

Technical Specification Group Radio Access Network
 Marco Island, USA 4 - 7 June 2002

RP#16(02) 0424

TSG_Doc_Num	Specification	CR_Num	Revision_Num	3G_Release	CR_Subject	CR_Category	Cur_Ver_Num	New_Ver_Num	Tdoc_Num	WorkItem
RP-020424	25.423	620		Rel-5	Removal of syntax errors from ASN.1	F	5.0.0	5.1.0	R3-021256	TEI
RP-020424	25.423	664	1	Rel-5	DSCH Support Indicator in Cell Capability Container	F	5.0.0	5.1.0	R3-021610	TEI
RP-020424	25.423	669	1	Rel-5	Support of Iur-g procedures	B	5.0.0	5.1.0	R3-021637	TEI
RP-020424	25.413	477	3	Rel-5	GERAN specific impacts on the Iur- cs interface	B	5.0.0	5.1.0	R3-021656	TEI
RP-020424	25.433	655		Rel-5	Removal of syntax errors from ASN.1	F	5.0.0	5.1.0	R3-021255	TEI
RP-020424	25.433	659		Rel-5	Correction to Implementation of Rel-5	F	5.0.0	5.1.0	R3-021263	TEI
RP-020424	25.453	017	2	Rel-5	Criticality Information Decoding Failure Handling	F	5.3.0	5.4.0	R3-021172	TEI
RP-020424	25.453	018	1	Rel-5	Clarification for the usage of the cause value	F	5.3.0	5.4.0	R3-021508	TEI

CHANGE REQUEST

⌘ **25.413 CR 477** ⌘ rev **3** ⌘ Current version: **5.0.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

Title:	⌘ GERAN specific impacts on the lu-cs interface		
Source:	⌘ R-WG3		
Work item code:	⌘ TEI	Date:	⌘ 31 May 2002
Category:	⌘ B	Release:	⌘ REL-5
	<i>Use <u>one</u> of the following categories:</i> F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900.		<i>Use <u>one</u> of the following releases:</i> 2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) REL-4 (Release 4) REL-5 (Release 5)

Reason for change: ⌘ Within GERAN speech and data frames will be transmitted at the air interface using a corresponding channel coding. As the support of transceivers with limited capabilities has to be assured, the CN has to take the GERAN capabilities into account during call set-up and handover. Additionally GERAN has to be aware of the service to be able to setup an appropriate radio bearer. Therefore GERAN specific information has to be exchanged via the lu interface. For GERAN lu mode the GERAN Classmark as well as the GERAN BSC Container information elements were introduced in order to make GERAN aware of the service and to take transceiver capabilities into account at call establishment and during handover.

Summary of change: ⌘ Two IEs, the GERAN Classmark and the GERAN BSC Container, are introduced to define containers, which allow the exchange of GERAN specific information via the lu interface. The GERAN Classmark IE is added to the messages INITIAL UE MESSAGE, RELOCATION REQUIRED, RELOCATION FAILURE and RAB ASSIGNMENT RESPONSE. In addition to this a GERAN specific cause "GERAN lu-mode Failure" is introduced. The GERAN BSC Container IE is added to the messages RAB ASSIGNMENT REQUEST and RELOCATION REQUEST. The contents of these containers are defined in GERAN specifications. Therefore only a reference is defined within the Container IEs.

Reference [11] is updated. A Reference to 3GPP 43.051 is added.
 Revision 1:
 - definition of "GERAN BSC in lu mode" added to section 3.1
 - rewording of the condition, when the GERAN Classmark IE has to be added to the RELOCATION REQUIRED message in section 8.6.2
 - changes removed from section 8.6.3, as the RNC (BSC) will be prepared to receive the cause value "GERAN lu-mode Failure". Description of this failure event is already covered by added text in section 8.7.3.

		Revision 2: - results from e-mail discussion	
		Revision 3: - wording in the Initial UE Message procedure text changed from "call setup" to "establishment of a signalling connection"	
Consequences if not approved:	⌘		
Clauses affected:	⌘	2, 3.3, 8.2, 8.6, 8.7, 8.22, 9.1.3, 9.1.4, 9.1.9, 9.1.10, 9.1.16, 9.1.33, 9.2.1.4, 9.2.1.x2 (new), 9.2.1.x3 (new), 9.3.3, 9.3.4 and 9.3.6	
Other specs affected:	⌘	<input checked="" type="checkbox"/> Other core specifications <input type="checkbox"/> Test specifications <input type="checkbox"/> O&M Specifications	⌘ 3GPP TS 48.008, 3GPP TS 43.051
Other comments:	⌘		

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Comprehensive information and tips about how to create CRs can be found at: http://www.3gpp.org/3G_Specs/CRs.htm. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <ftp://ftp.3gpp.org/specs/>. For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.

For a specific reference, subsequent revisions do not apply".

For a non-specific reference, the latest version applies".

- [1] 3GPP TR 23.930: "Iu Principles".
- [2] 3GPP TS 25.410: "UTRAN Iu Interface: General Aspects and Principles".
- [3] 3GPP TS 25.401: "UTRAN Overall Description".
- [4] 3GPP TR 25.931: "UTRAN Functions, Examples on Signalling Procedures".
- [5] 3GPP TS 25.412: "UTRAN Iu interface signalling transport".
- [6] 3GPP TS 25.415: "UTRAN Iu interface user plane protocols".
- [7] 3GPP TS 23.107: "Quality of Service (QoS) concept and architecture".
- [8] 3GPP TS 24.008: "Mobile radio interface layer 3 specification; Core network protocols; Stage 3".
- [9] 3GPP TS 25.414: "UTRAN Iu interface data transport and transport signalling".
- [10] 3GPP TS 25.331: Radio Resource Control (RRC) protocol specification".
- [11] 3GPP TS 48.008: "3rd Generation Partnership Project (3GPP) Technical Specification Group GSM EDGE Radio Access Network; Mobile-services Switching Centre – Base Station System (MSC - BSS) interface; Layer 3 specification".
- 3GPP TS 08.08: "~~Mobile-services Switching Centre – Base Station System (MSC - BSS) interface; Layer 3 specification".~~
- [12] 3GPP TS 12.08: "Subscriber and equipment trace".
- [13] ITU-T Recommendation X.691 (1997): "Information technology - ASN.1 encoding rules: Specification of Packed Encoding Rules (PER)".
- [14] ITU-T Recommendation X.680 (1997): "Information technology - Abstract Syntax Notation One (ASN.1): Specification of basic notation".
- [15] ITU-T Recommendation X.681 (1997): "Information technology - Abstract Syntax Notation One (ASN.1): Information object specification".
- [16] 3GPP TS 23.110: "UMTS Access Stratum, Services and Functions".
- [17] 3GPP TS 25.323: "Packet Data Convergence Protocol (PDCP) specification".
- [18] 3GPP TR 25.921: "Guidelines and principles for protocol description and error handling".
- [19] 3GPP TS 23.003: "Numbering, addressing and identification".
- [20] 3GPP TS 23.032: "Universal Geographical Area Description (GAD)".
- [21] 3GPP TS 23.060: "General Packet Radio Service (GPRS); Service description; Stage 2".
- [22] 3GPP TS 24.080: "Mobile radio Layer 3 supplementary services specification; Formats and coding".

- [23] 3GPP TS 29.108: "Application of the Radio Access Network Application Part (RANAP) on the E-interface".
- [24] 3GPP TS 29.002: "Mobile Application Part (MAP) specification".
- [25] 3GPP TS 12.20: "Base Station System (BSS) management information".
- [26] 3GPP TS 23.236: "Intra-domain connection of Radio Access Network (RAN) nodes to multiple Core Network (CN) nodes".
- [x1] 3GPP TS 43.051: "3rd Generation Partnership Project; Technical Specification Group GSM/EDGE Radio Access Network; Overall description - Stage 2".

3 Definitions, symbols and abbreviations

3.1 Definitions

For the purposes of the present document, the following terms and definitions apply.

Cell Load-Based Inter-System Handover: This mechanism, which is contained within a UTRAN RNC, consists of three primary functions:

1. The RNC has the capability to generate and send Cell Load Information towards the target/source system.
2. The RNC has the capability to receive Cell Load Information from the target/source system, and is able to interpret this information.
3. The ability of the RNC to make a handover decision by comparing the Cell Load Information that it has received from the target system with the Cell Load Information it has about its own cells.

Default CN node: An RNC with an inactive or not implemented NAS Node Selection Function [26] has one single permanent default CN node per CN domain. It always initiates the Initial UE Message procedure towards its default CN node. If the NAS Node Selection Function is active, then no Default CN node exists.

GERAN BSC in Iu mode: In the context of this specification no distinction between an UTRAN RNC and a GERAN BSC in Iu mode is made. The GERAN BSC in Iu mode will behave as a RNC unless explicitly stated (see [X1]).

Relocation of SRNS: relocation of SRNS is a UMTS functionality used to relocate the serving RNS role from one RNS to another RNS. This UMTS functionality is realised by several elementary procedures executed in several interfaces and by several protocols and it may involve a change in the radio resources used between UTRAN and UE

It is also possible to relocate the serving RNS role from:

- one RNS within UMTS to another relocation target external to UMTS;
- functionality equivalent to the serving RNS role from another relocation source external to UMTS to another RNS.

Serving RNS (SRNS): role an RNS can take with respect to a specific connection between an UE and UTRAN. There is one serving RNS for each UE that has a connection to UTRAN. The serving RNS is in charge of the radio connection between a UE and the UTRAN. The serving RNS terminates the Iu for this UE.

Serving RNC (SRNC): SRNC is the RNC belonging to SRNS

SRNC-ID: see [3] for definition

S-RNTI: see [3] for definition

Source RNS: role, with respect to a specific connection between UTRAN and CN, that RNS takes when it decides to initiate a relocation of SRNS

Source RNC: source RNC is the RNC belonging to source RNS

Target RNS: role an RNS gets with respect to a specific connection between UTRAN and CN when it is being a subject of a relocation of SRNS which is being made towards that RNS

Target RNC: target RNC is the RNC belonging to target RNS

Directed retry: Directed retry is the process of assigning a User Equipment to a radio resource that does not belong to the serving RNC e.g. in situations of congestion. It is triggered by the RAB Assignment procedure and employs relocation procedures.

Elementary Procedure: RANAP protocol consists of Elementary Procedures (EPs). An Elementary Procedure is a unit of interaction between the RNS and the CN. These Elementary Procedures are defined separately and are intended to be used to build up complete sequences in a flexible manner. If the independence between some EPs is restricted, it is described under the relevant EP description. Unless otherwise stated by the restrictions, the EPs may be invoked

independently of each other as stand alone procedures, which can be active in parallel. Examples on using several RANAP EPs together with each other and EPs from other interfaces can be found in reference [4].

An EP consists of an initiating message and possibly a response message. Three kinds of EPs are used:

- **Class 1:** Elementary Procedures with response (success and/or failure).
- **Class 2:** Elementary Procedures without response.
- **Class 3:** Elementary Procedures with possibility of multiple responses.

For Class 1 EPs, the types of responses can be as follows:

Successful:

- A signalling message explicitly indicates that the elementary procedure successfully completed with the receipt of the response.

Unsuccessful:

- A signalling message explicitly indicates that the EP failed.
- On time supervision expiry (i.e. absence of expected response).

Successful and Unsuccessful:

- One signalling message reports both successful and unsuccessful outcome for the different included requests. The response message used is the one defined for successful outcome.

Class 2 EPs are considered always successful.

Class 3 EPs have one or several response messages reporting both successful, unsuccessful outcome of the requests and temporary status information about the requests. This type of EP only terminates through response(s) or EP timer expiry.

3.2 Symbols

Void.

3.3 Abbreviations

For the purposes of the present document, the following abbreviations apply:

AAL2	ATM Adaptation Layer type 2
AS	Access Stratum
ASN.1	Abstract Syntax Notation One
ATM	Asynchronous Transfer Mode
<u>BSC</u>	<u>Base Station Controller</u>
CC	Call Control
CN	Core Network
CRNC	Controlling RNC
CS	Circuit Switched
DCH	Dedicated Channel
DL	Downlink
DRNC	Drift RNC
DRNS	Drift RNS
DSCH	Downlink Shared Channel
EP	Elementary Procedure
<u>GERAN</u>	<u>GSM/EDGE Radio Access Network</u>
GPRS	General Packet Radio System
GTP	GPRS Tunnelling Protocol
IE	Information Element
IMEI	International Mobile Equipment Identity

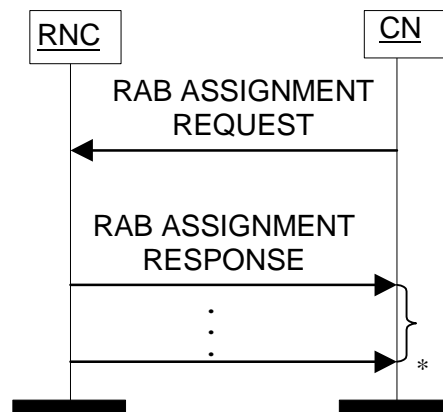
IMSI	International Mobile Subscriber Identity
IPv4	Internet Protocol (version 4)
IPv6	Internet Protocol (version 6)
MM	Mobility Management
MSC	Mobile services Switching Center
NAS	Non Access Stratum
NNSF	NAS Node Selection Function
N-PDU	Network – Protocol Data Unit
OSP:IHOSS	Octet Stream Protocol: Internet-Hosted Octet Stream Service
P-TMSI	Packet TMSI
PDCP	Packet Data Convergence Protocol
PDP	Packet Data Protocol
PDU	Protocol Data Unit
PPP	Point-to-Point Protocol
PS	Packet Switched
QoS	Quality of Service
RAB	Radio Access Bearer
RANAP	Radio Access Network Application Part
RNC	Radio Network Controller
RNS	Radio Network Subsystem
RRC	Radio Resource Control
SAI	Service Area Identifier
SAP	Service Access Point
SCCP	Signalling Connection Control Part
SDU	Service Data Unit
SGSN	Serving GPRS Support Node
SRNC	Serving RNC
SRNS	Serving RNS
TEID	Tunnel Endpoint Identifier
TMSI	Temporary Mobile Subscriber Identity
UE	User Equipment
UEA	UMTS Encryption Algorithm
UIA	UMTS Integrity Algorithm
UL	Uplink
UMTS	Universal Mobile Telecommunications System
USCH	Uplink Shared Channel
UTRAN	UMTS Terrestrial Radio Access Network

8.2 RAB Assignment

8.2.1 General

The purpose of the RAB Assignment procedure is to establish new RABs and/or to enable modifications and/or releases of already established RABs for a given UE. The procedure uses connection oriented signalling.

8.2.2 Successful Operation



* it can be several responses

Figure 1: RAB Assignment procedure. Successful operation.

The CN shall initiate the procedure by sending a RAB ASSIGNMENT REQUEST message. When sending the RAB ASSIGNMENT REQUEST message, the CN shall start the $T_{RABAssgt}$ timer.

The CN may request UTRAN to:

- establish,
- modify,
- release

one or several RABs with one RAB ASSIGNMENT REQUEST message.

The CN shall include in the RAB ASSIGNMENT REQUEST message at least one request to either establish/modify or release a RAB.

The message shall contain the information required by the UTRAN to build the new RAB configuration, such as:

- list of RABs to establish or modify with their bearer characteristics;
- list of RABs to release.

For each RAB requested to establish, the message shall contain:

- RAB ID.
- NAS Synchronisation Indicator (only when available).
- RAB parameters (including e.g. Allocation/Retention Priority).
- User Plane Information (i.e required User Plane Mode and required UP Mode Versions).
- Transport Layer Information.
- PDP Type Information (only for PS)

- Data Volume Reporting Indication (only for PS).
- DL GTP-PDU sequence number (only when GTP-PDU sequence number is available in cases of intersystem change from GPRS to UMTS or when establishing a RAB for an existing PDP context or in some further cases described in [21]).
- UL GTP-PDU sequence number (only when GTP-PDU sequence number is available in cases of intersystem change from GPRS to UMTS or when establishing a RAB for an existing PDP context or in some further cases described in [21]).
- DL N-PDU sequence number (only when N-PDU sequence number is available in case of intersystem change from GPRS to UMTS or in some further cases described in [21]).
- UL N-PDU sequence number (only when N-PDU sequence number is available in case of intersystem change from GPRS to UMTS or in some further cases described in [21]).

For each RAB requested to modify, the message may contain:

- RAB ID (mandatory).
- NAS Synchronisation Indicator.
- RAB parameters.
- Transport Layer Information.
- User Plane Information.

The *Transport Layer Information* IE may be present at a RAB modification except in the case when the only other present IE, besides the *RAB ID* IE, is the *NAS Synchronisation Indicator* IE.

In case of GERAN Iu-mode, for a RAB requested to be setup or modified from the the CS domain, the RAB ASSIGNMENT REQUEST message may contain the GERAN BSC Container IE in order to provide GERAN specific information to GERAN (see [x1]).

At a RAB modification, the *RAB parameter* IE and the *User Plane Information* IE shall be present in RAB ASSIGNMENT REQUEST message only when any previously set value is requested to be modified.

If, for a RAB requested to be modified, one (or more) of these IEs except *RAB ID* IE are not present in RAB ASSIGNMENT REQUEST message the RNC shall continue to use the value(s) currently in use for the not present IEs.

For each RAB request to release, the message shall contain:

- RAB ID.
- Cause.

Upon reception of the RAB ASSIGNMENT REQUEST message UTRAN shall execute the requested RAB configuration. The CN may indicate that RAB QoS negotiation is allowed for certain RAB parameters and in some cases also which alternative values to be used in the negotiation.

The same RAB ID shall only be present once in the whole RAB ASSIGNMENT REQUEST message.

The RAB ID shall identify uniquely the RAB for the specific CN domain for the particular UE, which makes the RAB ID unique over the Iu connection on which the RAB ASSIGNMENT REQUEST message is received. When a RAB ID already in use over that particular Iu instance is used, the procedure is considered as modification of that RAB.

The RNC shall pass the contents of *RAB ID* IE to the radio interface protocol for each RAB requested to establish or modify.

The RNC shall establish or modify the resources according to the values of the *Allocation/Retention Priority* IE (priority level, pre-emption indicators, queuing) and the resource situation as follows:

- The RNC shall consider the priority level of the requested RAB, when deciding on the resource allocation.
- If the requested RAB is allowed for queuing and the resource situation so requires, RNC may place the RAB in the establishment queue.

- The priority levels and the pre-emption indicators may (singularly or in combination) be used to determine whether the RAB assignment has to be performed unconditionally and immediately. If the requested RAB is marked as "may trigger pre-emption" and the resource situation so requires, RNC may trigger the pre-emption procedure which may then cause the forced release of a lower priority RAB which is marked as "pre-emptable". Whilst the process and the extent of the pre-emption procedure is operator dependent, the pre-emption indicators, if given in the RAB ASSIGNMENT REQUEST message, shall be treated as follows:
 1. The values of the last received *Pre-emption Vulnerability* IE and *Priority Level* IE shall prevail.
 2. If the *Pre-emption Capability* IE is set to "may trigger pre-emption", then this allocation request may trigger the pre-emption procedure.
 3. If the *Pre-emption Capability* IE is set to "shall not trigger pre-emption", then this allocation request shall not trigger the pre-emption procedure.
 4. If the *Pre-emption Vulnerability* IE is set to "pre-emptable", then this connection shall be included in the pre-emption process.
 5. If the *Pre-emption Vulnerability* IE is set to "not pre-emptable", then this connection shall not be included in the pre-emption process.
 6. If the *Priority Level* IE is set to "no priority" the given values for the *Pre-emption Capability* IE and *Pre-emption Vulnerability* IE shall not be considered. Instead the values "shall not trigger pre-emption" and "not pre-emptable" shall prevail.
- If the *Allocation/Retention Priority* IE is not given in the RAB ASSIGNMENT REQUEST message, the allocation request shall not trigger the pre-emption process and the connection may be pre-empted and considered to have the value "lowest" as priority level. Moreover, queuing shall not be allowed.
- The UTRAN pre-emption process shall keep the following rules:
 1. UTRAN shall only pre-empt RABs with lower priority, in ascending order of priority.
 2. The pre-emption may be done for RABs belonging to the same UE or to other UEs.

If the *NAS Synchronisation Indicator* IE is contained in the RAB ASSIGNMENT REQUEST message, the RNC shall pass it to the radio interface protocol for the transfer to the UE.

If the RAB ASSIGNMENT REQUEST message includes the *PDP Type Information* IE, the UTRAN may use this to configure any compression algorithms.

If the *Service Handover* IE is included, this tells if the RAB

- should be handed over to GSM, i.e. from NAS point of view, the RAB should be handed over to GSM as soon as possible although the final decision whether to perform a handover to GSM is still made in UTRAN.
- should not be handed over to GSM, i.e. from NAS point of view, the RAB should remain in UMTS as long as possible although the final decision whether to perform a handover to GSM is still made in UTRAN.
- shall not be handed over to GSM, i.e. the RAB shall never be handed over to GSM. This means that UTRAN shall not initiate handover to GSM for the UE unless the RABs with this indication have first been released with the normal release procedures.

The value of the *Service Handover* IE is valid throughout the lifetime of the RAB or until changed by a RAB modification.

The *Service Handover* IE shall only influence decisions made regarding UTRAN initiated inter-system handovers.

If the *Service Handover* IE is not included, the decision whether to perform an inter-system handover to GSM is only an internal UTRAN matter.

UTRAN shall report to CN, in the first RAB ASSIGNMENT RESPONSE message, the result for all the requested RABs, such as:

- List of RABs successfully established or modified.

- List of RABs released.
- List of RABs queued.
- List of RABs failed to establish or modify.
- List of RABs failed to release.

The same RAB ID shall only be present once in the whole RAB ASSIGNMENT RESPONSE message.

For each RAB successfully established towards the PS domain, the RNC shall include the *Transport Layer Address* IE and the *Iu Transport Association* IE in the RAB ASSIGNMENT RESPONSE message.

For each RAB successfully modified or released towards the PS domain, for which data volume reporting has been requested, the RNC shall include the *DL Data Volumes* IE in the RAB ASSIGNMENT RESPONSE message.

For each RAB successfully released towards the PS domain, the RNC shall include in the RAB ASSIGNMENT RESPONSE message, if available, the *DL GTP-PDU Sequence Number* IE and the *UL GTP-PDU Sequence Number* IE, if the release was initiated by UTRAN.

The RNC shall report in the RAB ASSIGNMENT RESPONSE message at least one RAB:

- setup/modified or
- released or
- queued or
- failed to setup/modify or
- failed to release.

If any alternative RAB parameter values have been used when establishing or modifying a RAB, these RAB parameter values shall be included in the RAB ASSIGNMENT RESPONSE message.

For the CS domain, when an ALCAP is used, UTRAN shall report the outcome of a specific RAB to establish or modify only after the transport network control plane signalling, which is needed for RAB establishment or modification, has been executed. At a RAB establishment, the transport network control plane signalling shall use the *Transport Layer Address* IE and *Iu Transport Association* IE. At a RAB modification when *Transport Layer Address* (IE) and *Iu Transport Association* IEs are included, the RNC shall establish a new transport bearer. The transport network control plane signalling shall then use the included *Transport Layer Address* IE and *Iu Transport Association* IE. Then the switch over to this new transport bearer shall be done immediately after transport bearer establishment and initialisation of the user plane mode. If *Transport Layer Address* (IE) and *Iu Transport Association* IEs are not included, then the RNC may modify the already existing transport bearer.

For the PS domain or for the CS domain when an ALCAP is not used, for each RAB successfully modified towards the PS domain, if the RNC has changed the *Transport Layer Address* IE and/or the *Iu Transport Association* IE, it shall include the new value(s) in the RAB ASSIGNMENT RESPONSE message.

Before reporting the successful outcome of a specific RAB to establish or modify, the RNC shall have executed the initialisation of the user plane mode as requested by the CN in the *User Plane Mode* IE. If the RNC can not initialise the requested user plane mode for any of the user plane mode versions in the *UP Mode Versions* IE according to the rules for initialisation of the respective user plane mode versions, as described in [6], the RAB Assignment shall fail with the cause value "RNC unable to establish all RFCs".

In case of establishment of a RAB for the PS domain, the CN must be prepared to receive user data before the RAB ASSIGNMENT RESPONSE message has been received.

If none of the RABs have been queued, the CN shall stop timer $T_{RABAssgt}$. And the RAB Assignment procedure terminates. In that case, the procedure shall also be terminated in UTRAN.

When the request to establish or modify one or several RABs is put in the queue, UTRAN shall start the timer $T_{QUEUING}$. This timer specifies the maximum time for queuing of the request of establishment or modification. The same timer $T_{QUEUING}$ is supervising all RABs being queued.

For each RAB that is queued the following outcomes shall be possible:

- successfully established or modified;
- failed to establish or modify;
- failed due to expiry of the timer T_{QUEUING} .

For the queued RABs, indicated in the first RAB ASSIGNMENT RESPONSE message, UTRAN shall report the outcome of the queuing for every RAB individually or for several RABs in subsequent RAB ASSIGNMENT RESPONSE message(s). This is left to implementation. UTRAN shall stop T_{QUEUING} when all RABs have been either successfully established or modified or failed to establish or modify. The RAB Assignment procedure is then terminated both in CN and UTRAN when all RABs have been responded to.

When CN receives the response that one or several RABs are queued, CN shall expect UTRAN to provide the outcome of the queuing function for each RAB before expiry of the T_{RABASSGT} timer. In case the timer T_{RABASSGT} expires, the CN shall consider the RAB Assignment procedure terminated and the RABs not reported shall be considered as failed.

In the case the timer T_{QUEUING} expires, the RAB Assignment procedure terminates in UTRAN for all queued RABs, and UTRAN shall respond for all of them in one RAB ASSIGNMENT RESPONSE message. The RAB Assignment procedure shall also be terminated in CN.

In case a request to modify or release a RAB contains the RAB ID of a RAB being queued, the RAB shall be taken out of the queue and treated according to the second request. The first request shall be responded to as a RAB failed to setup or modify with the cause value "Request superseded".

When UTRAN reports unsuccessful establishment/modification of a RAB, the cause value should be precise enough to enable the core network to know the reason for unsuccessful establishment/modification. Typical cause values are: "Requested Traffic Class not Available", "Invalid RAB Parameters Value", "Requested Maximum Bit Rate not Available", "Requested Maximum Bit Rate for DL not Available", "Requested Maximum Bit Rate for UL not Available", "Requested Guaranteed Bit Rate not Available", "Requested Guaranteed Bit Rate for DL not Available", "Requested Guaranteed Bit Rate for UL not Available", "Requested Transfer Delay not Achievable", "Invalid RAB Parameters Combination", "Condition Violation for SDU Parameters", "Condition Violation for Traffic Handling Priority", "Condition Violation for Guaranteed Bit Rate", "User Plane Versions not Supported", "Iu UP Failure", "Iu Transport Connection Failed to Establish".

In case of GERAN Iu-mode (only for CS), if the BSC cannot provide an appropriate RAB corresponding to the content of the GERAN BSC Container IE (if received), the BSC shall report unsuccessful RAB establishment/modification indicating the cause value "GERAN Iu-mode Failure" and the GERAN Classmark IE in the GERAN Iu mode specific RABs Failed To Setup Or Modify List IE within the RAB ASSIGNMENT RESPONSE message.

If the RAB ID of a RAB requested to be released is unknown in the RNC, this shall be reported as a RAB failed to release with the cause value "Invalid RAB ID".

