAP ID | M |  | NG-RAN node UE XnAP ID  9.2.3.16 | Allocated at the S-NG-RAN node | YES | reject |
| Target S-NG-RAN node ID | M |  | Global NG-RAN Node ID  9.2.2.3 | This IE shall be ignored if the *Conditional PSCell Change Information Required* IE is present or the *LTM Candidate PSCell Change Information Required* IE is present. | YES | reject |
| Cause | M |  | 9.2.3.2 |  | YES | ignore |
| **PDU Session SN Change Required List** |  | *0..1* |  |  | YES | ignore |
| **>PDU Session SN Change Required Item** |  | *1 .. <maxnoofPDUsessions>* |  | NOTE: If the  *PDU Session Resource Change Required Info – SN terminated* IE  is not present in a *PDU Session SN Change Required Item* IE, abnormal conditions as specified in clause 8.3.5.4 apply. | – |  |
| >>PDU Session ID | M |  | 9.2.3.18 |  | – |  |
| >>PDU Session Resource Change Required Info – SN terminated | O |  | 9.2.1.18 |  | – |  |
| S-NG-RAN node to M-NG-RAN node Container | M |  | OCTET STRING | Includes the *CG-Config* message as defined in subclause 11.2.2 of TS 38.331 [10].  This IE shall be ignored if the *Conditional PSCell Change Information Required* IE is present. | YES | reject |
| SCG UE History Information | O |  | 9.2.3.151 |  | YES | ignore |
| SN Mobility Information | O |  | BIT STRING (SIZE (32)) | Information related to PSCell change; S-NG-RAN node provides it in order to enable later analysis of the conditions that led to wrong PSCell change. | YES | ignore |
| Source PSCell ID | O |  | Global NG-RAN Cell Identity  9.2.2.27 |  | YES | ignore |
| **Conditional PSCell Change Information Required** | O |  |  |  | YES | ignore |
| **>Multiple Target S-NG-RAN Node List** |  | *1* |  |  | – |  |
| **>>Multiple Target S-NG-RAN Node Item** |  | *1 .. <maxnoofTargetSNs>* |  |  | – |  |
| >>>Target S-NG-RAN node ID | M |  | Global NG-RAN Node ID  9.2.2.3 |  | – |  |
| >>>CPC Indicator | M |  | ENUMERATED (CPC-initiation, CPC-modification, CPC-cancellation, ...) |  | – |  |
| >>>Maximum Number of PSCells To Prepare | M |  | INTEGER (1..8, …) | Indicates the maximum number of PSCells that the target SN may prepare. | – |  |
| >>>Estimated Arrival Probability | O |  | INTEGER (1..100) | Indicates the arrival probability for the UE towards the candidate target SN. | – |  |
| >>>S-NG-RAN node to M-NG-RAN node Container | M |  | OCTET STRING | Includes the *CG-Config* message as defined in subclause 11.2.2 of TS 38.331 [10]. | – |  |
| >S-CPAC Request | O |  | ENUMERATED (initiation, …) | Indicates that SN change is for S-CPAC preparation. | YES | reject |
| Source SN to Target SN QMC Information | O |  | QMC Configuration Information  9.2.3.156 | This IE contains S-NG-RAN node-related QMC Configuration Information to be forwarded to the target S-NG-RAN node. | YES | ignore |
| **LTM Candidate PSCell Change Information Required** | O |  |  |  | YES | reject |
| >LTM Request Indication | O |  | ENUMERATED (initiation, modification, ...) |  | – |  |
| >CSI Resource Configuration | O |  | 9.2.1.xx8 |  | – |  |
| >LTM Configuration ID Mapping List | O |  | 9.2.1.xx5 |  | – |  |
| **>Multiple Target S-NG-RAN Node List** |  | *1* |  |  | – |  |
| **>>Multiple Target S-NG-RAN Node Item** |  | *1 .. <maxnoofTargetSNs>* |  |  | – |  |
| >>>Target S-NG-RAN node ID | M |  | Global NG-RAN Node ID  9.2.2.3 |  | – |  |
| >>>Suggested LTM Candidate PSCell List | O |  | 9.2.3.xx3 |  | – |  |
| >>>S-NG-RAN node to M-NG-RAN node Container | M |  | OCTET STRING | Includes the *CG-Config* message as defined in subclause 11.2.2 of TS 38.331 [10]. | – |  |
| >>>Maximum Number of PSCells To Prepare | M |  | INTEGER (1..8, …) | Indicates the maximum number of PSCells that the target SN may prepare. | – |  |

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| --- | --- |
| Range bound | Explanation |
| maxnoofPDUsessions | Maximum no. of PDU sessions. Value is 256 |
| maxnoofTargetSNs | Maximum no. of the target S-NG-RAN nodes. Value is 8 |

<<<<<<<<<<<<<<<<<<<< Next Changes >>>>>>>>>>>>>>>>>>>>

9.1.2.12 S-NODE CHANGE CONFIRM

This message is sent by the M-NG-RAN node to inform the S-NG-RAN node that the preparation of the S-NG-RAN node initiated S-NG-RAN node change was successful.

Direction: M-NG-RAN node → S-NG-RAN node.

| **IE/Group Name** | **Presence** | **Range** | **IE type and reference** | **Semantics description** | **Criticality** | **Assigned Criticality** |
| --- | --- | --- | --- | --- | --- | --- |
| Message Type | M |  | 9.2.3.1 |  | YES | reject |
| M-NG-RAN node UE XnAP ID | M |  | NG-RAN node UE XnAP ID  9.2.3.16 | Allocated at the M-NG-RAN node | YES | ignore |
| S-NG-RAN node UE XnAP ID | M |  | NG-RAN node UE XnAP ID  9.2.3.16 | Allocated at the S-NG-RAN node | YES | ignore |
| **PDU Session SN Change Confirm List** |  | *0..1* |  |  | YES | ignore |
| **>PDU Session SN Change Confirm Item** |  | *1 .. <maxnoof PDUsessions>* |  | NOTE: If the  *PDU Session Resource Change Confirm Info – SN terminated* IE  is not present in a *PDU Session SN Change Confirm Item* IE, abnormal conditions as specified in clause 8.3.5.4 apply. | – |  |
| >>PDU Session ID | M |  | 9.2.3.18 |  | – |  |
| >>PDU Session Resource Change Confirm Info – SN terminated | O |  | 9.2.1.19 |  | – |  |
| **>>Additional List of PDU Session Resource Change Confirm Info – SN Terminated** |  | *0..1* |  | This IE would be present only if multiple candidate target SNs are prepared in case of SN initiated inter-SN CPC. | YES | ignore |
| **>>>Additional List of PDU Session Resource Change Confirm Info – SN Terminated-Item** |  | *1 .. <maxnoofTargetSNsMinusOne>* |  |  | – |  |
| >>>>PDU Session Resource Change Confirm Info – SN terminated | M |  | 9.2.1.19 |  | – |  |
| Criticality Diagnostics | O |  | 9.2.3.3 |  | YES | ignore |
| **Conditional PSCell Change Information Confirm** | O |  |  |  | YES | ignore |
| **>Multiple Target S-NG-RAN Node List** |  | *1* |  |  | – |  |
| **>>Multiple Target S-NG-RAN Node Item** |  | *1 .. <maxnoofTargetSNs>* |  |  | – |  |
| >>>Target S-NG-RAN node ID | M |  | Global NG-RAN Node ID  9.2.2.3 |  | – |  |
| **>>>Candidate PSCell List** |  | 1 |  |  | – |  |
| **>>>>Candidate PSCell Item** |  | *1 .. <maxnoofPSCellCandidate>* |  |  | – |  |
| >>>>>PSCell ID | M |  | NR CGI  9.2.2.7 |  | – |  |
| >>>CPAC Preparation Type | O |  | ENUMERATED (s-cpac, ...) |  | YES | ignore |
| M-NG-RAN node to S-NG-RAN node Container | O |  | OCTET STRING | Includes the *RRCReconfigurationComplete* message as defined in subclause 6.2.2 of TS 38.331 [10]. | YES | ignore |
| **LTM Candidate PSCell Change Information Confirm** | O |  |  |  | YES | ignore |
| **>Multiple Target S-NG-RAN Node List** |  | 1 |  |  | – |  |
| **>>Multiple Target S-NG-RAN Node Item** |  | *1 .. <maxnoofTargetSNs>* |  |  | – |  |
| >>>Target S-NG-RAN node ID | M |  | Global NG-RAN Node ID  9.2.2.3 |  | – |  |
| >>>Candidate PSCell List | M |  | 9.2.3.xx4 |  | – |  |

|  |  |
| --- | --- |
| **Range bound** | **Explanation** |
| maxnoofPDUsessions | Maximum no. of PDU sessions. Value is 256 |
| maxnoofTargetSNs | Maximum no. of the target S-NG-RAN nodes. Value is 8 |
| maxnoofPSCellCandidate | Maximum no, of PSCell candidate. Value is 8 |
| maxnoofTargetSNsMinusOne | Maximum no. of the target S-NG-RAN nodes minus 1. Value is 7 |

<<<<<<<<<<<<<<<<<<<< Next Changes >>>>>>>>>>>>>>>>>>>>

#### 9.2.3.xx1 LTM Security Configurations List

This IE is used to apply security in the S-NG-RAN node for inter-SN SCG LTM as defined in TS 37.340 [8].

| IE/Group Name | Presence | Range | IE Type and Reference | Semantics Description |
| --- | --- | --- | --- | --- |
| **LTM Security Configurations List** |  | *1* |  |  |
| **>LTM Security Configurations Item** |  | *1 .. <maxnoofSecurityConfigurations>* |  |  |
| >>S-NG-RAN node Security Key | M |  | BIT STRING (SIZE(256)) | The S-KSN which is provided by the M-NG-RAN node, see TS 33.501 [28]. |
| >>SK-counter | M |  | INTEGER (0..65535) |  |

|  |  |
| --- | --- |
| Range bound | Explanation |
| maxnoofSecurityConfigurations | Maximum no. of LTM security configurations. Value is 8. |

<<<<<<<<<<<<<<<<<<<< Next Changes >>>>>>>>>>>>>>>>>>>>

#### 9.2.3.xx2 L1 Configuration

This IE contains information related to the L1 RS configuration about the PSCells served by the S-NG-RAN node.

| IE/Group Name | Presence | Range | IE type and reference | Semantics description |
| --- | --- | --- | --- | --- |
| CHOICE *L1 Configuration* | M |  |  |  |
| >*SSB* |  |  |  |  |
| >>SSB Configuration | M |  | OCTET STRING | Contains the *ltm-SSB-Config-r18* as defined in TS 38.331 [10]. |
| >*CSI-RS* |  |  |  |  |
| >>CSI-RS Resource Configuration | M |  | OCTET STRING | Contains the *ltm-NZP-CSI-RS-ResourceConfigToAddModList-r19* as defined in TS 38.331 [10]. |
| >>CSI-RS Resource Set Configuration | M |  | OCTET STRING | Contains the *ltm-NZP-CSI-RS-ResourceSetToAddModList-r19* as defined in TS 38.331 [10]. |

<<<<<<<<<<<<<<<<<<<< Next Changes >>>>>>>>>>>>>>>>>>>>

#### 9.2.3.xx3 Suggested LTM Candidate PSCell List

This IE provides suggested LTM candidate PSCell list.

| IE/Group Name | Presence | Range | IE type and reference | Semantics description | Criticality | Assigned Criticality |
| --- | --- | --- | --- | --- | --- | --- |
| **Suggested LTM Candidate PSCell List** |  | *1* |  |  | – |  |
| **>Suggested Candidate PSCell Item** |  | *1 .. <* *maxnoofLTMCells>* |  |  | – |  |
| >>PSCell ID | M |  | NR CGI  9.2.2.7 |  | – |  |
| >>Early Sync Information Request | O |  | 9.2.1.xx3 |  | – |  |
| >>CSI Resource Configuration Request | O |  | ENUMERATED (true, …) |  | – |  |

|  |  |
| --- | --- |
| Range bound | Explanation |
| maxnoofLTMCells | Maximum no. of Cells configured for LTM allowed towards one UE, the maximum value is 8. |

<<<<<<<<<<<<<<<<<<<< Next Changes >>>>>>>>>>>>>>>>>>>>

#### 9.2.3.xx4 LTM Candidate PSCell List

This IE provides LTM candidate PSCell list.

| IE/Group Name | Presence | Range | IE type and reference | Semantics description | Criticality | Assigned Criticality |
| --- | --- | --- | --- | --- | --- | --- |
| **LTM Candidate PSCell List** |  | *1* |  |  | – |  |
| **>Candidate PSCell Item** |  | *1 .. <* *maxnoofLTMCells>* |  |  | – |  |
| >>PSCell ID | M |  | NR CGI  9.2.2.7 |  | – |  |
| >>TCI States Configurations List | O |  | OCTET STRING | Includes the *LTM-TCI-Info*  IE, as defined in TS 38.331 [10]. | – |  |
| >>Early UL Sync Configuration | O |  | 9.2.1.xx6 | Early UL sync configurations for the UE. | – |  |
| >>Early UL Sync Configuration for SUL | O |  | 9.2.1.xx6 | Early UL sync configurations for the UE for SUL carrier. | – |  |
| >>Layer 1 Configuration | O |  | 9.2.3.xx2 |  | – |  |
| >>Complete Candidate Configuration Indicator | O |  | ENUMERATED (complete, ...) |  | – |  |

|  |  |
| --- | --- |
| Range bound | Explanation |
| maxnoofLTMCells | Maximum no. of Cells configured for LTM allowed towards one UE, the maximum value is 8. |

<<<<<<<<<<<<<<<<<<<< Next Changes >>>>>>>>>>>>>>>>>>>>

## 9.3 Message and Information Element Abstract Syntax (with ASN.1)

### 9.3.1 General

XnAP ASN.1 definition conforms to ITU-T Rec. X.680 [16] and ITU-T Rec. X.681 [17].

Sub clause 9.3 presents the Abstract Syntax of the XnAP protocol with ASN.1. In case there is contradiction between the ASN.1 definition in this sub clause and the tabular format in sub clause 9.1 and 9.2, the ASN.1 shall take precedence, except for the definition of conditions for the presence of conditional elements, in which the tabular format shall take precedence.

The ASN.1 definition specifies the structure and content of XnAP messages. XnAP messages can contain any IEs specified in the object set definitions for that message without the order or number of occurrence being restricted by ASN.1. However, for this version of the standard, a sending entity shall construct an XnAP message according to the PDU definitions module and with the following additional rules:

- IEs shall be ordered (in an IE container) in the order they appear in object set definitions.

- Object set definitions specify how many times IEs may appear. An IE shall appear exactly once if the presence field in an object has value "mandatory". An IE may appear at most once if the presence field in an object has value "optional" or "conditional". If in a tabular format there is multiplicity specified for an IE (i.e. an IE list) then in the corresponding ASN.1 definition the list definition is separated into two parts. The first part defines an IE container list in which the list elements reside. The second part defines list elements. The IE container list appears as an IE of its own. For this version of the standard an IE container list may contain only one kind of list elements.

NOTE: In the above, "IE" means an IE in the object set with an explicit ID. If one IE needs to appear more than once in one object set, then the different occurrences have different IE IDs.

If an XnAP message that is not constructed as defined above is received, this shall be considered as Abstract Syntax Error, and the message shall be handled as defined for Abstract Syntax Error in clause 10.

### 9.3.2 Usage of Private Message Mechanism for Non-standard Use

The private message mechanism for non-standard use may be used:

- for special operator (and/or vendor) specific features considered not to be part of the basic functionality, i.e. the functionality required for a complete and high-quality specification in order to guarantee multivendor inter-operability.

- by vendors for research purposes, e.g. to implement and evaluate new algorithms/features before such features are proposed for standardisation.

The private message mechanism shall not be used for basic functionality. Such functionality shall be standardised.

### 9.3.3 Elementary Procedure Definitions

-- ASN1START

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

--

-- Elementary Procedure definitions

--

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

XnAP-PDU-Descriptions {

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

ngran-access (22) modules (3) xnap (2) version1 (1) xnap-PDU-Descriptions (0) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

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

--

-- IE parameter types from other modules.

--

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

IMPORTS

Criticality,

ProcedureCode

FROM XnAP-CommonDataTypes

HandoverRequest,

HandoverRequestAcknowledge,

HandoverPreparationFailure,

SNStatusTransfer,

UEContextRelease,

HandoverCancel,

NotificationControlIndication,

RANPaging,

RetrieveUEContextRequest,

RetrieveUEContextResponse,

RetrieveUEContextConfirm,

RetrieveUEContextFailure,

XnUAddressIndication,

SecondaryRATDataUsageReport,

SNodeAdditionRequest,

SNodeAdditionRequestAcknowledge,

SNodeAdditionRequestReject,

SNodeReconfigurationComplete,

SNodeModificationRequest,

SNodeModificationRequestAcknowledge,

SNodeModificationRequestReject,

SNodeModificationRequired,

SNodeModificationConfirm,

SNodeModificationRefuse,

SNodeReleaseRequest,

SNodeReleaseRequestAcknowledge,

SNodeReleaseReject,

SNodeReleaseRequired,

SNodeReleaseConfirm,

SNodeCounterCheckRequest,

SNodeChangeRequired,

SNodeChangeConfirm,

SNodeChangeRefuse,

RRCTransfer,

XnRemovalRequest,

XnRemovalResponse,

XnRemovalFailure,

XnSetupRequest,

XnSetupResponse,

XnSetupFailure,

NGRANNodeConfigurationUpdate,

NGRANNodeConfigurationUpdateAcknowledge,

NGRANNodeConfigurationUpdateFailure,

E-UTRA-NR-CellResourceCoordinationRequest,

E-UTRA-NR-CellResourceCoordinationResponse,

ActivityNotification,

CellActivationRequest,

CellActivationResponse,

CellActivationFailure,

ResetRequest,

ResetResponse,

ErrorIndication,

PrivateMessage,

DeactivateTrace,

TraceStart,

HandoverSuccess,

ConditionalHandoverCancel,

EarlyStatusTransfer,

FailureIndication,

HandoverReport,

ResourceStatusRequest,

ResourceStatusResponse,

ResourceStatusFailure,

ResourceStatusUpdate,

MobilityChangeRequest,

MobilityChangeAcknowledge,

MobilityChangeFailure,

AccessAndMobilityIndication,

CellTrafficTrace,

RANMulticastGroupPaging,

ScgFailureInformationReport,

ScgFailureTransfer,

F1CTrafficTransfer,

IABTransportMigrationManagementRequest,

IABTransportMigrationManagementResponse,

IABTransportMigrationManagementReject,

IABTransportMigrationModificationRequest,

IABTransportMigrationModificationResponse,

IABResourceCoordinationRequest,

IABResourceCoordinationResponse,

CPCCancel,

PartialUEContextTransfer,

PartialUEContextTransferAcknowledge,

PartialUEContextTransferFailure,

RachIndication,

DataCollectionRequest,

DataCollectionResponse,

DataCollectionFailure,

DataCollectionUpdate

FROM XnAP-PDU-Contents

id-handoverPreparation,

id-sNStatusTransfer,

id-handoverCancel,

id-notificationControl,

id-retrieveUEContext,

id-rANPaging,

id-xnUAddressIndication,

id-uEContextRelease,

id-secondaryRATDataUsageReport,

id-sNGRANnodeAdditionPreparation,

id-sNGRANnodeReconfigurationCompletion,

id-mNGRANnodeinitiatedSNGRANnodeModificationPreparation,

id-sNGRANnodeinitiatedSNGRANnodeModificationPreparation,

id-mNGRANnodeinitiatedSNGRANnodeRelease,

id-sNGRANnodeinitiatedSNGRANnodeRelease,

id-sNGRANnodeCounterCheck,

id-sNGRANnodeChange,

id-activityNotification,

id-rRCTransfer,

id-xnRemoval,

id-xnSetup,

id-nGRANnodeConfigurationUpdate,

id-e-UTRA-NR-CellResourceCoordination,

id-cellActivation,

id-reset,

id-errorIndication,

id-privateMessage,

id-deactivateTrace,

id-traceStart,

id-handoverSuccess,

id-conditionalHandoverCancel,

id-earlyStatusTransfer,

id-failureIndication,

id-handoverReport,

id-resourceStatusReportingInitiation,

id-resourceStatusReporting,

id-mobilitySettingsChange,

id-accessAndMobilityIndication,

id-cellTrafficTrace,

id-RANMulticastGroupPaging,

id-scgFailureInformationReport,

id-scgFailureTransfer,

id-f1CTrafficTransfer,

id-iABTransportMigrationManagement,

id-iABTransportMigrationModification,

id-iABResourceCoordination,

id-retrieveUEContextConfirm,

id-cPCCancel,

id-partialUEContextTransfer,

id-rachIndication,

id-dataCollectionReportingInitiation,

id-dataCollectionReporting

FROM XnAP-Constants;

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

--

-- Interface Elementary Procedure Class

--

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

XNAP-ELEMENTARY-PROCEDURE ::= CLASS {

&InitiatingMessage ,

&SuccessfulOutcome OPTIONAL,

&UnsuccessfulOutcome OPTIONAL,

&procedureCode ProcedureCode UNIQUE,

&criticality Criticality DEFAULT ignore

}

WITH SYNTAX {

INITIATING MESSAGE &InitiatingMessage

[SUCCESSFUL OUTCOME &SuccessfulOutcome]

[UNSUCCESSFUL OUTCOME &UnsuccessfulOutcome]

PROCEDURE CODE &procedureCode

[CRITICALITY &criticality]

}

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

--

-- Interface PDU Definition

--

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

XnAP-PDU ::= CHOICE {

initiatingMessage InitiatingMessage,

successfulOutcome SuccessfulOutcome,

unsuccessfulOutcome UnsuccessfulOutcome,

...

}

InitiatingMessage ::= SEQUENCE {

procedureCode XNAP-ELEMENTARY-PROCEDURE.&procedureCode ({XNAP-ELEMENTARY-PROCEDURES}),

criticality XNAP-ELEMENTARY-PROCEDURE.&criticality ({XNAP-ELEMENTARY-PROCEDURES}{@procedureCode}),

value XNAP-ELEMENTARY-PROCEDURE.&InitiatingMessage ({XNAP-ELEMENTARY-PROCEDURES}{@procedureCode})

}

SuccessfulOutcome ::= SEQUENCE {

procedureCode XNAP-ELEMENTARY-PROCEDURE.&procedureCode ({XNAP-ELEMENTARY-PROCEDURES}),

criticality XNAP-ELEMENTARY-PROCEDURE.&criticality ({XNAP-ELEMENTARY-PROCEDURES}{@procedureCode}),

value XNAP-ELEMENTARY-PROCEDURE.&SuccessfulOutcome ({XNAP-ELEMENTARY-PROCEDURES}{@procedureCode})

}

UnsuccessfulOutcome ::= SEQUENCE {

procedureCode XNAP-ELEMENTARY-PROCEDURE.&procedureCode ({XNAP-ELEMENTARY-PROCEDURES}),

criticality XNAP-ELEMENTARY-PROCEDURE.&criticality ({XNAP-ELEMENTARY-PROCEDURES}{@procedureCode}),

value XNAP-ELEMENTARY-PROCEDURE.&UnsuccessfulOutcome ({XNAP-ELEMENTARY-PROCEDURES}{@procedureCode})

}

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

--

-- Interface Elementary Procedure List

--

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

XNAP-ELEMENTARY-PROCEDURES XNAP-ELEMENTARY-PROCEDURE ::= {

XNAP-ELEMENTARY-PROCEDURES-CLASS-1 |

XNAP-ELEMENTARY-PROCEDURES-CLASS-2 ,

...

}

XNAP-ELEMENTARY-PROCEDURES-CLASS-1 XNAP-ELEMENTARY-PROCEDURE ::= {

handoverPreparation |

retrieveUEContext |

sNGRANnodeAdditionPreparation |

mNGRANnodeinitiatedSNGRANnodeModificationPreparation |

sNGRANnodeinitiatedSNGRANnodeModificationPreparation |

mNGRANnodeinitiatedSNGRANnodeRelease |

sNGRANnodeinitiatedSNGRANnodeRelease |

sNGRANnodeChange |

xnRemoval |

xnSetup |

nGRANnodeConfigurationUpdate |

e-UTRA-NR-CellResourceCoordination |

cellActivation |

reset |

resourceStatusReportingInitiation |

mobilitySettingsChange |

iABTransportMigrationManagement |

iABTransportMigrationModification |

iABResourceCoordination |

partialUEContextTransfer |

dataCollectionReportingInitiation,

...

}

XNAP-ELEMENTARY-PROCEDURES-CLASS-2 XNAP-ELEMENTARY-PROCEDURE ::= {

sNStatusTransfer |

handoverCancel |

rANPaging |

xnUAddressIndication |

uEContextRelease |

sNGRANnodeReconfigurationCompletion |

sNGRANnodeCounterCheck |

rRCTransfer |

errorIndication |

privateMessage |

notificationControl |

activityNotification |

secondaryRATDataUsageReport |

deactivateTrace |

traceStart |

handoverSuccess |

conditionalHandoverCancel |

earlyStatusTransfer |

failureIndication |

handoverReport |

resourceStatusReporting |

accessAndMobilityIndication |

cellTrafficTrace |

rANMulticastGroupPaging |

scgFailureInformationReport |

scgFailureTransfer |

f1CTrafficTransfer |

retrieveUEContextConfirm |

cPCCancel |

rachIndication |

dataCollectionReporting,

...

}

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

--

-- Interface Elementary Procedures

--

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

handoverPreparation XNAP-ELEMENTARY-PROCEDURE ::= {

INITIATING MESSAGE HandoverRequest

SUCCESSFUL OUTCOME HandoverRequestAcknowledge

UNSUCCESSFUL OUTCOME HandoverPreparationFailure

PROCEDURE CODE id-handoverPreparation

CRITICALITY reject

}

sNStatusTransfer XNAP-ELEMENTARY-PROCEDURE ::= {

INITIATING MESSAGE SNStatusTransfer

PROCEDURE CODE id-sNStatusTransfer

CRITICALITY ignore

}

handoverCancel XNAP-ELEMENTARY-PROCEDURE ::= {

INITIATING MESSAGE HandoverCancel

PROCEDURE CODE id-handoverCancel

CRITICALITY ignore

}

retrieveUEContext XNAP-ELEMENTARY-PROCEDURE ::= {

INITIATING MESSAGE RetrieveUEContextRequest

SUCCESSFUL OUTCOME RetrieveUEContextResponse

UNSUCCESSFUL OUTCOME RetrieveUEContextFailure

PROCEDURE CODE id-retrieveUEContext

CRITICALITY reject

}

rANPaging XNAP-ELEMENTARY-PROCEDURE ::= {

INITIATING MESSAGE RANPaging

PROCEDURE CODE id-rANPaging

CRITICALITY reject

}

xnUAddressIndication XNAP-ELEMENTARY-PROCEDURE ::= {

INITIATING MESSAGE XnUAddressIndication

PROCEDURE CODE id-xnUAddressIndication

CRITICALITY reject

}

uEContextRelease XNAP-ELEMENTARY-PROCEDURE ::= {

INITIATING MESSAGE UEContextRelease

PROCEDURE CODE id-uEContextRelease

CRITICALITY reject

}

sNGRANnodeAdditionPreparation XNAP-ELEMENTARY-PROCEDURE ::= {

INITIATING MESSAGE SNodeAdditionRequest

SUCCESSFUL OUTCOME SNodeAdditionRequestAcknowledge

UNSUCCESSFUL OUTCOME SNodeAdditionRequestReject

PROCEDURE CODE id-sNGRANnodeAdditionPreparation

CRITICALITY reject

}

sNGRANnodeReconfigurationCompletion XNAP-ELEMENTARY-PROCEDURE ::= {

INITIATING MESSAGE SNodeReconfigurationComplete

PROCEDURE CODE id-sNGRANnodeReconfigurationCompletion

CRITICALITY reject

}

mNGRANnodeinitiatedSNGRANnodeModificationPreparation XNAP-ELEMENTARY-PROCEDURE ::= {

INITIATING MESSAGE SNodeModificationRequest

SUCCESSFUL OUTCOME SNodeModificationRequestAcknowledge

UNSUCCESSFUL OUTCOME SNodeModificationRequestReject

PROCEDURE CODE id-mNGRANnodeinitiatedSNGRANnodeModificationPreparation

CRITICALITY reject

}

sNGRANnodeinitiatedSNGRANnodeModificationPreparation XNAP-ELEMENTARY-PROCEDURE ::= {

INITIATING MESSAGE SNodeModificationRequired

SUCCESSFUL OUTCOME SNodeModificationConfirm

UNSUCCESSFUL OUTCOME SNodeModificationRefuse

PROCEDURE CODE id-sNGRANnodeinitiatedSNGRANnodeModificationPreparation

CRITICALITY reject

}

mNGRANnodeinitiatedSNGRANnodeRelease XNAP-ELEMENTARY-PROCEDURE ::= {

INITIATING MESSAGE SNodeReleaseRequest

SUCCESSFUL OUTCOME SNodeReleaseRequestAcknowledge

UNSUCCESSFUL OUTCOME SNodeReleaseReject

PROCEDURE CODE id-mNGRANnodeinitiatedSNGRANnodeRelease

CRITICALITY reject

}

sNGRANnodeinitiatedSNGRANnodeRelease XNAP-ELEMENTARY-PROCEDURE ::= {

INITIATING MESSAGE SNodeReleaseRequired

SUCCESSFUL OUTCOME SNodeReleaseConfirm

PROCEDURE CODE id-sNGRANnodeinitiatedSNGRANnodeRelease

CRITICALITY reject

}

sNGRANnodeCounterCheck XNAP-ELEMENTARY-PROCEDURE ::= {

INITIATING MESSAGE SNodeCounterCheckRequest

PROCEDURE CODE id-sNGRANnodeCounterCheck

CRITICALITY reject

}

sNGRANnodeChange XNAP-ELEMENTARY-PROCEDURE ::= {

INITIATING MESSAGE SNodeChangeRequired

SUCCESSFUL OUTCOME SNodeChangeConfirm

UNSUCCESSFUL OUTCOME SNodeChangeRefuse

PROCEDURE CODE id-sNGRANnodeChange

CRITICALITY reject

}

rRCTransfer XNAP-ELEMENTARY-PROCEDURE ::= {

INITIATING MESSAGE RRCTransfer

PROCEDURE CODE id-rRCTransfer

CRITICALITY reject

}

xnRemoval XNAP-ELEMENTARY-PROCEDURE ::= {

INITIATING MESSAGE XnRemovalRequest

SUCCESSFUL OUTCOME XnRemovalResponse

UNSUCCESSFUL OUTCOME XnRemovalFailure

PROCEDURE CODE id-xnRemoval

CRITICALITY reject

}

xnSetup XNAP-ELEMENTARY-PROCEDURE ::= {

INITIATING MESSAGE XnSetupRequest

SUCCESSFUL OUTCOME XnSetupResponse

UNSUCCESSFUL OUTCOME XnSetupFailure

PROCEDURE CODE id-xnSetup

CRITICALITY reject

}

nGRANnodeConfigurationUpdate XNAP-ELEMENTARY-PROCEDURE ::= {

INITIATING MESSAGE NGRANNodeConfigurationUpdate

SUCCESSFUL OUTCOME NGRANNodeConfigurationUpdateAcknowledge

UNSUCCESSFUL OUTCOME NGRANNodeConfigurationUpdateFailure

PROCEDURE CODE id-nGRANnodeConfigurationUpdate

CRITICALITY reject

}

partialUEContextTransfer XNAP-ELEMENTARY-PROCEDURE ::= {

INITIATING MESSAGE PartialUEContextTransfer

SUCCESSFUL OUTCOME PartialUEContextTransferAcknowledge

UNSUCCESSFUL OUTCOME PartialUEContextTransferFailure

PROCEDURE CODE id-partialUEContextTransfer

CRITICALITY reject

}

e-UTRA-NR-CellResourceCoordination XNAP-ELEMENTARY-PROCEDURE ::= {

INITIATING MESSAGE E-UTRA-NR-CellResourceCoordinationRequest

SUCCESSFUL OUTCOME E-UTRA-NR-CellResourceCoordinationResponse

PROCEDURE CODE id-e-UTRA-NR-CellResourceCoordination

CRITICALITY reject

}

cellActivation XNAP-ELEMENTARY-PROCEDURE ::= {

INITIATING MESSAGE CellActivationRequest

SUCCESSFUL OUTCOME CellActivationResponse

UNSUCCESSFUL OUTCOME CellActivationFailure

PROCEDURE CODE id-cellActivation

CRITICALITY reject

}

reset XNAP-ELEMENTARY-PROCEDURE ::= {

INITIATING MESSAGE ResetRequest

SUCCESSFUL OUTCOME ResetResponse

PROCEDURE CODE id-reset

CRITICALITY reject

}

errorIndication XNAP-ELEMENTARY-PROCEDURE ::= {

INITIATING MESSAGE ErrorIndication

PROCEDURE CODE id-errorIndication

CRITICALITY ignore

}

notificationControl XNAP-ELEMENTARY-PROCEDURE ::= {

INITIATING MESSAGE NotificationControlIndication

PROCEDURE CODE id-notificationControl

CRITICALITY ignore

}

activityNotification XNAP-ELEMENTARY-PROCEDURE ::= {

INITIATING MESSAGE ActivityNotification

PROCEDURE CODE id-activityNotification

CRITICALITY ignore

}

privateMessage XNAP-ELEMENTARY-PROCEDURE ::= {

INITIATING MESSAGE PrivateMessage

PROCEDURE CODE id-privateMessage

CRITICALITY ignore

}

secondaryRATDataUsageReport XNAP-ELEMENTARY-PROCEDURE ::= {

INITIATING MESSAGE SecondaryRATDataUsageReport

PROCEDURE CODE id-secondaryRATDataUsageReport

CRITICALITY reject

}

deactivateTrace XNAP-ELEMENTARY-PROCEDURE ::= {

INITIATING MESSAGE DeactivateTrace

PROCEDURE CODE id-deactivateTrace

CRITICALITY ignore

}

traceStart XNAP-ELEMENTARY-PROCEDURE ::= {

INITIATING MESSAGE TraceStart

PROCEDURE CODE id-traceStart

CRITICALITY ignore

}

handoverSuccess XNAP-ELEMENTARY-PROCEDURE ::= {

INITIATING MESSAGE HandoverSuccess

PROCEDURE CODE id-handoverSuccess

CRITICALITY ignore

}

conditionalHandoverCancel XNAP-ELEMENTARY-PROCEDURE ::= {

INITIATING MESSAGE ConditionalHandoverCancel

PROCEDURE CODE id-conditionalHandoverCancel

CRITICALITY ignore

}

earlyStatusTransfer XNAP-ELEMENTARY-PROCEDURE ::= {

INITIATING MESSAGE EarlyStatusTransfer

PROCEDURE CODE id-earlyStatusTransfer

CRITICALITY ignore

}

failureIndication XNAP-ELEMENTARY-PROCEDURE ::= {

INITIATING MESSAGE FailureIndication

PROCEDURE CODE id-failureIndication

CRITICALITY ignore

}

handoverReport XNAP-ELEMENTARY-PROCEDURE ::= {

INITIATING MESSAGE HandoverReport

PROCEDURE CODE id-handoverReport

CRITICALITY ignore

}

resourceStatusReportingInitiation XNAP-ELEMENTARY-PROCEDURE ::= {

INITIATING MESSAGE ResourceStatusRequest

SUCCESSFUL OUTCOME ResourceStatusResponse

UNSUCCESSFUL OUTCOME ResourceStatusFailure

PROCEDURE CODE id-resourceStatusReportingInitiation

CRITICALITY reject

}

resourceStatusReporting XNAP-ELEMENTARY-PROCEDURE ::= {

INITIATING MESSAGE ResourceStatusUpdate

PROCEDURE CODE id-resourceStatusReporting

CRITICALITY ignore

}

mobilitySettingsChange XNAP-ELEMENTARY-PROCEDURE ::= {

INITIATING MESSAGE MobilityChangeRequest

SUCCESSFUL OUTCOME MobilityChangeAcknowledge

UNSUCCESSFUL OUTCOME MobilityChangeFailure

PROCEDURE CODE id-mobilitySettingsChange

CRITICALITY reject

}

accessAndMobilityIndication XNAP-ELEMENTARY-PROCEDURE ::={

INITIATING MESSAGE AccessAndMobilityIndication

PROCEDURE CODE id-accessAndMobilityIndication

CRITICALITY ignore

}

cellTrafficTrace XNAP-ELEMENTARY-PROCEDURE ::= {

INITIATING MESSAGE CellTrafficTrace

PROCEDURE CODE id-cellTrafficTrace

CRITICALITY ignore

}

rANMulticastGroupPaging XNAP-ELEMENTARY-PROCEDURE ::={

INITIATING MESSAGE RANMulticastGroupPaging

PROCEDURE CODE id-RANMulticastGroupPaging

CRITICALITY reject

}

scgFailureInformationReport XNAP-ELEMENTARY-PROCEDURE ::={

INITIATING MESSAGE ScgFailureInformationReport

PROCEDURE CODE id-scgFailureInformationReport

CRITICALITY ignore

}

scgFailureTransfer XNAP-ELEMENTARY-PROCEDURE ::={

INITIATING MESSAGE ScgFailureTransfer

PROCEDURE CODE id-scgFailureTransfer

CRITICALITY ignore

}

f1CTrafficTransfer XNAP-ELEMENTARY-PROCEDURE ::= {

INITIATING MESSAGE F1CTrafficTransfer

PROCEDURE CODE id-f1CTrafficTransfer

CRITICALITY reject

}

iABTransportMigrationManagement XNAP-ELEMENTARY-PROCEDURE ::={

INITIATING MESSAGE IABTransportMigrationManagementRequest

SUCCESSFUL OUTCOME IABTransportMigrationManagementResponse

UNSUCCESSFUL OUTCOME IABTransportMigrationManagementReject

PROCEDURE CODE id-iABTransportMigrationManagement

CRITICALITY reject

}

iABTransportMigrationModification XNAP-ELEMENTARY-PROCEDURE ::={

INITIATING MESSAGE IABTransportMigrationModificationRequest

SUCCESSFUL OUTCOME IABTransportMigrationModificationResponse

PROCEDURE CODE id-iABTransportMigrationModification

CRITICALITY reject

}

iABResourceCoordination XNAP-ELEMENTARY-PROCEDURE ::={

INITIATING MESSAGE IABResourceCoordinationRequest

SUCCESSFUL OUTCOME IABResourceCoordinationResponse

PROCEDURE CODE id-iABResourceCoordination

CRITICALITY reject

}

retrieveUEContextConfirm XNAP-ELEMENTARY-PROCEDURE ::={

INITIATING MESSAGE RetrieveUEContextConfirm

PROCEDURE CODE id-retrieveUEContextConfirm

CRITICALITY reject

}

cPCCancel XNAP-ELEMENTARY-PROCEDURE ::={

INITIATING MESSAGE CPCCancel

PROCEDURE CODE id-cPCCancel

CRITICALITY ignore

}

rachIndication XNAP-ELEMENTARY-PROCEDURE ::={

INITIATING MESSAGE RachIndication

PROCEDURE CODE id-rachIndication

CRITICALITY ignore

}

dataCollectionReportingInitiation XNAP-ELEMENTARY-PROCEDURE ::= {

INITIATING MESSAGE DataCollectionRequest

SUCCESSFUL OUTCOME DataCollectionResponse

UNSUCCESSFUL OUTCOME DataCollectionFailure

PROCEDURE CODE id-dataCollectionReportingInitiation

CRITICALITY reject

}

dataCollectionReporting XNAP-ELEMENTARY-PROCEDURE ::= {

INITIATING MESSAGE DataCollectionUpdate

PROCEDURE CODE id-dataCollectionReporting

CRITICALITY ignore

}

END

-- ASN1STOP

### 9.3.4 PDU Definitions

-- ASN1START

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

--

-- PDU definitions for XnAP.

--

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

XnAP-PDU-Contents {

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

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

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

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

--

-- IE parameter types from other modules.

--

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

IMPORTS

ActivationIDforCellActivation,

AMF-Region-Information,

AMF-UE-NGAP-ID,

AS-SecurityInformation,

AssistanceDataForRANPaging,

AerialUESubscriptionInformation,

A2XPC5QoSParameters,

BitRate,

Cause,

CellAndCapacityAssistanceInfo-EUTRA,

CellAndCapacityAssistanceInfo-NR,

CellAssistanceInfo-EUTRA,

CellAssistanceInfo-NR,

CHOinformation-Req,

CHOinformation-Ack,

CHOinformation-AddReq,

CHOinformation-AddReqAck,

CHOinformation-ModReq,

CHO-MRDC-EarlyDataForwarding,

CHO-MRDC-Indicator,

CPTransportLayerInformation,

TNLA-To-Add-List,

TNLA-To-Update-List,

TNLA-To-Remove-List,

TNLA-Setup-List,

TNLA-Failed-To-Setup-List,

CriticalityDiagnostics,

XnUAddressInfoperPDUSession-List,

DAPSResponseInfo-List,

DataTrafficResourceIndication,

DeliveryStatus,

DesiredActNotificationLevel,

DRB-ID,

DRB-List,

DRB-Number,

DRBsSubjectToDLDiscarding-List,

DRBsSubjectToEarlyStatusTransfer-List,

DRBsSubjectToStatusTransfer-List,

DRBToQoSFlowMapping-List,

E-UTRA-CGI,

ExpectedUEActivityBehaviour,

ExpectedUEBehaviour,

ExtendedUEIdentityIndexValue,

FiveGCMobilityRestrictionListContainer,

GlobalCell-ID,

GlobalNG-RANNode-ID,

GlobalNG-RANCell-ID,

GUAMI,

InterfaceInstanceIndication,

I-RNTI,

Local-NG-RAN-Node-Identifier,

LocationInformationSNReporting,

LocationReportingInformation,

LowerLayerPresenceStatusChange,

LTEA2XServicesAuthorized,

LTEUESidelinkAggregateMaximumBitRate,

LTEV2XServicesAuthorized,

MR-DC-ResourceCoordinationInfo,

ServedCells-E-UTRA,

ServedCells-NR,

ServedCellsToUpdate-E-UTRA,

ServedCellsToUpdate-NR,

MAC-I,

MaskedIMEISV,

MDT-Configuration,

MDTPLMNList,

MobilityRestrictionList,

Neighbour-NG-RAN-Node-List,

NG-RAN-Cell-Identity,

NG-RANnodeUEXnAPID,

NR-CGI,

NE-DC-TDM-Pattern,

NRA2XServicesAuthorized,

NRUESidelinkAggregateMaximumBitRate,

NRV2XServicesAuthorized,

PagingDRX,

EUTRAPagingeDRXInformation,

PagingPriority,

PartialListIndicator,

PLMN-Identity,

PDCPChangeIndication,

PDUSessionAggregateMaximumBitRate,

PDUSession-ID,

PDUSession-List,

PDUSession-List-withCause,

PDUSession-List-withDataForwardingFromTarget,

PDUSession-List-withDataForwardingRequest,

PDUSessionResourcesAdmitted-List,

PDUSessionResourcesNotAdmitted-List,

PDUSessionResourcesToBeSetup-List,

PDUSessionResourceChangeRequiredInfo-SNterminated,

PDUSessionResourceChangeRequiredInfo-MNterminated,

PDUSessionResourceChangeConfirmInfo-SNterminated,

PDUSessionResourceChangeConfirmInfo-MNterminated,

PDUSessionResourceSecondaryRATUsageList,

PDUSessionResourceSetupInfo-SNterminated,

PDUSessionResourceSetupInfo-MNterminated,

PDUSessionResourceSetupResponseInfo-SNterminated,

PDUSessionResourceSetupResponseInfo-MNterminated,

PDUSessionResourceModificationInfo-SNterminated,

PDUSessionResourceModificationInfo-MNterminated,

PDUSessionResourceModificationResponseInfo-SNterminated,

PDUSessionResourceModificationResponseInfo-MNterminated,

PDUSessionResourceModConfirmInfo-SNterminated,

PDUSessionResourceModConfirmInfo-MNterminated,

PDUSessionResourceModRqdInfo-SNterminated,

PDUSessionResourceModRqdInfo-MNterminated,

PDUSessionType,

PC5QoSParameters,

QoSFlowIdentifier,

QoSFlowNotificationControlIndicationInfo,

QoSFlows-List,

RANPagingArea,

ResetRequestTypeInfo,

ResetResponseTypeInfo,

RFSP-Index,

RRCConfigIndication,

RRCResumeCause,

SCGConfigurationQuery,

SCGreconfigNotification,

SecurityIndication,

S-NG-RANnode-SecurityKey,

SpectrumSharingGroupID,

SplitSRBsTypes,

S-NG-RANnode-Addition-Trigger-Ind,

S-NSSAI,

TargetCellList,

TAISupport-List,

Target-CGI,

TimeToWait,

TraceActivation,

UEAggregateMaximumBitRate,

UEContextID,

UEContextInfoRetrUECtxtResp,

UEContextKeptIndicator,

UEHistoryInformation,

UEIdentityIndexValue,

UERadioCapabilityForPaging,

UERadioCapabilityID,

UERANPagingIdentity,

UESecurityCapabilities,

UPTransportLayerInformation,

UserPlaneTrafficActivityReport,

XnBenefitValue,

RANPagingFailure,

TNLConfigurationInfo,

MaximumCellListSize,

MessageOversizeNotification,

NG-RANTraceID,

MobilityInformation,

InitiatingCondition-FailureIndication,

HandoverReportType,

TargetCellinEUTRAN,

C-RNTI,

UERLFReportContainer,

Measurement-ID,

RegistrationRequest,

ReportCharacteristics,

CellToReport,

ReportingPeriodicity,

CellMeasurementResult,

UEHistoryInformationFromTheUE,

MobilityParametersInformation,

MobilityParametersModificationRange,

RAReport,

IABNodeIndication,

SNTriggered,

SCGIndicator,

UESpecificDRX,

DirectForwardingPathAvailability,

TransportLayerAddress,

PrivacyIndicator,

URIaddress,

MBS-Session-ID,

UEIdentityIndexList-MBSGroupPaging,

MBS-SessionInformation-List,

MBS-SessionInformationResponse-List,

SuccessfulHOReportInformation,

PSCellHistoryInformationRetrieve,

SSBOffsets-List,

NG-RANnode2SSBOffsetsModificationRange,

Coverage-Modification-List,

SCGFailureReportContainer,

SNMobilityInformation,

PSCellChangeHistory,

CHOConfiguration,

SCGUEHistoryInformation,

F1CTrafficContainer,

NoPDUSessionIndication,

IAB-TNL-Address-Request,

IAB-TNL-Address-Response,

TrafficIndex,

TrafficProfile,

TrafficToBeReleaseInformation,

F1-TerminatingTopologyBHInformation,

Non-F1-TerminatingTopologyBHInformation,

BHInfoList,

IABTNLAddress,

IABCellInformation,

IABTNLAddressException,

TimeSynchronizationAssistanceInformation,

SCGActivationRequest,

SCGActivationStatus,

CPAInformationRequest,

CPAInformationAck,

CPCInformationRequired,

CPCInformationConfirm,

CPAInformationModReq,

CPAInformationModReqAck,

CPC-DataForwarding-Indicator,

CPCInformationUpdate,

CPACInformationModRequired,

QMCConfigInfo,

FiveGProSeAuthorized,

FiveGProSePC5QoSParameters,

ServedCellSpecificInfoReq-NR,

NRPagingeDRXInformation,

NRPagingeDRXInformationforRRCINACTIVE,

SDTSupportRequest,

SDT-Termination-Request,

SDTPartialUEContextInfo,

SDTDataForwardingDRBList,

PEIPSassistanceInformation,

UESliceMaximumBitRateList,

PagingCause,

MDTPLMNModificationList,

F1-terminatingIAB-donorIndicator,

SRB-ID,

AdditionalListofPDUSessionResourceChangeConfirmInfo-SNterminated,

HashedUEIdentityIndexValue,

MBS-DataForwarding-Indicator,

IABAuthorizationStatus,

NID,

MT-SDT-Information,

PosPartialUEContextInfo,

SRSConfiguration,

RaReportIndicationList,

SuccessfulPSCellChangeReportInformation,

CPACConfiguration,

TimeSinceFailure,

SPRAvailability,

DLLBTFailureInformationRequest,

DLLBTFailureInformationList,

CellBasedUETrajectoryPrediction,

DataCollectionID,

RequestedPredictionTime,

NodeMeasurementInitiationResult-List,

CellMeasurementInitiationResult-List,

UEAssociatedInfoResult-List,

UETrajectoryCollectionConfiguration,

UEPerformanceCollectionConfiguration,

CellMeasurementResultForDataCollection-List,

CellToReportForDataCollection-List,

CandidateRelayUEInfoList,

NRPagingLongeDRXInformationforRRCINACTIVE,

QMCCoordinationRequest,

QMCCoordinationResponse,

DirectForwardingPathAvailabilityWithSourceMN,

Conditional-Reconfig-List,

PDUSetbasedHandlingIndicator,

MobileIAB-AuthorizationStatus,

BAPAddress,

S-CPAC-Request,

SK-COUNTER,

RegistrationRequestForDataCollection,

ReportCharacteristicsForDataCollection,

ReportingPeriodicityForDataCollection,

NodeAssociatedInfoResult,

SLPositioning-Ranging-Services-Info,

PDUSessionsListToBeReleased-UPError,

UserPlaneFailureIndication,

SRSPositioningConfigOrActivationRequest,

NRPPaPositioningInformation,

LTMInformation-AddReq,

LTMInformation-AddReqAck,

LTMInformation-UpdateReq,

LTMInformation-ModReq,

LTMInformation-ModReqAck,

LTMInformation-UpdateReqAck,

LTMInformation-Required,

LTMInformation-ChangeRequired,

LTMInformation-ChangeConfirm

FROM XnAP-IEs

PrivateIE-Container{},

ProtocolExtensionContainer{},

ProtocolIE-Container{},

ProtocolIE-ContainerList{},

ProtocolIE-ContainerPair{},

ProtocolIE-ContainerPairList{},

ProtocolIE-Single-Container{},

XNAP-PRIVATE-IES,

XNAP-PROTOCOL-EXTENSION,

XNAP-PROTOCOL-IES,

XNAP-PROTOCOL-IES-PAIR

FROM XnAP-Containers

id-A2XPC5QoSParameters,

id-ActivatedServedCells,

id-ActivationIDforCellActivation,

id-AdditionalDRBIDs,

id-AerialUESubscriptionInformation,

id-AMF-Region-Information,

id-AMF-Region-Information-To-Add,

id-AMF-Region-Information-To-Delete,

id-AssistanceDataForRANPaging,

id-AvailableDRBIDs,

id-Cause,

id-cellAssistanceInfo-EUTRA,

id-cellAssistanceInfo-NR,

id-CellAndCapacityAssistanceInfo-EUTRA,

id-CellAndCapacityAssistanceInfo-NR,

id-ConfigurationUpdateInitiatingNodeChoice,

id-UEContextID,

id-CriticalityDiagnostics,

id-XnUAddressInfoperPDUSession-List,

id-DesiredActNotificationLevel,

id-DRBsSubjectToStatusTransfer-List,

id-ExpectedUEBehaviour,

id-ExtendedUEIdentityIndexValue,

id-FiveGCMobilityRestrictionListContainer,

id-GlobalNG-RAN-node-ID,

id-GUAMI,

id-indexToRatFrequSelectionPriority,

id-List-of-served-cells-E-UTRA,

id-List-of-served-cells-NR,

id-LocationInformationSN,

id-LocationInformationSNReporting,

id-LocationReportingInformation,

id-LTEA2XServicesAuthorized,

id-LTEA2XUEPC5AggregateMaximumBitRate,

id-LTEUESidelinkAggregateMaximumBitRate,

id-LTEV2XServicesAuthorized,

id-MAC-I,

id-MaskedIMEISV,

id-MDT-Configuration,

id-MDTPLMNList,

id-MN-to-SN-Container,

id-MobilityRestrictionList,

id-M-NG-RANnodeUEXnAPID,

id-new-NG-RAN-Cell-Identity,

id-newNG-RANnodeUEXnAPID,

id-NRA2XServicesAuthorized,

id-NRA2XUEPC5AggregateMaximumBitRate,

id-NRUESidelinkAggregateMaximumBitRate,

id-NRV2XServicesAuthorized,

id-oldNG-RANnodeUEXnAPID,

id-OldtoNewNG-RANnodeResumeContainer,

id-PagingCause,

id-PagingDRX,

id-EUTRAPagingeDRXInformation,

id-PagingPriority,

id-PartialListIndicator-EUTRA,

id-PartialListIndicator-NR,

id-PCellID,

id-PDUSessionResourceSecondaryRATUsageList,

id-PDUSessionResourcesActivityNotifyList,

id-PDUSessionResourcesAdmitted-List,

id-PDUSessionResourcesNotAdmitted-List,

id-PDUSessionResourcesNotifyList,

id-PDUSessionToBeAddedAddReq,

id-PDUSessionToBeReleased-RelReqAck,

id-procedureStage,

id-RANPagingArea,

id-requestedSplitSRB,

id-RequiredNumberOfDRBIDs,

id-ResetRequestTypeInfo,

id-ResetResponseTypeInfo,

id-RespondingNodeTypeConfigUpdateAck,

id-RRCResumeCause,

id-SCGreconfigNotification,

id-selectedPLMN,

id-ServedCellsToActivate,

id-servedCellsToUpdate-E-UTRA,

id-ServedCellsToUpdateInitiatingNodeChoice,

id-servedCellsToUpdate-NR,

id-sourceNG-RANnodeUEXnAPID,

id-SpareDRBIDs,

id-S-NG-RANnodeMaxIPDataRate-UL,

id-S-NG-RANnodeMaxIPDataRate-DL,

id-S-NG-RANnodeUEXnAPID,

id-TAISupport-list,

id-Target2SourceNG-RANnodeTranspContainer,

id-targetCellGlobalID,

id-targetNG-RANnodeUEXnAPID,

id-TimeToWait,

id-TNLA-To-Add-List,

id-TNLA-To-Update-List,

id-TNLA-To-Remove-List,

id-TNLA-Setup-List,

id-TNLA-Failed-To-Setup-List,

id-TraceActivation,

id-UEContextInfoHORequest,

id-UEContextInfoRetrUECtxtResp,

id-UEContextKeptIndicator,

id-UEContextRefAtSN-HORequest,

id-UEHistoryInformation,

id-UEIdentityIndexValue,

id-UERANPagingIdentity,

id-UESecurityCapabilities,

id-UserPlaneTrafficActivityReport,

id-XnRemovalThreshold,

id-PDUSessionAdmittedAddedAddReqAck,

id-PDUSessionNotAdmittedAddReqAck,

id-SN-to-MN-Container,

id-RRCConfigIndication,

id-SplitSRB-RRCTransfer,

id-UEReportRRCTransfer,

id-PDUSessionReleasedList-RelConf,

id-BearersSubjectToCounterCheck,

id-PDUSessionToBeReleasedList-RelRqd,

id-ResponseInfo-ReconfCompl,

id-initiatingNodeType-ResourceCoordRequest,

id-respondingNodeType-ResourceCoordResponse,

id-PDUSessionToBeReleased-RelReq,

id-PDUSession-SNChangeRequired-List,

id-PDUSession-SNChangeConfirm-List,

id-PDCPChangeIndication,

id-PC5QoSParameters,

id-SCGConfigurationQuery,

id-UEContextInfo-SNModRequest,

id-requestedSplitSRBrelease,

id-PDUSessionAdmitted-SNModResponse,

id-PDUSessionNotAdmitted-SNModResponse,

id-admittedSplitSRB,

id-admittedSplitSRBrelease,

id-PDUSessionAdmittedModSNModConfirm,

id-PDUSessionReleasedSNModConfirm,

id-s-ng-RANnode-SecurityKey,

id-PDUSessionToBeModifiedSNModRequired,

id-S-NG-RANnodeUE-AMBR,

id-PDUSessionToBeReleasedSNModRequired,

id-target-S-NG-RANnodeID,

id-S-NSSAI,

id-MR-DC-ResourceCoordinationInfo,

id-RANPagingFailure,

id-UERadioCapabilityForPaging,

id-PDUSessionDataForwarding-SNModResponse,

id-Secondary-MN-Xn-U-TNLInfoatM,

id-NE-DC-TDM-Pattern,

id-InterfaceInstanceIndication,

id-S-NG-RANnode-Addition-Trigger-Ind,

id-SNTriggered,

id-DRBs-transferred-to-MN,

id-TNLConfigurationInfo,

id-MessageOversizeNotification,

id-NG-RANTraceID,

id-FastMCGRecoveryRRCTransfer-SN-to-MN,

id-FastMCGRecoveryRRCTransfer-MN-to-SN,

id-RequestedFastMCGRecoveryViaSRB3,

id-AvailableFastMCGRecoveryViaSRB3,

id-RequestedFastMCGRecoveryViaSRB3Release,

id-ReleaseFastMCGRecoveryViaSRB3,

id-CHOinformation-Req,

id-CHOinformation-Ack,

id-targetCellsToCancel,

id-requestedTargetCellGlobalID,

id-DAPSResponseInfo-List,

id-CHO-MRDC-EarlyDataForwarding,

id-CHO-MRDC-Indicator,

id-MobilityInformation,

id-InitiatingCondition-FailureIndication,

id-UEHistoryInformationFromTheUE,

id-HandoverReportType,

id-HandoverCause,

id-SourceCellCGI,

id-TargetCellCGI,

id-ReEstablishmentCellCGI,

id-TargetCellinEUTRAN,

id-SourceCellCRNTI,

id-UERLFReportContainer,

id-NGRAN-Node1-Measurement-ID,

id-NGRAN-Node2-Measurement-ID,

id-RegistrationRequest,

id-ReportCharacteristics,

id-CellToReport,

id-ReportingPeriodicity,

id-CellMeasurementResult,

id-NG-RANnode1CellID,

id-NG-RANnode2CellID,

id-NG-RANnode1MobilityParameters,

id-NG-RANnode2ProposedMobilityParameters,

id-MobilityParametersModificationRange,

id-RAReport,

id-IABNodeIndication,

id-UERadioCapabilityID,

id-SCGIndicator,

id-UESpecificDRX,

id-PDUSessionExpectedUEActivityBehaviour,

id-DirectForwardingPathAvailability,

id-SourceNG-RAN-node-ID,

id-TargetNodeID,

id-ManagementBasedMDTPLMNList,

id-PrivacyIndicator,

id-TraceCollectionEntityIPAddress,

id-TraceCollectionEntityURI,

id-MBS-Session-ID,

id-UEIdentityIndexList-MBSGroupPaging,

id-MulticastRANPagingArea,

id-MBS-SessionInformation-List,

id-MBS-SessionInformationResponse-List,

id-SuccessfulHOReportInformation,

id-PSCellHistoryInformationRetrieve,

id-SSBOffsets-List,

id-NG-RANnode2SSBOffsetsModificationRange,

id-Coverage-Modification-List,

id-SourcePSCellCGI,

id-FailedPSCellCGI,

id-SCGFailureReportContainer,

id-SNMobilityInformation,

id-SourcePSCellID,

id-SuitablePSCellCGI,

id-PSCellChangeHistory,

id-CHOConfiguration,

id-SCGUEHistoryInformation,

id-F1CTrafficContainer,

id-NoPDUSessionIndication,

id-F1-Terminating-IAB-DonorUEXnAPID,

id-nonF1-Terminating-IAB-DonorUEXnAPID,

id-IAB-TNL-Address-Request,

id-IAB-TNL-Address-Response,

id-TrafficToBeAddedList,

id-TrafficToBeModifiedList,

id-TrafficToBeReleaseInformation,

id-TrafficAddedList,

id-TrafficModifiedList,

id-TrafficNotAddedList,

id-TrafficNotModifiedList,

id-TrafficRequiredToBeModifiedList,

id-TrafficRequiredModifiedList,

id-TrafficReleasedList,

id-IABTNLAddressToBeAdded,

id-IABTNLAddressToBeReleasedList,

id-BoundaryNodeCellsList,

id-ParentNodeCellsList,

id-IABTNLAddressException,

id-CHOinformation-AddReq,

id-CHOinformation-AddReqAck,

id-CHOinformation-ModReq,

id-TimeSynchronizationAssistanceInformation,

id-SCGActivationRequest,

id-SCGActivationStatus,

id-CPAInformationRequest,

id-CPAInformationAck,

id-CPCInformationRequired,

id-CPCInformationConfirm,

id-CPAInformationModReq,

id-CPAInformationModReqAck,

id-CPC-DataForwarding-Indicator,

id-CPCInformationUpdate,

id-CPACInformationModRequired,

id-QMCConfigInfo,

id-Local-NG-RAN-Node-Identifier,

id-Neighbour-NG-RAN-Node-List,

id-Local-NG-RAN-Node-Identifier-Removal,

id-FiveGProSeAuthorized,

id-FiveGProSePC5QoSParameters,

id-FiveGProSeUEPC5AggregateMaximumBitRate,

id-ServedCellSpecificInfoReq-NR,

id-NRPagingeDRXInformation,

id-NRPagingeDRXInformationforRRCINACTIVE,

id-SDTSupportRequest,

id-SDT-SRB-between-NewNode-OldNode,

id-SDT-Termination-Request,

id-SDTPartialUEContextInfo,

id-SDTDataForwardingDRBList,

id-PEIPSassistanceInformation,

id-UESliceMaximumBitRateList,

id-S-NG-RANnodeUE-Slice-MBR,

id-ManagementBasedMDTPLMNModificationList,

id-F1-terminatingIAB-donorIndicator,

id-AdditionalListofPDUSessionResourceChangeConfirmInfo-SNterminated,

id-HashedUEIdentityIndexValue,

id-MBS-DataForwarding-Indicator,

id-IABAuthorizationStatus,

id-SelectedNID,

id-MT-SDT-Information,

id-PosPartialUEContextInfo,

id-SRSConfiguration,

id-RaReportIndicationList,

id-SuccessfulPSCellChangeReportInformation,

id-CPACConfiguration,

id-TargetCellCRNTI,

id-TimeSinceFailure,

id-SPRAvailability,

id-DLLBTFailureInformationRequest,

id-DLLBTFailureInformationList,

id-CellBasedUETrajectoryPrediction,

id-DataCollectionID,

id-RequestedPredictionTime,

id-NodeMeasurementInitiationResult-List,

id-CellMeasurementInitiationResult-List,

id-UEAssociatedInfoResult-List,

id-UETrajectoryCollectionConfiguration,

id-UEPerformanceCollectionConfiguration,

id-CellMeasurementResultForDataCollection-List,

id-CellToReportForDataCollection-List,

id-CandidateRelayUEInfoList,

id-NRCellsAndSSBsList,

id-ActivatedNRCellsAndSSBsList,

id-NRPagingLongeDRXInformationforRRCINACTIVE,

id-QMCCoordinationRequest,

id-QMCCoordinationResponse,

id-QoE-Measurement-Results,

id-Src-SN-to-Tgt-SNQMCInfoInquiry,

id-DirectForwardingPathAvailabilityWithSourceMN,

id-accessed-PSCellID,

id-conditional-Reconfig-ToCancel-List,

id-PDUSetbasedHandlingIndicator,

id-MobileIAB-AuthorizationStatus,

id-MIAB-MT-BAP-Address,

id-S-CPAC-Request,

id-sk-Counter,

id-Source-M-NG-RANnodeID,

id-SourceSN-to-TargetSN-QMCInfo,

id-RegistrationRequestForDataCollection,

id-ReportCharacteristicsForDataCollection,

id-ReportingPeriodicityForDataCollection,

id-NodeAssociatedInfoResult,

id-SLPositioning-Ranging-Services-Info,

id-PDUSessionsListToBeReleased-UPError,

id-UserPlaneFailureIndication,

id-SRSPositioningConfigOrActivationRequest,

id-NRPPaPositioningInformation,

id-LTMInformation-AddReq,

id-LTMInformation-AddReqAck,

id-LTMInformation-UpdateReq,

id-LTMInformation-ModReq,

id-LTMInformation-ModReqAck,

id-LTMInformation-UpdateReqAck,

id-LTMInformation-Required,

id-LTMInformation-ChangeRequired,

id-LTMInformation-ChangeConfirm,

maxnoofCellsinNG-RANnode,

maxnoofDRBs,

maxnoofPDUSessions,

maxnoofQoSFlows,

maxnoofServedCellsIAB,

maxnoofTrafficIndexEntries,

maxnoofTLAsIAB,

maxnoofBAPControlPDURLCCHs,

maxnoofServingCells,

maxnoofSSBAreas

FROM XnAP-Constants;

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

--

-- HANDOVER REQUEST

--

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

HandoverRequest ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{HandoverRequest-IEs}},

...