The RNC may indicate an impending directed retry attempt to GSM by sending RAB ASSIGNMENT RESPONSE message with a RAB ID included in the list of RABs failed to setup and a cause value of "Directed Retry".

The RNC shall be prepared to receive a RAB ASSIGNMENT REQUEST message containing a *RABs To Be Released* IE at any time and shall always reply to it. If there is an ongoing RAB Assignment procedure for a RAB indicated within the *RABs To Be Released* IE, the RNC shall discard the preceding RAB Assignment procedure for that specific RAB, release any related resources and report the released RAB within the RAB ASSIGNMENT RESPONSE message.

After sending RAB ASSIGNMENT RESPONSE message containing RAB ID within the *RABs Released* IE, the RNC shall be prepared to receive new establishment request of a RAB identified by the same RAB ID

8.2.3 Unsuccessful Operation

The unsuccessful operation for this Class 3 Elementary procedure is described under the Successful Operation chapter.

8.2.4 Abnormal Conditions

For a RAB requested to be modified, if only the *RAB ID* IE, the *NAS Synchronisation Indicator* IE and the *Transport Layer Information* IE are included in the *First Setup or Modify Item* IE this RAB shall not be modified, and the corresponding *RAB ID* IE with *Cause* IE shall be included in the "RABs Failed To Setup Or Modify List" in the RAB ASSIGNMENT RESPONSE message.

If, for a RAB requested to be setup towards the PS domain, any of these following IEs:

- *PDP Type Information*.
- *Data Volume Reporting Indication*.

is not present, the RNC shall continue with the procedure.

Interactions with Relocation Preparation procedure:

If the relocation becomes necessary during the RAB Assignment procedure, the RNC may interrupt the ongoing RAB Assignment procedure and initiate the Relocation Preparation procedure as follows:

1. The RNC shall terminate the RAB Assignment procedure indicating unsuccessful RAB configuration modification:
 - for all queued RABs;
 - for RABs not already established or modified, and
 - for RABs not already released;with the cause "Relocation triggered".
2. The RNC shall terminate the RAB Assignment procedure indicating successful RAB configuration modification:
 - for RABs already established or modified but not yet reported to the CN, and
 - for RABs already released but not yet reported to the CN.
3. The RNC shall report this outcome of the procedure in one RAB ASSIGNMENT RESPONSE message.
4. The RNC shall invoke relocation by sending the RELOCATION REQUIRED message to the active CN node(s).
5. The CN shall terminate the RAB Assignment procedure at reception of the RAB ASSIGNMENT RESPONSE message.

Directed retry from UMTS to GSM (CS domain only):

In the case where the RNC has no RAB configuration for a particular UE in the CS domain, and the RNC receives a RAB ASSIGNMENT REQUEST message for that UE requesting the establishment of one RAB only, a directed retry to perform inter-system handover to GSM may be initiated. In this case the RNC may interrupt the ongoing RAB Assignment procedure and initiate the Relocation Preparation procedure as follows:

1. The RNC shall terminate the RAB Assignment procedure indicating unsuccessful RAB configuration modification of that RAB with the cause "Directed retry".
2. The RNC shall report this outcome of the procedure in one RAB ASSIGNMENT RESPONSE message.
3. The RNC shall invoke relocation by sending the RELOCATION REQUIRED message to the active CN node, with the cause "Directed Retry".

The CN shall terminate the RAB Assignment procedure at reception of the RAB ASSIGNMENT RESPONSE message.

8.6 Relocation Preparation

8.6.1 General

The purpose of the Relocation Preparation procedure is to prepare relocation of SRNS either with involving UE or without involving UE. The relocation procedure shall be co-ordinated in all Iu signalling connections existing for the UE in order to allow Relocation co-ordination in the target RNC. The procedure uses connection oriented signalling.

The source RNC shall not initiate the Relocation Preparation procedure for an Iu signalling connection if a Prepared Relocation exists in the RNC for that Iu signalling connection or if a Relocation Preparation procedure is ongoing for that Iu signalling connection.

8.6.2 Successful Operation

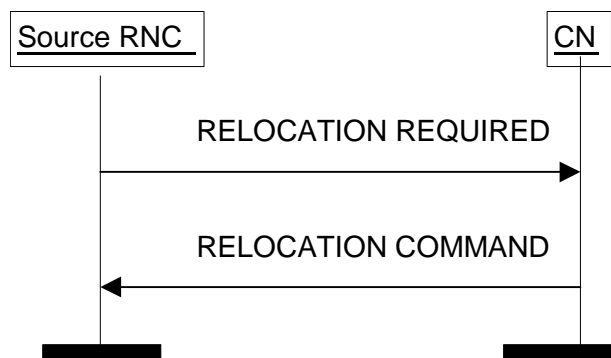


Figure 2: Relocation Preparation procedure. Successful operation.

The source RNC shall initiate the procedure by generating RELOCATION REQUIRED message. The source RNC shall decide whether to initiate the intra-system Relocation or the inter-system handover. In case of intra-system Relocation the source RNC shall indicate in the *Source ID* IE the RNC-ID of the source RNC and in the *Target ID* IE the RNC-ID of the target RNC. In case of inter-system handover the source RNC shall indicate in the *Source ID* IE the Service Area Identifier and in the *Target ID* IE the cell global identity of the cell in the target system. The source RNC shall indicate the appropriate cause value for the Relocation in the *Cause* IE. Typical cause values are "Time critical Relocation", "Resource optimisation relocation", "Relocation desirable for radio reasons", "Directed Retry", "Reduce Load in Serving Cell".

The source RNC shall determine whether the relocation of SRNS shall be executed with or without involvement of UE. The source RNC shall set the *Relocation Type* IE accordingly to "UE involved in relocation of SRNS" or "UE not involved in relocation of SRNS".

In case of intra-system Relocation, the source RNC shall include in the RELOCATION REQUIRED message the *Source RNC to Target RNC Transparent Container* IE. This container shall include the *Relocation Type* IE and the number of Iu signalling connections existing for the UE by setting correctly the *Number of Iu Instances* IE. If available, this container shall further include the *Chosen Integrity Protection Algorithm* IE and the *Integrity Protection Key* IE. If ciphering is active, this container shall include, for ciphering information of signalling data, the *Chosen Encryption Algorithm* IE and the *Ciphering Key* IE, for ciphering information of CS user data the *Chosen Encryption Algorithm CS* IE and for ciphering information of PS user data the *Chosen Encryption Algorithm PS* IE. This container shall include the *RRC Container* IE. If the *Relocation Type* IE is set to "UE not involved in relocation of SRNS" and the UE is using DCH(s), DSCH(s) or USCH(s), the *Source RNC to Target RNC Transparent Container* IE shall include the mapping between each RAB subflow and transport channel identifier(s), i.e. if the RAB is carried on a DCH(s), the DCH ID(s) shall be included, and when it is carried on DSCH(s) or USCH(s), the DSCH ID(s) or USCH ID(s) respectively shall be included. If the *Relocation Type* IE is set to "UE not involved in relocation of SRNS", the *d-RNTI* IE shall be included in the *Source RNC to Target RNC Transparent Container* IE. If the *Relocation Type* IE is set to "UE involved in relocation of SRNS", the *Target Cell ID* IE shall be included in the *Source RNC to Target RNC Transparent Container* IE.

In case of a Relocation to GERAN Iu-mode (only for CS), the RNC shall include the GERAN Classmark IE within the RELOCATION REQUIRED message in those cases, where the transmission of the GERAN Classmark IE is required, as defined in [x1].

In case of inter-system handover to GSM the RNC:

- shall include *MS Classmark 2* and *MS Classmark 3* IEs received from the UE in the RELOCATION REQUIRED message to the CN.
- shall include the *Old BSS to New BSS* IE within the RELOCATION REQUIRED message only if the information is available.

The source RNC shall send the RELOCATION REQUIRED message to the CN and the source RNC shall start the timer $T_{RELOCprep}$.

When the preparation including resource allocation in the target system is ready and the CN has decided to continue the relocation of SRNS, the CN shall send RELOCATION COMMAND message to the source RNC and the CN shall start the timer $T_{RELOCcomplete}$.

If the *Target RNC To Source RNC Transparent Container* IE or the *L3 information* IE is received by the CN from the relocation target, it shall be included in the RELOCATION COMMAND message.

The RELOCATION COMMAND message may also contain the *Inter-System Information Transparent Container* IE.

For each RAB successfully established in the target system and originating from the PS domain, the RELOCATION COMMAND message shall contain Iu transport address and Iu transport association to be used for the forwarding of the DL N-PDU duplicates towards the relocation target. Upon reception of the RELOCATION COMMAND message from the PS domain, the source RNC shall start the timer $T_{DATAfwd}$.

The Relocation Preparation procedure is terminated in the CN by transmission of RELOCATION COMMAND message.

If the target system (including target CN) does not support all existing RABs, the RELOCATION COMMAND message shall contain a list of RABs indicating all the RABs that are not supported by the target system. This list is contained in the *RABs to Be Released* IE. The source RNC shall use this information to avoid transferring associated contexts where applicable and may use this information e.g. to decide if to cancel the relocation or not. The resources associated with these not supported RABs shall not be released until the relocation is completed. This is in order to make a return to the old configuration possible in case of a failed or cancelled relocation.

Upon reception of RELOCATION COMMAND message the source RNC shall stop the timer $T_{RELOCprep}$, RNC shall start the timer $T_{RELOCoverall}$ and RNC shall terminate the Relocation Preparation procedure. The source RNC is then defined to have a Prepared Relocation for that Iu signalling connection.

When Relocation Preparation procedure is terminated successfully and when the source RNC is ready, the source RNC should trigger the execution of relocation of SRNS.

Interactions with other procedures:

If, after RELOCATION REQUIRED message is sent and before the Relocation Preparation procedure is terminated, the source RNC receives a RANAP message initiating an other connection oriented RANAP class 1 or class 3 procedure (except IU RELEASE COMMAND message, which shall be handled normally) via the same Iu signalling connection, the source RNC shall either:

1. cancel the Relocation Preparation procedure i.e. execute Relocation Cancel procedure with an appropriate value for the *Cause* IE, e.g. "Interaction with other procedure", and after successful completion of Relocation Cancel procedure, the source RNC shall continue the initiated RANAP procedure;

or

2. terminate the initiated RANAP procedure without any changes in UTRAN by sending appropriate response message with the cause value "Relocation Triggered" to the CN. The source RNC shall then continue the relocation of SRNS.

If during the Relocation Preparation procedure the source RNC receives a DIRECT TRANSFER message it shall be handled normally.

If during the Relocation Preparation procedure the source RNC receives connection oriented RANAP class 2 messages (with the exception of DIRECT TRANSFER message) it shall decide to either execute the procedure immediately or suspend it. In the case the relocation is cancelled the RNC shall resume any suspended procedures (if any).

After Relocation Preparation procedure is terminated successfully, all RANAP messages (except IU RELEASE COMMAND message, which shall be handled normally) received via the same Iu signalling bearer shall be ignored by the source RNC.

8.6.3 Unsuccessful Operation

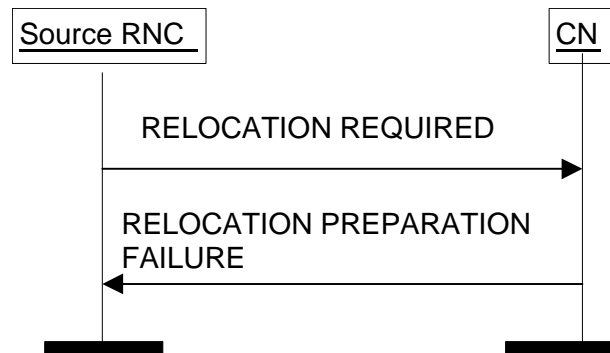


Figure 3: Relocation Preparation procedure. Unsuccessful operation.

If the CN or target system is not able to even partially accept the relocation of SRNS or a failure occurs during the Relocation Preparation procedure in the CN or the CN decides not to continue the relocation of SRNS, the CN shall send RELOCATION PREPARATION FAILURE message to the source RNC.

RELOCATION PREPARATION FAILURE message shall contain appropriate value for the *Cause IE* e.g. "T_{RELOCalloc} expiry", "Relocation Failure in Target CN/RNC or Target System", "Relocation not supported in Target RNC or Target System", "Relocation Target not allowed", "No Radio Resources Available in Target Cell".

Transmission of RELOCATION PREPARATION FAILURE message terminates the procedure in the CN. Reception of RELOCATION PREPARATION FAILURE message terminates the procedure in UTRAN.

When the Relocation Preparation procedure is unsuccessfully terminated, the existing Iu signalling connection can be used normally.

If the Relocation Preparation procedure is terminated unsuccessfully, the CN shall release the possibly existing Iu signalling connection for the same UE and related to the same relocation of SRNS towards the target RNC by initiating Iu Release procedure towards the target RNC with an appropriate value for the *Cause IE*, e.g. "Relocation Cancelled".

The RELOCATION PREPARATION FAILURE message may contain the *Inter-System Information Transparent Container IE*.

Interactions with Relocation Cancel procedure:

If there is no response from the CN to the RELOCATION REQUIRED message before timer T_{RELOCprep} expires in the source RNC, the source RNC shall cancel the Relocation Preparation procedure by initiating the Relocation Cancel procedure with appropriate value for the *Cause IE*, e.g. "T_{RELOCprep} expiry".

8.6.4 Abnormal Conditions

If the target RNC, which was indicated in the RELOCATION REQUIRED message, is not known to the CN:

1. The CN shall reject the relocation of SRNS by sending a RELOCATION PREPARATION FAILURE message to the source RNC with *Cause IE* set to "Unknown target RNC".
2. The CN shall continue to use the existing Iu connection towards the source RNC.

8.6.5 Co-ordination of Two Iu Signalling Connections

If the RNC has decided to initiate Relocation Preparation procedure for a UTRAN to UTRAN relocation, the RNC shall initiate simultaneously Relocation Preparation procedure on all Iu signalling connections existing for the UE.

For intersystem handover to GSM, Relocation Preparation procedure shall be initiated only towards the circuit switched CN.

The source RNC shall not trigger the execution of relocation of SRNS unless it has received RELOCATION COMMAND message from all Iu signalling connections for which the Relocation Preparation procedure has been initiated.

If the source RNC receives RELOCATION PREPARATION FAILURE message from the CN, the RNC shall initiate Relocation Cancel procedure on the other Iu signalling connection for the UE if the other Iu signalling connection exists and if the Relocation Preparation procedure is still ongoing or the procedure has terminated successfully in that Iu signalling connection.

8.7 Relocation Resource Allocation

8.7.1 General

The purpose of the Relocation Resource Allocation procedure is to allocate resources from target RNS for a relocation of SRNS. Procedure shall be co-ordinated in all Iu signalling connections existing for the UE. The procedure uses connection oriented signalling.

8.7.2 Successful Operation

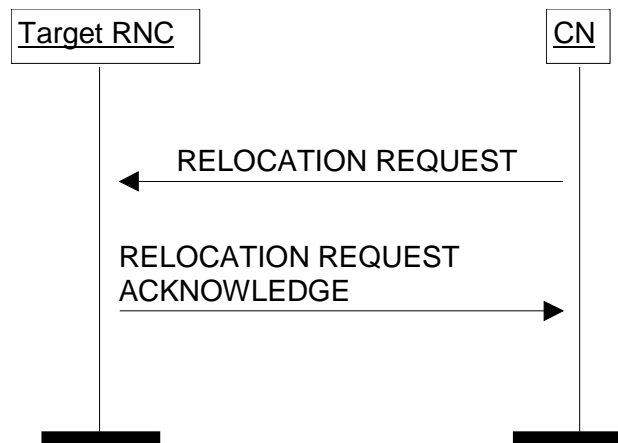


Figure 4: Relocation Resource Allocation procedure. Successful operation.

The CN shall initiate the procedure by generating RELOCATION REQUEST message. In a UTRAN to UTRAN relocation, this message shall contain the information (if any) required by the UTRAN to build the same RAB configuration as existing for the UE before the relocation. The CN may indicate that RAB QoS negotiation is allowed for certain RAB parameters and in some cases also which alternative values to be used in the negotiation.

The CN shall transmit the RELOCATION REQUEST message to target RNC and the CN shall start the timer $T_{RELOCalloc}$.

When a RELOCATION REQUEST message is sent from a CN node towards an RNC for which the sending CN node is not the default CN node, the *Global CN-ID* IE shall be included.

Upon reception of the RELOCATION REQUEST message, the target RNC shall initiate allocation of requested resources.

The RELOCATION REQUEST message shall contain following IEs

- *Permanent NAS UE Identity* IE (if available)
- *Cause*
- *CN Domain Indicator*
- *Source RNC To Target RNC Transparent Container*
- *Iu Signalling Connection Identifier*
- *Integrity Protection Information* IE (if available)

For each RAB requested to relocate (or to be created e.g. in the case of inter-system handover), the message shall contain following IEs:

- *RAB-ID*
- *NAS Synchronisation Indicator* IE (if the relevant NAS information is provided by the CN)
- *RAB parameters*

- *User Plane Information*
- *Transport Layer Address*
- *Iu Transport Association*
- *Data Volume Reporting Indication* (only for PS)
- *PDP Type Information* (only for PS)

The RELOCATION REQUEST message may include following IEs:

- *Encryption Information*

For each RAB requested to relocate the message may include following IEs:

- *Service Handover.*
- *Alternative RAB Parameter Values.*

The following information elements received in RELOCATION REQUEST message require the same special actions in the RNC as specified for the same IEs in the RAB Assignment procedure:

- *RAB-ID*
- *User plane Information*(i.e. required User Plane Mode and required User Plane Versions)
- *Priority level, queuing and pre-emption indication*
- *Service Handover*

If the RELOCATION REQUEST message includes the *PDP Type Information* IE, the UTRAN may use this IE to configure any compression algorithms.

The *Cause* IE shall contain the same value as the one received in the related RELOCATION REQUIRED message.

The *Iu Signalling Connection Identifier* IE contains an Iu signalling connection identifier which is allocated by the CN, and which the RNC is required to store and remember for the duration of the Iu connection.

The *Global CN-ID* IE contains the identity of the CN node that sent the RELOCATION REQUEST message, and it shall, if included, be stored together with the Iu signalling connection identifier. If the *Global CN-ID* IE is not included, the RELOCATION REQUEST message shall be considered as coming from the default CN node for the indicated CN domain.

In case of GERAN Iu-mode, for RAB requested to be relocated from the the CS domain, the RELOCATION REQUEST message may contain the *GERAN BSC Container* IE in order to provide GERAN specific information to the target BSC (see [x1]).

Following additional actions shall be executed in the target RNC during Relocation Resource Allocation procedure:

If the *Relocation Type* IE is set to "UE involved in relocation of SRNS":

- The target RNC may accept a requested RAB only if the RAB can be supported by the target RNC.
- Other RABs shall be rejected by the target RNC in the RELOCATION REQUEST ACKNOWLEDGE message with an appropriate value for *Cause* IE, e.g. "Unable to Establish During Relocation".
- The target RNC shall include information adapted to the resulting RAB configuration in the target to source RNC transparent container to be included in the RELOCATION REQUEST ACKNOWLEDGE message sent to the CN. If the target RNC supports triggering of the Relocation Detect procedure via the Iur interface, the RNC shall assign a d-RNTI for the context of the relocation and include it in the container. If two CNs are involved in the relocation of SRNS, the target RNC may, however, decide to send the container to only one CN.
- If any alternative RAB parameter values have been used when allocating the resources, these RAB parameter values shall be included in the RELOCATION REQUEST ACKNOWLEDGE message within the *Assigned RAB Parameter Values* IE.

If the *Relocation Type* IE is set to "UE not involved in relocation of SRNS":

- The target RNC may accept a RAB only if the radio bearer(s) for the RAB either exist(s) already, and can be used for the RAB by the target RNC, or does not exist before the relocation but can be established in order to support the RAB in the target RNC.
- If existing radio bearers are not related to any RAB that is accepted by target RNC, the radio bearers shall be ignored during the relocation of SRNS and the radio bearers shall be released by radio interface protocols after completion of relocation of SRNS.
- If any alternative RAB parameter values have been used when allocating the resources, these RAB parameter values shall be included in the RELOCATION REQUEST ACKNOWLEDGE message within the *Assigned RAB Parameter Values* IE. It should be noted that the usage of alternative RAB parameter values is not applicable to the UTRAN initiated relocation of type "UE not involved in relocation of SRNS".

After all necessary resources for accepted RABs including the initialised Iu user plane, are successfully allocated, the target RNC shall send RELOCATION REQUEST ACKNOWLEDGE message to the CN.

For each RAB successfully setup the RNC shall include following IEs:

- *RAB ID*
- *Transport Layer Address* (when no ALCAP has been used)
- *Iu Transport Association* (when no ALCAP has been used)

For each RAB the RNC is not able to setup during Relocation Resource Allocation the RNC shall include the *RAB ID* IE and the *Cause* IE within the *RABs Failed To Setup* IE. The resources associated with the RABs indicated as failed to set up shall not be released in the CN until the relocation is completed. This is in order to make a return to the old configuration possible in case of a failed or cancelled relocation.

The RELOCATION REQUEST ACKNOWLEDGE message sent to by the CN shall, if applicable and if not sent via the other CN domain, include the *Target RNC To Source RNC Transparent Container* IE. This container shall be transferred by CN to the source RNC or the external relocation source while completing the Relocation Preparation procedure.

If the target RNC supports cell load-based inter-system handover, then in the case of inter-system handover, the *New BSS to Old BSS Information* IE may be included in the RELOCATION REQUEST ACKNOWLEDGE message.

If the *Integrity Protection Information* IE was included in the RELOCATION REQUEST message, the RNC shall include the *Chosen Integrity Protection Algorithm* IE within the RELOCATION REQUEST ACKNOWLEDGE message, if the *Encryption Information* IE was included, the RNC shall include the *Chosen Encryption Algorithm* IE.

If one or more of the RABs that the target RNC has decided to support can not be supported by the CN, then these failed RABs shall not be released towards the target RNC until the relocation is completed.

If the *NAS Synchronisation Indicator* IE is contained in the RELOCATION REQUEST message, the target RNC shall pass it to the source RNC within the *RRC Container* IE contained in the *Target RNC to Source RNC Transparent Container* IE.

Transmission and reception of RELOCATION REQUEST ACKNOWLEDGE message terminates the procedure in the UTRAN and the CN respectively.

Before reporting the successful outcome of the Relocation Resource allocation procedure, the RNC shall have executed the initialisation of the user plane mode as requested by the CN in the *User Plane Mode* IE. If the RNC can not initialise the requested user plane mode for any of the user plane mode versions in the *UP Mode Versions* IE according to the rules for initialisation of the respective user plane mode versions, as described in [6], the RAB Relocation shall fail with the cause value "RNC unable to establish all RFCs".

8.7.3 Unsuccessful Operation

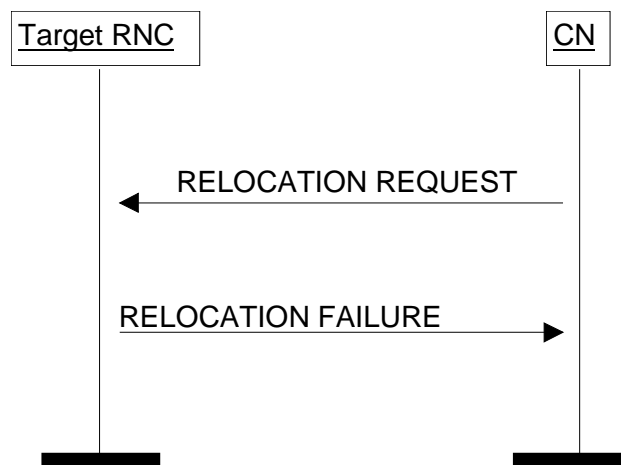


Figure 5: Relocation Resource Allocation procedure: Unsuccessful operation.

If the target RNC can not even partially accept the relocation of SRNS or a failure occurs during the Relocation Resource Allocation procedure in the target RNC, the target RNC shall send RELOCATION FAILURE message to the CN.

In case a Relocation to GERAN Iu-mode fails (only for CS), because the Target BSC cannot provide an appropriate RAB corresponding to the content of the GERAN BSC Container IE (if received), the Target BSC shall report the unsuccessful Relocation Resource Allocation by indicating the cause value "GERAN Iu-mode Failure" within the RELOCATION FAILURE message and shall include the GERAN Classmark IE.

Transmission and reception of RELOCATION FAILURE message terminates the procedure in the UTRAN and the CN respectively.

When CN has received RELOCATION FAILURE message from target RNC, CN shall stop timer $T_{RELOCalloc}$ and shall assume possibly allocated resources within target RNC completely released.

In the case of inter-system handover, and if the target RNC supports cell load-based inter-system handover, then

- the *NewBSS to Old BSS Information* IE may be included in the RELOCATION FAILURE message.
- the RELOCATION FAILURE message may contain the appropriate value in the *Cause* IE, e.g. "No Radio Resources Available in Target Cell".

8.7.4 Abnormal Conditions

If after reception of the RELOCATION REQUEST message, the target RNC receives another RELOCATION REQUEST message on the same Iu connection, then the target RNC shall discard the latter message and the original Relocation Resource Allocation procedure shall continue normally.

Interactions with Iu Release procedure:

If the CN decides to not continue the Relocation Resource Allocation procedure (e.g. due to $T_{RELOCalloc}$ expiry) before the Relocation Resource Allocation procedure is completed, the CN shall stop timer $T_{RELOCalloc}$ (if timer $T_{RELOCalloc}$ has not already expired) and the CN shall, if the Iu signalling connection has been established or later becomes established, initiate the Iu Release procedure towards the target RNC with an appropriate value for the *Cause* IE, e.g. "Relocation Cancelled".

8.7.5 Co-ordination of Two Iu Signalling Connections

Co-ordination of two Iu signalling connections during Relocation Resource Allocation procedure shall be executed by the target RNC when the *Number of Iu Instances* IE received in the *Source RNC to Target RNC Transparent Container* IE in the RELOCATION REQUEST message indicates that two CN domains are involved in relocation of SRNS.

If two CN domains are involved, the following actions shall be taken by the target RNC:

- The target RNC shall utilise the *Permanent NAS UE Identity* IE, received explicitly by each CN domain within RELOCATION REQUEST message, to co-ordinate both Iu signalling connections.
- The target RNC shall generate and send RELOCATION REQUEST ACKNOWLEDGE message only after all expected RELOCATION REQUEST messages are received and analysed.
- The target RNC shall ensure that there is no conflicting information in *Target RNC to Source RNC Transparent Container* IE in RELOCATION REQUEST ACKNOWLEDGE messages transmitted via different Iu signalling connections and related to the same relocation of SRNS.
- The selection of signalling connection utilised for the *Target RNC to Source RNC Transparent Container* IE in RELOCATION REQUEST ACKNOWLEDGE message need not to be dependent on the signalling connection via which the *Source RNC to Target RNC Transparent Container* IE in RELOCATION REQUEST message was received.

8.22 Initial UE Message

8.22.1 General

The purpose of the Initial UE Message procedure is to establish an Iu signalling connection between a CN domain and the RNC and to transfer the initial NAS-PDU to the CN node as determined by the NAS Node Selection Function - if this function is active, or otherwise to the default CN node. The procedure uses connection oriented signalling.