}

HandoverRequest-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-sourceNG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-Cause CRITICALITY reject TYPE Cause PRESENCE mandatory}|

{ ID id-targetCellGlobalID CRITICALITY reject TYPE Target-CGI PRESENCE mandatory}|

{ ID id-GUAMI CRITICALITY reject TYPE GUAMI PRESENCE mandatory}|

{ ID id-UEContextInfoHORequest CRITICALITY reject TYPE UEContextInfoHORequest PRESENCE mandatory}|

{ ID id-TraceActivation CRITICALITY ignore TYPE TraceActivation PRESENCE optional }|

{ ID id-MaskedIMEISV CRITICALITY ignore TYPE MaskedIMEISV PRESENCE optional }|

{ ID id-UEHistoryInformation CRITICALITY ignore TYPE UEHistoryInformation PRESENCE mandatory}|

{ ID id-UEContextRefAtSN-HORequest CRITICALITY ignore TYPE UEContextRefAtSN-HORequest PRESENCE optional }|

{ ID id-CHOinformation-Req CRITICALITY reject TYPE CHOinformation-Req PRESENCE optional }|

{ ID id-NRV2XServicesAuthorized CRITICALITY ignore TYPE NRV2XServicesAuthorized PRESENCE optional }|

{ ID id-LTEV2XServicesAuthorized CRITICALITY ignore TYPE LTEV2XServicesAuthorized PRESENCE optional }|

{ ID id-PC5QoSParameters CRITICALITY ignore TYPE PC5QoSParameters PRESENCE optional }|

{ ID id-MobilityInformation CRITICALITY ignore TYPE MobilityInformation PRESENCE optional }|

{ ID id-UEHistoryInformationFromTheUE CRITICALITY ignore TYPE UEHistoryInformationFromTheUE PRESENCE optional }|

{ ID id-IABNodeIndication CRITICALITY reject TYPE IABNodeIndication PRESENCE optional }|

{ ID id-NoPDUSessionIndication CRITICALITY ignore TYPE NoPDUSessionIndication PRESENCE optional }|

{ ID id-TimeSynchronizationAssistanceInformation CRITICALITY ignore TYPE TimeSynchronizationAssistanceInformation PRESENCE optional }|

{ ID id-QMCConfigInfo CRITICALITY ignore TYPE QMCConfigInfo PRESENCE optional }|

{ ID id-FiveGProSeAuthorized CRITICALITY ignore TYPE FiveGProSeAuthorized PRESENCE optional }|

{ ID id-FiveGProSePC5QoSParameters CRITICALITY ignore TYPE FiveGProSePC5QoSParameters PRESENCE optional }|

{ ID id-IABAuthorizationStatus CRITICALITY ignore TYPE IABAuthorizationStatus PRESENCE optional }|

{ ID id-DLLBTFailureInformationRequest CRITICALITY ignore TYPE DLLBTFailureInformationRequest PRESENCE optional }|

{ ID id-AerialUESubscriptionInformation CRITICALITY ignore TYPE AerialUESubscriptionInformation PRESENCE optional }|

{ ID id-NRA2XServicesAuthorized CRITICALITY ignore TYPE NRA2XServicesAuthorized PRESENCE optional }|

{ ID id-LTEA2XServicesAuthorized CRITICALITY ignore TYPE LTEA2XServicesAuthorized PRESENCE optional }|

{ ID id-A2XPC5QoSParameters CRITICALITY ignore TYPE A2XPC5QoSParameters PRESENCE optional }|

{ ID id-CellBasedUETrajectoryPrediction CRITICALITY ignore TYPE CellBasedUETrajectoryPrediction PRESENCE optional }|

{ ID id-DataCollectionID CRITICALITY ignore TYPE DataCollectionID PRESENCE optional }|

{ ID id-CandidateRelayUEInfoList CRITICALITY reject TYPE CandidateRelayUEInfoList PRESENCE optional }|

{ ID id-SourceSN-to-TargetSN-QMCInfo CRITICALITY ignore TYPE QMCConfigInfo PRESENCE optional }|

{ ID id-MobileIAB-AuthorizationStatus CRITICALITY reject TYPE MobileIAB-AuthorizationStatus PRESENCE optional }|

{ ID id-SLPositioning-Ranging-Services-Info CRITICALITY ignore TYPE SLPositioning-Ranging-Services-Info PRESENCE optional },

...

}

UEContextInfoHORequest ::= SEQUENCE {

ng-c-UE-reference AMF-UE-NGAP-ID,

cp-TNL-info-source CPTransportLayerInformation,

ueSecurityCapabilities UESecurityCapabilities,

securityInformation AS-SecurityInformation,

indexToRatFrequencySelectionPriority RFSP-Index OPTIONAL,

ue-AMBR UEAggregateMaximumBitRate,

pduSessionResourcesToBeSetup-List PDUSessionResourcesToBeSetup-List,

rrc-Context OCTET STRING,

locationReportingInformation LocationReportingInformation OPTIONAL,

mrl MobilityRestrictionList OPTIONAL,

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

...

}

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

{ ID id-FiveGCMobilityRestrictionListContainer CRITICALITY ignore EXTENSION FiveGCMobilityRestrictionListContainer PRESENCE optional }|

{ ID id-NRUESidelinkAggregateMaximumBitRate CRITICALITY ignore EXTENSION NRUESidelinkAggregateMaximumBitRate PRESENCE optional }|

{ ID id-LTEUESidelinkAggregateMaximumBitRate CRITICALITY ignore EXTENSION LTEUESidelinkAggregateMaximumBitRate PRESENCE optional }|

{ ID id-MDTPLMNList CRITICALITY ignore EXTENSION MDTPLMNList PRESENCE optional }|

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

{ ID id-MBS-SessionInformation-List CRITICALITY ignore EXTENSION MBS-SessionInformation-List PRESENCE optional }|

{ ID id-FiveGProSeUEPC5AggregateMaximumBitRate CRITICALITY ignore EXTENSION NRUESidelinkAggregateMaximumBitRate PRESENCE optional }|

{ ID id-UESliceMaximumBitRateList CRITICALITY ignore EXTENSION UESliceMaximumBitRateList PRESENCE optional }|

{ ID id-NRA2XUEPC5AggregateMaximumBitRate CRITICALITY ignore EXTENSION NRUESidelinkAggregateMaximumBitRate PRESENCE optional }|

{ ID id-LTEA2XUEPC5AggregateMaximumBitRate CRITICALITY ignore EXTENSION LTEUESidelinkAggregateMaximumBitRate PRESENCE optional },

...

}

UEContextRefAtSN-HORequest ::= SEQUENCE {

globalNG-RANNode-ID GlobalNG-RANNode-ID,

sN-NG-RANnodeUEXnAPID NG-RANnodeUEXnAPID,

iE-Extensions ProtocolExtensionContainer { {UEContextRefAtSN-HORequest-ExtIEs} } OPTIONAL,

...

}

UEContextRefAtSN-HORequest-ExtIEs XNAP-PROTOCOL-EXTENSION ::={

...

}

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

--

-- HANDOVER REQUEST ACKNOWLEDGE

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

HandoverRequestAcknowledge ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{HandoverRequestAcknowledge-IEs}},

...

}

HandoverRequestAcknowledge-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-sourceNG-RANnodeUEXnAPID CRITICALITY ignore TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-targetNG-RANnodeUEXnAPID CRITICALITY ignore TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-PDUSessionResourcesAdmitted-List CRITICALITY ignore TYPE PDUSessionResourcesAdmitted-List PRESENCE mandatory}|

{ ID id-PDUSessionResourcesNotAdmitted-List CRITICALITY ignore TYPE PDUSessionResourcesNotAdmitted-List PRESENCE optional }|

{ ID id-Target2SourceNG-RANnodeTranspContainer CRITICALITY ignore TYPE OCTET STRING PRESENCE mandatory}|

{ ID id-UEContextKeptIndicator CRITICALITY ignore TYPE UEContextKeptIndicator PRESENCE optional }|

{ ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional }|

{ ID id-DRBs-transferred-to-MN CRITICALITY ignore TYPE DRB-List PRESENCE optional }|

{ ID id-DAPSResponseInfo-List CRITICALITY reject TYPE DAPSResponseInfo-List PRESENCE optional }|

{ ID id-CHOinformation-Ack CRITICALITY reject TYPE CHOinformation-Ack PRESENCE optional }|

{ ID id-MBS-SessionInformationResponse-List CRITICALITY ignore TYPE MBS-SessionInformationResponse-List PRESENCE optional }|

{ ID id-RRCConfigIndication CRITICALITY ignore TYPE RRCConfigIndication PRESENCE optional }|

{ ID id-PDUSetbasedHandlingIndicator CRITICALITY ignore TYPE PDUSetbasedHandlingIndicator PRESENCE optional },

...

}

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

--

-- HANDOVER PREPARATION FAILURE

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

HandoverPreparationFailure ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{HandoverPreparationFailure-IEs}},

...

}

HandoverPreparationFailure-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-sourceNG-RANnodeUEXnAPID CRITICALITY ignore TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-Cause CRITICALITY ignore TYPE Cause PRESENCE mandatory}|

{ ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional }|

{ ID id-requestedTargetCellGlobalID CRITICALITY reject TYPE Target-CGI PRESENCE optional},

...

}

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

--

-- SN STATUS TRANSFER

--

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

SNStatusTransfer ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{SNStatusTransfer-IEs}},

...

}

SNStatusTransfer-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-sourceNG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-targetNG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-DRBsSubjectToStatusTransfer-List CRITICALITY ignore TYPE DRBsSubjectToStatusTransfer-List PRESENCE mandatory}|

{ ID id-CHOConfiguration CRITICALITY ignore TYPE CHOConfiguration PRESENCE optional}|

{ ID id-MobilityInformation CRITICALITY ignore TYPE MobilityInformation PRESENCE optional},

...

}

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

--

-- UE CONTEXT RELEASE

--

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

UEContextRelease ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{UEContextRelease-IEs}},

...

}

UEContextRelease-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-sourceNG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-targetNG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory},

...

}

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

--

-- HANDOVER CANCEL

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

HandoverCancel ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{HandoverCancel-IEs}},

...

}

HandoverCancel-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-sourceNG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-targetNG-RANnodeUEXnAPID CRITICALITY ignore TYPE NG-RANnodeUEXnAPID PRESENCE optional }|

{ ID id-Cause CRITICALITY ignore TYPE Cause PRESENCE mandatory}|

{ ID id-targetCellsToCancel CRITICALITY reject TYPE TargetCellList PRESENCE optional},

...

}

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

--

-- HANDOVER SUCCESS

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

HandoverSuccess ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{HandoverSuccess-IEs}},

...

}

HandoverSuccess-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-sourceNG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-targetNG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-requestedTargetCellGlobalID CRITICALITY reject TYPE Target-CGI PRESENCE mandatory}|

{ ID id-accessed-PSCellID CRITICALITY ignore TYPE NR-CGI PRESENCE optional},

...

}

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

--

-- CONDITIONAL HANDOVER CANCEL

--

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

ConditionalHandoverCancel ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ ConditionalHandoverCancel-IEs}},

...

}

ConditionalHandoverCancel-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-sourceNG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-targetNG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-Cause CRITICALITY ignore TYPE Cause PRESENCE mandatory}|

{ ID id-targetCellsToCancel CRITICALITY reject TYPE TargetCellList PRESENCE optional}|

{ ID id-conditional-Reconfig-ToCancel-List CRITICALITY reject TYPE Conditional-Reconfig-List PRESENCE optional},

...

}

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

--

-- EARLY STATUS TRANSFER

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

EarlyStatusTransfer ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ EarlyStatusTransfer-IEs}},

...

}

EarlyStatusTransfer-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-sourceNG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-targetNG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-procedureStage CRITICALITY reject TYPE ProcedureStageChoice PRESENCE mandatory},

...

}

ProcedureStageChoice ::= CHOICE {

first-dl-count FirstDLCount,

dl-discarding DLDiscarding,

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

}

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

...

}

FirstDLCount ::= SEQUENCE {

dRBsSubjectToEarlyStatusTransfer DRBsSubjectToEarlyStatusTransfer-List,

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

...

}

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

...

}

DLDiscarding ::= SEQUENCE {

dRBsSubjectToDLDiscarding DRBsSubjectToDLDiscarding-List,

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

...

}

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

...

}

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

--

-- RAN PAGING

--

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

RANPaging ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{RANPaging-IEs}},

...

}

RANPaging-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-UEIdentityIndexValue CRITICALITY reject TYPE UEIdentityIndexValue PRESENCE mandatory}|

{ ID id-UERANPagingIdentity CRITICALITY ignore TYPE UERANPagingIdentity PRESENCE mandatory}|

{ ID id-PagingDRX CRITICALITY ignore TYPE PagingDRX PRESENCE mandatory}|

{ ID id-RANPagingArea CRITICALITY reject TYPE RANPagingArea PRESENCE mandatory}|

{ ID id-PagingPriority CRITICALITY ignore TYPE PagingPriority PRESENCE optional }|

{ ID id-AssistanceDataForRANPaging CRITICALITY ignore TYPE AssistanceDataForRANPaging PRESENCE optional }|

{ ID id-UERadioCapabilityForPaging CRITICALITY ignore TYPE UERadioCapabilityForPaging PRESENCE optional }|

{ ID id-ExtendedUEIdentityIndexValue CRITICALITY ignore TYPE ExtendedUEIdentityIndexValue PRESENCE optional }|

{ ID id-EUTRAPagingeDRXInformation CRITICALITY ignore TYPE EUTRAPagingeDRXInformation PRESENCE optional }|

{ ID id-UESpecificDRX CRITICALITY ignore TYPE UESpecificDRX PRESENCE optional }|

{ ID id-NRPagingeDRXInformation CRITICALITY ignore TYPE NRPagingeDRXInformation PRESENCE optional }|

{ ID id-NRPagingeDRXInformationforRRCINACTIVE CRITICALITY ignore TYPE NRPagingeDRXInformationforRRCINACTIVE PRESENCE optional }|

{ ID id-PagingCause CRITICALITY ignore TYPE PagingCause PRESENCE optional }|

{ ID id-PEIPSassistanceInformation CRITICALITY ignore TYPE PEIPSassistanceInformation PRESENCE optional }|

{ ID id-HashedUEIdentityIndexValue CRITICALITY ignore TYPE HashedUEIdentityIndexValue PRESENCE optional }|

{ ID id-MT-SDT-Information CRITICALITY ignore TYPE MT-SDT-Information PRESENCE optional }|

{ ID id-NRPagingLongeDRXInformationforRRCINACTIVE CRITICALITY ignore TYPE NRPagingLongeDRXInformationforRRCINACTIVE PRESENCE optional},

...

}

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

--

-- RETRIEVE UE CONTEXT REQUEST

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

RetrieveUEContextRequest ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{RetrieveUEContextRequest-IEs}},

...

}

RetrieveUEContextRequest-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-newNG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-UEContextID CRITICALITY reject TYPE UEContextID PRESENCE mandatory}|

{ ID id-MAC-I CRITICALITY reject TYPE MAC-I PRESENCE mandatory}|

{ ID id-new-NG-RAN-Cell-Identity CRITICALITY reject TYPE NG-RAN-Cell-Identity PRESENCE mandatory}|

{ ID id-RRCResumeCause CRITICALITY ignore TYPE RRCResumeCause PRESENCE optional }|

{ ID id-SDTSupportRequest CRITICALITY ignore TYPE SDTSupportRequest PRESENCE optional }|

{ ID id-SRSPositioningConfigOrActivationRequest CRITICALITY ignore TYPE SRSPositioningConfigOrActivationRequest PRESENCE optional },

...

}

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

--

-- RETRIEVE UE CONTEXT RESPONSE

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

RetrieveUEContextResponse ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ RetrieveUEContextResponse-IEs}},

...

}

RetrieveUEContextResponse-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-newNG-RANnodeUEXnAPID CRITICALITY ignore TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-oldNG-RANnodeUEXnAPID CRITICALITY ignore TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-GUAMI CRITICALITY reject TYPE GUAMI PRESENCE mandatory}|

{ ID id-UEContextInfoRetrUECtxtResp CRITICALITY reject TYPE UEContextInfoRetrUECtxtResp PRESENCE mandatory}|

{ ID id-TraceActivation CRITICALITY ignore TYPE TraceActivation PRESENCE optional }|

{ ID id-MaskedIMEISV CRITICALITY ignore TYPE MaskedIMEISV PRESENCE optional }|

{ ID id-LocationReportingInformation CRITICALITY ignore TYPE LocationReportingInformation PRESENCE optional }|

{ ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional }|

{ ID id-NRV2XServicesAuthorized CRITICALITY ignore TYPE NRV2XServicesAuthorized PRESENCE optional }|

{ ID id-LTEV2XServicesAuthorized CRITICALITY ignore TYPE LTEV2XServicesAuthorized PRESENCE optional }|

{ ID id-PC5QoSParameters CRITICALITY ignore TYPE PC5QoSParameters PRESENCE optional }|

{ ID id-UEHistoryInformation CRITICALITY ignore TYPE UEHistoryInformation PRESENCE optional }|

{ ID id-UEHistoryInformationFromTheUE CRITICALITY ignore TYPE UEHistoryInformationFromTheUE PRESENCE optional }|

{ ID id-MDTPLMNList CRITICALITY ignore TYPE MDTPLMNList PRESENCE optional }|

{ ID id-IABNodeIndication CRITICALITY reject TYPE IABNodeIndication PRESENCE optional }|

{ ID id-UEContextRefAtSN-HORequest CRITICALITY ignore TYPE UEContextRefAtSN-HORequest PRESENCE optional }|

{ ID id-TimeSynchronizationAssistanceInformation CRITICALITY ignore TYPE TimeSynchronizationAssistanceInformation PRESENCE optional }|

{ ID id-QMCConfigInfo CRITICALITY ignore TYPE QMCConfigInfo PRESENCE optional }|

{ ID id-FiveGProSeAuthorized CRITICALITY ignore TYPE FiveGProSeAuthorized PRESENCE optional }|

{ ID id-FiveGProSePC5QoSParameters CRITICALITY ignore TYPE FiveGProSePC5QoSParameters PRESENCE optional }|

{ ID id-AerialUESubscriptionInformation CRITICALITY ignore TYPE AerialUESubscriptionInformation PRESENCE optional }|

{ ID id-NRA2XServicesAuthorized CRITICALITY ignore TYPE NRA2XServicesAuthorized PRESENCE optional }|

{ ID id-LTEA2XServicesAuthorized CRITICALITY ignore TYPE LTEA2XServicesAuthorized PRESENCE optional }|

{ ID id-A2XPC5QoSParameters CRITICALITY ignore TYPE A2XPC5QoSParameters PRESENCE optional }|

{ ID id-MobileIAB-AuthorizationStatus CRITICALITY reject TYPE MobileIAB-AuthorizationStatus PRESENCE optional }|

{ ID id-SLPositioning-Ranging-Services-Info CRITICALITY ignore TYPE SLPositioning-Ranging-Services-Info  PRESENCE optional },

...

}

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

--

-- RETRIEVE UE CONTEXT CONFIRM

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

RetrieveUEContextConfirm ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{RetrieveUEContextConfirm-IEs}},

...

}

RetrieveUEContextConfirm-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-oldNG-RANnodeUEXnAPID CRITICALITY ignore TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-newNG-RANnodeUEXnAPID CRITICALITY ignore TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-UEContextKeptIndicator CRITICALITY ignore TYPE UEContextKeptIndicator PRESENCE optional }|

{ ID id-SDT-Termination-Request CRITICALITY ignore TYPE SDT-Termination-Request PRESENCE optional },

...

}

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

--

-- RETRIEVE UE CONTEXT FAILURE

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

RetrieveUEContextFailure ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ RetrieveUEContextFailure-IEs}},

...

}

RetrieveUEContextFailure-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-newNG-RANnodeUEXnAPID CRITICALITY ignore TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-OldtoNewNG-RANnodeResumeContainer CRITICALITY ignore TYPE OCTET STRING PRESENCE optional }|

{ ID id-Cause CRITICALITY ignore TYPE Cause PRESENCE mandatory}|

{ ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional },

...

}

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

--

-- XN-U ADDRESS INDICATION

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

XnUAddressIndication ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ XnUAddressIndication-IEs}},

...

}

XnUAddressIndication-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-newNG-RANnodeUEXnAPID CRITICALITY ignore TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-oldNG-RANnodeUEXnAPID CRITICALITY ignore TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-XnUAddressInfoperPDUSession-List CRITICALITY reject TYPE XnUAddressInfoperPDUSession-List PRESENCE mandatory}|

{ ID id-CHO-MRDC-Indicator CRITICALITY reject TYPE CHO-MRDC-Indicator PRESENCE optional }|

{ ID id-CHO-MRDC-EarlyDataForwarding CRITICALITY ignore TYPE CHO-MRDC-EarlyDataForwarding PRESENCE optional }|

{ ID id-CPC-DataForwarding-Indicator CRITICALITY reject TYPE CPC-DataForwarding-Indicator PRESENCE optional }|

{ ID id-MBS-DataForwarding-Indicator CRITICALITY ignore TYPE MBS-DataForwarding-Indicator PRESENCE optional }|

{ ID id-MBS-SessionInformationResponse-List CRITICALITY ignore TYPE MBS-SessionInformationResponse-List PRESENCE optional }|

{ ID id-PDUSetbasedHandlingIndicator CRITICALITY ignore TYPE PDUSetbasedHandlingIndicator PRESENCE optional },

...

}

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

--

-- S-NODE ADDITION REQUEST

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

SNodeAdditionRequest ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ SNodeAdditionRequest-IEs}},

...

}

SNodeAdditionRequest-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-M-NG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-UESecurityCapabilities CRITICALITY reject TYPE UESecurityCapabilities PRESENCE mandatory}|

{ ID id-s-ng-RANnode-SecurityKey CRITICALITY reject TYPE S-NG-RANnode-SecurityKey PRESENCE mandatory}|

{ ID id-S-NG-RANnodeUE-AMBR CRITICALITY reject TYPE UEAggregateMaximumBitRate PRESENCE mandatory}|

{ ID id-selectedPLMN CRITICALITY ignore TYPE PLMN-Identity PRESENCE optional }|

{ ID id-MobilityRestrictionList CRITICALITY ignore TYPE MobilityRestrictionList PRESENCE optional }|

{ ID id-indexToRatFrequSelectionPriority CRITICALITY reject TYPE RFSP-Index PRESENCE optional }|

{ ID id-PDUSessionToBeAddedAddReq CRITICALITY reject TYPE PDUSessionToBeAddedAddReq PRESENCE mandatory}|

{ ID id-MN-to-SN-Container CRITICALITY reject TYPE OCTET STRING PRESENCE mandatory}|

{ ID id-S-NG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE optional }|

{ ID id-ExpectedUEBehaviour CRITICALITY ignore TYPE ExpectedUEBehaviour PRESENCE optional }|

{ ID id-requestedSplitSRB CRITICALITY reject TYPE SplitSRBsTypes PRESENCE optional }|

{ ID id-PCellID CRITICALITY reject TYPE GlobalNG-RANCell-ID PRESENCE optional }|

{ ID id-DesiredActNotificationLevel CRITICALITY ignore TYPE DesiredActNotificationLevel PRESENCE optional }|

{ ID id-AvailableDRBIDs CRITICALITY reject TYPE DRB-List PRESENCE conditional}

-- This IE shall be present if there is at least one *PDU Session Resource Setup Info – SN terminated* in the *PDU Session Resources To Be Added List* IE. --|

{ ID id-S-NG-RANnodeMaxIPDataRate-UL CRITICALITY reject TYPE BitRate PRESENCE optional }|

{ ID id-S-NG-RANnodeMaxIPDataRate-DL CRITICALITY reject TYPE BitRate PRESENCE optional }|

{ ID id-LocationInformationSNReporting CRITICALITY ignore TYPE LocationInformationSNReporting PRESENCE optional }|

{ ID id-MR-DC-ResourceCoordinationInfo CRITICALITY ignore TYPE MR-DC-ResourceCoordinationInfo PRESENCE optional }|

{ ID id-MaskedIMEISV CRITICALITY ignore TYPE MaskedIMEISV PRESENCE optional }|

{ ID id-NE-DC-TDM-Pattern CRITICALITY ignore TYPE NE-DC-TDM-Pattern PRESENCE optional }|

{ ID id-S-NG-RANnode-Addition-Trigger-Ind CRITICALITY reject TYPE S-NG-RANnode-Addition-Trigger-Ind PRESENCE optional }|

{ ID id-TraceActivation CRITICALITY ignore TYPE TraceActivation PRESENCE optional }|

{ ID id-RequestedFastMCGRecoveryViaSRB3 CRITICALITY ignore TYPE RequestedFastMCGRecoveryViaSRB3 PRESENCE optional }|

{ ID id-UERadioCapabilityID CRITICALITY reject TYPE UERadioCapabilityID PRESENCE optional }|

{ ID id-SourceNG-RAN-node-ID CRITICALITY ignore TYPE GlobalNG-RANNode-ID PRESENCE optional }|

{ ID id-ManagementBasedMDTPLMNList CRITICALITY ignore TYPE MDTPLMNList PRESENCE optional }|

{ ID id-UEHistoryInformation CRITICALITY ignore TYPE UEHistoryInformation PRESENCE optional }|

{ ID id-UEHistoryInformationFromTheUE CRITICALITY ignore TYPE UEHistoryInformationFromTheUE PRESENCE optional }|

{ ID id-PSCellChangeHistory CRITICALITY ignore TYPE PSCellChangeHistory PRESENCE optional }|

{ ID id-IABNodeIndication CRITICALITY reject TYPE IABNodeIndication PRESENCE optional }|

{ ID id-NoPDUSessionIndication CRITICALITY ignore TYPE NoPDUSessionIndication PRESENCE optional }|

{ ID id-CHOinformation-AddReq CRITICALITY reject TYPE CHOinformation-AddReq PRESENCE optional }|

{ ID id-SCGActivationRequest CRITICALITY ignore TYPE SCGActivationRequest PRESENCE optional }|

{ ID id-CPAInformationRequest CRITICALITY reject TYPE CPAInformationRequest PRESENCE optional }|

{ ID id-S-NG-RANnodeUE-Slice-MBR CRITICALITY reject TYPE UESliceMaximumBitRateList PRESENCE optional }|

{ ID id-F1-terminatingIAB-donorIndicator CRITICALITY reject TYPE F1-terminatingIAB-donorIndicator PRESENCE optional }|

{ ID id-SelectedNID CRITICALITY ignore TYPE NID PRESENCE optional }|

{ ID id-QMCCoordinationRequest CRITICALITY ignore TYPE QMCCoordinationRequest PRESENCE optional }|

{ ID id-SourceSN-to-TargetSN-QMCInfo CRITICALITY ignore TYPE QMCConfigInfo PRESENCE optional }|

{ ID id-IABAuthorizationStatus CRITICALITY ignore TYPE IABAuthorizationStatus PRESENCE optional }|

{ ID id-Source-M-NG-RANnodeID CRITICALITY ignore TYPE GlobalNG-RANNode-ID PRESENCE optional }|

{ ID id-LTMInformation-AddReq CRITICALITY reject TYPE LTMInformation-AddReq PRESENCE optional },

...

}

PDUSessionToBeAddedAddReq ::= SEQUENCE (SIZE(1..maxnoofPDUSessions)) OF PDUSessionToBeAddedAddReq-Item

PDUSessionToBeAddedAddReq-Item ::= SEQUENCE {

pduSessionId PDUSession-ID,

s-NSSAI S-NSSAI,

sN-PDUSessionAMBR PDUSessionAggregateMaximumBitRate OPTIONAL,

sn-terminated PDUSessionResourceSetupInfo-SNterminated OPTIONAL,

mn-terminated PDUSessionResourceSetupInfo-MNterminated OPTIONAL,

-- NOTE: If neither the PDU Session Resource Setup Info – SN terminated IE

-- nor the *PDU Session Resource Setup Info – MN terminated* IE is present,

-- abnormal conditions as specified in clause 8.3.1.4 apply.

iE-Extension ProtocolExtensionContainer { {PDUSessionToBeAddedAddReq-Item-ExtIEs} } OPTIONAL,

...

}

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

...

}

RequestedFastMCGRecoveryViaSRB3 ::= ENUMERATED {true, ...}

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

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-- S-NODE ADDITION REQUEST ACKNOWLEDGE

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

SNodeAdditionRequestAcknowledge ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ SNodeAdditionRequestAcknowledge-IEs}},

...

}

SNodeAdditionRequestAcknowledge-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-M-NG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-S-NG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-PDUSessionAdmittedAddedAddReqAck CRITICALITY ignore TYPE PDUSessionAdmittedAddedAddReqAck PRESENCE mandatory}|

{ ID id-PDUSessionNotAdmittedAddReqAck CRITICALITY ignore TYPE PDUSessionNotAdmittedAddReqAck PRESENCE optional }|

{ ID id-SN-to-MN-Container CRITICALITY reject TYPE OCTET STRING PRESENCE mandatory}|

{ ID id-admittedSplitSRB CRITICALITY reject TYPE SplitSRBsTypes PRESENCE optional }|

{ ID id-RRCConfigIndication CRITICALITY reject TYPE RRCConfigIndication PRESENCE optional }|

{ ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional }|

{ ID id-LocationInformationSN CRITICALITY ignore TYPE Target-CGI PRESENCE optional }|

{ ID id-MR-DC-ResourceCoordinationInfo CRITICALITY ignore TYPE MR-DC-ResourceCoordinationInfo PRESENCE optional }|

{ ID id-AvailableFastMCGRecoveryViaSRB3 CRITICALITY ignore TYPE AvailableFastMCGRecoveryViaSRB3 PRESENCE optional }|

{ ID id-DirectForwardingPathAvailability CRITICALITY ignore TYPE DirectForwardingPathAvailability PRESENCE optional }|

{ ID id-SCGActivationStatus CRITICALITY ignore TYPE SCGActivationStatus PRESENCE optional }|

{ ID id-CPAInformationAck CRITICALITY ignore TYPE CPAInformationAck PRESENCE optional }|

{ ID id-SNMobilityInformation CRITICALITY ignore TYPE SNMobilityInformation PRESENCE optional }|

{ ID id-QMCCoordinationResponse CRITICALITY ignore TYPE QMCCoordinationResponse PRESENCE optional }|

{ ID id-CHOinformation-AddReqAck CRITICALITY reject TYPE CHOinformation-AddReqAck PRESENCE optional }|

{ ID id-DirectForwardingPathAvailabilityWithSourceMN CRITICALITY ignore TYPE DirectForwardingPathAvailabilityWithSourceMN PRESENCE optional }|

{ ID id-LTMInformation-AddReqAck CRITICALITY ignore TYPE LTMInformation-AddReqAck PRESENCE optional },

...

}

PDUSessionAdmittedAddedAddReqAck ::= SEQUENCE (SIZE(1..maxnoofPDUSessions)) OF PDUSessionAdmittedAddedAddReqAck-Item

PDUSessionAdmittedAddedAddReqAck-Item ::= SEQUENCE {

pduSessionId PDUSession-ID,

sn-terminated PDUSessionResourceSetupResponseInfo-SNterminated OPTIONAL,

mn-terminated PDUSessionResourceSetupResponseInfo-MNterminated OPTIONAL,

-- NOTE: If neither the *PDU Session Resource Setup Response Info – SN terminated* IE

-- nor the *PDU Session Resource Setup Response Info – MN terminated* IE is present,

-- abnormal conditions as specified in clause 8.3.1.4 apply.

iE-Extension ProtocolExtensionContainer { {PDUSessionAdmittedAddedAddReqAck-Item-ExtIEs} } OPTIONAL,

...

}

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

...

}

PDUSessionNotAdmittedAddReqAck ::= SEQUENCE {

pduSessionResourcesNotAdmitted-SNterminated PDUSessionResourcesNotAdmitted-List OPTIONAL,

pduSessionResourcesNotAdmitted-MNterminated PDUSessionResourcesNotAdmitted-List OPTIONAL,

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

...

}

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

...

}

AvailableFastMCGRecoveryViaSRB3 ::= ENUMERATED {true, ...}

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

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-- S-NODE ADDITION REQUEST REJECT

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

SNodeAdditionRequestReject ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ SNodeAdditionRequestReject-IEs}},

...

}

SNodeAdditionRequestReject-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-M-NG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-S-NG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-Cause CRITICALITY ignore TYPE Cause PRESENCE mandatory}|

{ ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional }|

{ ID id-PCellID CRITICALITY reject TYPE GlobalNG-RANCell-ID PRESENCE optional },

...

}

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

--

-- S-NODE RECONFIGURATION COMPLETE

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

SNodeReconfigurationComplete ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ SNodeReconfigurationComplete-IEs}},

...

}

SNodeReconfigurationComplete-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-M-NG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-S-NG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-ResponseInfo-ReconfCompl CRITICALITY ignore TYPE ResponseInfo-ReconfCompl PRESENCE mandatory},

...

}

ResponseInfo-ReconfCompl ::= SEQUENCE {

responseType-ReconfComplete ResponseType-ReconfComplete,

iE-Extensions ProtocolExtensionContainer { {ResponseInfo-ReconfCompl-ExtIEs} } OPTIONAL,

...

}

ResponseInfo-ReconfCompl-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

ResponseType-ReconfComplete ::= CHOICE {

configuration-successfully-applied Configuration-successfully-applied,

configuration-rejected-by-M-NG-RANNode Configuration-rejected-by-M-NG-RANNode,

choice-extension ProtocolIE-Single-Container { {ResponseType-ReconfComplete-ExtIEs} }

}

ResponseType-ReconfComplete-ExtIEs XNAP-PROTOCOL-IES ::= {

...

}

Configuration-successfully-applied ::= SEQUENCE {

m-NG-RANNode-to-S-NG-RANNode-Container OCTET STRING OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {Configuration-successfully-applied-ExtIEs} } OPTIONAL,

...

}

Configuration-successfully-applied-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ ID id-sk-Counter CRITICALITY ignore EXTENSION SK-COUNTER PRESENCE optional},

...

}

Configuration-rejected-by-M-NG-RANNode ::= SEQUENCE {

cause Cause,

m-NG-RANNode-to-S-NG-RANNode-Container OCTET STRING OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {Configuration-rejected-by-M-NG-RANNode-ExtIEs} } OPTIONAL,

...

}

Configuration-rejected-by-M-NG-RANNode-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

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

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-- S-NODE MODIFICATION REQUEST

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

SNodeModificationRequest ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ SNodeModificationRequest-IEs}},

...

}

SNodeModificationRequest-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-M-NG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-S-NG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-Cause CRITICALITY ignore TYPE Cause PRESENCE mandatory}|

{ ID id-PDCPChangeIndication CRITICALITY ignore TYPE PDCPChangeIndication PRESENCE optional }|

{ ID id-selectedPLMN CRITICALITY ignore TYPE PLMN-Identity PRESENCE optional }|

{ ID id-MobilityRestrictionList CRITICALITY ignore TYPE MobilityRestrictionList PRESENCE optional }|

{ ID id-SCGConfigurationQuery CRITICALITY ignore TYPE SCGConfigurationQuery PRESENCE optional }|

{ ID id-UEContextInfo-SNModRequest CRITICALITY reject TYPE UEContextInfo-SNModRequest PRESENCE optional }|

{ ID id-MN-to-SN-Container CRITICALITY ignore TYPE OCTET STRING PRESENCE optional }|

{ ID id-requestedSplitSRB CRITICALITY ignore TYPE SplitSRBsTypes PRESENCE optional }|

{ ID id-requestedSplitSRBrelease CRITICALITY ignore TYPE SplitSRBsTypes PRESENCE optional }|

{ ID id-DesiredActNotificationLevel CRITICALITY ignore TYPE DesiredActNotificationLevel PRESENCE optional }|

{ ID id-AdditionalDRBIDs CRITICALITY reject TYPE DRB-List PRESENCE optional }|

{ ID id-S-NG-RANnodeMaxIPDataRate-UL CRITICALITY reject TYPE BitRate PRESENCE optional }|

{ ID id-S-NG-RANnodeMaxIPDataRate-DL CRITICALITY reject TYPE BitRate PRESENCE optional }|

{ ID id-LocationInformationSNReporting CRITICALITY ignore TYPE LocationInformationSNReporting PRESENCE optional }|

{ ID id-MR-DC-ResourceCoordinationInfo CRITICALITY ignore TYPE MR-DC-ResourceCoordinationInfo PRESENCE optional }|

{ ID id-PCellID CRITICALITY reject TYPE GlobalNG-RANCell-ID PRESENCE optional }|

{ ID id-NE-DC-TDM-Pattern CRITICALITY ignore TYPE NE-DC-TDM-Pattern PRESENCE optional }|

{ ID id-RequestedFastMCGRecoveryViaSRB3 CRITICALITY ignore TYPE RequestedFastMCGRecoveryViaSRB3 PRESENCE optional }|

{ ID id-RequestedFastMCGRecoveryViaSRB3Release CRITICALITY ignore TYPE RequestedFastMCGRecoveryViaSRB3Release PRESENCE optional }|

{ ID id-SNTriggered CRITICALITY ignore TYPE SNTriggered PRESENCE optional }|

{ ID id-TargetNodeID CRITICALITY ignore TYPE GlobalNG-RANNode-ID PRESENCE optional }|

{ ID id-PSCellHistoryInformationRetrieve CRITICALITY ignore TYPE PSCellHistoryInformationRetrieve PRESENCE optional }|

{ ID id-UEHistoryInformationFromTheUE CRITICALITY ignore TYPE UEHistoryInformationFromTheUE PRESENCE optional }|

{ ID id-CHOinformation-ModReq CRITICALITY ignore TYPE CHOinformation-ModReq PRESENCE optional }|

{ ID id-SCGActivationRequest CRITICALITY ignore TYPE SCGActivationRequest PRESENCE optional }|

{ ID id-CPAInformationModReq CRITICALITY ignore TYPE CPAInformationModReq PRESENCE optional }|

{ ID id-CPCInformationUpdate CRITICALITY ignore TYPE CPCInformationUpdate PRESENCE optional }|

{ ID id-S-NG-RANnodeUE-Slice-MBR CRITICALITY ignore TYPE UESliceMaximumBitRateList PRESENCE optional }|

{ ID id-ManagementBasedMDTPLMNModificationList CRITICALITY ignore TYPE MDTPLMNModificationList PRESENCE optional }|

{ ID id-SelectedNID CRITICALITY ignore TYPE NID PRESENCE optional }|

{ ID id-QMCCoordinationRequest CRITICALITY ignore TYPE QMCCoordinationRequest PRESENCE optional }|

{ ID id-Src-SN-to-Tgt-SNQMCInfoInquiry CRITICALITY ignore TYPE Src-SN-to-Tgt-SNQMCInfoInquiry PRESENCE optional }|

{ ID id-IABAuthorizationStatus CRITICALITY ignore TYPE IABAuthorizationStatus PRESENCE optional }|

{ ID id-LTMInformation-UpdateReq CRITICALITY ignore TYPE LTMInformation-UpdateReq PRESENCE optional }|

{ ID id-LTMInformation-ModReq CRITICALITY ignore TYPE LTMInformation-ModReq PRESENCE optional },

...

}

UEContextInfo-SNModRequest ::= SEQUENCE {

ueSecurityCapabilities UESecurityCapabilities OPTIONAL,

s-ng-RANnode-SecurityKey S-NG-RANnode-SecurityKey OPTIONAL,

s-ng-RANnodeUE-AMBR UEAggregateMaximumBitRate OPTIONAL,

indexToRatFrequencySelectionPriority RFSP-Index OPTIONAL,

lowerLayerPresenceStatusChange LowerLayerPresenceStatusChange OPTIONAL,

pduSessionResourceToBeAdded PDUSessionsToBeAdded-SNModRequest-List OPTIONAL,

pduSessionResourceToBeModified PDUSessionsToBeModified-SNModRequest-List OPTIONAL,

pduSessionResourceToBeReleased PDUSessionsToBeReleased-SNModRequest-List OPTIONAL,

iE-Extension ProtocolExtensionContainer { {UEContextInfo-SNModRequest-ExtIEs} } OPTIONAL,

...

}

UEContextInfo-SNModRequest-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

PDUSessionsToBeAdded-SNModRequest-List ::= SEQUENCE (SIZE(1..maxnoofPDUSessions)) OF PDUSessionsToBeAdded-SNModRequest-Item

PDUSessionsToBeAdded-SNModRequest-Item ::= SEQUENCE {

pduSessionId PDUSession-ID,

s-NSSAI S-NSSAI,

sN-PDUSessionAMBR PDUSessionAggregateMaximumBitRate OPTIONAL,

sn-terminated PDUSessionResourceSetupInfo-SNterminated OPTIONAL,

mn-terminated PDUSessionResourceSetupInfo-MNterminated OPTIONAL,

-- NOTE: If neither the *PDU Session Resource Setup Info – SN terminated* IE

-- nor the *PDU Session Resource Setup Info – MN terminated* IE is present,

-- abnormal conditions as specified in clause 8.3.3.4 apply.

iE-Extension ProtocolExtensionContainer { {PDUSessionsToBeAdded-SNModRequest-Item-ExtIEs} } OPTIONAL,

...

}

PDUSessionsToBeAdded-SNModRequest-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ID id-PDUSessionExpectedUEActivityBehaviour CRITICALITY ignore EXTENSION ExpectedUEActivityBehaviour PRESENCE optional},

...

}

PDUSessionsToBeModified-SNModRequest-List ::= SEQUENCE (SIZE(1..maxnoofPDUSessions)) OF PDUSessionsToBeModified-SNModRequest-Item

PDUSessionsToBeModified-SNModRequest-Item ::= SEQUENCE {

pduSessionId PDUSession-ID,

sN-PDUSessionAMBR PDUSessionAggregateMaximumBitRate OPTIONAL,

sn-terminated PDUSessionResourceModificationInfo-SNterminated OPTIONAL,

mn-terminated PDUSessionResourceModificationInfo-MNterminated OPTIONAL,

-- NOTE: If neither the *PDU Session Resource Modification Info – SN terminated* IE

-- nor the *PDU Session Resource Modification Info – MN terminated* IE is present,

-- abnormal conditions as specified in clause 8.3.3.4 apply.

iE-Extension ProtocolExtensionContainer { {PDUSessionsToBeModified-SNModRequest-Item-ExtIEs} } OPTIONAL,

...

}

PDUSessionsToBeModified-SNModRequest-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ ID id-S-NSSAI CRITICALITY reject EXTENSION S-NSSAI PRESENCE optional }|

{ ID id-PDUSessionExpectedUEActivityBehaviour CRITICALITY ignore EXTENSION ExpectedUEActivityBehaviour PRESENCE optional }|

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

...

}

PDUSessionsToBeReleased-SNModRequest-List ::= SEQUENCE {

pdu-session-list PDUSession-List-withCause OPTIONAL,

iE-Extension ProtocolExtensionContainer { {PDUSessionsToBeReleased-SNModRequest-List-ExtIEs} } OPTIONAL,

...

}

PDUSessionsToBeReleased-SNModRequest-List-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

RequestedFastMCGRecoveryViaSRB3Release ::= ENUMERATED {true, ...}

Src-SN-to-Tgt-SNQMCInfoInquiry ::= ENUMERATED {true, ...}

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

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-- S-NODE MODIFICATION REQUEST ACKNOWLEDGE

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

SNodeModificationRequestAcknowledge ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ SNodeModificationRequestAcknowledge-IEs}},

...

}

SNodeModificationRequestAcknowledge-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-M-NG-RANnodeUEXnAPID CRITICALITY ignore TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-S-NG-RANnodeUEXnAPID CRITICALITY ignore TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-PDUSessionAdmitted-SNModResponse CRITICALITY ignore TYPE PDUSessionAdmitted-SNModResponse PRESENCE optional }|

{ ID id-PDUSessionNotAdmitted-SNModResponse CRITICALITY ignore TYPE PDUSessionNotAdmitted-SNModResponse PRESENCE optional }|

{ ID id-SN-to-MN-Container CRITICALITY ignore TYPE OCTET STRING PRESENCE optional }|

{ ID id-admittedSplitSRB CRITICALITY ignore TYPE SplitSRBsTypes PRESENCE optional }|

{ ID id-admittedSplitSRBrelease CRITICALITY ignore TYPE SplitSRBsTypes PRESENCE optional }|

{ ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional }|

{ ID id-LocationInformationSN CRITICALITY ignore TYPE Target-CGI PRESENCE optional }|

{ ID id-MR-DC-ResourceCoordinationInfo CRITICALITY ignore TYPE MR-DC-ResourceCoordinationInfo PRESENCE optional }|

{ ID id-PDUSessionDataForwarding-SNModResponse CRITICALITY ignore TYPE PDUSessionDataForwarding-SNModResponse PRESENCE optional }|

{ ID id-RRCConfigIndication CRITICALITY reject TYPE RRCConfigIndication PRESENCE optional }|

{ ID id-AvailableFastMCGRecoveryViaSRB3 CRITICALITY ignore TYPE AvailableFastMCGRecoveryViaSRB3 PRESENCE optional }|

{ ID id-ReleaseFastMCGRecoveryViaSRB3 CRITICALITY ignore TYPE ReleaseFastMCGRecoveryViaSRB3 PRESENCE optional }|

{ ID id-DirectForwardingPathAvailability CRITICALITY ignore TYPE DirectForwardingPathAvailability PRESENCE optional }|

{ ID id-SCGUEHistoryInformation CRITICALITY ignore TYPE SCGUEHistoryInformation PRESENCE optional }|

{ ID id-SCGActivationStatus CRITICALITY ignore TYPE SCGActivationStatus PRESENCE optional }|

{ ID id-CPAInformationModReqAck CRITICALITY ignore TYPE CPAInformationModReqAck PRESENCE optional }|

{ ID id-QMCCoordinationResponse CRITICALITY ignore TYPE QMCCoordinationResponse PRESENCE optional }|

{ ID id-SourceSN-to-TargetSN-QMCInfo CRITICALITY ignore TYPE QMCConfigInfo PRESENCE optional }|

{ ID id-LTMInformation-ModReqAck CRITICALITY ignore TYPE LTMInformation-ModReqAck PRESENCE optional }|

{ ID id-LTMInformation-UpdateReqAck CRITICALITY ignore TYPE LTMInformation-UpdateReqAck PRESENCE optional },

...

}

PDUSessionAdmitted-SNModResponse ::= SEQUENCE {

pduSessionResourcesAdmittedToBeAdded PDUSessionAdmittedToBeAddedSNModResponse OPTIONAL,

pduSessionResourcesAdmittedToBeModified PDUSessionAdmittedToBeModifiedSNModResponse OPTIONAL,

pduSessionResourcesAdmittedToBeReleased PDUSessionAdmittedToBeReleasedSNModResponse OPTIONAL,

iE-Extension ProtocolExtensionContainer { {PDUSessionAdmitted-SNModResponse-ExtIEs} } OPTIONAL,

...

}

PDUSessionAdmitted-SNModResponse-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

PDUSessionAdmittedToBeAddedSNModResponse ::= SEQUENCE (SIZE(1..maxnoofPDUSessions)) OF PDUSessionAdmittedToBeAddedSNModResponse-Item

PDUSessionAdmittedToBeAddedSNModResponse-Item ::= SEQUENCE {

pduSessionId PDUSession-ID,

sn-terminated PDUSessionResourceSetupResponseInfo-SNterminated OPTIONAL,

mn-terminated PDUSessionResourceSetupResponseInfo-MNterminated OPTIONAL,

-- NOTE: If neither the *PDU Session Resource Setup Response Info – SN terminated* IE

-- nor the *PDU Session Resource Setup Response Info – MN terminated* IE is present,

-- abnormal conditions as specified in clause 8.3.3.4 apply.

iE-Extension ProtocolExtensionContainer { {PDUSessionAdmittedToBeAddedSNModResponse-Item-ExtIEs} } OPTIONAL,

...

}

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

...

}

PDUSessionAdmittedToBeModifiedSNModResponse::= SEQUENCE (SIZE(1..maxnoofPDUSessions)) OF PDUSessionAdmittedToBeModifiedSNModResponse-Item

PDUSessionAdmittedToBeModifiedSNModResponse-Item ::= SEQUENCE {

pduSessionId PDUSession-ID,

sn-terminated PDUSessionResourceModificationResponseInfo-SNterminated OPTIONAL,

mn-terminated PDUSessionResourceModificationResponseInfo-MNterminated OPTIONAL,

-- NOTE: If neither the *PDU Session Resource Modification Response Info – SN terminated* IE

-- nor the *PDU Session Resource Modification Response Info – MN terminated* IE is present,

-- abnormal conditions as specified in clause 8.3.3.4 apply.

iE-Extension ProtocolExtensionContainer { {PDUSessionAdmittedToBeModifiedSNModResponse-Item-ExtIEs} } OPTIONAL,

...

}

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

...

}

PDUSessionAdmittedToBeReleasedSNModResponse ::= SEQUENCE {

sn-terminated PDUSession-List-withDataForwardingRequest OPTIONAL,

mn-terminated PDUSession-List-withCause OPTIONAL,

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

...

}

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

...

}

PDUSessionNotAdmitted-SNModResponse ::= SEQUENCE {

pdu-Session-List PDUSession-List OPTIONAL,

iE-Extension ProtocolExtensionContainer { {PDUSessionNotAdmitted-SNModResponse-ExtIEs} } OPTIONAL,

...

}

PDUSessionNotAdmitted-SNModResponse-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

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

...

}

PDUSessionDataForwarding-SNModResponse ::= SEQUENCE {

sn-terminated PDUSession-List-withDataForwardingRequest,

iE-Extensions ProtocolExtensionContainer { {PDUSessionDataForwarding-SNModResponse-ExtIEs} } OPTIONAL,

...

}

PDUSessionDataForwarding-SNModResponse-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

ReleaseFastMCGRecoveryViaSRB3 ::= ENUMERATED {true, ...}

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

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-- S-NODE MODIFICATION REQUEST REJECT

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

SNodeModificationRequestReject ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ SNodeModificationRequestReject-IEs}},

...

}

SNodeModificationRequestReject-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-M-NG-RANnodeUEXnAPID CRITICALITY ignore TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-S-NG-RANnodeUEXnAPID CRITICALITY ignore TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-Cause CRITICALITY ignore TYPE Cause PRESENCE mandatory}|

{ ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional },

...

}

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

--

-- S-NODE MODIFICATION REQUIRED

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

SNodeModificationRequired ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ SNodeModificationRequired-IEs}},

...

}

SNodeModificationRequired-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-M-NG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-S-NG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-Cause CRITICALITY ignore TYPE Cause PRESENCE mandatory}|

{ ID id-PDCPChangeIndication CRITICALITY ignore TYPE PDCPChangeIndication PRESENCE optional }|

{ ID id-PDUSessionToBeModifiedSNModRequired CRITICALITY ignore TYPE PDUSessionToBeModifiedSNModRequired PRESENCE optional }|

{ ID id-PDUSessionToBeReleasedSNModRequired CRITICALITY ignore TYPE PDUSessionToBeReleasedSNModRequired PRESENCE optional }|

{ ID id-SN-to-MN-Container CRITICALITY ignore TYPE OCTET STRING PRESENCE optional }|

{ ID id-SpareDRBIDs CRITICALITY ignore TYPE DRB-List PRESENCE optional }|

{ ID id-RequiredNumberOfDRBIDs CRITICALITY ignore TYPE DRB-Number PRESENCE optional }|

{ ID id-LocationInformationSN CRITICALITY ignore TYPE Target-CGI PRESENCE optional }|

{ ID id-MR-DC-ResourceCoordinationInfo CRITICALITY ignore TYPE MR-DC-ResourceCoordinationInfo PRESENCE optional }|

{ ID id-RRCConfigIndication CRITICALITY reject TYPE RRCConfigIndication PRESENCE optional }|

{ ID id-AvailableFastMCGRecoveryViaSRB3 CRITICALITY ignore TYPE AvailableFastMCGRecoveryViaSRB3 PRESENCE optional }|

{ ID id-ReleaseFastMCGRecoveryViaSRB3 CRITICALITY ignore TYPE ReleaseFastMCGRecoveryViaSRB3 PRESENCE optional }|

{ ID id-SCGIndicator CRITICALITY ignore TYPE SCGIndicator PRESENCE optional }|

{ ID id-SCGUEHistoryInformation CRITICALITY ignore TYPE SCGUEHistoryInformation PRESENCE optional }|

{ ID id-SCGActivationRequest CRITICALITY ignore TYPE SCGActivationRequest PRESENCE optional }|

{ ID id-CPACInformationModRequired CRITICALITY ignore TYPE CPACInformationModRequired PRESENCE optional }|

{ ID id-SCGreconfigNotification CRITICALITY ignore TYPE SCGreconfigNotification PRESENCE optional }|

{ ID id-SPRAvailability CRITICALITY ignore TYPE SPRAvailability PRESENCE optional }|

{ ID id-QMCCoordinationRequest CRITICALITY ignore TYPE QMCCoordinationRequest PRESENCE optional }|

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

{ ID id-PDUSessionsListToBeReleased-UPError CRITICALITY ignore TYPE PDUSessionsListToBeReleased-UPError PRESENCE optional }|

{ ID id-LTMInformation-Required CRITICALITY ignore TYPE LTMInformation-Required PRESENCE optional },

...

}

PDUSessionToBeModifiedSNModRequired::= SEQUENCE (SIZE (1.. maxnoofPDUSessions)) OF PDUSessionToBeModifiedSNModRequired-Item

PDUSessionToBeModifiedSNModRequired-Item ::= SEQUENCE {

pduSessionId PDUSession-ID,

sn-terminated PDUSessionResourceModRqdInfo-SNterminated OPTIONAL,

mn-terminated PDUSessionResourceModRqdInfo-MNterminated OPTIONAL,

-- NOTE: If neither the *PDU Session Resource Modification Required Info – SN terminated* IE

-- nor the *PDU Session Resource Modification Required Info – MN terminated* IE is present,

-- abnormal conditions as specified in clause 8.3.4.4 apply.

iE-Extension ProtocolExtensionContainer { {PDUSessionToBeModifiedSNModRequired-Item-ExtIEs} } OPTIONAL,

...

}

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

...

}

PDUSessionToBeReleasedSNModRequired ::= SEQUENCE {

sn-terminated PDUSession-List-withDataForwardingRequest OPTIONAL,

mn-terminated PDUSession-List-withCause OPTIONAL,

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

...

}

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

...

}

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

--

-- S-NODE MODIFICATION CONFIRM

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

SNodeModificationConfirm ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ SNodeModificationConfirm-IEs}},

...

}

SNodeModificationConfirm-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-M-NG-RANnodeUEXnAPID CRITICALITY ignore TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-S-NG-RANnodeUEXnAPID CRITICALITY ignore TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-PDUSessionAdmittedModSNModConfirm CRITICALITY ignore TYPE PDUSessionAdmittedModSNModConfirm PRESENCE optional }|

{ ID id-PDUSessionReleasedSNModConfirm CRITICALITY ignore TYPE PDUSessionReleasedSNModConfirm PRESENCE optional }|

{ ID id-MN-to-SN-Container CRITICALITY ignore TYPE OCTET STRING PRESENCE optional }|

{ ID id-AdditionalDRBIDs CRITICALITY reject TYPE DRB-List PRESENCE optional }|

{ ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional }|

{ ID id-MR-DC-ResourceCoordinationInfo CRITICALITY ignore TYPE MR-DC-ResourceCoordinationInfo PRESENCE optional }|

{ ID id-QMCCoordinationResponse CRITICALITY ignore TYPE QMCCoordinationResponse PRESENCE optional },

...

}

PDUSessionAdmittedModSNModConfirm ::= SEQUENCE (SIZE(1..maxnoofPDUSessions)) OF PDUSessionAdmittedModSNModConfirm-Item

PDUSessionAdmittedModSNModConfirm-Item ::= SEQUENCE {

pduSessionId PDUSession-ID,

sn-terminated PDUSessionResourceModConfirmInfo-SNterminated OPTIONAL,

mn-terminated PDUSessionResourceModConfirmInfo-MNterminated OPTIONAL,

-- NOTE: If neither the *PDU Session Resource Modification Confirm Info – SN terminated* IE

-- nor the *PDU Session Resource Modification Confirm Info – MN terminated* IE is present,

-- abnormal conditions as specified in clause 8.3.4.4 apply.

iE-Extension ProtocolExtensionContainer { {PDUSessionAdmittedModSNModConfirm-Item-ExtIEs} } OPTIONAL,

...

}

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

...

}

PDUSessionReleasedSNModConfirm ::= SEQUENCE {

sn-terminated PDUSession-List-withDataForwardingFromTarget OPTIONAL,

mn-terminated PDUSession-List OPTIONAL,

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

...

}

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

...

}

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

--

-- S-NODE MODIFICATION REFUSE

--

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

SNodeModificationRefuse ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ SNodeModificationRefuse-IEs}},

...

}

SNodeModificationRefuse-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-M-NG-RANnodeUEXnAPID CRITICALITY ignore TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-S-NG-RANnodeUEXnAPID CRITICALITY ignore TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-Cause CRITICALITY ignore TYPE Cause PRESENCE mandatory}|

{ ID id-MN-to-SN-Container CRITICALITY ignore TYPE OCTET STRING PRESENCE optional }|

{ ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional },

...

}

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

--

-- S-NODE RELEASE REQUEST

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

SNodeReleaseRequest ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ SNodeReleaseRequest-IEs}},

...

}

SNodeReleaseRequest-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-M-NG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-S-NG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE optional }|

{ ID id-Cause CRITICALITY ignore TYPE Cause PRESENCE mandatory}|

{ ID id-PDUSessionToBeReleased-RelReq CRITICALITY ignore TYPE PDUSession-List-withCause PRESENCE optional }|

{ ID id-UEContextKeptIndicator CRITICALITY ignore TYPE UEContextKeptIndicator PRESENCE optional }|

{ ID id-MN-to-SN-Container CRITICALITY ignore TYPE OCTET STRING PRESENCE optional }|

{ ID id-DRBs-transferred-to-MN CRITICALITY ignore TYPE DRB-List PRESENCE optional },

...

}

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

--

-- S-NODE RELEASE REQUEST ACKNOWLEDGE

--

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

SNodeReleaseRequestAcknowledge ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ SNodeReleaseRequestAcknowledge-IEs}},

...

}

SNodeReleaseRequestAcknowledge-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-M-NG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-S-NG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE optional }|

{ ID id-PDUSessionToBeReleased-RelReqAck CRITICALITY ignore TYPE PDUSessionToBeReleasedList-RelReqAck PRESENCE optional }|

{ ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional }|

{ ID id-SCGUEHistoryInformation CRITICALITY ignore TYPE SCGUEHistoryInformation PRESENCE optional }|

{ ID id-SNMobilityInformation CRITICALITY ignore TYPE SNMobilityInformation PRESENCE optional },

...

}

PDUSessionToBeReleasedList-RelReqAck ::= SEQUENCE {

pduSessionsToBeReleasedList-SNterminated PDUSession-List-withDataForwardingRequest OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {PDUSessionToBeReleasedList-RelReqAck-ExtIEs} } OPTIONAL,

...

}

PDUSessionToBeReleasedList-RelReqAck-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

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

--

-- S-NODE RELEASE REJECT

--

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

SNodeReleaseReject ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ SNodeReleaseReject-IEs}},

...

}

SNodeReleaseReject-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-M-NG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-S-NG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE optional }|

{ ID id-Cause CRITICALITY ignore TYPE Cause PRESENCE mandatory}|

{ ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional },

...

}

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

--

-- S-NODE RELEASE REQUIRED

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

SNodeReleaseRequired ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ SNodeReleaseRequired-IEs}},

...

}

SNodeReleaseRequired-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-M-NG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-S-NG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-PDUSessionToBeReleasedList-RelRqd CRITICALITY ignore TYPE PDUSessionToBeReleasedList-RelRqd PRESENCE optional }|

{ ID id-Cause CRITICALITY ignore TYPE Cause PRESENCE mandatory}|

{ ID id-SN-to-MN-Container CRITICALITY ignore TYPE OCTET STRING PRESENCE optional }|

{ ID id-SCGUEHistoryInformation CRITICALITY ignore TYPE SCGUEHistoryInformation PRESENCE optional }|

{ ID id-PDUSessionsListToBeReleased-UPError CRITICALITY ignore TYPE PDUSessionsListToBeReleased-UPError PRESENCE optional },

...

}

PDUSessionToBeReleasedList-RelRqd ::= SEQUENCE {

pduSessionsToBeReleasedList-SNterminated PDUSession-List-withDataForwardingRequest OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {PDUSessionToBeReleasedList-RelRqd-ExtIEs} } OPTIONAL,

...

}

PDUSessionToBeReleasedList-RelRqd-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

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

--

-- S-NODE RELEASE CONFIRM

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

SNodeReleaseConfirm ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ SNodeReleaseConfirm-IEs}},

...

}

SNodeReleaseConfirm-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-M-NG-RANnodeUEXnAPID CRITICALITY ignore TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-S-NG-RANnodeUEXnAPID CRITICALITY ignore TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-PDUSessionReleasedList-RelConf CRITICALITY ignore TYPE PDUSessionReleasedList-RelConf PRESENCE optional }|

{ ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional },

...

}

PDUSessionReleasedList-RelConf ::= SEQUENCE {

pduSessionsReleasedList-SNterminated PDUSession-List-withDataForwardingFromTarget OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {PDUSessionReleasedList-RelConf-ExtIEs} } OPTIONAL,

...

}

PDUSessionReleasedList-RelConf-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

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

--

-- S-NODE COUNTER CHECK REQUEST

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

SNodeCounterCheckRequest ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ SNodeCounterCheckRequest-IEs}},

...

}

SNodeCounterCheckRequest-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-M-NG-RANnodeUEXnAPID CRITICALITY ignore TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-S-NG-RANnodeUEXnAPID CRITICALITY ignore TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-BearersSubjectToCounterCheck CRITICALITY ignore TYPE BearersSubjectToCounterCheck-List PRESENCE mandatory},

...

}

BearersSubjectToCounterCheck-List ::= SEQUENCE (SIZE(1..maxnoofDRBs)) OF BearersSubjectToCounterCheck-Item

BearersSubjectToCounterCheck-Item ::= SEQUENCE {

drb-ID DRB-ID,

ul-count INTEGER (0.. 4294967295),

dl-count INTEGER (0.. 4294967295),

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

...

}

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

...

}

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

--

-- S-NODE CHANGE REQUIRED

--

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

SNodeChangeRequired ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ SNodeChangeRequired-IEs}},

...

}

SNodeChangeRequired-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-M-NG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-S-NG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-target-S-NG-RANnodeID CRITICALITY reject TYPE GlobalNG-RANNode-ID PRESENCE mandatory}|

{ ID id-Cause CRITICALITY ignore TYPE Cause PRESENCE mandatory}|

{ ID id-PDUSession-SNChangeRequired-List CRITICALITY ignore TYPE PDUSession-SNChangeRequired-List PRESENCE optional }|

{ ID id-SN-to-MN-Container CRITICALITY reject TYPE OCTET STRING PRESENCE mandatory}|

{ ID id-SCGUEHistoryInformation CRITICALITY ignore TYPE SCGUEHistoryInformation PRESENCE optional }|

{ ID id-SNMobilityInformation CRITICALITY ignore TYPE SNMobilityInformation PRESENCE optional }|

{ ID id-SourcePSCellID CRITICALITY ignore TYPE GlobalNG-RANCell-ID PRESENCE optional }|

{ ID id-CPCInformationRequired CRITICALITY ignore TYPE CPCInformationRequired PRESENCE optional }|

{ ID id-SourceSN-to-TargetSN-QMCInfo CRITICALITY ignore TYPE QMCConfigInfo PRESENCE optional }|

{ ID id-LTMInformation-ChangeRequired CRITICALITY reject TYPE LTMInformation-ChangeRequired PRESENCE optional },

...

}

PDUSession-SNChangeRequired-List ::= SEQUENCE (SIZE(1..maxnoofPDUSessions)) OF PDUSession-SNChangeRequired-Item

PDUSession-SNChangeRequired-Item ::= SEQUENCE {

pduSessionId PDUSession-ID,

sn-terminated PDUSessionResourceChangeRequiredInfo-SNterminated OPTIONAL,

mn-terminated PDUSessionResourceChangeRequiredInfo-MNterminated OPTIONAL,

-- NOTE: If the *PDU Session Resource Change Required Info – SN terminated* IE is not present,

-- abnormal conditions as specified in clause 8.3.5.4 apply.

iE-Extension ProtocolExtensionContainer { {PDUSession-SNChangeRequired-Item-ExtIEs} } OPTIONAL,

...

}

PDUSession-SNChangeRequired-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

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

--

-- S-NODE CHANGE CONFIRM

--

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

SNodeChangeConfirm ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ SNodeChangeConfirm-IEs}},

...

}

SNodeChangeConfirm-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-M-NG-RANnodeUEXnAPID CRITICALITY ignore TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-S-NG-RANnodeUEXnAPID CRITICALITY ignore TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-PDUSession-SNChangeConfirm-List CRITICALITY ignore TYPE PDUSession-SNChangeConfirm-List PRESENCE optional }|

{ ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional }|

{ ID id-CPCInformationConfirm CRITICALITY ignore TYPE CPCInformationConfirm PRESENCE optional }|

{ ID id-MN-to-SN-Container CRITICALITY ignore TYPE OCTET STRING PRESENCE optional }|

{ ID id-LTMInformation-ChangeConfirm CRITICALITY ignore TYPE LTMInformation-ChangeConfirm PRESENCE optional },

...

}

PDUSession-SNChangeConfirm-List ::= SEQUENCE (SIZE(1..maxnoofPDUSessions)) OF PDUSession-SNChangeConfirm-Item

PDUSession-SNChangeConfirm-Item ::= SEQUENCE {

pduSessionId PDUSession-ID,

sn-terminated PDUSessionResourceChangeConfirmInfo-SNterminated OPTIONAL,

mn-terminated PDUSessionResourceChangeConfirmInfo-MNterminated OPTIONAL,

-- NOTE: If the *PDU Session Resource Change Confirm Info – SN terminated* IE is not present,

-- abnormal conditions as specified in clause 8.3.5.4 apply.

iE-Extension ProtocolExtensionContainer { {PDUSession-SNChangeConfirm-Item-ExtIEs} } OPTIONAL,

...

}

PDUSession-SNChangeConfirm-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ ID id-AdditionalListofPDUSessionResourceChangeConfirmInfo-SNterminated CRITICALITY ignore EXTENSION AdditionalListofPDUSessionResourceChangeConfirmInfo-SNterminated PRESENCE optional},

...

}

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

--

-- S-NODE CHANGE REFUSE

--

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

SNodeChangeRefuse ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ SNodeChangeRefuse-IEs}},

...

}

SNodeChangeRefuse-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-M-NG-RANnodeUEXnAPID CRITICALITY ignore TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-S-NG-RANnodeUEXnAPID CRITICALITY ignore TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-Cause CRITICALITY ignore TYPE Cause PRESENCE mandatory}|

{ ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional },

...

}

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

--

-- RRC TRANSFER

--

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

RRCTransfer ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ RRCTransfer-IEs}},

...

}

RRCTransfer-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-M-NG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-S-NG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-SplitSRB-RRCTransfer CRITICALITY reject TYPE SplitSRB-RRCTransfer PRESENCE optional }|

{ ID id-UEReportRRCTransfer CRITICALITY reject TYPE UEReportRRCTransfer PRESENCE optional }|

{ ID id-FastMCGRecoveryRRCTransfer-SN-to-MN CRITICALITY ignore TYPE FastMCGRecoveryRRCTransfer PRESENCE optional }|

{ ID id-FastMCGRecoveryRRCTransfer-MN-to-SN CRITICALITY ignore TYPE FastMCGRecoveryRRCTransfer PRESENCE optional }|

{ ID id-SDT-SRB-between-NewNode-OldNode CRITICALITY ignore TYPE SDT-SRB-between-NewNode-OldNode PRESENCE optional }|

{ ID id-QoE-Measurement-Results CRITICALITY ignore TYPE QoE-Measurement-Results PRESENCE optional },

...

}

SplitSRB-RRCTransfer ::= SEQUENCE {

rrcContainer OCTET STRING OPTIONAL,

srbType ENUMERATED {srb1, srb2, ...},

deliveryStatus DeliveryStatus OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {SplitSRB-RRCTransfer-ExtIEs} } OPTIONAL,

...

}

SplitSRB-RRCTransfer-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

UEReportRRCTransfer::= SEQUENCE {

rrcContainer OCTET STRING,

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

...

}

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

...

}

FastMCGRecoveryRRCTransfer::= SEQUENCE {

rrcContainer OCTET STRING,

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

...

}

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

...

}

SDT-SRB-between-NewNode-OldNode::= SEQUENCE {

rrcContainer OCTET STRING,

srb-ID SRB-ID,

iE-Extensions ProtocolExtensionContainer { { SDT-SRB-between-NewNode-OldNode-ExtIEs} } OPTIONAL,

...

}

SDT-SRB-between-NewNode-OldNode-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

QoE-Measurement-Results ::= SEQUENCE {

qOEReference OCTET STRING (SIZE(6)),

rrcContainerForRVQoEReport OCTET STRING OPTIONAL,

rrcContainerForQoEReport OCTET STRING OPTIONAL,

appLayerSessionStatus ENUMERATED {started, stopped, ...} OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {QoE-Measurement-Results-ExtIEs} } OPTIONAL,

...

}

QoE-Measurement-Results-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

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

--

-- NOTIFICATION CONTROL INDICATION

--

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

NotificationControlIndication ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{NotificationControlIndication-IEs}},

...

}

NotificationControlIndication-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-M-NG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-S-NG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-PDUSessionResourcesNotifyList CRITICALITY reject TYPE PDUSessionResourcesNotifyList PRESENCE optional },

...

}

PDUSessionResourcesNotifyList ::= SEQUENCE (SIZE(1..maxnoofPDUSessions)) OF PDUSessionResourcesNotify-Item

PDUSessionResourcesNotify-Item ::= SEQUENCE {

pduSessionId PDUSession-ID,

qosFlowsNotificationContrIndInfo QoSFlowNotificationControlIndicationInfo,

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

...

}

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

...

}

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

--

-- ACTIVITY NOTIFICATION

--

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

ActivityNotification ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ActivityNotification-IEs}},

...

}

ActivityNotification-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-M-NG-RANnodeUEXnAPID CRITICALITY ignore TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-S-NG-RANnodeUEXnAPID CRITICALITY ignore TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-UserPlaneTrafficActivityReport CRITICALITY ignore TYPE UserPlaneTrafficActivityReport PRESENCE optional }|

{ ID id-PDUSessionResourcesActivityNotifyList CRITICALITY ignore TYPE PDUSessionResourcesActivityNotifyList PRESENCE optional }|

{ ID id-RANPagingFailure CRITICALITY ignore TYPE RANPagingFailure PRESENCE optional },

...

}

PDUSessionResourcesActivityNotifyList ::= SEQUENCE (SIZE(1..maxnoofPDUSessions)) OF PDUSessionResourcesActivityNotify-Item

PDUSessionResourcesActivityNotify-Item ::= SEQUENCE {

pduSessionId PDUSession-ID,

pduSessionLevelUPactivityreport UserPlaneTrafficActivityReport OPTIONAL,

qosFlowsActivityNotifyList QoSFlowsActivityNotifyList OPTIONAL,

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

...

}

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

...

}

QoSFlowsActivityNotifyList ::= SEQUENCE (SIZE(1..maxnoofQoSFlows)) OF QoSFlowsActivityNotifyItem

QoSFlowsActivityNotifyItem ::= SEQUENCE {

qosFlowIdentifier QoSFlowIdentifier,

pduSessionLevelUPactivityreport UserPlaneTrafficActivityReport,

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

...

}

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

...

}

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

--

-- XN SETUP REQUEST

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

XnSetupRequest ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ XnSetupRequest-IEs}},

...

}

XnSetupRequest-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-GlobalNG-RAN-node-ID CRITICALITY reject TYPE GlobalNG-RANNode-ID PRESENCE mandatory}|

{ ID id-TAISupport-list CRITICALITY reject TYPE TAISupport-List PRESENCE mandatory}|

{ ID id-AMF-Region-Information CRITICALITY reject TYPE AMF-Region-Information PRESENCE mandatory}|

{ ID id-List-of-served-cells-NR CRITICALITY reject TYPE ServedCells-NR PRESENCE optional }|

{ ID id-List-of-served-cells-E-UTRA CRITICALITY reject TYPE ServedCells-E-UTRA PRESENCE optional }|

{ ID id-InterfaceInstanceIndication CRITICALITY reject TYPE InterfaceInstanceIndication PRESENCE optional }|

{ ID id-TNLConfigurationInfo CRITICALITY ignore TYPE TNLConfigurationInfo PRESENCE optional }|

{ ID id-PartialListIndicator-NR CRITICALITY ignore TYPE PartialListIndicator PRESENCE optional }|

{ ID id-CellAndCapacityAssistanceInfo-NR CRITICALITY ignore TYPE CellAndCapacityAssistanceInfo-NR PRESENCE optional }|

{ ID id-PartialListIndicator-EUTRA CRITICALITY ignore TYPE PartialListIndicator PRESENCE optional }|

{ ID id-CellAndCapacityAssistanceInfo-EUTRA CRITICALITY ignore TYPE CellAndCapacityAssistanceInfo-EUTRA PRESENCE optional }|

{ ID id-Local-NG-RAN-Node-Identifier CRITICALITY ignore TYPE Local-NG-RAN-Node-Identifier PRESENCE optional }|

{ ID id-Neighbour-NG-RAN-Node-List CRITICALITY ignore TYPE Neighbour-NG-RAN-Node-List PRESENCE optional },

...

}

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

--

-- XN SETUP RESPONSE

--

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

XnSetupResponse ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ XnSetupResponse-IEs}},

...

}

XnSetupResponse-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-GlobalNG-RAN-node-ID CRITICALITY reject TYPE GlobalNG-RANNode-ID PRESENCE mandatory}|

{ ID id-TAISupport-list CRITICALITY reject TYPE TAISupport-List PRESENCE mandatory}|

{ ID id-List-of-served-cells-NR CRITICALITY reject TYPE ServedCells-NR PRESENCE optional }|

{ ID id-List-of-served-cells-E-UTRA CRITICALITY reject TYPE ServedCells-E-UTRA PRESENCE optional }|

{ ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional }|

{ ID id-AMF-Region-Information CRITICALITY reject TYPE AMF-Region-Information PRESENCE optional }|

{ ID id-InterfaceInstanceIndication CRITICALITY reject TYPE InterfaceInstanceIndication PRESENCE optional }|

{ ID id-TNLConfigurationInfo CRITICALITY ignore TYPE TNLConfigurationInfo PRESENCE optional }|

{ ID id-PartialListIndicator-NR CRITICALITY ignore TYPE PartialListIndicator PRESENCE optional }|

{ ID id-CellAndCapacityAssistanceInfo-NR CRITICALITY ignore TYPE CellAndCapacityAssistanceInfo-NR PRESENCE optional }|

{ ID id-PartialListIndicator-EUTRA CRITICALITY ignore TYPE PartialListIndicator PRESENCE optional }|

{ ID id-CellAndCapacityAssistanceInfo-EUTRA CRITICALITY ignore TYPE CellAndCapacityAssistanceInfo-EUTRA PRESENCE optional }|

{ ID id-Local-NG-RAN-Node-Identifier CRITICALITY ignore TYPE Local-NG-RAN-Node-Identifier PRESENCE optional }|

{ ID id-Neighbour-NG-RAN-Node-List CRITICALITY ignore TYPE Neighbour-NG-RAN-Node-List PRESENCE optional },

...

}

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

--

-- XN SETUP FAILURE

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

XnSetupFailure ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ XnSetupFailure-IEs}},

...

}

XnSetupFailure-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-Cause CRITICALITY ignore TYPE Cause PRESENCE mandatory}|

{ ID id-TimeToWait CRITICALITY ignore TYPE TimeToWait PRESENCE optional }|

{ ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional }|

{ ID id-InterfaceInstanceIndication CRITICALITY reject TYPE InterfaceInstanceIndication PRESENCE optional }|

{ ID id-MessageOversizeNotification CRITICALITY ignore TYPE MessageOversizeNotification PRESENCE optional },

...

}

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

--

-- NG-RAN NODE CONFIGURATION UPDATE

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

NGRANNodeConfigurationUpdate ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ NGRANNodeConfigurationUpdate-IEs}},

...

}

NGRANNodeConfigurationUpdate-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-TAISupport-list CRITICALITY reject TYPE TAISupport-List PRESENCE optional }|

{ ID id-ConfigurationUpdateInitiatingNodeChoice CRITICALITY ignore TYPE ConfigurationUpdateInitiatingNodeChoice PRESENCE mandatory}|

{ ID id-TNLA-To-Add-List CRITICALITY ignore TYPE TNLA-To-Add-List PRESENCE optional }|

{ ID id-TNLA-To-Remove-List CRITICALITY ignore TYPE TNLA-To-Remove-List PRESENCE optional }|

{ ID id-TNLA-To-Update-List CRITICALITY ignore TYPE TNLA-To-Update-List PRESENCE optional }|

{ ID id-GlobalNG-RAN-node-ID CRITICALITY reject TYPE GlobalNG-RANNode-ID PRESENCE optional }|

{ ID id-AMF-Region-Information-To-Add CRITICALITY reject TYPE AMF-Region-Information PRESENCE optional }|

{ ID id-AMF-Region-Information-To-Delete CRITICALITY reject TYPE AMF-Region-Information PRESENCE optional }|

{ ID id-InterfaceInstanceIndication CRITICALITY reject TYPE InterfaceInstanceIndication PRESENCE optional }|

{ ID id-TNLConfigurationInfo CRITICALITY ignore TYPE TNLConfigurationInfo PRESENCE optional }|

{ ID id-Coverage-Modification-List CRITICALITY reject TYPE Coverage-Modification-List PRESENCE optional }|

{ ID id-Local-NG-RAN-Node-Identifier CRITICALITY ignore TYPE Local-NG-RAN-Node-Identifier PRESENCE optional }|

{ ID id-Neighbour-NG-RAN-Node-List CRITICALITY ignore TYPE Neighbour-NG-RAN-Node-List PRESENCE optional }|

{ ID id-Local-NG-RAN-Node-Identifier-Removal CRITICALITY ignore TYPE Local-NG-RAN-Node-Identifier PRESENCE optional },

...

}

ConfigurationUpdateInitiatingNodeChoice ::= CHOICE {

gNB ProtocolIE-Container { {ConfigurationUpdate-gNB} },

ng-eNB ProtocolIE-Container { {ConfigurationUpdate-ng-eNB} },

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

}

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

...

}

ConfigurationUpdate-gNB XNAP-PROTOCOL-IES ::= {

{ ID id-servedCellsToUpdate-NR CRITICALITY ignore TYPE ServedCellsToUpdate-NR PRESENCE optional }|

{ ID id-cellAssistanceInfo-NR CRITICALITY ignore TYPE CellAssistanceInfo-NR PRESENCE optional }|

{ ID id-cellAssistanceInfo-EUTRA CRITICALITY ignore TYPE CellAssistanceInfo-EUTRA PRESENCE optional }|

{ ID id-ServedCellSpecificInfoReq-NR CRITICALITY ignore TYPE ServedCellSpecificInfoReq-NR PRESENCE optional},

...

}

ConfigurationUpdate-ng-eNB XNAP-PROTOCOL-IES ::= {

{ ID id-servedCellsToUpdate-E-UTRA CRITICALITY ignore TYPE ServedCellsToUpdate-E-UTRA PRESENCE optional }|

{ ID id-cellAssistanceInfo-NR CRITICALITY ignore TYPE CellAssistanceInfo-NR PRESENCE optional }|

{ ID id-cellAssistanceInfo-EUTRA CRITICALITY ignore TYPE CellAssistanceInfo-EUTRA PRESENCE optional },

...

}

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

--

-- NG-RAN NODE CONFIGURATION UPDATE ACKNOWLEDGE

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

NGRANNodeConfigurationUpdateAcknowledge ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ NGRANNodeConfigurationUpdateAcknowledge-IEs}},

...

}

NGRANNodeConfigurationUpdateAcknowledge-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-RespondingNodeTypeConfigUpdateAck CRITICALITY ignore TYPE RespondingNodeTypeConfigUpdateAck PRESENCE mandatory}|

{ ID id-TNLA-Setup-List CRITICALITY ignore TYPE TNLA-Setup-List PRESENCE optional }|

{ ID id-TNLA-Failed-To-Setup-List CRITICALITY ignore TYPE TNLA-Failed-To-Setup-List PRESENCE optional }|

{ ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional }|

{ ID id-InterfaceInstanceIndication CRITICALITY reject TYPE InterfaceInstanceIndication PRESENCE optional }|

{ ID id-TNLConfigurationInfo CRITICALITY ignore TYPE TNLConfigurationInfo PRESENCE optional }|

{ ID id-Local-NG-RAN-Node-Identifier CRITICALITY ignore TYPE Local-NG-RAN-Node-Identifier PRESENCE optional }|

{ ID id-Neighbour-NG-RAN-Node-List CRITICALITY ignore TYPE Neighbour-NG-RAN-Node-List PRESENCE optional }|

{ ID id-Local-NG-RAN-Node-Identifier-Removal CRITICALITY ignore TYPE Local-NG-RAN-Node-Identifier PRESENCE optional },

...

}

RespondingNodeTypeConfigUpdateAck ::= CHOICE {

ng-eNB RespondingNodeTypeConfigUpdateAck-ng-eNB,

gNB RespondingNodeTypeConfigUpdateAck-gNB,

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

}

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

...

}

RespondingNodeTypeConfigUpdateAck-ng-eNB ::= SEQUENCE {

iE-Extension ProtocolExtensionContainer { {RespondingNodeTypeConfigUpdateAck-ng-eNB-ExtIEs} } OPTIONAL,

...

}

RespondingNodeTypeConfigUpdateAck-ng-eNB-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ ID id-List-of-served-cells-E-UTRA CRITICALITY ignore EXTENSION ServedCells-E-UTRA PRESENCE optional }|

{ ID id-PartialListIndicator-EUTRA CRITICALITY ignore EXTENSION PartialListIndicator PRESENCE optional }|

{ ID id-CellAndCapacityAssistanceInfo-EUTRA CRITICALITY ignore EXTENSION CellAndCapacityAssistanceInfo-EUTRA PRESENCE optional },

...

}

RespondingNodeTypeConfigUpdateAck-gNB ::= SEQUENCE {

served-NR-Cells ServedCells-NR OPTIONAL,

iE-Extension ProtocolExtensionContainer { {RespondingNodeTypeConfigUpdateAck-gNB-ExtIEs} } OPTIONAL,

...

}

RespondingNodeTypeConfigUpdateAck-gNB-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ ID id-PartialListIndicator-NR CRITICALITY ignore EXTENSION PartialListIndicator PRESENCE optional }|

{ ID id-CellAndCapacityAssistanceInfo-NR CRITICALITY ignore EXTENSION CellAndCapacityAssistanceInfo-NR PRESENCE optional },

...

}

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

--

-- NG-RAN NODE CONFIGURATION UPDATE FAILURE

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

NGRANNodeConfigurationUpdateFailure ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{NGRANNodeConfigurationUpdateFailure-IEs}},

...

}

NGRANNodeConfigurationUpdateFailure-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-Cause CRITICALITY ignore TYPE Cause PRESENCE mandatory}|

{ ID id-TimeToWait CRITICALITY ignore TYPE TimeToWait PRESENCE optional }|

{ ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional }|

{ ID id-InterfaceInstanceIndication CRITICALITY reject TYPE InterfaceInstanceIndication PRESENCE optional },

...

}

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

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-- E-UTRA - NR CELL RESOURCE COORDINATION REQUEST

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

E-UTRA-NR-CellResourceCoordinationRequest ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{E-UTRA-NR-CellResourceCoordinationRequest-IEs}},

...

}

E-UTRA-NR-CellResourceCoordinationRequest-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-initiatingNodeType-ResourceCoordRequest CRITICALITY reject TYPE InitiatingNodeType-ResourceCoordRequest PRESENCE mandatory}|

{ ID id-InterfaceInstanceIndication CRITICALITY reject TYPE InterfaceInstanceIndication PRESENCE optional },

...

}

InitiatingNodeType-ResourceCoordRequest ::= CHOICE {

ng-eNB ResourceCoordRequest-ng-eNB-initiated,

gNB ResourceCoordRequest-gNB-initiated,

choice-extension ProtocolIE-Single-Container { {InitiatingNodeType-ResourceCoordRequest-ExtIEs} }

}

InitiatingNodeType-ResourceCoordRequest-ExtIEs XNAP-PROTOCOL-IES ::= {

...

}

ResourceCoordRequest-ng-eNB-initiated ::= SEQUENCE {

dataTrafficResourceIndication DataTrafficResourceIndication,

spectrumSharingGroupID SpectrumSharingGroupID,

listofE-UTRACells SEQUENCE (SIZE(1.. maxnoofCellsinNG-RANnode)) OF E-UTRA-CGI OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {ResourceCoordRequest-ng-eNB-initiated-ExtIEs} } OPTIONAL,

...

}

ResourceCoordRequest-ng-eNB-initiated-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

ResourceCoordRequest-gNB-initiated ::= SEQUENCE {

dataTrafficResourceIndication DataTrafficResourceIndication,

listofE-UTRACells SEQUENCE (SIZE(1.. maxnoofCellsinNG-RANnode)) OF E-UTRA-CGI OPTIONAL,

spectrumSharingGroupID SpectrumSharingGroupID,

listofNRCells SEQUENCE (SIZE(1.. maxnoofCellsinNG-RANnode)) OF NR-CGI OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {ResourceCoordRequest-gNB-initiated-ExtIEs} } OPTIONAL,

...

}

ResourceCoordRequest-gNB-initiated-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

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

--

-- E-UTRA - NR CELL RESOURCE COORDINATION RESPONSE

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

E-UTRA-NR-CellResourceCoordinationResponse::= SEQUENCE {

protocolIEs ProtocolIE-Container {{E-UTRA-NR-CellResourceCoordinationResponse-IEs}},

...

}

E-UTRA-NR-CellResourceCoordinationResponse-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-respondingNodeType-ResourceCoordResponse CRITICALITY reject TYPE RespondingNodeType-ResourceCoordResponse PRESENCE mandatory}|

{ ID id-InterfaceInstanceIndication CRITICALITY reject TYPE InterfaceInstanceIndication PRESENCE optional },

...

}

RespondingNodeType-ResourceCoordResponse ::= CHOICE {

ng-eNB ResourceCoordResponse-ng-eNB-initiated,

gNB ResourceCoordResponse-gNB-initiated,

choice-extension ProtocolIE-Single-Container { {RespondingNodeType-ResourceCoordResponse-ExtIEs} }

}

RespondingNodeType-ResourceCoordResponse-ExtIEs XNAP-PROTOCOL-IES ::= {

...

}

ResourceCoordResponse-ng-eNB-initiated ::= SEQUENCE {

dataTrafficResourceIndication DataTrafficResourceIndication,

spectrumSharingGroupID SpectrumSharingGroupID,

listofE-UTRACells SEQUENCE (SIZE(1.. maxnoofCellsinNG-RANnode)) OF E-UTRA-CGI OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {ResourceCoordResponse-ng-eNB-initiated-ExtIEs} } OPTIONAL,

...

}

ResourceCoordResponse-ng-eNB-initiated-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

ResourceCoordResponse-gNB-initiated ::= SEQUENCE {

dataTrafficResourceIndication DataTrafficResourceIndication,

spectrumSharingGroupID SpectrumSharingGroupID,

listofNRCells SEQUENCE (SIZE(1.. maxnoofCellsinNG-RANnode)) OF NR-CGI OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {ResourceCoordResponse-gNB-initiated-ExtIEs} } OPTIONAL,

...

}

ResourceCoordResponse-gNB-initiated-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

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

--

-- SECONDARY RAT DATA USAGE REPORT

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

SecondaryRATDataUsageReport ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{SecondaryRATDataUsageReport-IEs}},

...

}

SecondaryRATDataUsageReport-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-M-NG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-S-NG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

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

...

}

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

--

-- XN REMOVAL REQUEST

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

XnRemovalRequest ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ XnRemovalRequest-IEs}},

...

}

XnRemovalRequest-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-GlobalNG-RAN-node-ID CRITICALITY reject TYPE GlobalNG-RANNode-ID PRESENCE mandatory}|

{ ID id-XnRemovalThreshold CRITICALITY reject TYPE XnBenefitValue PRESENCE optional }|

{ ID id-InterfaceInstanceIndication CRITICALITY reject TYPE InterfaceInstanceIndication PRESENCE optional },

...

}

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--

-- XN REMOVAL RESPONSE

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

XnRemovalResponse ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ XnRemovalResponse-IEs}},

...

}

XnRemovalResponse-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-GlobalNG-RAN-node-ID CRITICALITY reject TYPE GlobalNG-RANNode-ID PRESENCE mandatory}|

{ ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional }|

{ ID id-InterfaceInstanceIndication CRITICALITY reject TYPE InterfaceInstanceIndication PRESENCE optional },

...

}

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

--

-- XN REMOVAL FAILURE

--

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

XnRemovalFailure ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ XnRemovalFailure-IEs}},

...

}

XnRemovalFailure-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-Cause CRITICALITY ignore TYPE Cause PRESENCE mandatory}|

{ ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional }|

{ ID id-InterfaceInstanceIndication CRITICALITY reject TYPE InterfaceInstanceIndication PRESENCE optional },

...

}

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

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-- CELL ACTIVATION REQUEST

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

CellActivationRequest ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ CellActivationRequest-IEs}},

...

}

CellActivationRequest-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-ServedCellsToActivate CRITICALITY reject TYPE ServedCellsToActivate PRESENCE mandatory}|

{ ID id-ActivationIDforCellActivation CRITICALITY reject TYPE ActivationIDforCellActivation PRESENCE mandatory}|

{ ID id-InterfaceInstanceIndication CRITICALITY reject TYPE InterfaceInstanceIndication PRESENCE optional },

...

}

ServedCellsToActivate ::= CHOICE {

nr-cells SEQUENCE (SIZE(1..maxnoofCellsinNG-RANnode)) OF NR-CGI,

e-utra-cells SEQUENCE (SIZE(1..maxnoofCellsinNG-RANnode)) OF E-UTRA-CGI,

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

}

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

{ ID id-NRCellsAndSSBsList CRITICALITY ignore TYPE ToBeActivatedNRCellsAndSSBsList PRESENCE mandatory},

...

}

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

ToBeActivatedNRCellsAndSSBs-Item ::= SEQUENCE {

nrCGI NR-CGI,

sSBstobeActivatedList SEQUENCE (SIZE(1.. maxnoofSSBAreas)) OF SSBsToBeActivated-Item OPTIONAL,

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

...

}

ToBeActivatedNRCellsAndSSBs-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {  
 ...

}

SSBsToBeActivated-Item ::= SEQUENCE {

ssbIndex INTEGER(0..63),

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

...

}

SSBsToBeActivated-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {  
 ...

}

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

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-- CELL ACTIVATION RESPONSE

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

CellActivationResponse ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{CellActivationResponse-IEs}},

...

}

CellActivationResponse-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-ActivatedServedCells CRITICALITY reject TYPE ActivatedServedCells PRESENCE mandatory}|

{ ID id-ActivationIDforCellActivation CRITICALITY reject TYPE ActivationIDforCellActivation PRESENCE mandatory}|

{ ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional }|

{ ID id-InterfaceInstanceIndication CRITICALITY reject TYPE InterfaceInstanceIndication PRESENCE optional },

...

}

ActivatedServedCells ::= CHOICE {

nr-cells SEQUENCE (SIZE(1..maxnoofCellsinNG-RANnode)) OF NR-CGI,

e-utra-cells SEQUENCE (SIZE(1..maxnoofCellsinNG-RANnode)) OF E-UTRA-CGI,

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

}

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

{ ID id-ActivatedNRCellsAndSSBsList CRITICALITY ignore TYPE ActivatedNRCellsAndSSBsList PRESENCE mandatory},

...

}

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

ActivatedNRCellsAndSSBs-Item ::= SEQUENCE {

nrCGI NR-CGI,

sSBsActivatedList SEQUENCE (SIZE(1..maxnoofSSBAreas)) OF SSBsActivated-Item OPTIONAL,

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

...

}

ActivatedNRCellsAndSSBs-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {  
 ...

}

SSBsActivated-Item ::= SEQUENCE {

ssbIndex INTEGER(0..63),

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

...

}

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

...

}

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

--

-- CELL ACTIVATION FAILURE

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

CellActivationFailure ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{CellActivationFailure-IEs}},

...

}

CellActivationFailure-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-ActivationIDforCellActivation CRITICALITY reject TYPE ActivationIDforCellActivation PRESENCE mandatory}|

{ ID id-Cause CRITICALITY ignore TYPE Cause PRESENCE mandatory}|

{ ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional }|

{ ID id-InterfaceInstanceIndication CRITICALITY reject TYPE InterfaceInstanceIndication PRESENCE optional },

...

}

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

--

-- RESET REQUEST

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

ResetRequest ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ResetRequest-IEs}},

...

}

ResetRequest-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-ResetRequestTypeInfo CRITICALITY reject TYPE ResetRequestTypeInfo PRESENCE mandatory}|

{ ID id-Cause CRITICALITY ignore TYPE Cause PRESENCE mandatory}|

{ ID id-InterfaceInstanceIndication CRITICALITY reject TYPE InterfaceInstanceIndication PRESENCE optional },

...

}

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

--

-- RESET RESPONSE

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

ResetResponse ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ResetResponse-IEs}},

...

}

ResetResponse-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-ResetResponseTypeInfo CRITICALITY reject TYPE ResetResponseTypeInfo PRESENCE mandatory}|

{ ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional }|

{ ID id-InterfaceInstanceIndication CRITICALITY reject TYPE InterfaceInstanceIndication PRESENCE optional },

...

}

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

--

-- ERROR INDICATION

--

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

ErrorIndication ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ErrorIndication-IEs}},

...

}

ErrorIndication-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-oldNG-RANnodeUEXnAPID CRITICALITY ignore TYPE NG-RANnodeUEXnAPID PRESENCE optional }|

{ ID id-newNG-RANnodeUEXnAPID CRITICALITY ignore TYPE NG-RANnodeUEXnAPID PRESENCE optional }|

{ ID id-Cause CRITICALITY ignore TYPE Cause PRESENCE optional }|

{ ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional }|

{ ID id-InterfaceInstanceIndication CRITICALITY reject TYPE InterfaceInstanceIndication PRESENCE optional },

...

}

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

--

-- PRIVATE MESSAGE

--

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

PrivateMessage ::= SEQUENCE {

privateIEs PrivateIE-Container {{PrivateMessage-IEs}},

...

}

PrivateMessage-IEs XNAP-PRIVATE-IES ::= {

...

}

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

--

-- TRACE START

--

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

TraceStart ::= SEQUENCE {

protocolIEs ProtocolIE-Container { {TraceStartIEs} },

...

}

TraceStartIEs XNAP-PROTOCOL-IES ::= {

{ ID id-M-NG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-S-NG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-TraceActivation CRITICALITY ignore TYPE TraceActivation PRESENCE optional },

...

}

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

--

-- DEACTIVATE TRACE

--

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

DeactivateTrace ::= SEQUENCE {

protocolIEs ProtocolIE-Container { {DeactivateTraceIEs} },

...

}

DeactivateTraceIEs XNAP-PROTOCOL-IES ::= {

{ ID id-M-NG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-S-NG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-NG-RANTraceID CRITICALITY ignore TYPE NG-RANTraceID PRESENCE mandatory},

...

}

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

--

-- FAILURE INDICATION

--

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

FailureIndication ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{FailureIndication-IEs}},

...

}

FailureIndication-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-InitiatingCondition-FailureIndication CRITICALITY reject TYPE InitiatingCondition-FailureIndication PRESENCE mandatory},

...

}

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

--

-- HANDOVER REPORT

--

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

HandoverReport ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ HandoverReport-IEs}},

...

}

HandoverReport-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-HandoverReportType CRITICALITY ignore TYPE HandoverReportType PRESENCE mandatory}|

{ ID id-HandoverCause CRITICALITY ignore TYPE Cause PRESENCE mandatory}|

{ ID id-SourceCellCGI CRITICALITY ignore TYPE GlobalNG-RANCell-ID PRESENCE mandatory }|

{ ID id-TargetCellCGI CRITICALITY ignore TYPE GlobalNG-RANCell-ID PRESENCE mandatory }|

{ ID id-ReEstablishmentCellCGI CRITICALITY ignore TYPE GlobalCell-ID PRESENCE conditional }|

-- This IE shall be present if the *Handover Report Type* IE is set to the value "HO to wrong cell"

{ ID id-TargetCellinEUTRAN CRITICALITY ignore TYPE TargetCellinEUTRAN PRESENCE conditional }|

-- This IE shall be present if the *Handover Report Type* IE is set to the value "Inter-system ping-pong"

{ ID id-SourceCellCRNTI CRITICALITY ignore TYPE C-RNTI PRESENCE optional }|

{ ID id-MobilityInformation CRITICALITY ignore TYPE MobilityInformation PRESENCE optional }|

{ ID id-UERLFReportContainer CRITICALITY ignore TYPE UERLFReportContainer PRESENCE optional }|

{ ID id-CHOConfiguration CRITICALITY ignore TYPE CHOConfiguration PRESENCE optional}|

{ ID id-TargetCellCRNTI CRITICALITY ignore TYPE C-RNTI PRESENCE optional}|

{ ID id-TimeSinceFailure CRITICALITY ignore TYPE TimeSinceFailure PRESENCE optional},

...

}

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

--

-- RESOURCE STATUS REQUEST

--

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

ResourceStatusRequest ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ResourceStatusRequest-IEs}},

...

}

ResourceStatusRequest-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-NGRAN-Node1-Measurement-ID CRITICALITY reject TYPE Measurement-ID PRESENCE mandatory}|

{ ID id-NGRAN-Node2-Measurement-ID CRITICALITY ignore TYPE Measurement-ID PRESENCE conditional}|

-- This IE shall be present if the *Registration Request* IE is set to the value "stop" or "add".

{ ID id-RegistrationRequest CRITICALITY reject TYPE RegistrationRequest PRESENCE mandatory}|

{ ID id-ReportCharacteristics CRITICALITY reject TYPE ReportCharacteristics PRESENCE conditional}|

-- This IE shall be present if the *Registration Request* IE is set to the value "start".

{ ID id-CellToReport CRITICALITY ignore TYPE CellToReport PRESENCE optional}|

{ ID id-ReportingPeriodicity CRITICALITY ignore TYPE ReportingPeriodicity PRESENCE optional},

...

}

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

--

-- RESOURCE STATUS RESPONSE

--

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

ResourceStatusResponse ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ResourceStatusResponse-IEs}},

...

}

ResourceStatusResponse-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-NGRAN-Node1-Measurement-ID CRITICALITY reject TYPE Measurement-ID PRESENCE mandatory}|

{ ID id-NGRAN-Node2-Measurement-ID CRITICALITY reject TYPE Measurement-ID PRESENCE mandatory}|

{ ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional},

...

}

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

--

-- RESOURCE STATUS FAILURE

--

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

ResourceStatusFailure ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ResourceStatusFailure-IEs}},

...

}

ResourceStatusFailure-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-NGRAN-Node1-Measurement-ID CRITICALITY reject TYPE Measurement-ID PRESENCE mandatory}|

{ ID id-NGRAN-Node2-Measurement-ID CRITICALITY reject TYPE Measurement-ID PRESENCE mandatory}|

{ ID id-Cause CRITICALITY ignore TYPE Cause PRESENCE mandatory}|

{ ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional},

...

}

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

--

-- RESOURCE STATUS UPDATE

--

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

ResourceStatusUpdate ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ResourceStatusUpdate-IEs}},

...

}

ResourceStatusUpdate-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-NGRAN-Node1-Measurement-ID CRITICALITY reject TYPE Measurement-ID PRESENCE mandatory}|

{ ID id-NGRAN-Node2-Measurement-ID CRITICALITY reject TYPE Measurement-ID PRESENCE mandatory}|

{ ID id-CellMeasurementResult CRITICALITY ignore TYPE CellMeasurementResult PRESENCE mandatory},

...

}

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

--

-- MOBILITY CHANGE REQUEST

--

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

MobilityChangeRequest ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{MobilityChangeRequest-IEs}},

...

}

MobilityChangeRequest-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-NG-RANnode1CellID CRITICALITY reject TYPE GlobalNG-RANCell-ID PRESENCE mandatory}|

{ ID id-NG-RANnode2CellID CRITICALITY reject TYPE GlobalNG-RANCell-ID PRESENCE mandatory}|

{ ID id-NG-RANnode1MobilityParameters CRITICALITY ignore TYPE MobilityParametersInformation PRESENCE optional}|

{ ID id-NG-RANnode2ProposedMobilityParameters CRITICALITY reject TYPE MobilityParametersInformation PRESENCE mandatory}|

{ ID id-Cause CRITICALITY ignore TYPE Cause PRESENCE mandatory}|

{ ID id-SSBOffsets-List CRITICALITY ignore TYPE SSBOffsets-List PRESENCE optional},

...

}

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

--

-- MOBILITY CHANGE ACKNOWLEDGE

--

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

MobilityChangeAcknowledge ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{MobilityChangeAcknowledge-IEs}},

...

}

MobilityChangeAcknowledge-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-NG-RANnode1CellID CRITICALITY reject TYPE GlobalNG-RANCell-ID PRESENCE mandatory}|

{ ID id-NG-RANnode2CellID CRITICALITY reject TYPE GlobalNG-RANCell-ID PRESENCE mandatory}|

{ ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional},

...

}

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

--

-- MOBILITY CHANGE FAILURE

--

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

MobilityChangeFailure ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{MobilityChangeFailure-IEs}},

...

}

MobilityChangeFailure-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-NG-RANnode1CellID CRITICALITY reject TYPE GlobalNG-RANCell-ID PRESENCE mandatory}|

{ ID id-NG-RANnode2CellID CRITICALITY reject TYPE GlobalNG-RANCell-ID PRESENCE mandatory}|

{ ID id-Cause CRITICALITY ignore TYPE Cause PRESENCE mandatory}|

{ ID id-MobilityParametersModificationRange CRITICALITY ignore TYPE MobilityParametersModificationRange PRESENCE optional}|

{ ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional}|

{ ID id-NG-RANnode2SSBOffsetsModificationRange CRITICALITY ignore TYPE NG-RANnode2SSBOffsetsModificationRange PRESENCE optional},

...

}

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

--

-- ACCESS AND MOBILITY INDICATION

--

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

AccessAndMobilityIndication ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ AccessAndMobilityIndication-IEs}},

...

}

AccessAndMobilityIndication-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-RAReport CRITICALITY ignore TYPE RAReport PRESENCE optional}|

{ ID id-SuccessfulHOReportInformation CRITICALITY ignore TYPE SuccessfulHOReportInformation PRESENCE optional}|

{ ID id-SuccessfulPSCellChangeReportInformation CRITICALITY ignore TYPE SuccessfulPSCellChangeReportInformation PRESENCE optional}|

{ ID id-DLLBTFailureInformationList CRITICALITY ignore TYPE DLLBTFailureInformationList PRESENCE optional},

...

}

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

--

-- CELL TRAFFIC TRACE

--

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

CellTrafficTrace ::= SEQUENCE {

protocolIEs ProtocolIE-Container { {CellTrafficTraceIEs} },

...

}

CellTrafficTraceIEs XNAP-PROTOCOL-IES ::= {

{ ID id-M-NG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-S-NG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-NG-RANTraceID CRITICALITY ignore TYPE NG-RANTraceID PRESENCE mandatory}|

{ ID id-TraceCollectionEntityIPAddress CRITICALITY ignore TYPE TransportLayerAddress PRESENCE mandatory}|

{ ID id-PrivacyIndicator CRITICALITY ignore TYPE PrivacyIndicator PRESENCE optional }|

{ ID id-TraceCollectionEntityURI CRITICALITY ignore TYPE URIaddress PRESENCE optional },

...

}

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

--

-- RAN MULTICAST GROUP PAGING

--

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

RANMulticastGroupPaging ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{RANMulticastGroupPaging-IEs}},

...

}

RANMulticastGroupPaging-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-MBS-Session-ID CRITICALITY reject TYPE MBS-Session-ID PRESENCE mandatory}|

{ ID id-UEIdentityIndexList-MBSGroupPaging CRITICALITY reject TYPE UEIdentityIndexList-MBSGroupPaging PRESENCE mandatory}|

{ ID id-MulticastRANPagingArea CRITICALITY reject TYPE RANPagingArea PRESENCE mandatory},

...

}

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

--

-- SCG FAILURE INFORMATION REPORT

--

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

ScgFailureInformationReport ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ ScgFailureInformationReport-IEs}},

...

}

ScgFailureInformationReport-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-M-NG-RANnodeUEXnAPID CRITICALITY ignore TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-S-NG-RANnodeUEXnAPID CRITICALITY ignore TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-SourcePSCellCGI CRITICALITY ignore TYPE GlobalNG-RANCell-ID PRESENCE optional }|

{ ID id-FailedPSCellCGI CRITICALITY ignore TYPE GlobalNG-RANCell-ID PRESENCE optional }|

{ ID id-SCGFailureReportContainer CRITICALITY ignore TYPE SCGFailureReportContainer PRESENCE mandatory}|

{ ID id-SNMobilityInformation CRITICALITY ignore TYPE SNMobilityInformation PRESENCE optional }|

{ ID id-CPACConfiguration CRITICALITY ignore TYPE CPACConfiguration PRESENCE optional },

...

}

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

--

-- SCG FAILURE TRANSFER

--

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

ScgFailureTransfer ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ ScgFailureTransfer-IEs}},

...

}

ScgFailureTransfer-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-M-NG-RANnodeUEXnAPID CRITICALITY ignore TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-S-NG-RANnodeUEXnAPID CRITICALITY ignore TYPE NG-RANnodeUEXnAPID PRESENCE mandatory},

...

}

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

--

-- F1-C TRAFFIC TRANSFER

--

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

F1CTrafficTransfer ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ F1CTrafficTransfer-IEs}},

...

}

F1CTrafficTransfer-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-M-NG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-S-NG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-F1CTrafficContainer CRITICALITY reject TYPE F1CTrafficContainer PRESENCE mandatory},

...

}

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

--

-- IAB TRANSPORT MIGRATION MANAGEMENT REQUEST

--

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

IABTransportMigrationManagementRequest ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ IABTransportMigrationManagementRequest-IEs}},

...

}

IABTransportMigrationManagementRequest-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-F1-Terminating-IAB-DonorUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-nonF1-Terminating-IAB-DonorUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-TrafficToBeAddedList CRITICALITY reject TYPE TrafficToBeAddedList PRESENCE optional }|

{ ID id-TrafficToBeModifiedList CRITICALITY reject TYPE TrafficToBeModifiedList PRESENCE optional }|

{ ID id-TrafficToBeReleaseInformation CRITICALITY reject TYPE TrafficToBeReleaseInformation PRESENCE optional }|

{ ID id-IAB-TNL-Address-Request CRITICALITY reject TYPE IAB-TNL-Address-Request PRESENCE optional }|

{ ID id-IABTNLAddressException CRITICALITY reject TYPE IABTNLAddressException PRESENCE optional }|

{ ID id-MIAB-MT-BAP-Address CRITICALITY reject TYPE BAPAddress PRESENCE optional },

...

}

TrafficToBeAddedList ::= SEQUENCE (SIZE(1..maxnoofTrafficIndexEntries)) OF TrafficToBeAdded-Item

TrafficToBeAdded-Item ::= SEQUENCE {

trafficIndex TrafficIndex,

trafficProfile TrafficProfile,

f1-TerminatingTopologyBHInformation F1-TerminatingTopologyBHInformation OPTIONAL,

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

...

}

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

...

}

TrafficToBeModifiedList ::= SEQUENCE (SIZE(1..maxnoofTrafficIndexEntries)) OF TrafficToBeModified-Item

TrafficToBeModified-Item ::= SEQUENCE {

trafficIndex TrafficIndex,

trafficProfile TrafficProfile OPTIONAL,

f1-TerminatingTopologyBHInformation F1-TerminatingTopologyBHInformation OPTIONAL,

iE-Extension ProtocolExtensionContainer { {TrafficToBeModified-Item-ExtIEs} } OPTIONAL,

...

}

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

...

}

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

--

-- IAB TRANSPORT MIGRATION MANAGEMENT RESPONSE

--

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

IABTransportMigrationManagementResponse ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ IABTransportMigrationManagementResponse-IEs}},

...

}

IABTransportMigrationManagementResponse-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-F1-Terminating-IAB-DonorUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-nonF1-Terminating-IAB-DonorUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-TrafficAddedList CRITICALITY reject TYPE TrafficAddedList PRESENCE optional }|

{ ID id-TrafficModifiedList CRITICALITY reject TYPE TrafficModifiedList PRESENCE optional }|

{ ID id-TrafficNotAddedList CRITICALITY reject TYPE TrafficNotAddedList PRESENCE optional }|

{ ID id-TrafficNotModifiedList CRITICALITY reject TYPE TrafficNotModifiedList PRESENCE optional }|

{ ID id-IAB-TNL-Address-Response CRITICALITY reject TYPE IAB-TNL-Address-Response PRESENCE optional }|

{ ID id-TrafficReleasedList CRITICALITY reject TYPE TrafficReleasedList PRESENCE optional },

...

}

TrafficAddedList ::= SEQUENCE (SIZE(1..maxnoofTrafficIndexEntries)) OF TrafficAdded-Item

TrafficAdded-Item ::= SEQUENCE {

trafficIndex TrafficIndex,

non-F1-TerminatingTopologyBHInformation Non-F1-TerminatingTopologyBHInformation,

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

...

}

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

...

}

TrafficModifiedList ::= SEQUENCE (SIZE(1..maxnoofTrafficIndexEntries)) OF TrafficModified-Item

TrafficModified-Item ::= SEQUENCE {

trafficIndex TrafficIndex,

non-F1-TerminatingTopologyBHInformation Non-F1-TerminatingTopologyBHInformation,

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

...

}

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

...

}

TrafficNotAddedList ::= SEQUENCE (SIZE(1..maxnoofTrafficIndexEntries)) OF TrafficNotAdded-Item

TrafficNotAdded-Item ::= SEQUENCE {

trafficIndex TrafficIndex,

casue Cause OPTIONAL,

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

...

}

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

...

}

TrafficNotModifiedList ::= SEQUENCE (SIZE(1..maxnoofTrafficIndexEntries)) OF TrafficNotModified-Item

TrafficNotModified-Item ::= SEQUENCE {

trafficIndex TrafficIndex,

cause Cause OPTIONAL,

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

...

}

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

...

}

TrafficReleasedList ::= SEQUENCE (SIZE(1..maxnoofTrafficIndexEntries)) OF TrafficReleased-Item

TrafficReleased-Item ::= SEQUENCE {

trafficIndex TrafficIndex,

bHInfoList BHInfoList OPTIONAL,

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

...

}

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

...

}

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

--

-- IAB TRANSPORT MIGRATION MANAGEMENT REJECT

--

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

IABTransportMigrationManagementReject ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ IABTransportMigrationManagementReject-IEs}},

...

}

IABTransportMigrationManagementReject-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-F1-Terminating-IAB-DonorUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-nonF1-Terminating-IAB-DonorUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-Cause CRITICALITY ignore TYPE Cause PRESENCE mandatory}|

{ ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional },

...

}

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

--

-- IAB TRANSPORT MIGRATION MODIFICATION REQUEST

--

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

IABTransportMigrationModificationRequest ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ IABTransportMigrationModificationRequest-IEs}},

...

}

IABTransportMigrationModificationRequest-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-F1-Terminating-IAB-DonorUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-nonF1-Terminating-IAB-DonorUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-TrafficRequiredToBeModifiedList CRITICALITY reject TYPE TrafficRequiredToBeModifiedList PRESENCE optional }|

{ ID id-TrafficToBeReleaseInformation CRITICALITY reject TYPE TrafficToBeReleaseInformation PRESENCE optional }|

{ ID id-IABTNLAddressToBeAdded CRITICALITY reject TYPE IAB-TNL-Address-Response PRESENCE optional }|

{ ID id-IABTNLAddressToBeReleasedList CRITICALITY reject TYPE IABTNLAddressToBeReleasedList PRESENCE optional }|

{ ID id-IABAuthorizationStatus CRITICALITY ignore TYPE IABAuthorizationStatus PRESENCE optional }|

{ ID id-MobileIAB-AuthorizationStatus CRITICALITY ignore TYPE MobileIAB-AuthorizationStatus PRESENCE optional },

...

}

TrafficRequiredToBeModifiedList ::= SEQUENCE (SIZE(1..maxnoofTrafficIndexEntries)) OF TrafficRequiredToBeModified-Item

TrafficRequiredToBeModified-Item ::= SEQUENCE {

trafficIndex TrafficIndex,

non-f1-TerminatingTopologyBHInformation Non-F1-TerminatingTopologyBHInformation,

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

...

}

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

...

}

IABTNLAddressToBeReleasedList ::= SEQUENCE (SIZE(1..maxnoofTLAsIAB)) OF IABTNLAddressToBeReleased-Item

IABTNLAddressToBeReleased-Item ::= SEQUENCE {

iabTNLAddress IABTNLAddress,

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

...

}

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

...

}

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

--

-- IAB TRANSPORT MIGRATION MODIFICATION RESPONSE

--

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

IABTransportMigrationModificationResponse ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ IABTransportMigrationModificationResponse-IEs}},

...

}

IABTransportMigrationModificationResponse-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-F1-Terminating-IAB-DonorUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-nonF1-Terminating-IAB-DonorUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-TrafficRequiredModifiedList CRITICALITY reject TYPE TrafficRequiredModifiedList PRESENCE optional }|

{ ID id-TrafficReleasedList CRITICALITY reject TYPE TrafficReleasedList PRESENCE optional },

...

}

TrafficRequiredModifiedList ::= SEQUENCE (SIZE(1..maxnoofTrafficIndexEntries)) OF TrafficRequiredModified-Item

TrafficRequiredModified-Item ::= SEQUENCE {

trafficIndex TrafficIndex,

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

...

}

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

...

}

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

--

-- IAB RESOURCE COORDINATION REQUEST

--

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

IABResourceCoordinationRequest ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ IABResourceCoordinationRequest-IEs}},

...

}

IABResourceCoordinationRequest-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-F1-Terminating-IAB-DonorUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-nonF1-Terminating-IAB-DonorUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-BoundaryNodeCellsList CRITICALITY reject TYPE BoundaryNodeCellsList PRESENCE optional }|

{ ID id-ParentNodeCellsList CRITICALITY reject TYPE ParentNodeCellsList PRESENCE optional },

...

}

BoundaryNodeCellsList ::= SEQUENCE (SIZE(1..maxnoofServedCellsIAB)) OF BoundaryNodeCellsList-Item

BoundaryNodeCellsList-Item ::= SEQUENCE {

boundaryNodeCellInformation IABCellInformation,

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

...

}

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

...

}

ParentNodeCellsList ::= SEQUENCE (SIZE(1..maxnoofServingCells)) OF ParentNodeCellsList-Item

ParentNodeCellsList-Item ::= SEQUENCE {

parentNodeCellInformation IABCellInformation,

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

...

}

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

...

}

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

--

-- IAB RESOURCE COORDINATION RESPONSE

--

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

IABResourceCoordinationResponse ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ IABResourceCoordinationResponse-IEs}},

...

}

IABResourceCoordinationResponse-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-F1-Terminating-IAB-DonorUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-nonF1-Terminating-IAB-DonorUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-BoundaryNodeCellsList CRITICALITY reject TYPE BoundaryNodeCellsList PRESENCE optional }|

{ ID id-ParentNodeCellsList CRITICALITY reject TYPE ParentNodeCellsList PRESENCE optional },

...

}

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

--

-- CONDITIONAL PSCELL CHANGE CANCEL

--

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

CPCCancel ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ CPCCancel-IEs}},

...

}

CPCCancel-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-M-NG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-S-NG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-Cause CRITICALITY ignore TYPE Cause PRESENCE optional }|

{ ID id-target-S-NG-RANnodeID CRITICALITY reject TYPE GlobalNG-RANNode-ID PRESENCE mandatory},

...

}

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

--

-- PARTIAL UE CONTEXT TRANSFER

--

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

PartialUEContextTransfer ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ PartialUEContextTransfer-IEs}},

...

}

PartialUEContextTransfer-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-newNG-RANnodeUEXnAPID CRITICALITY reject TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-oldNG-RANnodeUEXnAPID CRITICALITY ignore TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-SDTPartialUEContextInfo CRITICALITY ignore TYPE SDTPartialUEContextInfo PRESENCE mandatory}|

{ ID id-PosPartialUEContextInfo CRITICALITY ignore TYPE PosPartialUEContextInfo PRESENCE optional },

...

}

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

--

-- PARTIAL UE CONTEXT TRANSFER ACKNOWLEDGE

--

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

PartialUEContextTransferAcknowledge ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ PartialUEContextTransferAcknowledge-IEs}},

...

}

PartialUEContextTransferAcknowledge-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-newNG-RANnodeUEXnAPID CRITICALITY ignore TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-oldNG-RANnodeUEXnAPID CRITICALITY ignore TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-SDTDataForwardingDRBList CRITICALITY ignore TYPE SDTDataForwardingDRBList PRESENCE optional }|

{ ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional }|

{ ID id-SRSConfiguration CRITICALITY ignore TYPE SRSConfiguration PRESENCE optional },

...

}

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

--

-- PARTIAL UE CONTEXT TRANSFER FAILURE

--

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

PartialUEContextTransferFailure::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ PartialUEContextTransferFailure-IEs}},

...

}

PartialUEContextTransferFailure-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-newNG-RANnodeUEXnAPID CRITICALITY ignore TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-oldNG-RANnodeUEXnAPID CRITICALITY ignore TYPE NG-RANnodeUEXnAPID PRESENCE mandatory}|

{ ID id-Cause CRITICALITY ignore TYPE Cause PRESENCE mandatory}|

{ ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional },

...

}

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

--

-- RACH INDICATION

--

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

RachIndication ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{ RachIndication-IEs}},

...

}

RachIndication-IEs XNAP-PROTOCOL-IES ::= {

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

...

}

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

--

-- DATA COLLECTION REQUEST

--

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

DataCollectionRequest ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{DataCollectionRequest-IEs}},

...

}

DataCollectionRequest-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-NGRAN-Node1-Measurement-ID CRITICALITY reject TYPE Measurement-ID PRESENCE mandatory}|

{ ID id-NGRAN-Node2-Measurement-ID CRITICALITY ignore TYPE Measurement-ID PRESENCE conditional}|

-- This IE shall be present if the *Registration Request for Data Collection* IE is set to the value "stop".

{ ID id-RegistrationRequestForDataCollection CRITICALITY reject TYPE RegistrationRequestForDataCollection PRESENCE mandatory}|

{ ID id-ReportCharacteristicsForDataCollection CRITICALITY reject TYPE ReportCharacteristicsForDataCollection PRESENCE conditional}|

-- This IE shall be present if the *Registration Request for Data Collection* IE is set to the value "start".

{ ID id-CellToReportForDataCollection-List CRITICALITY ignore TYPE CellToReportForDataCollection-List PRESENCE optional}|

{ ID id-ReportingPeriodicityForDataCollection CRITICALITY ignore TYPE ReportingPeriodicityForDataCollection PRESENCE optional}|

{ ID id-RequestedPredictionTime CRITICALITY ignore TYPE RequestedPredictionTime PRESENCE optional}|

{ ID id-UETrajectoryCollectionConfiguration CRITICALITY ignore TYPE UETrajectoryCollectionConfiguration PRESENCE optional}|

{ ID id-UEPerformanceCollectionConfiguration CRITICALITY ignore TYPE UEPerformanceCollectionConfiguration PRESENCE optional},

...

}

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

--

-- DATA COLLECTION RESPONSE

--

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

DataCollectionResponse ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{DataCollectionResponse-IEs}},

...

}

DataCollectionResponse-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-NGRAN-Node1-Measurement-ID CRITICALITY reject TYPE Measurement-ID PRESENCE mandatory}|

{ ID id-NGRAN-Node2-Measurement-ID CRITICALITY reject TYPE Measurement-ID PRESENCE mandatory}|

{ ID id-NodeMeasurementInitiationResult-List CRITICALITY reject TYPE NodeMeasurementInitiationResult-List PRESENCE optional}|

{ ID id-CellMeasurementInitiationResult-List CRITICALITY reject TYPE CellMeasurementInitiationResult-List PRESENCE optional}|

{ ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional},

...

}

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

--

-- DATA COLLECTION FAILURE

--

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

DataCollectionFailure ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{DataCollectionFailure-IEs}},

...

}

DataCollectionFailure-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-NGRAN-Node1-Measurement-ID CRITICALITY reject TYPE Measurement-ID PRESENCE mandatory}|

{ ID id-NGRAN-Node2-Measurement-ID CRITICALITY reject TYPE Measurement-ID PRESENCE mandatory}|

{ ID id-Cause CRITICALITY ignore TYPE Cause PRESENCE mandatory}|

{ ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional},

...

}

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

--

-- DATA COLLECTION UPDATE

--

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

DataCollectionUpdate ::= SEQUENCE {

protocolIEs ProtocolIE-Container {{DataCollectionUpdate-IEs}},

...

}

DataCollectionUpdate-IEs XNAP-PROTOCOL-IES ::= {

{ ID id-NGRAN-Node1-Measurement-ID CRITICALITY reject TYPE Measurement-ID PRESENCE mandatory}|

{ ID id-NGRAN-Node2-Measurement-ID CRITICALITY reject TYPE Measurement-ID PRESENCE mandatory}|

{ ID id-CellMeasurementResultForDataCollection-List CRITICALITY ignore TYPE CellMeasurementResultForDataCollection-List PRESENCE optional }|

{ ID id-UEAssociatedInfoResult-List CRITICALITY ignore TYPE UEAssociatedInfoResult-List PRESENCE optional }|

{ ID id-NodeAssociatedInfoResult CRITICALITY ignore TYPE NodeAssociatedInfoResult PRESENCE optional },

...

}

END

-- ASN1STOP

### 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,

id-IntendedTDD-DL-ULConfiguration-NR,

id-MaxIPrate-DL,

id-SecurityResult,

id-OldQoSFlowMap-ULendmarkerexpected,

id-PDUSessionCommonNetworkInstance,

id-PDUSession-PairID,

id-BPLMN-ID-Info-EUTRA,

id-BPLMN-ID-Info-NR,

id-DRBsNotAdmittedSetupModifyList,

id-Secondary-MN-Xn-U-TNLInfoatM,

id-ULForwardingProposal,

id-DRB-IDs-takenintouse,

id-SplitSessionIndicator,

id-NonGBRResources-Offered,

id-MDT-Configuration,

id-TraceCollectionEntityURI,

id-NPN-Broadcast-Information,

id-NPNPagingAssistanceInformation,

id-NPNMobilityInformation,

id-NPN-Support,

id-LTEUESidelinkAggregateMaximumBitRate,

id-NRA2XUEPC5AggregateMaximumBitRate,

id-NRUESidelinkAggregateMaximumBitRate,

id-ExtendedRATRestrictionInformation,

id-QoSMonitoringRequest,

id-QoSMonitoringDisabled,

id-QosMonitoringReportingFrequency,

id-DAPSRequestInfo,

id-OffsetOfNbiotChannelNumberToDL-EARFCN,

id-OffsetOfNbiotChannelNumberToUL-EARFCN,

id-NBIoT-UL-DL-AlignmentOffset,

id-TDDULDLConfigurationCommonNR,

id-CarrierList,

id-ULCarrierList,

id-FrequencyShift7p5khz,

id-SSB-PositionsInBurst,

id-NRCellPRACHConfig,

id-Redundant-UL-NG-U-TNLatUPF,

id-Redundant-DL-NG-U-TNLatNG-RAN,

id-CNPacketDelayBudgetDownlink,

id-CNPacketDelayBudgetUplink,

id-ExtendedPacketDelayBudget,

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

id-RedundantCommonNetworkInstance,

id-TSCTrafficCharacteristics,

id-RedundantQoSFlowIndicator,

id-Additional-PDCP-Duplication-TNL-List,

id-RedundantPDUSessionInformation,

id-UsedRSNInformation,

id-RLCDuplicationInformation,

id-CSI-RSTransmissionIndication,

id-UERadioCapabilityID,

id-secondary-SN-UL-PDCP-UP-TNLInfo,

id-pdcpDuplicationConfiguration,

id-duplicationActivation,

id-NPRACHConfiguration,

id-QoSFlowsMappedtoDRB-SetupResponse-MNterminated,

id-DL-scheduling-PDCCH-CCE-usage,

id-UL-scheduling-PDCCH-CCE-usage,

id-SFN-Offset,

id-QoS-Mapping-Information,

id-AdditionLocationInformation,

id-dataForwardingInfoFromTargetE-UTRANnode,

id-Cause,

id-SecurityIndication,

id-RRCConnReestab-Indicator,

id-SourceDLForwardingIPAddress,

id-SourceNodeDLForwardingIPAddress,

id-M4ReportAmount,

id-M5ReportAmount,

id-M6ReportAmount,

id-M7ReportAmount,

id-BeamMeasurementIndicationM1,

id-Supported-MBS-FSA-ID-List,

id-MBS-AssistanceInformation,

id-MBS-SessionAssociatedInformation,

id-MBS-SessionInformation-List,

id-SliceRadioResourceStatus-List,

id-CompositeAvailableCapacitySupplementaryUplink,

id-SSBOffsets-List,

id-NG-RANnode2SSBOffsetsModificationRange,

id-NR-U-Channel-List,

id-NR-U-ChannelInfo-List,

id-MIMOPRBusageInformation,

id-UEAssistantIdentifier,

id-IAB-MT-Cell-List,

id-NoPDUSessionIndication,

id-permutation,

id-UL-GNB-DU-Cell-Resource-Configuration,

id-DL-GNB-DU-Cell-Resource-Configuration,

id-tdd-GNB-DU-Cell-Resource-Configuration,

id-Additional-Measurement-Timing-Configuration-List,

id-SurvivalTime,

id-Local-NG-RAN-Node-Identifier,

id-Neighbour-NG-RAN-Node-List,

id-FiveGProSeUEPC5AggregateMaximumBitRate,

id-Redcap-Bcast-Information,

id-UESliceMaximumBitRateList,

id-PositioningInformation,

id-ServedCellSpecificInfoReq-NR,

id-TAINSAGSupportList,

id-earlyMeasurement,

id-BeamMeasurementsReportConfiguration,

id-CoverageModificationCause,

id-UERLFReportContainerLTEExtension,

id-ExcessPacketDelayThresholdConfiguration,

id-Full-and-Short-I-RNTI-Profile-List,

id-QosFlowMappingIndication,

id-EquivalentSNPNs,

id-CHOTimeBasedInformation,

id-ChannelOccupancyTimePercentageUL,

id-EnergyDetectionThresholdUL,

id-PSCellListContainer,

id-RadioResourceStatusNR-U,

id-FiveGProSeLayer2Multipath,

id-FiveGProSeLayer2UEtoUERelay,

id-FiveGProSeLayer2UEtoUERemote,

id-ClockQualityReportingControlInfo,

id-CapabilityForBATAdaptation,

id-PNI-NPNBasedMDT,

id-PNI-NPN-AreaScopeofMDT,

id-SNPN-CellBasedMDT,

id-SNPN-TAIBasedMDT,

id-SNPN-BasedMDT,

id-S-CPAC-Request,

id-S-CPAC-Request-Info,

id-S-CPAC-ReferenceConfigRequest,

id-S-CPAC-InterSN-ExecutionNotify,

id-S-CPAC-dataforwardinginfofromSource,

id-CPACcandidatePSCells-wotherInfo-list,

id-eRedcap-Bcast-Information,

id-NRPagingLongeDRXInformationforRRCINACTIVE,

id-MBSCommServiceType,

id-AssistanceInformationQoE-Meas,

id-QoERVQoEReportingPaths,

id-DirectForwardingPathAvailability,

id-CHO-CPAC-Info,

id-CHO-Maxnoof-CondReconfig,

id-PDUSetQoSParameters,

id-N6JitterInformation,

id-ECNMarkingorCongestionInformationReportingRequest,

id-TAISliceUnavailableCellList,

id-MobileIABCell,

id-XR-Bcast-Information,

id-MaximumDataBurstVolume,

id-CPAC-Preparation-Type,

id-MN-only-MDT-collection,

id-BarringExemptionforEmerCallInfo,

id-Transmission-Bandwidth-asymmetric,

id-NRPPaPositioningInformation,

maxEARFCN,

maxnoofAllowedAreas,

maxnoofAMFRegions,

maxnoofAoIs,

maxnoofBPLMNs,

maxnoofCAGs,

maxnoofCAGsperPLMN,

maxnoofCellsinAoI,

maxnoofCellsinNG-RANnode,

maxnoofCellsinRNA,

maxnoofCellsinUEHistoryInfo,

maxnoofCellsUEMovingTrajectory,

maxnoofDRBs,

maxnoofEPLMNs,

maxnoofEPLMNsplus1,

maxnoofEUTRABands,

maxnoofEUTRABPLMNs,

maxnoofForbiddenTACs,

maxnoofMBSFNEUTRA,

maxnoofMultiConnectivityMinusOne,

maxnoofNeighbours,

maxnoofNIDs,

maxnoofNRCellBands,

maxnoofPDUSessions,

maxnoofPLMNs,

maxnoofProtectedResourcePatterns,

maxnoofQoSFlows,

maxnoofQoSParaSets,

maxnoofRANAreaCodes,

maxnoofRANAreasinRNA,

maxnoofSCellGroups,

maxnoofSCellGroupsplus1,

maxnoofSliceItems,

maxnoofExtSliceItems,

maxnoofSNPNIDs,

maxnoofsupportedTACs,

maxnoofsupportedPLMNs,

maxnoofTAI,

maxnoofTAIsinAoI,

maxnoofTNLAssociations,

maxnoofUEContexts,

maxNRARFCN,

maxNrOfErrors,

maxnoofRANNodesinAoI,

maxnooftimeperiods,

maxnoofslots,

maxnoofExtTLAs,

maxnoofGTPTLAs,

maxnoofCHOcells,

maxnoofPC5QoSFlows,

maxnoofSSBAreas,

maxnoofNRSCSs,

maxnoofPhysicalResourceBlocks,

maxnoofRAReports,

maxnoofAdditionalPDCPDuplicationTNL,

maxnoofRLCDuplicationstate,

maxnoofBluetoothName,

maxnoofCellIDforMDT,

maxnoofMDTPLMNs,

maxnoofTAforMDT,

maxnoofWLANName,

maxnoofSensorName,

maxnoofNeighPCIforMDT,

maxnoofFreqforMDT,

maxnoofNonAnchorCarrierFreqConfig,

maxnoofDataForwardingTunneltoE-UTRAN,

maxnoofUEIDIndicesforMBSPaging,

maxnoofMBSFSAs,

maxnoofMBSQoSFlows,

maxnoofMRBs,

maxnoofCellsforMBS,

maxnoofMBSServiceAreaInformation,

maxnoofTAIforMBS,

maxnoofAssociatedMBSSessions,

maxnoofMBSSessions,

maxnoofSuccessfulHOReports,

maxnoofPSCellsPerSN,

maxnoofNR-UChannelIDs,

maxnoofCellsinCHO,

maxnoofCHOexecutioncond,

maxnoofServingCells,

maxnoofBHInfo,

maxnoofTLAsIAB,

maxnoofTrafficIndexEntries,

maxnoofBAPControlPDURLCCHs,

maxnoofServedCellsIAB,

maxnoofDUFSlots,

maxnoofSymbols,

maxnoofHSNASlots,

maxnoofRBsetsPerCell,

maxnoofChildIABNodes,

maxnoofIABSTCInfo,

maxnoofPSCellCandidates,

maxnoofTargetSNs,

maxnoofUEAppLayerMeas,

maxnoofSNSSAIforQMC,

maxnoofCellIDforQMC,

maxnoofPLMNforQMC,

maxnoofTAforQMC,

maxnoofMTCItems,

maxnoofCSIRSconfigurations,

maxnoofCSIRSneighbourCells,

maxnoofCSIRSneighbourCellsInMTC,

maxnoofNeighbour-NG-RAN-Nodes,

maxnoofSRBs,

maxnoofSMBR,

maxnoofNSAGs,

maxnoofRBsetsPerCell1,

maxnoofTargetSNsMinusOne,

maxnoofThresholdsForExcessPacketDelay,

maxnoofESNPNs,

maxnoofSuccessfulPSCellChangeReports,

maxnoofUEsforRAReportIndications,

maxnoofPSCellsinCPAC,

maxnoofCPACexecutioncond,

maxnoofLBTFailureInformation,

maxnoofCellsTrajectoryPredict,

maxnoofCellsTrajectory,

maxFailedCellMeasObjects,

maxFailedMeasPerNode,

maxnoofUEReports,

maxnoofCandidateRelayUEs,

maxnoofCAGforMDT,

maxnoofMDTSNPNs,

maxnoofSecurityConfigurations,

maxnoofRSPPQoSFlows,

maxnoofLTMCells

FROM XnAP-Constants

Criticality,

ProcedureCode,

ProtocolIE-ID,

TriggeringMessage

FROM XnAP-CommonDataTypes

ProtocolExtensionContainer{},

ProtocolIE-Single-Container{},

XNAP-PROTOCOL-EXTENSION,

XNAP-PROTOCOL-IES

FROM XnAP-Containers;

-- A

A2XPC5QoSParameters ::= SEQUENCE {

a2XPC5QoSFlowList A2XPC5QoSFlowList,

aA2XPC5LinkAggregateBitRates BitRate OPTIONAL,

iE-Extensions ProtocolExtensionContainer { { A2XPC5QoSParameters-ExtIEs} } OPTIONAL,

...