8.22.2 Successful Operation

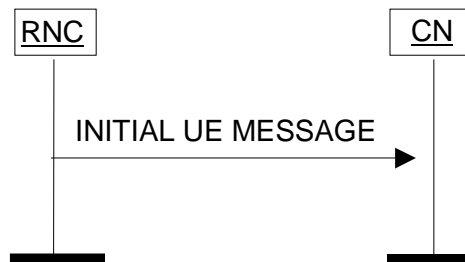


Figure 6: Initial UE Message procedure. Successful operation.

When RNC has received from radio interface a NAS message (see [8]) to be forwarded to CN domain to which the Iu signalling connection for the UE does not exist, RNC shall initiate the Initial UE Message procedure and send the INITIAL UE MESSAGE message to the CN. If NNSF is active, the selection of the CN node is made according to [26].

In addition to the received NAS-PDU, RNC shall add following information to the INITIAL UE MESSAGE message:

- CN domain indicator, indicating the CN domain towards which this message is sent.
- For CS domain, the LAI which was the last LAI indicated to the UE by UTRAN via the current RRC connection, or if UTRAN had not yet indicated any LAI to the UE via the current RRC connection, then the LAI of the cell via which the current RRC connection was established.
- For PS domain, the LAI+RAC which were the last LAI+RAC indicated to the UE by UTRAN via the current RRC connection, or if UTRAN had not yet indicated any LAI+RAC to the UE via the current RRC connection, then the LAI+RAC of the cell via which the current RRC connection was established.
- Service Area corresponding to at least one of the cells from which the UE is consuming radio resources.
- Iu signalling connection identifier.
- Global RNC identifier.

The *Iu Signalling Connection Identifier* IE contains an Iu signalling connection identifier which is allocated by the RNC, and which the CN is required to store and remember for the duration of the Iu connection.

Whereas several processing entities within the CN (e.g. charging, interception, etc.) may make use of the location information given in the *SAI* IE and the *LAI* (and *RAC*) IE, the mobility management within the CN shall rely on the information given within the *LAI* IE (resp. *LAI* and *RAC* IEs) only.

In case of establishment of a signalling connection towards the CS domain in GERAN Iu-mode, the INITIAL UE MESSAGE message shall contain the *GERAN Classmark* IE in order to provide the CN with GERAN specific information (see [x1]).

Lots of unaffected part in 8.22 not shown

9.1.3 RAB ASSIGNMENT REQUEST

This message is sent by the CN to request the establishment, modification or release of one or more RABs for the same UE.

Direction: CN → RNC.

Signalling bearer mode: Connection oriented.

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	M		9.2.1.1		YES	reject
RABs To Be Setup Or Modified List	O				YES	ignore
>RABs To Be Setup Or Modified Item IEs		1 to <maxnoofRABs>				
>>First Setup Or Modify Item	M			Grouping reason: same criticality	EACH	reject
>>>RAB ID	M		9.2.1.2	The same RAB ID must only be present in one group.	-	
>>>NAS Synchronisation Indicator	O		9.2.3.18		-	
>>>RAB Parameters	O		9.2.1.3	Includes all necessary parameters for RABs (both for MSC and SGSN) including QoS.	-	
>>>User Plane Information	O				-	
>>>>User Plane Mode	M		9.2.1.18		-	
>>>>UP Mode Versions	M		9.2.1.19		-	
>>>Transport Layer Information	O				-	
>>>>Transport Layer Address	M		9.2.2.1		-	
>>>>lu Transport Association	M		9.2.2.2		-	
>>>Service Handover	O		9.2.1.41		-	
>>>GERAN BSC Container	O		9.2.1.x3		-	
>>Second Setup Or Modify Item	M			Grouping reason: same criticality	EACH	ignore
>>> PDP Type Information	O		9.2.1.40		-	
>>>Data Volume Reporting Indication	O		9.2.1.17		-	
>>>DL GTP-PDU Sequence Number	O		9.2.2.3		-	
>>>UL GTP-PDU Sequence Number	O		9.2.2.4		-	
>>>DL N-PDU Sequence Number	O		9.2.1.33		-	
>>>UL N-PDU Sequence Number	O		9.2.1.34		-	
>>>Alternative RAB Parameter Values	O		9.2.1.43		YES	ignore

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
RABs To Be Released List	O				YES	ignore
>RABs To Be Released Item IEs		1 to <maxnoofRABs>			EACH	ignore
>>RAB ID	M		9.2.1.2	The same RAB ID must only be present in one group.	-	
>>Cause	M		9.2.1.4		-	

Range bound	Explanation
maxnoofRABs	Maximum no. of RABs for one UE. Value is 256.

9.1.4 RAB ASSIGNMENT RESPONSE

This message is sent by the RNC to report the outcome of the request from the RAB ASSIGNMENT REQUEST message.

Direction: RNC → CN.

Signalling bearer mode: Connection oriented.

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	M		9.2.1.1		YES	reject
RABs Setup Or Modified List	O				YES	ignore
>RABs Setup Or Modified Item IEs		1 to <maxnoofRABs>			EACH	ignore
>>RAB ID	M		9.2.1.2	The same RAB ID must only be present in one group.	-	
>>Transport Layer Address	O		9.2.2.1		-	
>>lu Transport Association	O		9.2.2.2		-	
>>DL Data Volumes	O				-	
>>>Data Volume List		1 to <maxnoofVol>			-	
>>>>Unsuccessfully Transmitted DL Data Volume	M		9.2.3.12		-	
>>>>Data Volume Reference	O		9.2.3.13		-	
>>Assigned RAB Parameter Values	O		9.2.1.44		YES	ignore
RABs Released List	O				YES	ignore
>RABs Released Item IEs		1 to <maxnoofRABs>			EACH	ignore
>>RAB ID	M		9.2.1.2	The same RAB ID must only be present in one group.	-	
>>DL Data Volumes	O				-	
>>>Data Volume List		1 to <maxnoofVol>			-	
>>>>Unsuccessfully Transmitted DL Data Volume	M		9.2.3.12		-	
>>>>Data Volume Reference	O		9.2.3.13		-	
>>DL GTP-PDU Sequence Number	O		9.2.2.3		-	
>>UL GTP-PDU Sequence Number			9.2.2.4		-	
RABs Queued List	O				YES	ignore
>RABs Queued Item IEs		1 to <maxnoofRABs>			EACH	ignore
>>RAB ID	M		9.2.1.2	The same RAB ID must only be present in one group.	-	
RABs Failed To Setup Or Modify List	O				YES	ignore
>RABs Failed To Setup Or Modify Item IEs		1 to <maxnoofRABs>			EACH	ignore
>>RAB ID	M		9.2.1.2	The same RAB ID must only be present in	-	

				one group.		
>>Cause	M		9.2.1.4		-	
GERAN lu mode specific RABs Failed To Setup Or Modify List	<u>O</u>			This applies only in GERAN lu mode case.	YES	ignore
> GERAN lu mode specific RABs Failed To Setup Or Modify Item IEs		1 to <maxnoofRABs>			EACH	ignore
>>RAB ID	<u>M</u>		9.2.1.2	The same RAB ID must only be present in one group.	-	
>>Cause	<u>M</u>		9.2.1.4		-	
>>GERAN Classmark	<u>O</u>		9.2.1.x2		-	-
RABs Failed To Release List	O				YES	ignore
>RABs Failed To Release Item IEs		1 to <maxnoofRABs>			EACH	ignore
>>RAB ID	M		9.2.1.2	The same RAB ID must only be present in one group.	-	
>>Cause	M		9.2.1.4.		-	
Criticality Diagnostics	O		9.2.1.35		YES	ignore

Range bound	Explanation
maxnoofRABs	Maximum no. of RABs for one UE. Value is 256.
maxnoofVol	Maximum no. of reported data volume for one RAB. Value is 2.

9.1.9 RELOCATION REQUIRED

This message is sent by the source RNC to inform the CN that a relocation is to be performed.

Direction: RNC → CN.

Signalling bearer mode: Connection oriented.

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	M		9.2.1.1		YES	reject
Relocation Type	M		9.2.1.23		YES	reject
Cause	M		9.2.1.4		YES	ignore
Source ID	M		9.2.1.24		YES	ignore
Target ID	M		9.2.1.25		YES	reject
MS Classmark 2	C – ifGSMtarget		9.2.1.26	Defined in [8].	YES	reject
MS Classmark 3	C – ifGSMtarget		9.2.1.27	Defined in [8].	YES	ignore
Source RNC To Target RNC Transparent Container	C – ifUMTStarget		9.2.1.28		YES	reject
Old BSS To New BSS Information	O		9.2.1.29	Defined in [11]. Can optionally be used if GSM target but not used for UMTS target.	YES	ignore
GERAN Classmark	<u>O</u>		<u>9.2.1.x2</u>		<u>YES</u>	<u>ignore</u>

Condition	Explanation
ifGSMtarget	This IE shall be present if the <i>Target ID</i> IE contains a <i>CGI</i> IE.
ifUMTStarget	This IE shall be present if the <i>Target ID</i> IE contains a <i>Target RNC-ID</i> IE.

9.1.10 RELOCATION REQUEST

This message is sent by the CN to request the target RNC to allocate necessary resources for a relocation.

Direction: CN → RNC.

Signalling bearer mode: Connection oriented.

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	M		9.2.1.1		YES	reject
Permanent NAS UE Identity	O		9.2.3.1		YES	ignore
Cause	M		9.2.1.4		YES	ignore
CN Domain Indicator	M		9.2.1.5		YES	reject
Source RNC To Target RNC Transparent Container	M		9.2.1.28		YES	reject
RABs To Be Setup List	O				YES	reject
>RABs To Be Setup Item IEs		1 to <maxnoofRABs>			EACH	reject
>>RAB ID	M		9.2.1.2		-	
>>NAS Synchronisation Indicator	O		9.2.3.18		-	
>>RAB Parameters	M		9.2.1.3		-	
>>Data Volume Reporting Indication	C – ifPS		9.2.1.17		-	
>> PDP Type Information	C – ifPS		9.2.1.40		-	
>>User Plane Information	M				-	
>>>User Plane Mode	M		9.2.1.18		-	
>>>UP Mode Versions	M		9.2.1.19		-	
>>Transport Layer Address	M		9.2.2.1		-	
>>Iu Transport Association	M		9.2.2.2		-	
>>Service Handover	O		9.2.1.41		-	
>> Alternative RAB Parameter Values	O		9.2.1.43		YES	Ignore
>>GERAN BSC Container	O		9.2.1.x3		:	
Integrity Protection Information	O		9.2.1.11	Integrity Protection Information includes key and permitted algorithms.	YES	ignore
Encryption Information	O		9.2.1.12	Encryption Information includes key and permitted algorithms.	YES	ignore
Iu Signalling Connection Identifier	M		9.2.1.38		YES	ignore
Global CN-ID	O		9.2.1.46		YES	reject

Condition	Explanation
IfPS	This IE shall be present if the <i>CN domain indicator</i> IE is set to "PS domain".

Range bound	Explanation
maxnoofRABs	Maximum no. of RABs for one UE. Value is 256.

9.1.16 RELOCATION FAILURE

This message is sent by the target RNC to inform the CN that the requested resource allocation failed.

Direction: RNC → CN.

Signalling bearer mode: Connection oriented.

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	M		9.2.1.1		YES	reject
Cause	M		9.2.1.4		YES	ignore
Criticality Diagnostics	O		9.2.1.35		YES	ignore
New BSS to Old BSS Information	O		9.2.1.47	Defined in [11]	YES	ignore
<u>GERAN Classmark</u>	<u>O</u>		<u>9.2.1.x2</u>		<u>YES</u>	<u>ignore</u>

9.1.33 INITIAL UE MESSAGE

This message is sent by the RNC to transfer the radio interface initial layer 3 message to the CN.

Direction: RNC → CN.

Signalling bearer mode: Connection oriented.

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	M		9.2.1.1		YES	ignore
CN Domain Indicator	M		9.2.1.5		YES	ignore
LAI	M		9.2.3.6		YES	ignore
RAC	C - ifPS		9.2.3.7		YES	ignore
SAI	M		9.2.3.9		YES	ignore
NAS-PDU	M		9.2.3.5		YES	ignore
Iu Signalling Connection Identifier	M		9.2.1.38		YES	ignore
Global RNC-ID	M		9.2.1.39		YES	ignore
GERAN Classmark	<u>O</u>		<u>9.2.1.x2</u>		<u>YES</u>	<u>ignore</u>

Condition	Explanation
ifPS	This IE shall be present if the <i>CN Domain Indicator</i> IE is set to "PS domain".

9.2.1.4 Cause

The purpose of the *Cause* IE is to indicate the reason for a particular event for the RANAP protocol.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
<p>Choice Cause</p> <p>>Radio Network Layer Cause</p>			<p>INTEGER (RAB pre-empted(1),</p> <p>Trelocoverall Expiry(2),</p> <p>Trelocprep Expiry(3),</p> <p>Treloccomplete Expiry(4),</p> <p>Tqueing Expiry(5),</p> <p>Relocation Triggered(6),</p> <p>Unable to Establish During Relocation(8),</p> <p>Unknown Target RNC(9),</p> <p>Relocation Cancelled(10),</p> <p>Successful Relocation(11),</p> <p>Requested Ciphering and/or Integrity Protection Algorithms not Supported(12),</p> <p>Change of Ciphering and/or Integrity Protection is not supported(13),</p> <p>Failure in the Radio Interface Procedure(14),</p> <p>Release due to UTRAN Generated Reason(15),</p> <p>User Inactivity(16),</p> <p>Time Critical Relocation(17),</p> <p>Requested Traffic Class not Available(18),</p> <p>Invalid RAB Parameters Value(19),</p> <p>Requested</p>	<p>Value range is 1 – 64.</p>

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Choice Cause				
			Maximum Bit Rate not Available(20), Requested Maximum Bit Rate for DL not Available(33), Requested Maximum Bit Rate for UL not Available(34), Requested Guaranteed Bit Rate not Available(21), Requested Guaranteed Bit Rate for DL not Available(35), Requested Guaranteed Bit Rate for UL not Available(36), Requested Transfer Delay not Achievable(22), Invalid RAB Parameters Combination(23), Condition Violation for SDU Parameters(24), Condition Violation for Traffic Handling Priority(25), Condition Violation for Guaranteed Bit Rate(26), User Plane Versions not Supported(27), Iu UP Failure(28), TRELOCalloc Expiry (7), Relocation Failure in Target CN/RNC or Target System (29), Invalid RAB ID(30),	

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Choice Cause				
			No remaining RAB(31), Interaction with other procedure(32), Repeated Integrity Checking Failure(37), Requested Request Type not supported(38), Request superseded(39), Release due to UE generated signalling connection release(40), Resource Optimisation Relocation(41), Requested Information Not Available(42), Relocation desirable for radio reasons (43), Relocation not supported in Target RNC or Target system(44), Directed Retry (45), Radio Connection With UE Lost(46) RNC unable to establish all RFCs (47) , Deciphering Keys Not Available(48), Dedicated Assistance data Not Available(49), Relocation Target not allowed(50), Reduce Load in Serving Cell (51), No Radio	

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Choice Cause				
			Resources Available in Target cell (52) <u>GERAN Iu-mode failure (x4)</u>	

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Choice Cause				
>Transport Layer Cause			INTEGER (Signalling Transport Resource Failure(65), Iu Transport Connection Failed to Establish(66), ...)	Value range is 65 – 80.
>NAS Cause			INTEGER (User Restriction Start Indication(81), User Restriction End Indication(82), Normal Release(83), ...)	Value range is 81 – 96.
>Protocol Cause			INTEGER (Transfer Syntax Error(97), Semantic Error (98), Message not compatible with receiver state (99), Abstract Syntax Error (Reject) (100), Abstract Syntax Error (Ignore and Notify) (101), Abstract Syntax Error (Falsely Constructed Message) (102), ...)	Value range is 97 – 112.
>Miscellaneous Cause			INTEGER (O&M Intervention(113), No Resource Available(114), Unspecified Failure(115), Network Optimisation(116), ...)	Value range is 113 – 128.
>Non-standard Cause			INTEGER	Value range is 129 – 256.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Choice Cause				
			(...)	

The meaning of the different cause values is described in the following table. In general, "not supported" cause values indicate that the concerning capability is missing. On the other hand, "not available" cause values indicate that the concerning capability is present, but insufficient resources were available to perform the requested action.

Radio Network Layer cause	Meaning
Deciphering Keys Not Available	The action failed because RNC is not able to provide requested deciphering keys.
Change Of Ciphering And/Or Integrity Protection Is Not Supported	The UTRAN and/or the UE are/is unable to support the requested change of ciphering and/or integrity protection algorithms.
Condition Violation For Guaranteed Bit Rate	The action was not performed due to condition violation for guaranteed bit rate.
Condition Violation For SDU Parameters	The action was not performed due to condition violation for SDU parameters.
Condition Violation For Traffic Handling Priority	The action was not performed due to condition violation for traffic handling priority.
Dedicated Assistance data Not Available	The action failed because RNC is not able to successfully deliver the requested dedicated assistance data to the UE.
Directed Retry	The reason for action is Directed Retry
Failure In The Radio Interface Procedure	Radio interface procedure has failed.
Interaction With Other Procedure	Relocation was cancelled due to interaction with other procedure.
Invalid RAB ID	The action failed because the RAB ID is unknown in the RNC.
Invalid RAB Parameters Combination	The action failed due to invalid RAB parameters combination.
Invalid RAB Parameters Value	The action failed due to invalid RAB parameters value.
Iu UP Failure	The action failed due to Iu UP failure.
No remaining RAB	The reason for the action is no remaining RAB.
RAB Pre-empted	The reason for the action is that RAB is pre-empted.
Radio Connection With UE Lost	The action is requested due to losing radio connection to the UE
Release Due To UE Generated Signalling Connection Release	Release requested due to UE generated signalling connection release.
Release Due To UTRAN Generated Reason	Release is initiated due to UTRAN generated reason.
Relocation Cancelled	The reason for the action is relocation cancellation.
Relocation Desirable for Radio Reasons	The reason for requesting relocation is radio related.
Relocation Failure In Target CN/RNC Or Target System	Relocation failed due to a failure in target CN/RNC or target system.
Relocation Not Supported In Target RNC Or Target System	Relocation failed because relocation was not supported in target RNC or target system.
Relocation Target not allowed	Relocation to the indicated target cell is not allowed for the UE in question.
Relocation Triggered	The action failed due to relocation.
Repeated Integrity Checking Failure	The action is requested due to repeated failure in integrity checking.
Request Superseded	The action failed because there was a second request on the same RAB.
Requested Ciphering And/Or Integrity Protection Algorithms Not Supported	The UTRAN or the UE is unable to support the requested ciphering and/or integrity protection algorithms.
Requested Guaranteed Bit Rate For DL Not Available	The action failed because requested guaranteed bit rate for DL is not available.
Requested Guaranteed Bit Rate For UL Not Available	The action failed because requested guaranteed bit rate for UL is not available.
Requested Guaranteed Bit Rate Not Available	The action failed because requested guaranteed bit rate is not available.
Requested Information Not Available	The action failed because requested information is not available.
Requested Maximum Bit Rate For DL Not Available	The action failed because requested maximum bit rate for DL is not available.
Requested Maximum Bit Rate For UL Not Available	The action failed because requested maximum bit rate for UL is not available.
Requested Maximum Bit Rate Not Available	The action failed because requested maximum bit rate is not available.
Requested Request Type Not Supported	The RNC is not supporting the requested location request type either because it doesn't support the requested event or it doesn't support the requested report area.
Requested Traffic Class Not	The action failed because requested traffic class is not

Available	available.
Requested Transfer Delay Not Achievable	The action failed because requested transfer delay is not achievable.
Resource Optimisation Relocation	The reason for requesting relocation is resource optimisation.
Successful Relocation	The reason for the action is completion of successful relocation.
Time Critical Relocation	Relocation is requested for time critical reason.
T _{QUEUING} Expiry	The action failed due to expiry of the timer T _{QUEUING} .
T _{RELOCalloc} Expiry	Relocation Resource Allocation procedure failed due to expiry of the timer T _{RELOCalloc} .
T _{RELOCcomplete} Expiry	The reason for the action is expiry of timer T _{RELOCcomplete} .
T _{RELOCoverall} Expiry	The reason for the action is expiry of timer T _{RELOCoverall} .
T _{RELOCprep} Expiry	Relocation Preparation procedure is cancelled when timer T _{RELOCprep} expires.
Unable To Establish During Relocation	RAB failed to establish during relocation because it cannot be supported in the target RNC.
Unknown Target RNC	Relocation rejected because the target RNC is not known to the CN.
User Inactivity	The action is requested due to user inactivity.
User Plane Versions Not Supported	The action failed because requested user plane versions were not supported.
RNC unable to establish all RFCs	RNC couldn't establish all RAB subflow combinations indicated within the <i>RAB Parameters</i> IE.
Reduce Load in Serving Cell	Load on serving cell needs to be reduced.
No Radio Resources Available in Target Cell	Load on target cell is too high.
<u>GERAN lu-mode failure</u>	<u>The RAB establishment/modification/relocation failed because the GERAN BSC cannot provide an appropriate RAB due to limited capabilities within GERAN.</u>

Transport Layer cause	Meaning
Iu Transport Connection Failed to Establish	The action failed because the Iu Transport Network Layer connection could not be established.
Signalling Transport Resource Failure	Signalling transport resources have failed (<i>e.g. processor reset</i>).

NAS cause	Meaning
Normal Release	The release is normal.
User Restriction Start Indication	A location report is generated due to entering a classified area set by O&M.
User Restriction End Indication	A location report is generated due to leaving a classified area set by O&M.

Protocol cause	Meaning
Abstract Syntax Error (Reject)	The received message included an abstract syntax error and the concerning criticality indicated "reject".
Abstract Syntax Error (Ignore And Notify)	The received message included an abstract syntax error and the concerning criticality indicated "ignore and notify".
Abstract Syntax Error (Falsely Constructed Message)	The received message contained IEs or IE groups in wrong order or with too many occurrences.
Message Not Compatible With Receiver State	The received message was not compatible with the receiver state.
Semantic Error	The received message included a semantic error.
Transfer Syntax Error	The received message included a transfer syntax error.

Miscellaneous cause	Meaning
Network Optimisation	The action is performed for network optimisation.
No Resource Available	No requested resource is available.
O&M Intervention	The action is due to O&M intervention.
Unspecified Failure	Sent when none of the specified cause values applies.

9.2.1.53 Non Real-Time Load Information

The *Non Real-Time Load Information* IE indicates the load situation on the cell for the Non Real-Time traffic. Non Real Time traffic corresponds to the Interactive and Background traffic classes.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Non Real Time Load Information	M		ENUMERATED (Low, Medium, High, Overloaded, ...)	

9.2.1.x2 GERAN Classmark

The purpose of *GERAN Classmark* IE is to transfer GERAN specific information to the CN.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
<u>GERAN Classmark</u>	<u>M</u>		<u>OCTET STRING</u>	<u>Contents defined in [11].</u>

9.2.1.x3 GERAN BSC Container

The purpose of *GERAN BSC Container* IE is to transfer GERAN specific information from the CN to GERAN.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
<u>GERAN BSC Container</u>	<u>M</u>		<u>OCTET STRING</u>	<u>Contents defined in [11].</u>

9.3.3 PDU Definitions

```

-- *****
--
-- PDU definitions for RANAP.
--
-- *****

RANAP-PDU-Contents {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) ranap (0) version1 (1) ranap-PDU-Contents (1) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

-- *****
--
-- IE parameter types from other modules.
--
-- *****

IMPORTS
BroadcastAssistanceDataDecipheringKeys,
LocationRelatedDataRequestType,
DataVolumeReference,
CellLoadInformation,
AreaIdentity,
CN-DomainIndicator,
Cause,
CriticalityDiagnostics,
ChosenEncryptionAlgorithm,
ChosenIntegrityProtectionAlgorithm,
ClassmarkInformation2,
ClassmarkInformation3,
DL-GTP-PDU-SequenceNumber,
DL-N-PDU-SequenceNumber,
DataVolumeReportingIndication,
DRX-CycleLengthCoefficient,
EncryptionInformation,
GERAN-BSC-Container,
GERAN-Classmark,
GlobalCN-ID,
GlobalRNC-ID,
IntegrityProtectionInformation,
InterSystemInformation-TransparentContainer,
IuSignallingConnectionIdentifier,
IuTransportAssociation,
KeyStatus,
L3-Information,
LAI,

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LastKnownServiceArea,
NAS-PDU,
NAS-SynchronisationIndicator,
NewBSS-To-OldBSS-Information,
NonSearchingIndication,
NumberOfSteps,
OMC-ID,
OldBSS-ToNewBSS-Information,
PagingAreaID,
PagingCause,
PDP-TypeInformation,
PermanentNAS-UE-ID,
RAB-ID,
RAB-Parameters,
RAC,
RelocationType,
RequestType,
Requested-RAB-Parameter-Values,
SAI,
SAPI,
Service-Handover,
SourceID,
SourceRNC-ToTargetRNC-TransparentContainer,
TargetID,
TargetRNC-ToSourceRNC-TransparentContainer,
TemporaryUE-ID,
TraceReference,
TraceType,
UnsuccessfullyTransmittedDataVolume,
TransportLayerAddress,
TriggerID,
UE-ID,
UL-GTP-PDU-SequenceNumber,
UL-N-PDU-SequenceNumber,
UP-ModeVersions,
UserPlaneMode,
Alt-RAB-Parameters,
Ass-RAB-Parameters

FROM RANAP-IES

PrivateIE-Container{},
ProtocolExtensionContainer{},
ProtocolIE-ContainerList{},
ProtocolIE-ContainerPair{},
ProtocolIE-ContainerPairList{},
ProtocolIE-Container{},
RANAP-PRIVATE-IES,
RANAP-PROTOCOL-EXTENSION,
RANAP-PROTOCOL-IES,
RANAP-PROTOCOL-IES-PAIR

FROM RANAP-Containers

maxNrOfDTs ,
maxNrOfErrors ,
maxNrOfIuSigConIds ,
maxNrOfRABs ,
maxNrOfVol ,

id-AreaIdentity ,
id-Alt-RAB-Parameters ,
id-Ass-RAB-Parameters ,
id-BroadcastAssistanceDataDecipheringKeys ,
id-LocationRelatedDataRequestType ,
id-CN-DomainIndicator ,
id-Cause ,
id-ChosenEncryptionAlgorithm ,
id-ChosenIntegrityProtectionAlgorithm ,
id-ClassmarkInformation2 ,
id-ClassmarkInformation3 ,
id-CriticalityDiagnostics ,
id-DRX-CycleLengthCoefficient ,
id-DirectTransferInformationItem-RANAP-RelocInf ,
id-DirectTransferInformationList-RANAP-RelocInf ,
id-DL-GTP-PDU-SequenceNumber ,
id-EncryptionInformation ,
id-GERAN-BSC-Container ,
id-GERAN-Classmark ,
id-GERAN-Iumode-RAB-Failed-RABAssgntResponse-Item ,
id-GERAN-Iumode-RAB-FailedList-RABAssgntResponse ,
id-GlobalCN-ID ,
id-GlobalRNC-ID ,
id-IntegrityProtectionInformation ,
id-InterSystemInformation-TransparentContainer ,
id-IuSigConId ,
id-IuSigConIdItem ,
id-IuSigConIdList ,
id-IuTransportAssociation ,
id-KeyStatus ,
id-L3-Information ,
id-LAI ,
id-LastKnownServiceArea ,
id-NAS-PDU ,
id-NewBSS-To-OldBSS-Information ,
id-NonSearchingIndication ,
id-NumberOfSteps ,
id-OMC-ID ,
id-OldBSS-To-NewBSS-Information ,
id-PagingAreaID ,
id-PagingCause ,
id-PermanentNAS-UE-ID ,
id-RAB-ContextItem ,
id-RAB-ContextList ,
id-RAB-ContextFailedtoTransferItem ,
id-RAB-ContextFailedtoTransferList ,
id-RAB-ContextItem-RANAP-RelocInf ,


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id-RAB-ContextList-RANAP-RelocInf,
id-RAB-DataForwardingItem,
id-RAB-DataForwardingItem-SRNS-CtxReq,
id-RAB-DataForwardingList,
id-RAB-DataForwardingList-SRNS-CtxReq,
id-RAB-DataVolumeReportItem,
id-RAB-DataVolumeReportList,
id-RAB-DataVolumeReportRequestItem,
id-RAB-DataVolumeReportRequestList,
id-RAB-FailedItem,
id-RAB-FailedList,
id-RAB-FailedtoReportItem,
id-RAB-FailedtoReportList,
id-RAB-ID,
id-RAB-ModifyList,
id-RAB-ModifyItem,
id-RAB-QueuedItem,
id-RAB-QueuedList,
id-RAB-ReleaseFailedList,
id-RAB-ReleaseItem,
id-RAB-ReleasedItem-IuRelComp,
id-RAB-ReleaseList,
id-RAB-ReleasedItem,
id-RAB-ReleasedList,
id-RAB-ReleasedList-IuRelComp,
id-RAB-RelocationReleaseItem,
id-RAB-RelocationReleaseList,
id-RAB-SetupItem-RelocReq,
id-RAB-SetupItem-RelocReqAck,
id-RAB-SetupList-RelocReq,
id-RAB-SetupList-RelocReqAck,
id-RAB-SetupOrModifiedItem,
id-RAB-SetupOrModifiedList,
id-RAB-SetupOrModifyItem,
id-RAB-SetupOrModifyList,
id-RAC,
id-RelocationType,
id-RequestType,
id-SAI,
id-SAPI,
id-SourceID,
id-SourceRNC-ToTargetRNC-TransparentContainer,
id-TargetID,
id-TargetRNC-ToSourceRNC-TransparentContainer,
id-TemporaryUE-ID,
id-TraceReference,
id-TraceType,
id-TransportLayerAddress,
id-TriggerID,
id-UE-ID,
id-UL-GTP-PDU-SequenceNumber
FROM RANAP-Constants;
```

Lots of unaffected ASN1 in 9.3.3 not shown

```
-- *****
--
-- Relocation Required
--
-- *****

RelocationRequired ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container      { {RelocationRequiredIEs} },
    protocolExtensions   ProtocolExtensionContainer { {RelocationRequiredExtensions} }      OPTIONAL,
    ...
}

RelocationRequiredIEs RANAP-PROTOCOL-IES ::= {
    { ID id-RelocationType          CRITICALITY reject  TYPE RelocationType          PRESENCE mandatory } |
    { ID id-Cause                    CRITICALITY ignore  TYPE Cause                    PRESENCE mandatory } |
    { ID id-SourceID                 CRITICALITY ignore  TYPE SourceID                 PRESENCE mandatory } |
    { ID id-TargetID                 CRITICALITY reject  TYPE TargetID                 PRESENCE mandatory } |
    { ID id-ClassmarkInformation2     CRITICALITY reject  TYPE ClassmarkInformation2     PRESENCE conditional
-- This IE shall be present if the Target ID IE contains a CGI IE --
    } |
    { ID id-ClassmarkInformation3     CRITICALITY ignore  TYPE ClassmarkInformation3     PRESENCE conditional
-- This IE shall be present if the Target ID IE contains a CGI IE --
    } |
    { ID id-SourceRNC-ToTargetRNC-TransparentContainer
          CRITICALITY reject  TYPE SourceRNC-ToTargetRNC-TransparentContainer PRESENCE conditional
-- This IE shall be present if the Target ID IE contains a RNC-ID IE --
    } |
    { ID id-OldBSS-ToNewBSS-Information CRITICALITY ignore  TYPE OldBSS-ToNewBSS-Information PRESENCE optional } ,
    ...
}

RelocationRequiredExtensions RANAP-PROTOCOL-EXTENSION ::= {
-- Extension for Release 5 to enable GERAN support over Iu-CS --
    { ID id-GERAN-Classmark          CRITICALITY ignore  EXTENSION GERAN-Classmark          PRESENCE optional } ,
    ...
}

```

Lots of unaffected ASN1 in 9.3.3 not shown

```
-- *****
--
-- RELOCATION RESOURCE ALLOCATION ELEMENTARY PROCEDURE
--
-- *****

-- *****
--
-- Relocation Request
--
-- *****

RelocationRequest ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container      { {RelocationRequestIEs} },

```

```

    protocolExtensions      ProtocolExtensionContainer { {RelocationRequestExtensions} }          OPTIONAL,
    ...
}

RelocationRequestIEs RANAP-PROTOCOL-IES ::= {
  { ID id-PermanentNAS-UE-ID      CRITICALITY ignore  TYPE PermanentNAS-UE-ID          PRESENCE optional } |
  { ID id-Cause                    CRITICALITY ignore  TYPE Cause                          PRESENCE mandatory } |
  { ID id-CN-DomainIndicator       CRITICALITY reject TYPE CN-DomainIndicator          PRESENCE mandatory } |
  { ID id-SourceRNC-ToTargetRNC-TransparentContainer
    CRITICALITY reject  TYPE SourceRNC-ToTargetRNC-TransparentContainer PRESENCE mandatory } |
  { ID id-RAB-SetupList-RelocReq   CRITICALITY reject  TYPE RAB-SetupList-RelocReq          PRESENCE optional } |
  { ID id-IntegrityProtectionInformation CRITICALITY ignore  TYPE IntegrityProtectionInformation PRESENCE optional } |
  { ID id-EncryptionInformation    CRITICALITY ignore  TYPE EncryptionInformation          PRESENCE optional } |
  { ID id-IuSigConId              CRITICALITY ignore  TYPE IuSignallingConnectionIdentifier PRESENCE mandatory },
  ...
}

RAB-SetupList-RelocReq ::= RAB-IE-ContainerList { {RAB-SetupItem-RelocReq-IEs} }

RAB-SetupItem-RelocReq-IEs RANAP-PROTOCOL-IES ::= {
  { ID id-RAB-SetupItem-RelocReq   CRITICALITY reject  TYPE RAB-SetupItem-RelocReq          PRESENCE mandatory },
  ...
}

RAB-SetupItem-RelocReq ::= SEQUENCE {
  rAB-ID                          RAB-ID,
  nAS-SynchronisationIndicator    NAS-SynchronisationIndicator  OPTIONAL,
  rAB-Parameters                  RAB-Parameters,
  dataVolumeReportingIndication   DataVolumeReportingIndication  OPTIONAL
  -- This IE shall be present if the CN domain indicator IE is set to "PS domain" --,
  pdp-TypeInformation             PDP-TypeInformation          OPTIONAL
  -- This IE shall be present if the CN domain indicator IE is set to "PS domain" --,
  userPlaneInformation            UserPlaneInformation,
  transportLayerAddress           TransportLayerAddress,
  iuTransportAssociation          IuTransportAssociation,
  service-Handover                Service-Handover              OPTIONAL,
  iE-Extensions                   ProtocolExtensionContainer { {RAB-SetupItem-RelocReq-ExtIEs} }  OPTIONAL,
  ...
}

RAB-SetupItem-RelocReq-ExtIEs RANAP-PROTOCOL-EXTENSION ::= {
-- Extension for Release 4 to enable RAB Quality of Service negotiation over Iu --
  {ID id-Alt-RAB-Parameters      CRITICALITY ignore  EXTENSION Alt-RAB-Parameters          PRESENCE optional},
-- Extension for Release 5 to enable GERAN support over Iu-Cs --
  { ID id-GERAN-BSC-Container    CRITICALITY ignore  EXTENSION GERAN-BSC-Container          PRESENCE optional } ,
  ...
}

UserPlaneInformation ::= SEQUENCE {
  userPlaneMode                  UserPlaneMode,
  uP-ModeVersions                UP-ModeVersions,
  iE-Extensions                   ProtocolExtensionContainer { {UserPlaneInformation-ExtIEs} }  OPTIONAL,
  ...
}

```

```

}

UserPlaneInformation-ExtIEs RANAP-PROTOCOL-EXTENSION ::= {
  ...
}

RelocationRequestExtensions RANAP-PROTOCOL-EXTENSION ::= {
  -- Extension for Release 4 --
  { ID id-GlobalCN-ID          CRITICALITY reject          EXTENSION GlobalCN-ID          PRESENCE optional},
  ...
}

-- *****
--
-- Relocation Request Acknowledge
--
-- *****

RelocationRequestAcknowledge ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container          { {RelocationRequestAcknowledgeIEs} },
  protocolExtensions  ProtocolExtensionContainer { {RelocationRequestAcknowledgeExtensions} }      OPTIONAL,
  ...
}

RelocationRequestAcknowledgeIEs RANAP-PROTOCOL-IES ::= {
  { ID id-TargetRNC-ToSourceRNC-TransparentContainer
    CRITICALITY ignore TYPE TargetRNC-ToSourceRNC-TransparentContainer PRESENCE optional } |
  { ID id-RAB-SetupList-RelocReqAck          CRITICALITY ignore TYPE RAB-SetupList-RelocReqAck          PRESENCE optional } |
  { ID id-RAB-FailedList                    CRITICALITY ignore TYPE RAB-FailedList                    PRESENCE optional } |
  { ID id-ChosenIntegrityProtectionAlgorithm CRITICALITY ignore TYPE ChosenIntegrityProtectionAlgorithm PRESENCE optional } |
  { ID id-ChosenEncryptionAlgorithm         CRITICALITY ignore TYPE ChosenEncryptionAlgorithm         PRESENCE optional } |
  { ID id-CriticalityDiagnostics            CRITICALITY ignore TYPE CriticalityDiagnostics            PRESENCE optional },
  ...
}

RAB-SetupList-RelocReqAck ::= RAB-IE-ContainerList { {RAB-SetupItem-RelocReqAck-IEs} }

RAB-SetupItem-RelocReqAck-IEs RANAP-PROTOCOL-IES ::= {
  { ID id-RAB-SetupItem-RelocReqAck          CRITICALITY reject TYPE RAB-SetupItem-RelocReqAck          PRESENCE mandatory },
  ...
}

RAB-SetupItem-RelocReqAck ::= SEQUENCE {
  rAB-ID          RAB-ID,
  transportLayerAddress TransportLayerAddress OPTIONAL,
  iuTransportAssociation IuTransportAssociation OPTIONAL,
  iE-Extensions  ProtocolExtensionContainer { {RAB-SetupItem-RelocReqAck-ExtIEs} }      OPTIONAL,
  ...
}

RAB-SetupItem-RelocReqAck-ExtIEs RANAP-PROTOCOL-EXTENSION ::= {
  -- Extension for Release 4 to enable RAB Quality of Service negotiation over Iu --
  { ID id-Ass-RAB-Parameters          CRITICALITY ignore          EXTENSION Ass-RAB-Parameters          PRESENCE optional } ,

```

```

}
...
RAB-FailedList ::= RAB-IE-ContainerList { {RAB-FailedItemIEs} }

RAB-FailedItemIEs RANAP-PROTOCOL-IES ::= {
  { ID id-RAB-FailedItem          CRITICALITY ignore  TYPE RAB-FailedItem          PRESENCE mandatory },
  ...
}

RAB-FailedItem ::= SEQUENCE {
  rAB-ID          RAB-ID,
  cause          Cause,
  iE-Extensions  ProtocolExtensionContainer { {RAB-FailedItem-ExtIEs} }      OPTIONAL,
  ...
}

RAB-FailedItem-ExtIEs RANAP-PROTOCOL-EXTENSION ::= {
  ...
}

RelocationRequestAcknowledgeExtensions RANAP-PROTOCOL-EXTENSION ::= {
-- Extension for Release 5 to enable Inter RAN Load Information Exchange over Iu --
  {ID id-NewBSS-To-OldBSS-Information  CRITICALITY ignore  EXTENSION NewBSS-To-OldBSS-Information  PRESENCE optional },
  ...
}

-- *****
--
-- Relocation Failure
--
-- *****

RelocationFailure ::= SEQUENCE {
  protocolIEs      ProtocolIE-Container      { {RelocationFailureIEs} },
  protocolExtensions  ProtocolExtensionContainer { {RelocationFailureExtensions} }      OPTIONAL,
  ...
}

RelocationFailureIEs RANAP-PROTOCOL-IES ::= {
  { ID id-Cause          CRITICALITY ignore  TYPE Cause          PRESENCE mandatory } |
  { ID id-CriticalityDiagnostics  CRITICALITY ignore  TYPE CriticalityDiagnostics  PRESENCE optional },
  ...
}

RelocationFailureExtensions RANAP-PROTOCOL-EXTENSION ::= {
-- Extension for Release 5 to enable Inter RAN Load Information Exchange over Iu --
  { ID id-NewBSS-To-OldBSS-Information  CRITICALITY ignore  EXTENSION NewBSS-To-OldBSS-Information  PRESENCE optional },
-- Extension for Release 5 to enable GERAN support over Iu-cs --
  { ID id-GERAN-Classmark  CRITICALITY ignore  EXTENSION GERAN-Classmark  PRESENCE optional } ,
  ...
}

```

Lots of unaffected ASN1 in 9.3.3 not shown

```

-- *****
--
-- INITIAL UE MESSAGE ELEMENTARY PROCEDURE
--
-- *****

-- *****
--
-- Initial UE Message
--
-- *****

InitialUE-Message ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container          { {InitialUE-MessageIEs} },
    protocolExtensions   ProtocolExtensionContainer { {InitialUE-MessageExtensions} }          OPTIONAL,
    ...
}

InitialUE-MessageIEs RANAP-PROTOCOL-IES ::= {
    { ID id-CN-DomainIndicator          CRITICALITY ignore TYPE CN-DomainIndicator          PRESENCE mandatory } |
    { ID id-LAI                          CRITICALITY ignore TYPE LAI                          PRESENCE mandatory } |
    { ID id-RAC                          CRITICALITY ignore TYPE RAC                          PRESENCE conditional
-- This IE shall be present if the CN Domain Indicator IE is set to "PS domain" --
    } |
    { ID id-SAI                          CRITICALITY ignore TYPE SAI                          PRESENCE mandatory } |
    { ID id-NAS-PDU                      CRITICALITY ignore TYPE NAS-PDU                      PRESENCE mandatory } |
    { ID id-IuSigConID                  CRITICALITY ignore TYPE IuSignallingConnectionIdentifier PRESENCE mandatory } |
    { ID id-GlobalRNC-ID                CRITICALITY ignore TYPE GlobalRNC-ID                PRESENCE mandatory },
    ...
}

InitialUE-MessageExtensions RANAP-PROTOCOL-EXTENSION ::= {
-- Extension for Release 5 to enable GERAN support over Iu-cs --
    { ID id-GERAN-Classmark              CRITICALITY ignore EXTENSION GERAN-Classmark          PRESENCE optional } ,
    ...
}

```

Lots of unaffected ASN1 in 9.3.3 not shown

```

-- *****
--
-- RAB ASSIGNMENT ELEMENTARY PROCEDURE
--
-- *****

-- *****
--
-- RAB Assignment Request
--
-- *****

```

```

RAB-AssignmentRequest ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container      { {RAB-AssignmentRequestIEs} },
    protocolExtensions   ProtocolExtensionContainer { {RAB-AssignmentRequestExtensions} }      OPTIONAL,
    ...
}

RAB-AssignmentRequestIEs RANAP-PROTOCOL-IES ::= {
    { ID id-RAB-SetupOrModifyList          CRITICALITY ignore TYPE RAB-SetupOrModifyList          PRESENCE optional } |
    { ID id-RAB-ReleaseList                CRITICALITY ignore TYPE RAB-ReleaseList                PRESENCE optional },
    ...
}

RAB-SetupOrModifyList ::= RAB-IE-ContainerPairList { {RAB-SetupOrModifyItem-IEs} }

RAB-SetupOrModifyItem-IEs RANAP-PROTOCOL-IES-PAIR ::= {
    { ID id-RAB-SetupOrModifyItem          FIRST CRITICALITY reject FIRST TYPE RAB-SetupOrModifyItemFirst
      SECOND CRITICALITY ignore SECOND TYPE RAB-SetupOrModifyItemSecond
      PRESENCE mandatory },
    ...
}

RAB-SetupOrModifyItemFirst ::= SEQUENCE {
    rAB-ID                RAB-ID,
    nAS-SynchronisationIndicator NAS-SynchronisationIndicator OPTIONAL,
    rAB-Parameters        RAB-Parameters OPTIONAL,
    userPlaneInformation  UserPlaneInformation OPTIONAL,
    transportLayerInformation TransportLayerInformation OPTIONAL,
    service-Handover      Service-Handover OPTIONAL,
    iE-Extensions         ProtocolExtensionContainer { {RAB-SetupOrModifyItemFirst-ExtIEs} }      OPTIONAL,
    ...
}

TransportLayerInformation ::= SEQUENCE {
    transportLayerAddress TransportLayerAddress,
    iuTransportAssociation IuTransportAssociation,
    iE-Extensions         ProtocolExtensionContainer { {TransportLayerInformation-ExtIEs} }      OPTIONAL,
    ...
}

TransportLayerInformation-ExtIEs RANAP-PROTOCOL-EXTENSION ::= {
    ...
}

RAB-SetupOrModifyItemFirst-ExtIEs RANAP-PROTOCOL-EXTENSION ::= {
    -- Extension for Release 5 to enable GERAN support over Iu-CS --
    { ID id-GERAN-BSC-Container          CRITICALITY ignore EXTENSION GERAN-BSC-Container          PRESENCE optional },
    ...
}

RAB-SetupOrModifyItemSecond ::= SEQUENCE {
    pDP-TypeInformation    PDP-TypeInformation          OPTIONAL,
    dataVolumeReportingIndication DataVolumeReportingIndication OPTIONAL,

```

```

dl-GTP-PDU-SequenceNumber      DL-GTP-PDU-SequenceNumber  OPTIONAL,
ul-GTP-PDU-SequenceNumber      UL-GTP-PDU-SequenceNumber  OPTIONAL,
dl-N-PDU-SequenceNumber        DL-N-PDU-SequenceNumber    OPTIONAL,
ul-N-PDU-SequenceNumber        UL-N-PDU-SequenceNumber    OPTIONAL,
IE-Extensions                   ProtocolExtensionContainer { {RAB-SetupOrModifyItemSecond-ExtIEs} }    OPTIONAL,
...
}

RAB-SetupOrModifyItemSecond-ExtIEs RANAP-PROTOCOL-EXTENSION ::= {
-- Extension for Release 4 to enable RAB Quality of Service negotiation over Iu --
  { ID id-Alt-RAB-Parameters      CRITICALITY ignore      EXTENSION Alt-RAB-Parameters      PRESENCE optional },
  ...
}

RAB-AssignmentRequestExtensions RANAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- RAB Assignment Response
--
-- *****

RAB-AssignmentResponse ::= SEQUENCE {
  protocolIEs      ProtocolIE-Container      { {RAB-AssignmentResponseIEs} },
  protocolExtensions      ProtocolExtensionContainer { {RAB-AssignmentResponseExtensions} }    OPTIONAL,
  ...
}

RAB-AssignmentResponseIEs RANAP-PROTOCOL-IES ::= {
  { ID id-RAB-SetupOrModifiedList      CRITICALITY ignore      TYPE RAB-SetupOrModifiedList      PRESENCE optional } |
  { ID id-RAB-ReleasedList      CRITICALITY ignore      TYPE RAB-ReleasedList      PRESENCE optional } |

  { ID id-RAB-QueuedList      CRITICALITY ignore      TYPE RAB-QueuedList      PRESENCE optional } |
  { ID id-RAB-FailedList      CRITICALITY ignore      TYPE RAB-FailedList      PRESENCE optional } |
  { ID id-RAB-ReleaseFailedList      CRITICALITY ignore      TYPE RAB-ReleaseFailedList      PRESENCE optional } |
  { ID id-CriticalityDiagnostics      CRITICALITY ignore      TYPE CriticalityDiagnostics      PRESENCE optional },
  ...
}

RAB-SetupOrModifiedList ::= RAB-IE-ContainerList { {RAB-SetupOrModifiedItemIEs} }

RAB-SetupOrModifiedItemIEs RANAP-PROTOCOL-IES ::= {
  { ID id-RAB-SetupOrModifiedItem      CRITICALITY ignore      TYPE RAB-SetupOrModifiedItem      PRESENCE mandatory },
  ...
}

RAB-SetupOrModifiedItem ::= SEQUENCE {
  rAB-ID      RAB-ID,
  transportLayerAddress      TransportLayerAddress      OPTIONAL,
  iuTransportAssociation      IuTransportAssociation      OPTIONAL,
  dl-dataVolumes      DataVolumeList      OPTIONAL,

```



```

    iE-Extensions          ProtocolExtensionContainer { {RAB-SetupOrModifiedItem-ExtIEs} }          OPTIONAL,
    ...
}

RAB-SetupOrModifiedItem-ExtIEs RANAP-PROTOCOL-EXTENSION ::= {
-- Extension for Release 4 to enable RAB Quality of Service negotiation over Iu --
{ ID id-Ass-RAB-Parameters    CRITICALITY ignore    EXTENSION Ass-RAB-Parameters    PRESENCE optional },
    ...
}

RAB-ReleasedList          ::= RAB-IE-ContainerList { {RAB-ReleasedItemIEs} }

RAB-ReleasedItemIEs RANAP-PROTOCOL-IES ::= {
{ ID id-RAB-ReleasedItem      CRITICALITY ignore    TYPE RAB-ReleasedItem          PRESENCE mandatory },
    ...
}

RAB-ReleasedItem ::= SEQUENCE {
    rAB-ID                    RAB-ID,
    dl-dataVolumes            DataVolumeList          OPTIONAL,
    dl-GTP-PDU-SequenceNumber DL-GTP-PDU-SequenceNumber    OPTIONAL,
    ul-GTP-PDU-SequenceNumber UL-GTP-PDU-SequenceNumber    OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { {RAB-ReleasedItem-ExtIEs} }    OPTIONAL,
    ...
}

RAB-ReleasedItem-ExtIEs RANAP-PROTOCOL-EXTENSION ::= {
    ...
}

DataVolumeList ::= SEQUENCE (SIZE (1..maxNrOfVol)) OF
    SEQUENCE {
        dl-UnsuccessfullyTransmittedDataVolume    UnsuccessfullyTransmittedDataVolume,
        dataVolumeReference                        DataVolumeReference OPTIONAL,
        iE-Extensions                            ProtocolExtensionContainer { {DataVolumeList-ExtIEs} }    OPTIONAL,
        ...
    }

DataVolumeList-ExtIEs RANAP-PROTOCOL-EXTENSION ::= {
    ...
}

RAB-QueuedList          ::= RAB-IE-ContainerList { {RAB-QueuedItemIEs} }

RAB-QueuedItemIEs RANAP-PROTOCOL-IES ::= {
{ ID id-RAB-QueuedItem      CRITICALITY ignore    TYPE RAB-QueuedItem          PRESENCE mandatory },
    ...
}

RAB-QueuedItem ::= SEQUENCE {
    rAB-ID                    RAB-ID,
    iE-Extensions            ProtocolExtensionContainer { {RAB-QueuedItem-ExtIEs} }    OPTIONAL,
    ...
}

```

```

}
RAB-QueuedItem-ExtIEs RANAP-PROTOCOL-EXTENSION ::= {
  ...
}
RAB-ReleaseFailedList ::= RAB-FailedList
RAB-AssignmentResponseExtensions RANAP-PROTOCOL-EXTENSION ::= {
  -- Extension for Release 5 to enable GERAN support over Iu-CS --
  { ID id-GERAN-Iumode-RAB-FailedList-RABAssgntResponse CRITICALITY ignore EXTENSION GERAN-Iumode-RAB-FailedList-RABAssgntResponse
  PRESENCE optional} ,
  ...
}
GERAN-Iumode-RAB-FailedList-RABAssgntResponse ::= RAB-IE-ContainerList { {GERAN-Iumode-RAB-Failed-RABAssgntResponse-ItemIEs} }
GERAN-Iumode-RAB-Failed-RABAssgntResponse-ItemIEs RANAP-PROTOCOL-IES ::= {
  { ID id-GERAN-Iumode-RAB-Failed-RABAssgntResponse-Item CRITICALITY ignore TYPE GERAN-Iumode-RAB-Failed-RABAssgntResponse-Item
  PRESENCE mandatory } ,
  ...
}
GERAN-Iumode-RAB-Failed-RABAssgntResponse-Item ::= SEQUENCE {
  rAB-ID RAB-ID,
  cause Cause,
  gERAN-Classmark GERAN-Classmark OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { {GERAN-Iumode-RAB-Failed-RABAssgntResponse-Item-ExtIEs} } OPTIONAL,
  ...
}
GERAN-Iumode-RAB-Failed-RABAssgntResponse-Item-ExtIEs RANAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

Lots of unaffected ASN1 in 9.3.3 not shown

9.3.4 Information Element Definitions

```
-- *****
--
-- Information Element Definitions
--
-- *****

RANAP-IEs {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) ranap (0) version1 (1) ranap-IEs (2) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN
```

Lots of unaffected ASN1 in 9.3.4 not shown

```
CauseRadioNetwork ::= INTEGER {
    rab-pre-empted (1),
    trelocoverall-expiry (2),
    trelocprep-expiry (3),
    treloccomplete-expiry (4),
    tqueing-expiry (5),
    relocation-triggered (6),
    trellocalloc-expiry(7),
    unable-to-establish-during-relocation (8),
    unknown-target-rnc (9),
    relocation-cancelled (10),
    successful-relocation (11),
    requested-ciphering-and-or-integrity-protection-algorithms-not-supported (12),
    change-of-ciphering-and-or-integrity-protection-is-not-supported (13),
    failure-in-the-radio-interface-procedure (14),
    release-due-to-utran-generated-reason (15),
    user-inactivity (16),
    time-critical-relocation (17),
    requested-traffic-class-not-available (18),
    invalid-rab-parameters-value (19),
    requested-maximum-bit-rate-not-available (20),
    requested-guaranteed-bit-rate-not-available (21),
    requested-transfer-delay-not-achievable (22),
    invalid-rab-parameters-combination (23),
    condition-violation-for-sdu-parameters (24),
    condition-violation-for-traffic-handling-priority (25),
    condition-violation-for-guaranteed-bit-rate (26),
    user-plane-versions-not-supported (27),
    iu-up-failure (28),
    relocation-failure-in-target-CN-RNC-or-target-system(29),
    invalid-RAB-ID (30),
    no-remaining-rab (31),
    interaction-with-other-procedure (32),
    requested-maximum-bit-rate-for-dl-not-available (33),
```