}

A2XPC5QoSParameters-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

A2XPC5QoSFlowList ::= SEQUENCE (SIZE(1..maxnoofPC5QoSFlows)) OF A2XPC5QoSFlowItem

A2XPC5QoSFlowItem ::= SEQUENCE {

a2XpQI FiveQI,

a2Xpc5FlowBitRates A2XPC5FlowBitRates OPTIONAL,

a2Xrange Range OPTIONAL,

iE-Extensions ProtocolExtensionContainer { { A2XPC5QoSFlowItem-ExtIEs} } OPTIONAL,

...

}

A2XPC5QoSFlowItem-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

A2XPC5FlowBitRates ::= SEQUENCE {

a2XguaranteedFlowBitRate BitRate,

a2XmaximumFlowBitRate BitRate,

iE-Extensions ProtocolExtensionContainer { { A2XPC5FlowBitRates-ExtIEs} } OPTIONAL,

...

}

A2XPC5FlowBitRates-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

AdditionalListofPDUSessionResourceChangeConfirmInfo-SNterminated ::= SEQUENCE (SIZE(1..maxnoofTargetSNsMinusOne)) OF AdditionalListofPDUSessionResourceChangeConfirmInfo-SNterminated-Item

AdditionalListofPDUSessionResourceChangeConfirmInfo-SNterminated-Item ::= SEQUENCE {

pDUSessionResourceChangeConfirmInfo-SNterminated PDUSessionResourceChangeConfirmInfo-SNterminated,

iE-Extensions ProtocolExtensionContainer { { AdditionalListofPDUSessionResourceChangeConfirmInfo-SNterminated-Item-ExtIEs} } OPTIONAL,

...

}

AdditionalListofPDUSessionResourceChangeConfirmInfo-SNterminated-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

AveragePacketDelay ::= SEQUENCE {

uL-AveragePacketDelay AveragePacketDelayValue,

dL-AveragePacketDelay AveragePacketDelayValue,

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

...

}

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

...

}

AveragePacketDelayValue ::= INTEGER (0..10000)

AdditionLocationInformation ::= ENUMERATED {

includePSCell,

...

}

Additional-PDCP-Duplication-TNL-List ::= SEQUENCE (SIZE(1..maxnoofAdditionalPDCPDuplicationTNL)) OF Additional-PDCP-Duplication-TNL-Item

Additional-PDCP-Duplication-TNL-Item ::= SEQUENCE {  
 additional-PDCP-Duplication-UP-TNL-Information UPTransportLayerInformation,  
 iE-Extensions ProtocolExtensionContainer { { Additional-PDCP-Duplication-TNL-ExtIEs} } OPTIONAL,  
 ...  
}

Additional-PDCP-Duplication-TNL-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {  
 ...  
}

Additional-UL-NG-U-TNLatUPF-Item ::= SEQUENCE {

additional-UL-NG-U-TNLatUPF UPTransportLayerInformation,

iE-Extensions ProtocolExtensionContainer { { Additional-UL-NG-U-TNLatUPF-Item-ExtIEs} } OPTIONAL,

...

}

Additional-UL-NG-U-TNLatUPF-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

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

...

}

Additional-UL-NG-U-TNLatUPF-List ::= SEQUENCE (SIZE(1..maxnoofMultiConnectivityMinusOne)) OF Additional-UL-NG-U-TNLatUPF-Item

Additional-Measurement-Timing-Configuration-List ::= SEQUENCE (SIZE(1.. maxnoofMTCItems)) OF Additional-Measurement-Timing-Configuration-Item

Additional-Measurement-Timing-Configuration-Item ::= SEQUENCE {

additionalMeasurementTimingConfigurationIndex INTEGER (0..16),

csi-RS-MTC-Configuration-List CSI-RS-MTC-Configuration-List,

iE-Extensions ProtocolExtensionContainer { { Additional-Measurement-Timing-Configuration-Item-ExtIEs} } OPTIONAL,

...

}

Additional-Measurement-Timing-Configuration-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

ActivationIDforCellActivation ::= INTEGER (0..255)

Active-MBS-SessionInformation ::= SEQUENCE {

mBS-QoSFlowsToAdd-List MBS-QoSFlowsToAdd-List,

mBS-ServiceArea MBS-ServiceArea OPTIONAL,

mBS-MappingandDataForwardingRequestInfofromSource MBS-MappingandDataForwardingRequestInfofromSource OPTIONAL,

iE-Extensions ProtocolExtensionContainer { { Active-MBS-SessionInformation-ExtIEs} } OPTIONAL,

...

}

Active-MBS-SessionInformation-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

DataCollectionID ::= SEQUENCE {

nGRAN-Node1-Measurement-ID Measurement-ID,

nGRAN-Node2-Measurement-ID Measurement-ID,

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

...

}

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

...

}

AerialControllerUE ::= ENUMERATED {

authorized,

not-authorized,

...

}

AerialUE ::= ENUMERATED {

authorized,

not-authorized,

...

}

AerialUESubscriptionInformation ::= ENUMERATED {

allowed,

not-allowed,

...

}

AllocationandRetentionPriority ::= SEQUENCE {

priorityLevel INTEGER (0..15,...),

pre-emption-capability ENUMERATED {shall-not-trigger-preemption, may-trigger-preemption, ...},

pre-emption-vulnerability ENUMERATED {not-preemptable, preemptable, ...},

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

...

}

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

...

}

ActivationSFN ::= INTEGER (0..1023)

AllowedCAG-ID-List-perPLMN ::= SEQUENCE (SIZE(1..maxnoofCAGsperPLMN)) OF CAG-Identifier

AllowedPNI-NPN-ID-List ::= SEQUENCE (SIZE(1..maxnoofEPLMNsplus1)) OF AllowedPNI-NPN-ID-Item

AllowedPNI-NPN-ID-Item ::= SEQUENCE {

plmn-id PLMN-Identity,

pni-npn-restricted-information PNI-NPN-Restricted-Information,

allowed-CAG-id-list-per-plmn AllowedCAG-ID-List-perPLMN,

iE-Extensions ProtocolExtensionContainer { {AllowedPNI-NPN-ID-Item-ExtIEs} } OPTIONAL,

...

}

AllowedPNI-NPN-ID-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

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

AlternativeQoSParaSetList ::= SEQUENCE (SIZE(1..maxnoofQoSParaSets)) OF AlternativeQoSParaSetItem

AlternativeQoSParaSetItem ::= SEQUENCE {

alternativeQoSParaSetIndex QoSParaSetIndex,

guaranteedFlowBitRateDL BitRate OPTIONAL,

guaranteedFlowBitRateUL BitRate OPTIONAL,

packetDelayBudget PacketDelayBudget OPTIONAL,

packetErrorRate PacketErrorRate OPTIONAL,

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

...

}

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

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

...

}

AMF-Region-Information ::= SEQUENCE (SIZE (1..maxnoofAMFRegions)) OF GlobalAMF-Region-Information

GlobalAMF-Region-Information ::= SEQUENCE {

plmn-ID PLMN-Identity,

amf-region-id BIT STRING (SIZE (8)),

iE-Extensions ProtocolExtensionContainer { {GlobalAMF-Region-Information-ExtIEs} } OPTIONAL,

...

}

GlobalAMF-Region-Information-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

AMF-UE-NGAP-ID ::= INTEGER (0..1099511627775)

AreaOfInterestInformation ::= SEQUENCE (SIZE(1..maxnoofAoIs)) OF AreaOfInterest-Item

AreaOfInterest-Item ::= SEQUENCE {

listOfTAIsinAoI ListOfTAIsinAoI OPTIONAL,

listOfCellsinAoI ListOfCells OPTIONAL,

listOfRANNodesinAoI ListOfRANNodesinAoI OPTIONAL,

requestReferenceID RequestReferenceID,

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

...

}

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

...

}

AreaScopeOfMDT-NR ::= CHOICE {

cellBased CellBasedMDT-NR,

tABased TABasedMDT,

tAIBased TAIBasedMDT,

...,

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

}

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

{ ID id-PNI-NPNBasedMDT CRITICALITY ignore TYPE PNI-NPNBasedMDT PRESENCE mandatory}|

{ ID id-SNPN-CellBasedMDT CRITICALITY ignore TYPE SNPN-CellBasedMDT PRESENCE mandatory}|

{ ID id-SNPN-TAIBasedMDT CRITICALITY ignore TYPE SNPN-TAIBasedMDT PRESENCE mandatory}|

{ ID id-SNPN-BasedMDT CRITICALITY ignore TYPE SNPN-BasedMDT PRESENCE mandatory},

...

}

AreaScopeOfMDT-EUTRA ::= CHOICE {

cellBased CellBasedMDT-EUTRA,

tABased TABasedMDT,

tAIBased TAIBasedMDT,

...,

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

}

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

...

}

AreaScopeOfNeighCellsList ::= SEQUENCE (SIZE(1..maxnoofFreqforMDT)) OF AreaScopeOfNeighCellsItem

AreaScopeOfNeighCellsItem ::= SEQUENCE {

nrFrequencyInfo NRFrequencyInfo,

pciListForMDT PCIListForMDT OPTIONAL,

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

...

}

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

...

}

AreaScopeOfQMC ::= CHOICE {

cellBased CellBasedQMC,

tABased TABasedQMC,

tAIBased TAIBasedQMC,

pLMNAreaBased PLMNAreaBasedQMC,

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

}

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

...

}

AS-SecurityInformation ::= SEQUENCE {

key-NG-RAN-Star BIT STRING (SIZE(256)),

ncc INTEGER (0..7),

iE-Extensions ProtocolExtensionContainer { {AS-SecurityInformation-ExtIEs} } OPTIONAL,

...

}

AS-SecurityInformation-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

AssistanceDataForRANPaging ::= SEQUENCE {

ran-paging-attempt-info RANPagingAttemptInfo OPTIONAL,

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

...

}

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

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

...

}

AssistanceInformationQoE-Meas ::= INTEGER (1..16, ...)

Associated-QoSFlowInfo-List ::= SEQUENCE (SIZE(1..maxnoofMBSQoSFlows)) OF Associated-QoSFlowInfo-Item

Associated-QoSFlowInfo-Item ::= SEQUENCE {

mBS-QoSFlowIdentifier QoSFlowIdentifier,

associatedUnicastQoSFlowIdentifier QoSFlowIdentifier,

iE-Extensions ProtocolExtensionContainer { { Associated-QoSFlowInfo-Item-ExtIEs} } OPTIONAL,

...

}

Associated-QoSFlowInfo-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

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

AvailableRRCConnectionCapacityValue ::= INTEGER (0..100)

AvailableRVQoEMetrics ::= SEQUENCE {

applicationLayerBufferLevelList ENUMERATED {true, ...} OPTIONAL,

playoutDelayForMediaStartup ENUMERATED {true, ...} OPTIONAL,

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

...

}

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

...

}

AveragingWindow ::= INTEGER (0..4095, ...)

-- B

BAPAddress ::= BIT STRING (SIZE(10))

BAPPathID ::= BIT STRING (SIZE(10))

BAPRoutingID ::= SEQUENCE {

bAPAddress BAPAddress,

bAPPathID BAPPathID,

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

...

}

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

...

}

BeamMeasurementIndicationM1 ::= ENUMERATED {true, ...}

BeamMeasurementsReportConfiguration ::= SEQUENCE {

beamMeasurementsReportQuantity BeamMeasurementsReportQuantity OPTIONAL,

maxNrofRS-IndexesToReport MaxNrofRS-IndexesToReport OPTIONAL,

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

...

}

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

...

}

BeamMeasurementsReportQuantity ::= SEQUENCE {

rSRP ENUMERATED {true, ...},

rSRQ ENUMERATED {true, ...},

sINR ENUMERATED {true, ...},

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

...

}

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

...

}

BHInfoIndex ::= INTEGER (1..maxnoofBHInfo)

BHInfoList ::= SEQUENCE (SIZE(1.. maxnoofBHInfo)) OF BHInfo-Item

BHInfo-Item ::= SEQUENCE {

bHInfoIndex BHInfoIndex,

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

...

}

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

...

}

BHRLCChannelID ::= BIT STRING (SIZE(16))

BAPControlPDURLCCH-List ::= SEQUENCE (SIZE(1.. maxnoofBAPControlPDURLCCHs)) OF BAPControlPDURLCCH-Item

BAPControlPDURLCCH-Item ::= SEQUENCE {

bHRLCCHID BHRLCChannelID,

nexthopBAPAddress BAPAddress,

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

...

}

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

...

}

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

BluetoothMeasurementConfiguration ::= SEQUENCE {

bluetoothMeasConfig BluetoothMeasConfig,

bluetoothMeasConfigNameList BluetoothMeasConfigNameList OPTIONAL,

bt-rssi ENUMERATED {true, ...} OPTIONAL,

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

...

}

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

...

}

BluetoothMeasConfigNameList ::= SEQUENCE (SIZE(1..maxnoofBluetoothName)) OF BluetoothName

BluetoothMeasConfig::= ENUMERATED {setup,...}

BluetoothName ::= OCTET STRING (SIZE (1..248))

BPLMN-ID-Info-EUTRA ::= SEQUENCE (SIZE(1..maxnoofEUTRABPLMNs)) OF BPLMN-ID-Info-EUTRA-Item

BPLMN-ID-Info-EUTRA-Item ::= SEQUENCE {

broadcastPLMNs BroadcastEUTRAPLMNs,

tac TAC,

e-utraCI E-UTRA-Cell-Identity,

ranac RANAC OPTIONAL,

iE-Extension ProtocolExtensionContainer { {BPLMN-ID-Info-EUTRA-Item-ExtIEs} } OPTIONAL,

...

}

BPLMN-ID-Info-EUTRA-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

BPLMN-ID-Info-NR ::= SEQUENCE (SIZE(1..maxnoofBPLMNs)) OF BPLMN-ID-Info-NR-Item

BPLMN-ID-Info-NR-Item ::= SEQUENCE {

broadcastPLMNs BroadcastPLMNs,

tac TAC,

nr-CI NR-Cell-Identity,

ranac RANAC OPTIONAL,

iE-Extension ProtocolExtensionContainer { {BPLMN-ID-Info-NR-Item-ExtIEs} } OPTIONAL,

...

}

BPLMN-ID-Info-NR-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ ID id-ConfiguredTACIndication CRITICALITY ignore EXTENSION ConfiguredTACIndication PRESENCE optional }|

{ ID id-NPN-Broadcast-Information CRITICALITY reject EXTENSION NPN-Broadcast-Information PRESENCE optional },

...

}

BitRate ::= INTEGER (0..4000000000000,...)

BroadcastCAG-Identifier-List ::= SEQUENCE (SIZE(1..maxnoofCAGs)) OF BroadcastCAG-Identifier-Item

BroadcastCAG-Identifier-Item ::= SEQUENCE {

cag-Identifier CAG-Identifier,

iE-Extension ProtocolExtensionContainer { {BroadcastCAG-Identifier-Item-ExtIEs} } OPTIONAL,

...

}

BroadcastCAG-Identifier-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

BroadcastNID-List ::= SEQUENCE (SIZE(1..maxnoofNIDs)) OF BroadcastNID-Item

BroadcastNID-Item ::= SEQUENCE {

nid NID,

iE-Extension ProtocolExtensionContainer { {BroadcastNID-Item-ExtIEs} } OPTIONAL,

...

}

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

...

}

BroadcastPLMNs ::= SEQUENCE (SIZE(1..maxnoofBPLMNs)) OF PLMN-Identity

BroadcastEUTRAPLMNs ::= SEQUENCE (SIZE(1..maxnoofEUTRABPLMNs)) OF PLMN-Identity

BroadcastPLMNinTAISupport-Item ::= SEQUENCE {

plmn-id PLMN-Identity,

tAISliceSupport-List SliceSupport-List,

iE-Extension ProtocolExtensionContainer { {BroadcastPLMNinTAISupport-Item-ExtIEs} } OPTIONAL,

...

}

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

{ ID id-NPN-Support CRITICALITY reject EXTENSION NPN-Support PRESENCE optional}|

{ ID id-ExtendedTAISliceSupportList CRITICALITY reject EXTENSION ExtendedSliceSupportList PRESENCE optional}|

{ ID id-TAINSAGSupportList CRITICALITY ignore EXTENSION TAINSAGSupportList PRESENCE optional}|

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

...

}

BroadcastPNI-NPN-ID-Information ::= SEQUENCE (SIZE(1..maxnoofBPLMNs)) OF BroadcastPNI-NPN-ID-Information-Item

BroadcastPNI-NPN-ID-Information-Item ::= SEQUENCE {

plmn-id PLMN-Identity,

broadcastCAG-Identifier-List BroadcastCAG-Identifier-List,

iE-Extension ProtocolExtensionContainer { {BroadcastPNI-NPN-ID-Information-Item-ExtIEs} } OPTIONAL,

...

}

BroadcastPNI-NPN-ID-Information-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

BroadcastSNPNID-List ::= SEQUENCE (SIZE(1..maxnoofSNPNIDs)) OF BroadcastSNPNID

BroadcastSNPNID ::= SEQUENCE {

plmn-id PLMN-Identity,

broadcastNID-List BroadcastNID-List,

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

...

}

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

...

}

-- 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 ::= {

...

}

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 ::= {

...

}

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 ::= {

...

}

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 ::={

...

}

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 ::={

...

}

CSI-RS-Configuration ::= SEQUENCE {

csi-rs-ResourceConfiguration OCTET STRING,

csi-rs-ResourceSetConfiguration OCTET STRING,

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

...

}

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

...

}

-- D

XnUAddressInfoperPDUSession-List ::= SEQUENCE (SIZE(1..maxnoofPDUSessions)) OF XnUAddressInfoperPDUSession-Item

XnUAddressInfoperPDUSession-Item ::= SEQUENCE {

pduSession-ID PDUSession-ID,

dataForwardingInfoFromTargetNGRANnode DataForwardingInfoFromTargetNGRANnode OPTIONAL,

pduSessionResourceSetupCompleteInfo-SNterm PDUSessionResourceBearerSetupCompleteInfo-SNterminated OPTIONAL,

iE-Extension ProtocolExtensionContainer { { XnUAddressInfoperPDUSession-Item-ExtIEs} } OPTIONAL,

...

}

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

{ ID id-SecondarydataForwardingInfoFromTarget-List CRITICALITY ignore EXTENSION SecondarydataForwardingInfoFromTarget-List PRESENCE optional}|

{ ID id-DRB-IDs-takenintouse CRITICALITY reject EXTENSION DRB-List PRESENCE optional}|

{ ID id-dataForwardingInfoFromTargetE-UTRANnode CRITICALITY ignore EXTENSION DataForwardingInfoFromTargetE-UTRANnode PRESENCE optional},

...

}

DataForwardingInfoFromTargetE-UTRANnode ::= SEQUENCE {

dataForwardingInfoFromTargetE-UTRANnode-List DataForwardingInfoFromTargetE-UTRANnode-List,

iE-Extension ProtocolExtensionContainer { { DataForwardingInfoFromTargetE-UTRANnode-ExtIEs} } OPTIONAL,

...

}

DataForwardingInfoFromTargetE-UTRANnode-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

DataForwardingInfoFromTargetE-UTRANnode-List ::= SEQUENCE (SIZE(1.. maxnoofDataForwardingTunneltoE-UTRAN)) OF DataForwardingInfoFromTargetE-UTRANnode-Item

DataForwardingInfoFromTargetE-UTRANnode-Item ::= SEQUENCE {

dlForwardingUPTNLInformation UPTransportLayerInformation,

qosFlowsToBeForwarded-List QoSFlowsToBeForwarded-List,

iE-Extension ProtocolExtensionContainer { { DataForwardingInfoFromTargetE-UTRANnode-Item-ExtIEs} } OPTIONAL,

...

}

DataForwardingInfoFromTargetE-UTRANnode-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

QoSFlowsToBeForwarded-List ::= SEQUENCE (SIZE(1..maxnoofQoSFlows)) OF QoSFlowsToBeForwarded-Item

QoSFlowsToBeForwarded-Item ::= SEQUENCE {

qosFlowIdentifier QoSFlowIdentifier,

iE-Extension ProtocolExtensionContainer { { QoSFlowsToBeForwarded-Item-ExtIEs} } OPTIONAL,

...

}

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

...

}

DataForwardingInfoFromTargetNGRANnode ::= SEQUENCE {

qosFlowsAcceptedForDataForwarding-List QoSFLowsAcceptedToBeForwarded-List,

pduSessionLevelDLDataForwardingInfo UPTransportLayerInformation OPTIONAL,

pduSessionLevelULDataForwardingInfo UPTransportLayerInformation OPTIONAL,

dataForwardingResponseDRBItemList DataForwardingResponseDRBItemList OPTIONAL,

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

...

}

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

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

...

}

QoSFLowsAcceptedToBeForwarded-List ::= SEQUENCE (SIZE(1.. maxnoofQoSFlows)) OF QoSFLowsAcceptedToBeForwarded-Item

QoSFLowsAcceptedToBeForwarded-Item ::= SEQUENCE {

qosFlowIdentifier QoSFlowIdentifier,

iE-Extension ProtocolExtensionContainer { {QoSFLowsAcceptedToBeForwarded-Item-ExtIEs} } OPTIONAL,

...

}

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

...

}

DataforwardingandOffloadingInfofromSource ::= SEQUENCE {

qosFlowsToBeForwarded QoSFLowsToBeForwarded-List,

sourceDRBtoQoSFlowMapping DRBToQoSFlowMapping-List OPTIONAL,

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

...

}

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

...

}

QoSFLowsToBeForwarded-List ::= SEQUENCE (SIZE(1.. maxnoofQoSFlows)) OF QoSFLowsToBeForwarded-Item

QoSFLowsToBeForwarded-Item ::= SEQUENCE {

qosFlowIdentifier QoSFlowIdentifier,

dl-dataforwarding DLForwarding,

ul-dataforwarding ULForwarding,

iE-Extension ProtocolExtensionContainer { {QoSFLowsToBeForwarded-Item-ExtIEs} } OPTIONAL,

...

}

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

{ ID id-ULForwardingProposal CRITICALITY ignore EXTENSION ULForwardingProposal PRESENCE optional }|

{ ID id-SourceDLForwardingIPAddress CRITICALITY ignore EXTENSION TransportLayerAddress PRESENCE optional}|

{ ID id-SourceNodeDLForwardingIPAddress CRITICALITY ignore EXTENSION TransportLayerAddress PRESENCE optional},

...

}

DataForwardingResponseDRBItemList ::= SEQUENCE (SIZE(1..maxnoofDRBs)) OF DataForwardingResponseDRBItem

DataForwardingResponseDRBItem ::= SEQUENCE {

drb-ID DRB-ID,

dlForwardingUPTNL UPTransportLayerInformation OPTIONAL,

ulForwardingUPTNL UPTransportLayerInformation OPTIONAL,

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

...

}

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

...

}

DataTrafficResources ::= BIT STRING (SIZE(6..17600))

DataTrafficResourceIndication ::= SEQUENCE {

activationSFN ActivationSFN,

sharedResourceType SharedResourceType,

reservedSubframePattern ReservedSubframePattern OPTIONAL,

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

...

}

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

...

}

DAPSRequestInfo ::= SEQUENCE {

dapsIndicator ENUMERATED {daps-HO-required, ...},

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

...

}

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

...

}

DAPSResponseInfo-List ::= SEQUENCE (SIZE (1..maxnoofDRBs)) OF DAPSResponseInfo-Item

DAPSResponseInfo-Item ::= SEQUENCE {

drbID DRB-ID,

dapsResponseIndicator ENUMERATED {daps-HO-accepted, daps-HO-not-accepted, ...},

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

...

}

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

...

}

DeliveryStatus ::= INTEGER (0..4095, ...)

DesiredActNotificationLevel ::= ENUMERATED {none, qos-flow, pdu-session, ue-level, ...}

DefaultDRB-Allowed ::= ENUMERATED {true, false, ...}

DirectForwardingPathAvailability ::= ENUMERATED {direct-path-available, ...}

DirectForwardingPathAvailabilityWithSourceMN ::= ENUMERATED {direct-path-available, ...}

DLCountChoice ::= CHOICE {

count12bits COUNT-PDCP-SN12,

count18bits COUNT-PDCP-SN18,

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

}

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

...

}

DLForwarding ::= ENUMERATED {dl-forwarding-proposed, ...}

DL-GBR-PRB-usage::= INTEGER (0..100)

DL-GBR-PRB-usage-for-MIMO::= INTEGER (0..100)

DL-non-GBR-PRB-usage::= INTEGER (0..100)

DL-non-GBR-PRB-usage-for-MIMO::= INTEGER (0..100)

DLF1Terminating-BHInfo ::= SEQUENCE {

egressBAPRoutingID BAPRoutingID,

egressBHRLCCHID BHRLCChannelID,

iE-Extensions ProtocolExtensionContainer { { DLF1Terminating-BHInfo-ExtIEs} } OPTIONAL,

...

}

DLF1Terminating-BHInfo-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

DLLBTFailureInformationRequest ::= ENUMERATED {inquiry, ...}

DLLBTFailureInformationList ::= SEQUENCE (SIZE(1.. maxnoofLBTFailureInformation)) OF DLLBTFailureInformationList-Item

DLLBTFailureInformationList-Item::= SEQUENCE {

uEAssistantIdentifier NG-RANnodeUEXnAPID,

numberOfDLLBTFailures INTEGER (1..1000,...) OPTIONAL,

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

...

}

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

...

}

DLNonF1Terminating-BHInfo ::= SEQUENCE {

ingressBAPRoutingID BAPRoutingID,

ingressBHRLCCHID BHRLCChannelID,

priorhopBAPAddress BAPAddress,

iabqosMappingInformation IAB-QoS-Mapping-Information,

iE-Extensions ProtocolExtensionContainer { { DLNonF1Terminating-BHInfo-ExtIEs} } OPTIONAL,

...

}

DLNonF1Terminating-BHInfo-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

DL-Total-PRB-usage::= INTEGER (0..100)

DL-Total-PRB-usage-for-MIMO::= INTEGER (0..100)

DRB-ID ::= INTEGER (1..32, ...)

DRB-List ::= SEQUENCE (SIZE (1..maxnoofDRBs)) OF DRB-ID

DRB-List-withCause ::= SEQUENCE (SIZE (1..maxnoofDRBs)) OF DRB-List-withCause-Item

DRB-List-withCause-Item ::= SEQUENCE {

drb-id DRB-ID,

cause Cause,

rLC-Mode RLCMode OPTIONAL,

iE-Extension ProtocolExtensionContainer { {DRB-List-withCause-Item-ExtIEs} } OPTIONAL,

...

}

DRB-List-withCause-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

DRB-Number ::= INTEGER (1..32, ...)

DRBsSubjectToDLDiscarding-List ::= SEQUENCE (SIZE (1..maxnoofDRBs)) OF DRBsSubjectToDLDiscarding-Item

DRBsSubjectToDLDiscarding-Item ::= SEQUENCE {

drbID DRB-ID,

dlCount DLCountChoice,

iE-Extension ProtocolExtensionContainer { { DRBsSubjectToDLDiscarding-Item-ExtIEs} } OPTIONAL,

...

}

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

...

}

DRBsSubjectToEarlyStatusTransfer-List ::= SEQUENCE (SIZE (1..maxnoofDRBs)) OF DRBsSubjectToEarlyStatusTransfer-Item

DRBsSubjectToEarlyStatusTransfer-Item ::= SEQUENCE {

drbID DRB-ID,

dlCount DLCountChoice,

iE-Extension ProtocolExtensionContainer { { DRBsSubjectToEarlyStatusTransfer-Item-ExtIEs} } OPTIONAL,

...

}

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

...

}

DRBsSubjectToStatusTransfer-List ::= SEQUENCE (SIZE (1..maxnoofDRBs)) OF DRBsSubjectToStatusTransfer-Item

DRBsSubjectToStatusTransfer-Item ::= SEQUENCE {

drbID DRB-ID,

pdcpStatusTransfer-UL DRBBStatusTransferChoice,

pdcpStatusTransfer-DL DRBBStatusTransferChoice,

iE-Extension ProtocolExtensionContainer { {DRBsSubjectToStatusTransfer-Item-ExtIEs} } OPTIONAL,

...

}

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

{ ID id-OldQoSFlowMap-ULendmarkerexpected CRITICALITY reject EXTENSION QoSFlows-List PRESENCE optional },

...

}

DRBBStatusTransferChoice ::= CHOICE {

pdcp-sn-12bits DRBBStatusTransfer12bitsSN,

pdcp-sn-18bits DRBBStatusTransfer18bitsSN,

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

}

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

...

}

DRBBStatusTransfer12bitsSN ::= SEQUENCE {

receiveStatusofPDCPSDU BIT STRING (SIZE(1..2048)) OPTIONAL,

cOUNTValue COUNT-PDCP-SN12,

iE-Extension ProtocolExtensionContainer { {DRBBStatusTransfer12bitsSN-ExtIEs} } OPTIONAL,

...

}

DRBBStatusTransfer12bitsSN-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

DRBBStatusTransfer18bitsSN ::= SEQUENCE {

receiveStatusofPDCPSDU BIT STRING (SIZE(1..131072)) OPTIONAL,

cOUNTValue COUNT-PDCP-SN18,

iE-Extension ProtocolExtensionContainer { {DRBBStatusTransfer18bitsSN-ExtIEs} } OPTIONAL,

...

}

DRBBStatusTransfer18bitsSN-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

DRBToQoSFlowMapping-List ::= SEQUENCE (SIZE (1..maxnoofDRBs)) OF DRBToQoSFlowMapping-Item

DRBToQoSFlowMapping-Item ::= SEQUENCE {

drb-ID DRB-ID,

qosFlows-List QoSFlows-List,

rLC-Mode RLCMode OPTIONAL,

iE-Extension ProtocolExtensionContainer { {DRBToQoSFlowMapping-Item-ExtIEs} } OPTIONAL,

...

}

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

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

...

}

DUF-Slot-Config-List ::= SEQUENCE (SIZE(1..maxnoofDUFSlots)) OF DUF-Slot-Config-Item

DUF-Slot-Config-Item ::= CHOICE {

explicitFormat ExplicitFormat,

implicitFormat ImplicitFormat,

choice-extension ProtocolIE-Single-Container { { DUF-Slot-Config-Item-ExtIEs} }

}

DUF-Slot-Config-Item-ExtIEs XNAP-PROTOCOL-IES ::= {

...

}

DUFSlotformatIndex ::= INTEGER(0..254)

DUFTransmissionPeriodicity ::= ENUMERATED { ms0p5, ms0p625, ms1, ms1p25, ms2, ms2p5, ms5, ms10, ...}

DU-RX-MT-RX ::= ENUMERATED {supported, not-supported, supported-FDM-required, ...}

DU-TX-MT-TX ::= ENUMERATED {supported, not-supported, supported-FDM-required, ...}

DU-RX-MT-TX ::= ENUMERATED {supported, not-supported, supported-FDM-required, ...}

DU-TX-MT-RX ::= ENUMERATED {supported, not-supported, supported-FDM-required, ...}

DuplicationActivation ::= ENUMERATED {active, inactive, ...}

Dynamic5QIDescriptor ::= SEQUENCE {

priorityLevelQoS PriorityLevelQoS,

packetDelayBudget PacketDelayBudget,

packetErrorRate PacketErrorRate,

fiveQI FiveQI OPTIONAL,

delayCritical ENUMERATED {delay-critical, non-delay-critical, ...} OPTIONAL,

-- This IE shall be present if the *GBR QoS Flow Information* IE is present in the *QoS Flow Level QoS Parameters* IE.

averagingWindow AveragingWindow OPTIONAL,

-- This IE shall be present if the *GBR QoS Flow Information* IE is present in the *QoS Flow Level QoS Parameters* IE.

maximumDataBurstVolume MaximumDataBurstVolume OPTIONAL,

iE-Extension ProtocolExtensionContainer { {Dynamic5QIDescriptor-ExtIEs } } OPTIONAL,

...

}

Dynamic5QIDescriptor-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ ID id-ExtendedPacketDelayBudget CRITICALITY ignore EXTENSION ExtendedPacketDelayBudget PRESENCE optional}|

{ ID id-CNPacketDelayBudgetDownlink CRITICALITY ignore EXTENSION ExtendedPacketDelayBudget PRESENCE optional}|

{ ID id-CNPacketDelayBudgetUplink CRITICALITY ignore EXTENSION ExtendedPacketDelayBudget PRESENCE optional},

...

}

-- E

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

ECNMarkingorCongestionInformationReportingRequest ::= CHOICE {

eCNMarkingAtRANRequest ECNMarkingAtRANRequest,

eCNMarkingAtUPFRequest ECNMarkingAtUPFRequest,

congestionInformationRequest CongestionInformationRequest,

choice-Extensions ProtocolIE-Single-Container { {ECNMarkingorCongestionInformationReportingRequest-ExtIEs} }

}

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

...

}

ECNMarkingAtRANRequest ::= ENUMERATED {ul, dl, both, stop,...}

ECNMarkingAtUPFRequest ::= ENUMERATED {ul, dl, both, stop,...}

CongestionInformationRequest ::= ENUMERATED {ul, dl, both, stop, ...}

EnergyCost ::= INTEGER (0..10000, ...)

EquivalentSNPNs ::= SEQUENCE (SIZE(1..maxnoofESNPNs)) OF SNPNIdentity

E-RAB-ID ::= INTEGER (0..15, ...)

E-UTRAARFCN ::= INTEGER (0..maxEARFCN)

E-UTRA-Cell-Identity ::= BIT STRING (SIZE(28))

ERedcap-Bcast-Information ::= BIT STRING(SIZE(8))

E-UTRA-CGI ::= SEQUENCE {

plmn-id PLMN-Identity,

e-utra-CI E-UTRA-Cell-Identity,

iE-Extension ProtocolExtensionContainer { {E-UTRA-CGI-ExtIEs} } OPTIONAL,

...

}

E-UTRA-CGI-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

E-UTRAFrequencyBandIndicator ::= INTEGER (1..256, ...)

E-UTRAMultibandInfoList ::= SEQUENCE (SIZE(1..maxnoofEUTRABands)) OF E-UTRAFrequencyBandIndicator

EUTRAPagingeDRXInformation ::= SEQUENCE {

eutrapaging-eDRX-Cycle EUTRAPaging-eDRX-Cycle,

eutrapaging-Time-Window EUTRAPaging-Time-Window OPTIONAL,

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

...

}

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

...

}

EUTRAPaging-eDRX-Cycle ::= ENUMERATED {

hfhalf, hf1, hf2, hf4, hf6,

hf8, hf10, hf12, hf14, hf16,

hf32, hf64, hf128, hf256,

...

}

EUTRAPaging-Time-Window ::= ENUMERATED {

s1, s2, s3, s4, s5,

s6, s7, s8, s9, s10,

s11, s12, s13, s14, s15, s16,

...

}

E-UTRAPCI ::= INTEGER (0..503, ...)

E-UTRAPRACHConfiguration ::= SEQUENCE {

rootSequenceIndex INTEGER (0..837),

zeroCorrelationIndex INTEGER (0..15),

highSpeedFlag ENUMERATED {true, false, ...},

prach-FreqOffset INTEGER (0..94),

prach-ConfigIndex INTEGER (0..63) OPTIONAL,

-- C-ifTDD: This IE shall be present if the *EUTRA-Mode-Info* IE in the *Served Cell Information E-UTRA* IE is set to the value "TDD" --

iE-Extensions ProtocolExtensionContainer { {E-UTRAPRACHConfiguration-ExtIEs} } OPTIONAL,

...

}

E-UTRAPRACHConfiguration-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

E-UTRATransmissionBandwidth ::= ENUMERATED {bw6, bw15, bw25, bw50, bw75, bw100, ..., bw1}

EndpointIPAddressAndPort ::=SEQUENCE {

endpointIPAddress TransportLayerAddress,

portNumber PortNumber,

iE-Extensions ProtocolExtensionContainer { { EndpointIPAddressAndPort-ExtIEs} } OPTIONAL

}

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

...

}

EventTriggered ::= SEQUENCE {

loggedEventTriggeredConfig LoggedEventTriggeredConfig,

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

...

}

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

...

}

EventType ::= ENUMERATED {

report-upon-change-of-serving-cell,

report-UE-moving-presence-into-or-out-of-the-Area-of-Interest,

...,

report-upon-change-of-serving-cell-and-Area-of-Interest

}

EventTypeTrigger ::= CHOICE {

outOfCoverage ENUMERATED {true, ...},

eventL1 EventL1,

choice-Extensions ProtocolIE-Single-Container { {EventTypeTrigger-ExtIEs} }

}

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

...

}

EventL1 ::= SEQUENCE {

l1Threshold MeasurementThresholdL1LoggedMDT,

hysteresis Hysteresis,

timeToTrigger TimeToTrigger,

iE-Extensions ProtocolExtensionContainer { { EventL1-ExtIEs} } OPTIONAL,

...

}

EventL1-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

MeasurementThresholdL1LoggedMDT ::= CHOICE {

threshold-RSRP Threshold-RSRP,

threshold-RSRQ Threshold-RSRQ,

...,

choice-extension ProtocolIE-Single-Container { {MeasurementThresholdL1LoggedMDT-ExtIEs} }

}

MeasurementThresholdL1LoggedMDT-ExtIEs XNAP-PROTOCOL-IES ::= {

...

}

ExcessPacketDelayThresholdConfiguration ::= SEQUENCE (SIZE(1..maxnoofThresholdsForExcessPacketDelay)) OF ExcessPacketDelayThresholdItem

ExcessPacketDelayThresholdItem ::= SEQUENCE {

fiveQI FiveQI,

excessPacketDelayThresholdValue ExcessPacketDelayThresholdValue,

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

...

}

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

...

}

ExcessPacketDelayThresholdValue ::= ENUMERATED {

ms0dot25, ms0dot5, ms1, ms2, ms4, ms5, ms10, ms20, ms30, ms40, ms50, ms60, ms70, ms80, ms90, ms100, ms150, ms300, ms500,

...

}

ExpectedActivityPeriod ::= INTEGER (1..30|40|50|60|80|100|120|150|180|181, ...)

ExpectedHOInterval ::= ENUMERATED {

sec15, sec30, sec60, sec90, sec120, sec180, long-time,

...

}

ExpectedIdlePeriod ::= INTEGER (1..30|40|50|60|80|100|120|150|180|181, ...)

ExpectedUEActivityBehaviour ::= SEQUENCE {

expectedActivityPeriod ExpectedActivityPeriod OPTIONAL,

expectedIdlePeriod ExpectedIdlePeriod OPTIONAL,

sourceOfUEActivityBehaviourInformation SourceOfUEActivityBehaviourInformation OPTIONAL,

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

...

}

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

...

}

ExpectedUEBehaviour ::= SEQUENCE {

expectedUEActivityBehaviour ExpectedUEActivityBehaviour OPTIONAL,

expectedHOInterval ExpectedHOInterval OPTIONAL,

expectedUEMobility ExpectedUEMobility OPTIONAL,

expectedUEMovingTrajectory ExpectedUEMovingTrajectory OPTIONAL,

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

...

}

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

...

}

ExpectedUEMobility ::= ENUMERATED {

stationary,

mobile,

...

}

ExpectedUEMovingTrajectory ::= SEQUENCE (SIZE(1..maxnoofCellsUEMovingTrajectory)) OF ExpectedUEMovingTrajectoryItem

ExpectedUEMovingTrajectoryItem ::= SEQUENCE {

nGRAN-CGI GlobalNG-RANCell-ID,

timeStayedInCell INTEGER (0..4095) OPTIONAL,

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

...

}

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

...

}

SourceOfUEActivityBehaviourInformation ::= ENUMERATED {

subscription-information,

statistics,

...

}

ExplicitFormat ::= SEQUENCE {

permutation Permutation,

noofDownlinkSymbols INTEGER(0..14) OPTIONAL,

noofUplinkSymbols INTEGER(0..14) OPTIONAL,

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

...

}

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

...

}

ExtendedRATRestrictionInformation ::= SEQUENCE {

primaryRATRestriction BIT STRING (SIZE(8, ..., 16)),

secondaryRATRestriction BIT STRING (SIZE(8, ...)),

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

...

}

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

...

}

ExtendedPacketDelayBudget ::= INTEGER (0..65535, ..., 65536..109999)

ExtendedSliceSupportList ::= SEQUENCE (SIZE(1..maxnoofExtSliceItems)) OF S-NSSAI

ExtendedUEIdentityIndexValue ::= BIT STRING (SIZE(16))

ExtTLAs ::= SEQUENCE (SIZE(1..maxnoofExtTLAs)) OF ExtTLA-Item

ExtTLA-Item ::= SEQUENCE {

iPsecTLA TransportLayerAddress OPTIONAL,

gTPTransportLayerAddresses GTPTLAs OPTIONAL,

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

...

}

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

...

}

GTPTLAs ::= SEQUENCE (SIZE(1.. maxnoofGTPTLAs)) OF GTPTLA-Item

GTPTLA-Item ::= SEQUENCE {

gTPTransportLayerAddresses TransportLayerAddress,

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

...

}

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

...

}

-- F

F1CTrafficContainer ::= OCTET STRING

F1-terminatingIAB-donorIndicator ::= ENUMERATED {true, ...}

F1-TerminatingTopologyBHInformation ::= SEQUENCE {

f1TerminatingBHInformation-List F1TerminatingBHInformation-List,

iE-Extensions ProtocolExtensionContainer { {F1-TerminatingTopologyBHInformation-ExtIEs} } OPTIONAL,

...

}

F1-TerminatingTopologyBHInformation-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

F1TerminatingBHInformation-List ::= SEQUENCE (SIZE(1..maxnoofBHInfo)) OF F1TerminatingBHInformation-Item

F1TerminatingBHInformation-Item ::= SEQUENCE {

bHInfoIndex BHInfoIndex,

dLTNLAddress IABTNLAddress,

dlF1TerminatingBHInfo DLF1Terminating-BHInfo OPTIONAL,

ulF1TerminatingBHInfo ULF1Terminating-BHInfo OPTIONAL,

iE-Extension ProtocolExtensionContainer { { F1TerminatingBHInformation-Item-ExtIEs} } OPTIONAL,

...

}

F1TerminatingBHInformation-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

FiveGCMobilityRestrictionListContainer ::= OCTET STRING

-- This octets of the OCTET STRING contain the Mobility Restriction List IE as specified in TS 38.413 [5]. --

FiveGProSeAuthorized ::= SEQUENCE {

fiveGproSeDirectDiscovery FiveGProSeDirectDiscovery OPTIONAL,

fiveGproSeDirectCommunication FiveGProSeDirectCommunication OPTIONAL,

fiveGnrProSeLayer2UEtoNetworkRelay FiveGProSeLayer2UEtoNetworkRelay OPTIONAL,

fiveGnrProSeLayer3UEtoNetworkRelay FiveGProSeLayer3UEtoNetworkRelay OPTIONAL,

fiveGnrProSeLayer2RemoteUE FiveGProSeLayer2RemoteUE OPTIONAL,

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

...

}

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

{ ID id-FiveGProSeLayer2Multipath CRITICALITY ignore EXTENSION FiveGProSeLayer2Multipath PRESENCE optional}|

{ ID id-FiveGProSeLayer2UEtoUERelay CRITICALITY ignore EXTENSION FiveGProSeLayer2UEtoUERelay PRESENCE optional}|

{ ID id-FiveGProSeLayer2UEtoUERemote CRITICALITY ignore EXTENSION FiveGProSeLayer2UEtoUERemote PRESENCE optional},

...

}

FiveGProSeDirectDiscovery ::= ENUMERATED {

authorized,

not-authorized,

...

}

FiveGProSeDirectCommunication ::= ENUMERATED {

authorized,

not-authorized,

...

}

FiveGProSeLayer2UEtoNetworkRelay ::= ENUMERATED {

authorized,

not-authorized,

...

}

FiveGProSeLayer3UEtoNetworkRelay ::= ENUMERATED {

authorized,

not-authorized,

...

}

FiveGProSeLayer2RemoteUE ::= ENUMERATED {

authorized,

not-authorized,

...

}

FiveGProSeLayer2Multipath ::= ENUMERATED {

authorized,

not-authorized,

...

}

FiveGProSeLayer2UEtoUERelay ::= ENUMERATED {

authorized,

not-authorized,

...

}

FiveGProSeLayer2UEtoUERemote ::= ENUMERATED {

authorized,

not-authorized,

...

}

FiveGProSePC5QoSParameters ::= SEQUENCE {

fiveGProSepc5QoSFlowList FiveGProSePC5QoSFlowList,

fiveGproSepc5LinkAggregateBitRates BitRate OPTIONAL,

iE-Extensions ProtocolExtensionContainer { { FiveGProSePC5QoSParameters-ExtIEs} } OPTIONAL,

...

}

FiveGProSePC5QoSParameters-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

FiveGProSePC5QoSFlowList::= SEQUENCE (SIZE(1..maxnoofPC5QoSFlows)) OF FiveGProSePC5QoSFlowItem

FiveGProSePC5QoSFlowItem::= SEQUENCE {

fiveGproSepQI FiveQI,

fiveGproSepc5FlowBitRates FiveGProSePC5FlowBitRates OPTIONAL,

fiveGproSerange Range OPTIONAL,

iE-Extensions ProtocolExtensionContainer { { FiveGProSePC5QoSFlowItem-ExtIEs} } OPTIONAL,

...

}

FiveGProSePC5QoSFlowItem-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

FiveGProSePC5FlowBitRates ::= SEQUENCE {

fiveGproSeguaranteedFlowBitRate BitRate,

fiveGproSemaximumFlowBitRate BitRate,

iE-Extensions ProtocolExtensionContainer { { FiveGProSePC5FlowBitRates-ExtIEs} } OPTIONAL,

...

}

FiveGProSePC5FlowBitRates-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

FiveQI ::= INTEGER (0..255, ...)

Flows-Mapped-To-DRB-List ::= SEQUENCE (SIZE(1.. maxnoofQoSFlows)) OF Flows-Mapped-To-DRB-Item

Flows-Mapped-To-DRB-Item ::= SEQUENCE {

qoSFlowIdentifier QoSFlowIdentifier,

qoSFlowLevelQoSParameters QoSFlowLevelQoSParameters,

qoSFlowMappingIndication QoSFlowMappingIndication OPTIONAL,

iE-Extensions ProtocolExtensionContainer { { Flows-Mapped-To-DRB-Item-ExtIEs} } OPTIONAL

}

Flows-Mapped-To-DRB-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

FreqDomainHSNAconfiguration-List ::= SEQUENCE (SIZE(1.. maxnoofHSNASlots)) OF FreqDomainHSNAconfiguration-List-Item

FreqDomainHSNAconfiguration-List-Item ::= SEQUENCE {

rBsetIndex INTEGER(0.. maxnoofRBsetsPerCell1, ...),

freqDomainSlotHSNAconfiguration-List FreqDomainSlotHSNAconfiguration-List,

iE-Extensions ProtocolExtensionContainer { { FreqDomainHSNAconfiguration-List-Item-ExtIEs} } OPTIONAL,

...

}

FreqDomainHSNAconfiguration-List-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

FreqDomainSlotHSNAconfiguration-List ::= SEQUENCE (SIZE(1.. maxnoofHSNASlots)) OF FreqDomainSlotHSNAconfiguration-List-Item

FreqDomainSlotHSNAconfiguration-List-Item ::= SEQUENCE {

slotIndex INTEGER(1..maxnoofHSNASlots),

hSNADownlink HSNADownlink OPTIONAL,

hSNAUplink HSNAUplink OPTIONAL,

hSNAFlexible HSNAFlexible OPTIONAL,

iE-Extensions ProtocolExtensionContainer { { FreqDomainSlotHSNAconfiguration-List-Item-ExtIEs} } OPTIONAL,

...

}

FreqDomainSlotHSNAconfiguration-List-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

FrequencyShift7p5khz ::= ENUMERATED {false, true, ...}

-- G

GBRQoSFlowInfo ::= SEQUENCE {

maxFlowBitRateDL BitRate,

maxFlowBitRateUL BitRate,

guaranteedFlowBitRateDL BitRate,

guaranteedFlowBitRateUL BitRate,

notificationControl ENUMERATED {notification-requested, ...} OPTIONAL,

maxPacketLossRateDL PacketLossRate OPTIONAL,

maxPacketLossRateUL PacketLossRate OPTIONAL,

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

...

}

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

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

...

}

GlobalgNB-ID ::= SEQUENCE {

plmn-id PLMN-Identity,

gnb-id GNB-ID-Choice,

iE-Extensions ProtocolExtensionContainer { {GlobalgNB-ID-ExtIEs} } OPTIONAL,

...

}

GlobalgNB-ID-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

GNB-DU-Cell-Resource-Configuration ::= SEQUENCE {

subcarrierSpacing SSB-subcarrierSpacing,

dUFTransmissionPeriodicity DUFTransmissionPeriodicity OPTIONAL,

dUF-Slot-Config-List DUF-Slot-Config-List OPTIONAL,

hSNATransmissionPeriodicity HSNATransmissionPeriodicity,

hNSASlotConfigList HSNASlotConfigList OPTIONAL,

rBsetConfiguration RBsetConfiguration OPTIONAL,

freqDomainHSNAconfiguration-List FreqDomainHSNAconfiguration-List OPTIONAL,

nACellResourceConfigurationList NACellResourceConfigurationList OPTIONAL,

iE-Extensions ProtocolExtensionContainer { { GNB-DU-Cell-Resource-Configuration-ExtIEs } } OPTIONAL,

...

}

GNB-DU-Cell-Resource-Configuration-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

GNB-ID-Choice ::= CHOICE {

gnb-ID BIT STRING (SIZE(22..32)),

choice-extension ProtocolIE-Single-Container { {GNB-ID-Choice-ExtIEs} }

}

GNB-ID-Choice-ExtIEs XNAP-PROTOCOL-IES ::= {

...

}

GNB-RadioResourceStatus ::= SEQUENCE {

ssbAreaRadioResourceStatus-List SSBAreaRadioResourceStatus-List,

iE-Extensions ProtocolExtensionContainer { { GNB-RadioResourceStatus-ExtIEs} } OPTIONAL,

...

}

GNB-RadioResourceStatus-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ ID id-SliceRadioResourceStatus-List CRITICALITY ignore EXTENSION SliceRadioResourceStatus-List PRESENCE optional }|

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

...

}

GlobalCell-ID ::= SEQUENCE {

plmn-id PLMN-Identity,

cell-type Cell-Type-Choice,

iE-Extensions ProtocolExtensionContainer { { GlobalCell-ID-ExtIEs} } OPTIONAL,

...

}

GlobalCell-ID-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

GlobalngeNB-ID ::= SEQUENCE {

plmn-id PLMN-Identity,

enb-id ENB-ID-Choice,

iE-Extensions ProtocolExtensionContainer { {GlobaleNB-ID-ExtIEs} } OPTIONAL,

...

}

GlobaleNB-ID-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

ENB-ID-Choice ::= CHOICE {

enb-ID-macro BIT STRING (SIZE(20)),

enb-ID-shortmacro BIT STRING (SIZE(18)),

enb-ID-longmacro BIT STRING (SIZE(21)),

choice-extension ProtocolIE-Single-Container { {ENB-ID-Choice-ExtIEs} }

}

ENB-ID-Choice-ExtIEs XNAP-PROTOCOL-IES ::= {

...

}

GlobalNG-RANCell-ID ::= SEQUENCE {

plmn-id PLMN-Identity,

ng-RAN-Cell-id NG-RAN-Cell-Identity,

iE-Extensions ProtocolExtensionContainer { {GlobalNG-RANCell-ID-ExtIEs} } OPTIONAL,

...

}

GlobalNG-RANCell-ID-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

GlobalNG-RANNode-ID ::= CHOICE {

gNB GlobalgNB-ID,

ng-eNB GlobalngeNB-ID,

choice-extension ProtocolIE-Single-Container { {GlobalNG-RANNode-ID-ExtIEs} }

}

GlobalNG-RANNode-ID-ExtIEs XNAP-PROTOCOL-IES ::= {

...

}

GTP-TEID ::= OCTET STRING (SIZE(4))

GTPtunnelTransportLayerInformation ::= SEQUENCE {

tnl-address TransportLayerAddress,

gtp-teid GTP-TEID,

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

...

}

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

{ID id-QoS-Mapping-Information CRITICALITY reject EXTENSION QoS-Mapping-Information PRESENCE optional },

...

}

GUAMI ::= SEQUENCE {

plmn-ID PLMN-Identity,

amf-region-id BIT STRING (SIZE (8)),

amf-set-id BIT STRING (SIZE (10)),

amf-pointer BIT STRING (SIZE (6)),

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

...

}

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

...

}

-- H

HandoverReportType ::= ENUMERATED {

hoTooEarly,

hoToWrongCell,

intersystempingpong,

...

}

HashedUEIdentityIndexValue ::= BIT STRING (SIZE(13, ...))

HSNASlotConfigList ::= SEQUENCE (SIZE(1..maxnoofHSNASlots)) OF HSNASlotConfigItem

HSNASlotConfigItem ::= SEQUENCE {

hSNADownlink HSNADownlink OPTIONAL,

hSNAUplink HSNAUplink OPTIONAL,

hSNAFlexible HSNAFlexible OPTIONAL,

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

...

}

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

...

}

HSNADownlink ::= ENUMERATED { hard, soft, notavailable }

HSNAFlexible ::= ENUMERATED { hard, soft, notavailable }

HSNAUplink ::= ENUMERATED { hard, soft, notavailable }

HSNATransmissionPeriodicity ::= ENUMERATED { ms0p5, ms0p625, ms1, ms1p25, ms2, ms2p5, ms5, ms10, ms20, ms40, ms80, ms160, ...}

Hysteresis ::= INTEGER (0..30)

-- I

IABCellInformation::= SEQUENCE{

nRCGI NR-CGI,

iAB-DU-Cell-Resource-Configuration-Mode-Info IAB-DU-Cell-Resource-Configuration-Mode-Info OPTIONAL,

iAB-STC-Info IAB-STC-Info OPTIONAL,

rACH-Config-Common RACH-Config-Common OPTIONAL,

rACH-Config-Common-IAB RACH-Config-Common-IAB OPTIONAL,

cSI-RS-Configuration OCTET STRING OPTIONAL,

sR-Configuration OCTET STRING OPTIONAL,

pDCCH-ConfigSIB1 OCTET STRING OPTIONAL,

sCS-Common OCTET STRING OPTIONAL,

multiplexingInfo MultiplexingInfo OPTIONAL,

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

...

}

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

...

}

IAB-DU-Cell-Resource-Configuration-Mode-Info ::= CHOICE {

tDD IAB-DU-Cell-Resource-Configuration-TDD-Info,

fDD IAB-DU-Cell-Resource-Configuration-FDD-Info,

choice-extension ProtocolIE-Single-Container { { IAB-DU-Cell-Resource-Configuration-Mode-Info-ExtIEs} }

}

IAB-DU-Cell-Resource-Configuration-Mode-Info-ExtIEs XNAP-PROTOCOL-IES ::= {

...

}

IAB-DU-Cell-Resource-Configuration-FDD-Info ::= SEQUENCE {

gNB-DU-Cell-Resource-Configuration-FDD-UL GNB-DU-Cell-Resource-Configuration,

gNB-DU-Cell-Resource-Configuration-FDD-DL GNB-DU-Cell-Resource-Configuration,

uLFrequencyInfo NRFrequencyInfo OPTIONAL,

dLFrequencyInfo NRFrequencyInfo OPTIONAL,

uLTransmissionBandwidth NRTransmissionBandwidth OPTIONAL,

dlTransmissionBandwidth NRTransmissionBandwidth OPTIONAL,

uLCarrierList NRCarrierList OPTIONAL,

dlCarrierList NRCarrierList OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {IAB-DU-Cell-Resource-Configuration-FDD-Info-ExtIEs} } OPTIONAL,

...

}

IAB-DU-Cell-Resource-Configuration-FDD-Info-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

IAB-DU-Cell-Resource-Configuration-TDD-Info ::= SEQUENCE {

gNB-DU-Cell-Resource-Configuration-TDD GNB-DU-Cell-Resource-Configuration,

frequencyInfo NRFrequencyInfo OPTIONAL,

transmissionBandwidth NRTransmissionBandwidth OPTIONAL,

carrierList NRCarrierList OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {IAB-DU-Cell-Resource-Configuration-TDD-Info-ExtIEs} } OPTIONAL,

...

}

IAB-DU-Cell-Resource-Configuration-TDD-Info-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

IAB-MT-Cell-List ::= SEQUENCE (SIZE(1..maxnoofServingCells)) OF IAB-MT-Cell-List-Item

IAB-MT-Cell-List-Item ::= SEQUENCE {

nRCellIdentity NR-Cell-Identity,

dU-RX-MT-RX DU-RX-MT-RX,

dU-TX-MT-TX DU-TX-MT-TX,

dU-RX-MT-TX DU-RX-MT-TX,

dU-TX-MT-RX DU-TX-MT-RX,

iE-Extensions ProtocolExtensionContainer { { IAB-MT-Cell-List-Item-ExtIEs } } OPTIONAL,

...

}

IAB-MT-Cell-List-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

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

IAB-QoS-Mapping-Information ::= SEQUENCE {

dscp BIT STRING (SIZE(6)) OPTIONAL,

flow-label BIT STRING (SIZE(20)) OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {IAB-QoS-Mapping-Information-ExtIEs} } OPTIONAL,

...

}

IAB-QoS-Mapping-Information-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

IAB-STC-Info ::= SEQUENCE{

iAB-STC-Info-List IAB-STC-Info-List,

iE-Extensions ProtocolExtensionContainer { { IAB-STC-Info-ExtIEs } } OPTIONAL,

...

}

IAB-STC-Info-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

IAB-STC-Info-List ::= SEQUENCE (SIZE(1..maxnoofIABSTCInfo)) OF IAB-STC-Info-Item

IAB-STC-Info-Item::= SEQUENCE {

sSB-freqInfo SSB-freqInfo,

sSB-subcarrierSpacing SSB-subcarrierSpacing,

sSB-transmissionPeriodicity SSB-transmissionPeriodicity,

sSB-transmissionTimingOffset SSB-transmissionTimingOffset,

sSB-transmissionBitmap SSB-transmissionBitmap,

iE-Extensions ProtocolExtensionContainer { { IAB-STC-Info-Item-ExtIEs } } OPTIONAL,

...

}

IAB-STC-Info-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

IAB-TNL-Address-Request ::= SEQUENCE {

iABIPv4AddressesRequested IABTNLAddressesRequested,

iABIPv6RequestType IABIPv6RequestType,

iABTNLAddressToRemove-List IABTNLAddressToRemove-List,

iE-Extensions ProtocolExtensionContainer { {IAB-TNL-Address-Request-ExtIEs} } OPTIONAL,

...

}

IAB-TNL-Address-Request-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

IABIPv6RequestType ::= CHOICE {

iPv6Address IABTNLAddressesRequested,

iPv6Prefix IABTNLAddressesRequested,

choice-extension ProtocolIE-Single-Container { {IABIPv6RequestType-ExtIEs} }

}

IABIPv6RequestType-ExtIEs XNAP-PROTOCOL-IES ::= {

...

}

IAB-TNL-Address-Response ::= SEQUENCE {

iABAllocatedTNLAddress-List IABAllocatedTNLAddress-List,

iE-Extensions ProtocolExtensionContainer { {IAB-TNL-Address-Response-ExtIEs} } OPTIONAL,

...

}

IAB-TNL-Address-Response-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

IABAllocatedTNLAddress-List ::= SEQUENCE (SIZE(1..maxnoofTLAsIAB)) OF IABAllocatedTNLAddress-Item

IABAllocatedTNLAddress-Item ::= SEQUENCE {

iABTNLAddress IABTNLAddress,

iABTNLAddressUsage IABTNLAddressUsage OPTIONAL,

associatedDonorDUAddress BAPAddress OPTIONAL,

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

...

}

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

...

}

IABTNLAddress ::= CHOICE {

iPv4Address BIT STRING (SIZE(32)),

iPv6Address BIT STRING (SIZE(128)),

iPv6Prefix BIT STRING (SIZE(64)),

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

}

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

...