```

requested-maximum-bit-rate-for-ul-not-available (34),
requested-guaranteed-bit-rate-for-dl-not-available (35),
requested-guaranteed-bit-rate-for-ul-not-available (36),
repeated-integrity-checking-failure (37),
requested-request-type-not-supported (38),
request-superseded (39),
release-due-to-UE-generated-signalling-connection-release (40),
resource-optimisation-relocation (41),
requested-information-not-available (42),
relocation-desirable-for-radio-reasons (43),
relocation-not-supported-in-target-RNC-or-target-system (44),
directed-retry (45),
radio-connection-with-UE-Lost (46),
rNC-unable-to-establish-all-RFCs (47),
deciphering-keys-not-available(48),
dedicated-assistance-data-not-available(49),
relocation-target-not-allowed (50),
reduce-load-in-serving-cell (51),
no-radio-resources-available-in-target-cell (52),
GERAN-Iumode-failure (x4)
} (1..64)

```

Lots of unaffected ASN1 in 9.3.4 not shown

```

GA-UncertaintyEllipse ::= SEQUENCE {
    uncertaintySemi-major    INTEGER (0..127),
    uncertaintySemi-minor    INTEGER (0..127),
    orientationOfMajorAxis   INTEGER (0..179),
    ...
}

```

```

GERAN-BSC-Container      ::= OCTET STRING
-- GERAN BSC Container as defined in [11] --

```

```

GERAN-Classmark         ::= OCTET STRING
-- GERAN Classmark as defined in [11] --

```

```

GlobalCN-ID ::= SEQUENCE {
    pLMNidentity          PLMNidentity,
    cN-ID                 CN-ID
}

```

Lots of unaffected ASN1 in 9.3.4 not shown

9.3.6 Constant Definitions

```
-- *****
--
-- Constant definitions
--
-- *****

RANAP-Constants {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) ranap (0) version1 (1) ranap-Constants (4) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN
```

Lots of unaffected ASN1 in 9.3.6 not shown

```
-- *****
--
-- IEs
--
-- *****

id-AreaIdentity                INTEGER ::= 0
id-CN-DomainIndicator          INTEGER ::= 3
id-Cause                       INTEGER ::= 4
id-ChosenEncryptionAlgorithm   INTEGER ::= 5
id-ChosenIntegrityProtectionAlgorithm INTEGER ::= 6
id-ClassmarkInformation2       INTEGER ::= 7
id-ClassmarkInformation3       INTEGER ::= 8
id-CriticalityDiagnostics      INTEGER ::= 9
id-DL-GTP-PDU-SequenceNumber  INTEGER ::= 10
id-EncryptionInformation       INTEGER ::= 11
id-IntegrityProtectionInformation INTEGER ::= 12
id-IuTransportAssociation      INTEGER ::= 13
id-L3-Information              INTEGER ::= 14
id-LAI                         INTEGER ::= 15
id-NAS-PDU                    INTEGER ::= 16
id-NonSearchingIndication      INTEGER ::= 17
id-NumberOfSteps               INTEGER ::= 18
id-OMC-ID                     INTEGER ::= 19
id-OldBSS-ToNewBSS-Information INTEGER ::= 20
id-PagingAreaID               INTEGER ::= 21
id-PagingCause                 INTEGER ::= 22
id-PermanentNAS-UE-ID         INTEGER ::= 23
id-RAB-ContextItem            INTEGER ::= 24
id-RAB-ContextList            INTEGER ::= 25
id-RAB-DataForwardingItem     INTEGER ::= 26
id-RAB-DataForwardingItem-SRNS-CtxReq INTEGER ::= 27
id-RAB-DataForwardingList     INTEGER ::= 28
id-RAB-DataForwardingList-SRNS-CtxReq INTEGER ::= 29
```

id-RAB-DataVolumeReportItem	INTEGER ::= 30
id-RAB-DataVolumeReportList	INTEGER ::= 31
id-RAB-DataVolumeReportRequestItem	INTEGER ::= 32
id-RAB-DataVolumeReportRequestList	INTEGER ::= 33
id-RAB-FailedItem	INTEGER ::= 34
id-RAB-FailedList	INTEGER ::= 35
id-RAB-ID	INTEGER ::= 36
id-RAB-QueuedItem	INTEGER ::= 37
id-RAB-QueuedList	INTEGER ::= 38
id-RAB-ReleaseFailedList	INTEGER ::= 39
id-RAB-ReleaseItem	INTEGER ::= 40
id-RAB-ReleaseList	INTEGER ::= 41
id-RAB-ReleasedItem	INTEGER ::= 42
id-RAB-ReleasedList	INTEGER ::= 43
id-RAB-ReleasedList-IuRelComp	INTEGER ::= 44
id-RAB-RelocationReleaseItem	INTEGER ::= 45
id-RAB-RelocationReleaseList	INTEGER ::= 46
id-RAB-SetupItem-RelocReq	INTEGER ::= 47
id-RAB-SetupItem-RelocReqAck	INTEGER ::= 48
id-RAB-SetupList-RelocReq	INTEGER ::= 49
id-RAB-SetupList-RelocReqAck	INTEGER ::= 50
id-RAB-SetupOrModifiedItem	INTEGER ::= 51
id-RAB-SetupOrModifiedList	INTEGER ::= 52
id-RAB-SetupOrModifyItem	INTEGER ::= 53
id-RAB-SetupOrModifyList	INTEGER ::= 54
id-RAC	INTEGER ::= 55
id-RelocationType	INTEGER ::= 56
id-RequestType	INTEGER ::= 57
id-SAI	INTEGER ::= 58
id-SAPI	INTEGER ::= 59
id-SourceID	INTEGER ::= 60
id-SourceRNC-ToTargetRNC-TransparentContainer	INTEGER ::= 61
id-TargetID	INTEGER ::= 62
id-TargetRNC-ToSourceRNC-TransparentContainer	INTEGER ::= 63
id-TemporaryUE-ID	INTEGER ::= 64
id-TraceReference	INTEGER ::= 65
id-TraceType	INTEGER ::= 66
id-TransportLayerAddress	INTEGER ::= 67
id-TriggerID	INTEGER ::= 68
id-UE-ID	INTEGER ::= 69
id-UL-GTP-PDU-SequenceNumber	INTEGER ::= 70
id-RAB-FailedtoReportItem	INTEGER ::= 71
id-RAB-FailedtoReportList	INTEGER ::= 72
id-KeyStatus	INTEGER ::= 75
id-DRX-CycleLengthCoefficient	INTEGER ::= 76
id-IuSigConIdList	INTEGER ::= 77
id-IuSigConIdItem	INTEGER ::= 78
id-IuSigConId	INTEGER ::= 79
id-DirectTransferInformationItem-RANAP-RelocInf	INTEGER ::= 80
id-DirectTransferInformationList-RANAP-RelocInf	INTEGER ::= 81
id-RAB-ContextItem-RANAP-RelocInf	INTEGER ::= 82
id-RAB-ContextList-RANAP-RelocInf	INTEGER ::= 83
id-RAB-ContextFailedtoTransferItem	INTEGER ::= 84

id-RAB-ContextFailedtoTransferList	INTEGER ::= 85
id-GlobalRNC-ID	INTEGER ::= 86
id-RAB-ReleasedItem-IuRelComp	INTEGER ::= 87
id-MessageStructure	INTEGER ::= 88
id-Alt-RAB-Parameters	INTEGER ::= 89
id-Ass-RAB-Parameters	INTEGER ::= 90
id-RAB-ModifyList	INTEGER ::= 91
id-RAB-ModifyItem	INTEGER ::= 92
id-TypeOfError	INTEGER ::= 93
id-BroadcastAssistanceDataDecipheringKeys	INTEGER ::= 94
id-LocationRelatedDataRequestType	INTEGER ::= 95
id-GlobalCN-ID	INTEGER ::= 96
id-LastKnownServiceArea	INTEGER ::= 97
id-InterSystemInformation-TransparentContainer	INTEGER ::= 98
id-NewBSS-To-OldBSS-Information	INTEGER ::= 99
id-DownlinkCellLoadInformation	INTEGER ::= 100
id-UplinkCellLoadInformation	INTEGER ::= 101
<u>id-GERAN-BSC-Container</u>	<u>INTEGER ::= x5</u>
<u>id-GERAN-Classmark</u>	<u>INTEGER ::= x6</u>
<u>id-GERAN-Iumode-RAB-Failed-RABAssgntResponse-Item</u>	<u>INTEGER ::= x7</u>
<u>id-GERAN-Iumode-RAB-FailedList-RABAssgntResponse</u>	<u>INTEGER ::= x8</u>

CHANGE REQUEST

⌘ **25.423 CR 620** ⌘ rev ⌘ Current version: **5.0.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

Title:	⌘ Removal of syntax errors from ASN.1		
Source:	⌘ R-WG3		
Work item code:	⌘ TEI	Date:	⌘ 2002-May
Category:	⌘ F	Release:	⌘ REL5
	Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:
	F (correction)		2 (GSM Phase 2)
	A (corresponds to a correction in an earlier release)		R96 (Release 1996)
	B (addition of feature),		R97 (Release 1997)
	C (functional modification of feature)		R98 (Release 1998)
	D (editorial modification)		R99 (Release 1999)
	Detailed explanations of the above categories can be found in 3GPP TR 21.900 .		REL-4 (Release 4)
			REL-5 (Release 5)

Reason for change:	⌘ There are several syntax errors in ASN.1.
Summary of change:	⌘ Syntax errors in ASN.1 were removed (please see revision makers).
Consequences if not approved:	⌘ If this CR is not approved, syntax errors still remain in ASN.1.
	<u>Impact Analysis:</u>
	Impact assessment towards the previous version of the specification (same release):
	This CR has non isolated impact with the previous version of the specification (same release) because syntax errors affect several procedures.
	This CR has an impact under protocol point of view. The impact can not be considered isolated because syntax errors affect several procedures.

Clauses affected:	⌘ 9.3.2, 9.3.3, 9.3.4 and 9.3.6		
Other specs affected:	⌘ <input type="checkbox"/> Other core specifications	⌘	
	<input type="checkbox"/> Test specifications		
	<input type="checkbox"/> O&M Specifications		
Other comments:	⌘		

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at: http://www.3gpp.org/3G_Specs/CRs.htm. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <ftp://ftp.3gpp.org/specs/>. For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.

- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

9.3.2 Elementary Procedure Definitions

```
-- *****
--
-- Elementary Procedure definitions
--
-- *****

RNSAP-PDU-Descriptions {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) rnsap (1) version1 (1) rnsap-PDU-Descriptions (0) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

-- *****
--
-- IE parameter types from other modules.
--
-- *****

IMPORTS
    Criticality,
    ProcedureID,
    TransactionID
FROM RNSAP-CommonDataTypes

    CommonMeasurementFailureIndication,
    CommonMeasurementInitiationFailure,
    CommonMeasurementInitiationRequest,
    CommonMeasurementInitiationResponse,
    CommonMeasurementReport,
    CommonMeasurementTerminationRequest,
    CommonTransportChannelResourcesFailure,
    CommonTransportChannelResourcesRequest,
    CommonTransportChannelResourcesReleaseRequest,
    CommonTransportChannelResourcesResponseFDD,
    CommonTransportChannelResourcesResponseTDD,
    CompressedModeCommand,
    DedicatedMeasurementFailureIndication,
    DedicatedMeasurementInitiationFailure,
    DedicatedMeasurementInitiationRequest,
    DedicatedMeasurementInitiationResponse,
    DedicatedMeasurementReport,
    DedicatedMeasurementTerminationRequest,
    DL-PowerControlRequest,
    DL-PowerTimeslotControlRequest,
    DownlinkSignallingTransferRequest,
    ErrorIndication,
```

InformationExchangeFailureIndication,
InformationExchangeInitiationFailure,
InformationExchangeInitiationRequest,
InformationExchangeInitiationResponse,
InformationExchangeTerminationRequest,
InformationReport,
PagingRequest,
PhysicalChannelReconfigurationCommand,
PhysicalChannelReconfigurationFailure,
PhysicalChannelReconfigurationRequestFDD,
PhysicalChannelReconfigurationRequestTDD,
PrivateMessage,
RadioLinkActivationCommandFDD,
RadioLinkActivationCommandTDD,
RadioLinkAdditionFailureFDD,
RadioLinkAdditionFailureTDD,
RadioLinkAdditionRequestFDD,
RadioLinkAdditionRequestTDD,
RadioLinkAdditionResponseFDD,
RadioLinkAdditionResponseTDD,
RadioLinkCongestionIndication,
RadioLinkDeletionRequest,
RadioLinkDeletionResponse,
RadioLinkFailureIndication,
RadioLinkPreemptionRequiredIndication,
RadioLinkReconfigurationCancel,
RadioLinkReconfigurationCommit,
RadioLinkReconfigurationFailure,
RadioLinkReconfigurationPrepareFDD,
RadioLinkReconfigurationPrepareTDD,
RadioLinkReconfigurationReadyFDD,
RadioLinkReconfigurationReadyTDD,
RadioLinkReconfigurationRequestFDD,
RadioLinkReconfigurationRequestTDD,
RadioLinkReconfigurationResponseFDD,
RadioLinkReconfigurationResponseTDD,
RadioLinkRestoreIndication,
RadioLinkSetupFailureFDD,
RadioLinkSetupFailureTDD,
RadioLinkSetupRequestFDD,
RadioLinkSetupRequestTDD,
RadioLinkSetupResponseFDD,
RadioLinkSetupResponseTDD,
RelocationCommit,
ResetRequest,
ResetResponse,
UplinkSignallingTransferIndicationFDD,
UplinkSignallingTransferIndicationTDD

FROM RNSAP-PDU-Contents

id-commonMeasurementFailure,

```

id-commonMeasurementInitiation,
id-commonMeasurementReporting,
id-commonMeasurementTermination,
id-commonTransportChannelResourcesInitialisation,
id-commonTransportChannelResourcesRelease,
id-compressedModeCommand,
id-downlinkPowerControl,
id-downlinkSignallingTransfer,
id-downlinkPowerTimeslotControl,
id-errorIndication,
id-informationExchangeFailure,
id-informationExchangeInitiation,
id-informationReporting,
id-informationExchangeTermination,
id-dedicatedMeasurementFailure,
id-dedicatedMeasurementInitiation,
id-dedicatedMeasurementReporting,
id-dedicatedMeasurementTermination,
id-paging,
id-physicalChannelReconfiguration,
id-privateMessage,
id-radioLinkActivation,
id-radioLinkAddition,
id-radioLinkCongestion,
id-radioLinkDeletion,
id-radioLinkFailure,
id-radioLinkPreemption,
id-radioLinkRestoration,
id-radioLinkSetup,
id-relocationCommit,
id-reset,
id-synchronisedRadioLinkReconfigurationCancellation,
id-synchronisedRadioLinkReconfigurationCommit,
id-synchronisedRadioLinkReconfigurationPreparation,
id-unsynchronisedRadioLinkReconfiguration,
id-uplinkSignallingTransfer
FROM RNSAP-Constants;

-- *****
--
-- Interface Elementary Procedure Class
--
-- *****

RNSAP-ELEMENTARY-PROCEDURE ::= CLASS {
    &InitiatingMessage          ,
    &SuccessfulOutcome          OPTIONAL,
    &UnsuccessfulOutcome       OPTIONAL,
    &Outcome                    OPTIONAL,
    &procedureID                ProcedureID  UNIQUE,
    &criticality                Criticality  DEFAULT ignore
}

```

```

}
WITH SYNTAX {
  INITIATING MESSAGE      &InitiatingMessage
  [SUCCESSFUL OUTCOME     &SuccessfulOutcome]
  [UNSUCCESSFUL OUTCOME   &UnsuccessfulOutcome]
  [OUTCOME                 &Outcome]
  PROCEDURE ID            &procedureID
  [CRITICALITY            &criticality]
}

-- *****
--
-- Interface PDU Definition
--
-- *****

RNSAP-PDU ::= CHOICE {
  initiatingMessage  InitiatingMessage,
  successfulOutcome  SuccessfulOutcome,
  unsuccessfulOutcome UnsuccessfulOutcome,
  outcome           Outcome,
  ...
}

InitiatingMessage ::= SEQUENCE {
  procedureID RNSAP-ELEMENTARY-PROCEDURE.&procedureID      ( {RNSAP-ELEMENTARY-PROCEDURES} ),
  criticality RNSAP-ELEMENTARY-PROCEDURE.&criticality        ( {RNSAP-ELEMENTARY-PROCEDURES} {@procedureID} ),
  transactionID TransactionID,
  value       RNSAP-ELEMENTARY-PROCEDURE.&InitiatingMessage ( {RNSAP-ELEMENTARY-PROCEDURES} {@procedureID} )
}

SuccessfulOutcome ::= SEQUENCE {
  procedureID RNSAP-ELEMENTARY-PROCEDURE.&procedureID      ( {RNSAP-ELEMENTARY-PROCEDURES} ),
  criticality RNSAP-ELEMENTARY-PROCEDURE.&criticality        ( {RNSAP-ELEMENTARY-PROCEDURES} {@procedureID} ),
  transactionID TransactionID,
  value       RNSAP-ELEMENTARY-PROCEDURE.&SuccessfulOutcome ( {RNSAP-ELEMENTARY-PROCEDURES} {@procedureID} )
}

UnsuccessfulOutcome ::= SEQUENCE {
  procedureID RNSAP-ELEMENTARY-PROCEDURE.&procedureID      ( {RNSAP-ELEMENTARY-PROCEDURES} ),
  criticality RNSAP-ELEMENTARY-PROCEDURE.&criticality        ( {RNSAP-ELEMENTARY-PROCEDURES} {@procedureID} ),
  transactionID TransactionID,
  value       RNSAP-ELEMENTARY-PROCEDURE.&UnsuccessfulOutcome ( {RNSAP-ELEMENTARY-PROCEDURES} {@procedureID} )
}

Outcome ::= SEQUENCE {
  procedureID RNSAP-ELEMENTARY-PROCEDURE.&procedureID      ( {RNSAP-ELEMENTARY-PROCEDURES} ),
  criticality RNSAP-ELEMENTARY-PROCEDURE.&criticality        ( {RNSAP-ELEMENTARY-PROCEDURES} {@procedureID} ),
  transactionID TransactionID,
  value       RNSAP-ELEMENTARY-PROCEDURE.&Outcome          ( {RNSAP-ELEMENTARY-PROCEDURES} {@procedureID} )
}

```

```

-- *****
--
-- Interface Elementary Procedure List
--
-- *****

RNSAP-ELEMENTARY-PROCEDURES RNSAP-ELEMENTARY-PROCEDURE ::= {
    RNSAP-ELEMENTARY-PROCEDURES-CLASS-1      |
    RNSAP-ELEMENTARY-PROCEDURES-CLASS-2      |
    RNSAP-ELEMENTARY-PROCEDURES-CLASS-3      |
    ...                                        |
}

RNSAP-ELEMENTARY-PROCEDURES-CLASS-1 RNSAP-ELEMENTARY-PROCEDURE ::= {
    radioLinkSetupFDD                        |
    radioLinkSetupTDD                        |
    radioLinkAdditionFDD                     |
    radioLinkAdditionTDD                     |
    radioLinkDeletion                         |
    synchronisedRadioLinkReconfigurationPreparationFDD
    synchronisedRadioLinkReconfigurationPreparationTDD
    unSynchronisedRadioLinkReconfigurationFDD
    unSynchronisedRadioLinkReconfigurationTDD
    physicalChannelReconfigurationFDD
    physicalChannelReconfigurationTDD
    dedicatedMeasurementInitiation           |
    commonTransportChannelResourcesInitialisationFDD
    commonTransportChannelResourcesInitialisationTDD
    ... ,
    commonMeasurementInitiation              |
    informationExchangeInitiation            |
    reset                                    |
}

RNSAP-ELEMENTARY-PROCEDURES-CLASS-2 RNSAP-ELEMENTARY-PROCEDURE ::= {
    uplinkSignallingTransferFDD              |
    uplinkSignallingTransferTDD              |
    downlinkSignallingTransfer                |
    relocationCommit                          |
    paging                                    |
    synchronisedRadioLinkReconfigurationCommit
    synchronisedRadioLinkReconfigurationCancellation
    radioLinkFailure                          |
    radioLinkPreemption                       |
    radioLinkRestoration                      |
    dedicatedMeasurementReporting             |
    dedicatedMeasurementTermination          |
    dedicatedMeasurementFailure               |
    downlinkPowerControlFDD                  |
    downlinkPowerTimeslotControl              |
}

```

```

compressedModeCommandFDD
commonTransportChannelResourcesRelease
errorIndication
privateMessage
...
radioLinkCongestion
commonMeasurementFailure
commonMeasurementReporting
commonMeasurementTermination
informationExchangeFailure
informationExchangeTermination
informationReporting
radioLinkActivationFDD
radioLinkActivationTDD
}

RNSAP-ELEMENTARY-PROCEDURES-CLASS-3 RNSAP-ELEMENTARY-PROCEDURE ::= {
  ...
}

-- *****
--
-- Interface Elementary Procedures
--
-- *****

radioLinkSetupFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE RadioLinkSetupRequestFDD
  SUCCESSFUL OUTCOME RadioLinkSetupResponseFDD
  UNSUCCESSFUL OUTCOME RadioLinkSetupFailureFDD
  PROCEDURE ID { procedureCode id-radioLinkSetup, ddMode fdd }
  CRITICALITY reject
}

radioLinkSetupTDD RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE RadioLinkSetupRequestTDD
  SUCCESSFUL OUTCOME RadioLinkSetupResponseTDD
  UNSUCCESSFUL OUTCOME RadioLinkSetupFailureTDD
  PROCEDURE ID { procedureCode id-radioLinkSetup, ddMode tdd }
  CRITICALITY reject
}

radioLinkAdditionFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE RadioLinkAdditionRequestFDD
  SUCCESSFUL OUTCOME RadioLinkAdditionResponseFDD
  UNSUCCESSFUL OUTCOME RadioLinkAdditionFailureFDD
  PROCEDURE ID { procedureCode id-radioLinkAddition , ddMode fdd }
  CRITICALITY reject
}

radioLinkAdditionTDD RNSAP-ELEMENTARY-PROCEDURE ::= {

```

```
INITIATING MESSAGE  RadioLinkAdditionRequestTDD
SUCCESSFUL OUTCOME  RadioLinkAdditionResponseTDD
UNSUCCESSFUL OUTCOME RadioLinkAdditionFailureTDD
PROCEDURE ID       { procedureCode id-radioLinkAddition , ddMode tdd }
CRITICALITY        reject
}

radioLinkDeletion RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE  RadioLinkDeletionRequest
  SUCCESSFUL OUTCOME  RadioLinkDeletionResponse
  PROCEDURE ID       { procedureCode id-radioLinkDeletion, ddMode common }
  CRITICALITY        reject
}

synchronisedRadioLinkReconfigurationPreparationFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE  RadioLinkReconfigurationPrepareFDD
  SUCCESSFUL OUTCOME  RadioLinkReconfigurationReadyFDD
  UNSUCCESSFUL OUTCOME RadioLinkReconfigurationFailure
  PROCEDURE ID       { procedureCode id-synchronisedRadioLinkReconfigurationPreparation, ddMode fdd }
  CRITICALITY        reject
}

synchronisedRadioLinkReconfigurationPreparationTDD RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE  RadioLinkReconfigurationPrepareTDD
  SUCCESSFUL OUTCOME  RadioLinkReconfigurationReadyTDD
  UNSUCCESSFUL OUTCOME RadioLinkReconfigurationFailure
  PROCEDURE ID       { procedureCode id-synchronisedRadioLinkReconfigurationPreparation, ddMode tdd }
  CRITICALITY        reject
}

unSynchronisedRadioLinkReconfigurationFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE  RadioLinkReconfigurationRequestFDD
  SUCCESSFUL OUTCOME  RadioLinkReconfigurationResponseFDD
  UNSUCCESSFUL OUTCOME RadioLinkReconfigurationFailure
  PROCEDURE ID       { procedureCode id-unSynchronisedRadioLinkReconfiguration, ddMode fdd }
  CRITICALITY        reject
}

unSynchronisedRadioLinkReconfigurationTDD RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE  RadioLinkReconfigurationRequestTDD
  SUCCESSFUL OUTCOME  RadioLinkReconfigurationResponseTDD
  UNSUCCESSFUL OUTCOME RadioLinkReconfigurationFailure
  PROCEDURE ID       { procedureCode id-unSynchronisedRadioLinkReconfiguration, ddMode tdd }
  CRITICALITY        reject
}

physicalChannelReconfigurationFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE  PhysicalChannelReconfigurationRequestFDD
  SUCCESSFUL OUTCOME  PhysicalChannelReconfigurationCommand
  UNSUCCESSFUL OUTCOME PhysicalChannelReconfigurationFailure
  PROCEDURE ID       { procedureCode id-physicalChannelReconfiguration, ddMode fdd }
}
```



```
    CRITICALITY    reject
}

physicalChannelReconfigurationTDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE    PhysicalChannelReconfigurationRequestTDD
    SUCCESSFUL OUTCOME    PhysicalChannelReconfigurationCommand
    UNSUCCESSFUL OUTCOME    PhysicalChannelReconfigurationFailure
    PROCEDURE ID          { procedureCode id-physicalChannelReconfiguration, ddMode tdd }
    CRITICALITY          reject
}

dedicatedMeasurementInitiation RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE    DedicatedMeasurementInitiationRequest
    SUCCESSFUL OUTCOME    DedicatedMeasurementInitiationResponse
    UNSUCCESSFUL OUTCOME    DedicatedMeasurementInitiationFailure
    PROCEDURE ID          { procedureCode id-dedicatedMeasurementInitiation, ddMode common }
    CRITICALITY          reject
}

commonTransportChannelResourcesInitialisationFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE    CommonTransportChannelResourcesRequest
    SUCCESSFUL OUTCOME    CommonTransportChannelResourcesResponseFDD
    UNSUCCESSFUL OUTCOME    CommonTransportChannelResourcesFailure
    PROCEDURE ID          { procedureCode id-commonTransportChannelResourcesInitialisation, ddMode fdd }
    CRITICALITY          reject
}

commonTransportChannelResourcesInitialisationTDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE    CommonTransportChannelResourcesRequest
    SUCCESSFUL OUTCOME    CommonTransportChannelResourcesResponseTDD
    UNSUCCESSFUL OUTCOME    CommonTransportChannelResourcesFailure
    PROCEDURE ID          { procedureCode id-commonTransportChannelResourcesInitialisation, ddMode tdd }
    CRITICALITY          reject
}

uplinkSignallingTransferFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE    UplinkSignallingTransferIndicationFDD
    PROCEDURE ID          { procedureCode id-uplinkSignallingTransfer, ddMode fdd }
    CRITICALITY          ignore
}

uplinkSignallingTransferTDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE    UplinkSignallingTransferIndicationTDD
    PROCEDURE ID          { procedureCode id-uplinkSignallingTransfer, ddMode tdd }
    CRITICALITY          ignore
}

downlinkSignallingTransfer RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE    DownlinkSignallingTransferRequest
    PROCEDURE ID          { procedureCode id-downlinkSignallingTransfer, ddMode common }
    CRITICALITY          ignore
}
```