}

IABTNLAddressesRequested ::= SEQUENCE {

tNLAddressesOrPrefixesRequestedAllTraffic INTEGER (1..256) OPTIONAL,

tNLAddressesOrPrefixesRequestedF1-C INTEGER (1..256) OPTIONAL,

tNLAddressesOrPrefixesRequestedF1-U INTEGER (1..256) OPTIONAL,

tNLAddressesOrPrefixesRequestedNoNF1 INTEGER (1..256) OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {IABTNLAddressesRequested-ExtIEs} } OPTIONAL

}

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

...

}

IABTNLAddressToRemove-List ::= SEQUENCE (SIZE(1..maxnoofTLAsIAB)) OF IABTNLAddressToRemove-Item

IABTNLAddressToRemove-Item ::= SEQUENCE {

iABTNLAddress IABTNLAddress,

iE-Extension ProtocolExtensionContainer { {IABTNLAddressToRemove-Item-ExtIEs} } OPTIONAL,

...

}

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

...

}

IABTNLAddressUsage ::= ENUMERATED {

f1-c,

f1-u,

non-f1,

...,

all

}

IABTNLAddressException ::= SEQUENCE (SIZE(1..maxnoofTLAsIAB)) OF IABTNLAddress-Item

IABTNLAddress-Item ::= SEQUENCE {

iABTNLAddress IABTNLAddress,

iE-Extensions ProtocolExtensionContainer { { IABTNLAddress-ItemExtIEs } } OPTIONAL,

...}

IABTNLAddress-ItemExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

ImmediateMDT-NR ::= SEQUENCE {

measurementsToActivate MeasurementsToActivate,

m1Configuration M1Configuration OPTIONAL,

-- This IE shall be present if the *Measurements to Activate* IE has the first bit set to "1".--

m4Configuration M4Configuration OPTIONAL,

-- This IE shall be present if the *Measurements to Activate* IE has the fourth bit set to "1".--

m5Configuration M5Configuration OPTIONAL,

-- This IE shall be present if the *Measurements to Activate* IE has the fifth bit set to "1".--

mDT-Location-Info MDT-Location-Info OPTIONAL,

m6Configuration M6Configuration OPTIONAL,

-- This IE shall be present if the *Measurements to Activate* IE has the seventh bit set to "1".--

m7Configuration M7Configuration OPTIONAL,

-- This IE shall be present if the *Measurements to Activate* IE has the eighth bit set to "1".--

bluetoothMeasurementConfiguration BluetoothMeasurementConfiguration OPTIONAL,

wLANMeasurementConfiguration WLANMeasurementConfiguration OPTIONAL,

sensorMeasurementConfiguration SensorMeasurementConfiguration OPTIONAL,

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

...

}

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

...

}

ImplicitFormat ::= SEQUENCE {

dUFSlotformatIndex DUFSlotformatIndex,

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

...

}

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

...

}

InitiatingCondition-FailureIndication ::= CHOICE {

rRCReestab RRCReestab-initiated,

rRCSetup RRCSetup-initiated,

choice-extension ProtocolIE-Single-Container { {InitiatingCondition-FailureIndication-ExtIEs} }

}

InitiatingCondition-FailureIndication-ExtIEs XNAP-PROTOCOL-IES ::= {

...

}

IntendedTDD-DL-ULConfiguration-NR ::= SEQUENCE {

nrscs NRSCS,

nrCyclicPrefix NRCyclicPrefix,

nrDL-ULTransmissionPeriodicity NRDL-ULTransmissionPeriodicity,

slotConfiguration-List SlotConfiguration-List,

iE-Extensions ProtocolExtensionContainer { {IntendedTDD-DL-ULConfiguration-NR-ExtIEs} } OPTIONAL,

...

}

IntendedTDD-DL-ULConfiguration-NR-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

InterfaceInstanceIndication ::= INTEGER (0..255, ...)

I-RNTI ::= CHOICE {

i-RNTI-full BIT STRING (SIZE(40)),

i-RNTI-short BIT STRING (SIZE(24)),

choice-extension ProtocolIE-Single-Container { {I-RNTI-ExtIEs} }

}

I-RNTI-ExtIEs XNAP-PROTOCOL-IES ::= {

...

}

IABAuthorizationStatus ::= ENUMERATED {

authorized,

not-authorized,

...

}

-- J

-- K

-- L

Local-NG-RAN-Node-Identifier ::= CHOICE {

full-I-RNTI-Profile-List Full-I-RNTI-Profile-List,

short-I-RNTI-Profile-List Short-I-RNTI-Profile-List,

choice-extension ProtocolIE-Single-Container { { Local-NG-RAN-Node-Identifier-ExtIEs} }

}

Local-NG-RAN-Node-Identifier-ExtIEs XNAP-PROTOCOL-IES ::= {

{ ID id-Full-and-Short-I-RNTI-Profile-List CRITICALITY ignore TYPE Full-and-Short-I-RNTI-Profile-List PRESENCE mandatory},

...

}

Full-and-Short-I-RNTI-Profile-List::= SEQUENCE {

full-I-RNTI-Profile-List Full-I-RNTI-Profile-List,

short-I-RNTI-Profile-List Short-I-RNTI-Profile-List,

iE-Extensions ProtocolExtensionContainer { { Full-and-Short-I-RNTI-Profile-List-ExtIEs} } OPTIONAL,

...

}

Full-and-Short-I-RNTI-Profile-List-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

Full-I-RNTI-Profile-List ::= CHOICE {

full-I-RNTI-Profile-0 BIT STRING (SIZE (21)),

full-I-RNTI-Profile-1 BIT STRING (SIZE (18)),

full-I-RNTI-Profile-2 BIT STRING (SIZE (15)),

full-I-RNTI-Profile-3 BIT STRING (SIZE (12)),

choice-extension ProtocolIE-Single-Container { { Full-I-RNTI-Profile-List-ExtIEs} }

}

Full-I-RNTI-Profile-List-ExtIEs XNAP-PROTOCOL-IES ::= {

...

}

Short-I-RNTI-Profile-List ::= CHOICE {

short-I-RNTI-Profile-0 BIT STRING (SIZE (8)),

short-I-RNTI-Profile-1 BIT STRING (SIZE (6)),

choice-extension ProtocolIE-Single-Container { { Short-I-RNTI-Profile-List-ExtIEs} }

}

Short-I-RNTI-Profile-List-ExtIEs XNAP-PROTOCOL-IES ::= {

...

}

LastVisitedCell-Item ::= CHOICE {

nG-RAN-Cell LastVisitedNGRANCellInformation,

e-UTRAN-Cell LastVisitedEUTRANCellInformation,

uTRAN-Cell LastVisitedUTRANCellInformation,

gERAN-Cell LastVisitedGERANCellInformation,

choice-extension ProtocolIE-Single-Container { { LastVisitedCell-Item-ExtIEs} }

}

LastVisitedCell-Item-ExtIEs XNAP-PROTOCOL-IES ::= {

...

}

LastVisitedEUTRANCellInformation ::= OCTET STRING

LastVisitedGERANCellInformation ::= OCTET STRING

LastVisitedNGRANCellInformation ::= OCTET STRING

LastVisitedUTRANCellInformation ::= OCTET STRING

LastVisitedPSCellInformation ::= OCTET STRING

LastVisitedPSCellList ::= SEQUENCE (SIZE(1..maxnoofPSCellsPerSN)) OF LastVisitedPSCellList-Item

LastVisitedPSCellList-Item ::= SEQUENCE {

lastVisitedPSCellInformation LastVisitedPSCellInformation,

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

...

}

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

...

}

SCGUEHistoryInformation ::= SEQUENCE {

lastVisitedPSCellList LastVisitedPSCellList OPTIONAL,

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

...

}

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

...

}

LCID ::= INTEGER (1..32, ...)

Links-to-log ::= ENUMERATED {uplink, downlink, both-uplink-and-downlink, ...}

ListOfCells ::= SEQUENCE (SIZE(1..maxnoofCellsinAoI)) OF CellsinAoI-Item

CellsinAoI-Item ::= SEQUENCE {

pLMN-Identity PLMN-Identity,

ng-ran-cell-id NG-RAN-Cell-Identity,

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

...

}

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

...

}

ListOfRANNodesinAoI ::= SEQUENCE (SIZE(1.. maxnoofRANNodesinAoI)) OF GlobalNG-RANNodesinAoI-Item

GlobalNG-RANNodesinAoI-Item ::= SEQUENCE {

global-NG-RAN-Node-ID GlobalNG-RANNode-ID,

iE-Extensions ProtocolExtensionContainer { {GlobalNG-RANNodesinAoI-Item-ExtIEs} } OPTIONAL,

...

}

GlobalNG-RANNodesinAoI-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

ListOfTAIsinAoI ::= SEQUENCE (SIZE(1..maxnoofTAIsinAoI)) OF TAIsinAoI-Item

TAIsinAoI-Item ::= SEQUENCE {

pLMN-Identity PLMN-Identity,

tAC TAC,

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

...

}

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

...

}

LocationInformationSNReporting ::= ENUMERATED {

pSCell,

...

}

LocationReportingInformation ::= SEQUENCE {

eventType EventType,

reportArea ReportArea,

areaOfInterest AreaOfInterestInformation OPTIONAL,

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

...

}

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

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

...

}

LoggedEventTriggeredConfig ::= SEQUENCE {

eventTypeTrigger EventTypeTrigger,

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

...

}

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

...

}

LoggedMDT-NR ::= SEQUENCE {

loggingInterval LoggingInterval,

loggingDuration LoggingDuration,

reportType ReportType,

bluetoothMeasurementConfiguration BluetoothMeasurementConfiguration OPTIONAL,

wLANMeasurementConfiguration WLANMeasurementConfiguration OPTIONAL,

sensorMeasurementConfiguration SensorMeasurementConfiguration OPTIONAL,

areaScopeOfNeighCellsList AreaScopeOfNeighCellsList OPTIONAL,

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

...

}

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

{ID id-earlyMeasurement CRITICALITY ignore EXTENSION EarlyMeasurement PRESENCE optional },

...

}

LoggingInterval ::= ENUMERATED { ms320, ms640, ms1280, ms2560, ms5120, ms10240, ms20480, ms30720, ms40960, ms61440, infinity,...}

LoggingDuration ::= ENUMERATED {m10, m20, m40, m60, m90, m120}

LowerLayerPresenceStatusChange ::= ENUMERATED {

release-lower-layers,

re-establish-lower-layers,

...,

suspend-lower-layers,

resume-lower-layers

}

LTEA2XServicesAuthorized ::= SEQUENCE {

aerialUE AerialUE OPTIONAL,

aerialControllerUE AerialControllerUE OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {LTEA2XServicesAuthorized-ExtIEs} } OPTIONAL,

...

}

LTEA2XServicesAuthorized-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

LTEV2XServicesAuthorized ::= SEQUENCE {

vehicleUE VehicleUE OPTIONAL,

pedestrianUE PedestrianUE OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {LTEV2XServicesAuthorized-ExtIEs} } OPTIONAL,

...

}

LTEV2XServicesAuthorized-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

LTEUESidelinkAggregateMaximumBitRate ::= SEQUENCE {

uESidelinkAggregateMaximumBitRate BitRate,

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

...

}

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

...

}

LTMInformation-AddReq ::= SEQUENCE {

lTM-RequestIndication ENUMERATED {request, ...} OPTIONAL,

cSI-ResourceConfiguration CSIResourceConfig OPTIONAL,

suggestedLTMCandidatePSCellList SuggestedLTMCandidatePSCell-List OPTIONAL,

maxNrofPSCellsToPrepare MaxNrofPSCellsToPrepare,

lTM-ConfigurationIDMappingList LTMConfigurationIDMappingList OPTIONAL,

lTM-SecurityConfigurationList LTM-SecurityConfiguration-List OPTIONAL,

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

...

}

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

...

}

LTM-SecurityConfiguration-List ::= SEQUENCE (SIZE(1..maxnoofSecurityConfigurations)) OF LTM-SecurityConfiguration-Item

LTM-SecurityConfiguration-Item ::= SEQUENCE {

s-ng-RANnode-SecurityKey S-NG-RANnode-SecurityKey,

sk-counter SK-COUNTER,

iE-Extensions ProtocolExtensionContainer { { LTM-SecurityConfiguration-Item-ExtIEs} } OPTIONAL,

...

}

LTM-SecurityConfiguration-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

LTMInformation-AddReqAck ::= SEQUENCE {

lTM-CandidatePSCellList LTM-CandidatePSCell-List OPTIONAL,

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

...

}

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

...

}

LTM-CandidatePSCell-List ::= SEQUENCE (SIZE(1..maxnoofLTMCells)) OF LTM-CandidatePSCell-Item

LTM-CandidatePSCell-Item ::= SEQUENCE {

pscell-id NR-CGI,

tCI-StatesConfigurationsList OCTET STRING OPTIONAL,

early-ul-SyncConfiguration EarlyULSyncConfig OPTIONAL,

early-ul-SyncConfigurationForSUL EarlyULSyncConfig OPTIONAL,

l1-Configuration L1-ConfigurationChoice OPTIONAL,

complete-CandidateConfigurationIndicator ENUMERATED {complete, ...} OPTIONAL,

iE-Extensions ProtocolExtensionContainer { { LTM-CandidatePSCell-Item-ExtIEs} } OPTIONAL,

...

}

LTM-CandidatePSCell-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

L1-ConfigurationChoice ::= CHOICE {

ssb SSB-Configuration,

csi-rs CSI-RS-Configuration,

choice-extension ProtocolIE-Single-Container { {L1-ConfigurationChoice-ExtIEs} }

}

L1-ConfigurationChoice-ExtIEs XNAP-PROTOCOL-IES ::= {

...

}

LTMInformation-UpdateReq ::= SEQUENCE {

cSI-ResourceConfiguration CSIResourceConfig OPTIONAL,

lTM-ConfigurationIDMappingList LTMConfigurationIDMappingList OPTIONAL,

multipleTargetSN-List MultipleTargetSN-List OPTIONAL,

iE-Extensions ProtocolExtensionContainer { { LTMInformation-UpdateReq-ExtIEs} } OPTIONAL,

...

}

LTMInformation-UpdateReq-ExtIEs XNAP-PROTOCOL-EXTENSION ::={

...

}

LTMInformation-ModReq ::= SEQUENCE {

maxNrofPSCellsToPrepare MaxNrofPSCellsToPrepare OPTIONAL,

sCG-ReferenceConfigurationRequest ENUMERATED {request, ...} OPTIONAL,

lTM-SecurityConfigurationList LTM-SecurityConfiguration-List OPTIONAL,

suggestedLTMCandidatePSCellList SuggestedLTMCandidatePSCell-List OPTIONAL,

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

...

}

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

...

}

LTMInformation-ModReqAck ::= SEQUENCE {

lTM-CandidatePSCellList LTM-CandidatePSCell-List OPTIONAL,

iE-Extensions ProtocolExtensionContainer { { LTMInformation-ModReqAck-ExtIEs} } OPTIONAL,

...

}

LTMInformation-ModReqAck-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

LTMInformation-UpdateReqAck ::= SEQUENCE {

cSI-ResourceConfiguration CSIResourceConfig OPTIONAL,

lTM-ConfigurationIDMappingList LTMConfigurationIDMappingList OPTIONAL,

iE-Extensions ProtocolExtensionContainer { { LTMInformation-UpdateReqAck-ExtIEs} } OPTIONAL,

...

}

LTMInformation-UpdateReqAck-ExtIEs XNAP-PROTOCOL-EXTENSION ::={

...

}

LTMInformation-Required ::= SEQUENCE (SIZE(1..maxnoofLTMCells)) OF LTMInformation-Required-Item

LTMInformation-Required-Item ::= SEQUENCE {

pscell-id NR-CGI,

iE-Extensions ProtocolExtensionContainer { { LTMInformation-Required-Item-ExtIEs} } OPTIONAL,

...

}

LTMInformation-Required-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

LTMInformation-ChangeRequired ::= SEQUENCE {

lTM-RequestIndication LTM-RequestIndication OPTIONAL,

cSI-ResourceConfiguration CSIResourceConfig OPTIONAL,

lTM-ConfigurationIDMappingList LTMConfigurationIDMappingList OPTIONAL,

multipleTargetSNChangeRequired-List MultipleTargetSNChangeRequired-List,

iE-Extensions ProtocolExtensionContainer { { LTMInformation-ChangeRequired-ExtIEs} } OPTIONAL,

...

}

LTMInformation-ChangeRequired-ExtIEs XNAP-PROTOCOL-EXTENSION ::={

...

}

LTM-RequestIndication ::= ENUMERATED {initiation, modification, ...}

LTMInformation-ChangeConfirm ::= SEQUENCE {

multipleTargetSNChangeConfirm-List MultipleTargetSNChangeConfirm-List,

iE-Extensions ProtocolExtensionContainer { { LTMInformation-ChangeConfirm-ExtIEs} } OPTIONAL,

...

}

LTMInformation-ChangeConfirm-ExtIEs XNAP-PROTOCOL-EXTENSION ::={

...

}

-- M

MaxNrofRS-IndexesToReport::= INTEGER (1..64, ...)

MaxNrofPSCellsToPrepare::= INTEGER (1..8, ...)

MBSCommServiceType ::= ENUMERATED {multicast, broadcast, ...}

MDTAlignmentInfo ::= CHOICE {

s-BasedMDT S-BasedMDT,

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

}

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

...

}

MeasCollectionEntityIPAddress ::= TransportLayerAddress

M1Configuration ::= SEQUENCE {

m1reportingTrigger M1ReportingTrigger,

m1thresholdeventA2 M1ThresholdEventA2 OPTIONAL,

-- This IE shall be present if the *Measurements to Activate* IE has the first bit set to "1" and the *M1* *Reporting Trigger* IE is set to "A2event-triggered" or to "A2event-triggered periodic".

m1periodicReporting M1PeriodicReporting OPTIONAL,

-- This IE shall be present if the *M1* *Reporting Trigger* IE is set to "periodic", or to "A2event-triggered periodic".

iE-Extensions ProtocolExtensionContainer { { M1Configuration-ExtIEs} } OPTIONAL,

...

}

M1Configuration-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ID id-BeamMeasurementIndicationM1 CRITICALITY ignore EXTENSION BeamMeasurementIndicationM1 PRESENCE optional }|

{ID id-BeamMeasurementsReportConfiguration CRITICALITY ignore EXTENSION BeamMeasurementsReportConfiguration PRESENCE conditional },

-- This IE shall be present if the *Include Beam Measurements Indication* IE is set to "true".

...

}

M1PeriodicReporting ::= SEQUENCE {

reportInterval ReportIntervalMDT,

reportAmount ReportAmountMDT,

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

...

}

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

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

...

}

M1ReportingTrigger ::= ENUMERATED{

periodic,

a2eventtriggered,

a2eventtriggered-periodic,

...

}

M1ThresholdEventA2 ::= SEQUENCE {

measurementThreshold MeasurementThresholdA2,

iE-Extensions ProtocolExtensionContainer { { M1ThresholdEventA2-ExtIEs} } OPTIONAL,

...

}

M1ThresholdEventA2-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

M4Configuration ::= SEQUENCE {

m4period M4period,

m4-links-to-log Links-to-log,

iE-Extensions ProtocolExtensionContainer { { M4Configuration-ExtIEs} } OPTIONAL,

...

}

M4Configuration-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ ID id-M4ReportAmount CRITICALITY ignore EXTENSION M4ReportAmountMDT PRESENCE optional },

...

}

M4ReportAmountMDT ::= ENUMERATED{r1, r2, r4, r8, r16, r32, r64, infinity, ...}

M4period ::= ENUMERATED {ms1024, ms2048, ms5120, ms10240, min1, ... }

M5Configuration ::= SEQUENCE {

m5period M5period,

m5-links-to-log Links-to-log,

iE-Extensions ProtocolExtensionContainer { { M5Configuration-ExtIEs} } OPTIONAL,

...

}

M5Configuration-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ ID id-M5ReportAmount CRITICALITY ignore EXTENSION M5ReportAmountMDT PRESENCE optional },

...

}

M5ReportAmountMDT ::= ENUMERATED{r1, r2, r4, r8, r16, r32, r64, infinity, ...}

M5period ::= ENUMERATED {ms1024, ms2048, ms5120, ms10240, min1, ... }

M6Configuration ::= SEQUENCE {

m6report-Interval M6report-Interval,

m6-links-to-log Links-to-log,

iE-Extensions ProtocolExtensionContainer { { M6Configuration-ExtIEs} } OPTIONAL,

...

}

M6Configuration-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ ID id-M6ReportAmount CRITICALITY ignore EXTENSION M6ReportAmountMDT PRESENCE optional}|

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

...

}

M6ReportAmountMDT ::= ENUMERATED{r1, r2, r4, r8, r16, r32, r64, infinity, ...}

M6report-Interval ::= ENUMERATED { ms120, ms240, ms480, ms640, ms1024, ms2048, ms5120, ms10240, ms20480, ms40960, min1, min6, min12, min30,... }

M7Configuration ::= SEQUENCE {

m7period M7period,

m7-links-to-log Links-to-log,

iE-Extensions ProtocolExtensionContainer { { M7Configuration-ExtIEs} } OPTIONAL,

...

}

M7Configuration-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ ID id-M7ReportAmount CRITICALITY ignore EXTENSION M7ReportAmountMDT PRESENCE optional },

...

}

M7ReportAmountMDT ::= ENUMERATED{r1, r2, r4, r8, r16, r32, r64, infinity, ...}

M7period ::= INTEGER(1..60, ...)

MAC-I ::= BIT STRING (SIZE(16))

MaskedIMEISV ::= BIT STRING (SIZE(64))

MaxCHOpreparations ::= INTEGER (1..8, ...)

MaximumDataBurstVolume ::= INTEGER (0..4095, ..., 4096.. 2000000)

MaximumIPdatarate ::= SEQUENCE {

maxIPrate-UL MaxIPrate,

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

...

}

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

{ ID id-MaxIPrate-DL CRITICALITY ignore EXTENSION MaxIPrate PRESENCE optional},

...

}

MaxIPrate ::= ENUMERATED {

bitrate64kbs,

max-UErate,

...

}

MBSFNControlRegionLength ::= INTEGER (0..3)

MBSFNSubframeAllocation-E-UTRA ::= CHOICE {

oneframe BIT STRING (SIZE(6)),

fourframes BIT STRING (SIZE(24)),

choice-extension ProtocolIE-Single-Container { {MBSFNSubframeAllocation-E-UTRA-ExtIEs} }

}

MBSFNSubframeAllocation-E-UTRA-ExtIEs XNAP-PROTOCOL-IES ::= {

...

}

MBSFNSubframeInfo-E-UTRA ::= SEQUENCE (SIZE(1..maxnoofMBSFNEUTRA)) OF MBSFNSubframeInfo-E-UTRA-Item

MBSFNSubframeInfo-E-UTRA-Item ::= SEQUENCE {

radioframeAllocationPeriod ENUMERATED{n1,n2,n4,n8,n16,n32,...},

radioframeAllocationOffset INTEGER (0..7, ...),

subframeAllocation MBSFNSubframeAllocation-E-UTRA,

iE-Extensions ProtocolExtensionContainer { {MBSFNSubframeInfo-E-UTRA-Item-ExtIEs} } OPTIONAL,

...

}

MBSFNSubframeInfo-E-UTRA-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::={

...

}

MBS-FrequencySelectionArea-Identity ::= OCTET STRING (SIZE(3))

MBS-Area-Session-ID ::= INTEGER (0..65535, ...)

MBS-MappingandDataForwardingRequestInfofromSource ::= SEQUENCE (SIZE(1..maxnoofMRBs)) OF MBS-MappingandDataForwardingRequestInfofromSource-Item

MBS-MappingandDataForwardingRequestInfofromSource-Item ::= SEQUENCE {

mRB-ID MRB-ID,

mBS-QoSFlow-List MBS-QoSFlow-List,

mRB-ProgressInformation MRB-ProgressInformation OPTIONAL,

iE-Extensions ProtocolExtensionContainer { { MBS-MappingandDataForwardingRequestInfofromSource-Item-ExtIEs} } OPTIONAL,

...

}

MBS-MappingandDataForwardingRequestInfofromSource-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

MBS-DataForwarding-Indicator ::= ENUMERATED{mbs-only, ...}

MBS-DataForwardingResponseInfofromTarget ::= SEQUENCE (SIZE(1..maxnoofMRBs)) OF MBS-DataForwardingResponseInfofromTarget-Item

MBS-DataForwardingResponseInfofromTarget-Item ::= SEQUENCE {

mRB-ID MRB-ID,

dlForwardingUPTNL UPTransportLayerInformation,

mRB-ProgressInformation MRB-ProgressInformation OPTIONAL,

iE-Extensions ProtocolExtensionContainer { { MBS-DataForwardingResponseInfofromTarget-Item-ExtIEs} } OPTIONAL,

...

}

MBS-DataForwardingResponseInfofromTarget-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

MBS-QoSFlow-List ::= SEQUENCE (SIZE(1..maxnoofMBSQoSFlows)) OF QoSFlowIdentifier

MBS-QoSFlowsToAdd-List ::= SEQUENCE (SIZE(1..maxnoofMBSQoSFlows)) OF MBS-QoSFlowsToAdd-Item

MBS-QoSFlowsToAdd-Item ::= SEQUENCE {

mBS-QosFlowIdentifier QoSFlowIdentifier,

mBS-QosFlowLevelQosParameters QoSFlowLevelQoSParameters,

iE-Extensions ProtocolExtensionContainer { { MBS-QoSFlowsToAdd-Item-ExtIEs} } OPTIONAL,

...

}

MBS-QoSFlowsToAdd-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

MBS-ServiceArea ::= CHOICE {

locationindependent MBS-ServiceAreaInformation,

locationdependent MBS-ServiceAreaInformationList,

choice-extension ProtocolIE-Single-Container { {MBS-ServiceArea-ExtIEs} }

}

MBS-ServiceArea-ExtIEs XNAP-PROTOCOL-IES ::= {

...

}

MBS-ServiceAreaCell-List ::= SEQUENCE (SIZE(1.. maxnoofCellsforMBS)) OF NR-CGI

MBS-ServiceAreaInformation ::= SEQUENCE {

mBS-ServiceAreaCell-List MBS-ServiceAreaCell-List OPTIONAL,

mBS-ServiceAreaTAI-List MBS-ServiceAreaTAI-List OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {MBS-ServiceAreaInformation-ExtIEs} } OPTIONAL,

...

}

MBS-ServiceAreaInformation-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

MBS-ServiceAreaInformationList ::= SEQUENCE (SIZE(1..maxnoofMBSServiceAreaInformation)) OF MBS-ServiceAreaInformation-Item

MBS-ServiceAreaInformation-Item ::= SEQUENCE { mBS-Area-Session-ID MBS-Area-Session-ID,

mBS-ServiceAreaInformation MBS-ServiceAreaInformation,

iE-Extensions ProtocolExtensionContainer { { MBS-ServiceAreaInformation-Item-ExtIEs} } OPTIONAL,

...

}

MBS-ServiceAreaInformation-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

MBS-ServiceAreaTAI-List ::= SEQUENCE (SIZE(1.. maxnoofTAIforMBS)) OF MBS-ServiceAreaTAI-Item

MBS-ServiceAreaTAI-Item ::= SEQUENCE {

plmn-ID PLMN-Identity,

tAC TAC,

iE-Extensions ProtocolExtensionContainer { {MBS-ServiceAreaTAI-Item-ExtIEs} } OPTIONAL,

...

}

MBS-ServiceAreaTAI-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

MBS-Session-ID ::= SEQUENCE {

tMGI TMGI,

nID NID OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {MBS-Session-ID-ExtIEs} } OPTIONAL,

...

}

MBS-Session-ID-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

MBS-AssistanceInformation ::= ENUMERATED {true, ...}

MBS-SessionAssociatedInformation ::= SEQUENCE (SIZE(1..maxnoofAssociatedMBSSessions)) OF MBS-SessionAssociatedInformation-Item

MBS-SessionAssociatedInformation-Item ::= SEQUENCE {

mBS-Session-ID MBS-Session-ID,

associated-QoSFlowInfo-List Associated-QoSFlowInfo-List,

iE-Extensions ProtocolExtensionContainer { { MBS-SessionAssociatedInformation-Item-ExtIEs} } OPTIONAL,

...

}

MBS-SessionAssociatedInformation-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

MBS-SessionInformation-List ::= SEQUENCE (SIZE(1..maxnoofMBSSessions)) OF MBS-SessionInformation-Item

MBS-SessionInformation-Item ::= SEQUENCE {

mBS-Session-ID MBS-Session-ID,

mBS-Area-Session-ID MBS-Area-Session-ID OPTIONAL,

active-MBS-SessioInformation Active-MBS-SessionInformation OPTIONAL,

iE-Extensions ProtocolExtensionContainer { { MBS-SessionInformation-Item-ExtIEs} } OPTIONAL,

...

}

MBS-SessionInformation-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ ID id-MBS-AssistanceInformation CRITICALITY ignore EXTENSION MBS-AssistanceInformation PRESENCE optional },

...

}

MBS-SessionInformationResponse-List ::= SEQUENCE (SIZE(1..maxnoofMBSSessions)) OF MBS-SessionInformationResponse-Item

MBS-SessionInformationResponse-Item ::= SEQUENCE {

mBS-Session-ID MBS-Session-ID,

mBS-DataForwardingResponseInfofromTarget MBS-DataForwardingResponseInfofromTarget OPTIONAL,

iE-Extensions ProtocolExtensionContainer { { MBS-SessionInformationResponse-Item-ExtIEs} } OPTIONAL,

...

}

MBS-SessionInformationResponse-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

MRB-ID ::= INTEGER (1..512, ...)

MRB-ProgressInformation ::= CHOICE {

pdcp-SN12 INTEGER (0..4095),

pdcp-SN18 INTEGER (0..262143),

choice-extension ProtocolIE-Single-Container { { MRB-ProgressInformation-ExtIEs} }

}

MRB-ProgressInformation-ExtIEs XNAP-PROTOCOL-IES ::= {

...

}

MDT-Activation ::= ENUMERATED {

immediate-MDT-only,

immediate-MDT-and-Trace,

logged-MDT-only,

...

}

MDT-Configuration ::= SEQUENCE {

mDT-Configuration-NR MDT-Configuration-NR OPTIONAL,

mDT-Configuration-EUTRA MDT-Configuration-EUTRA OPTIONAL,

iE-Extensions ProtocolExtensionContainer { { MDT-Configuration-ExtIEs} } OPTIONAL,

...

}

MDT-Configuration-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ ID id-MN-only-MDT-collection CRITICALITY ignore EXTENSION MN-only-MDT-collection PRESENCE optional },

...

}

MN-only-MDT-collection ::= ENUMERATED {

mN-Only,

...

}

MDT-Configuration-NR ::= SEQUENCE {

mdt-Activation MDT-Activation,

areaScopeOfMDT-NR AreaScopeOfMDT-NR OPTIONAL,

mDTMode-NR MDTMode-NR,

signallingBasedMDTPLMNList MDTPLMNList OPTIONAL,

iE-Extensions ProtocolExtensionContainer { { MDT-Configuration-NR-ExtIEs} } OPTIONAL,

...

}

MDT-Configuration-NR-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ID id-PNI-NPN-AreaScopeofMDT CRITICALITY ignore EXTENSION PNI-NPN-AreaScopeofMDT PRESENCE optional },

...

}

MDT-Configuration-EUTRA ::= SEQUENCE {

mdt-Activation MDT-Activation,

areaScopeOfMDT-EUTRA AreaScopeOfMDT-EUTRA OPTIONAL,

mDTMode-EUTRA MDTMode-EUTRA,

signallingBasedMDTPLMNList MDTPLMNList,

iE-Extensions ProtocolExtensionContainer { { MDT-Configuration-EUTRA-ExtIEs} } OPTIONAL,

...

}

MDT-Configuration-EUTRA-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

MDT-Location-Info ::= BIT STRING (SIZE (8))

MDTPLMNList ::= SEQUENCE (SIZE(1..maxnoofMDTPLMNs)) OF PLMN-Identity

MDTPLMNModificationList ::= SEQUENCE (SIZE(0..maxnoofMDTPLMNs)) OF PLMN-Identity

MDTMode-NR ::= CHOICE {

immediateMDT ImmediateMDT-NR,

loggedMDT LoggedMDT-NR,

...,

mDTMode-NR-Extension MDTMode-NR-Extension

}

MDTMode-NR-Extension ::= ProtocolIE-Single-Container {{ MDTMode-NR-ExtensionIE }}

MDTMode-NR-ExtensionIE XNAP-PROTOCOL-IES ::= {

...

}

MDTMode-EUTRA ::= OCTET STRING

MeasObjectContainer ::= OCTET STRING

MeasurementsToActivate ::= BIT STRING (SIZE (8))

MeasurementThresholdA2 ::= CHOICE {

threshold-RSRP Threshold-RSRP,

threshold-RSRQ Threshold-RSRQ,

threshold-SINR Threshold-SINR,

choice-extension ProtocolIE-Single-Container { { MeasurementThresholdA2-ExtIEs} }

}

MeasurementThresholdA2-ExtIEs XNAP-PROTOCOL-IES ::= {

...

}

Measurement-ID ::= INTEGER (1..4095,...)

MIMOPRBusageInformation ::= SEQUENCE {

dl-GBR-PRB-usage-for-MIMO DL-GBR-PRB-usage-for-MIMO,

ul-GBR-PRB-usage-for-MIMO UL-GBR-PRB-usage-for-MIMO,

dl-non-GBR-PRB-usage-for-MIMO DL-non-GBR-PRB-usage-for-MIMO,

ul-non-GBR-PRB-usage-for-MIMO UL-non-GBR-PRB-usage-for-MIMO,

dl-Total-PRB-usage-for-MIMO DL-Total-PRB-usage-for-MIMO,

ul-Total-PRB-usage-for-MIMO UL-Total-PRB-usage-for-MIMO,

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

...

}

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

...

}

MobileIAB-AuthorizationStatus ::= ENUMERATED {authorized, not-authorized,...}

MobileIABCell ::= ENUMERATED {

true,

...

}

MobilityInformation ::= BIT STRING (SIZE(32))

MobilityParametersModificationRange ::= SEQUENCE {

handoverTriggerChangeLowerLimit INTEGER (-20..20),

handoverTriggerChangeUpperLimit INTEGER (-20..20),

...

}

MobilityParametersInformation ::= SEQUENCE {

handoverTriggerChange INTEGER (-20..20),

...

}

MobilityRestrictionList ::= SEQUENCE {

serving-PLMN PLMN-Identity,

equivalent-PLMNs SEQUENCE (SIZE(1..maxnoofEPLMNs)) OF PLMN-Identity OPTIONAL,

rat-Restrictions RAT-RestrictionsList OPTIONAL,

forbiddenAreaInformation ForbiddenAreaList OPTIONAL,

serviceAreaInformation ServiceAreaList OPTIONAL,

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

...

}

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

{ ID id-LastE-UTRANPLMNIdentity CRITICALITY ignore EXTENSION PLMN-Identity PRESENCE optional }|

{ ID id-CNTypeRestrictionsForServing CRITICALITY ignore EXTENSION CNTypeRestrictionsForServing PRESENCE optional }|

{ ID id-CNTypeRestrictionsForEquivalent CRITICALITY ignore EXTENSION CNTypeRestrictionsForEquivalent PRESENCE optional }|

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

...

}

CNTypeRestrictionsForEquivalent ::= SEQUENCE (SIZE(1..maxnoofEPLMNs)) OF CNTypeRestrictionsForEquivalentItem

CNTypeRestrictionsForEquivalentItem ::= SEQUENCE {

plmn-Identity PLMN-Identity,

cn-Type ENUMERATED {epc-forbidden, fiveGC-forbidden, ...},

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

...

}

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

...

}

CNTypeRestrictionsForServing ::= ENUMERATED {

epc-forbidden,

...

}

RAT-RestrictionsList ::= SEQUENCE (SIZE(1..maxnoofPLMNs)) OF RAT-RestrictionsItem

RAT-RestrictionsItem ::= SEQUENCE {

plmn-Identity PLMN-Identity,

rat-RestrictionInformation RAT-RestrictionInformation,

iE-Extensions ProtocolExtensionContainer { {RAT-RestrictionsItem-ExtIEs} } OPTIONAL,

...

}

RAT-RestrictionsItem-ExtIEs XNAP-PROTOCOL-EXTENSION ::={

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

...

}

RAT-RestrictionInformation ::= BIT STRING {e-UTRA (0),nR (1), nR-unlicensed (2), nR-LEO (3), nR-MEO (4), nR-GEO (5), nR-OTHERSAT (6)} (SIZE(8, ...))

ForbiddenAreaList ::= SEQUENCE (SIZE(1..maxnoofPLMNs)) OF ForbiddenAreaItem

ForbiddenAreaItem ::= SEQUENCE {

plmn-Identity PLMN-Identity,

forbidden-TACs SEQUENCE (SIZE(1..maxnoofForbiddenTACs)) OF TAC,

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

...

}

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

...

}

ServiceAreaList ::= SEQUENCE (SIZE(1..maxnoofPLMNs)) OF ServiceAreaItem

ServiceAreaItem ::= SEQUENCE {

plmn-Identity PLMN-Identity,

allowed-TACs-ServiceArea SEQUENCE (SIZE(1..maxnoofAllowedAreas)) OF TAC OPTIONAL,

not-allowed-TACs-ServiceArea SEQUENCE (SIZE(1..maxnoofAllowedAreas)) OF TAC OPTIONAL,

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

...

}

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

...

}

MR-DC-ResourceCoordinationInfo ::= SEQUENCE {

ng-RAN-Node-ResourceCoordinationInfo NG-RAN-Node-ResourceCoordinationInfo,

iE-Extension ProtocolExtensionContainer { {MR-DC-ResourceCoordinationInfo-ExtIEs}} OPTIONAL,

...

}

MR-DC-ResourceCoordinationInfo-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

NG-RAN-Node-ResourceCoordinationInfo ::= CHOICE {

eutra-resource-coordination-info E-UTRA-ResourceCoordinationInfo,

nr-resource-coordination-info NR-ResourceCoordinationInfo

}

E-UTRA-ResourceCoordinationInfo ::= SEQUENCE {

e-utra-cell E-UTRA-CGI,

ul-coordination-info BIT STRING (SIZE (6..4400)),

dl-coordination-info BIT STRING (SIZE (6..4400)) OPTIONAL,

nr-cell NR-CGI OPTIONAL,

e-utra-coordination-assistance-info E-UTRA-CoordinationAssistanceInfo OPTIONAL,

iE-Extension ProtocolExtensionContainer { {E-UTRA-ResourceCoordinationInfo-ExtIEs} } OPTIONAL,

...

}

E-UTRA-ResourceCoordinationInfo-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

E-UTRA-CoordinationAssistanceInfo ::= ENUMERATED {coordination-not-required, ...}

NR-ResourceCoordinationInfo ::= SEQUENCE {

nr-cell NR-CGI,

ul-coordination-info BIT STRING (SIZE (6..4400)),

dl-coordination-info BIT STRING (SIZE (6..4400)) OPTIONAL,

e-utra-cell E-UTRA-CGI OPTIONAL,

nr-coordination-assistance-info NR-CoordinationAssistanceInfo OPTIONAL,

iE-Extension ProtocolExtensionContainer { {NR-ResourceCoordinationInfo-ExtIEs} } OPTIONAL,

...

}

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

...

}

NR-CoordinationAssistanceInfo ::= ENUMERATED {coordination-not-required, ...}

MessageOversizeNotification ::= SEQUENCE {

maximumCellListSize MaximumCellListSize,

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

...

}

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

...

}

MaximumCellListSize ::= INTEGER(1..16384, ...)

MT-SDT-Information ::= SEQUENCE {

mT-SDT-Indicator MT-SDT-Indicator,

mT-SDT-DataSize MT-SDT-DataSize,

iE-Extensions ProtocolExtensionContainer { { MT-SDT-Information-ExtIEs} } OPTIONAL,

...

}

MT-SDT-Information-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

MT-SDT-DataSize ::= INTEGER (1..96000, ...)

MT-SDT-Indicator ::= ENUMERATED {true, ...}

MultiplexingInfo ::= SEQUENCE{

iAB-MT-Cell-List IAB-MT-Cell-List,

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

...

}

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

...

}

MeasuredUETrajectory ::= SEQUENCE (SIZE(1..maxnoofCellsTrajectory)) OF MeasuredUETrajectory-Item

MeasuredUETrajectory-Item ::= SEQUENCE{

measuredtrajectoryCellInfo MeasuredTrajectoryCellInfo,

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

...

}

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

...

}

MeasuredTrajectoryCellInfo ::= CHOICE {

nG-RAN-Cell MeasuredTrajectoryNGRANCellInfo,

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

}

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

...

}

MeasuredTrajectoryNGRANCellInfo ::= SEQUENCE {

globalNG-RANCell-ID GlobalNG-RANCell-ID,

timeUEStaysInCell INTEGER (0..4095),

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

...

}

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

...

}

MultipleTargetSN-List ::= SEQUENCE (SIZE(1..maxnoofTargetSNs)) OF MultipleTargetSN-Item

MultipleTargetSN-Item ::= SEQUENCE {

lTM-CandidatePSCellList LTM-CandidatePSCell-List OPTIONAL,

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

...

}

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

...

}

MultipleTargetSNChangeConfirm-List ::= SEQUENCE (SIZE(1..maxnoofTargetSNs)) OF MultipleTargetSNChangeConfirm-Item

MultipleTargetSNChangeConfirm-Item ::= SEQUENCE {

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

lTM-CandidatePSCellList LTM-CandidatePSCell-List,

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

...

}

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

...

}

MultipleTargetSNChangeRequired-List ::= SEQUENCE (SIZE(1..maxnoofTargetSNs)) OF MultipleTargetSNChangeRequired-Item

MultipleTargetSNChangeRequired-Item ::= SEQUENCE {

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

suggestedLTMCandidatePSCellList SuggestedLTMCandidatePSCell-List OPTIONAL,

sN-to-MN-Container OCTET STRING,

maxNrofPSCellsToPrepare MaxNrofPSCellsToPrepare,

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

...

}

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

...

}

-- N

N6JitterInformation ::= SEQUENCE {

n6JitterLowerBound INTEGER (-127..127),

n6JitterUpperBound INTEGER (-127..127),

iE-Extensions ProtocolExtensionContainer { { N6JitterInformationExtIEs } } OPTIONAL,

...

}

N6JitterInformationExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

NACellResourceConfigurationList ::= SEQUENCE (SIZE(1..maxnoofHSNASlots)) OF NACellResourceConfiguration-Item

NACellResourceConfiguration-Item ::= SEQUENCE {

nAdownlink ENUMERATED {true, false, ...} OPTIONAL,

nAuplink ENUMERATED {true, false, ...} OPTIONAL,

nAflexible ENUMERATED {true, false, ...} OPTIONAL,

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

...

}

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

...

}

NBIoT-UL-DL-AlignmentOffset ::= ENUMERATED {

khz-7dot5,

khz0,

khz7dot5,

...

}

NE-DC-TDM-Pattern ::= SEQUENCE {

subframeAssignment ENUMERATED {sa0,sa1,sa2,sa3,sa4,sa5,sa6},

harqOffset INTEGER (0..9),

iE-Extension ProtocolExtensionContainer { {NE-DC-TDM-Pattern-ExtIEs}} OPTIONAL,

...

}

NE-DC-TDM-Pattern-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

NeighbourInformation-E-UTRA ::= SEQUENCE (SIZE(1..maxnoofNeighbours)) OF NeighbourInformation-E-UTRA-Item

NeighbourInformation-E-UTRA-Item ::= SEQUENCE {

e-utra-PCI E-UTRAPCI,

e-utra-cgi E-UTRA-CGI,

earfcn E-UTRAARFCN,

tac TAC,

ranac RANAC OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {NeighbourInformation-E-UTRA-Item-ExtIEs} } OPTIONAL,

...

}

NeighbourInformation-E-UTRA-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::={

...

}

NeighbourInformation-NR ::= SEQUENCE (SIZE(1..maxnoofNeighbours)) OF NeighbourInformation-NR-Item

NeighbourInformation-NR-Item ::= SEQUENCE {

nr-PCI NRPCI,

nr-cgi NR-CGI,

tac TAC,

ranac RANAC OPTIONAL,

nr-mode-info NeighbourInformation-NR-ModeInfo,

connectivitySupport Connectivity-Support,

measurementTimingConfiguration OCTET STRING,

iE-Extensions ProtocolExtensionContainer { {NeighbourInformation-NR-Item-ExtIEs} } OPTIONAL,

...

}

NeighbourInformation-NR-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::={

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

...

}

NeighbourInformation-NR-ModeInfo ::= CHOICE {

fdd-info NeighbourInformation-NR-ModeFDDInfo,

tdd-info NeighbourInformation-NR-ModeTDDInfo,

choice-extension ProtocolIE-Single-Container { {NeighbourInformation-NR-ModeInfo-ExtIEs} }

}

NeighbourInformation-NR-ModeInfo-ExtIEs XNAP-PROTOCOL-IES ::= {

...

}

NeighbourInformation-NR-ModeFDDInfo ::= SEQUENCE {

ul-NR-FreqInfo NRFrequencyInfo,

dl-NR-FequInfo NRFrequencyInfo,

ie-Extensions ProtocolExtensionContainer { {NeighbourInformation-NR-ModeFDDInfo-ExtIEs} } OPTIONAL,

...

}

NeighbourInformation-NR-ModeFDDInfo-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

NeighbourInformation-NR-ModeTDDInfo ::= SEQUENCE {

nr-FreqInfo NRFrequencyInfo,

ie-Extensions ProtocolExtensionContainer { {NeighbourInformation-NR-ModeTDDInfo-ExtIEs} } OPTIONAL,

...

}

NeighbourInformation-NR-ModeTDDInfo-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

Neighbour-NG-RAN-Node-List ::= SEQUENCE (SIZE(0..maxnoofNeighbour-NG-RAN-Nodes)) OF Neighbour-NG-RAN-Node-Item

Neighbour-NG-RAN-Node-Item ::= SEQUENCE {

globalNG-RANNodeID GlobalNG-RANNode-ID,

local-NG-RAN-Node-Identifier Local-NG-RAN-Node-Identifier,

ie-Extensions ProtocolExtensionContainer { {Neighbour-NG-RAN-Node-Item-ExtIEs} } OPTIONAL,

...

}

Neighbour-NG-RAN-Node-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

NID ::= BIT STRING (SIZE(44))

NRCarrierList ::= SEQUENCE (SIZE(1..maxnoofNRSCSs)) OF NRCarrierItem

NRCarrierItem ::= SEQUENCE {

carrierSCS NRSCS,

offsetToCarrier INTEGER (0..2199, ...),

carrierBandwidth INTEGER (0..maxnoofPhysicalResourceBlocks, ...),

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

...

}

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

...

}

NRCellPRACHConfig ::= OCTET STRING

NG-RAN-Cell-Identity ::= CHOICE {

nr NR-Cell-Identity,

e-utra E-UTRA-Cell-Identity,

choice-extension ProtocolIE-Single-Container { {NG-RAN-Cell-Identity-ExtIEs} }

}

NG-RAN-Cell-Identity-ExtIEs XNAP-PROTOCOL-IES ::= {

...

}

NG-RAN-CellPCI ::= CHOICE {

nr NRPCI,

e-utra E-UTRAPCI,

choice-extension ProtocolIE-Single-Container { {NG-RAN-CellPCI-ExtIEs} }

}

NG-RAN-CellPCI-ExtIEs XNAP-PROTOCOL-IES ::= {

...

}

NG-RANnode2SSBOffsetsModificationRange ::= SEQUENCE (SIZE(1..maxnoofSSBAreas)) OF SSBOffsetModificationRange

NG-RANnodeUEXnAPID ::= INTEGER (0.. 4294967295)

NumberofActiveUEs::= INTEGER(0..16777215, ...)

NodeAssociatedInfoResult ::= SEQUENCE {

energyCost EnergyCost OPTIONAL,

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

...

}

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

...

}

NodeMeasurementInitiationResult-List ::= SEQUENCE (SIZE(1..maxFailedMeasPerNode)) OF NodeMeasurementInitiationResult-Item

NodeMeasurementInitiationResult-Item ::= SEQUENCE {

nodemeasurementFailedReportCharacteristics BIT STRING(SIZE(32)),

cause Cause,

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

...

}

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

...

}

NoofRRCConnections ::= INTEGER (1..65536,...)

NonDynamic5QIDescriptor ::= SEQUENCE {

fiveQI FiveQI,

priorityLevelQoS PriorityLevelQoS OPTIONAL,

averagingWindow AveragingWindow OPTIONAL,

maximumDataBurstVolume MaximumDataBurstVolume OPTIONAL,

iE-Extension ProtocolExtensionContainer { {NonDynamic5QIDescriptor-ExtIEs } } OPTIONAL,

...

}

NonDynamic5QIDescriptor-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ ID id-CNPacketDelayBudgetDownlink CRITICALITY ignore EXTENSION ExtendedPacketDelayBudget PRESENCE optional}|

{ ID id-CNPacketDelayBudgetUplink CRITICALITY ignore EXTENSION ExtendedPacketDelayBudget PRESENCE optional},

...

}

NRARFCN ::= INTEGER (0.. maxNRARFCN)

NG-eNB-RadioResourceStatus ::= SEQUENCE {

dL-GBR-PRB-usage DL-GBR-PRB-usage,

uL-GBR-PRB-usage UL-GBR-PRB-usage,

dL-non-GBR-PRB-usage DL-non-GBR-PRB-usage,

uL-non-GBR-PRB-usage UL-non-GBR-PRB-usage,

dL-Total-PRB-usage DL-Total-PRB-usage,

uL-Total-PRB-usage UL-Total-PRB-usage,

iE-Extensions ProtocolExtensionContainer { { NG-eNB-RadioResourceStatus-ExtIEs} } OPTIONAL,

...

}

NG-eNB-RadioResourceStatus-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ ID id-DL-scheduling-PDCCH-CCE-usage CRITICALITY ignore EXTENSION DL-scheduling-PDCCH-CCE-usage PRESENCE optional}|

{ ID id-UL-scheduling-PDCCH-CCE-usage CRITICALITY ignore EXTENSION UL-scheduling-PDCCH-CCE-usage PRESENCE optional},

...

}

DL-scheduling-PDCCH-CCE-usage ::= INTEGER (0.. 100)

UL-scheduling-PDCCH-CCE-usage ::= INTEGER (0.. 100)

TNLCapacityIndicator ::= SEQUENCE {

dLTNLOfferedCapacity OfferedCapacity,

dLTNLAvailableCapacity AvailableCapacity,

uLTNLOfferedCapacity OfferedCapacity,

uLTNLAvailableCapacity AvailableCapacity,

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

...

}

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

...

}

Non-F1-TerminatingTopologyBHInformation ::= SEQUENCE {

nonF1TerminatingBHInformation-List NonF1TerminatingBHInformation-List,

bAPControlPDURLCCH-List BAPControlPDURLCCH-List OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {Non-F1-TerminatingTopologyBHInformation-ExtIEs} } OPTIONAL,

...

}

Non-F1-TerminatingTopologyBHInformation-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

NonF1TerminatingBHInformation-List ::= SEQUENCE (SIZE(1..maxnoofBHInfo)) OF NonF1TerminatingBHInformation-Item

NonF1TerminatingBHInformation-Item ::= SEQUENCE {

bHInfoIndex BHInfoIndex,

dlNon-F1TerminatingBHInfo DLNonF1Terminating-BHInfo OPTIONAL,

ulNon-F1TerminatingBHInfo ULNonF1Terminating-BHInfo OPTIONAL,

iE-Extension ProtocolExtensionContainer { { NonF1TerminatingBHInformation-Item-ExtIEs} } OPTIONAL,

...

}

NonF1TerminatingBHInformation-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

NonUPTraffic ::= CHOICE {

nonUPTrafficType NonUPTrafficType,

controlPlaneTrafficType ControlPlaneTrafficType,

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

}

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

...

}

NonUPTrafficType ::= ENUMERATED {ueassociatedf1ap, nonueassociatedf1ap, nonf1, ...}

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

NPN-Broadcast-Information ::= CHOICE {

snpn-Information NPN-Broadcast-Information-SNPN,

pni-npn-Information NPN-Broadcast-Information-PNI-NPN,

choice-extension ProtocolIE-Single-Container { {NPN-Broadcast-Information-ExtIEs} }

}

NPN-Broadcast-Information-ExtIEs XNAP-PROTOCOL-IES ::= {

...

}

NPN-Broadcast-Information-SNPN ::= SEQUENCE {

broadcastSNPNID-List BroadcastSNPNID-List,

iE-Extension ProtocolExtensionContainer { {NPN-Broadcast-Information-SNPN-ExtIEs} } OPTIONAL,

...

}

NPN-Broadcast-Information-SNPN-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

NPN-Broadcast-Information-PNI-NPN ::= SEQUENCE {

broadcastPNI-NPN-ID-Information BroadcastPNI-NPN-ID-Information,

iE-Extension ProtocolExtensionContainer { {NPN-Broadcast-Information-PNI-NPN-ExtIEs} } OPTIONAL,

...

}

NPN-Broadcast-Information-PNI-NPN-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

NPNMobilityInformation::= CHOICE {

snpn-mobility-information NPNMobilityInformation-SNPN,

pni-npn-mobility-information NPNMobilityInformation-PNI-NPN,

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

}

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

...

}

NPNMobilityInformation-SNPN ::= SEQUENCE {

serving-NID NID,

iE-Extension ProtocolExtensionContainer { {NPNMobilityInformation-SNPN-ExtIEs} } OPTIONAL,

...

}

NPNMobilityInformation-SNPN-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

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

...

}

NPNMobilityInformation-PNI-NPN ::= SEQUENCE {

allowedPNI-NPN-ID-List AllowedPNI-NPN-ID-List,

iE-Extension ProtocolExtensionContainer { {NPNMobilityInformation-PNI-NPN-ExtIEs} } OPTIONAL,

...

}

NPNMobilityInformation-PNI-NPN-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

NPNPagingAssistanceInformation ::= CHOICE {

pni-npn-Information NPNPagingAssistanceInformation-PNI-NPN,

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

}

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

...

}

NPNPagingAssistanceInformation-PNI-NPN ::= SEQUENCE {

allowedPNI-NPN-ID-List AllowedPNI-NPN-ID-List,

iE-Extension ProtocolExtensionContainer { {NPNPagingAssistanceInformation-PNI-NPN-ExtIEs} } OPTIONAL,

...

}

NPNPagingAssistanceInformation-PNI-NPN-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

NPN-Support ::= CHOICE {

sNPN NPN-Support-SNPN,

choice-Extensions ProtocolIE-Single-Container { {NPN-Support-ExtIEs} }

}

NPN-Support-ExtIEs XNAP-PROTOCOL-IES ::= {

...

}

NPN-Support-SNPN ::= SEQUENCE {

nid NID,

ie-Extension ProtocolExtensionContainer { {NPN-Support-SNPN-ExtIEs} } OPTIONAL,

...

}

NPN-Support-SNPN-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

NPRACHConfiguration::= SEQUENCE {

fdd-or-tdd CHOICE {

fdd NPRACHConfiguration-FDD,

tdd NPRACHConfiguration-TDD,

choice-extension ProtocolIE-Single-Container { { FDD-or-TDD-in-NPRACHConfiguration-Choice-ExtIEs} }

},

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

...

}

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

...

}

FDD-or-TDD-in-NPRACHConfiguration-Choice-ExtIEs XNAP-PROTOCOL-IES ::= {

...

}

NPRACHConfiguration-FDD::= SEQUENCE {

nprach-CP-length NPRACH-CP-Length,

anchorCarrier-NPRACHConfig OCTET STRING,

anchorCarrier-EDT-NPRACHConfig OCTET STRING OPTIONAL,

anchorCarrier-Format2-NPRACHConfig OCTET STRING OPTIONAL,

anchorCarrier-Format2-EDT-NPRACHConfig OCTET STRING OPTIONAL,

non-anchorCarrier-NPRACHConfig OCTET STRING OPTIONAL,

non-anchorCarrier-Format2-NPRACHConfig OCTET STRING OPTIONAL,

iE-Extensions ProtocolExtensionContainer { { NPRACHConfiguration-FDD-ExtIEs} } OPTIONAL,

...

}

NPRACHConfiguration-FDD-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

NPRACHConfiguration-TDD::= SEQUENCE {

nprach-preambleFormat NPRACH-preambleFormat,

anchorCarrier-NPRACHConfigTDD OCTET STRING,

non-anchorCarrierFequencyConfiglist Non-AnchorCarrierFrequencylist OPTIONAL,

non-anchorCarrier-NPRACHConfigTDD OCTET STRING OPTIONAL,

iE-Extensions ProtocolExtensionContainer { { NPRACHConfiguration-TDD-ExtIEs} } OPTIONAL,

...

}

NPRACHConfiguration-TDD-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

NPRACH-CP-Length::= ENUMERATED {

us66dot7,

us266dot7,

...

}

NPRACH-preambleFormat::= ENUMERATED {fmt0,fmt1,fmt2,fmt0a,fmt1a,...}

Non-AnchorCarrierFrequencylist ::= SEQUENCE (SIZE(1..maxnoofNonAnchorCarrierFreqConfig)) OF

SEQUENCE {

non-anchorCarrierFrquency OCTET STRING,

iE-Extensions ProtocolExtensionContainer { { Non-AnchorCarrierFrequencylist-ExtIEs} } OPTIONAL,

...

}

Non-AnchorCarrierFrequencylist-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

NR-Cell-Identity ::= BIT STRING (SIZE (36))

NG-RAN-Cell-Identity-ListinRANPagingArea ::= SEQUENCE (SIZE (1..maxnoofCellsinRNA)) OF NG-RAN-Cell-Identity

NR-CGI ::= SEQUENCE {

plmn-id PLMN-Identity,

nr-CI NR-Cell-Identity,

iE-Extension ProtocolExtensionContainer { {NR-CGI-ExtIEs} } OPTIONAL,

...

}

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

...

}

NR-U-Channel-List ::= SEQUENCE (SIZE (1..maxnoofNR-UChannelIDs)) OF NR-U-Channel-Item

NR-U-Channel-Item ::= SEQUENCE {

nR-U-ChannelID NR-U-ChannelID,

channelOccupancyTimePercentageDL ChannelOccupancyTimePercentage,

energyDetectionThresholdDL EnergyDetectionThreshold,

iE-Extension ProtocolExtensionContainer { {NR-U-Channel-Item-ExtIEs} } OPTIONAL,

...

}

NR-U-Channel-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ ID id-ChannelOccupancyTimePercentageUL CRITICALITY ignore EXTENSION ChannelOccupancyTimePercentage PRESENCE optional}|

{ ID id-EnergyDetectionThresholdUL CRITICALITY ignore EXTENSION EnergyDetectionThreshold PRESENCE optional}|

{ ID id-RadioResourceStatusNR-U CRITICALITY ignore EXTENSION RadioResourceStatusNR-U PRESENCE optional},

...

}

NR-U-ChannelID ::= INTEGER (1..maxnoofNR-UChannelIDs, ...)

ChannelOccupancyTimePercentage ::= INTEGER (0..100,...)

EnergyDetectionThreshold ::= INTEGER (-100..-50, ...)

NR-U-ChannelInfo-List ::= SEQUENCE (SIZE (1..maxnoofNR-UChannelIDs)) OF NR-U-ChannelInfo-Item

NR-U-ChannelInfo-Item ::= SEQUENCE {

nR-U-ChannelID NR-U-ChannelID,

nRARFCN NRARFCN,

bandwidth Bandwidth,

iE-Extension ProtocolExtensionContainer { {NR-U-ChannelInfo-Item-ExtIEs} } OPTIONAL,

...

}

NR-U-ChannelInfo-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

Bandwidth ::= ENUMERATED{mhz10, mhz20, mhz40, mhz60, mhz80, ...,mhz100}

NRA2XServicesAuthorized ::= SEQUENCE {

aerialUE AerialUE OPTIONAL,

aerialControllerUE AerialControllerUE OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {NRA2XServicesAuthorized-ExtIEs} } OPTIONAL,

...

}

NRA2XServicesAuthorized-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

NRCyclicPrefix ::= ENUMERATED {normal, extended, ...}

NRDL-ULTransmissionPeriodicity ::= ENUMERATED {ms0p5, ms0p625, ms1, ms1p25, ms2, ms2p5, ms3, ms4, ms5, ms10, ms20, ms40, ms60, ms80, ms100, ms120, ms140, ms160, ...}

NRFrequencyBand ::= INTEGER (1..1024, ...)

NRFrequencyBand-List ::= SEQUENCE (SIZE(1..maxnoofNRCellBands)) OF NRFrequencyBandItem

NRFrequencyBandItem ::= SEQUENCE {

nr-frequency-band NRFrequencyBand,

supported-SUL-Band-List SupportedSULBandList OPTIONAL,

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

...

}

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

...

}

NRFrequencyInfo ::= SEQUENCE {

nrARFCN NRARFCN,

sul-information SUL-Information OPTIONAL,

frequencyBand-List NRFrequencyBand-List,

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

...

}

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

{ ID id-FrequencyShift7p5khz CRITICALITY ignore EXTENSION FrequencyShift7p5khz PRESENCE optional },...

}

NRMobilityHistoryReport ::= OCTET STRING

NRModeInfo ::= CHOICE {

fdd NRModeInfoFDD,

tdd NRModeInfoTDD,

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

}

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

...

}

NRModeInfoFDD ::= SEQUENCE {

ulNRFrequencyInfo NRFrequencyInfo,

dlNRFrequencyInfo NRFrequencyInfo,

ulNRTransmissonBandwidth NRTransmissionBandwidth,

dlNRTransmissonBandwidth NRTransmissionBandwidth,

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

...

}

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

{ ID id-ULCarrierList CRITICALITY ignore EXTENSION NRCarrierList PRESENCE optional }|

{ ID id-DLCarrierList CRITICALITY ignore EXTENSION NRCarrierList PRESENCE optional }|

{ ID id-UL-GNB-DU-Cell-Resource-Configuration CRITICALITY ignore EXTENSION GNB-DU-Cell-Resource-Configuration PRESENCE optional }|

{ ID id-DL-GNB-DU-Cell-Resource-Configuration CRITICALITY ignore EXTENSION GNB-DU-Cell-Resource-Configuration PRESENCE optional },

...

}

NRModeInfoTDD ::= SEQUENCE {

nrFrequencyInfo NRFrequencyInfo,

nrTransmissonBandwidth NRTransmissionBandwidth,

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

...

}

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

{ ID id-IntendedTDD-DL-ULConfiguration-NR CRITICALITY ignore EXTENSION IntendedTDD-DL-ULConfiguration-NR PRESENCE optional }|

{ ID id-TDDULDLConfigurationCommonNR CRITICALITY ignore EXTENSION TDDULDLConfigurationCommonNR PRESENCE optional }|

{ ID id-CarrierList CRITICALITY ignore EXTENSION NRCarrierList PRESENCE optional }|

{ ID id-tdd-GNB-DU-Cell-Resource-Configuration CRITICALITY ignore EXTENSION GNB-DU-Cell-Resource-Configuration PRESENCE optional }|

{ ID id-Transmission-Bandwidth-asymmetric CRITICALITY ignore EXTENSION Transmission-Bandwidth-asymmetric PRESENCE optional },

...

}

NRNRB ::= ENUMERATED { nrb11, nrb18, nrb24, nrb25, nrb31, nrb32, nrb38, nrb51, nrb52, nrb65, nrb66, nrb78, nrb79, nrb93, nrb106, nrb107, nrb121, nrb132, nrb133, nrb135, nrb160, nrb162, nrb189, nrb216, nrb217, nrb245, nrb264, nrb270, nrb273, ..., nrb33, nrb62, nrb124, nrb148, nrb248, nrb44, nrb58, nrb92, nrb119, nrb188, nrb242, nrb15}

NRPagingeDRXInformation ::= SEQUENCE {

nRPaging-eDRX-Cycle NRPaging-eDRX-Cycle,

nRPaging-Time-Window NRPaging-Time-Window OPTIONAL,

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

...

}

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

...

}

NRPaging-eDRX-Cycle ::= ENUMERATED {

hfquarter, hfhalf, hf1, hf2, hf4,

hf8, hf16,

hf32, hf64, hf128, hf256,

hf512, hf1024,

...

}

NRPaging-Time-Window ::= ENUMERATED {

s1, s2, s3, s4, s5,

s6, s7, s8, s9, s10,

s11, s12, s13, s14, s15, s16,

...,s17, s18, s19, s20, s21, s22,

s23, s24, s25, s26, s27, s28, s29,

s30, s31, s32

}

NRPagingeDRXInformationforRRCINACTIVE ::= SEQUENCE {

nRPaging-eDRX-Cycle-Inactive NRPaging-eDRX-Cycle-Inactive,

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

...

}

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

...

}

NRPaging-eDRX-Cycle-Inactive ::= ENUMERATED {

hfquarter, hfhalf, hf1,

...

}

NRPagingLongeDRXInformationforRRCINACTIVE ::= SEQUENCE {

nRPaging-long-eDRX-Cycle-Inactive NRPaging-long-eDRX-Cycle-Inactive,

nRPaging-Time-Window-Inactive NRPaging-Time-Window-Inactive,

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

...

}

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

...

}

NRPaging-long-eDRX-Cycle-Inactive ::= ENUMERATED {

hf2, hf4, hf8, hf16,

hf32, hf64, hf128, hf256,

hf512, hf1024,

...

}

NRPaging-Time-Window-Inactive ::= ENUMERATED {

s1, s2, s3, s4, s5,

s6, s7, s8, s9, s10,

s11, s12, s13, s14, s15, s16,

s17, s18, s19, s20, s21, s22,

s23, s24, s25, s26, s27, s28, s29,

s30, s31, s32, ...

}

NRPCI ::= INTEGER (0..1007, ...)

NRSCS ::= ENUMERATED { scs15, scs30, scs60, scs120, ..., scs480, scs960}

NRTransmissionBandwidth ::= SEQUENCE {

nRSCS NRSCS,

nRNRB NRNRB,

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

...

}

NRPPaPositioningInformation ::= SEQUENCE {

routingID RoutingID,

nRPPaTransactionID INTEGER (0..32767),

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

...

}

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

...

}

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

...

}

Transmission-Bandwidth-asymmetric ::= SEQUENCE {

ul-Transmission-Bandwidth NRTransmissionBandwidth,

dl-Transmission-Bandwidth NRTransmissionBandwidth,

iE-Extensions ProtocolExtensionContainer { { Transmission-Bandwidth-asymmetric-ExtIEs} } OPTIONAL,

...

}

Transmission-Bandwidth-asymmetric-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

NumberOfAntennaPorts-E-UTRA ::= ENUMERATED {an1, an2, an4, ...}

NG-RANTraceID ::=OCTET STRING (SIZE (8))

NonGBRResources-Offered ::= ENUMERATED {true, ...}

NRV2XServicesAuthorized ::= SEQUENCE {

vehicleUE VehicleUE OPTIONAL,

pedestrianUE PedestrianUE OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {NRV2XServicesAuthorized-ExtIEs} } OPTIONAL,

...

}

NRV2XServicesAuthorized-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

NRUESidelinkAggregateMaximumBitRate ::= SEQUENCE {

uESidelinkAggregateMaximumBitRate BitRate,

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

...

}

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

...

}

NSAG-ID ::= INTEGER (0..255, ...)

-- O

OfferedCapacity ::= INTEGER (1.. 16777216,...)

OffsetOfNbiotChannelNumberToEARFCN ::= ENUMERATED {

minusTen,

minusNine,

minusEightDotFive,

minusEight,

minusSeven,

minusSix,

minusFive,

minusFourDotFive,

minusFour,

minusThree,

minusTwo,

minusOne,

minusZeroDotFive,

zero,

one,

two,

three,

threeDotFive,

four,

five,

six,

seven,

sevenDotFive,

eight,

nine,

...

}

-- P

PositioningInformation ::= SEQUENCE {

requestedSRSTransmissionCharacteristics RequestedSRSTransmissionCharacteristics,

routingID RoutingID,

nRPPaTransactionID INTEGER (0..32767),

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

...

}

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

...

}

PacketDelayBudget ::= INTEGER (0..1023, ...)

PacketErrorRate ::= SEQUENCE {

pER-Scalar PER-Scalar,

pER-Exponent PER-Exponent,

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

...

}

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

...

}

PagingCause ::= ENUMERATED {

voice,

...

}

PedestrianUE ::= ENUMERATED {

authorized,

not-authorized,

...

}

PER-Scalar ::= INTEGER (0..9, ...)

PER-Exponent ::= INTEGER (0..9, ...)

PEIPSassistanceInformation ::= SEQUENCE {

cNsubgroupID CNsubgroupID,

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

...

}

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

...

}

PacketLossRate ::= INTEGER (0..1000, ...)

PagingDRX ::= ENUMERATED {

v32,

v64,

v128,

v256,

... ,

v512,

v1024

}

PagingPriority ::= ENUMERATED {

priolevel1,

priolevel2,

priolevel3,

priolevel4,

priolevel5,

priolevel6,

priolevel7,

priolevel8,

...

}

PartialListIndicator ::= ENUMERATED {partial, ...}

PC5QoSParameters ::= SEQUENCE {

pc5QoSFlowList PC5QoSFlowList,

pc5LinkAggregateBitRates BitRate OPTIONAL,

iE-Extensions ProtocolExtensionContainer { { PC5QoSParameters-ExtIEs} } OPTIONAL,

...

}

PC5QoSParameters-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

PC5QoSFlowList ::= SEQUENCE (SIZE(1..maxnoofPC5QoSFlows)) OF PC5QoSFlowItem

-- The size of the PC5 QoS Flow List shall not exceed 2048 items.

PC5QoSFlowItem::= SEQUENCE {

pQI FiveQI,

pc5FlowBitRates PC5FlowBitRates OPTIONAL,

range Range OPTIONAL,

iE-Extensions ProtocolExtensionContainer { { PC5QoSFlowItem-ExtIEs} } OPTIONAL,

...

}

PC5QoSFlowItem-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

PC5FlowBitRates ::= SEQUENCE {

guaranteedFlowBitRate BitRate,

maximumFlowBitRate BitRate,

iE-Extensions ProtocolExtensionContainer { { PC5FlowBitRates-ExtIEs} } OPTIONAL,

...

}

PC5FlowBitRates-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

PDCPChangeIndication ::= CHOICE {

from-S-NG-RAN-node ENUMERATED {s-ng-ran-node-key-update-required, pdcp-data-recovery-required, ...},

from-M-NG-RAN-node ENUMERATED {pdcp-data-recovery-required, ...},

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

}

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

...

}

PDCPDuplicationConfiguration ::= ENUMERATED {

configured,

de-configured,

...

}

PDCPSNLength ::= SEQUENCE {

ulPDCPSNLength ENUMERATED {v12bits, v18bits, ...},

dlPDCPSNLength ENUMERATED {v12bits, v18bits, ...},

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

...

}

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

...

}

PDUSetQoSParameters ::= SEQUENCE {

ulPDUSetQoSInformation PDUSetQoSInformation OPTIONAL,

dlPDUSetQoSInformation PDUSetQoSInformation OPTIONAL,

iE-Extensions ProtocolExtensionContainer { { PDUSetQoSParameters-ExtIEs } } OPTIONAL

}

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

...

}

PDUSetQoSInformation ::= SEQUENCE {

pduSetDelayBudget ExtendedPacketDelayBudget OPTIONAL,

pduSetErrorRate PacketErrorRate OPTIONAL,

pduSetIntegratedHandlingInformation ENUMERATED {true, false, ...} OPTIONAL,

iE-Extensions ProtocolExtensionContainer { { PDUSetQoSInformation-ExtIEs } } OPTIONAL

}

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

...

}

PDUSetbasedHandlingIndicator ::= ENUMERATED {

supported,

...

}

PDUSessionAggregateMaximumBitRate ::= SEQUENCE {

downlink-session-AMBR BitRate,

uplink-session-AMBR BitRate,

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

...

}

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

...

}

PDUSession-List ::= SEQUENCE (SIZE (1.. maxnoofPDUSessions)) OF PDUSession-ID

PDUSession-List-withCause ::= SEQUENCE (SIZE (1.. maxnoofPDUSessions)) OF PDUSession-List-withCause-Item

PDUSession-List-withCause-Item ::= SEQUENCE {

pduSessionId PDUSession-ID,

cause Cause OPTIONAL,

iE-Extension ProtocolExtensionContainer { {PDUSession-List-withCause-Item-ExtIEs} } OPTIONAL,

...

}

PDUSession-List-withCause-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

PDUSession-List-withDataForwardingFromTarget ::= SEQUENCE (SIZE (1.. maxnoofPDUSessions)) OF

PDUSession-List-withDataForwardingFromTarget-Item

PDUSession-List-withDataForwardingFromTarget-Item ::= SEQUENCE {

pduSessionId PDUSession-ID,

dataforwardinginfoTarget DataForwardingInfoFromTargetNGRANnode,

iE-Extension ProtocolExtensionContainer { {PDUSession-List-withDataForwardingFromTarget-Item-ExtIEs} } OPTIONAL,

...

}

PDUSession-List-withDataForwardingFromTarget-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ ID id-DRB-IDs-takenintouse CRITICALITY reject EXTENSION DRB-List PRESENCE optional},

...

}

PDUSession-List-withDataForwardingRequest ::= SEQUENCE (SIZE (1.. maxnoofPDUSessions)) OF

PDUSession-List-withDataForwardingRequest-Item

PDUSession-List-withDataForwardingRequest-Item ::= SEQUENCE {

pduSessionId PDUSession-ID,

dataforwardingInfofromSource DataforwardingandOffloadingInfofromSource OPTIONAL,

dRBtoBeReleasedList DRBToQoSFlowMapping-List OPTIONAL,

iE-Extension ProtocolExtensionContainer { {PDUSession-List-withDataForwardingRequest-Item-ExtIEs} } OPTIONAL,

...

}

PDUSession-List-withDataForwardingRequest-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

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

...

}

PDUSessionsListToBeReleased-UPError ::= SEQUENCE (SIZE (1.. maxnoofPDUSessions)) OF PDUSessionsListToBeReleased-UPError-Item

PDUSessionsListToBeReleased-UPError-Item ::= SEQUENCE {

pduSessionId PDUSession-ID,

userPlaneErrorIndicator UserPlaneErrorIndicator,

iE-Extension ProtocolExtensionContainer { {PDUSessionsListToBeReleased-UPError-Item-ExtIEs} } OPTIONAL,

...

}

PDUSessionsListToBeReleased-UPError-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

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

--

-- PDU Session related message level IEs BEGIN

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

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

--

-- PDU Session Resources Admitted List

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

PDUSessionResourcesAdmitted-List ::= SEQUENCE (SIZE(1..maxnoofPDUSessions)) OF PDUSessionResourcesAdmitted-Item

PDUSessionResourcesAdmitted-Item ::= SEQUENCE {

pduSessionId PDUSession-ID,

pduSessionResourceAdmittedInfo PDUSessionResourceAdmittedInfo,

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

...

}

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

...

}

PDUSessionResourceAdmittedInfo ::= SEQUENCE {

dL-NG-U-TNL-Information-Unchanged ENUMERATED {true, ...} OPTIONAL,

qosFlowsAdmitted-List QoSFlowsAdmitted-List,

qosFlowsNotAdmitted-List QoSFlows-List-withCause OPTIONAL,

dataForwardingInfoFromTarget DataForwardingInfoFromTargetNGRANnode OPTIONAL,

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

...

}

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

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

...

}

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

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-- PDU Session Resources Not Admitted List

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

PDUSessionResourcesNotAdmitted-List ::= SEQUENCE (SIZE (1..maxnoofPDUSessions)) OF PDUSessionResourcesNotAdmitted-Item

PDUSessionResourcesNotAdmitted-Item ::= SEQUENCE {

pduSessionId PDUSession-ID,

cause Cause OPTIONAL,

iE-Extension ProtocolExtensionContainer { {PDUSessionResourcesNotAdmitted-Item-Item-ExtIEs} } OPTIONAL,

...

}

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

...

}

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

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-- PDU Session Resources To Be Setup List

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

PDUSessionResourcesToBeSetup-List ::= SEQUENCE (SIZE(1..maxnoofPDUSessions)) OF PDUSessionResourcesToBeSetup-Item

PDUSessionResourcesToBeSetup-Item ::= SEQUENCE {

pduSessionId PDUSession-ID,

s-NSSAI S-NSSAI,

pduSessionAMBR PDUSessionAggregateMaximumBitRate OPTIONAL,

uL-NG-U-TNLatUPF UPTransportLayerInformation,

source-DL-NG-U-TNL-Information UPTransportLayerInformation OPTIONAL,

securityIndication SecurityIndication OPTIONAL,

pduSessionType PDUSessionType,

pduSessionNetworkInstance PDUSessionNetworkInstance OPTIONAL,

qosFlowsToBeSetup-List QoSFlowsToBeSetup-List,

dataforwardinginfofromSource DataforwardingandOffloadingInfofromSource OPTIONAL,

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

...

}

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

{ ID id-Additional-UL-NG-U-TNLatUPF-List CRITICALITY ignore EXTENSION Additional-UL-NG-U-TNLatUPF-List PRESENCE optional}|

{ ID id-PDUSessionCommonNetworkInstance CRITICALITY ignore EXTENSION PDUSessionCommonNetworkInstance PRESENCE optional}|

{ ID id-Redundant-UL-NG-U-TNLatUPF CRITICALITY ignore EXTENSION UPTransportLayerInformation PRESENCE optional}|

{ ID id-Additional-Redundant-UL-NG-U-TNLatUPF-List CRITICALITY ignore EXTENSION Additional-UL-NG-U-TNLatUPF-List PRESENCE optional}|

{ ID id-RedundantCommonNetworkInstance CRITICALITY ignore EXTENSION PDUSessionCommonNetworkInstance PRESENCE optional}|

{ ID id-RedundantPDUSessionInformation CRITICALITY ignore EXTENSION RedundantPDUSessionInformation PRESENCE optional}|

{ ID id-MBS-SessionAssociatedInformation CRITICALITY ignore EXTENSION MBS-SessionAssociatedInformation PRESENCE optional},

...

}

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

--

-- PDU Session Resource Setup Info - SN terminated

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

PDUSessionResourceSetupInfo-SNterminated ::= SEQUENCE {

uL-NG-U-TNLatUPF UPTransportLayerInformation,

pduSessionType PDUSessionType,

pduSessionNetworkInstance PDUSessionNetworkInstance OPTIONAL,

qosFlowsToBeSetup-List QoSFlowsToBeSetup-List-Setup-SNterminated,

dataforwardinginfofromSource DataforwardingandOffloadingInfofromSource OPTIONAL,

securityIndication SecurityIndication OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {PDUSessionResourceSetupInfo-SNterminated-ExtIEs} } OPTIONAL,

...

}

PDUSessionResourceSetupInfo-SNterminated-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

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

{ ID id-PDUSessionCommonNetworkInstance CRITICALITY ignore EXTENSION PDUSessionCommonNetworkInstance PRESENCE optional}|

{ ID id-DefaultDRB-Allowed CRITICALITY ignore EXTENSION DefaultDRB-Allowed PRESENCE optional}|

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

{ ID id-NonGBRResources-Offered CRITICALITY ignore EXTENSION NonGBRResources-Offered PRESENCE optional}|

{ ID id-Redundant-UL-NG-U-TNLatUPF CRITICALITY ignore EXTENSION UPTransportLayerInformation PRESENCE optional}|

{ ID id-RedundantCommonNetworkInstance CRITICALITY ignore EXTENSION PDUSessionCommonNetworkInstance PRESENCE optional}|

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

...

}

QoSFlowsToBeSetup-List-Setup-SNterminated ::= SEQUENCE (SIZE(1..maxnoofQoSFlows)) OF QoSFlowsToBeSetup-List-Setup-SNterminated-Item

QoSFlowsToBeSetup-List-Setup-SNterminated-Item ::= SEQUENCE {

qfi QoSFlowIdentifier,

qosFlowLevelQoSParameters QoSFlowLevelQoSParameters,

offeredGBRQoSFlowInfo GBRQoSFlowInfo OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {QoSFlowsToBeSetup-List-Setup-SNterminated-Item-ExtIEs} } OPTIONAL,

...

}

QoSFlowsToBeSetup-List-Setup-SNterminated-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ ID id-TSCTrafficCharacteristics CRITICALITY ignore EXTENSION TSCTrafficCharacteristics PRESENCE optional}|

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

...

}

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

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-- PDU Session Resource Setup Response Info - SN terminated

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

PDUSessionResourceSetupResponseInfo-SNterminated ::= SEQUENCE {

dL-NG-U-TNLatNG-RAN UPTransportLayerInformation,

dRBsToBeSetup DRBsToBeSetupList-SetupResponse-SNterminated OPTIONAL,

dataforwardinginfoTarget DataForwardingInfoFromTargetNGRANnode OPTIONAL,

qosFlowsNotAdmittedList QoSFlows-List-withCause OPTIONAL,

securityResult SecurityResult OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {PDUSessionResourceSetupResponseInfo-SNterminated-ExtIEs} } OPTIONAL,

...

}

PDUSessionResourceSetupResponseInfo-SNterminated-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ ID id-DRB-IDs-takenintouse CRITICALITY reject EXTENSION DRB-List PRESENCE optional}|

{ ID id-Redundant-DL-NG-U-TNLatNG-RAN CRITICALITY ignore EXTENSION UPTransportLayerInformation PRESENCE optional}|

{ ID id-UsedRSNInformation CRITICALITY ignore EXTENSION RedundantPDUSessionInformation PRESENCE optional}|

{ ID id-S-CPAC-dataforwardinginfofromSource CRITICALITY ignore EXTENSION DataforwardingandOffloadingInfofromSource PRESENCE optional},

...

}

DRBsToBeSetupList-SetupResponse-SNterminated ::= SEQUENCE (SIZE(1..maxnoofDRBs)) OF DRBsToBeSetupList-SetupResponse-SNterminated-Item

DRBsToBeSetupList-SetupResponse-SNterminated-Item ::= SEQUENCE {

drb-ID DRB-ID,

sN-UL-PDCP-UP-TNLInfo UPTransportParameters,

dRB-QoS QoSFlowLevelQoSParameters,

pDCP-SNLength PDCPSNLength OPTIONAL,

rLC-Mode RLCMode,

uL-Configuration ULConfiguration OPTIONAL,

secondary-SN-UL-PDCP-UP-TNLInfo UPTransportParameters OPTIONAL,

duplicationActivation DuplicationActivation OPTIONAL,

qoSFlowsMappedtoDRB-SetupResponse-SNterminated QoSFlowsMappedtoDRB-SetupResponse-SNterminated,

iE-Extensions ProtocolExtensionContainer { {DRBsToBeSetupList-SetupResponse-SNterminated-Item-ExtIEs} } OPTIONAL,

...

}

DRBsToBeSetupList-SetupResponse-SNterminated-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ ID id-Additional-PDCP-Duplication-TNL-List CRITICALITY ignore EXTENSION Additional-PDCP-Duplication-TNL-List PRESENCE optional}|

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

...

}

QoSFlowsMappedtoDRB-SetupResponse-SNterminated ::= SEQUENCE (SIZE(1..maxnoofQoSFlows)) OF

QoSFlowsMappedtoDRB-SetupResponse-SNterminated-Item

QoSFlowsMappedtoDRB-SetupResponse-SNterminated-Item ::= SEQUENCE {

qoSFlowIdentifier QoSFlowIdentifier,

mCGRequestedGBRQoSFlowInfo GBRQoSFlowInfo OPTIONAL,

qosFlowMappingIndication QoSFlowMappingIndication OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {QoSFlowsMappedtoDRB-SetupResponse-SNterminated-Item-ExtIEs} } OPTIONAL,

...

}

QoSFlowsMappedtoDRB-SetupResponse-SNterminated-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ ID id-CurrentQoSParaSetIndex CRITICALITY ignore EXTENSION QoSParaSetIndex PRESENCE optional }|

{ ID id-SourceDLForwardingIPAddress CRITICALITY ignore EXTENSION TransportLayerAddress PRESENCE optional},

...

}

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

--

-- PDU Session Resource Setup Info - MN terminated

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

PDUSessionResourceSetupInfo-MNterminated ::= SEQUENCE {

pduSessionType PDUSessionType,

dRBsToBeSetup DRBsToBeSetupList-Setup-MNterminated,

iE-Extensions ProtocolExtensionContainer { {PDUSessionResourceSetupInfo-MNterminated-ExtIEs} } OPTIONAL,

...

}

PDUSessionResourceSetupInfo-MNterminated-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

DRBsToBeSetupList-Setup-MNterminated ::= SEQUENCE (SIZE(1..maxnoofDRBs)) OF DRBsToBeSetupList-Setup-MNterminated-Item

DRBsToBeSetupList-Setup-MNterminated-Item ::= SEQUENCE {

drb-ID DRB-ID,

mN-UL-PDCP-UP-TNLInfo UPTransportParameters,

rLC-Mode RLCMode,

uL-Configuration ULConfiguration OPTIONAL,

dRB-QoS QoSFlowLevelQoSParameters,

pDCP-SNLength PDCPSNLength OPTIONAL,

secondary-MN-UL-PDCP-UP-TNLInfo UPTransportParameters OPTIONAL,

duplicationActivation DuplicationActivation OPTIONAL,

qoSFlowsMappedtoDRB-Setup-MNterminated QoSFlowsMappedtoDRB-Setup-MNterminated,

iE-Extensions ProtocolExtensionContainer { {DRBsToBeSetupList-Setup-MNterminated-Item-ExtIEs} } OPTIONAL,

...

}

DRBsToBeSetupList-Setup-MNterminated-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ ID id-Additional-PDCP-Duplication-TNL-List CRITICALITY ignore EXTENSION Additional-PDCP-Duplication-TNL-List PRESENCE optional}|

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

...

}

QoSFlowsMappedtoDRB-Setup-MNterminated ::= SEQUENCE (SIZE(1..maxnoofQoSFlows)) OF QoSFlowsMappedtoDRB-Setup-MNterminated-Item

QoSFlowsMappedtoDRB-Setup-MNterminated-Item ::= SEQUENCE {

qoSFlowIdentifier QoSFlowIdentifier,

qoSFlowLevelQoSParameters QoSFlowLevelQoSParameters,

qosFlowMappingIndication QoSFlowMappingIndication OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {QoSFlowsMappedtoDRB-Setup-MNterminated-Item-ExtIEs} } OPTIONAL,

...

}

QoSFlowsMappedtoDRB-Setup-MNterminated-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

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

...

}

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

--

-- PDU Session Resource Setup Response Info - MN terminated

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

PDUSessionResourceSetupResponseInfo-MNterminated ::= SEQUENCE {

dRBsAdmittedList DRBsAdmittedList-SetupResponse-MNterminated,

iE-Extensions ProtocolExtensionContainer { {PDUSessionResourceSetupResponseInfo-MNterminated-ExtIEs} } OPTIONAL,

...

}

PDUSessionResourceSetupResponseInfo-MNterminated-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ID id-DRBsNotAdmittedSetupModifyList CRITICALITY ignore EXTENSION DRB-List-withCause PRESENCE optional},

...

}

DRBsAdmittedList-SetupResponse-MNterminated ::= SEQUENCE (SIZE(1..maxnoofDRBs)) OF DRBsAdmittedList-SetupResponse-MNterminated-Item

DRBsAdmittedList-SetupResponse-MNterminated-Item ::= SEQUENCE {

drb-ID DRB-ID,

sN-DL-SCG-UP-TNLInfo UPTransportParameters,

secondary-SN-DL-SCG-UP-TNLInfo UPTransportParameters OPTIONAL,

lCID LCID OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {DRBsAdmittedList-SetupResponse-MNterminated-Item-ExtIEs} } OPTIONAL,

...

}

DRBsAdmittedList-SetupResponse-MNterminated-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ ID id-Additional-PDCP-Duplication-TNL-List CRITICALITY ignore EXTENSION Additional-PDCP-Duplication-TNL-List PRESENCE optional}|

{ ID id-QoSFlowsMappedtoDRB-SetupResponse-MNterminated CRITICALITY ignore EXTENSION QoSFlowsMappedtoDRB-SetupResponse-MNterminated PRESENCE optional},

...

}

QoSFlowsMappedtoDRB-SetupResponse-MNterminated ::= SEQUENCE (SIZE(1..maxnoofQoSFlows)) OF QoSFlowsMappedtoDRB-SetupResponse-MNterminated-Item

QoSFlowsMappedtoDRB-SetupResponse-MNterminated-Item ::= SEQUENCE {

qoSFlowIdentifier QoSFlowIdentifier,

currentQoSParaSetIndex QoSParaSetIndex,

iE-Extensions ProtocolExtensionContainer { {QoSFlowsMappedtoDRB-SetupResponse-MNterminated-Item-ExtIEs} } OPTIONAL,

...

}

QoSFlowsMappedtoDRB-SetupResponse-MNterminated-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

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

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-- PDU Session Resource Modification Info - SN terminated

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

PDUSessionResourceModificationInfo-SNterminated ::= SEQUENCE {

uL-NG-U-TNLatUPF UPTransportLayerInformation OPTIONAL,

pduSessionNetworkInstance PDUSessionNetworkInstance OPTIONAL,

qosFlowsToBeSetup-List QoSFlowsToBeSetup-List-Setup-SNterminated OPTIONAL,

dataforwardinginfofromSource DataforwardingandOffloadingInfofromSource OPTIONAL,

qosFlowsToBeModified-List QoSFlowsToBeSetup-List-Modified-SNterminated OPTIONAL,

qoSFlowsToBeReleased-List QoSFlows-List-withCause OPTIONAL,

drbsToBeModifiedList DRBsToBeModified-List-Modified-SNterminated OPTIONAL,

dRBsToBeReleased DRB-List-withCause OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {PDUSessionResourceModificationInfo-SNterminated-ExtIEs} } OPTIONAL,

...

}

PDUSessionResourceModificationInfo-SNterminated-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ ID id-PDUSessionCommonNetworkInstance CRITICALITY ignore EXTENSION PDUSessionCommonNetworkInstance PRESENCE optional}|

{ID id-DefaultDRB-Allowed CRITICALITY ignore EXTENSION DefaultDRB-Allowed PRESENCE optional}|

{ID id-NonGBRResources-Offered CRITICALITY ignore EXTENSION NonGBRResources-Offered PRESENCE optional}|

{ID id-Redundant-UL-NG-U-TNLatUPF CRITICALITY ignore EXTENSION UPTransportLayerInformation PRESENCE optional}|

{ID id-RedundantCommonNetworkInstance CRITICALITY ignore EXTENSION PDUSessionCommonNetworkInstance PRESENCE optional}|

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

...

}

QoSFlowsToBeSetup-List-Modified-SNterminated ::= SEQUENCE (SIZE(1..maxnoofQoSFlows)) OF QoSFlowsToBeSetup-List-Modified-SNterminated-Item

QoSFlowsToBeSetup-List-Modified-SNterminated-Item ::= SEQUENCE {

qfi QoSFlowIdentifier,

qosFlowLevelQoSParameters QoSFlowLevelQoSParameters OPTIONAL,

offeredGBRQoSFlowInfo GBRQoSFlowInfo OPTIONAL,

qosFlowMappingIndication QoSFlowMappingIndication OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {QoSFlowsToBeSetup-List-Modified-SNterminated-Item-ExtIEs} } OPTIONAL,

...

}

QoSFlowsToBeSetup-List-Modified-SNterminated-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ ID id-TSCTrafficCharacteristics CRITICALITY ignore EXTENSION TSCTrafficCharacteristics PRESENCE optional}|

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

...

}

DRBsToBeModified-List-Modified-SNterminated ::= SEQUENCE (SIZE(1..maxnoofDRBs)) OF DRBsToBeModified-List-Modified-SNterminated-Item

DRBsToBeModified-List-Modified-SNterminated-Item ::= SEQUENCE {

drb-ID DRB-ID,

mN-DL-SCG-UP-TNLInfo UPTransportParameters OPTIONAL,

secondary-MN-DL-SCG-UP-TNLInfo UPTransportParameters OPTIONAL,

lCID LCID OPTIONAL,

rlc-status RLC-Status OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {DRBsToBeModified-List-Modified-SNterminated-Item-ExtIEs} } OPTIONAL,

...

}

DRBsToBeModified-List-Modified-SNterminated-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ ID id-Additional-PDCP-Duplication-TNL-List CRITICALITY ignore EXTENSION Additional-PDCP-Duplication-TNL-List PRESENCE optional},

...

}

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-- PDU Session Resource Modification Response Info - SN terminated

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PDUSessionResourceModificationResponseInfo-SNterminated ::= SEQUENCE {

dL-NG-U-TNLatNG-RAN UPTransportLayerInformation OPTIONAL,

dRBsToBeSetup DRBsToBeSetupList-SetupResponse-SNterminated OPTIONAL,

dataforwardinginfoTarget DataForwardingInfoFromTargetNGRANnode OPTIONAL,

dRBsToBeModified DRBsToBeModifiedList-ModificationResponse-SNterminated OPTIONAL,

dRBsToBeReleased DRB-List-withCause OPTIONAL,

dataforwardinginfofromSource DataforwardingandOffloadingInfofromSource OPTIONAL,

qosFlowsNotAdmittedTBAdded QoSFlows-List-withCause OPTIONAL,

qosFlowsReleased QoSFlows-List-withCause OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {PDUSessionResourceModificationResponseInfo-SNterminated-ExtIEs} } OPTIONAL,

...

}

PDUSessionResourceModificationResponseInfo-SNterminated-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ ID id-DRB-IDs-takenintouse CRITICALITY reject EXTENSION DRB-List PRESENCE optional}|

{ ID id-Redundant-DL-NG-U-TNLatNG-RAN CRITICALITY ignore EXTENSION UPTransportLayerInformation PRESENCE optional}|

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

...

}

DRBsToBeModifiedList-ModificationResponse-SNterminated ::= SEQUENCE (SIZE(1..maxnoofDRBs)) OF

DRBsToBeModifiedList-ModificationResponse-SNterminated-Item

DRBsToBeModifiedList-ModificationResponse-SNterminated-Item ::= SEQUENCE {

drb-ID DRB-ID,

sN-UL-PDCP-UP-TNLInfo UPTransportParameters OPTIONAL,

dRB-QoS QoSFlowLevelQoSParameters OPTIONAL,

qoSFlowsMappedtoDRB-SetupResponse-SNterminated QoSFlowsMappedtoDRB-SetupResponse-SNterminated OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {DRBsToBeModifiedList-ModificationResponse-SNterminated-Item-ExtIEs} } OPTIONAL,

...

}

DRBsToBeModifiedList-ModificationResponse-SNterminated-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ ID id-Additional-PDCP-Duplication-TNL-List CRITICALITY ignore EXTENSION Additional-PDCP-Duplication-TNL-List PRESENCE optional}|

{ ID id-RLCDuplicationInformation CRITICALITY ignore EXTENSION RLCDuplicationInformation PRESENCE optional}|

{ ID id-secondary-SN-UL-PDCP-UP-TNLInfo CRITICALITY ignore EXTENSION UPTransportParameters PRESENCE optional}|

{ ID id-pdcpDuplicationConfiguration CRITICALITY ignore EXTENSION PDCPDuplicationConfiguration PRESENCE optional}|

{ ID id-duplicationActivation CRITICALITY ignore EXTENSION DuplicationActivation PRESENCE optional},

...

}

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

--

-- PDU Session Resource Modification Info - MN terminated

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

PDUSessionResourceModificationInfo-MNterminated ::= SEQUENCE {

pduSessionType PDUSessionType,

dRBsToBeSetup DRBsToBeSetupList-Setup-MNterminated OPTIONAL,

dRBsToBeModified DRBsToBeModifiedList-Modification-MNterminated OPTIONAL,

dRBsToBeReleased DRB-List-withCause OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {PDUSessionResourceModificationInfo-MNterminated-ExtIEs} } OPTIONAL,

...

}

PDUSessionResourceModificationInfo-MNterminated-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

DRBsToBeModifiedList-Modification-MNterminated ::= SEQUENCE (SIZE(1..maxnoofDRBs)) OF

DRBsToBeModifiedList-Modification-MNterminated-Item

DRBsToBeModifiedList-Modification-MNterminated-Item ::= SEQUENCE {

drb-ID DRB-ID,

mN-UL-PDCP-UP-TNLInfo UPTransportParameters OPTIONAL,

dRB-QoS QoSFlowLevelQoSParameters OPTIONAL,

secondary-MN-UL-PDCP-UP-TNLInfo UPTransportParameters OPTIONAL,

uL-Configuration ULConfiguration OPTIONAL,

pdcpDuplicationConfiguration PDCPDuplicationConfiguration OPTIONAL,

duplicationActivation DuplicationActivation OPTIONAL,

qoSFlowsMappedtoDRB-Setup-MNterminated QoSFlowsMappedtoDRB-Setup-MNterminated OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {DRBsToBeModifiedList-Modification-MNterminated-Item-ExtIEs} } OPTIONAL,

...

}

DRBsToBeModifiedList-Modification-MNterminated-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ ID id-Additional-PDCP-Duplication-TNL-List CRITICALITY ignore EXTENSION Additional-PDCP-Duplication-TNL-List PRESENCE optional}|

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

...

}

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-- PDU Session Resource Modification Response Info - MN terminated

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

PDUSessionResourceModificationResponseInfo-MNterminated ::= SEQUENCE {

dRBsAdmittedList DRBsAdmittedList-ModificationResponse-MNterminated,

dRBsReleasedList DRB-List OPTIONAL,

dRBsNotAdmittedSetupModifyList DRB-List-withCause OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {PDUSessionResourceModificationResponseInfo-MNterminated-ExtIEs} } OPTIONAL,

...

}

PDUSessionResourceModificationResponseInfo-MNterminated-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

DRBsAdmittedList-ModificationResponse-MNterminated ::= SEQUENCE (SIZE(1..maxnoofDRBs)) OF DRBsAdmittedList-ModificationResponse-MNterminated-Item

DRBsAdmittedList-ModificationResponse-MNterminated-Item ::= SEQUENCE {

drb-ID DRB-ID,

sN-DL-SCG-UP-TNLInfo UPTransportParameters OPTIONAL,

secondary-SN-DL-SCG-UP-TNLInfo UPTransportParameters OPTIONAL,

lCID LCID OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {DRBsAdmittedList-ModificationResponse-MNterminated-Item-ExtIEs} } OPTIONAL,

...

}

DRBsAdmittedList-ModificationResponse-MNterminated-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ ID id-Additional-PDCP-Duplication-TNL-List CRITICALITY ignore EXTENSION Additional-PDCP-Duplication-TNL-List PRESENCE optional}|

{ ID id-QoSFlowsMappedtoDRB-SetupResponse-MNterminated CRITICALITY ignore EXTENSION QoSFlowsMappedtoDRB-SetupResponse-MNterminated PRESENCE optional},

...

}

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

--

-- PDU Session Resource Change Required Info - SN terminated

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PDUSessionResourceChangeRequiredInfo-SNterminated ::= SEQUENCE {

dataforwardinginfofromSource DataforwardingandOffloadingInfofromSource OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {PDUSessionResourceChangeRequiredInfo-SNterminated-ExtIEs} } OPTIONAL,

...

}

PDUSessionResourceChangeRequiredInfo-SNterminated-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

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-- PDU Session Resource Change Confirm Info - SN terminated

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PDUSessionResourceChangeConfirmInfo-SNterminated ::= SEQUENCE {

dataforwardinginfoTarget DataForwardingInfoFromTargetNGRANnode OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {PDUSessionResourceChangeConfirmInfo-SNterminated-ExtIEs} } OPTIONAL,

...

}

PDUSessionResourceChangeConfirmInfo-SNterminated-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ ID id-DRB-IDs-takenintouse CRITICALITY reject EXTENSION DRB-List PRESENCE optional},

...

}

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

--

-- PDU Session Resource Change Required Info - MN terminated

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

PDUSessionResourceChangeRequiredInfo-MNterminated ::= SEQUENCE {

iE-Extensions ProtocolExtensionContainer { {PDUSessionResourceChangeRequiredInfo-MNterminated-ExtIEs} } OPTIONAL,

...

}

PDUSessionResourceChangeRequiredInfo-MNterminated-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

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

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-- PDU Session Resource Change Confirm Info - MN terminated

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PDUSessionResourceChangeConfirmInfo-MNterminated ::= SEQUENCE {

iE-Extensions ProtocolExtensionContainer { {PDUSessionResourceChangeConfirmInfo-MNterminated-ExtIEs} } OPTIONAL,

...

}

PDUSessionResourceChangeConfirmInfo-MNterminated-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

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

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-- PDU Session Resource Modification Required Info - SN terminated

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

PDUSessionResourceModRqdInfo-SNterminated ::= SEQUENCE {

dL-NG-U-TNLatNG-RAN UPTransportLayerInformation OPTIONAL,

qoSFlowsToBeReleased-List QoSFlows-List-withCause OPTIONAL,

dataforwardinginfofromSource DataforwardingandOffloadingInfofromSource OPTIONAL,

drbsToBeSetupList DRBsToBeSetup-List-ModRqd-SNterminated OPTIONAL,

drbsToBeModifiedList DRBsToBeModified-List-ModRqd-SNterminated OPTIONAL,

dRBsToBeReleased DRB-List-withCause OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {PDUSessionResourceModRqdInfo-SNterminated-ExtIEs} } OPTIONAL,

...

}

PDUSessionResourceModRqdInfo-SNterminated-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

DRBsToBeSetup-List-ModRqd-SNterminated ::= SEQUENCE (SIZE(1..maxnoofDRBs)) OF DRBsToBeSetup-List-ModRqd-SNterminated-Item

DRBsToBeSetup-List-ModRqd-SNterminated-Item ::= SEQUENCE {

drb-ID DRB-ID,

pDCP-SNLength PDCPSNLength OPTIONAL,

sn-UL-PDCP-UPTNLinfo UPTransportParameters,

dRB-QoS QoSFlowLevelQoSParameters,

secondary-SN-UL-PDCP-UP-TNLInfo UPTransportParameters OPTIONAL,

duplicationActivation DuplicationActivation OPTIONAL,

uL-Configuration ULConfiguration OPTIONAL,

qoSFlowsMappedtoDRB-ModRqd-SNterminated QoSFlowsSetupMappedtoDRB-ModRqd-SNterminated,

rLC-Mode RLCMode,

iE-Extensions ProtocolExtensionContainer { {DRBsToBeSetup-List-ModRqd-SNterminated-Item-ExtIEs} } OPTIONAL,

...

}

DRBsToBeSetup-List-ModRqd-SNterminated-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ ID id-Additional-PDCP-Duplication-TNL-List CRITICALITY ignore EXTENSION Additional-PDCP-Duplication-TNL-List PRESENCE optional}|

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

...

}

QoSFlowsSetupMappedtoDRB-ModRqd-SNterminated ::= SEQUENCE (SIZE(1..maxnoofQoSFlows)) OF

QoSFlowsSetupMappedtoDRB-ModRqd-SNterminated-Item

QoSFlowsSetupMappedtoDRB-ModRqd-SNterminated-Item ::= SEQUENCE {

qoSFlowIdentifier QoSFlowIdentifier,

mCGRequestedGBRQoSFlowInfo GBRQoSFlowInfo OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {QoSFlowsSetupMappedtoDRB-ModRqd-SNterminated-Item-ExtIEs} } OPTIONAL,

...

}

QoSFlowsSetupMappedtoDRB-ModRqd-SNterminated-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ID id-QosFlowMappingIndication CRITICALITY ignore EXTENSION QoSFlowMappingIndication PRESENCE optional},

...

}

DRBsToBeModified-List-ModRqd-SNterminated ::= SEQUENCE (SIZE(1..maxnoofDRBs)) OF DRBsToBeModified-List-ModRqd-SNterminated-Item

DRBsToBeModified-List-ModRqd-SNterminated-Item ::= SEQUENCE {

drb-ID DRB-ID,

sN-UL-PDCP-UP-TNLInfo UPTransportParameters OPTIONAL,

dRB-QoS QoSFlowLevelQoSParameters OPTIONAL,

secondary-SN-UL-PDCP-UP-TNLInfo UPTransportParameters OPTIONAL,

uL-Configuration ULConfiguration OPTIONAL,

pdcpDuplicationConfiguration PDCPDuplicationConfiguration OPTIONAL,

duplicationActivation DuplicationActivation OPTIONAL,

qoSFlowsMappedtoDRB-ModRqd-SNterminated QoSFlowsModifiedMappedtoDRB-ModRqd-SNterminated OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {DRBsToBeModified-List-ModRqd-SNterminated-Item-ExtIEs} } OPTIONAL,

...

}

DRBsToBeModified-List-ModRqd-SNterminated-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ ID id-Additional-PDCP-Duplication-TNL-List CRITICALITY ignore EXTENSION Additional-PDCP-Duplication-TNL-List PRESENCE optional}|

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

...

}

QoSFlowsModifiedMappedtoDRB-ModRqd-SNterminated ::= SEQUENCE (SIZE(1..maxnoofQoSFlows)) OF

QoSFlowsModifiedMappedtoDRB-ModRqd-SNterminated-Item

QoSFlowsModifiedMappedtoDRB-ModRqd-SNterminated-Item ::= SEQUENCE {

qoSFlowIdentifier QoSFlowIdentifier,

mCGRequestedGBRQoSFlowInfo GBRQoSFlowInfo OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {QoSFlowsModifiedMappedtoDRB-ModRqd-SNterminated-Item-ExtIEs} } OPTIONAL,

...

}

QoSFlowsModifiedMappedtoDRB-ModRqd-SNterminated-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ID id-QosFlowMappingIndication CRITICALITY ignore EXTENSION QoSFlowMappingIndication PRESENCE optional},

...

}

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

--

-- PDU Session Resource Modification Confirm Info - SN terminated

--

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

PDUSessionResourceModConfirmInfo-SNterminated ::= SEQUENCE {

uL-NG-U-TNLatUPF UPTransportLayerInformation OPTIONAL,

dRBsAdmittedList DRBsAdmittedList-ModConfirm-SNterminated,

dRBsNotAdmittedSetupModifyList DRB-List-withCause OPTIONAL,

dataforwardinginfoTarget DataForwardingInfoFromTargetNGRANnode OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {PDUSessionResourceModConfirmInfo-SNterminated-ExtIEs} } OPTIONAL,

...

}

PDUSessionResourceModConfirmInfo-SNterminated-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ ID id-DRB-IDs-takenintouse CRITICALITY reject EXTENSION DRB-List PRESENCE optional},

...

}

DRBsAdmittedList-ModConfirm-SNterminated ::= SEQUENCE (SIZE(1..maxnoofDRBs)) OF

DRBsAdmittedList-ModConfirm-SNterminated-Item

DRBsAdmittedList-ModConfirm-SNterminated-Item ::= SEQUENCE {

drb-ID DRB-ID,

mN-DL-CG-UP-TNLInfo UPTransportParameters OPTIONAL,

secondary-MN-DL-CG-UP-TNLInfo UPTransportParameters OPTIONAL,

lCID LCID OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {DRBsAdmittedList-ModConfirm-SNterminated-Item-ExtIEs} } OPTIONAL,

...

}

DRBsAdmittedList-ModConfirm-SNterminated-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ ID id-Additional-PDCP-Duplication-TNL-List CRITICALITY ignore EXTENSION Additional-PDCP-Duplication-TNL-List PRESENCE optional},

...

}

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

--

-- PDU Session Resource Modification Required Info - MN terminated

--

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

PDUSessionResourceModRqdInfo-MNterminated ::= SEQUENCE {

dRBsToBeModified DRBsToBeModified-List-ModRqd-MNterminated OPTIONAL,

dRBsToBeReleased DRB-List-withCause OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {PDUSessionResourceModRqdInfo-MNterminated-ExtIEs} } OPTIONAL,

...

}

PDUSessionResourceModRqdInfo-MNterminated-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

DRBsToBeModified-List-ModRqd-MNterminated ::= SEQUENCE (SIZE(1..maxnoofDRBs)) OF DRBsToBeModified-List-ModRqd-MNterminated-Item

DRBsToBeModified-List-ModRqd-MNterminated-Item ::= SEQUENCE {

drb-ID DRB-ID,

sN-DL-SCG-UP-TNLInfo UPTransportLayerInformation,

secondary-SN-DL-SCG-UP-TNLInfo UPTransportLayerInformation OPTIONAL,

lCID LCID OPTIONAL,

rlc-status RLC-Status OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {DRBsToBeModified-List-ModRqd-MNterminated-Item-ExtIEs} } OPTIONAL,

...

}

DRBsToBeModified-List-ModRqd-MNterminated-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ ID id-Additional-PDCP-Duplication-TNL-List CRITICALITY ignore EXTENSION Additional-PDCP-Duplication-TNL-List PRESENCE optional},

...

}

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

--

-- PDU Session Resource Modification Confirm Info - MN terminated

--

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

PDUSessionResourceModConfirmInfo-MNterminated ::= SEQUENCE {

iE-Extensions ProtocolExtensionContainer { {PDUSessionResourceModConfirmInfo-MNterminated-ExtIEs} } OPTIONAL,

...

}

PDUSessionResourceModConfirmInfo-MNterminated-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

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

--

-- PDU Session Resource Setup Complete Info - SN terminated

--

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

PDUSessionResourceBearerSetupCompleteInfo-SNterminated ::= SEQUENCE {

dRBsToBeSetupList SEQUENCE (SIZE(1..maxnoofDRBs)) OF DRBsToBeSetupList-BearerSetupComplete-SNterminated-Item,

iE-Extensions ProtocolExtensionContainer { {PDUSessionResourceBearerSetupCompleteInfo-SNterminated-ExtIEs} } OPTIONAL,

...

}

PDUSessionResourceBearerSetupCompleteInfo-SNterminated-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

DRBsToBeSetupList-BearerSetupComplete-SNterminated-Item ::= SEQUENCE {

dRB-ID DRB-ID,

mN-Xn-U-TNLInfoatM UPTransportLayerInformation,

iE-Extensions ProtocolExtensionContainer { {DRBsToBeSetupList-BearerSetupComplete-SNterminated-Item-ExtIEs} } OPTIONAL,

...

}

DRBsToBeSetupList-BearerSetupComplete-SNterminated-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ID id-Secondary-MN-Xn-U-TNLInfoatM CRITICALITY ignore EXTENSION UPTransportLayerInformation PRESENCE optional},

...

}

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

--

-- PDU Session related message level IEs END

--

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

PDUSessionResourceSecondaryRATUsageList ::= SEQUENCE (SIZE(1..maxnoofPDUSessions)) OF PDUSessionResourceSecondaryRATUsageItem

PDUSessionResourceSecondaryRATUsageItem ::= SEQUENCE {

pDUSessionID PDUSession-ID,

secondaryRATUsageInformation SecondaryRATUsageInformation,

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

...

}

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

...

}

PDUSessionUsageReport ::= SEQUENCE {

rATType ENUMERATED {nr, eutra, ..., nr-unlicensed, e-utra-unlicensed},

pDUSessionTimedReportList VolumeTimedReportList,

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

...

}

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

...

}

PDUSessionType ::= ENUMERATED {ipv4, ipv6, ipv4v6, ethernet, unstructured, ...}

PDUSession-ID ::= INTEGER (0..255)

PDUSessionNetworkInstance ::= INTEGER (1..256, ...)

PDUSessionCommonNetworkInstance ::= OCTET STRING

PDUSession-PairID ::= INTEGER (0..255, ...)

Periodical ::= SEQUENCE {

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

...

}

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

...

}

Permutation ::= ENUMERATED {dfu, ufd, ...}

PLMN-Identity ::= OCTET STRING (SIZE(3))

PLMNAreaBasedQMC ::= SEQUENCE {

plmnListforQMC PLMNListforQMC,

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

...

}

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

...

}

PLMNListforQMC ::= SEQUENCE (SIZE(1..maxnoofPLMNforQMC)) OF PLMN-Identity

PCIListForMDT ::= SEQUENCE (SIZE(1.. maxnoofNeighPCIforMDT)) OF NRPCI

PNI-NPN-Restricted-Information ::= ENUMERATED { restriced, not-restricted, ...}

PortNumber ::= BIT STRING (SIZE (16))

PosPartialUEContextInfo ::= SEQUENCE {

requestedSRSTransmissionCharacteristics RequestedSRSTransmissionCharacteristics OPTIONAL,

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

...

}

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

...

}

PredictedUETrajectory-Item ::= SEQUENCE{

predictedtrajectoryCellInfo PredictedTrajectoryCellInfo,

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

...

}

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

...

}

PredictedTrajectoryCellInfo::= CHOICE {

nG-RAN-Cell-Predicted PredictedTrajectoryNGRANCellInfo,

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

}

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

...

}

PredictedTrajectoryNGRANCellInfo ::= SEQUENCE {

globalNG-RANCell-ID GlobalNG-RANCell-ID,

predictedTimeUEStaysInCell INTEGER (0..4095) OPTIONAL,

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

...

}

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

...

}

PriorityLevelQoS ::= INTEGER (1..127, ...)

ProtectedE-UTRAResourceIndication ::= SEQUENCE {

activationSFN ActivationSFN,

protectedResourceList ProtectedE-UTRAResourceList,

mbsfnControlRegionLength MBSFNControlRegionLength OPTIONAL,

pDCCHRegionLength INTEGER (1..3),

iE-Extensions ProtocolExtensionContainer { {ProtectedE-UTRAResourceIndication-ExtIEs} } OPTIONAL,

...

}

ProtectedE-UTRAResourceIndication-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

ProtectedE-UTRAResourceList ::= SEQUENCE (SIZE (1.. maxnoofProtectedResourcePatterns)) OF ProtectedE-UTRAResource-Item

ProtectedE-UTRAResource-Item ::= SEQUENCE {

resourceType ENUMERATED {downlinknonCRS, cRS, uplink, ...},

intra-PRBProtectedResourceFootprint BIT STRING (SIZE(84, ...)),

protectedFootprintFrequencyPattern BIT STRING (SIZE(6..110, ...)),

protectedFootprintTimePattern ProtectedE-UTRAFootprintTimePattern,

iE-Extensions ProtocolExtensionContainer { {ProtectedE-UTRAResource-Item-ExtIEs} } OPTIONAL,

...

}

ProtectedE-UTRAResource-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

ProtectedE-UTRAFootprintTimePattern ::= SEQUENCE {

protectedFootprintTimeperiodicity INTEGER (1..320, ...),

protectedFootrpintStartTime INTEGER (1..20, ...),

iE-Extensions ProtocolExtensionContainer { {ProtectedE-UTRAFootprintTimePattern-ExtIEs} } OPTIONAL,

...

}

ProtectedE-UTRAFootprintTimePattern-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

PrivacyIndicator ::= ENUMERATED {

immediate-MDT,

logged-MDT,

...

}

PSCellChangeHistory ::= ENUMERATED {reporting-full-history, ...}

PSCellHistoryInformationRetrieve ::= ENUMERATED {query, ...}

PSCellListContainer ::= OCTET STRING

PNI-NPN-AreaScopeofMDT ::= SEQUENCE {

cAGListforMDT CAGListforMDT,

iE-Extensions ProtocolExtensionContainer { {PNI-NPN-AreaScopeofMDT-ExtIEs} } OPTIONAL,

...

}

PNI-NPN-AreaScopeofMDT-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

PNI-NPNBasedMDT::= SEQUENCE {

cAGListforMDT CAGListforMDT,

iE-Extensions ProtocolExtensionContainer { {PNI-NPNBasedMDT-ExtIEs} } OPTIONAL,

...

}

PNI-NPNBasedMDT-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

-- Q

QMCConfigInfo ::= SEQUENCE {

uEAppLayerMeasInfoList UEAppLayerMeasInfoList,

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

...

}

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

...

}

UEAppLayerMeasInfoList ::= SEQUENCE (SIZE(1..maxnoofUEAppLayerMeas)) OF UEAppLayerMeasInfo-Item

UEAppLayerMeasInfo-Item ::= SEQUENCE {

uEAppLayerMeasConfigInfo UEAppLayerMeasConfigInfo,

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

...

}

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

...

}

QMCCoordinationRequest ::= SEQUENCE {

mN-to-SN-QMCCoordRequestList MN-to-SN-QMCCoordRequestList OPTIONAL,

sN-to-MN-QMCCoordRequestList SN-to-MN-QMCCoordRequestList OPTIONAL,

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

...

}

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

...

}

MN-to-SN-QMCCoordRequestList ::= SEQUENCE (SIZE(1..maxnoofUEAppLayerMeas)) OF MN-to-SN-QMCCoordRequestList-Item

MN-to-SN-QMCCoordRequestList-Item ::= SEQUENCE {

qOEReference QOEReference,

qOEMeasConfigAppLayerID QOEMeasConfAppLayerID OPTIONAL,

measCollectionEntityIPAddress MeasCollectionEntityIPAddress OPTIONAL,

qoEReportingPathRequest ENUMERATED{srb4, srb5, ...} OPTIONAL,

rVQoEReportingPathRequest ENUMERATED{srb4, srb5, ...} OPTIONAL,

furtherRVQoEInterestInquiry ENUMERATED{true, ...} OPTIONAL,

furtherRVQoEReportingPathInquiry ENUMERATED{true, ...} OPTIONAL,

currentRVQoEConfig RVQoEConfig OPTIONAL,

availableRVQoEMetrics AvailableRVQoEMetrics OPTIONAL,

configReleaseIndication ENUMERATED{rvqoe,qoe-and-rvqoe, ...} OPTIONAL,

iE-Extensions ProtocolExtensionContainer { { MN-to-SN-QMCCoordRequestList-Item-ExtIEs} } OPTIONAL,

...

}

MN-to-SN-QMCCoordRequestList-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

SN-to-MN-QMCCoordRequestList ::= SEQUENCE (SIZE(1..maxnoofUEAppLayerMeas)) OF SN-to-MN-QMCCoordRequestList-Item

SN-to-MN-QMCCoordRequestList-Item ::= SEQUENCE {

qOEReference QOEReference,

measCollectionEntityIPAddress MeasCollectionEntityIPAddress OPTIONAL,

qoEReportingPathRequest ENUMERATED{srb4, srb5, ...} OPTIONAL,

rVQoEReportingPathRequest ENUMERATED{srb4, srb5, ...} OPTIONAL,

furtherRVQoEInterestInquiry ENUMERATED{true, ...} OPTIONAL,

furtherRVQoEReportingPathInquiry ENUMERATED{true, ...} OPTIONAL,

currentRVQoEConfig RVQoEConfig OPTIONAL,

availableRVQoEMetrics AvailableRVQoEMetrics OPTIONAL,

configReleaseIndication ENUMERATED{rvqoe,qoe-and-rvqoe, ...} OPTIONAL,

iE-Extensions ProtocolExtensionContainer { { SN-to-MN-QMCCoordRequestList-Item-ExtIEs} } OPTIONAL,

...

}

SN-to-MN-QMCCoordRequestList-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

QMCCoordinationResponse ::= SEQUENCE {

mN-to-SN-QMCCoordResponseList MN-to-SN-QMCCoordResponseList OPTIONAL,

sN-to-MN-QMCCoordResponseList SN-to-MN-QMCCoordResponseList OPTIONAL,

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

...

}

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

...

}

MN-to-SN-QMCCoordResponseList ::= SEQUENCE (SIZE(1..maxnoofUEAppLayerMeas)) OF MN-to-SN-QMCCoordResponseList-Item

MN-to-SN-QMCCoordResponseList-Item ::= SEQUENCE {

qOEReference QOEReference,

qOEMeasConfigAppLayerID QOEMeasConfAppLayerID OPTIONAL,

qoEConfigSendingPath ENUMERATED{mn, sn, ...} OPTIONAL,

qoEReportingPathResponse ENUMERATED{accepted, rejected, ...} OPTIONAL,

rVQoEReportingPathResponse ENUMERATED{accepted, rejected, ...} OPTIONAL,

furtherRVQoEInterestResponse ENUMERATED{interested, not-interested, ...} OPTIONAL,

furtherRVQoEReportingPathResponse ENUMERATED{srb4, srb5, ...} OPTIONAL,

preferredRVQoEConfig RVQoEConfig OPTIONAL,

iE-Extensions ProtocolExtensionContainer { { MN-to-SN-QMCCoordResponseList-Item-ExtIEs} } OPTIONAL,

...

}

MN-to-SN-QMCCoordResponseList-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

SN-to-MN-QMCCoordResponseList ::= SEQUENCE (SIZE(1..maxnoofUEAppLayerMeas)) OF SN-to-MN-QMCCoordResponseList-Item

SN-to-MN-QMCCoordResponseList-Item ::= SEQUENCE {

qOEReference QOEReference,

qoEReportingPathResponse ENUMERATED{accepted, rejected, ...} OPTIONAL,

rVQoEReportingPathResponse ENUMERATED{accepted, rejected, ...} OPTIONAL,

furtherRVQoEInterestResponse ENUMERATED{interested, not-interested, ...} OPTIONAL,

furtherRVQoEReportingPathResponse ENUMERATED{srb4, srb5, ...} OPTIONAL,

preferredRVQoEConfig RVQoEConfig OPTIONAL,

iE-Extensions ProtocolExtensionContainer { { SN-to-MN-QMCCoordResponseList-Item-ExtIEs} } OPTIONAL,

...

}

SN-to-MN-QMCCoordResponseList-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

QoERVQoEReportingPaths ::= SEQUENCE {

qoEReportingPath ENUMERATED{srb4, srb5, ...} OPTIONAL,

rVQoEReportingPath ENUMERATED{srb4, srb5, ...} OPTIONAL,

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

...

}

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

...

}

RVQoEConfig ::= SEQUENCE {

availableRANVisibleQoEMetrics AvailableRVQoEMetrics OPTIONAL,

reportingPeriodicity RVQoEReportingPeriodicity OPTIONAL,

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

...

}

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

...

}

RVQoEReportingPeriodicity ::= ENUMERATED {

ms120,

ms240,

ms480,

ms640,

ms1024,

...

}

QOEMeasConfAppLayerID ::= INTEGER (0..15, ...)

QOEMeasStatus ::= ENUMERATED {ongoing, ...}

QOEReference ::= OCTET STRING (SIZE (6))

QoSCharacteristics ::= CHOICE {

non-dynamic NonDynamic5QIDescriptor,

dynamic Dynamic5QIDescriptor,

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

}

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

...

}

QoSFlowIdentifier ::= INTEGER (0..63, ...)

QoSFlowLevelQoSParameters ::= SEQUENCE {

qos-characteristics QoSCharacteristics,

allocationAndRetentionPrio AllocationandRetentionPriority,

gBRQoSFlowInfo GBRQoSFlowInfo OPTIONAL,

reflectiveQoS ReflectiveQoSAttribute OPTIONAL,

additionalQoSflowInfo ENUMERATED {more-likely, ...} OPTIONAL,

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

...

}

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

{ID id-QoSMonitoringRequest CRITICALITY ignore EXTENSION QosMonitoringRequest PRESENCE optional}|

{ID id-QosMonitoringReportingFrequency CRITICALITY ignore EXTENSION QosMonitoringReportingFrequency PRESENCE optional}|

{ID id-QoSMonitoringDisabled CRITICALITY ignore EXTENSION QoSMonitoringDisabled PRESENCE optional}|

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

...

}

QoSFlowMappingIndication ::= ENUMERATED {

ul,

dl,

...

}

QoSFlowNotificationControlIndicationInfo ::= SEQUENCE (SIZE (1..maxnoofQoSFlows)) OF QoSFlowNotify-Item

QoSFlowNotify-Item ::= SEQUENCE {

qosFlowIdentifier QoSFlowIdentifier,

notificationInformation ENUMERATED {fulfilled, not-fulfilled, ...},

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

...

}

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

{ ID id-CurrentQoSParaSetIndex CRITICALITY ignore EXTENSION QoSParaSetNotifyIndex PRESENCE optional },

...

}

QoSFlows-List ::= SEQUENCE (SIZE (1..maxnoofQoSFlows)) OF QoSFlow-Item

QoSFlow-Item ::= SEQUENCE {

qfi QoSFlowIdentifier,

qosFlowMappingIndication QoSFlowMappingIndication OPTIONAL,

iE-Extension ProtocolExtensionContainer { {QoSFlow-Item-ExtIEs} } OPTIONAL,

...

}

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

...

}

QoSFlows-List-withCause ::= SEQUENCE (SIZE (1..maxnoofQoSFlows)) OF QoSFlowwithCause-Item

QoSFlowwithCause-Item ::= SEQUENCE {

qfi QoSFlowIdentifier,

cause Cause OPTIONAL,

iE-Extension ProtocolExtensionContainer { {QoSFlowwithCause-Item-ExtIEs} } OPTIONAL,

...

}

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

...

}

QoS-Mapping-Information ::= SEQUENCE {

dscp BIT STRING (SIZE(6)) OPTIONAL,

flow-label BIT STRING (SIZE(20)) OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {QoS-Mapping-Information-ExtIEs} } OPTIONAL,

...

}

QoS-Mapping-Information-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

QoSParaSetIndex ::= INTEGER (1..8,...)

QoSParaSetNotifyIndex ::= INTEGER (0..8,...)

QoSFlowsAdmitted-List ::= SEQUENCE (SIZE (1..maxnoofQoSFlows)) OF QoSFlowsAdmitted-Item

QoSFlowsAdmitted-Item ::= SEQUENCE {

qfi QoSFlowIdentifier,

iE-Extension ProtocolExtensionContainer { {QoSFlowsAdmitted-Item-ExtIEs} } OPTIONAL,

...

}

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

{ ID id-CurrentQoSParaSetIndex CRITICALITY ignore EXTENSION QoSParaSetIndex PRESENCE optional },

...

}

QoSFlowsToBeSetup-List ::= SEQUENCE (SIZE (1..maxnoofQoSFlows)) OF QoSFlowsToBeSetup-Item

QoSFlowsToBeSetup-Item ::= SEQUENCE {

qfi QoSFlowIdentifier,

qosFlowLevelQoSParameters QoSFlowLevelQoSParameters,

e-RAB-ID E-RAB-ID OPTIONAL,

iE-Extension ProtocolExtensionContainer { {QoSFlowsToBeSetup-Item-ExtIEs} } OPTIONAL,

...

}

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

{ ID id-TSCTrafficCharacteristics CRITICALITY ignore EXTENSION TSCTrafficCharacteristics PRESENCE optional}|

{ ID id-RedundantQoSFlowIndicator CRITICALITY ignore EXTENSION RedundantQoSFlowIndicator PRESENCE optional}|

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

...

}

QoSFlowsUsageReportList ::= SEQUENCE (SIZE(1..maxnoofQoSFlows)) OF QoSFlowsUsageReport-Item

QoSFlowsUsageReport-Item ::= SEQUENCE {

qosFlowIdentifier QoSFlowIdentifier,

rATType ENUMERATED {nr, eutra, ..., nr-unlicensed, e-utra-unlicensed},

qoSFlowsTimedReportList VolumeTimedReportList,

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

...

}

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

...

}

QosMonitoringRequest ::= ENUMERATED {ul, dl, both}

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

QosMonitoringReportingFrequency ::= INTEGER (1..1800, ...)

-- R

RACH-Config-Common ::= OCTET STRING

RACH-Config-Common-IAB ::= OCTET STRING

RAReport ::= SEQUENCE (SIZE(1.. maxnoofRAReports)) OF RAReportList-Item

RAReportList-Item ::= SEQUENCE {

rAReport RAReportContainer,

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

...

}

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

{ ID id-UEAssistantIdentifier CRITICALITY ignore EXTENSION NG-RANnodeUEXnAPID PRESENCE optional}|

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

...

}

RAReportContainer ::= OCTET STRING

RadioResourceStatus ::= CHOICE {

ng-eNB-RadioResourceStatus NG-eNB-RadioResourceStatus,

gNB-RadioResourceStatus GNB-RadioResourceStatus,

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

}

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

...

}

RANAC ::= INTEGER (0..255)

RANAreaID ::= SEQUENCE {

tAC TAC,

rANAC RANAC OPTIONAL,

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

...

}

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

...

}

RANAreaID-List ::= SEQUENCE (SIZE(1..maxnoofRANAreasinRNA)) OF RANAreaID

Range ::= ENUMERATED {m50, m80, m180, m200, m350, m400, m500, m700, m1000, ...}

RANPagingArea ::= SEQUENCE {

pLMN-Identity PLMN-Identity,

rANPagingAreaChoice RANPagingAreaChoice,

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

...

}

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

...

}

RANPagingAreaChoice ::= CHOICE {

cell-List NG-RAN-Cell-Identity-ListinRANPagingArea,

rANAreaID-List RANAreaID-List,

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

}

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

...

}

RANPagingAttemptInfo ::= SEQUENCE {

pagingAttemptCount INTEGER (1..16, ...),

intendedNumberOfPagingAttempts INTEGER (1..16, ...),

nextPagingAreaScope ENUMERATED {same, changed, ...} OPTIONAL,

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

...

}

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

...

}

RANPagingFailure ::= ENUMERATED {

true,

...