```
}

relocationCommit RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE RelocationCommit
    PROCEDURE ID      { procedureCode id-relocationCommit, ddMode common }
    CRITICALITY      ignore
}

paging RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE PagingRequest
    PROCEDURE ID      { procedureCode id-paging, ddMode common }
    CRITICALITY      ignore
}

synchronisedRadioLinkReconfigurationCommit RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE RadioLinkReconfigurationCommit
    PROCEDURE ID      { procedureCode id-synchronisedRadioLinkReconfigurationCommit, ddMode common }
    CRITICALITY      ignore
}

synchronisedRadioLinkReconfigurationCancellation RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE RadioLinkReconfigurationCancel
    PROCEDURE ID      { procedureCode id-synchronisedRadioLinkReconfigurationCancellation, ddMode common }
    CRITICALITY      ignore
}

radioLinkFailure RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE RadioLinkFailureIndication
    PROCEDURE ID      { procedureCode id-radioLinkFailure, ddMode common }
    CRITICALITY      ignore
}

radioLinkPreemption RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE RadioLinkPreemptionRequiredIndication
    PROCEDURE ID      { procedureCode id-radioLinkPreemption, ddMode common }
    CRITICALITY      ignore
}

radioLinkRestoration RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE RadioLinkRestoreIndication
    PROCEDURE ID      { procedureCode id-radioLinkRestoration, ddMode common }
    CRITICALITY      ignore
}

dedicatedMeasurementReporting RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE DedicatedMeasurementReport
    PROCEDURE ID      { procedureCode id-dedicatedMeasurementReporting, ddMode common }
    CRITICALITY      ignore
}

dedicatedMeasurementTermination RNSAP-ELEMENTARY-PROCEDURE ::= {
```

```
INITIATING MESSAGE DedicatedMeasurementTerminationRequest
PROCEDURE ID      { procedureCode id-dedicatedMeasurementTermination, ddMode common }
CRITICALITY      ignore
}

dedicatedMeasurementFailure RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE DedicatedMeasurementFailureIndication
  PROCEDURE ID      { procedureCode id-dedicatedMeasurementFailure, ddMode common }
  CRITICALITY      ignore
}

radioLinkCongestion RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE RadioLinkCongestionIndication
  PROCEDURE ID      { procedureCode id-radioLinkCongestion, ddMode common }
  CRITICALITY      reject
}

downlinkPowerControlFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE DL-PowerControlRequest
  PROCEDURE ID      { procedureCode id-downlinkPowerControl, ddMode fdd }
  CRITICALITY      ignore
}

downlinkPowerTimeslotControl RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE DL-PowerTimeslotControlRequest
  PROCEDURE ID      { procedureCode id-downlinkPowerTimeslotControl, ddMode tdd }
  CRITICALITY      ignore
}

compressedModeCommandFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE CompressedModeCommand
  PROCEDURE ID      { procedureCode id-compressedModeCommand, ddMode fdd }
  CRITICALITY      ignore
}

commonTransportChannelResourcesRelease RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE CommonTransportChannelResourcesReleaseRequest
  PROCEDURE ID      { procedureCode id-commonTransportChannelResourcesRelease, ddMode common }
  CRITICALITY      ignore
}

errorIndication RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE ErrorIndication
  PROCEDURE ID      { procedureCode id-errorIndication, ddMode common }
  CRITICALITY      ignore
}

commonMeasurementInitiation RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE CommonMeasurementInitiationRequest
  SUCCESSFUL OUTCOME CommonMeasurementInitiationResponse
  UNSUCCESSFUL OUTCOME CommonMeasurementInitiationFailure
}
```

```
PROCEDURE ID      { procedureCode id-commonMeasurementInitiation, ddMode common }
CRITICALITY      reject
}

commonMeasurementReporting RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE CommonMeasurementReport
  PROCEDURE ID      { procedureCode id-commonMeasurementReporting, ddMode common }
  CRITICALITY      ignore
}

commonMeasurementTermination RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE CommonMeasurementTerminationRequest
  PROCEDURE ID      { procedureCode id-commonMeasurementTermination, ddMode common }
  CRITICALITY      ignore
}

commonMeasurementFailure RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE CommonMeasurementFailureIndication
  PROCEDURE ID      { procedureCode id-commonMeasurementFailure, ddMode common }
  CRITICALITY      ignore
}

informationExchangeInitiation RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE InformationExchangeInitiationRequest
  SUCCESSFUL OUTCOME InformationExchangeInitiationResponse
  UNSUCCESSFUL OUTCOME InformationExchangeInitiationFailure
  PROCEDURE ID      { procedureCode id-informationExchangeInitiation, ddMode common }
  CRITICALITY      reject
}

informationReporting RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE InformationReport
  PROCEDURE ID      { procedureCode id-informationReporting, ddMode common }
  CRITICALITY      ignore
}

informationExchangeTermination RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE InformationExchangeTerminationRequest
  PROCEDURE ID      { procedureCode id-informationExchangeTermination, ddMode common }
  CRITICALITY      ignore
}

informationExchangeFailure RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE InformationExchangeFailureIndication
  PROCEDURE ID      { procedureCode id-informationExchangeFailure, ddMode common }
  CRITICALITY      ignore
}

privateMessage RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE PrivateMessage
  PROCEDURE ID      { procedureCode id-privateMessage, ddMode common }
}
```

```

    CRITICALITY    ignore
}

reset RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE    ResetRequest
    SUCCESSFUL OUTCOME    ResetResponse
    PROCEDURE ID          { procedureCode id-reset, ddMode common }
    CRITICALITY           reject
}

radioLinkActivationFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE    RadioLinkActivationCommandFDD
    PROCEDURE ID          { procedureCode id-radioLinkActivation, ddMode fdd }
    CRITICALITY           ignore
}

radioLinkActivationTDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE    RadioLinkActivationCommandTDD
    PROCEDURE ID          { procedureCode id-radioLinkActivation, ddMode tdd }
    CRITICALITY           ignore
}

END

```

9.3.3 PDU Definitions

```

-- *****
--
-- PDU definitions for RNSAP.
--
-- *****

RNSAP-PDU-Contents {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) rnsap (1) version1 (1) rnsap-PDU-Contents (1) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

-- *****
--
-- IE parameter types from other modules.
--
-- *****

IMPORTS
    Active-Pattern-Sequence-Information,

```

AllocationRetentionPriority,
AllowedQueuingTime,
Allowed-Rate-Information,
AlphaValue,
AntennaColocationIndicator,
BLER,
SCTD-Indicator,
BindingID,
C-ID,
C-RNTI,
CCTrCH-ID,
CFN,
ClosedLoopModel-SupportIndicator,
ClosedLoopMode2-SupportIndicator,
Closedlooptimingadjustmentmode,
CN-CS-DomainIdentifier,
CN-PS-DomainIdentifier,
CNDomainType,
Cause,
CellCapabilityContainer-FDD,
CellCapabilityContainer-TDD,
CellCapabilityContainer-TDD-LCR,
CellParameterID,
ChipOffset,
CommonMeasurementAccuracy,
CommonMeasurementType,
CommonMeasurementValue,
CommonMeasurementValueInformation,
CommonTransportChannelResourcesInitialisationNotRequired,
CongestionCause,
CoverageIndicator,
CriticalityDiagnostics,
D-RNTI,
D-RNTI-ReleaseIndication,
DCH-FDD-Information,
DCH-ID,
DCH-InformationResponse,
DCH-TDD-Information,
DL-DPCH-SlotFormat,
DL-TimeslotISCP,
DL-Power,
DL-PowerBalancing-Information,
DL-PowerBalancing-ActivationIndicator,
DL-PowerBalancing-UpdatedIndicator,
DL-ReferencePowerInformation,
DL-ScramblingCode,
DL-Timeslot-Information,
DL-TimeslotLCR-Information,
DL-TimeSlot-ISCP-Info,
DL-TimeSlot-ISCP-LCR-Information,
DPC-Mode,

DPC-Mode-Change-SupportIndicator,
DPCH-ID,
DL-DPCH-TimingAdjustment,
DRACControl,
DRXCycleLengthCoefficient,
DedicatedMeasurementType,
DedicatedMeasurementValue,
DedicatedMeasurementValueInformation,
DelayedActivation,
DelayedActivationUpdate,
DiversityControlField,
DiversityMode,
DSCH-FDD-Information,
DSCH-FDD-InformationResponse,
DSCH-FlowControlInformation,
DSCH-FlowControlItem,
DSCH-TDD-Information,
DSCH-ID,
DSCH-RNTI,
SchedulingPriorityIndicator,
EnhancedDSCHPC,
EnhancedDSCHPCCounter,
EnhancedDSCHPCIndicator,
EnhancedDSCHPCWnd,
EnhancedDSCHPowerOffset,
Enhanced-PrimaryCPICH-EcNo,
FACH-FlowControlInformation,
FDD-DCHs-to-Modify,
FDD-DL-ChannelisationCodeNumber,
FDD-DL-CodeInformation,
FDD-S-CCPCH-Offset,
FDD-TPC-DownlinkStepSize,
FirstRLS-Indicator,
FNReportingIndicator,
FrameHandlingPriority,
FrameOffset,
GA-AccessPointPosition,
GA-Cell,
GA-CellAdditionalShapes,
HCS-Prio,
HSDSCH-FDD-Information,
HSDSCH-FDD-Information-Response,
HSDSCH-Information-to-Modify,
HSDSCH-MACdFlow-ID,
HSDSCH-RNTI,
HSDSCH-TDD-Information,
HSDSCH-TDD-Information-Response,
IMSI,
InformationExchangeID,
InformationReportCharacteristics,
InformationType,

InnerLoopDLPCStatus,
L3-Information,
SplitType,
LengthOfTFICI2,
LimitedPowerIncrease,
MaximumAllowedULTxPower,
MaxNrDLPhysicalchannels,
MaxNrOfUL-DPCHs,
MaxNrTimeslots,
MaxNrULPhysicalchannels,
MeasurementFilterCoefficient,
MeasurementID,
MidambleAllocationMode,
MidambleShiftAndBurstType,
MidambleShiftLCR,
MinimumSpreadingFactor,
MinUL-ChannelisationCodeLength,
MultiplexingPosition,
NeighbouringFDDCellMeasurementInformation,
NeighbouringTDDCellMeasurementInformation,
Neighbouring-GSM-CellInformation,
Neighbouring-UMTS-CellInformation,
NeighbouringTDDCellMeasurementInformationLCR,
NrOfDLchannelisationcodes,
PagingCause,
PagingRecordType,
PDSCHCodeMapping,
PayloadCRC-PresenceIndicator,
PCCPCH-Power,
PC-Preamble,
Permanent-NAS-UE-Identity,
PowerAdjustmentType,
PowerOffset,
PrimaryCCPCH-RSCP,
PrimaryCPICH-EcNo,
PrimaryCPICH-Power,
PrimaryScramblingCode,
PropagationDelay,
PunctureLimit,
QE-Selector,
RANAP-RelocationInformation,
RB-Info,
RL-ID,
RL-Set-ID,
RNC-ID,
RepetitionLength,
RepetitionPeriod,
ReportCharacteristics,
Received-total-wide-band-power,
RequestedDataValue,
RequestedDataValueInformation,

RL-Specific-DCH-Info,
RxTimingDeviationForTA,
S-FieldLength,
S-RNTI,
SCH-TimeSlot,
SAI,
SFN,
Secondary-CCPCH-Info,
Secondary-CCPCH-Info-TDD,
Secondary-LCR-CCPCH-Info-TDD,
SpecialBurstScheduling,
SSDT-CellID,
SSDT-CellID-Length,
SSDT-Indication,
SSDT-SupportIndicator,
STTD-Indicator,
STTD-SupportIndicator,
AdjustmentPeriod,
ScaledAdjustmentRatio,
MaxAdjustmentStep,
SecondaryCCPCH-SlotFormat,
SRB-Delay,
SyncCase,
SynchronisationConfiguration,
TDD-ChannelisationCode,
TDD-DCHs-to-Modify,
TDD-DL-Code-Information,
TDD-DPCHOffset,
TDD-PhysicalChannelOffset,
TDD-TPC-DownlinkStepSize,
TDD-ChannelisationCodeLCR,
TDD-DL-Code-LCR-Information,
TDD-UL-Code-Information,
TDD-UL-Code-LCR-Information,
TFCI-Coding,
TFCI-PC-SupportIndicator,
TFCI-Presence,
TFCI-SignallingMode,
TimeSlot,
TimeSlotLCR,
TimingAdvanceApplied,
ToAWE,
ToAWS,
TrafficClass,
TransmitDiversityIndicator,
TransportBearerID,
TransportBearerRequestIndicator,
TFCS,
Transmission-Gap-Pattern-Sequence-Information,
TransportFormatManagement,
TransportFormatSet,

```
TransportLayerAddress,  
TrCH-SrcStatisticsDescr,  
TSTD-Indicator,  
TSTD-Support-Indicator,  
UARFCN,  
UC-ID,  
UL-DPCCH-SlotFormat,  
UL-SIR,  
UL-FP-Mode,  
UL-PhysCH-SF-Variation,  
UL-ScramblingCode,  
UL-Timeslot-Information,  
UL-TimeslotLCR-Information,  
UL-TimeSlot-ISCP-Info,  
UL-TimeSlot-ISCP-LCR-Info,  
URA-ID,  
URA-Information,  
USCH-ID,  
USCH-Information  
FROM RNSAP-IES
```

```
PrivateIE-Container{},  
ProtocolExtensionContainer{},  
ProtocolIE-ContainerList{},  
ProtocolIE-ContainerPair{},  
ProtocolIE-ContainerPairList{},  
ProtocolIE-Container{},  
ProtocolIE-Single-Container{},  
RNSAP-PRIVATE-IES,  
RNSAP-PROTOCOL-EXTENSION,  
RNSAP-PROTOCOL-IES,  
RNSAP-PROTOCOL-IES-PAIR  
FROM RNSAP-Containers
```

```
maxNoOfDSCHs,  
maxNoOfUSCHs,  
maxNrOfCCTrCHs,  
maxNrOfDCHs,  
maxNrOfTS,  
maxNrOfDPCHs,  
maxNrOfRLs,  
maxNrOfRLSets,  
maxNrOfRLs-1,  
maxNrOfRLs-2,  
maxNrOfULTs,  
maxNrOfDLTs,  
maxResetContext,  
maxNoOfDSCHsLCR,  
maxNoOfUSCHsLCR,  
maxNrOfCCTrCHsLCR,  
maxNrOfTsLCR,
```

maxNrOfDLTsLCR,
maxNrOfULTsLCR,
maxNrOfDPCHsLCR,
maxNrOfLCRTDDNeighboursPerRNC,
maxNrOfMeasNCell,
maxNrOfMACdFlows,

id-Active-Pattern-Sequence-Information,
id-AdjustmentRatio,
id-AllowedQueuingTime,
id-AntennaColocationIndicator,
id-BindingID,
id-C-ID,
id-C-RNTI,
id-CFN,
id-CFNReportingIndicator,
id-CN-CS-DomainIdentifier,
id-CN-PS-DomainIdentifier,
id-Cause,
id-CauseLevel-RL-AdditionFailureFDD,
id-CauseLevel-RL-AdditionFailureTDD,
id-CauseLevel-RL-ReconfFailure,
id-CauseLevel-RL-SetupFailureFDD,
id-CauseLevel-RL-SetupFailureTDD,
id-CCTrCH-InformationItem-RL-FailureInd,
id-CCTrCH-InformationItem-RL-RestoreInd,
id-CellCapabilityContainer-FDD,
id-CellCapabilityContainer-TDD,
id-CellCapabilityContainer-TDD-LCR,
id-ClosedLoopModel-SupportIndicator,
id-ClosedLoopMode2-SupportIndicator,
id-CNOriginatedPage-PagingRqst,
id-CommonMeasurementAccuracy,
id-CommonMeasurementObjectType-CM-Rprt,
id-CommonMeasurementObjectType-CM-Rqst,
id-CommonMeasurementObjectType-CM-Rsp,
id-CommonMeasurementType,
id-CommonTransportChannelResourcesInitialisationNotRequired,
id-CongestionCause,
id-CoverageIndicator,
id-CriticalityDiagnostics,
id-D-RNTI,
id-D-RNTI-ReleaseIndication,
id-DCHs-to-Add-FDD,
id-DCHs-to-Add-TDD,
id-DCH-DeleteList-RL-ReconfPrepFDD,
id-DCH-DeleteList-RL-ReconfPrepTDD,
id-DCH-DeleteList-RL-ReconfRqstFDD,
id-DCH-DeleteList-RL-ReconfRqstTDD,
id-DCH-FDD-Information,
id-DCH-TDD-Information,

id-FDD-DCHs-to-Modify,
id-TDD-DCHs-to-Modify,
id-DCH-InformationResponse,
id-DCH-Rate-InformationItem-RL-CongestInd,
id-DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationListIE-RL-ReconfReadyTDD,
id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD,
id-DL-CCTrCH-InformationListIE-PhyChReconfRqstTDD,
id-DL-CCTrCH-InformationListIE-RL-AdditionRspTDD,
id-DL-CCTrCH-InformationListIE-RL-SetupRspTDD,
id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationList-RL-SetupRqstTDD,
id-FDD-DL-CodeInformation,
id-DL-DPCH-Information-RL-ReconfPrepFDD,
id-DL-DPCH-Information-RL-SetupRqstFDD,
id-DL-DPCH-Information-RL-ReconfRqstFDD,
id-DL-DPCH-InformationItem-PhyChReconfRqstTDD,
id-DL-DPCH-InformationItem-RL-AdditionRspTDD,
id-DL-DPCH-InformationItem-RL-SetupRspTDD,
id-DL-DPCH-InformationAddListIE-RL-ReconfReadyTDD,
id-DL-DPCH-InformationDeleteListIE-RL-ReconfReadyTDD,
id-DL-DPCH-InformationModifyListIE-RL-ReconfReadyTDD,
id-DL-DPCH-TimingAdjustment,
id-DL-Physical-Channel-Information-RL-SetupRqstTDD,
id-DL-PowerBalancing-Information,
id-DL-PowerBalancing-ActivationIndicator,
id-DL-PowerBalancing-UpdatedIndicator,
id-DL-ReferencePowerInformation,
id-DLReferencePower,
id-DLReferencePowerList-DL-PC-Rqst,
id-DL-ReferencePowerInformation-DL-PC-Rqst,
id-DRXCycleLengthCoefficient,
id-DedicatedMeasurementObjectType-DM-Rprt,
id-DedicatedMeasurementObjectType-DM-Rqst,
id-DedicatedMeasurementObjectType-DM-Rsp,
id-DedicatedMeasurementType,
id-DelayedActivation,
id-DelayedActivationList-RL-ActivationCmdFDD,
id-DelayedActivationList-RL-ActivationCmdTDD,
id-DelayedActivationInformation-RL-ActivationCmdFDD,
id-DelayedActivationInformation-RL-ActivationCmdTDD,
id-DPC-Mode,
id-DPC-Mode-Change-SupportIndicator,

id-DSCHs-to-Add-FDD,
id-DSCHs-to-Add-TDD,
id-DSCH-DeleteList-RL-ReconfPrepTDD,
id-DSCH-Delete-RL-ReconfPrepFDD,
id-DSCH-FDD-Information,
id-DSCH-InformationListIE-RL-AdditionRspTDD,
id-DSCH-InformationListIEs-RL-SetupRspTDD,
id-DSCH-TDD-Information,
id-DSCH-FDD-InformationResponse,
id-DSCH-ModifyList-RL-ReconfPrepTDD,
id-DSCH-Modify-RL-ReconfPrepFDD,
id-DSCH-RNTI,
id-DSCHsToBeAddedOrModified-FDD,
id-DSCHsToBeAddedOrModifiedList-RL-ReconfReadyTDD,
id-EnhancedDSCHPC,
id-EnhancedDSCHPCIndicator,
id-Enhanced-PrimaryCPICH-EcNo,
id-FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspFDD,
id-FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspTDD,
id-GA-Cell,
id-GA-CellAdditionalShapes,
id-HCS-Prio,
id-HSDSCH-FDD-Information,
id-HSDSCH-FDD-Information-Response,
id-HSDSCH-FDD-Information-to-Add,
id-HSDSCH-FDD-Information-to-Delete,
id-HSDSCH-Information-to-Modify,
id-HSDSCH-RNTI,
id-HSDSCH-TDD-Information,
id-HSDSCH-TDD-Information-Response,
id-HSDSCH-TDD-Information-Response-LCR,
id-HSDSCH-TDD-Information-to-Add,
id-HSDSCH-TDD-Information-to-Delete,
id-HSPDSCH-RL-ID,
id-IMSI,
id-InformationExchangeID,
id-InformationExchangeObjectType-InfEx-Rprt,
id-InformationExchangeObjectType-InfEx-Rqst,
id-InformationExchangeObjectType-InfEx-Rsp,
id-InformationReportCharacteristics,
id-InformationType,
id-InnerLoopDLPCStatus,
id-SplitType,
id-LengthOfTFCI2,
id-L3-Information,
id-AdjustmentPeriod,
id-MaxAdjustmentStep,
id-MeasurementFilterCoefficient,
id-MeasurementID,
id-PagingArea-PagingRqst,
id-Permanent-NAS-UE-Identity,

id-FACH-FlowControlInformation,
id-PowerAdjustmentType,
id-PrimCCPCH-RSCP-DL-PC-RqstTDD,
id-PropagationDelay,
id-RANAP-RelocationInformation,
id-ResetIndicator,
id-RL-Information-PhyChReconfRqstFDD,
id-RL-Information-PhyChReconfRqstTDD,
id-RL-Information-RL-AdditionRqstFDD,
id-RL-Information-RL-AdditionRqstTDD,
id-RL-Information-RL-DeletionRqst,
id-RL-Information-RL-FailureInd,
id-RL-Information-RL-ReconfPrepFDD,
id-RL-Information-RL-RestoreInd,
id-RL-Information-RL-SetupRqstFDD,
id-RL-Information-RL-SetupRqstTDD,
id-RL-InformationItem-RL-CongestInd,
id-RL-InformationItem-DM-Rprt,
id-RL-InformationItem-DM-Rqst,
id-RL-InformationItem-DM-Rsp,
id-RL-InformationItem-RL-PreemptRequiredInd,
id-RL-InformationItem-RL-SetupRqstFDD,
id-RL-InformationList-RL-CongestInd,
id-RL-InformationList-RL-AdditionRqstFDD,
id-RL-InformationList-RL-DeletionRqst,
id-RL-InformationList-RL-PreemptRequiredInd,
id-RL-InformationList-RL-ReconfPrepFDD,
id-RL-InformationResponse-RL-AdditionRspTDD,
id-RL-InformationResponse-RL-ReconfReadyTDD,
id-RL-InformationResponse-RL-ReconfRspTDD,
id-RL-InformationResponse-RL-SetupRspTDD,
id-RL-InformationResponseItem-RL-AdditionRspFDD,
id-RL-InformationResponseItem-RL-ReconfReadyFDD,
id-RL-InformationResponseItem-RL-ReconfRspFDD,
id-RL-InformationResponseItem-RL-SetupRspFDD,
id-RL-InformationResponseList-RL-AdditionRspFDD,
id-RL-InformationResponseList-RL-ReconfReadyFDD,
id-RL-InformationResponseList-RL-ReconfRspFDD,
id-RL-InformationResponseList-RL-SetupRspFDD,
id-RL-ReconfigurationFailure-RL-ReconfFail,
id-RL-ReconfigurationReadyTDD-RL-Information,
id-RL-ReconfigurationRequestFDD-RL-InformationList,
id-RL-ReconfigurationRequestFDD-RL-Information-IEs,
id-RL-ReconfigurationRequestTDD-RL-Information,
id-RL-Specific-DCH-Info,
id-RL-Set-InformationItem-DM-Rprt,
id-RL-Set-InformationItem-DM-Rqst,
id-RL-Set-InformationItem-DM-Rsp,
id-RL-Set-Information-RL-FailureInd,
id-RL-Set-Information-RL-RestoreInd,
id-ReportCharacteristics,

id-Reporting-Object-RL-FailureInd,
id-Reporting-Object-RL-RestoreInd,
id-RNC-ID,
id-RxTimingDeviationForTA,
id-S-RNTI,
id-SAI,
id-SFN,
id-SFNReportingIndicator,
id-SRNC-ID,
id-SSDT-CellIDforEDSCHPC,
id-STTD-SupportIndicator,
id-SuccessfulRL-InformationResponse-RL-AdditionFailureFDD,
id-SuccessfulRL-InformationResponse-RL-SetupFailureFDD,
id-TFCI-PC-SupportIndicator,
id-timeSlot-ISCP,
id-TransportBearerID,
id-TransportBearerRequestIndicator,
id-TransportLayerAddress,
id-UC-ID,
id-ContextInfoItem-Reset,
id-Transmission-Gap-Pattern-Sequence-Information,
id-UL-CCTrCH-AddInformation-RL-ReconfPrepTDD,
id-UL-CCTrCH-DeleteInformation-RL-ReconfPrepTDD,
id-UL-CCTrCH-ModifyInformation-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD,
id-UL-CCTrCH-InformationList-RL-SetupRqstTDD,
id-UL-CCTrCH-InformationListIE-PhyChReconfRqstTDD,
id-UL-CCTrCH-InformationListIE-RL-AdditionRspTDD,
id-UL-CCTrCH-InformationListIE-RL-ReconfReadyTDD,
id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD,
id-UL-DPCH-Information-RL-ReconfPrepFDD,
id-UL-DPCH-Information-RL-ReconfRqstFDD,
id-UL-DPCH-Information-RL-SetupRqstFDD,
id-UL-DPCH-InformationItem-PhyChReconfRqstTDD,
id-UL-DPCH-InformationItem-RL-AdditionRspTDD,
id-UL-DPCH-InformationItem-RL-SetupRspTDD,
id-UL-DPCH-InformationAddListIE-RL-ReconfReadyTDD,
id-UL-DPCH-InformationDeleteListIE-RL-ReconfReadyTDD,
id-UL-DPCH-InformationModifyListIE-RL-ReconfReadyTDD,
id-UL-Physical-Channel-Information-RL-SetupRqstTDD,
id-UL-SIRTarget,
id-URA-Information,
id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD,
id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureTDD,

```

id-UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD,
id-UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD,
id-USCHs-to-Add,
id-USCH-DeleteList-RL-ReconfPrepTDD,
id-USCH-InformationListIE-RL-AdditionRspTDD,
id-USCH-InformationListIEs-RL-SetupRspTDD,
id-USCH-Information,
id-USCH-ModifyList-RL-ReconfPrepTDD,
id-USCHToBeAddedOrModifiedList-RL-ReconfReadyTDD,
id-DL-Timeslot-ISCP-LCR-Information-RL-SetupRqstTDD,
id-RL-LCR-InformationResponse-RL-SetupRspTDD,
id-UL-CCTrCH-LCR-InformationListIE-RL-SetupRspTDD,
id-UL-DPCH-LCR-InformationItem-RL-SetupRspTDD,
id-DL-CCTrCH-LCR-InformationListIE-RL-SetupRspTDD,
id-DL-DPCH-LCR-InformationItem-RL-SetupRspTDD,
id-DSCH-LCR-InformationListIEs-RL-SetupRspTDD,
id-USCH-LCR-InformationListIEs-RL-SetupRspTDD,
id-DL-Timeslot-ISCP-LCR-Information-RL-AdditionRqstTDD,
id-RL-LCR-InformationResponse-RL-AdditionRspTDD,
id-UL-CCTrCH-LCR-InformationListIE-RL-AdditionRspTDD,
id-UL-DPCH-LCR-InformationItem-RL-AdditionRspTDD,
id-DL-CCTrCH-LCR-InformationListIE-RL-AdditionRspTDD,
id-DL-DPCH-LCR-InformationItem-RL-AdditionRspTDD,
id-DSCH-LCR-InformationListIEs-RL-AdditionRspTDD,
id-USCH-LCR-InformationListIEs-RL-AdditionRspTDD,
id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfReadyTDD,
id-UL-Timeslot-LCR-InformationModifyList-RL-ReconfReadyTDD,
id-DL-DPCH-LCR-InformationAddListIE-RL-ReconfReadyTDD,
id-DL-Timeslot-LCR-InformationModifyList-RL-ReconfReadyTDD,
id-UL-Timeslot-LCR-InformationList-PhyChReconfRqstTDD,
id-DL-Timeslot-LCR-InformationList-PhyChReconfRqstTDD,
id-timeSlot-ISCP-LCR-List-DL-PC-Rqst-TDD,
id-TSTD-Support-Indicator-RL-SetupRqstTDD,
id-PrimaryCCPCH-RSCP-RL-ReconfPrepTDD,
id-DL-TimeSlot-ISCP-Info-RL-ReconfPrepTDD,
id-DL-Timeslot-ISCP-LCR-Information-RL-ReconfPrepTDD,
id-IPDL-TDD-ParametersLCR,
id-neighbouringTDDCellMeasurementInformationLCR,
id-UL-SIR-Target-CCTrCH-InformationItem-RL-SetupRspTDD,
id-UL-SIR-Target-CCTrCH-LCR-InformationItem-RL-SetupRspTDD,
id-Angle-Of-Arrival-Value-LCR
id-TrafficClass

```

```
FROM RNSAP-Constants;
```

```

-- *****
--
-- RADIO LINK SETUP REQUEST FDD
--
-- *****

```



```

RadioLinkSetupRequestFDD ::= SEQUENCE {
    protocolIEs                ProtocolIE-Container    {{RadioLinkSetupRequestFDD-IEs}},
    protocolExtensions         ProtocolExtensionContainer {{RadioLinkSetupRequestFDD-Extensions}}
    ...
}

RadioLinkSetupRequestFDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-SRNC-ID                CRITICALITY reject  TYPE RNC-ID                PRESENCE mandatory } |
    { ID id-S-RNTI                 CRITICALITY reject  TYPE S-RNTI                 PRESENCE mandatory } |
    { ID id-D-RNTI                 CRITICALITY reject  TYPE D-RNTI                 PRESENCE optional  } |
    { ID id-AllowedQueuingTime     CRITICALITY reject  TYPE AllowedQueuingTime    PRESENCE optional  } |
    { ID id-UL-DPCH-Information-RL-SetupRqstFDD CRITICALITY reject  TYPE UL-DPCH-Information-RL-SetupRqstFDD PRESENCE mandatory } |
    { ID id-DL-DPCH-Information-RL-SetupRqstFDD CRITICALITY reject  TYPE DL-DPCH-Information-RL-SetupRqstFDD PRESENCE mandatory } |
    { ID id-DCH-FDD-Information     CRITICALITY reject  TYPE DCH-FDD-Information    PRESENCE mandatory } |
    { ID id-DSCH-FDD-Information    CRITICALITY reject  TYPE DSCH-FDD-Information   PRESENCE optional  } |
    { ID id-RL-Information-RL-SetupRqstFDD CRITICALITY notify  TYPE RL-InformationList-RL-SetupRqstFDD PRESENCE mandatory } |
    { ID id-Transmission-Gap-Pattern-Sequence-Information CRITICALITY reject  TYPE Transmission-Gap-Pattern-Sequence-Information PRESENCE optional } |
    { ID id-Active-Pattern-Sequence-Information CRITICALITY reject  TYPE Active-Pattern-Sequence-Information PRESENCE optional },
    ...
}

UL-DPCH-Information-RL-SetupRqstFDD ::= SEQUENCE {
    ul-ScramblingCode            UL-ScramblingCode,
    minUL-ChannelisationCodeLength MinUL-ChannelisationCodeLength,
    maxNrOfUL-DPCHs              MaxNrOfUL-DPCHs          OPTIONAL
    -- This IE shall be present if minUL-ChannelisationCodeLength equals to 4 -- ,
    ul-PunctureLimit             PunctureLimit,
    ul-TFCS                      TFCS,
    ul-DPCCH-SlotFormat          UL-DPCCH-SlotFormat,
    ul-SIRTarget                 UL-SIR                  OPTIONAL,
    diversityMode                DiversityMode,
    sSDT-CellIdLength            SSDT-CellIdLength      OPTIONAL,
    s-FieldLength                S-FieldLength          OPTIONAL,
    iE-Extensions                ProtocolExtensionContainer { {UL-DPCH-Information-RL-SetupRqstFDD-ExtIEs} } OPTIONAL,
    ...
}

UL-DPCH-Information-RL-SetupRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-DPC-Mode              CRITICALITY reject  EXTENSION DPC-Mode PRESENCE optional },
    ...
}

DL-DPCH-Information-RL-SetupRqstFDD ::= SEQUENCE {
    tFCS                         TFCS,
    dl-DPCH-SlotFormat            DL-DPCH-SlotFormat,
    nrOfDLchannelisationcodes     NrOfDLchannelisationcodes,
    tFCI-SignallingMode           TFCI-SignallingMode,
    tFCI-Presence                 TFCI-Presence          OPTIONAL
    -- This IE shall be present if DL DPCH Slot Format IE is equal to any of the values from 12 to 16 -- ,
    multiplexingPosition          MultiplexingPosition,
}

```

```

powerOffsetInformation          PowerOffsetInformation-RL-SetupRqstFDD,
fdd-dl-TPC-DownlinkStepSize    FDD-TPC-DownlinkStepSize,
limitedPowerIncrease            LimitedPowerIncrease,
innerLoopDLPCStatus            InnerLoopDLPCStatus,
iE-Extensions                  ProtocolExtensionContainer { {DL-DPCH-Information-RL-SetupRqstFDD-ExtIEs} } OPTIONAL,
...
}

DL-DPCH-Information-RL-SetupRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-SplitType    CRITICALITY reject EXTENSION SplitType PRESENCE optional }|
  { ID id-LengthOfTFCI2 CRITICALITY reject EXTENSION LengthOfTFCI2 PRESENCE optional },
  ...
}

PowerOffsetInformation-RL-SetupRqstFDD ::= SEQUENCE {
  po1-ForTFCI-Bits      PowerOffset,
  po2-ForTPC-Bits       PowerOffset,
  po3-ForPilotBits      PowerOffset,
  iE-Extensions        ProtocolExtensionContainer { { PowerOffsetInformation-RL-SetupRqstFDD-ExtIEs} } OPTIONAL,
  ...
}

PowerOffsetInformation-RL-SetupRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

RL-InformationList-RL-SetupRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-InformationItemIEs-RL-SetupRqstFDD} }

RL-InformationItemIEs-RL-SetupRqstFDD RNSAP-PROTOCOL-IES ::= {
  { ID id-RL-InformationItem-RL-SetupRqstFDD CRITICALITY notify TYPE RL-InformationItem-RL-SetupRqstFDD PRESENCE mandatory }
}

RL-InformationItem-RL-SetupRqstFDD ::= SEQUENCE {
  rL-ID          RL-ID,
  c-ID          C-ID,
  firstRLS-indicator FirstRLS-Indicator,
  frameOffset    FrameOffset,
  chipOffset     ChipOffset,
  propagationDelay PropagationDelay OPTIONAL,
  diversityControlField DiversityControlField OPTIONAL
  -- This IE shall be present if the RL is not the first one in the RL-InformationList-RL-SetupRqstFDD --,
  dl-InitialTX-Power DL-Power OPTIONAL,
  primaryCPICH-EcNo PrimaryCPICH-EcNo OPTIONAL,
  sSDT-CellID      SSDT-CellID OPTIONAL,
  transmitDiversityIndicator TransmitDiversityIndicator OPTIONAL,
  -- This IE shall be present unless Diversity Mode IE in UL DPCH Information group is "none"
  iE-Extensions    ProtocolExtensionContainer { {RL-InformationItem-RL-SetupRqstFDD-ExtIEs} } OPTIONAL,
  ...
}

```

```

RL-InformationItem-RL-SetupRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-SSDT-CellIDforEDSCHPC CRITICALITY ignore EXTENSION SSDT-CellID PRESENCE conditional } |
  -- This IE shall be present if Enhanced DSCH PC IE is present in the DSCH Information IE.
  { ID id-Enhanced-PrimaryCPICH-EcNo CRITICALITY ignore EXTENSION Enhanced-PrimaryCPICH-EcNo PRESENCE optional } |
  { ID id-RL-Specific-DCH-Info CRITICALITY ignore EXTENSION RL-Specific-DCH-Info PRESENCE optional } |
  { ID id-DelayedActivation CRITICALITY reject EXTENSION DelayedActivation PRESENCE optional },
  ...
}

RadioLinkSetupRequestFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-Permanent-NAS-UE-Identity CRITICALITY ignore EXTENSION Permanent-NAS-UE-Identity PRESENCE optional } |
  { ID id-DL-PowerBalancing-Information CRITICALITY ignore EXTENSION DL-PowerBalancing-Information PRESENCE optional } |
  { ID id-HSDSCH-FDD-Information CRITICALITY reject EXTENSION HSDSCH-FDD-Information PRESENCE optional } |
  { ID id-HSPDSCH-RL-ID CRITICALITY reject EXTENSION RL-ID PRESENCE conditional },
  ...
}

-- *****
--
-- RADIO LINK SETUP REQUEST TDD
--
-- *****

RadioLinkSetupRequestTDD ::= SEQUENCE {
  protocolIEs ProtocolIE-Container {{RadioLinkSetupRequestTDD-IEs}},
  protocolExtensions ProtocolExtensionContainer {{RadioLinkSetupRequestTDD-Extensions}} OPTIONAL,
  ...
}

RadioLinkSetupRequestTDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-SRNC-ID CRITICALITY reject TYPE RNC-ID PRESENCE mandatory } |
  { ID id-S-RNTI CRITICALITY reject TYPE S-RNTI PRESENCE mandatory } |
  { ID id-D-RNTI CRITICALITY reject TYPE D-RNTI PRESENCE optional } |
  { ID id-UL-Physical-Channel-Information-RL-SetupRqstTDD CRITICALITY reject TYPE UL-Physical-Channel-Information-RL-SetupRqstTDD PRESENCE mandatory } |
  { ID id-DL-Physical-Channel-Information-RL-SetupRqstTDD CRITICALITY reject TYPE DL-Physical-Channel-Information-RL-SetupRqstTDD PRESENCE mandatory } |
  { ID id-AllowedQueuingTime CRITICALITY reject TYPE AllowedQueuingTime PRESENCE optional } |
  { ID id-UL-CCTrCH-InformationList-RL-SetupRqstTDD CRITICALITY notify TYPE UL-CCTrCH-InformationList-RL-SetupRqstTDD PRESENCE optional } |
  { ID id-DL-CCTrCH-InformationList-RL-SetupRqstTDD CRITICALITY notify TYPE DL-CCTrCH-InformationList-RL-SetupRqstTDD PRESENCE optional } |
  { ID id-DCH-TDD-Information CRITICALITY reject TYPE DCH-TDD-Information PRESENCE optional } |
  { ID id-DSCH-TDD-Information CRITICALITY reject TYPE DSCH-TDD-Information PRESENCE optional } |
  { ID id-USCH-Information CRITICALITY reject TYPE USCH-Information PRESENCE optional } |
  { ID id-RL-Information-RL-SetupRqstTDD CRITICALITY reject TYPE RL-Information-RL-SetupRqstTDD PRESENCE mandatory },
  ...
}

UL-Physical-Channel-Information-RL-SetupRqstTDD ::= SEQUENCE {
  maxNrTimeslots-UL MaxNrTimeslots,
  minimumSpreadingFactor-UL MinimumSpreadingFactor,
  maxNrULPhysicalchannels MaxNrULPhysicalchannels,

```

```

    iE-Extensions          ProtocolExtensionContainer { {UL-Physical-Channel-InformationItem-RL-SetupRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

UL-Physical-Channel-InformationItem-RL-SetupRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-Physical-Channel-Information-RL-SetupRqstTDD ::= SEQUENCE {
    maxNrTimeslots-DL          MaxNrTimeslots,
    minimumSpreadingFactor-DL MinimumSpreadingFactor,
    maxNrDLPhysicalchannels    MaxNrDLPhysicalchannels,
    iE-Extensions              ProtocolExtensionContainer { {DL-Physical-Channel-InformationItem-RL-SetupRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

DL-Physical-Channel-InformationItem-RL-SetupRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-CCTrCH-InformationList-RL-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {UL-CCTrCH-
InformationItemIEs-RL-SetupRqstTDD} }

UL-CCTrCH-InformationItemIEs-RL-SetupRqstTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD CRITICALITY notify TYPE UL-CCTrCH-InformationItem-RL-SetupRqstTDD PRESENCE mandatory }
}

UL-CCTrCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
    cCTrCH-ID          CCTrCH-ID,
    ul-TFCS            TFCS,
    tFCI-Coding        TFCI-Coding,
    ul-PunctureLimit   PunctureLimit,
    iE-Extensions      ProtocolExtensionContainer { {UL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

UL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CCTrCH-InformationList-RL-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {DL-CCTrCH-
InformationItemIEs-RL-SetupRqstTDD} }

DL-CCTrCH-InformationItemIEs-RL-SetupRqstTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD CRITICALITY notify TYPE DL-CCTrCH-InformationItem-RL-SetupRqstTDD PRESENCE mandatory }
}

DL-CCTrCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
    cCTrCH-ID          CCTrCH-ID,
    dl-TFCS            TFCS,
    tFCI-Coding        TFCI-Coding,

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```

dl-PunctureLimit          PunctureLimit,
tdd-TPC-DownlinkStepSize TDD-TPC-DownlinkStepSize,
cCtRCH-TPCList           CCTrCH-TPCList-RL-SetupRqstTDD OPTIONAL,
iE-Extensions            ProtocolExtensionContainer { {DL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs} } OPTIONAL,
...
}

DL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

CCTrCH-TPCList-RL-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF CCTrCH-TPCItem-RL-SetupRqstTDD

CCTrCH-TPCItem-RL-SetupRqstTDD ::= SEQUENCE {
  cCtRCH-ID          CCTrCH-ID,
  iE-Extensions     ProtocolExtensionContainer { { CCTrCH-TPCItem-RL-SetupRqstTDD-ExtIEs} } OPTIONAL,
  ...
}

CCTrCH-TPCItem-RL-SetupRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

RL-Information-RL-SetupRqstTDD ::= SEQUENCE {
  rL-ID          RL-ID,
  c-ID          C-ID,
  frameOffset   FrameOffset,
  specialBurstScheduling SpecialBurstScheduling,
  primaryCCPCH-RSCP PrimaryCCPCH-RSCP OPTIONAL,
  dL-TimeSlot-ISCP DL-TimeSlot-ISCP-Info OPTIONAL,
  --for 3.84Mcps TDD only
  iE-Extensions ProtocolExtensionContainer { {RL-Information-RL-SetupRqstTDD-ExtIEs} } OPTIONAL,
  ...
}

RL-Information-RL-SetupRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-DL-TimeSlot-ISCP-LCR-Information-RL-SetupRqstTDD CRITICALITY reject EXTENSION DL-TimeSlot-ISCP-LCR-Information PRESENCE optional }|
  { ID id-TSTD-Support-Indicator-RL-SetupRqstTDD CRITICALITY ignore EXTENSION TSTD-Support-Indicator PRESENCE optional }|
  --for 1.28Mcps TDD only
  { ID id-RL-Specific-DCH-Info CRITICALITY ignore EXTENSION RL-Specific-DCH-Info PRESENCE optional }|
  { ID id-DelayedActivation CRITICALITY reject EXTENSION DelayedActivation PRESENCE optional },
  ...
}

RadioLinkSetupRequestTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-Permanent-NAS-UE-Identity CRITICALITY ignore EXTENSION Permanent-NAS-UE-Identity PRESENCE optional }|
  { ID id-HSDSCH-TDD-Information CRITICALITY reject EXTENSION HSDSCH-TDD-Information PRESENCE optional }|
  { ID id-HSPDSCH-RL-ID CRITICALITY reject EXTENSION RL-ID PRESENCE conditional },
  ...
}

```

```

}
-- *****
--
-- RADIO LINK SETUP RESPONSE FDD
--
-- *****

RadioLinkSetupResponseFDD ::= SEQUENCE {
    protocolIEs                ProtocolIE-Container    {{RadioLinkSetupResponseFDD-IEs}},
    protocolExtensions         ProtocolExtensionContainer {{RadioLinkSetupResponseFDD-Extensions}}    OPTIONAL,
    ...
}

RadioLinkSetupResponseFDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-D-RNTI                CRITICALITY ignore TYPE D-RNTI                PRESENCE optional } |
    { ID id-CN-PS-DomainIdentifier CRITICALITY ignore TYPE CN-PS-DomainIdentifier PRESENCE optional } |
    { ID id-CN-CS-DomainIdentifier CRITICALITY ignore TYPE CN-CS-DomainIdentifier PRESENCE optional } |
    { ID id-RL-InformationResponseList-RL-SetupRspFDD CRITICALITY ignore TYPE RL-InformationResponseList-RL-SetupRspFDD PRESENCE mandatory } |
    { ID id-UL-SIRTarget          CRITICALITY ignore TYPE UL-SIR                PRESENCE optional } |
    { ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional },
    ...
}

RL-InformationResponseList-RL-SetupRspFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-InformationResponseItemIEs-RL-SetupRspFDD} }

RL-InformationResponseItemIEs-RL-SetupRspFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationResponseItem-RL-SetupRspFDD CRITICALITY ignore TYPE RL-InformationResponseItem-RL-SetupRspFDD PRESENCE mandatory }
}

RL-InformationResponseItem-RL-SetupRspFDD ::= SEQUENCE {
    rL-ID                RL-ID,
    rL-Set-ID            RL-Set-ID,
    uRA-Information      URA-Information    OPTIONAL,
    sAI                  SAI,
    gA-Cell              GA-Cell    OPTIONAL,
    gA-AccessPointPosition GA-AccessPointPosition    OPTIONAL,
    received-total-wide-band-power Received-total-wide-band-power,
    secondary-CCPCH-Info Secondary-CCPCH-Info    OPTIONAL,
    dl-CodeInformation   FDD-DL-CodeInformation,
    diversityIndication DiversityIndication-RL-SetupRspFDD,
    -- This IE represents both the Diversity Indication IE and the choice based on the diversity indication as described in
    -- the tabular message format in subclause 9.1.
    sSDT-SupportIndicator SSDT-SupportIndicator,
    maxUL-SIR            UL-SIR,
    minUL-SIR            UL-SIR,
    closedloopTimingadjustmentmode ClosedloopTimingadjustmentmode    OPTIONAL,
    maximumAllowedULTxPower MaximumAllowedULTxPower,
    maximumDLTxPower    DL-Power,
    minimumDLTxPower    DL-Power,

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primaryScramblingCode      PrimaryScramblingCode  OPTIONAL,
uL-UARFCN                  UARFCN                  OPTIONAL,
dL-UARFCN                  UARFCN                  OPTIONAL,
primaryCPICH-Power        PrimaryCPICH-Power,
dSCHInformationResponse    DSCH-InformationResponse-RL-SetupRspFDD OPTIONAL,
neighbouring-UMTS-CellInformation  Neighbouring-UMTS-CellInformation OPTIONAL,
neighbouring-GSM-CellInformation  Neighbouring-GSM-CellInformation OPTIONAL,
pC-Preamble                PC-Preamble,
sRB-Delay                  SRB-Delay,
iE-Extensions              ProtocolExtensionContainer { {RL-InformationResponseItem-RL-SetupRspFDD-ExtIEs} } OPTIONAL,
...
}

RL-InformationResponseItem-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-GA-CellAdditionalShapes      CRITICALITY ignore EXTENSION  GA-CellAdditionalShapes      PRESENCE optional }|
  { ID id-DL-PowerBalancing-ActivationIndicator  CRITICALITY ignore EXTENSION  DL-PowerBalancing-ActivationIndicator  PRESENCE optional}|
  { ID id-HSDSCH-FDD-Information-Response      CRITICALITY ignore EXTENSION  HSDSCH-FDD-Information-Response      PRESENCE optional}|
  { ID id-TFCI-PC-SupportIndicator      CRITICALITY ignore EXTENSION  TFCI-PC-SupportIndicator      PRESENCE optional }|
  { ID id-HCS-Prio                CRITICALITY ignore EXTENSION  HCS-Prio                PRESENCE optional },
  ...
}

DiversityIndication-RL-SetupRspFDD ::= CHOICE {
  combining                Combining-RL-SetupRspFDD,
  nonCombiningOrFirstRL    NonCombiningOrFirstRL-RL-SetupRspFDD
}

Combining-RL-SetupRspFDD ::= SEQUENCE {
  rL-ID                    RL-ID,
  iE-Extensions            ProtocolExtensionContainer { { CombiningItem-RL-SetupRspFDD-ExtIEs} } OPTIONAL,
  ...
}

CombiningItem-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-DCH-InformationResponse      CRITICALITY ignore EXTENSION  DCH-InformationResponse      PRESENCE optional },
  ...
}

NonCombiningOrFirstRL-RL-SetupRspFDD ::= SEQUENCE {
  dCH-InformationResponse    DCH-InformationResponse,
  iE-Extensions              ProtocolExtensionContainer { { NonCombiningOrFirstRLItem-RL-SetupRspFDD-ExtIEs} } OPTIONAL,
  ...
}

NonCombiningOrFirstRLItem-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DSCH-InformationResponse-RL-SetupRspFDD ::= ProtocolIE-Single-Container {{ DSCH-InformationResponseIE-RL-SetupRspFDD }}

```

```

DSCH-InformationResponseIE-RL-SetupRspFDD RNSAP-PROTOCOL-IES ::= {
  { ID id-DSCH-FDD-InformationResponse CRITICALITY ignore TYPE DSCH-FDD-InformationResponse PRESENCE mandatory }
}

RadioLinkSetupResponseFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-DSCH-RNTI CRITICALITY ignore EXTENSION DSCH-RNTI PRESENCE optional } |
  { ID id-HSDSCH-RNTI CRITICALITY reject EXTENSION HSDSCH-RNTI PRESENCE optional },
  ...
}

-- *****
--
-- RADIO LINK SETUP RESPONSE TDD
--
-- *****

RadioLinkSetupResponseTDD ::= SEQUENCE {
  protocolIEs ProtocolIE-Container {{RadioLinkSetupResponseTDD-IEs}},
  protocolExtensions ProtocolExtensionContainer {{RadioLinkSetupResponseTDD-Extensions}} OPTIONAL,
  ...
}

RadioLinkSetupResponseTDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-D-RNTI CRITICALITY ignore TYPE D-RNTI PRESENCE optional } |
  { ID id-CN-PS-DomainIdentifier CRITICALITY ignore TYPE CN-PS-DomainIdentifier PRESENCE optional } |
  { ID id-CN-CS-DomainIdentifier CRITICALITY ignore TYPE CN-CS-DomainIdentifier PRESENCE optional } |
  { ID id-RL-InformationResponse-RL-SetupRspTDD CRITICALITY ignore TYPE RL-InformationResponse-RL-SetupRspTDD PRESENCE optional } |
  --Mandatory for 3.84Mcps TDD only
  { ID id-UL-SIRTarget CRITICALITY ignore TYPE UL-SIR PRESENCE mandatory } |
  { ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional },
  ...
}

RL-InformationResponse-RL-SetupRspTDD ::= SEQUENCE {
  rL-ID RL-ID,
  uRA-Information URA-Information OPTIONAL,
  sAI SAI,
  gA-Cell GA-Cell OPTIONAL,
  gA-AccessPointPosition GA-AccessPointPosition OPTIONAL,
  ul-TimeSlot-ISCP-Info UL-TimeSlot-ISCP-Info,
  maxUL-SIR UL-SIR,
  minUL-SIR UL-SIR,
  maximumAllowedULTxPower MaximumAllowedULTxPower,
  maximumDLTxPower DL-Power,
  minimumDLTxPower DL-Power,
  uARFCNforNt UARFCN OPTIONAL,
  cellParameterID CellParameterID OPTIONAL,
  syncCase SyncCase OPTIONAL,
  sCH-TimeSlot SCH-TimeSlot OPTIONAL,
  -- This IE shall be present if Sync Case IE is Case2. --
  sCTD-Indicator SCTD-Indicator OPTIONAL,

```



```

pCCPCH-Power          PCCPCH-Power,
timingAdvanceApplied  TimingAdvanceApplied,
alphaValue            AlphaValue,
ul-PhysCH-SF-Variation  UL-PhysCH-SF-Variation,
synchronisationConfiguration  SynchronisationConfiguration,
secondary-CCPCH-Info-TDD  Secondary-CCPCH-Info-TDD  OPTIONAL,
ul-CCTrCHInformation  UL-CCTrCHInformationList-RL-SetupRspTDD  OPTIONAL,
dl-CCTrCHInformation  DL-CCTrCHInformationList-RL-SetupRspTDD  OPTIONAL,
dCH-InformationResponse  DCH-InformationResponseList-RL-SetupRspTDD  OPTIONAL,
dsch-InformationResponse  DSCH-InformationResponse-RL-SetupRspTDD  OPTIONAL,
usch-InformationResponse  USCH-InformationResponse-RL-SetupRspTDD  OPTIONAL,
neighbouring-UMTS-CellInformation  Neighbouring-UMTS-CellInformation  OPTIONAL,
neighbouring-GSM-CellInformation  Neighbouring-GSM-CellInformation  OPTIONAL,
iE-Extensions          ProtocolExtensionContainer { {RL-InformationResponse-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
...
}

RL-InformationResponse-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-GA-CellAdditionalShapes  CRITICALITY ignore  EXTENSION  GA-CellAdditionalShapes  PRESENCE optional }|
  { ID id-HSDSCH-TDD-Information-Response  CRITICALITY ignore  EXTENSION  HSDSCH-TDD-Information-Response  PRESENCE optional}|
  { ID id-HCS-Prio  CRITICALITY ignore  EXTENSION  HCS-Prio  PRESENCE optional },
  ...
}

UL-CCTrCHInformationList-RL-SetupRspTDD ::= ProtocolIE-Single-Container {{UL-CCTrCHInformationListIEs-RL-SetupRspTDD}}

UL-CCTrCHInformationListIEs-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD  CRITICALITY ignore  TYPE  UL-CCTrCHInformationListIE-RL-SetupRspTDD  PRESENCE mandatory }
}

UL-CCTrCHInformationListIE-RL-SetupRspTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCHInformationItem-RL-SetupRspTDD

UL-CCTrCHInformationItem-RL-SetupRspTDD ::= SEQUENCE {
  cCTrCH-ID          CCTrCH-ID,
  ul-DPCH-Information  UL-DPCH-InformationList-RL-SetupRspTDD  OPTIONAL,
  iE-Extensions          ProtocolExtensionContainer { {UL-CCTrCHInformationItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
  ...
}

UL-CCTrCHInformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  {ID id-UL-SIR-Target-CCTrCH-InformationItem-RL-SetupRspTDD  CRITICALITY ignore  EXTENSION  UL-SIR  PRESENCE optional},
  ...
}

UL-DPCH-InformationList-RL-SetupRspTDD ::= ProtocolIE-Single-Container { {UL-DPCH-InformationListIEs-RL-SetupRspTDD} }

UL-DPCH-InformationListIEs-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-UL-DPCH-InformationItem-RL-SetupRspTDD  CRITICALITY ignore  TYPE  UL-DPCH-InformationItem-RL-SetupRspTDD  PRESENCE mandatory }
}

```