}

RBsetConfiguration ::= SEQUENCE {

subcarrierSpacing SSB-subcarrierSpacing,

rBsetSize ENUMERATED {rb2, rb4, rb8, rb16, rb32, rb64},

numberofRBSets INTEGER(1.. maxnoofRBsetsPerCell),

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

...

}

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

...

}

Redcap-Bcast-Information ::= BIT STRING(SIZE(8))

RedundantQoSFlowIndicator ::= ENUMERATED {true, false}

RedundantPDUSessionInformation ::= SEQUENCE {

rSN RSN,

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

...

}

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

{ ID id-PDUSession-PairID CRITICALITY ignore EXTENSION PDUSession-PairID PRESENCE optional },

...

}

RSN ::= ENUMERATED {v1, v2, ...}

ReflectiveQoSAttribute ::= ENUMERATED {subject-to-reflective-QoS, ...}

RequestedSRSTransmissionCharacteristics ::= OCTET STRING

RoutingID ::= OCTET STRING

ReplacingCells ::= SEQUENCE (SIZE(0.. maxnoofCellsinNG-RANnode)) OF ReplacingCells-Item

ReplacingCells-Item ::= SEQUENCE {

globalNG-RANCell-ID GlobalCell-ID,

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

...

}

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

...

}

ReportAmountMDT ::= ENUMERATED{r1, r2, r4, r8, r16, r32, r64, infinity, ...}

ReportArea ::= ENUMERATED {

cell,

...

}

ReportConfigContainer ::= OCTET STRING

ReportIntervalMDT ::= ENUMERATED {ms120, ms240, ms480, ms640, ms1024, ms2048, ms5120, ms10240, min1, min6, min12, min30, min60, ...}

ReportType ::= CHOICE {

periodical Periodical,

eventTriggered EventTriggered,

...,

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

}

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

...

}

ExtendedReportIntervalMDT ::= ENUMERATED {

ms20480,

ms40960,

...

}

ReportCharacteristics ::= BIT STRING(SIZE(32))

ReportCharacteristicsForDataCollection ::= BIT STRING(SIZE(32))

ReportingPeriodicity ::= ENUMERATED {

half-thousand-ms,

one-thousand-ms,

two-thousand-ms,

five-thousand-ms,

ten-thousand-ms,

...

}

ReportingPeriodicityForDataCollection ::= ENUMERATED {

half-thousand-ms,

one-thousand-ms,

two-thousand-ms,

five-thousand-ms,

ten-thousand-ms,

...

}

RequestedPredictionTime ::= INTEGER (1..60, ...)

RegistrationRequest ::= ENUMERATED {start, stop, add, ... }

RegistrationRequestForDataCollection ::= ENUMERATED {start, stop, ... }

RequestReferenceID ::= INTEGER (1..64, ...)

ReservedSubframePattern ::= SEQUENCE {

subframeType ENUMERATED {mbsfn, non-mbsfn, ...},

reservedSubframePattern BIT STRING (SIZE(10..160)),

mbsfnControlRegionLength MBSFNControlRegionLength OPTIONAL,

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

...

}

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

...

}

ResetRequestTypeInfo ::= CHOICE {

fullReset ResetRequestTypeInfo-Full,

partialReset ResetRequestTypeInfo-Partial,

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

}

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

...

}

ResetRequestTypeInfo-Full ::= SEQUENCE {

iE-Extension ProtocolExtensionContainer { {ResetRequestTypeInfo-Full-ExtIEs} } OPTIONAL,

...

}

ResetRequestTypeInfo-Full-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

ResetRequestTypeInfo-Partial ::= SEQUENCE {

ue-contexts-ToBeReleasedList ResetRequestPartialReleaseList,

iE-Extension ProtocolExtensionContainer { {ResetRequestTypeInfo-Partial-ExtIEs} } OPTIONAL,

...

}

ResetRequestTypeInfo-Partial-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

ResetRequestPartialReleaseList ::= SEQUENCE (SIZE(1..maxnoofUEContexts)) OF ResetRequestPartialReleaseItem

ResetRequestPartialReleaseItem ::= SEQUENCE {

ng-ran-node1UEXnAPID NG-RANnodeUEXnAPID OPTIONAL,

ng-ran-node2UEXnAPID NG-RANnodeUEXnAPID OPTIONAL,

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

...

}

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

...

}

ResetResponseTypeInfo ::= CHOICE {

fullReset ResetResponseTypeInfo-Full,

partialReset ResetResponseTypeInfo-Partial,

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

}

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

...

}

ResetResponseTypeInfo-Full ::= SEQUENCE {

iE-Extension ProtocolExtensionContainer { {ResetResponseTypeInfo-Full-ExtIEs} } OPTIONAL,

...

}

ResetResponseTypeInfo-Full-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

ResetResponseTypeInfo-Partial ::= SEQUENCE {

ue-contexts-AdmittedToBeReleasedList ResetResponsePartialReleaseList,

iE-Extension ProtocolExtensionContainer { {ResetResponseTypeInfo-Partial-ExtIEs} } OPTIONAL,

...

}

ResetResponseTypeInfo-Partial-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

ResetResponsePartialReleaseList ::= SEQUENCE (SIZE(1..maxnoofUEContexts)) OF ResetResponsePartialReleaseItem

ResetResponsePartialReleaseItem ::= SEQUENCE {

ng-ran-node1UEXnAPID NG-RANnodeUEXnAPID OPTIONAL,

ng-ran-node2UEXnAPID NG-RANnodeUEXnAPID OPTIONAL,

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

...

}

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

...

}

RLCMode ::= ENUMERATED {

rlc-am,

rlc-um-bidirectional,

rlc-um-unidirectional-ul,

rlc-um-unidirectional-dl,

...

}

RLC-Status ::= SEQUENCE {

reestablishment-Indication Reestablishment-Indication,

iE-Extensions ProtocolExtensionContainer { {RLC-Status-ExtIEs} } OPTIONAL,

...

}

RLC-Status-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

RLCDuplicationInformation ::= SEQUENCE {

rLCDuplicationStateList RLCDuplicationStateList,

rLC-PrimaryIndicator ENUMERATED {true, false} OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {RLCDuplicationInformation-ItemExtIEs} } OPTIONAL

}

RLCDuplicationInformation-ItemExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

RLCDuplicationStateList ::= SEQUENCE (SIZE(1..maxnoofRLCDuplicationstate)) OF RLCDuplicationState-Item

RLCDuplicationState-Item ::= SEQUENCE {

duplicationState ENUMERATED {active,inactive, ...},

iE-Extensions ProtocolExtensionContainer { {RLCDuplicationState-ItemExtIEs } } OPTIONAL,

...

}

RLCDuplicationState-ItemExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

Reestablishment-Indication ::= ENUMERATED {

reestablished,

...

}

RFSP-Index ::= INTEGER (1..256)

RRCConfigIndication ::= ENUMERATED {

full-config,

delta-config,

...

}

RRCConnections::= SEQUENCE {

noofRRCConnections NoofRRCConnections,

availableRRCConnectionCapacityValue AvailableRRCConnectionCapacityValue,

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

...

}

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

...

}

RRCConnReestab-Indicator ::= ENUMERATED { reconfigurationFailure, handoverFailure, otherFailure, ...}

RRCReestab-initiated ::= SEQUENCE {

rRRCReestab-initiated-reporting RRCReestab-Initiated-Reporting,

iE-Extensions ProtocolExtensionContainer { { RRCReestab-initiated-ExtIEs} } OPTIONAL,

...

}

RRCReestab-initiated-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

RRCReestab-Initiated-Reporting ::= CHOICE {

rRCReestab-reporting-wo-UERLFReport RRCReestab-Initiated-Reporting-wo-UERLFReport,

rRCReestab-reporting-with-UERLFReport RRCReestab-Initiated-Reporting-with-UERLFReport,

choice-extension ProtocolIE-Single-Container { {RRCReestab-Initiated-Reporting-ExtIEs} }

}

RRCReestab-Initiated-Reporting-ExtIEs XNAP-PROTOCOL-IES ::= {

...

}

RRCReestab-Initiated-Reporting-wo-UERLFReport ::= SEQUENCE {

failureCellPCI NG-RAN-CellPCI,

reestabCellCGI GlobalNG-RANCell-ID,

c-RNTI C-RNTI,

shortMAC-I MAC-I,

iE-Extensions ProtocolExtensionContainer { { RRCReestab-Initiated-Reporting-wo-UERLFReport-ExtIEs} } OPTIONAL,

...

}

RRCReestab-Initiated-Reporting-wo-UERLFReport-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ ID id-RRCConnReestab-Indicator CRITICALITY ignore EXTENSION RRCConnReestab-Indicator PRESENCE optional },

...

}

RRCReestab-Initiated-Reporting-with-UERLFReport ::= SEQUENCE {

uERLFReportContainer UERLFReportContainer,

iE-Extensions ProtocolExtensionContainer { {RRCReestab-Initiated-Reporting-with-UERLFReport-ExtIEs} } OPTIONAL,

...

}

RRCReestab-Initiated-Reporting-with-UERLFReport-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

RRCSetup-initiated ::= SEQUENCE {

rRRCSetup-Initiated-Reporting RRCSetup-Initiated-Reporting,

uERLFReportContainer UERLFReportContainer OPTIONAL,

iE-Extensions ProtocolExtensionContainer { { RRCSetup-initiated-ExtIEs} } OPTIONAL,

...

}

RRCSetup-initiated-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

RRCSetup-Initiated-Reporting ::= CHOICE {

rRCSetup-reporting-with-UERLFReport RRCSetup-Initiated-Reporting-with-UERLFReport,

choice-extension ProtocolIE-Single-Container { {RRCSetup-Initiated-Reporting-ExtIEs} }

}

RRCSetup-Initiated-Reporting-ExtIEs XNAP-PROTOCOL-IES ::= {

...

}

RRCSetup-Initiated-Reporting-with-UERLFReport ::= SEQUENCE {

uERLFReportContainer UERLFReportContainer,

iE-Extensions ProtocolExtensionContainer { {RRCSetup-Initiated-Reporting-with-UERLFReport-ExtIEs} } OPTIONAL,

...

}

RRCSetup-Initiated-Reporting-with-UERLFReport-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

RRCResumeCause ::= ENUMERATED {

rna-Update,

...

}

RaReportIndicationList ::= SEQUENCE (SIZE(1..maxnoofUEsforRAReportIndications)) OF RaReportIndicationList-Item

RaReportIndicationList-Item ::= SEQUENCE {

m-NG-RAN-node-UE-XnAP-ID NG-RANnodeUEXnAPID,

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

...

}

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

...

}

RadioResourceStatusNR-U ::= SEQUENCE {

dL-Total-PRB-usage INTEGER (0..100),

uL-Total-PRB-usage INTEGER (0..100),

iE-Extensions ProtocolExtensionContainer {{ RadioResourceStatusNR-U-ExtIEs}} OPTIONAL,

...

}

RadioResourceStatusNR-U-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

-- S

SCGreconfigNotification ::= ENUMERATED {executed, ... , executed-deleted, deleted }

S-NSSAIListQoE ::= SEQUENCE (SIZE(1..maxnoofSNSSAIforQMC)) OF S-NSSAI

S-BasedMDT ::= SEQUENCE {

ng-ran-TraceID NG-RANTraceID,

iE-Extension ProtocolExtensionContainer { {S-BasedMDT-ExtIEs} } OPTIONAL,

...

}

S-BasedMDT-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

S-CPAC-Request ::= ENUMERATED {initiation, ...}

S-CPAC-Request-Info ::= SEQUENCE {

s-CPAC-Security-Config-List S-CPAC-SecurityConfig-List,

s-CPAC-MultiTargetSN-List S-CPAC-MultiTargetSN-List OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {S-CPAC-Request-Info-ExtIEs} } OPTIONAL,

...

}

S-CPAC-Request-Info-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

S-CPAC-ReferenceConfig-Request ::= ENUMERATED {request, ...}

S-CPAC-SecurityConfig-List ::= SEQUENCE (SIZE(1..maxnoofSecurityConfigurations)) OF S-CPAC-SecurityConfig-Item

S-CPAC-SecurityConfig-Item ::= SEQUENCE {

s-ng-RANnode-SecurityKey S-NG-RANnode-SecurityKey,

sk-counter SK-COUNTER,

iE-Extensions ProtocolExtensionContainer { {S-CPAC-SecurityConfig-Item-ExtIEs} } OPTIONAL,

...

}

S-CPAC-SecurityConfig-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

S-CPAC-MultiTargetSN-List ::= SEQUENCE (SIZE(1..maxnoofTargetSNsMinusOne)) OF S-CPAC-MultiTargetSN-Item

S-CPAC-MultiTargetSN-Item ::= SEQUENCE {

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

recommendedCandidatePSCells OCTET STRING,

iE-Extensions ProtocolExtensionContainer { {S-CPAC-MultiTargetSN-Item-ExtIEs} } OPTIONAL,

...

}

S-CPAC-MultiTargetSN-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

S-CPAC-InterSN-ExecutionNotify ::= ENUMERATED {executed, ...}

ServiceType ::= ENUMERATED{

qMC-for-streaming-service,

qMC-for-MTSI-service,

qMC-for-VR-service,

...

}

SecondarydataForwardingInfoFromTarget-Item::= SEQUENCE {

secondarydataForwardingInfoFromTarget DataForwardingInfoFromTargetNGRANnode,

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

...

}

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

...

}

SecondarydataForwardingInfoFromTarget-List ::= SEQUENCE (SIZE(1..maxnoofMultiConnectivityMinusOne)) OF SecondarydataForwardingInfoFromTarget-Item

SCGActivationRequest ::= ENUMERATED {activate-scg, deactivate-scg, ...}

SCGActivationStatus ::= ENUMERATED {scg-activated, scg-deactivated, ...}

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

SCGIndicator ::= ENUMERATED{released, ...}

SCGFailureReportContainer ::= OCTET STRING

SDTSupportRequest ::= SEQUENCE {

sdtindicator SDTIndicator,

sdtAssistantInfo SDTAssistantInfo OPTIONAL,

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

...

}

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

...

}

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

SDTAssistantInfo ::= ENUMERATED {single-packet, multiple-packets, ...}

SDT-Termination-Request ::= ENUMERATED {radio-link-problem, normal, ..., large-sdt-volume-from-BSR}

SDTPartialUEContextInfo ::= SEQUENCE {

dRBsToBeSetup SDT-DRBsToBeSetupList OPTIONAL,

sRBsToBeSetup SDT-SRBsToBeSetupList,

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

...

}

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

...

}

SDT-DRBsToBeSetupList ::= SEQUENCE (SIZE(1..maxnoofDRBs)) OF SDT-DRBsToBeSetupList-Item

SDT-DRBsToBeSetupList-Item ::= SEQUENCE {

drb-ID DRB-ID,

uL-TNLInfo UPTransportLayerInformation,

dRB-RLC-Bearer-Configuration OCTET STRING,

dRB-QoS QoSFlowLevelQoSParameters,

rLC-Mode RLCMode,

s-nssai S-NSSAI,

pDCP-SNLength PDCPSNLength,

flows-Mapped-To-DRB-List Flows-Mapped-To-DRB-List,

iE-Extensions ProtocolExtensionContainer { { SDT-DRBsToBeSetupList-Item-ExtIEs} } OPTIONAL,

...

}

SDT-DRBsToBeSetupList-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

SDT-SRBsToBeSetupList ::= SEQUENCE (SIZE(1..maxnoofSRBs)) OF SDT-SRBsToBeSetupList-Item

SDT-SRBsToBeSetupList-Item ::= SEQUENCE {

srb-ID SRB-ID,

sRB-RLC-Bearer-Configuration OCTET STRING,

iE-Extensions ProtocolExtensionContainer { { SDT-SRBsToBeSetupList-Item-ExtIEs} } OPTIONAL,

...

}

SDT-SRBsToBeSetupList-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

SRB-ID ::= INTEGER (0..4, ...)

SDTDataForwardingDRBList ::= SEQUENCE (SIZE(1..maxnoofDRBs)) OF SDTDataForwardingDRBList-Item

SDTDataForwardingDRBList-Item ::= SEQUENCE {

drb-ID DRB-ID,

dL-TNLInfo UPTransportLayerInformation OPTIONAL,

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

...

}

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

...

}

SecondaryRATUsageInformation ::= SEQUENCE {

pDUSessionUsageReport PDUSessionUsageReport OPTIONAL,

qosFlowsUsageReportList QoSFlowsUsageReportList OPTIONAL,

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

...

}

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

...

}

SecurityIndication ::= SEQUENCE {

integrityProtectionIndication ENUMERATED {required, preferred, not-needed, ...},

confidentialityProtectionIndication ENUMERATED {required, preferred, not-needed, ...},

maximumIPdatarate MaximumIPdatarate OPTIONAL,

-- This IE shall be present if the *Integrity Protection* IE within the *Security Indication* IE is present and set to "required" or "preferred". --

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

...

}

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

...

}

SecurityResult ::= SEQUENCE {

integrityProtectionResult ENUMERATED {performed, not-performed, ...},

confidentialityProtectionResult ENUMERATED {performed, not-performed, ...},

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

...

}

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

...

}

SensorMeasurementConfiguration ::= SEQUENCE {

sensorMeasConfig SensorMeasConfig,

sensorMeasConfigNameList SensorMeasConfigNameList OPTIONAL,

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

...

}

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

...

}

SensorMeasConfigNameList ::= SEQUENCE (SIZE(1..maxnoofSensorName)) OF SensorName

SensorMeasConfig::= ENUMERATED {setup,...}

SensorName ::= SEQUENCE {

uncompensatedBarometricConfig ENUMERATED {true, ...} OPTIONAL,

ueSpeedConfig ENUMERATED {true, ...} OPTIONAL,

ueOrientationConfig ENUMERATED {true, ...} OPTIONAL,

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

...

}

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

...

}

-- Served Cells E-UTRA IEs

ServedCellInformation-E-UTRA ::= SEQUENCE {

e-utra-pci E-UTRAPCI,

e-utra-cgi E-UTRA-CGI,

tac TAC,

ranac RANAC OPTIONAL,

broadcastPLMNs SEQUENCE (SIZE(1..maxnoofBPLMNs)) OF ServedCellInformation-E-UTRA-perBPLMN,

e-utra-mode-info ServedCellInformation-E-UTRA-ModeInfo,

numberofAntennaPorts NumberOfAntennaPorts-E-UTRA OPTIONAL,

prach-configuration E-UTRAPRACHConfiguration OPTIONAL,

mBSFNsubframeInfo MBSFNSubframeInfo-E-UTRA OPTIONAL,

multibandInfo E-UTRAMultibandInfoList OPTIONAL,

freqBandIndicatorPriority ENUMERATED {not-broadcast, broadcast, ...} OPTIONAL,

bandwidthReducedSI ENUMERATED {scheduled, ...} OPTIONAL,

protectedE-UTRAResourceIndication ProtectedE-UTRAResourceIndication OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {ServedCellInformation-E-UTRA-ExtIEs} } OPTIONAL,

...

}

ServedCellInformation-E-UTRA-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ ID id-BPLMN-ID-Info-EUTRA CRITICALITY ignore EXTENSION BPLMN-ID-Info-EUTRA PRESENCE optional }|

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

...

}

ServedCellInformation-E-UTRA-perBPLMN ::= SEQUENCE {

plmn-id PLMN-Identity,

iE-Extensions ProtocolExtensionContainer { {ServedCellInformation-E-UTRA-perBPLMN-ExtIEs} } OPTIONAL,

...

}

ServedCellInformation-E-UTRA-perBPLMN-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

ServedCellInformation-E-UTRA-ModeInfo ::= CHOICE {

fdd ServedCellInformation-E-UTRA-FDDInfo,

tdd ServedCellInformation-E-UTRA-TDDInfo,

choice-extension ProtocolIE-Single-Container{ {ServedCellInformation-E-UTRA-ModeInfo-ExtIEs} }

}

ServedCellInformation-E-UTRA-ModeInfo-ExtIEs XNAP-PROTOCOL-IES ::= {

...

}

ServedCellInformation-E-UTRA-FDDInfo ::= SEQUENCE {

ul-earfcn E-UTRAARFCN,

dl-earfcn E-UTRAARFCN,

ul-e-utraTxBW E-UTRATransmissionBandwidth,

dl-e-utraTxBW E-UTRATransmissionBandwidth,

iE-Extensions ProtocolExtensionContainer { {ServedCellInformation-E-UTRA-FDDInfo-ExtIEs} } OPTIONAL,

...

}

ServedCellInformation-E-UTRA-FDDInfo-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ ID id-OffsetOfNbiotChannelNumberToDL-EARFCN CRITICALITY reject EXTENSION OffsetOfNbiotChannelNumberToEARFCN PRESENCE optional}|

{ ID id-OffsetOfNbiotChannelNumberToUL-EARFCN CRITICALITY reject EXTENSION OffsetOfNbiotChannelNumberToEARFCN PRESENCE optional},

...

}

ServedCellInformation-E-UTRA-TDDInfo ::= SEQUENCE {

earfcn E-UTRAARFCN,

e-utraTxBW E-UTRATransmissionBandwidth,

subframeAssignmnet ENUMERATED {sa0,sa1,sa2,sa3,sa4,sa5,sa6,...},

specialSubframeInfo SpecialSubframeInfo-E-UTRA,

iE-Extensions ProtocolExtensionContainer { {ServedCellInformation-E-UTRA-TDDInfo-ExtIEs} } OPTIONAL,

...

}

ServedCellInformation-E-UTRA-TDDInfo-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ ID id-OffsetOfNbiotChannelNumberToDL-EARFCN CRITICALITY reject EXTENSION OffsetOfNbiotChannelNumberToEARFCN PRESENCE optional}|

{ ID id-NBIoT-UL-DL-AlignmentOffset CRITICALITY reject EXTENSION NBIoT-UL-DL-AlignmentOffset PRESENCE optional},

...

}

ServedCells-E-UTRA ::= SEQUENCE (SIZE (1..maxnoofCellsinNG-RANnode)) OF ServedCells-E-UTRA-Item

ServedCells-E-UTRA-Item ::= SEQUENCE {

served-cell-info-E-UTRA ServedCellInformation-E-UTRA,

neighbour-info-NR NeighbourInformation-NR OPTIONAL,

neighbour-info-E-UTRA NeighbourInformation-E-UTRA OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {ServedCells-E-UTRA-Item-ExtIEs} } OPTIONAL,

...

}

ServedCells-E-UTRA-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ ID id-SFN-Offset CRITICALITY ignore EXTENSION SFN-Offset PRESENCE optional },

...

}

ServedCellsToUpdate-E-UTRA ::= SEQUENCE {

served-Cells-ToAdd-E-UTRA ServedCells-E-UTRA OPTIONAL,

served-Cells-ToModify-E-UTRA ServedCells-ToModify-E-UTRA OPTIONAL,

served-Cells-ToDelete-E-UTRA SEQUENCE (SIZE (1..maxnoofCellsinNG-RANnode)) OF E-UTRA-CGI OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {ServedCellsToUpdate-E-UTRA-ExtIEs} } OPTIONAL,

...

}

ServedCellsToUpdate-E-UTRA-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

ServedCells-ToModify-E-UTRA ::= SEQUENCE (SIZE (1..maxnoofCellsinNG-RANnode)) OF ServedCells-ToModify-E-UTRA-Item

ServedCells-ToModify-E-UTRA-Item ::= SEQUENCE {

old-ECGI E-UTRA-CGI,

served-cell-info-E-UTRA ServedCellInformation-E-UTRA,

neighbour-info-NR NeighbourInformation-NR OPTIONAL,

neighbour-info-E-UTRA NeighbourInformation-E-UTRA OPTIONAL,

deactivation-indication ENUMERATED {deactivated, ...} OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {Served-cells-ToModify-E-UTRA-Item-ExtIEs} } OPTIONAL,

...

}

Served-cells-ToModify-E-UTRA-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ ID id-SFN-Offset CRITICALITY ignore EXTENSION SFN-Offset PRESENCE optional },

...

}

-- Served Cells NR IEs

ServedCellInformation-NR ::= SEQUENCE {

nrPCI NRPCI,

cellID NR-CGI,

tac TAC,

ranac RANAC OPTIONAL,

broadcastPLMN BroadcastPLMNs,

nrModeInfo NRModeInfo,

measurementTimingConfiguration OCTET STRING,

connectivitySupport Connectivity-Support,

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

...

}

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

{ ID id-BPLMN-ID-Info-NR CRITICALITY ignore EXTENSION BPLMN-ID-Info-NR PRESENCE optional }|

{ ID id-ConfiguredTACIndication CRITICALITY ignore EXTENSION ConfiguredTACIndication PRESENCE optional }|

{ ID id-SSB-PositionsInBurst CRITICALITY ignore EXTENSION SSB-PositionsInBurst PRESENCE optional }|

{ ID id-NRCellPRACHConfig CRITICALITY ignore EXTENSION NRCellPRACHConfig PRESENCE optional }|

{ ID id-NPN-Broadcast-Information CRITICALITY reject EXTENSION NPN-Broadcast-Information PRESENCE optional }|

{ ID id-CSI-RSTransmissionIndication CRITICALITY ignore EXTENSION CSI-RSTransmissionIndication PRESENCE optional }|

{ ID id-SFN-Offset CRITICALITY ignore EXTENSION SFN-Offset PRESENCE optional }|

{ ID id-Supported-MBS-FSA-ID-List CRITICALITY ignore EXTENSION Supported-MBS-FSA-ID-List PRESENCE optional }|

{ ID id-NR-U-ChannelInfo-List CRITICALITY ignore EXTENSION NR-U-ChannelInfo-List PRESENCE optional }|

{ ID id-Additional-Measurement-Timing-Configuration-List CRITICALITY ignore EXTENSION Additional-Measurement-Timing-Configuration-List PRESENCE optional }|

{ ID id-Redcap-Bcast-Information CRITICALITY ignore EXTENSION Redcap-Bcast-Information PRESENCE optional }|

{ ID id-eRedcap-Bcast-Information CRITICALITY ignore EXTENSION ERedcap-Bcast-Information PRESENCE optional }|

{ ID id-MobileIABCell CRITICALITY ignore EXTENSION MobileIABCell PRESENCE optional }|

{ ID id-XR-Bcast-Information CRITICALITY ignore EXTENSION XR-Bcast-Information PRESENCE optional }|

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

...

}

SFN-Offset ::= SEQUENCE {

sFN-Time-Offset BIT STRING (SIZE(24)),

iE-Extensions ProtocolExtensionContainer { {SFN-Offset-ExtIEs} } OPTIONAL,

...

}

SFN-Offset-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

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

ServedCells-NR-Item ::= SEQUENCE {

served-cell-info-NR ServedCellInformation-NR,

neighbour-info-NR NeighbourInformation-NR OPTIONAL,

neighbour-info-E-UTRA NeighbourInformation-E-UTRA OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {ServedCells-NR-Item-ExtIEs} } OPTIONAL,

...

}

ServedCells-NR-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ ID id-ServedCellSpecificInfoReq-NR CRITICALITY ignore EXTENSION ServedCellSpecificInfoReq-NR PRESENCE optional },

...

}

ServedCells-ToModify-NR ::= SEQUENCE (SIZE (1..maxnoofCellsinNG-RANnode)) OF ServedCells-ToModify-NR-Item

ServedCells-ToModify-NR-Item ::= SEQUENCE {

old-NR-CGI NR-CGI,

served-cell-info-NR ServedCellInformation-NR,

neighbour-info-NR NeighbourInformation-NR OPTIONAL,

neighbour-info-E-UTRA NeighbourInformation-E-UTRA OPTIONAL,

deactivation-indication ENUMERATED {deactivated, ...} OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {Served-cells-ToModify-NR-Item-ExtIEs} } OPTIONAL,

...

}

Served-cells-ToModify-NR-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

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

ServedCellSpecificInfoReq-NR-Item ::= SEQUENCE {

nRCGI NR-CGI,

additionalMTCListRequestIndicator ENUMERATED {additionalMTCListRequested, ...} OPTIONAL,

iE-Extensions ProtocolExtensionContainer { { ServedCellSpecificInfoReq-NR-Item-ExtIEs} } OPTIONAL,

...

}

ServedCellSpecificInfoReq-NR-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

ServedCellsToUpdate-NR ::= SEQUENCE {

served-Cells-ToAdd-NR ServedCells-NR OPTIONAL,

served-Cells-ToModify-NR ServedCells-ToModify-NR OPTIONAL,

served-Cells-ToDelete-NR SEQUENCE (SIZE (1..maxnoofCellsinNG-RANnode)) OF NR-CGI OPTIONAL,

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

...

}

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

...

}

SharedResourceType ::= CHOICE {

ul-onlySharing SharedResourceType-UL-OnlySharing,

ul-and-dl-Sharing SharedResourceType-ULDL-Sharing,

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

}

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

...

}

SharedResourceType-UL-OnlySharing ::= SEQUENCE {

ul-resourceBitmap DataTrafficResources,

iE-Extensions ProtocolExtensionContainer { {SharedResourceType-UL-OnlySharing-ExtIEs} } OPTIONAL,

...

}

SharedResourceType-UL-OnlySharing-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

SharedResourceType-ULDL-Sharing ::= CHOICE {

ul-resources SharedResourceType-ULDL-Sharing-UL-Resources,

dl-resources SharedResourceType-ULDL-Sharing-DL-Resources,

choice-extension ProtocolIE-Single-Container { {SharedResourceType-ULDL-Sharing-ExtIEs} }

}

SharedResourceType-ULDL-Sharing-ExtIEs XNAP-PROTOCOL-IES ::= {

...

}

SharedResourceType-ULDL-Sharing-UL-Resources ::= CHOICE {

unchanged NULL,

changed SharedResourceType-ULDL-Sharing-UL-ResourcesChanged,

choice-extension ProtocolIE-Single-Container { {SharedResourceType-ULDL-Sharing-UL-Resources-ExtIEs} }

}

SharedResourceType-ULDL-Sharing-UL-Resources-ExtIEs XNAP-PROTOCOL-IES ::= {

...

}

SharedResourceType-ULDL-Sharing-UL-ResourcesChanged ::= SEQUENCE {

ul-resourceBitmap DataTrafficResources,

iE-Extensions ProtocolExtensionContainer { {SharedResourceType-ULDL-Sharing-UL-ResourcesChanged-ExtIEs} } OPTIONAL,

...

}

SharedResourceType-ULDL-Sharing-UL-ResourcesChanged-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

SharedResourceType-ULDL-Sharing-DL-Resources ::= CHOICE {

unchanged NULL,

changed SharedResourceType-ULDL-Sharing-DL-ResourcesChanged,

choice-extension ProtocolIE-Single-Container { {SharedResourceType-ULDL-Sharing-DL-Resources-ExtIEs} }

}

SharedResourceType-ULDL-Sharing-DL-Resources-ExtIEs XNAP-PROTOCOL-IES ::= {

...

}

SharedResourceType-ULDL-Sharing-DL-ResourcesChanged ::= SEQUENCE {

dl-resourceBitmap DataTrafficResources,

iE-Extensions ProtocolExtensionContainer { {SharedResourceType-ULDL-Sharing-DL-ResourcesChanged-ExtIEs} } OPTIONAL,

...

}

SharedResourceType-ULDL-Sharing-DL-ResourcesChanged-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

SK-COUNTER ::= INTEGER (0..65535)

SliceAvailableCapacity ::= SEQUENCE (SIZE(1..maxnoofBPLMNs)) OF SliceAvailableCapacity-Item

SliceAvailableCapacity-Item ::= SEQUENCE {

pLMNIdentity PLMN-Identity,

sNSSAIAvailableCapacity-List SNSSAIAvailableCapacity-List,

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

...

}

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

...

}

SNSSAIAvailableCapacity-List ::= SEQUENCE (SIZE(1.. maxnoofSliceItems)) OF SNSSAIAvailableCapacity-Item

SNSSAIAvailableCapacity-Item ::= SEQUENCE {

sNSSAI S-NSSAI,

sliceAvailableCapacityValueDownlink INTEGER (0..100),

sliceAvailableCapacityValueUplink INTEGER (0..100),

iE-Extensions ProtocolExtensionContainer { { SNSSAIAvailableCapacity-Item-ExtIEs } } OPTIONAL

}

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

...

}

SliceRadioResourceStatus-List ::= SEQUENCE (SIZE(1..maxnoofBPLMNs)) OF SliceRadioResourceStatus-Item

SliceRadioResourceStatus-Item ::= SEQUENCE {

plmn-Identity PLMN-Identity,

sNSSAIRadioResourceStatus-List SNSSAIRadioResourceStatus-List,

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

...

}

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

...

}

SLPositioning-Ranging-Services-Info::= SEQUENCE{

sLPositioning-Ranging-Authorized SLPositioning-Ranging-Authorized,

rSPP-transport-QoS-parameters RSPP-transport-QoS-parameters OPTIONAL,

iE-Extensions ProtocolExtensionContainer { { SLPositioning-Ranging-Services-Info-ExtIEs} } OPTIONAL

}

SLPositioning-Ranging-Services-Info-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

SLPositioning-Ranging-Authorized ::= ENUMERATED {

authorized,

not-authorized,

...

}

RSPP-transport-QoS-parameters ::= SEQUENCE {

rSPPQoSFlowList RSPPQoSFlowList,

rSPPLinkAggregateBitRates BitRate OPTIONAL,

iE-Extensions ProtocolExtensionContainer { { RSPP-transport-QoS-parameters-ExtIEs} } OPTIONAL,

...

}

RSPP-transport-QoS-parameters-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

RSPPQoSFlowList ::= SEQUENCE (SIZE(1..maxnoofRSPPQoSFlows)) OF RSPPQoSFlowItem

RSPPQoSFlowItem ::= SEQUENCE {

pQI FiveQI,

rSPPFlowBitRates RSPPFlowBitRates OPTIONAL,

range Range OPTIONAL,

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

...

}

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

...

}

RSPPFlowBitRates ::= SEQUENCE {

guaranteedFlowBitRate BitRate,

maximumFlowBitRate BitRate,

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

...

}

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

...

}

SNSSAIRadioResourceStatus-List ::= SEQUENCE (SIZE(1..maxnoofSliceItems)) OF SNSSAIRadioResourceStatus-Item

SNSSAIRadioResourceStatus-Item ::= SEQUENCE {

sNSSAI S-NSSAI,

slice-DL-GBR-PRB-Usage Slice-DL-GBR-PRB-Usage,

slice-UL-GBR-PRB-Usage Slice-UL-GBR-PRB-Usage,

slice-DL-non-GBR-PRB-Usage Slice-DL-non-GBR-PRB-Usage,

slice-UL-non-GBR-PRB-Usage Slice-UL-non-GBR-PRB-Usage,

slice-DL-Total-PRB-Allocation Slice-DL-Total-PRB-Allocation,

slice-UL-Total-PRB-Allocation Slice-UL-Total-PRB-Allocation,

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

...

}

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

...

}

Slice-DL-GBR-PRB-Usage ::= INTEGER (0..100)

Slice-UL-GBR-PRB-Usage ::= INTEGER (0..100)

Slice-DL-non-GBR-PRB-Usage ::= INTEGER (0..100)

Slice-UL-non-GBR-PRB-Usage ::= INTEGER (0..100)

Slice-DL-Total-PRB-Allocation ::= INTEGER (0..100)

Slice-UL-Total-PRB-Allocation ::= INTEGER (0..100)

SliceSupport-List ::= SEQUENCE (SIZE(1..maxnoofSliceItems)) OF S-NSSAI

SliceToReport-List ::= SEQUENCE (SIZE(1..maxnoofBPLMNs)) OF SliceToReport-List-Item

SliceToReport-List-Item ::= SEQUENCE {

pLMNIdentity PLMN-Identity,

sNSSAIlist SNSSAI-list,

iE-Extensions ProtocolExtensionContainer { { SliceToReport-List-Item-ExtIEs} } OPTIONAL,

...

}

SliceToReport-List-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

SNSSAI-list ::= SEQUENCE (SIZE(1.. maxnoofSliceItems)) OF SNSSAI-Item

SNSSAI-Item ::= SEQUENCE {

sNSSAI S-NSSAI,

iE-Extensions ProtocolExtensionContainer { { SNSSAI-Item-ExtIEs } } OPTIONAL

}

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

...

}

SlotConfiguration-List ::= SEQUENCE (SIZE (1..maxnoofslots)) OF SlotConfiguration-List-Item

SlotConfiguration-List-Item ::= SEQUENCE {

slotIndex INTEGER (0..5119),

symbolAllocation-in-Slot SymbolAllocation-in-Slot,

iE-Extensions ProtocolExtensionContainer { {SlotConfiguration-List-Item-ExtIEs} } OPTIONAL,

...

}

SlotConfiguration-List-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

S-NG-RANnode-SecurityKey ::= BIT STRING (SIZE(256))

S-NG-RANnode-Addition-Trigger-Ind ::= ENUMERATED {

sn-change,

inter-MN-HO,

intra-MN-HO,

...

}

S-NSSAI ::= SEQUENCE {

sst OCTET STRING (SIZE(1)),

sd OCTET STRING (SIZE(3)) OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {S-NSSAI-ExtIEs} } OPTIONAL,

...

}

S-NSSAI-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

SNMobilityInformation ::= BIT STRING (SIZE(32))

SNPNIdentity ::= SEQUENCE {

plmnID PLMN-Identity,

nid NID,

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

...

}

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

...

}

SNTriggered ::=ENUMERATED{

true,

...

}

SpecialSubframeInfo-E-UTRA ::= SEQUENCE {

specialSubframePattern SpecialSubframePatterns-E-UTRA,

cyclicPrefixDL CyclicPrefix-E-UTRA-DL,

cyclicPrefixUL CyclicPrefix-E-UTRA-UL,

iE-Extensions ProtocolExtensionContainer { {SpecialSubframeInfo-E-UTRA-ExtIEs} } OPTIONAL,

...

}

SpecialSubframeInfo-E-UTRA-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

SpecialSubframePatterns-E-UTRA ::= ENUMERATED {

ssp0,

ssp1,

ssp2,

ssp3,

ssp4,

ssp5,

ssp6,

ssp7,

ssp8,

ssp9,

ssp10,

...

}

SpectrumSharingGroupID ::= INTEGER (1..maxnoofCellsinNG-RANnode)

SplitSessionIndicator ::= ENUMERATED {

split,

...

}

SplitSRBsTypes ::= ENUMERATED {srb1, srb2, srb1and2, ...}

SPRAvailability ::= ENUMERATED {spr-available, ...}

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

SRSConfiguration ::= OCTET STRING

SSBAreaCapacityValue-List ::= SEQUENCE (SIZE(1..maxnoofSSBAreas)) OF SSBAreaCapacityValue-List-Item

SSBAreaCapacityValue-List-Item ::= SEQUENCE {

sSBIndex INTEGER(0..63),

ssbAreaCapacityValue INTEGER (0..100),

iE-Extensions ProtocolExtensionContainer { { SSBAreaCapacityValue-List-Item-ExtIEs} } OPTIONAL,

...

}

SSBAreaCapacityValue-List-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

SSBAreaRadioResourceStatus-List ::= SEQUENCE (SIZE(1..maxnoofSSBAreas)) OF SSBAreaRadioResourceStatus-List-Item

SSBAreaRadioResourceStatus-List-Item ::= SEQUENCE {

sSBIndex INTEGER(0..63),

ssb-Area-DL-GBR-PRB-usage DL-GBR-PRB-usage,

ssb-Area-UL-GBR-PRB-usage UL-GBR-PRB-usage,

ssb-Area-dL-non-GBR-PRB-usage DL-non-GBR-PRB-usage,

ssb-Area-uL-non-GBR-PRB-usage UL-non-GBR-PRB-usage,

ssb-Area-dL-Total-PRB-usage DL-Total-PRB-usage,

ssb-Area-uL-Total-PRB-usage UL-Total-PRB-usage,

iE-Extensions ProtocolExtensionContainer { { SSBAreaRadioResourceStatus-List-Item-ExtIEs} } OPTIONAL,

...

}

SSBAreaRadioResourceStatus-List-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ ID id-DL-scheduling-PDCCH-CCE-usage CRITICALITY ignore EXTENSION DL-scheduling-PDCCH-CCE-usage PRESENCE optional}|

{ ID id-UL-scheduling-PDCCH-CCE-usage CRITICALITY ignore EXTENSION UL-scheduling-PDCCH-CCE-usage PRESENCE optional},

...

}

SSB-Coverage-Modification-List ::= SEQUENCE (SIZE (0..maxnoofSSBAreas)) OF SSB-Coverage-Modification-List-Item

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

sSBIndex INTEGER(0..63),

sSBCoverageState INTEGER (0..15, ...),

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

...

}

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

...

}

SSB-PositionsInBurst ::= CHOICE {

shortBitmap BIT STRING (SIZE (4)),

mediumBitmap BIT STRING (SIZE (8)),

longBitmap BIT STRING (SIZE (64)),

choice-extension ProtocolIE-Single-Container { {SSB-PositionsInBurst-ExtIEs} }

}

SSB-PositionsInBurst-ExtIEs XNAP-PROTOCOL-IES ::= {

...

}

SSB-freqInfo ::= INTEGER (0..maxNRARFCN)

SSB-subcarrierSpacing ::= ENUMERATED {kHz15, kHz30, kHz120, kHz240, spare3, spare2, spare1, ...}

SSBOffsets-List ::= SEQUENCE (SIZE(1..maxnoofSSBAreas)) OF SSBOffsets-Item

SSBOffsets-Item ::= SEQUENCE {

nG-RANnode1SSBOffsets SSBOffsetInformation OPTIONAL,

nG-RANnode2ProposedSSBOffsets SSBOffsetInformation,

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

...

}

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

...

}

SSBOffsetInformation ::= SEQUENCE {

sSBIndex INTEGER(0..63),

sSBTriggeringOffset MobilityParametersInformation,

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

...

}

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

...

}

SSBOffsetModificationRange ::= SEQUENCE {

sSBIndex INTEGER(0..63),

sSBobilityParametersModificationRange MobilityParametersModificationRange,

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

...

}

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

...

}

SSBToReport-List ::= SEQUENCE (SIZE(1..maxnoofSSBAreas)) OF SSBToReport-List-Item

SSBToReport-List-Item ::= SEQUENCE {

sSBIndex INTEGER(0..63),

iE-Extensions ProtocolExtensionContainer { { SSBToReport-List-Item-ExtIEs} } OPTIONAL,

...

}

SSBToReport-List-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

SSB-transmissionPeriodicity ::= ENUMERATED {sf10, sf20, sf40, sf80, sf160, sf320, sf640, ..., sf5}

SSB-transmissionTimingOffset ::= INTEGER (0..127, ...)

SSB-transmissionBitmap ::= CHOICE {

shortBitmap BIT STRING (SIZE (4)),

mediumBitmap BIT STRING (SIZE (8)),

longBitmap BIT STRING (SIZE (64)),

choice-extension ProtocolIE-Single-Container { { SSB-transmisisonBitmap-ExtIEs} }

}

SSB-transmisisonBitmap-ExtIEs XNAP-PROTOCOL-IES ::= {

...

}

SuccessfulHOReportInformation ::= SEQUENCE (SIZE(1.. maxnoofSuccessfulHOReports)) OF SuccessfulHOReportList-Item

SuccessfulHOReportList-Item ::= SEQUENCE {

successfulHOReport SuccessfulHOReportContainer,

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

...

}

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

...

}

SuccessfulHOReportContainer ::= OCTET STRING

SuccessfulPSCellChangeReportInformation ::= SEQUENCE (SIZE(1.. maxnoofSuccessfulPSCellChangeReports)) OF SuccessfulPSCellChangeReportList-Item

SuccessfulPSCellChangeReportList-Item ::= SEQUENCE {

successfulPSCellChangeReport SuccessfulPSCellChangeReportContainer,

sNMobilityInformation SNMobilityInformation OPTIONAL,

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

...

}

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

...

}

SuccessfulPSCellChangeReportContainer ::= OCTET STRING

SUL-FrequencyBand ::= INTEGER (1..1024)

SUL-Information ::= SEQUENCE {

sulFrequencyInfo NRARFCN,

sulTransmissionBandwidth NRTransmissionBandwidth,

iE-Extensions ProtocolExtensionContainer { {SUL-Information-ExtIEs} } OPTIONAL,

...

}

SUL-Information-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ ID id-CarrierList CRITICALITY ignore EXTENSION NRCarrierList PRESENCE optional }|

{ ID id-FrequencyShift7p5khz CRITICALITY ignore EXTENSION FrequencyShift7p5khz PRESENCE optional },

...

}

Supported-MBS-FSA-ID-List ::= SEQUENCE (SIZE(1..maxnoofMBSFSAs)) OF MBS-FrequencySelectionArea-Identity

SupportedSULBandList ::= SEQUENCE (SIZE(1..maxnoofNRCellBands)) OF SupportedSULBandItem

SupportedSULBandItem ::= SEQUENCE {

sulBandItem SUL-FrequencyBand,

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

...

}

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

...

}

SurvivalTime ::= INTEGER (0..1920000, ...)

SymbolAllocation-in-Slot ::= CHOICE {

allDL SymbolAllocation-in-Slot-AllDL,

allUL SymbolAllocation-in-Slot-AllUL,

bothDLandUL SymbolAllocation-in-Slot-BothDLandUL,

choice-extension ProtocolIE-Single-Container { {SymbolAllocation-in-Slot-ExtIEs} }

}

SymbolAllocation-in-Slot-ExtIEs XNAP-PROTOCOL-IES ::= {

...

}

SymbolAllocation-in-Slot-AllDL ::= SEQUENCE {

iE-Extension ProtocolExtensionContainer { {SymbolAllocation-in-Slot-AllDL-ExtIEs} } OPTIONAL,

...

}

SymbolAllocation-in-Slot-AllDL-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

SymbolAllocation-in-Slot-AllUL ::= SEQUENCE {

iE-Extension ProtocolExtensionContainer { {SymbolAllocation-in-Slot-AllUL-ExtIEs} } OPTIONAL,

...

}

SymbolAllocation-in-Slot-AllUL-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

SymbolAllocation-in-Slot-BothDLandUL ::= SEQUENCE {

numberofDLSymbols INTEGER (0..13),

numberofULSymbols INTEGER (0..13),

iE-Extension ProtocolExtensionContainer { {SymbolAllocation-in-Slot-BothDLandUL-ExtIEs} } OPTIONAL,

...

}

SymbolAllocation-in-Slot-BothDLandUL-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ ID id-permutation CRITICALITY ignore EXTENSION Permutation PRESENCE optional },

...

}

SNPN-CellBasedMDT::= SEQUENCE {

sNPN-CellIdListforMDT SNPN-CellIdListforMDT,

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

...

}

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

...

}

SNPN-CellIdListforMDT ::= SEQUENCE (SIZE(1..maxnoofCellIDforMDT)) OF SNPN-CellIdforMDT-Item

SNPN-CellIdforMDT-Item ::= SEQUENCE {

nRCGI NR-CGI,

nID NID,

iE-Extensions ProtocolExtensionContainer { {SNPN-CellIdforMDT-Item-ExtIEs} } OPTIONAL,

...

}

SNPN-CellIdforMDT-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

SNPN-TAIBasedMDT ::= SEQUENCE {

sNPN-TAIListforMDT SNPN-TAIListforMDT,

iE-Extensions ProtocolExtensionContainer { {SNPN-TAIBasedMDT-ExtIEs} } OPTIONAL,

...

}

SNPN-TAIBasedMDT-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

SNPN-TAIListforMDT ::= SEQUENCE (SIZE(1..maxnoofTAforMDT)) OF SNPN-TAIforMDT-Item

SNPN-TAIforMDT-Item ::= SEQUENCE {

plmn-ID PLMN-Identity,

tAC TAC,

nID NID,

iE-Extensions ProtocolExtensionContainer { {SNPN-TAIforMDT-Item-ExtIEs} } OPTIONAL,

...

}

SNPN-TAIforMDT-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

SNPN-BasedMDT::= SEQUENCE {

sNPNListforMDT SNPNListforMDT,

iE-Extensions ProtocolExtensionContainer { {SNPN-BasedMDT-ExtIEs} } OPTIONAL,

...

}

SNPN-BasedMDT-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

SNPNListforMDT ::= SEQUENCE (SIZE(1.. maxnoofMDTSNPNs)) OF SNPNforMDT-Item

SNPNforMDT-Item ::= SEQUENCE {

plmn-ID PLMN-Identity,

nID NID,

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

...

}

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

...

}

SuggestedLTMCandidatePSCell-List ::= SEQUENCE (SIZE(1..maxnoofLTMCells)) OF SuggestedLTMCandidatePSCell-Item

SuggestedLTMCandidatePSCell-Item ::= SEQUENCE {

pscell-id NR-CGI,

earlySyncInformationRequest EarlySyncInformationRequest OPTIONAL,

cSI-ResourceConfigurationRequest ENUMERATED {true, ...} OPTIONAL,

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

...

}

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

...

}

SSB-Configuration ::= OCTET STRING

-- T

TABasedMDT ::= SEQUENCE {

tAListforMDT TAListforMDT,

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

...

}

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

...

}

TAIBasedMDT ::= SEQUENCE {

tAIListforMDT TAIListforMDT,

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

...

}

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

...

}

TAIListforMDT ::= SEQUENCE (SIZE(1..maxnoofTAforMDT)) OF TAIforMDT-Item

TAIforMDT-Item ::= SEQUENCE {

plmn-ID PLMN-Identity,

tAC TAC,

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

...

}

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

...

}

TAC ::= OCTET STRING (SIZE (3))

TAINSAGSupportList ::= SEQUENCE (SIZE(1..maxnoofNSAGs)) OF TAINSAGSupportItem

TAINSAGSupportItem ::= SEQUENCE {

nSAG-ID NSAG-ID,

nSAGSliceSupportList ExtendedSliceSupportList,

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

...

}

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

...

}

TAISliceUnavailableCellList ::= SEQUENCE (SIZE(1..maxnoofExtSliceItems)) OF TAISliceUnavailableCellItem

TAISliceUnavailableCellItem ::= SEQUENCE {

sNSSAI S-NSSAI,

sliceAvailabilityList SliceAvailabilityList,

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

...

}

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

...

}

SliceAvailabilityList ::= CHOICE {

unavailableCellList UnavailableCellList,

availableCellList AvailableCellList,

choice-extension ProtocolIE-Single-Container { {SliceAvailabilityList-ExtIEs} },

...

}

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

...

}

AvailableCellList ::= SEQUENCE {

availableNRCellList AvailableNRCellList,

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

...

}

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

...

}

AvailableNRCellList ::= SEQUENCE (SIZE (1..maxnoofCellsinNG-RANnode)) OF NR-CGI

UnavailableCellList ::= SEQUENCE {

unavailableNRCellList UnavailableNRCellList,

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

...

}

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

...

}

UnavailableNRCellList ::= SEQUENCE (SIZE (1..maxnoofCellsinNG-RANnode)) OF NR-CGI

TAISupport-List ::= SEQUENCE (SIZE(1..maxnoofsupportedTACs)) OF TAISupport-Item

TAISupport-Item ::= SEQUENCE {

tac TAC,

broadcastPLMNs SEQUENCE (SIZE(1..maxnoofsupportedPLMNs)) OF BroadcastPLMNinTAISupport-Item,

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

...

}

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

...

}

TAListforMDT ::= SEQUENCE (SIZE(1..maxnoofTAforMDT)) OF TAC

TABasedQMC ::= SEQUENCE {

tAListforQMC TAListforQMC,

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

...

}

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

...

}

TAListforQMC ::= SEQUENCE (SIZE(1..maxnoofTAforQMC)) OF TAC

TAIBasedQMC ::= SEQUENCE {

tAIListforQMC TAIListforQMC,

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

...

}

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

...

}

TAIListforQMC ::= SEQUENCE (SIZE(1..maxnoofTAforQMC)) OF TAI-Item

TAI-Item ::= SEQUENCE {

tAC TAC,

pLMN-Identity PLMN-Identity,

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

...

}

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

...

}

TargetCellinEUTRAN ::= OCTET STRING -- This IE is to be encoded according to *Global Cell ID* in the *Last Visited E-UTRAN Cell Information* IE, as defined in TS 36.413 [31]

Target-CGI ::= CHOICE {

nr NR-CGI,

e-utra E-UTRA-CGI,

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

}

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

...

}

TDDULDLConfigurationCommonNR ::= OCTET STRING

TargetCellList ::= SEQUENCE (SIZE(1..maxnoofCHOcells)) OF TargetCellList-Item

TargetCellList-Item ::= SEQUENCE {

target-cell Target-CGI,

iE-Extensions ProtocolExtensionContainer { { TargetCellList-Item-ExtIEs} } OPTIONAL

}

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

...

}

Threshold-RSRQ ::= INTEGER(0..127)

Threshold-RSRP ::= INTEGER(0..127)

Threshold-SINR ::= INTEGER(0..127)

TimeSinceFailure ::= INTEGER (0..172800, ...)

TimeSynchronizationAssistanceInformation ::= SEQUENCE {

timeDistributionIndication ENUMERATED {enabled, disabled, ...},

uuTimeSynchronizationErrorBudget INTEGER (0..1000000, ...) OPTIONAL,

-- This IE shall be present if the *Time Distribution Indication* IE is set to “enabled”.

ie-Extension ProtocolExtensionContainer { { TimeSynchronizationAssistanceInformation-ExtIEs} } OPTIONAL,

...

}

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

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

...

}

TimeToTrigger ::= ENUMERATED {ms0, ms40, ms64, ms80, ms100, ms128, ms160, ms256, ms320, ms480, ms512, ms640, ms1024, ms1280, ms2560, ms5120}

TimeToWait ::= ENUMERATED {

v1s,

v2s,

v5s,

v10s,

v20s,

v60s,

...

}

TMGI ::= OCTET STRING (SIZE(6))

TNLConfigurationInfo ::= SEQUENCE {

extendedUPTransportLayerAddressesToAdd ExtTLAs OPTIONAL,

extendedUPTransportLayerAddressesToRemove ExtTLAs OPTIONAL,

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

...

}

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

...

}

TNLA-To-Add-List ::= SEQUENCE (SIZE(1..maxnoofTNLAssociations)) OF TNLA-To-Add-Item

TNLA-To-Add-Item ::= SEQUENCE {

tNLAssociationTransportLayerAddress CPTransportLayerInformation,

tNLAssociationUsage TNLAssociationUsage,

iE-Extensions ProtocolExtensionContainer { { TNLA-To-Add-Item-ExtIEs} } OPTIONAL

}

TNLA-To-Add-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

TNLA-To-Update-List ::= SEQUENCE (SIZE(1..maxnoofTNLAssociations)) OF TNLA-To-Update-Item

TNLA-To-Update-Item::= SEQUENCE {

tNLAssociationTransportLayerAddress CPTransportLayerInformation,

tNLAssociationUsage TNLAssociationUsage OPTIONAL,

iE-Extensions ProtocolExtensionContainer { { TNLA-To-Update-Item-ExtIEs} } OPTIONAL

}

TNLA-To-Update-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

TNLA-To-Remove-List ::= SEQUENCE (SIZE(1..maxnoofTNLAssociations)) OF TNLA-To-Remove-Item

TNLA-To-Remove-Item::= SEQUENCE {

tNLAssociationTransportLayerAddress CPTransportLayerInformation,

iE-Extensions ProtocolExtensionContainer { { TNLA-To-Remove-Item-ExtIEs} } OPTIONAL

}

TNLA-To-Remove-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

TNLA-Setup-List ::= SEQUENCE (SIZE(1..maxnoofTNLAssociations)) OF TNLA-Setup-Item

TNLA-Setup-Item ::= SEQUENCE {

tNLAssociationTransportLayerAddress CPTransportLayerInformation,

iE-Extensions ProtocolExtensionContainer { { TNLA-Setup-Item-ExtIEs} } OPTIONAL,

...

}

TNLA-Setup-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

TNLA-Failed-To-Setup-List ::= SEQUENCE (SIZE(1..maxnoofTNLAssociations)) OF TNLA-Failed-To-Setup-Item

TNLA-Failed-To-Setup-Item ::= SEQUENCE {

tNLAssociationTransportLayerAddress CPTransportLayerInformation,

cause Cause,

iE-Extensions ProtocolExtensionContainer { { TNLA-Failed-To-Setup-Item-ExtIEs} } OPTIONAL

}

TNLA-Failed-To-Setup-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

TNLAssociationUsage ::= ENUMERATED {

ue,

non-ue,

both,

...

}

TransportLayerAddress ::= BIT STRING (SIZE(1..160, ...))

TraceActivation ::= SEQUENCE {

ng-ran-TraceID NG-RANTraceID,

interfaces-to-trace BIT STRING { ng-c (0), x-nc (1), uu (2), f1-c (3), e1 (4)} (SIZE(8)),

trace-depth Trace-Depth,

trace-coll-address TransportLayerAddress,

ie-Extension ProtocolExtensionContainer { {TraceActivation-ExtIEs} } OPTIONAL,

...

}

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

-- Extension to support MDT –

{ ID id-TraceCollectionEntityURI CRITICALITY ignore EXTENSION URIaddress PRESENCE optional}|

{ ID id-MDT-Configuration CRITICALITY ignore EXTENSION MDT-Configuration PRESENCE optional},

...

}

Trace-Depth ::= ENUMERATED {

minimum,

medium,

maximum,

minimumWithoutVendorSpecificExtension,

mediumWithoutVendorSpecificExtension,

maximumWithoutVendorSpecificExtension,

...

}

TrafficIndex ::= INTEGER (1..1024, ...)

TrafficProfile ::= CHOICE {

uPTraffic QoSFlowLevelQoSParameters,

nonUPTraffic NonUPTraffic,

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

}

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

...

}

TrafficReleaseType ::= CHOICE {

fullRelease AllTrafficIndication,

partialRelease TrafficToBeRelease-List,

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

}

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

...

}

TrafficToBeReleaseInformation ::= SEQUENCE {

releaseType TrafficReleaseType,

ie-Extensions ProtocolExtensionContainer { {TrafficToBeReleaseInformation-ExtIEs} } OPTIONAL,

...

}

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

...

}

TrafficToBeRelease-List ::= SEQUENCE (SIZE(1..maxnoofTrafficIndexEntries)) OF TrafficToBeRelease-Item

TrafficToBeRelease-Item ::= SEQUENCE {

trafficIndex TrafficIndex,

bHInfoList BHInfoList OPTIONAL,

iE-Extension ProtocolExtensionContainer { {TrafficToBeRelease-Item-ExtIEs} } OPTIONAL,

...

}

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

...

}

TSCTrafficCharacteristics ::= SEQUENCE {

tSCAssistanceInformationDownlink TSCAssistanceInformation OPTIONAL,

tSCAssistanceInformationUplink TSCAssistanceInformation OPTIONAL,

ie-Extension ProtocolExtensionContainer { {TSCTrafficCharacteristics-ExtIEs} } OPTIONAL,

...

}

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

...

}

TSCAssistanceInformation ::= SEQUENCE {

periodicity INTEGER (0.. 640000, ...),

burstArrivalTime OCTET STRING OPTIONAL,

ie-Extension ProtocolExtensionContainer { { TSCAssistanceInformation-ExtIEs} } OPTIONAL,

...

}

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

{ ID id-SurvivalTime CRITICALITY ignore EXTENSION SurvivalTime PRESENCE optional}|

{ ID id-CapabilityForBATAdaptation CRITICALITY ignore EXTENSION CapabilityForBATAdaptation PRESENCE optional}|

{ ID id-N6JitterInformation CRITICALITY ignore EXTENSION N6JitterInformation PRESENCE optional},

...

}

TypeOfError ::= ENUMERATED {

not-understood,

missing,

...

}

-- U

UEAggregateMaximumBitRate ::= SEQUENCE {

dl-UE-AMBR BitRate,

ul-UE-AMBR BitRate,

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

...

}

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

...

}

UEAppLayerMeasConfigInfo ::= SEQUENCE {

qOEReference QOEReference,

qOEMeasConfigAppLayerID QOEMeasConfAppLayerID OPTIONAL,

serviceType ServiceType,

qOEMeasStatus QOEMeasStatus OPTIONAL,

containerAppLayerMeasConfig ContainerAppLayerMeasConfig OPTIONAL,

mDTAlignmentInfo MDTAlignmentInfo OPTIONAL,

measCollectionEntityIPAddress MeasCollectionEntityIPAddress OPTIONAL,

areaScopeOfQMC AreaScopeOfQMC OPTIONAL,

s-NSSAIListQoE S-NSSAIListQoE OPTIONAL,

availableRVQoEMetrics AvailableRVQoEMetrics OPTIONAL,

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

...

}

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

{ ID id-MBSCommServiceType CRITICALITY ignore EXTENSION MBSCommServiceType PRESENCE optional }|

{ ID id-AssistanceInformationQoE-Meas CRITICALITY ignore EXTENSION AssistanceInformationQoE-Meas PRESENCE optional }|

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

...

}

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

UEContextID ::= CHOICE {

rRCResume UEContextIDforRRCResume,

rRRCReestablishment UEContextIDforRRCReestablishment,

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

}

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

...

}

UEContextIDforRRCResume ::= SEQUENCE {

i-rnti I-RNTI,

allocated-c-rnti C-RNTI,

accessPCI NG-RAN-CellPCI,

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

...

}

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

...

}

UEContextIDforRRCReestablishment ::= SEQUENCE {

c-rnti C-RNTI,

failureCellPCI NG-RAN-CellPCI,

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

...

}

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

...

}

UEContextInfoRetrUECtxtResp ::= SEQUENCE {

ng-c-UE-signalling-ref AMF-UE-NGAP-ID,

signalling-TNL-at-source CPTransportLayerInformation,

ueSecurityCapabilities UESecurityCapabilities,

securityInformation AS-SecurityInformation,

ue-AMBR UEAggregateMaximumBitRate,

pduSessionResourcesToBeSetup-List PDUSessionResourcesToBeSetup-List,

rrc-Context OCTET STRING,

mobilityRestrictionList MobilityRestrictionList OPTIONAL,

indexToRatFrequencySelectionPriority RFSP-Index OPTIONAL,

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

...

}

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

{ ID id-FiveGCMobilityRestrictionListContainer CRITICALITY ignore EXTENSION FiveGCMobilityRestrictionListContainer PRESENCE optional }|

{ ID id-NRUESidelinkAggregateMaximumBitRate CRITICALITY ignore EXTENSION NRUESidelinkAggregateMaximumBitRate PRESENCE optional }|

{ ID id-LTEUESidelinkAggregateMaximumBitRate CRITICALITY ignore EXTENSION LTEUESidelinkAggregateMaximumBitRate PRESENCE optional }|

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

{ ID id-MBS-SessionInformation-List CRITICALITY ignore EXTENSION MBS-SessionInformation-List PRESENCE optional }|

{ ID id-NoPDUSessionIndication CRITICALITY ignore EXTENSION NoPDUSessionIndication PRESENCE optional }|

{ ID id-FiveGProSeUEPC5AggregateMaximumBitRate CRITICALITY ignore EXTENSION NRUESidelinkAggregateMaximumBitRate PRESENCE optional }|

{ ID id-UESliceMaximumBitRateList CRITICALITY ignore EXTENSION UESliceMaximumBitRateList PRESENCE optional }|

{ ID id-PositioningInformation CRITICALITY ignore EXTENSION PositioningInformation PRESENCE optional }|

{ ID id-NRA2XUEPC5AggregateMaximumBitRate CRITICALITY ignore EXTENSION NRUESidelinkAggregateMaximumBitRate PRESENCE optional }|

{ ID id-LTEA2XUEPC5AggregateMaximumBitRate CRITICALITY ignore EXTENSION LTEUESidelinkAggregateMaximumBitRate PRESENCE optional }|

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

...

}

UEHistoryInformation ::= SEQUENCE (SIZE(1..maxnoofCellsinUEHistoryInfo)) OF LastVisitedCell-Item

UEHistoryInformationFromTheUE ::= CHOICE {

nR NRMobilityHistoryReport,

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

}

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

...

}

UEIdentityIndexValue ::= CHOICE {

indexLength10 BIT STRING (SIZE(10)),

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

}

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

...

}

UEIdentityIndexList-MBSGroupPaging ::= SEQUENCE (SIZE(1..maxnoofUEIDIndicesforMBSPaging)) OF UEIdentityIndexList-MBSGroupPaging-Item

UEIdentityIndexList-MBSGroupPaging-Item ::= SEQUENCE {

ueIdentityIndexList-MBSGroupPagingValue UEIdentityIndexList-MBSGroupPagingValue,

pagingDRX UESpecificDRX OPTIONAL,

iE-Extension ProtocolExtensionContainer { {UEIdentityIndexList-MBSGroupPaging-Item-ExtIEs} } OPTIONAL,

...

}

UEIdentityIndexList-MBSGroupPaging-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

UEIdentityIndexList-MBSGroupPagingValue ::= CHOICE {

uEIdentityIndexValueMBSGroupPaging BIT STRING (SIZE(10)),

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

}

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

...

}

UERadioCapabilityForPaging ::= SEQUENCE {

uERadioCapabilityForPagingOfNR UERadioCapabilityForPagingOfNR OPTIONAL,

uERadioCapabilityForPagingOfEUTRA UERadioCapabilityForPagingOfEUTRA OPTIONAL,

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

...

}

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

...

}

UERadioCapabilityForPagingOfNR ::= OCTET STRING

UERadioCapabilityForPagingOfEUTRA ::= OCTET STRING

UERadioCapabilityID ::= OCTET STRING

UERANPagingIdentity ::= CHOICE {

i-RNTI-full BIT STRING ( SIZE (40)),

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

}

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

...

}

UERLFReportContainer ::= CHOICE {

nR-UERLFReportContainer UERLFReportContainerNR,

lTE-UERLFReportContainer UERLFReportContainerLTE,

choice-Extension ProtocolIE-Single-Container { {UERLFReportContainer-ExtIEs} }

}

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

{ID id-UERLFReportContainerLTEExtension CRITICALITY ignore TYPE UERLFReportContainerLTEExtension PRESENCE mandatory},

...

}

UERLFReportContainerLTE ::= OCTET STRING

-- This IE is a transparent container and includes the *rlf-Report-r9* contained in the *UEInformationResponse* message as defined in TS 36.331 [14].

UERLFReportContainerLTEExtension ::= SEQUENCE {

ueRLFReportContainerLTE UERLFReportContainerLTE,

ueRLFReportContainerLTEExtendBand UERLFReportContainerLTEExtendBand,

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

...

}

UERLFReportContainerLTEExtendBand ::= OCTET STRING

-- This IE is a transparent container and includes the *rlf-Report-v9e0* contained in the *UEInformationResponse* message as defined in TS 36.331 [14].

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

...

}

UERLFReportContainerNR ::= OCTET STRING

-- This IE is a transparent container and includes the *nr-RLF-Report* IE contained in the *UEInformationResponse* message as defined in TS 38.331 [10].

UESliceMaximumBitRateList ::= SEQUENCE (SIZE(1.. maxnoofSMBR)) OF UESliceMaximumBitRate-Item

UESliceMaximumBitRate-Item ::= SEQUENCE {

s-NSSAI S-NSSAI,

dl-UE-Slice-MBR BitRate,

ul-UE-Slice-MBR BitRate,

iE-Extensions ProtocolExtensionContainer { { UESliceMaximumBitRate-Item-ExtIEs} } OPTIONAL,

...

}

UESliceMaximumBitRate-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

UESecurityCapabilities ::= SEQUENCE {

nr-EncyptionAlgorithms BIT STRING {nea1-128(1),

nea2-128(2),

nea3-128(3)} (SIZE(16, ...)),

nr-IntegrityProtectionAlgorithms BIT STRING {nia1-128(1),

nia2-128(2),

nia3-128(3)} (SIZE(16, ...)),

e-utra-EncyptionAlgorithms BIT STRING {eea1-128(1),

eea2-128(2),

eea3-128(3)} (SIZE(16, ...)),

e-utra-IntegrityProtectionAlgorithms BIT STRING {eia1-128(1),

eia2-128(2),

eia3-128(3)} (SIZE(16, ...)),

iE-Extension ProtocolExtensionContainer { {UESecurityCapabilities-ExtIEs} } OPTIONAL,

...

}

UESecurityCapabilities-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

UESpecificDRX ::= ENUMERATED {

v32,

v64,

v128,

v256,

...

}

ULConfiguration::= SEQUENCE {

uL-PDCP UL-UE-Configuration,

iE-Extensions ProtocolExtensionContainer { {ULConfiguration-ExtIEs} } OPTIONAL,

...

}

ULConfiguration-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

UL-UE-Configuration::= ENUMERATED {no-data, shared, only, ...}

ULF1Terminating-BHInfo ::= SEQUENCE {

ingressBAPRoutingID BAPRoutingID,

ingressBHRLCCHID BHRLCChannelID,

iE-Extensions ProtocolExtensionContainer { { ULF1Terminating-BHInfo-ExtIEs} } OPTIONAL,

...

}

ULF1Terminating-BHInfo-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

ULNonF1Terminating-BHInfo ::= SEQUENCE {

egressBAPRoutingID BAPRoutingID,

egressBHRLCCHID BHRLCChannelID,

nexthopBAPAddress BAPAddress,

iE-Extensions ProtocolExtensionContainer { { ULNonF1Terminating-BHInfo-ExtIEs} } OPTIONAL,

...

}

ULNonF1Terminating-BHInfo-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

ULForwarding ::= ENUMERATED {ul-forwarding-proposed, ...}

ULForwardingProposal ::= ENUMERATED {ul-forwarding-proposed, ...}

UL-GBR-PRB-usage::= INTEGER (0..100)

UL-GBR-PRB-usage-for-MIMO::= INTEGER (0..100)

UL-non-GBR-PRB-usage::= INTEGER (0..100)

UL-non-GBR-PRB-usage-for-MIMO::= INTEGER (0..100)

UL-Total-PRB-usage::= INTEGER (0..100)

UL-Total-PRB-usage-for-MIMO::= INTEGER (0..100)

UPTransportLayerInformation ::= CHOICE {

gtpTunnel GTPtunnelTransportLayerInformation,

choice-extension ProtocolIE-Single-Container { {UPTransportLayerInformation-ExtIEs} }

}

UPTransportLayerInformation-ExtIEs XNAP-PROTOCOL-IES ::= {

...

}

UPTransportParameters ::= SEQUENCE (SIZE(1..maxnoofSCellGroupsplus1)) OF UPTransportParametersItem

UPTransportParametersItem ::= SEQUENCE {

upTNLInfo UPTransportLayerInformation,

cellGroupID CellGroupID,

iE-Extension ProtocolExtensionContainer { {UPTransportParametersItem-ExtIEs} } OPTIONAL,

...

}

UPTransportParametersItem-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

UserPlaneErrorIndicator ::= ENUMERATED {gtpu-error-indication-received, ...}

UserPlaneTrafficActivityReport ::= ENUMERATED {inactive, re-activated, ...}

UserPlaneFailureIndication ::= SEQUENCE {

userPlaneFailureType UserPlaneFailureType,

dL-NG-U-TNLatNG-RAN UPTransportLayerInformation,

uL-NG-U-TNLatNG-RAN UPTransportLayerInformation,

iE-Extensions ProtocolExtensionContainer {{ UserPlaneFailureIndication-ExtIEs} } OPTIONAL,

...

}

UserPlaneFailureIndication-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

UserPlaneFailureType ::= ENUMERATED {

gtp-u-error-indication-received,

up-path-failure,

...

}

URIaddress ::= VisibleString

UEAssociatedInfoResult-List ::= SEQUENCE (SIZE(1..maxnoofUEReports)) OF UEAssociatedInfoResult-Item

UEAssociatedInfoResult-Item ::= SEQUENCE {

uEAssistantIdentifier NG-RANnodeUEXnAPID,

uEPerformance UEPerformance OPTIONAL,

measuredUETrajectory MeasuredUETrajectory OPTIONAL,

iE-Extensions ProtocolExtensionContainer { { UEAssociatedInfoResult-Item-ExtIEs} } OPTIONAL,

...

}

UEAssociatedInfoResult-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

UEPerformance ::= SEQUENCE {

dL-UE-AverageThroughput BitRate OPTIONAL,

uL-UE-AverageThroughput BitRate OPTIONAL,

uE-AveragePacketDelay AveragePacketDelay OPTIONAL,

uE-AveragePacketLossDL PacketLossRate OPTIONAL,

iE-Extensions ProtocolExtensionContainer { { UEPerformance-ExtIEs} } OPTIONAL,

...

}

UEPerformance-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

UEPerformanceCollectionConfiguration ::= SEQUENCE {

collectionTimeDurationForUEPerformance INTEGER(1..5000, ...),

iE-Extensions ProtocolExtensionContainer { { UEPerformanceCollectionConfiguration-ExtIEs} } OPTIONAL,

...

}

UEPerformanceCollectionConfiguration-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

UETrajectoryCollectionConfiguration ::= SEQUENCE {

collectionTimeDurationForUETrajectory INTEGER (1..4096, ...),

numberOfVisitedCells INTEGER (1..16, ...) OPTIONAL,

iE-Extensions ProtocolExtensionContainer { { UETrajectoryCollectionConfiguration-ExtIEs} } OPTIONAL,

...

}

UETrajectoryCollectionConfiguration-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

-- V

VehicleUE ::= ENUMERATED {

authorized,

not-authorized,

...

}

VolumeTimedReportList ::= SEQUENCE (SIZE(1..maxnooftimeperiods)) OF VolumeTimedReport-Item

VolumeTimedReport-Item ::= SEQUENCE {

startTimeStamp OCTET STRING (SIZE(4)),

endTimeStamp OCTET STRING (SIZE(4)),

usageCountUL INTEGER (0..18446744073709551615),

usageCountDL INTEGER (0..18446744073709551615),

iE-Extensions ProtocolExtensionContainer { {VolumeTimedReport-Item-ExtIEs} } OPTIONAL,

...

}

VolumeTimedReport-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

-- W

WLANMeasurementConfiguration ::= SEQUENCE {

wlanMeasConfig WLANMeasConfig,

wlanMeasConfigNameList WLANMeasConfigNameList OPTIONAL,

wlan-rssi ENUMERATED {true, ...} OPTIONAL,

wlan-rtt ENUMERATED {true, ...} OPTIONAL,

iE-Extensions ProtocolExtensionContainer { { WLANMeasurementConfiguration-ExtIEs } } OPTIONAL,

...

}

WLANMeasurementConfiguration-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

WLANMeasConfigNameList ::= SEQUENCE (SIZE(1..maxnoofWLANName)) OF WLANName

WLANMeasConfig::= ENUMERATED {setup,...}

WLANName ::= OCTET STRING (SIZE (1..32))

-- X

XnBenefitValue ::= INTEGER (1..8, ...)

XR-Bcast-Information ::= ENUMERATED {true,...}

-- Y

-- Z

END

-- ASN1STOP

### 9.3.6 Common definitions

-- ASN1START

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

--

-- Common definitions

--

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

XnAP-CommonDataTypes {

itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)

ngran-access (22) modules (3) xnap (2) version1 (1) xnap-CommonDataTypes (3) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

--

-- Extension constants

--

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

maxPrivateIEs INTEGER ::= 65535

maxProtocolExtensions INTEGER ::= 65535

maxProtocolIEs INTEGER ::= 65535

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

--

-- Common Data Types

--

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Criticality ::= ENUMERATED { reject, ignore, notify }

Presence ::= ENUMERATED { optional, conditional, mandatory }

PrivateIE-ID ::= CHOICE {

local INTEGER (0.. maxPrivateIEs),

global OBJECT IDENTIFIER

}

ProcedureCode ::= INTEGER (0..255)

ProtocolIE-ID ::= INTEGER (0..maxProtocolIEs)

TriggeringMessage ::= ENUMERATED { initiating-message, successful-outcome, unsuccessful-outcome}

END

-- ASN1STOP

### 9.3.7 Constant definitions

-- ASN1START

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

--

-- Constant definitions

--

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

XnAP-Constants {

itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)

ngran-Access (22) modules (3) xnap (2) version1 (1) xnap-Constants (4) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

IMPORTS

ProcedureCode,

ProtocolIE-ID

FROM XnAP-CommonDataTypes;

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

--

-- Elementary Procedures

--

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

id-handoverPreparation ProcedureCode ::= 0

id-sNStatusTransfer ProcedureCode ::= 1

id-handoverCancel ProcedureCode ::= 2

id-retrieveUEContext ProcedureCode ::= 3

id-rANPaging ProcedureCode ::= 4

id-xnUAddressIndication ProcedureCode ::= 5

id-uEContextRelease ProcedureCode ::= 6

id-sNGRANnodeAdditionPreparation ProcedureCode ::= 7

id-sNGRANnodeReconfigurationCompletion ProcedureCode ::= 8

id-mNGRANnodeinitiatedSNGRANnodeModificationPreparation ProcedureCode ::= 9

id-sNGRANnodeinitiatedSNGRANnodeModificationPreparation ProcedureCode ::= 10

id-mNGRANnodeinitiatedSNGRANnodeRelease ProcedureCode ::= 11

id-sNGRANnodeinitiatedSNGRANnodeRelease ProcedureCode ::= 12

id-sNGRANnodeCounterCheck ProcedureCode ::= 13

id-sNGRANnodeChange ProcedureCode ::= 14

id-rRCTransfer ProcedureCode ::= 15

id-xnRemoval ProcedureCode ::= 16

id-xnSetup ProcedureCode ::= 17

id-nGRANnodeConfigurationUpdate ProcedureCode ::= 18

id-cellActivation ProcedureCode ::= 19

id-reset ProcedureCode ::= 20

id-errorIndication ProcedureCode ::= 21

id-privateMessage ProcedureCode ::= 22

id-notificationControl ProcedureCode ::= 23

id-activityNotification ProcedureCode ::= 24

id-e-UTRA-NR-CellResourceCoordination ProcedureCode ::= 25

id-secondaryRATDataUsageReport ProcedureCode ::= 26

id-deactivateTrace ProcedureCode ::= 27

id-traceStart ProcedureCode ::= 28

id-handoverSuccess ProcedureCode ::= 29

id-conditionalHandoverCancel ProcedureCode ::= 30

id-earlyStatusTransfer ProcedureCode ::= 31

id-failureIndication ProcedureCode ::= 32

id-handoverReport ProcedureCode ::= 33

id-resourceStatusReportingInitiation ProcedureCode ::= 34

id-resourceStatusReporting ProcedureCode ::= 35

id-mobilitySettingsChange ProcedureCode ::= 36

id-accessAndMobilityIndication ProcedureCode ::= 37

id-cellTrafficTrace ProcedureCode ::= 38

id-RANMulticastGroupPaging ProcedureCode ::= 39

id-scgFailureInformationReport ProcedureCode ::= 40

id-ProcedureCode41-NotToBeUsed ProcedureCode ::= 41

id-scgFailureTransfer ProcedureCode ::= 42

id-f1CTrafficTransfer ProcedureCode ::= 43

id-iABTransportMigrationManagement ProcedureCode ::= 44

id-iABTransportMigrationModification ProcedureCode ::= 45

id-iABResourceCoordination ProcedureCode ::= 46

id-retrieveUEContextConfirm ProcedureCode ::= 47

id-cPCCancel ProcedureCode ::= 48

id-partialUEContextTransfer ProcedureCode ::= 49

id-rachIndication ProcedureCode ::= 50

id-dataCollectionReportingInitiation ProcedureCode ::= 51

id-dataCollectionReporting ProcedureCode ::= 52

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

--

-- Lists

--

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

maxEARFCN INTEGER ::= 262143

maxnoofAllowedAreas INTEGER ::= 16

maxnoofAMFRegions INTEGER ::= 16

maxnoofAoIs INTEGER ::= 64

maxnoofBluetoothName INTEGER ::= 4

maxnoofBPLMNs INTEGER ::= 12

maxnoofCAGs INTEGER ::= 12

maxnoofCAGsperPLMN INTEGER ::= 256

maxnoofCellIDforMDT INTEGER ::= 32

maxnoofCellsinAoI INTEGER ::= 256

maxnoofCellsinUEHistoryInfo INTEGER ::= 16

maxnoofCellsinNG-RANnode INTEGER ::= 16384

maxnoofCellsinRNA INTEGER ::= 32

maxnoofCellsUEMovingTrajectory INTEGER ::= 16

maxnoofDRBs INTEGER ::= 32

maxnoofEUTRABands INTEGER ::= 16

maxnoofEUTRABPLMNs INTEGER ::= 6

maxnoofEPLMNs INTEGER ::= 15

maxnoofExtSliceItems INTEGER ::= 65535

maxnoofEPLMNsplus1 INTEGER ::= 16

maxnoofForbiddenTACs INTEGER ::= 4096

maxnoofFreqforMDT INTEGER ::= 8

maxnoofMBSFNEUTRA INTEGER ::= 8

maxnoofMDTPLMNs INTEGER ::= 16

maxnoofMultiConnectivityMinusOne INTEGER ::= 3

maxnoofNeighbours INTEGER ::= 1024

maxnoofNeighPCIforMDT INTEGER ::= 32

maxnoofNIDs INTEGER ::= 12

maxnoofNRCellBands INTEGER ::= 32

maxnoofPLMNs INTEGER ::= 16

maxnoofPDUSessions INTEGER ::= 256

maxnoofProtectedResourcePatterns INTEGER ::= 16

maxnoofQoSFlows INTEGER ::= 64

maxnoofQoSParaSets INTEGER ::= 8

maxnoofRANAreaCodes INTEGER ::= 32

maxnoofRANAreasinRNA INTEGER ::= 16

maxnoofRANNodesinAoI INTEGER ::= 64

maxnoofSCellGroups INTEGER ::= 3

maxnoofSCellGroupsplus1 INTEGER ::= 4

maxnoofSensorName INTEGER ::= 3

maxnoofSliceItems INTEGER ::= 1024

maxnoofSNPNIDs INTEGER ::= 12

maxnoofsupportedPLMNs INTEGER ::= 12

maxnoofsupportedTACs INTEGER ::= 256

maxnoofTAforMDT INTEGER ::= 8

maxnoofTAI INTEGER ::= 16

maxnoofTAIsinAoI INTEGER ::= 16

maxnooftimeperiods INTEGER ::= 2

maxnoofTNLAssociations INTEGER ::= 32

maxnoofUEContexts INTEGER ::= 8192

maxNRARFCN INTEGER ::= 3279165

maxNrOfErrors INTEGER ::= 256

maxnoofslots INTEGER ::= 5120

maxnoofExtTLAs INTEGER ::= 16

maxnoofGTPTLAs INTEGER ::= 16

maxnoofCHOcells INTEGER ::= 8

maxnoofPC5QoSFlows INTEGER ::= 2064

maxnoofSSBAreas INTEGER ::= 64

maxnoofRAReports INTEGER ::= 64

maxnoofNRSCSs INTEGER ::= 5

maxnoofPhysicalResourceBlocks INTEGER ::= 275

maxnoofAdditionalPDCPDuplicationTNL INTEGER ::= 2

maxnoofRLCDuplicationstate INTEGER ::= 3

maxnoofWLANName INTEGER ::= 4

maxnoofNonAnchorCarrierFreqConfig INTEGER ::= 15

maxnoofDataForwardingTunneltoE-UTRAN INTEGER ::= 256

maxnoofMBSFSAs INTEGER ::= 256

maxnoofUEIDIndicesforMBSPaging INTEGER ::= 4096

maxnoofMBSQoSFlows INTEGER ::= 64

maxnoofMRBs INTEGER ::= 32

maxnoofCellsforMBS INTEGER ::= 8192

maxnoofMBSServiceAreaInformation INTEGER ::= 256

maxnoofTAIforMBS INTEGER ::= 1024

maxnoofAssociatedMBSSessions INTEGER ::= 32

maxnoofMBSSessions INTEGER ::= 256

maxnoofSuccessfulHOReports INTEGER ::= 64

maxnoofPSCellsPerSN INTEGER ::= 8

maxnoofNR-UChannelIDs INTEGER ::= 16

maxnoofCellsinCHO INTEGER ::= 8

maxnoofCHOexecutioncond INTEGER ::= 2

maxnoofServedCellsIAB INTEGER ::= 512

maxnoofServingCells INTEGER ::= 32

maxnoofBHInfo INTEGER ::= 1024

maxnoofTrafficIndexEntries INTEGER ::= 1024

maxnoofTLAsIAB INTEGER ::= 1024

maxnoofBAPControlPDURLCCHs INTEGER ::= 2

maxnoofIABSTCInfo INTEGER ::= 45

maxnoofSymbols INTEGER ::= 14

maxnoofDUFSlots INTEGER ::= 320

maxnoofHSNASlots INTEGER ::= 5120

maxnoofRBsetsPerCell INTEGER ::= 8

maxnoofRBsetsPerCell1 INTEGER ::= 7

maxnoofChildIABNodes INTEGER ::= 1024

maxnoofPSCellCandidates INTEGER ::= 8

maxnoofTargetSNs INTEGER ::= 8

maxnoofUEAppLayerMeas INTEGER ::= 16

maxnoofSNSSAIforQMC INTEGER ::= 16

maxnoofCellIDforQMC INTEGER ::= 32

maxnoofPLMNforQMC INTEGER ::= 16

maxnoofTAforQMC INTEGER ::= 8

maxnoofMTCItems INTEGER ::= 16

maxnoofCSIRSconfigurations INTEGER ::= 96

maxnoofCSIRSneighbourCells INTEGER ::= 16

maxnoofCSIRSneighbourCellsInMTC INTEGER ::= 16

maxnoofNeighbour-NG-RAN-Nodes INTEGER ::= 256

maxnoofSRBs INTEGER ::= 5

maxnoofSMBR INTEGER ::= 8

maxnoofNSAGs INTEGER ::= 256

maxnoofTargetSNsMinusOne INTEGER ::= 7

maxnoofThresholdsForExcessPacketDelay INTEGER ::= 255

maxnoofESNPNs INTEGER ::= 15

maxnoofSuccessfulPSCellChangeReports INTEGER ::= 64

maxnoofUEsforRAReportIndications INTEGER ::= 64

maxnoofPSCellsinCPAC INTEGER ::= 8

maxnoofCPACexecutioncond INTEGER ::= 2

maxnoofLBTFailureInformation INTEGER ::= 64

maxnoofCellsTrajectoryPredict INTEGER ::= 16

maxnoofCellsTrajectory INTEGER ::= 16

maxFailedCellMeasObjects INTEGER ::= 124

maxFailedMeasPerNode INTEGER ::= 124

maxnoofUEReports INTEGER ::= 16

maxnoofCandidateRelayUEs INTEGER ::= 32

maxnoofCAGforMDT INTEGER ::= 256

maxnoofMDTSNPNs INTEGER ::= 16

maxnoofSecurityConfigurations INTEGER ::= 8

maxnoofRSPPQoSFlows INTEGER ::= 2048

maxnoofLTMCells INTEGER ::= 8

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

--

-- IEs

--

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

id-ActivatedServedCells ProtocolIE-ID ::= 0

id-ActivationIDforCellActivation ProtocolIE-ID ::= 1

id-admittedSplitSRB ProtocolIE-ID ::= 2

id-admittedSplitSRBrelease ProtocolIE-ID ::= 3

id-AMF-Region-Information ProtocolIE-ID ::= 4

id-AssistanceDataForRANPaging ProtocolIE-ID ::= 5

id-BearersSubjectToCounterCheck ProtocolIE-ID ::= 6

id-Cause ProtocolIE-ID ::= 7

id-cellAssistanceInfo-NR ProtocolIE-ID ::= 8

id-ConfigurationUpdateInitiatingNodeChoice ProtocolIE-ID ::= 9

id-CriticalityDiagnostics ProtocolIE-ID ::= 10

id-XnUAddressInfoperPDUSession-List ProtocolIE-ID ::= 11

id-DRBsSubjectToStatusTransfer-List ProtocolIE-ID ::= 12

id-ExpectedUEBehaviour ProtocolIE-ID ::= 13

id-GlobalNG-RAN-node-ID ProtocolIE-ID ::= 14

id-GUAMI ProtocolIE-ID ::= 15

id-indexToRatFrequSelectionPriority ProtocolIE-ID ::= 16

id-initiatingNodeType-ResourceCoordRequest ProtocolIE-ID ::= 17

id-List-of-served-cells-E-UTRA ProtocolIE-ID ::= 18

id-List-of-served-cells-NR ProtocolIE-ID ::= 19

id-LocationReportingInformation ProtocolIE-ID ::= 20

id-MAC-I ProtocolIE-ID ::= 21

id-MaskedIMEISV ProtocolIE-ID ::= 22

id-M-NG-RANnodeUEXnAPID ProtocolIE-ID ::= 23

id-MN-to-SN-Container ProtocolIE-ID ::= 24

id-MobilityRestrictionList ProtocolIE-ID ::= 25

id-new-NG-RAN-Cell-Identity ProtocolIE-ID ::= 26

id-newNG-RANnodeUEXnAPID ProtocolIE-ID ::= 27

id-UEReportRRCTransfer ProtocolIE-ID ::= 28

id-oldNG-RANnodeUEXnAPID ProtocolIE-ID ::= 29

id-OldtoNewNG-RANnodeResumeContainer ProtocolIE-ID ::= 30

id-PagingDRX ProtocolIE-ID ::= 31

id-PCellID ProtocolIE-ID ::= 32

id-PDCPChangeIndication ProtocolIE-ID ::= 33

id-PDUSessionAdmittedAddedAddReqAck ProtocolIE-ID ::= 34

id-PDUSessionAdmittedModSNModConfirm ProtocolIE-ID ::= 35

id-PDUSessionAdmitted-SNModResponse ProtocolIE-ID ::= 36

id-PDUSessionNotAdmittedAddReqAck ProtocolIE-ID ::= 37

id-PDUSessionNotAdmitted-SNModResponse ProtocolIE-ID ::= 38

id-PDUSessionReleasedList-RelConf ProtocolIE-ID ::= 39

id-PDUSessionReleasedSNModConfirm ProtocolIE-ID ::= 40

id-PDUSessionResourcesActivityNotifyList ProtocolIE-ID ::= 41

id-PDUSessionResourcesAdmitted-List ProtocolIE-ID ::= 42

id-PDUSessionResourcesNotAdmitted-List ProtocolIE-ID ::= 43

id-PDUSessionResourcesNotifyList ProtocolIE-ID ::= 44

id-PDUSession-SNChangeConfirm-List ProtocolIE-ID ::= 45

id-PDUSession-SNChangeRequired-List ProtocolIE-ID ::= 46

id-PDUSessionToBeAddedAddReq ProtocolIE-ID ::= 47

id-PDUSessionToBeModifiedSNModRequired ProtocolIE-ID ::= 48

id-PDUSessionToBeReleasedList-RelRqd ProtocolIE-ID ::= 49

id-PDUSessionToBeReleased-RelReq ProtocolIE-ID ::= 50

id-PDUSessionToBeReleasedSNModRequired ProtocolIE-ID ::= 51

id-RANPagingArea ProtocolIE-ID ::= 52

id-PagingPriority ProtocolIE-ID ::= 53

id-requestedSplitSRB ProtocolIE-ID ::= 54

id-requestedSplitSRBrelease ProtocolIE-ID ::= 55

id-ResetRequestTypeInfo ProtocolIE-ID ::= 56

id-ResetResponseTypeInfo ProtocolIE-ID ::= 57

id-RespondingNodeTypeConfigUpdateAck ProtocolIE-ID ::= 58

id-respondingNodeType-ResourceCoordResponse ProtocolIE-ID ::= 59

id-ResponseInfo-ReconfCompl ProtocolIE-ID ::= 60

id-RRCConfigIndication ProtocolIE-ID ::= 61

id-RRCResumeCause ProtocolIE-ID ::= 62

id-SCGConfigurationQuery ProtocolIE-ID ::= 63

id-selectedPLMN ProtocolIE-ID ::= 64

id-ServedCellsToActivate ProtocolIE-ID ::= 65

id-servedCellsToUpdate-E-UTRA ProtocolIE-ID ::= 66

id-ServedCellsToUpdateInitiatingNodeChoice ProtocolIE-ID ::= 67

id-servedCellsToUpdate-NR ProtocolIE-ID ::= 68

id-s-ng-RANnode-SecurityKey ProtocolIE-ID ::= 69

id-S-NG-RANnodeUE-AMBR ProtocolIE-ID ::= 70

id-S-NG-RANnodeUEXnAPID ProtocolIE-ID ::= 71

id-SN-to-MN-Container ProtocolIE-ID ::= 72

id-sourceNG-RANnodeUEXnAPID ProtocolIE-ID ::= 73

id-SplitSRB-RRCTransfer ProtocolIE-ID ::= 74

id-TAISupport-list ProtocolIE-ID ::= 75

id-TimeToWait ProtocolIE-ID ::= 76

id-Target2SourceNG-RANnodeTranspContainer ProtocolIE-ID ::= 77

id-targetCellGlobalID ProtocolIE-ID ::= 78

id-targetNG-RANnodeUEXnAPID ProtocolIE-ID ::= 79

id-target-S-NG-RANnodeID ProtocolIE-ID ::= 80

id-TraceActivation ProtocolIE-ID ::= 81

id-UEContextID ProtocolIE-ID ::= 82

id-UEContextInfoHORequest ProtocolIE-ID ::= 83

id-UEContextInfoRetrUECtxtResp ProtocolIE-ID ::= 84

id-UEContextInfo-SNModRequest ProtocolIE-ID ::= 85

id-UEContextKeptIndicator ProtocolIE-ID ::= 86

id-UEContextRefAtSN-HORequest ProtocolIE-ID ::= 87

id-UEHistoryInformation ProtocolIE-ID ::= 88

id-UEIdentityIndexValue ProtocolIE-ID ::= 89

id-UERANPagingIdentity ProtocolIE-ID ::= 90

id-UESecurityCapabilities ProtocolIE-ID ::= 91

id-UserPlaneTrafficActivityReport ProtocolIE-ID ::= 92

id-XnRemovalThreshold ProtocolIE-ID ::= 93

id-DesiredActNotificationLevel ProtocolIE-ID ::= 94

id-AvailableDRBIDs ProtocolIE-ID ::= 95

id-AdditionalDRBIDs ProtocolIE-ID ::= 96

id-SpareDRBIDs ProtocolIE-ID ::= 97

id-RequiredNumberOfDRBIDs ProtocolIE-ID ::= 98

id-TNLA-To-Add-List ProtocolIE-ID ::= 99

id-TNLA-To-Update-List ProtocolIE-ID ::= 100

id-TNLA-To-Remove-List ProtocolIE-ID ::= 101

id-TNLA-Setup-List ProtocolIE-ID ::= 102

id-TNLA-Failed-To-Setup-List ProtocolIE-ID ::= 103

id-PDUSessionToBeReleased-RelReqAck ProtocolIE-ID ::= 104

id-S-NG-RANnodeMaxIPDataRate-UL ProtocolIE-ID ::= 105

id-PDUSessionResourceSecondaryRATUsageList ProtocolIE-ID ::= 107

id-Additional-UL-NG-U-TNLatUPF-List ProtocolIE-ID ::= 108

id-SecondarydataForwardingInfoFromTarget-List ProtocolIE-ID ::= 109

id-LocationInformationSNReporting ProtocolIE-ID ::= 110

id-LocationInformationSN ProtocolIE-ID ::= 111

id-LastE-UTRANPLMNIdentity ProtocolIE-ID ::= 112

id-S-NG-RANnodeMaxIPDataRate-DL ProtocolIE-ID ::= 113

id-MaxIPrate-DL ProtocolIE-ID ::= 114

id-SecurityResult ProtocolIE-ID ::= 115

id-S-NSSAI ProtocolIE-ID ::= 116

id-MR-DC-ResourceCoordinationInfo ProtocolIE-ID ::= 117

id-AMF-Region-Information-To-Add ProtocolIE-ID ::= 118

id-AMF-Region-Information-To-Delete ProtocolIE-ID ::= 119

id-OldQoSFlowMap-ULendmarkerexpected ProtocolIE-ID ::= 120

id-RANPagingFailure ProtocolIE-ID ::= 121

id-UERadioCapabilityForPaging ProtocolIE-ID ::= 122

id-PDUSessionDataForwarding-SNModResponse ProtocolIE-ID ::= 123

id-DRBsNotAdmittedSetupModifyList ProtocolIE-ID ::= 124

id-Secondary-MN-Xn-U-TNLInfoatM ProtocolIE-ID ::= 125

id-NE-DC-TDM-Pattern ProtocolIE-ID ::= 126

id-PDUSessionCommonNetworkInstance ProtocolIE-ID ::= 127

id-BPLMN-ID-Info-EUTRA ProtocolIE-ID ::= 128

id-BPLMN-ID-Info-NR ProtocolIE-ID ::= 129

id-InterfaceInstanceIndication ProtocolIE-ID ::= 130

id-S-NG-RANnode-Addition-Trigger-Ind ProtocolIE-ID ::= 131

id-DefaultDRB-Allowed ProtocolIE-ID ::= 132

id-DRB-IDs-takenintouse ProtocolIE-ID ::= 133

id-SplitSessionIndicator ProtocolIE-ID ::= 134

id-CNTypeRestrictionsForEquivalent ProtocolIE-ID ::= 135

id-CNTypeRestrictionsForServing ProtocolIE-ID ::= 136

id-DRBs-transferred-to-MN ProtocolIE-ID ::= 137

id-ULForwardingProposal ProtocolIE-ID ::= 138

id-EndpointIPAddressAndPort ProtocolIE-ID ::= 139

id-IntendedTDD-DL-ULConfiguration-NR ProtocolIE-ID ::= 140

id-TNLConfigurationInfo ProtocolIE-ID ::= 141

id-PartialListIndicator-NR ProtocolIE-ID ::= 142

id-MessageOversizeNotification ProtocolIE-ID ::= 143

id-CellAndCapacityAssistanceInfo-NR ProtocolIE-ID ::= 144

id-NG-RANTraceID ProtocolIE-ID ::= 145

id-NonGBRResources-Offered ProtocolIE-ID ::= 146

id-FastMCGRecoveryRRCTransfer-SN-to-MN ProtocolIE-ID ::= 147

id-RequestedFastMCGRecoveryViaSRB3 ProtocolIE-ID ::= 148

id-AvailableFastMCGRecoveryViaSRB3 ProtocolIE-ID ::= 149

id-RequestedFastMCGRecoveryViaSRB3Release ProtocolIE-ID ::= 150

id-ReleaseFastMCGRecoveryViaSRB3 ProtocolIE-ID ::= 151

id-FastMCGRecoveryRRCTransfer-MN-to-SN ProtocolIE-ID ::= 152

id-ExtendedRATRestrictionInformation ProtocolIE-ID ::= 153

id-QoSMonitoringRequest ProtocolIE-ID ::= 154

id-FiveGCMobilityRestrictionListContainer ProtocolIE-ID ::= 155

id-PartialListIndicator-EUTRA ProtocolIE-ID ::= 156

id-CellAndCapacityAssistanceInfo-EUTRA ProtocolIE-ID ::= 157

id-CHOinformation-Req ProtocolIE-ID ::= 158

id-CHOinformation-Ack ProtocolIE-ID ::= 159

id-targetCellsToCancel ProtocolIE-ID ::= 160

id-requestedTargetCellGlobalID ProtocolIE-ID ::= 161

id-procedureStage ProtocolIE-ID ::= 162

id-DAPSRequestInfo ProtocolIE-ID ::= 163

id-DAPSResponseInfo-List ProtocolIE-ID ::= 164

id-CHO-MRDC-Indicator ProtocolIE-ID ::= 165

id-OffsetOfNbiotChannelNumberToDL-EARFCN ProtocolIE-ID ::= 166

id-OffsetOfNbiotChannelNumberToUL-EARFCN ProtocolIE-ID ::= 167

id-NBIoT-UL-DL-AlignmentOffset ProtocolIE-ID ::= 168

id-LTEV2XServicesAuthorized ProtocolIE-ID ::= 169

id-NRV2XServicesAuthorized ProtocolIE-ID ::= 170

id-LTEUESidelinkAggregateMaximumBitRate ProtocolIE-ID ::= 171

id-NRUESidelinkAggregateMaximumBitRate ProtocolIE-ID ::= 172

id-PC5QoSParameters ProtocolIE-ID ::= 173

id-AlternativeQoSParaSetList ProtocolIE-ID ::= 174

id-CurrentQoSParaSetIndex ProtocolIE-ID ::= 175

id-MobilityInformation ProtocolIE-ID ::= 176

id-InitiatingCondition-FailureIndication ProtocolIE-ID ::= 177

id-UEHistoryInformationFromTheUE ProtocolIE-ID ::= 178

id-HandoverReportType ProtocolIE-ID ::= 179

id-HandoverCause ProtocolIE-ID ::= 180

id-SourceCellCGI ProtocolIE-ID ::= 181

id-TargetCellCGI ProtocolIE-ID ::= 182

id-ReEstablishmentCellCGI ProtocolIE-ID ::= 183

id-TargetCellinEUTRAN ProtocolIE-ID ::= 184

id-SourceCellCRNTI ProtocolIE-ID ::= 185

id-UERLFReportContainer ProtocolIE-ID ::= 186

id-NGRAN-Node1-Measurement-ID ProtocolIE-ID ::= 187

id-NGRAN-Node2-Measurement-ID ProtocolIE-ID ::= 188

id-RegistrationRequest ProtocolIE-ID ::= 189

id-ReportCharacteristics ProtocolIE-ID ::= 190

id-CellToReport ProtocolIE-ID ::= 191

id-ReportingPeriodicity ProtocolIE-ID ::= 192

id-CellMeasurementResult ProtocolIE-ID ::= 193

id-NG-RANnode1CellID ProtocolIE-ID ::= 194

id-NG-RANnode2CellID ProtocolIE-ID ::= 195

id-NG-RANnode1MobilityParameters ProtocolIE-ID ::= 196

id-NG-RANnode2ProposedMobilityParameters ProtocolIE-ID ::= 197

id-MobilityParametersModificationRange ProtocolIE-ID ::= 198

id-TDDULDLConfigurationCommonNR ProtocolIE-ID ::= 199

id-CarrierList ProtocolIE-ID ::= 200

id-ULCarrierList ProtocolIE-ID ::= 201

id-FrequencyShift7p5khz ProtocolIE-ID ::= 202

id-SSB-PositionsInBurst ProtocolIE-ID ::= 203

id-NRCellPRACHConfig ProtocolIE-ID ::= 204

id-RAReport ProtocolIE-ID ::= 205

id-IABNodeIndication ProtocolIE-ID ::= 206

id-Redundant-UL-NG-U-TNLatUPF ProtocolIE-ID ::= 207

id-CNPacketDelayBudgetDownlink ProtocolIE-ID ::= 208

id-CNPacketDelayBudgetUplink ProtocolIE-ID ::= 209

id-Additional-Redundant-UL-NG-U-TNLatUPF-List ProtocolIE-ID ::= 210

id-RedundantCommonNetworkInstance ProtocolIE-ID ::= 211

id-TSCTrafficCharacteristics ProtocolIE-ID ::= 212

id-RedundantQoSFlowIndicator ProtocolIE-ID ::= 213

id-Redundant-DL-NG-U-TNLatNG-RAN ProtocolIE-ID ::= 214

id-ExtendedPacketDelayBudget ProtocolIE-ID ::= 215

id-Additional-PDCP-Duplication-TNL-List ProtocolIE-ID ::= 216

id-RedundantPDUSessionInformation ProtocolIE-ID ::= 217

id-UsedRSNInformation ProtocolIE-ID ::= 218

id-RLCDuplicationInformation ProtocolIE-ID ::= 219

id-NPN-Broadcast-Information ProtocolIE-ID ::= 220

id-NPNPagingAssistanceInformation ProtocolIE-ID ::= 221

id-NPNMobilityInformation ProtocolIE-ID ::= 222

id-NPN-Support ProtocolIE-ID ::= 223

id-MDT-Configuration ProtocolIE-ID ::= 224

id-MDTPLMNList ProtocolIE-ID ::= 225

id-TraceCollectionEntityURI ProtocolIE-ID ::= 226

id-UERadioCapabilityID ProtocolIE-ID ::= 227

id-CSI-RSTransmissionIndication ProtocolIE-ID ::= 228

id-SNTriggered ProtocolIE-ID ::= 229

id-DLCarrierList ProtocolIE-ID ::= 230

id-ExtendedTAISliceSupportList ProtocolIE-ID ::= 231

id-cellAssistanceInfo-EUTRA ProtocolIE-ID ::= 232

id-ConfiguredTACIndication ProtocolIE-ID ::= 233

id-secondary-SN-UL-PDCP-UP-TNLInfo ProtocolIE-ID ::= 234

id-pdcpDuplicationConfiguration ProtocolIE-ID ::= 235

id-duplicationActivation ProtocolIE-ID ::= 236

id-NPRACHConfiguration ProtocolIE-ID ::= 237

id-QosMonitoringReportingFrequency ProtocolIE-ID ::= 238

id-QoSFlowsMappedtoDRB-SetupResponse-MNterminated ProtocolIE-ID ::= 239

id-DL-scheduling-PDCCH-CCE-usage ProtocolIE-ID ::= 240

id-UL-scheduling-PDCCH-CCE-usage ProtocolIE-ID ::= 241

id-SFN-Offset ProtocolIE-ID ::= 242

id-QoSMonitoringDisabled ProtocolIE-ID ::= 243

id-ExtendedUEIdentityIndexValue ProtocolIE-ID ::= 244

id-EUTRAPagingeDRXInformation ProtocolIE-ID ::= 245

id-CHO-MRDC-EarlyDataForwarding ProtocolIE-ID ::= 246

id-SCGIndicator ProtocolIE-ID ::= 247

id-UESpecificDRX ProtocolIE-ID ::= 248

id-PDUSessionExpectedUEActivityBehaviour ProtocolIE-ID ::= 249

id-QoS-Mapping-Information ProtocolIE-ID ::= 250

id-AdditionLocationInformation ProtocolIE-ID ::= 251

id-dataForwardingInfoFromTargetE-UTRANnode ProtocolIE-ID ::= 252

id-DirectForwardingPathAvailability ProtocolIE-ID ::= 253

id-SourceNG-RAN-node-ID ProtocolIE-ID ::= 254

id-SourceDLForwardingIPAddress ProtocolIE-ID ::= 255

id-SourceNodeDLForwardingIPAddress ProtocolIE-ID ::= 256

id-ExtendedReportIntervalMDT ProtocolIE-ID ::= 257

id-SecurityIndication ProtocolIE-ID ::= 258

id-RRCConnReestab-Indicator ProtocolIE-ID ::= 259

id-TargetNodeID ProtocolIE-ID ::= 260

id-ManagementBasedMDTPLMNList ProtocolIE-ID ::= 261

id-PrivacyIndicator ProtocolIE-ID ::= 262

id-TraceCollectionEntityIPAddress ProtocolIE-ID ::= 263

id-M4ReportAmount ProtocolIE-ID ::= 264

id-M5ReportAmount ProtocolIE-ID ::= 265

id-M6ReportAmount ProtocolIE-ID ::= 266

id-M7ReportAmount ProtocolIE-ID ::= 267

id-BeamMeasurementIndicationM1 ProtocolIE-ID ::= 268

id-MBS-Session-ID ProtocolIE-ID ::= 269

id-UEIdentityIndexList-MBSGroupPaging ProtocolIE-ID ::= 270

id-MulticastRANPagingArea ProtocolIE-ID ::= 271

id-Supported-MBS-FSA-ID-List ProtocolIE-ID ::= 272

id-MBS-SessionInformation-List ProtocolIE-ID ::= 273

id-MBS-SessionInformationResponse-List ProtocolIE-ID ::= 274

id-MBS-SessionAssociatedInformation ProtocolIE-ID ::= 275

id-SuccessfulHOReportInformation ProtocolIE-ID ::= 276

id-SliceRadioResourceStatus-List ProtocolIE-ID ::= 277

id-CompositeAvailableCapacitySupplementaryUplink ProtocolIE-ID ::= 278

id-SCGUEHistoryInformation ProtocolIE-ID ::= 279

id-SSBOffsets-List ProtocolIE-ID ::= 280

id-NG-RANnode2SSBOffsetModificationRange ProtocolIE-ID ::= 281

id-Coverage-Modification-List ProtocolIE-ID ::= 282

id-NR-U-Channel-List ProtocolIE-ID ::= 283

id-SourcePSCellCGI ProtocolIE-ID ::= 284

id-FailedPSCellCGI ProtocolIE-ID ::= 285

id-SCGFailureReportContainer ProtocolIE-ID ::= 286

id-SNMobilityInformation ProtocolIE-ID ::= 287

id-SourcePSCellID ProtocolIE-ID ::= 288

id-SuitablePSCellCGI ProtocolIE-ID ::= 289

id-PSCellChangeHistory ProtocolIE-ID ::= 290

id-CHOConfiguration ProtocolIE-ID ::= 291

id-NR-U-ChannelInfo-List ProtocolIE-ID ::= 292

id-PSCellHistoryInformationRetrieve ProtocolIE-ID ::= 293

id-NG-RANnode2SSBOffsetsModificationRange ProtocolIE-ID ::= 294

id-MIMOPRBusageInformation ProtocolIE-ID ::= 295

id-F1CTrafficContainer ProtocolIE-ID ::= 296

id-IAB-MT-Cell-List ProtocolIE-ID ::= 297

id-NoPDUSessionIndication ProtocolIE-ID ::= 298

id-IAB-TNL-Address-Request ProtocolIE-ID ::= 299

id-IAB-TNL-Address-Response ProtocolIE-ID ::= 300

id-TrafficToBeAddedList ProtocolIE-ID ::= 301

id-TrafficToBeModifiedList ProtocolIE-ID ::= 302

id-TrafficToBeReleaseInformation ProtocolIE-ID ::= 303

id-TrafficAddedList ProtocolIE-ID ::= 304

id-TrafficModifiedList ProtocolIE-ID ::= 305

id-TrafficNotAddedList ProtocolIE-ID ::= 306

id-TrafficNotModifiedList ProtocolIE-ID ::= 307

id-TrafficRequiredToBeModifiedList ProtocolIE-ID ::= 308

id-TrafficRequiredModifiedList ProtocolIE-ID ::= 309

id-TrafficReleasedList ProtocolIE-ID ::= 310

id-IABTNLAddressToBeAdded ProtocolIE-ID ::= 311

id-IABTNLAddressToBeReleasedList ProtocolIE-ID ::= 312

id-nonF1-Terminating-IAB-DonorUEXnAPID ProtocolIE-ID ::= 313

id-F1-Terminating-IAB-DonorUEXnAPID ProtocolIE-ID ::= 314

id-BoundaryNodeCellsList ProtocolIE-ID ::= 315

id-ParentNodeCellsList ProtocolIE-ID ::= 316

id-tdd-GNB-DU-Cell-Resource-Configuration ProtocolIE-ID ::= 317

id-UL-GNB-DU-Cell-Resource-Configuration ProtocolIE-ID ::= 318

id-DL-GNB-DU-Cell-Resource-Configuration ProtocolIE-ID ::= 319

id-permutation ProtocolIE-ID ::= 320

id-IABTNLAddressException ProtocolIE-ID ::= 321

id-CHOinformation-AddReq ProtocolIE-ID ::= 322

id-CHOinformation-ModReq ProtocolIE-ID ::= 323

id-SurvivalTime ProtocolIE-ID ::= 324

id-TimeSynchronizationAssistanceInformation ProtocolIE-ID ::= 325

id-SCGActivationRequest ProtocolIE-ID ::= 326

id-SCGActivationStatus ProtocolIE-ID ::= 327

id-CPAInformationRequest ProtocolIE-ID ::= 328

id-CPAInformationAck ProtocolIE-ID ::= 329

id-CPCInformationRequired ProtocolIE-ID ::= 330

id-CPCInformationConfirm ProtocolIE-ID ::= 331

id-CPAInformationModReq ProtocolIE-ID ::= 332

id-CPAInformationModReqAck ProtocolIE-ID ::= 333

id-CPC-DataForwarding-Indicator ProtocolIE-ID ::= 334

id-CPCInformationUpdate ProtocolIE-ID ::= 335

id-CPACInformationModRequired ProtocolIE-ID ::= 336

id-QMCConfigInfo ProtocolIE-ID ::= 337

id-ProtocolIE-ID338-NotToBeUsed ProtocolIE-ID ::= 338

id-Additional-Measurement-Timing-Configuration-List ProtocolIE-ID ::= 339

id-PDUSession-PairID ProtocolIE-ID ::= 340

id-Local-NG-RAN-Node-Identifier ProtocolIE-ID ::= 341

id-Neighbour-NG-RAN-Node-List ProtocolIE-ID ::= 342

id-Local-NG-RAN-Node-Identifier-Removal ProtocolIE-ID ::= 343

id-FiveGProSeAuthorized ProtocolIE-ID ::= 344

id-FiveGProSePC5QoSParameters ProtocolIE-ID ::= 345

id-FiveGProSeUEPC5AggregateMaximumBitRate ProtocolIE-ID ::= 346

id-ServedCellSpecificInfoReq-NR ProtocolIE-ID ::= 347

id-NRPagingeDRXInformation ProtocolIE-ID ::= 348

id-NRPagingeDRXInformationforRRCINACTIVE ProtocolIE-ID ::= 349

id-Redcap-Bcast-Information ProtocolIE-ID ::= 350

id-SDTSupportRequest ProtocolIE-ID ::= 351

id-SDT-SRB-between-NewNode-OldNode ProtocolIE-ID ::= 352

id-SDT-Termination-Request ProtocolIE-ID ::= 353

id-SDTPartialUEContextInfo ProtocolIE-ID ::= 354

id-SDTDataForwardingDRBList ProtocolIE-ID ::= 355

id-PagingCause ProtocolIE-ID ::= 356

id-PEIPSassistanceInformation ProtocolIE-ID ::= 357

id-UESliceMaximumBitRateList ProtocolIE-ID ::= 358

id-S-NG-RANnodeUE-Slice-MBR ProtocolIE-ID ::= 359

id-PositioningInformation ProtocolIE-ID ::= 360

id-UEAssistantIdentifier ProtocolIE-ID ::= 361

id-ManagementBasedMDTPLMNModificationList ProtocolIE-ID ::= 362

id-F1-terminatingIAB-donorIndicator ProtocolIE-ID ::= 363

id-TAINSAGSupportList ProtocolIE-ID ::= 364

id-SCGreconfigNotification ProtocolIE-ID ::= 365

id-earlyMeasurement ProtocolIE-ID ::= 366

id-BeamMeasurementsReportConfiguration ProtocolIE-ID ::= 367

id-CoverageModificationCause ProtocolIE-ID ::= 368

id-AdditionalListofPDUSessionResourceChangeConfirmInfo-SNterminated ProtocolIE-ID ::= 369

id-UERLFReportContainerLTEExtension ProtocolIE-ID ::= 370

id-ExcessPacketDelayThresholdConfiguration ProtocolIE-ID ::= 371

id-HashedUEIdentityIndexValue ProtocolIE-ID ::= 372

id-QosFlowMappingIndication ProtocolIE-ID ::= 373

id-Full-and-Short-I-RNTI-Profile-List ProtocolIE-ID ::= 374

id-MBS-DataForwarding-Indicator ProtocolIE-ID ::= 375

id-IABAuthorizationStatus ProtocolIE-ID ::= 376

id-EquivalentSNPNs ProtocolIE-ID ::= 377

id-SelectedNID ProtocolIE-ID ::= 378

id-MT-SDT-Information ProtocolIE-ID ::= 379

id-PosPartialUEContextInfo ProtocolIE-ID ::= 380

id-SRSConfiguration ProtocolIE-ID ::= 381

id-CHOTimeBasedInformation ProtocolIE-ID ::= 382

id-ChannelOccupancyTimePercentageUL ProtocolIE-ID ::= 383

id-EnergyDetectionThresholdUL ProtocolIE-ID ::= 384

id-SuccessfulPSCellChangeReportInformation ProtocolIE-ID ::= 385

id-PSCellListContainer ProtocolIE-ID ::= 386

id-RadioResourceStatusNR-U ProtocolIE-ID ::= 387

id-CPACConfiguration ProtocolIE-ID ::= 388

id-RaReportIndicationList ProtocolIE-ID ::= 389

id-SPRAvailability ProtocolIE-ID ::= 390

id-DLLBTFailureInformationRequest ProtocolIE-ID ::= 391

id-DLLBTFailureInformationList ProtocolIE-ID ::= 392

id-TargetCellCRNTI ProtocolIE-ID ::= 393

id-TimeSinceFailure ProtocolIE-ID ::= 394

id-AerialUESubscriptionInformation ProtocolIE-ID ::= 395

id-LTEA2XServicesAuthorized ProtocolIE-ID ::= 396

id-NRA2XServicesAuthorized ProtocolIE-ID ::= 397

id-LTEA2XUEPC5AggregateMaximumBitRate ProtocolIE-ID ::= 398

id-NRA2XUEPC5AggregateMaximumBitRate ProtocolIE-ID ::= 399

id-A2XPC5QoSParameters ProtocolIE-ID ::= 400

id-CellBasedUETrajectoryPrediction ProtocolIE-ID ::= 401

id-DataCollectionID ProtocolIE-ID ::= 402

id-RequestedPredictionTime ProtocolIE-ID ::= 403

id-NodeMeasurementInitiationResult-List ProtocolIE-ID ::= 404

id-CellMeasurementInitiationResult-List ProtocolIE-ID ::= 405

id-UEAssociatedInfoResult-List ProtocolIE-ID ::= 406

id-ProtocolIE-ID-407-not-to-be-used ProtocolIE-ID ::= 407

id-UETrajectoryCollectionConfiguration ProtocolIE-ID ::= 408

id-UEPerformanceCollectionConfiguration ProtocolIE-ID ::= 409

id-CellMeasurementResultForDataCollection-List ProtocolIE-ID ::= 410

id-CellToReportForDataCollection-List ProtocolIE-ID ::= 411

id-FiveGProSeLayer2Multipath ProtocolIE-ID ::= 412

id-FiveGProSeLayer2UEtoUERelay ProtocolIE-ID ::= 413

id-FiveGProSeLayer2UEtoUERemote ProtocolIE-ID ::= 414

id-CandidateRelayUEInfoList ProtocolIE-ID ::= 415

id-NRCellsAndSSBsList ProtocolIE-ID ::= 416

id-ActivatedNRCellsAndSSBsList ProtocolIE-ID ::= 417

id-ClockQualityReportingControlInfo ProtocolIE-ID ::= 418

id-CapabilityForBATAdaptation ProtocolIE-ID ::= 419

id-PNI-NPN-AreaScopeofMDT ProtocolIE-ID ::= 420

id-PNI-NPNBasedMDT ProtocolIE-ID ::= 421

id-SNPN-CellBasedMDT ProtocolIE-ID ::= 422

id-SNPN-TAIBasedMDT ProtocolIE-ID ::= 423

id-SNPN-BasedMDT ProtocolIE-ID ::= 424

id-S-CPAC-Request ProtocolIE-ID ::= 425

id-S-CPAC-Request-Info ProtocolIE-ID ::= 426

id-S-CPAC-ReferenceConfigRequest ProtocolIE-ID ::= 427

id-S-CPAC-InterSN-ExecutionNotify ProtocolIE-ID ::= 428

id-S-CPAC-dataforwardinginfofromSource ProtocolIE-ID ::= 429

id-CPACcandidatePSCells-wotherInfo-list ProtocolIE-ID ::= 430

id-eRedcap-Bcast-Information ProtocolIE-ID ::= 431

id-NRPagingLongeDRXInformationforRRCINACTIVE ProtocolIE-ID ::= 432

id-MBS-AssistanceInformation ProtocolIE-ID ::= 433

id-QMCCoordinationRequest ProtocolIE-ID ::= 434

id-QMCCoordinationResponse ProtocolIE-ID ::= 435

id-QoE-Measurement-Results ProtocolIE-ID ::= 436

id-MBSCommServiceType ProtocolIE-ID ::= 437

id-AssistanceInformationQoE-Meas ProtocolIE-ID ::= 438

id-ProtocolIE-ID-439-not-to-be-used ProtocolIE-ID ::= 439

id-QoERVQoEReportingPaths ProtocolIE-ID ::= 440

id-Src-SN-to-Tgt-SNQMCInfoInquiry ProtocolIE-ID ::= 441

id-DirectForwardingPathAvailabilityWithSourceMN ProtocolIE-ID ::= 442

id-CHO-Maxnoof-CondReconfig ProtocolIE-ID ::= 443

id-accessed-PSCellID ProtocolIE-ID ::= 444

id-conditional-Reconfig-ToCancel-List ProtocolIE-ID ::= 445

id-CHOinformation-AddReqAck ProtocolIE-ID ::= 446

id-CHO-CPAC-Info ProtocolIE-ID ::= 447

id-PDUSetQoSParameters ProtocolIE-ID ::= 448

id-N6JitterInformation ProtocolIE-ID ::= 449

id-ECNMarkingorCongestionInformationReportingRequest ProtocolIE-ID ::= 450

id-PDUSetbasedHandlingIndicator ProtocolIE-ID ::= 451

id-TAISliceUnavailableCellList ProtocolIE-ID ::= 452

id-MobileIAB-AuthorizationStatus ProtocolIE-ID ::= 453

id-MIAB-MT-BAP-Address ProtocolIE-ID ::= 454

id-MobileIABCell ProtocolIE-ID ::= 455

id-sk-Counter ProtocolIE-ID ::= 456

id-Source-M-NG-RANnodeID ProtocolIE-ID ::= 457

id-ProtocolIE-ID458-NotToBeUsed ProtocolIE-ID ::= 458

id-SourceSN-to-TargetSN-QMCInfo ProtocolIE-ID ::= 459

id-RegistrationRequestForDataCollection ProtocolIE-ID ::= 460

id-ReportCharacteristicsForDataCollection ProtocolIE-ID ::= 461

id-ReportingPeriodicityForDataCollection ProtocolIE-ID ::= 462

id-NodeAssociatedInfoResult ProtocolIE-ID ::= 463

id-SLPositioning-Ranging-Services-Info ProtocolIE-ID ::= 464

id-XR-Bcast-Information ProtocolIE-ID ::= 465

id-PDUSessionsListToBeReleased-UPError ProtocolIE-ID ::= 466

id-MaximumDataBurstVolume  ProtocolIE-ID ::= 467

id-CPAC-Preparation-Type ProtocolIE-ID ::= 468

id-UserPlaneFailureIndication ProtocolIE-ID ::= 469

id-MN-only-MDT-collection ProtocolIE-ID ::= 470

id-BarringExemptionforEmerCallInfo ProtocolIE-ID ::= 471

id-Transmission-Bandwidth-asymmetric ProtocolIE-ID ::= 472

id-SRSPositioningConfigOrActivationRequest ProtocolIE-ID ::= 473

id-NRPPaPositioningInformation ProtocolIE-ID ::= 474

id-LTMInformation-AddReq ProtocolIE-ID ::= xx1

id-LTMInformation-AddReqAck ProtocolIE-ID ::= xx2

id-LTMInformation-UpdateReq ProtocolIE-ID ::= xx3

id-LTMInformation-ModReq ProtocolIE-ID ::= xx4

id-LTMInformation-ModReqAck ProtocolIE-ID ::= xx5

id-LTMInformation-UpdateReqAck ProtocolIE-ID ::= xx6

id-LTMInformation-Required ProtocolIE-ID ::= xx7

id-LTMInformation-ChangeRequired ProtocolIE-ID ::= xx8

id-LTMInformation-ChangeConfirm ProtocolIE-ID ::= xx9

END

-- ASN1STOP

### 9.3.8 Container definitions

-- ASN1START

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

--

-- Container definitions

--

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

XnAP-Containers {

itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)

ngran-access (22) modules (3) xnap (2) version1 (1) xnap-Containers (5) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

--

-- IE parameter types from other modules.

--

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

IMPORTS

maxPrivateIEs,

maxProtocolExtensions,

maxProtocolIEs,

Criticality,

Presence,

PrivateIE-ID,

ProtocolIE-ID

FROM XnAP-CommonDataTypes;

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

--

-- Class Definition for Protocol IEs

--

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

XNAP-PROTOCOL-IES ::= CLASS {

&id ProtocolIE-ID UNIQUE,

&criticality Criticality,

&Value,

&presence Presence

}

WITH SYNTAX {

ID &id

CRITICALITY &criticality

TYPE &Value

PRESENCE &presence

}

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

--

-- Class Definition for Protocol IE pairs

--

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

XNAP-PROTOCOL-IES-PAIR ::= CLASS {

&id ProtocolIE-ID UNIQUE,

&firstCriticality Criticality,

&FirstValue,

&secondCriticality Criticality,

&SecondValue,

&presence Presence

}

WITH SYNTAX {

ID &id

FIRST CRITICALITY &firstCriticality

FIRST TYPE &FirstValue

SECOND CRITICALITY &secondCriticality

SECOND TYPE &SecondValue

PRESENCE &presence

}

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

--

-- Class Definition for Protocol Extensions

--

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

XNAP-PROTOCOL-EXTENSION ::= CLASS {

&id ProtocolIE-ID UNIQUE,

&criticality Criticality,

&Extension,

&presence Presence

}

WITH SYNTAX {

ID &id

CRITICALITY &criticality

EXTENSION &Extension

PRESENCE &presence

}

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

--

-- Class Definition for Private IEs

--

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

XNAP-PRIVATE-IES ::= CLASS {

&id PrivateIE-ID,

&criticality Criticality,

&Value,

&presence Presence

}

WITH SYNTAX {

ID &id

CRITICALITY &criticality

TYPE &Value

PRESENCE &presence

}

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

--

-- Container for Protocol IEs

--

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

ProtocolIE-Container {XNAP-PROTOCOL-IES : IEsSetParam} ::=

SEQUENCE (SIZE (0..maxProtocolIEs)) OF

ProtocolIE-Field {{IEsSetParam}}

ProtocolIE-Single-Container {XNAP-PROTOCOL-IES : IEsSetParam} ::= ProtocolIE-Field {{IEsSetParam}}

ProtocolIE-Field {XNAP-PROTOCOL-IES : IEsSetParam} ::= SEQUENCE {

id XNAP-PROTOCOL-IES.&id ({IEsSetParam}),

criticality XNAP-PROTOCOL-IES.&criticality ({IEsSetParam}{@id}),

value XNAP-PROTOCOL-IES.&Value ({IEsSetParam}{@id})

}

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

--

-- Container for Protocol IE Pairs

--

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

ProtocolIE-ContainerPair {XNAP-PROTOCOL-IES-PAIR : IEsSetParam} ::=

SEQUENCE (SIZE (0..maxProtocolIEs)) OF

ProtocolIE-FieldPair {{IEsSetParam}}

ProtocolIE-FieldPair {XNAP-PROTOCOL-IES-PAIR : IEsSetParam} ::= SEQUENCE {

id XNAP-PROTOCOL-IES-PAIR.&id ({IEsSetParam}),

firstCriticality XNAP-PROTOCOL-IES-PAIR.&firstCriticality ({IEsSetParam}{@id}),

firstValue XNAP-PROTOCOL-IES-PAIR.&FirstValue ({IEsSetParam}{@id}),

secondCriticality XNAP-PROTOCOL-IES-PAIR.&secondCriticality ({IEsSetParam}{@id}),

secondValue XNAP-PROTOCOL-IES-PAIR.&SecondValue ({IEsSetParam}{@id})

}

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

--

-- Container Lists for Protocol IE Containers

--

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

ProtocolIE-ContainerList {INTEGER : lowerBound, INTEGER : upperBound, XNAP-PROTOCOL-IES : IEsSetParam} ::=

SEQUENCE (SIZE (lowerBound..upperBound)) OF

ProtocolIE-Container {{IEsSetParam}}

ProtocolIE-ContainerPairList {INTEGER : lowerBound, INTEGER : upperBound, XNAP-PROTOCOL-IES-PAIR : IEsSetParam} ::=

SEQUENCE (SIZE (lowerBound..upperBound)) OF

ProtocolIE-ContainerPair {{IEsSetParam}}

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

--

-- Container for Protocol Extensions

--

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

ProtocolExtensionContainer {XNAP-PROTOCOL-EXTENSION : ExtensionSetParam} ::= SEQUENCE (SIZE (1..maxProtocolExtensions)) OF

ProtocolExtensionField {{ExtensionSetParam}}

ProtocolExtensionField {XNAP-PROTOCOL-EXTENSION : ExtensionSetParam} ::= SEQUENCE {

id XNAP-PROTOCOL-EXTENSION.&id ({ExtensionSetParam}),

criticality XNAP-PROTOCOL-EXTENSION.&criticality ({ExtensionSetParam}{@id}),

extensionValue XNAP-PROTOCOL-EXTENSION.&Extension ({ExtensionSetParam}{@id})

}

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

--

-- Container for Private IEs

--

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

PrivateIE-Container {XNAP-PRIVATE-IES : IEsSetParam} ::=

SEQUENCE (SIZE (1..maxPrivateIEs)) OF

PrivateIE-Field {{IEsSetParam}}

PrivateIE-Field {XNAP-PRIVATE-IES : IEsSetParam} ::= SEQUENCE {

id XNAP-PRIVATE-IES.&id ({IEsSetParam}),

criticality XNAP-PRIVATE-IES.&criticality ({IEsSetParam}{@id}),

value XNAP-PRIVATE-IES.&Value ({IEsSetParam}{@id})

}

END

-- ASN1STOP

<<<<<<<<<<<<<<<<<<<< End of Changes >>>>>>>>>>>>>>>>>>>>