```

UL-DPCH-InformationItem-RL-SetupRspTDD ::= SEQUENCE {
    repetitionPeriod      RepetitionPeriod,
    repetitionLength      RepetitionLength,
    tDD-DPCHOffset        TDD-DPCHOffset,
    uL-Timeslot-Information UL-Timeslot-Information,
    iE-Extensions         ProtocolExtensionContainer { {UL-DPCH-InformationItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
    ...
}

UL-DPCH-InformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CCTrCHInformationList-RL-SetupRspTDD ::= ProtocolIE-Single-Container {{DL-CCTrCHInformationListIEs-RL-SetupRspTDD}}

DL-CCTrCHInformationListIEs-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-CCTrCH-InformationListIE-RL-SetupRspTDD    CRITICALITY ignore TYPE DL-CCTrCHInformationListIE-RL-SetupRspTDD PRESENCE mandatory }
}

DL-CCTrCHInformationListIE-RL-SetupRspTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCHInformationItem-RL-SetupRspTDD

DL-CCTrCHInformationItem-RL-SetupRspTDD ::= SEQUENCE {
    cCTrCH-ID          CCTrCH-ID,
    dl-DPCH-Information DL-DPCH-InformationList-RL-SetupRspTDD OPTIONAL,
    iE-Extensions      ProtocolExtensionContainer { {DL-CCTrCHInformationItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
    ...
}

DL-CCTrCHInformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-InformationList-RL-SetupRspTDD ::= ProtocolIE-Single-Container { {DL-DPCH-InformationListIEs-RL-SetupRspTDD} }

DL-DPCH-InformationListIEs-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationItem-RL-SetupRspTDD    CRITICALITY ignore TYPE DL-DPCH-InformationItem-RL-SetupRspTDD PRESENCE mandatory }
}

DL-DPCH-InformationItem-RL-SetupRspTDD ::= SEQUENCE {
    repetitionPeriod      RepetitionPeriod,
    repetitionLength      RepetitionLength,
    tDD-DPCHOffset        TDD-DPCHOffset,
    dL-Timeslot-Information DL-Timeslot-Information,
    iE-Extensions         ProtocolExtensionContainer { {DL-DPCH-InformationItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
    ...
}

DL-DPCH-InformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

DCH-InformationResponseList-RL-SetupRspTDD ::= ProtocolIE-Single-Container {{DCH-InformationResponseListIEs-RL-SetupRspTDD}}

DCH-InformationResponseListIEs-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-DCH-InformationResponse  CRITICALITY ignore  TYPE DCH-InformationResponse  PRESENCE mandatory }
}

DSCH-InformationResponse-RL-SetupRspTDD ::= ProtocolIE-Single-Container {{DSCH-InformationList-RL-SetupRspTDD}}

DSCH-InformationList-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-DSCH-InformationListIEs-RL-SetupRspTDD  CRITICALITY ignore  TYPE DSCH-InformationListIEs-RL-SetupRspTDD  PRESENCE mandatory }
}

DSCH-InformationListIEs-RL-SetupRspTDD ::= SEQUENCE (SIZE(0..maxNoOfDSCHs)) OF DSCHInformationItem-RL-SetupRspTDD

DSCHInformationItem-RL-SetupRspTDD ::= SEQUENCE {
  dsch-ID          DSCH-ID,
  dsch-FlowControlInformation  DSCH-FlowControlInformation,
  bindingID        BindingID  OPTIONAL,
  transportLayerAddress  TransportLayerAddress  OPTIONAL,
  transportFormatManagement  TransportFormatManagement,
  iE-Extensions      ProtocolExtensionContainer { {DSCHInformationItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
  ...
}

DSCHInformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

USCH-InformationResponse-RL-SetupRspTDD ::= ProtocolIE-Single-Container {{USCH-InformationList-RL-SetupRspTDD}}

USCH-InformationList-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-USCH-InformationListIEs-RL-SetupRspTDD  CRITICALITY ignore  TYPE USCH-InformationListIEs-RL-SetupRspTDD  PRESENCE mandatory }
}

USCH-InformationListIEs-RL-SetupRspTDD ::= SEQUENCE (SIZE(0..maxNoOfUSCHs)) OF USCHInformationItem-RL-SetupRspTDD

USCHInformationItem-RL-SetupRspTDD ::= SEQUENCE {
  usch-ID          USCH-ID,
  bindingID        BindingID  OPTIONAL,
  transportLayerAddress  TransportLayerAddress  OPTIONAL,
  transportFormatManagement  TransportFormatManagement,
  iE-Extensions      ProtocolExtensionContainer { {USCHInformationItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
  ...
}

USCHInformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

RadioLinkSetupResponseTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {

```

```

    { ID id-RL-LCR-InformationResponse-RL-SetupRspTDD CRITICALITY ignore EXTENSION RL-LCR-InformationResponse-RL-SetupRspTDD PRESENCE
mandatory}}
    --Mandatory for 1.28Mcps TDD only
    { ID id-HSDSCH-RNTI CRITICALITY reject EXTENSION HSDSCH-RNTI PRESENCE optional },
    ...
}

RL-LCR-InformationResponse-RL-SetupRspTDD ::= SEQUENCE {
    rL-ID RL-ID,
    uRA-Information URA-Information,
    sAI SAI,
    gA-Cell GA-Cell OPTIONAL,
    gA-AccessPointPosition GA-AccessPointPosition OPTIONAL,
    ul-TimeSlot-ISCP-LCR-Info UL-TimeSlot-ISCP-LCR-Info,
    maxUL-SIR UL-SIR,
    minUL-SIR UL-SIR,
    maximumAllowedULTxPower MaximumAllowedULTxPower,
    maximumDLTxPower DL-Power,
    minimumDLTxPower DL-Power,
    uARFCNforNt UARFCN OPTIONAL,
    cellParameterID CellParameterID OPTIONAL,
    sCTD-Indicator SCTD-Indicator OPTIONAL,
    pCCPCH-Power PCCPCH-Power,
    alphaValue AlphaValue,
    ul-PhysCH-SF-Variation UL-PhysCH-SF-Variation,
    synchronisationConfiguration SynchronisationConfiguration,
    secondary-LCR-CCPCH-Info-TDD Secondary-LCR-CCPCH-Info-TDD OPTIONAL,
    ul-LCR-CCTrCHInformationList-RL-SetupRspTDD UL-LCR-CCTrCHInformationList-RL-SetupRspTDD OPTIONAL,
    dl-LCR-CCTrCHInformationList-RL-SetupRspTDD DL-LCR-CCTrCHInformationList-RL-SetupRspTDD OPTIONAL,
    dCH-InformationResponseList-RL-SetupRspTDD DCH-InformationResponseList-RL-SetupRspTDD OPTIONAL,
    dsch-LCR-InformationResponseList-RL-SetupRspTDD DSCH-LCR-InformationResponseList-RL-SetupRspTDD OPTIONAL,
    usch-LCR-InformationResponseList-RL-SetupRspTDD USCH-LCR-InformationResponseList-RL-SetupRspTDD OPTIONAL,
    neighbouring-UMTS-CellInformationList-RL-SetupRspTDD Neighbouring-UMTS-CellInformationList-RL-SetupRspTDD OPTIONAL,
    neighbouring-GSM-CellInformationList-RL-SetupRspTDD Neighbouring-GSM-CellInformationList-RL-SetupRspTDD OPTIONAL,
    iE-Extensions ProtocolExtensionContainer { { RL-LCR-InformationResponseList-RL-SetupRspTDD-ExtIEs } } OPTIONAL,
    ...
}

RL-LCR-InformationResponseList-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-HSDSCH-TDD-Information-Response-LCR CRITICALITY ignore EXTENSION HSDSCH-TDD-Information-Response PRESENCE optional},
    ...
}

UL-LCR-CCTrCHInformationList-RL-SetupRspTDD ::= ProtocolIE-Single-Container {{UL-LCR-CCTrCHInformationListIEs-RL-SetupRspTDD}}

UL-LCR-CCTrCHInformationListIEs-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-UL-CCTrCH-LCR-InformationListIE-RL-SetupRspTDD CRITICALITY ignore TYPE UL-LCR-CCTrCHInformationListIE-RL-SetupRspTDD PRESENCE mandatory
}
}

UL-LCR-CCTrCHInformationListIE-RL-SetupRspTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHsLCR)) OF UL-LCR-CCTrCHInformationItem-RL-SetupRspTDD

```

```

UL-LCR-CCTrCHInformationItem-RL-SetupRspTDD ::= SEQUENCE {
    cCTrCH-ID                CCTrCH-ID,
    ul-DPCH-LCR-Information    UL-DPCH-LCR-InformationList-RL-SetupRspTDD    OPTIONAL,
    iE-Extensions              ProtocolExtensionContainer { {UL-LCR-CCTrCHInformationItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
    ...
}

UL-LCR-CCTrCHInformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    {ID id-UL-SIR-Target-CCTrCH-LCR-InformationItem-RL-SetupRspTDD    CRITICALITY ignore    EXTENSION UL-SIR    PRESENCE optional},
    ...
}

UL-DPCH-LCR-InformationList-RL-SetupRspTDD ::= ProtocolIE-Single-Container { {UL-DPCH-LCR-InformationListIEs-RL-SetupRspTDD} }

UL-DPCH-LCR-InformationListIEs-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-LCR-InformationItem-RL-SetupRspTDD    CRITICALITY ignore    TYPE UL-DPCH-LCR-InformationItem-RL-SetupRspTDD    PRESENCE mandatory }
}

UL-DPCH-LCR-InformationItem-RL-SetupRspTDD ::= SEQUENCE {
    repetitionPeriod          RepetitionPeriod,
    repetitionLength          RepetitionLength,
    tDD-DPCHOffset            TDD-DPCHOffset,
    uL-TimeslotLCR-Information UL-TimeslotLCR-Information,
    iE-Extensions              ProtocolExtensionContainer { {UL-DPCH-LCR-InformationItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
    ...
}

UL-DPCH-LCR-InformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-LCR-CCTrCHInformationList-RL-SetupRspTDD ::= ProtocolIE-Single-Container {{DL-LCR-CCTrCHInformationListIEs-RL-SetupRspTDD}}

DL-LCR-CCTrCHInformationListIEs-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-CCTrCH-LCR-InformationListIE-RL-SetupRspTDD    CRITICALITY ignore    TYPE DL-CCTrCH-LCR-InformationListIE-RL-SetupRspTDD    PRESENCE mandatory
}
}

DL-CCTrCH-LCR-InformationListIE-RL-SetupRspTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHsLCR)) OF DL-CCTrCH-LCR-InformationItem-RL-SetupRspTDD

DL-CCTrCH-LCR-InformationItem-RL-SetupRspTDD ::= SEQUENCE {
    cCTrCH-ID                CCTrCH-ID,
    dl-DPCH-LCR-Information    DL-DPCH-LCR-InformationList-RL-SetupRspTDD    OPTIONAL,
    iE-Extensions              ProtocolExtensionContainer { {DL-CCTrCH-LCR-InformationItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
    ...
}

DL-CCTrCH-LCR-InformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

DL-DPCH-LCR-InformationList-RL-SetupRspTDD ::= ProtocolIE-Single-Container { {DL-DPCH-LCR-InformationListIEs-RL-SetupRspTDD} }

DL-DPCH-LCR-InformationListIEs-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-DL-DPCH-LCR-InformationItem-RL-SetupRspTDD      CRITICALITY ignore  TYPE DL-DPCH-LCR-InformationItem-RL-SetupRspTDD  PRESENCE mandatory }
}

DL-DPCH-LCR-InformationItem-RL-SetupRspTDD ::= SEQUENCE {
  repetitionPeriod      RepetitionPeriod,
  repetitionLength      RepetitionLength,
  tDD-DPCHOffset        TDD-DPCHOffset,
  dL-Timeslot-LCR-Information  DL-TimeslotLCR-Information,
  tSTD-Indicator         TSTD-Indicator,
  iE-Extensions          ProtocolExtensionContainer { {DL-DPCH-LCR-InformationItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
  ...
}

DL-DPCH-LCR-InformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DSCH-LCR-InformationResponse-RL-SetupRspTDD ::= ProtocolIE-Single-Container { {DSCH-LCR-InformationList-RL-SetupRspTDD} }

DSCH-LCR-InformationList-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-DSCH-LCR-InformationListIEs-RL-SetupRspTDD      CRITICALITY ignore  TYPE DSCH-LCR-InformationListIEs-RL-SetupRspTDD  PRESENCE mandatory }
}

DSCH-LCR-InformationListIEs-RL-SetupRspTDD ::= SEQUENCE (SIZE(0..maxNoOfDSCHsLCR)) OF DSCH-LCR-InformationItem-RL-SetupRspTDD

DSCH-LCR-InformationItem-RL-SetupRspTDD ::= SEQUENCE {
  dsch-ID                DSCH-ID,
  dsch-FlowControlInformation  DSCH-FlowControlInformation,
  bindingID              BindingID OPTIONAL,
  transportLayerAddress   TransportLayerAddress OPTIONAL,
  transportFormatManagement  TransportFormatManagement,
  iE-Extensions          ProtocolExtensionContainer { {DSCH-LCR-InformationItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
  ...
}

DSCH-LCR-InformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

USCH-LCR-InformationResponse-RL-SetupRspTDD ::= ProtocolIE-Single-Container { {USCH-LCR-InformationList-RL-SetupRspTDD} }

USCH-LCR-InformationList-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-USCH-LCR-InformationListIEs-RL-SetupRspTDD      CRITICALITY ignore  TYPE USCH-LCR-InformationListIEs-RL-SetupRspTDD  PRESENCE mandatory }
}

USCH-LCR-InformationListIEs-RL-SetupRspTDD ::= SEQUENCE (SIZE(0..maxNoOfUSCHsLCR)) OF USCH-LCR-InformationItem-RL-SetupRspTDD

USCH-LCR-InformationItem-RL-SetupRspTDD ::= SEQUENCE {

```

```

    usch-ID                USCH-ID,
    bindingID              BindingID OPTIONAL,
    transportLayerAddress  TransportLayerAddress OPTIONAL,
    transportFormatManagement TransportFormatManagement,
    iE-Extensions          ProtocolExtensionContainer { {USCH-LCR-InformationItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
    ...
}

USCH-LCR-InformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- RADIO LINK SETUP FAILURE FDD
--
-- *****

RadioLinkSetupFailureFDD ::= SEQUENCE {
    protocolIEs                ProtocolIE-Container    {{RadioLinkSetupFailureFDD-IEs}},
    protocolExtensions          ProtocolExtensionContainer {{RadioLinkSetupFailureFDD-Extensions}}
    ...
}

RadioLinkSetupFailureFDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-D-RNTI                CRITICALITY ignore TYPE D-RNTI                PRESENCE optional } |
    { ID id-CN-PS-DomainIdentifier CRITICALITY ignore TYPE CN-PS-DomainIdentifier PRESENCE optional } |
    { ID id-CN-CS-DomainIdentifier CRITICALITY ignore TYPE CN-CS-DomainIdentifier PRESENCE optional } |
    { ID id-CauseLevel-RL-SetupFailureFDD CRITICALITY ignore TYPE CauseLevel-RL-SetupFailureFDD PRESENCE mandatory } |
    { ID id-UL-SIRTarget           CRITICALITY ignore TYPE UL-SIR                PRESENCE optional } |
    { ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional },
    ...
}

CauseLevel-RL-SetupFailureFDD ::= CHOICE {
    generalCause                GeneralCauseList-RL-SetupFailureFDD,
    rLSpecificCause             RLSpecificCauseList-RL-SetupFailureFDD,
    ...
}

GeneralCauseList-RL-SetupFailureFDD ::= SEQUENCE {
    cause                        Cause,
    iE-Extensions                ProtocolExtensionContainer { { GeneralCauseItem-RL-SetupFailureFDD-ExtIEs} }
    ...
}

GeneralCauseItem-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RLSpecificCauseList-RL-SetupFailureFDD ::= SEQUENCE {

```

```

    unsuccessful-RL-InformationRespList-RL-SetupFailureFDD      UnsuccessfulRL-InformationResponseList-RL-SetupFailureFDD,
    successful-RL-InformationRespList-RL-SetupFailureFDD        SuccessfulRL-InformationResponseList-RL-SetupFailureFDD  OPTIONAL,
    iE-Extensions                                               ProtocolExtensionContainer { { RLSpecificCauseItem-RL-SetupFailureFDD-ExtIEs} }  OPTIONAL,
    ...
}

RLSpecificCauseItem-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-HSDSCH-RNTI          CRITICALITY reject          EXTENSION HSDSCH-RNTI          PRESENCE optional },
    ...
}

UnsuccessfulRL-InformationResponseList-RL-SetupFailureFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {UnsuccessfulRL-
InformationResponse-RL-SetupFailureFDD-IEs} }

UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD          CRITICALITY ignore  TYPE UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD
    PRESENCE mandatory }
}

UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD ::= SEQUENCE {
    rL-ID                RL-ID,
    cause                Cause,
    iE-Extensions        ProtocolExtensionContainer { {UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD-ExtIEs} }  OPTIONAL,
    ...
}

UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

SuccessfulRL-InformationResponseList-RL-SetupFailureFDD ::= SEQUENCE (SIZE (0..maxNrOfRLs-1)) OF ProtocolIE-Single-Container { {SuccessfulRL-
InformationResponse-RL-SetupFailureFDD-IEs} }

SuccessfulRL-InformationResponse-RL-SetupFailureFDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-SuccessfulRL-InformationResponse-RL-SetupFailureFDD          CRITICALITY ignore  TYPE SuccessfulRL-InformationResponse-RL-SetupFailureFDD
    PRESENCE mandatory }
}

SuccessfulRL-InformationResponse-RL-SetupFailureFDD ::= SEQUENCE {
    rL-ID                RL-ID,
    rL-Set-ID            RL-Set-ID,
    uRA-Information      URA-Information  OPTIONAL,
    sAI                  SAI,
    gA-Cell              GA-Cell  OPTIONAL,
    gA-AccessPointPosition  GA-AccessPointPosition  OPTIONAL,
    received-total-wide-band-power  Received-total-wide-band-power,
    secondary-CCPCH-Info  Secondary-CCPCH-Info  OPTIONAL,
    dl-CodeInformation    FDD-DL-CodeInformation,
    diversityIndication   DiversityIndication-RL-SetupFailureFDD,
    -- This IE represents both the Diversity Indication IE and the choice based on the diversity indication as described in
    -- the tabular message format in subclause 9.1.
}

```



```

sSDT-SupportIndicator          SSDT-SupportIndicator,
maxUL-SIR                      UL-SIR,
minUL-SIR                      UL-SIR,
closedloopoptimingadjustmentmode Closedloopoptimingadjustmentmode OPTIONAL,
maximumAllowedULTxPower       MaximumAllowedULTxPower,
maximumDLTxPower              DL-Power,
minimumDLTxPower              DL-Power,
primaryCPICH-Power            PrimaryCPICH-Power,
primaryScramblingCode         PrimaryScramblingCode OPTIONAL,
uL-UARFCN                     UARFCN OPTIONAL,
dL-UARFCN                     UARFCN OPTIONAL,
dSCH-InformationResponse-RL-SetupFailureFDD DSCH-InformationResponseList-RL-SetupFailureFDD OPTIONAL,
neighbouring-UMTS-CellInformation Neighbouring-UMTS-CellInformation OPTIONAL,
neighbouring-GSM-CellInformation Neighbouring-GSM-CellInformation OPTIONAL,
pC-Preamble                   PC-Preamble,
sRB-Delay                     SRB-Delay,
iE-Extensions                 ProtocolExtensionContainer { {SuccessfulRL-InformationResponse-RL-SetupFailureFDD-ExtIEs} } OPTIONAL,
...
}

SuccessfulRL-InformationResponse-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-GA-CellAdditionalShapes          CRITICALITY ignore EXTENSION GA-CellAdditionalShapes          PRESENCE optional }|
  { ID id-DL-PowerBalancing-ActivationIndicator CRITICALITY ignore EXTENSION DL-PowerBalancing-ActivationIndicator PRESENCE optional}|
  { ID id-HSDSCH-FDD-Information-Response CRITICALITY ignore EXTENSION HSDSCH-FDD-Information-Response PRESENCE optional}|
  { ID id-TFCI-PC-SupportIndicator          CRITICALITY ignore EXTENSION TFCI-PC-SupportIndicator          PRESENCE optional }|
  { ID id-HCS-Prio                          CRITICALITY ignore EXTENSION HCS-Prio                          PRESENCE optional },
  ...
}

DiversityIndication-RL-SetupFailureFDD ::= CHOICE {
  combining                               Combining-RL-SetupFailureFDD,
  nonCombiningOrFirstRL                  NonCombiningOrFirstRL-RL-SetupFailureFDD
}

Combining-RL-SetupFailureFDD ::= SEQUENCE {
  rL-ID                                  RL-ID,
  iE-Extensions                          ProtocolExtensionContainer { { CombiningItem-RL-SetupFailureFDD-ExtIEs} } OPTIONAL,
  ...
}

CombiningItem-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-DCH-InformationResponse          CRITICALITY ignore EXTENSION DCH-InformationResponse          PRESENCE optional },
  ...
}

NonCombiningOrFirstRL-RL-SetupFailureFDD ::= SEQUENCE {
  dCH-InformationResponse                 DCH-InformationResponse,
  iE-Extensions                          ProtocolExtensionContainer { { NonCombiningOrFirstRLItem-RL-SetupFailureFDD-ExtIEs} } OPTIONAL,
  ...
}

```

```

NonCombiningOrFirstRLItem-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DSCH-InformationResponseList-RL-SetupFailureFDD ::= ProtocolIE-Single-Container {{ DSCH-InformationResponseListIEs-RL-SetupFailureFDD }}

DSCH-InformationResponseListIEs-RL-SetupFailureFDD RNSAP-PROTOCOL-IES ::= {
  { ID id-DSCH-FDD-InformationResponse CRITICALITY ignore TYPE DSCH-FDD-InformationResponse PRESENCE mandatory }
}

RadioLinkSetupFailureFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- RADIO LINK SETUP FAILURE TDD
--
-- *****

RadioLinkSetupFailureTDD ::= SEQUENCE {
  protocolIEs ProtocolIE-Container {{RadioLinkSetupFailureTDD-IEs}},
  protocolExtensions ProtocolExtensionContainer {{RadioLinkSetupFailureTDD-Extensions}} OPTIONAL,
  ...
}

RadioLinkSetupFailureTDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-CauseLevel-RL-SetupFailureTDD CRITICALITY ignore TYPE CauseLevel-RL-SetupFailureTDD PRESENCE mandatory }|
  { ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional },
  ...
}

CauseLevel-RL-SetupFailureTDD ::= CHOICE {
  generalCause GeneralCauseList-RL-SetupFailureTDD,
  rLSpecificCause RLSpecificCauseList-RL-SetupFailureTDD,
  ...
}

GeneralCauseList-RL-SetupFailureTDD ::= SEQUENCE {
  cause Cause,
  iE-Extensions ProtocolExtensionContainer { { GeneralCauseItem-RL-SetupFailureTDD-ExtIEs } } OPTIONAL,
  ...
}

GeneralCauseItem-RL-SetupFailureTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

RLSpecificCauseList-RL-SetupFailureTDD ::= SEQUENCE {
  unsuccessful-RL-InformationRespItem-RL-SetupFailureTDD Unsuccessful-RL-InformationRespItem-RL-SetupFailureTDD,

```

```

    iE-Extensions          ProtocolExtensionContainer { { RLSpecificCauseItem-RL-SetupFailureTDD-ExtIEs} } OPTIONAL,
    ...
}

RLSpecificCauseItem-RL-SetupFailureTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Unsuccessful-RL-InformationRespItem-RL-SetupFailureTDD ::= ProtocolIE-Single-Container { {Unsuccessful-RL-InformationRespItemIE-RL-SetupFailureTDD} }

Unsuccessful-RL-InformationRespItemIE-RL-SetupFailureTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD          CRITICALITY ignore      TYPE UnsuccessfulRL-InformationResponse-RL-
SetupFailureTDD          PRESENCE mandatory }
}

UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD ::= SEQUENCE {
    rL-ID          RL-ID,
    cause          Cause,
    iE-Extensions          ProtocolExtensionContainer { {UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD-ExtIEs} } OPTIONAL,
    ...
}

UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RadioLinkSetupFailureTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- RADIO LINK ADDITION REQUEST FDD
--
-- *****

RadioLinkAdditionRequestFDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container      {{RadioLinkAdditionRequestFDD-IEs}},
    protocolExtensions          ProtocolExtensionContainer {{RadioLinkAdditionRequestFDD-Extensions}}          OPTIONAL,
    ...
}

RadioLinkAdditionRequestFDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-UL-SIRTarget          CRITICALITY reject      TYPE UL-SIR          PRESENCE mandatory } |
    { ID id-RL-InformationList-RL-AdditionRqstFDD          CRITICALITY notify      TYPE RL-InformationList-RL-AdditionRqstFDD          PRESENCE mandatory } |
    { ID id-Active-Pattern-Sequence-Information          CRITICALITY reject      TYPE Active-Pattern-Sequence-Information          PRESENCE optional },
    ...
}

RL-InformationList-RL-AdditionRqstFDD          ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF ProtocolIE-Single-Container { {RL-Information-RL-
AdditionRqstFDD-IEs} }

```

```

RL-Information-RL-AdditionRqstFDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-RL-Information-RL-AdditionRqstFDD   CRITICALITY notify   TYPE RL-Information-RL-AdditionRqstFDD   PRESENCE mandatory }
}

RL-Information-RL-AdditionRqstFDD ::= SEQUENCE {
  rL-ID                RL-ID,
  c-ID                 C-ID,
  frameOffset          FrameOffset,
  chipOffset           ChipOffset,
  diversityControlField DiversityControlField,
  primaryCPICH-EcNo    PrimaryCPICH-EcNo      OPTIONAL,
  sSDT-CellID          SSDT-CellID           OPTIONAL,
  transmitDiversityIndicator TransmitDiversityIndicator  OPTIONAL,
  iE-Extensions        ProtocolExtensionContainer { {RL-Information-RL-AdditionRqstFDD-ExtIEs} } OPTIONAL,
  ...
}

RL-Information-RL-AdditionRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-DLReferencePower   CRITICALITY ignore   EXTENSION DL-Power           PRESENCE optional }|
  { ID id-Enhanced-PrimaryCPICH-EcNo CRITICALITY ignore   EXTENSION Enhanced-PrimaryCPICH-EcNo   PRESENCE optional }|
  { ID id-RL-Specific-DCH-Info CRITICALITY ignore   EXTENSION RL-Specific-DCH-Info PRESENCE optional }|
  { ID id-DelayedActivation CRITICALITY reject EXTENSION DelayedActivation PRESENCE optional },
  ...
}

RadioLinkAdditionRequestFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-DPC-Mode CRITICALITY reject EXTENSION DPC-Mode PRESENCE optional }|
  { ID id-Permanent-NAS-UE-Identity CRITICALITY ignore EXTENSION Permanent-NAS-UE-Identity PRESENCE optional },
  ...
}

-- *****
--
-- RADIO LINK ADDITION REQUEST TDD
--
-- *****

RadioLinkAdditionRequestTDD ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container  {{RadioLinkAdditionRequestTDD-IEs}},
  protocolExtensions   ProtocolExtensionContainer {{RadioLinkAdditionRequestTDD-Extensions}}          OPTIONAL,
  ...
}

RadioLinkAdditionRequestTDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-RL-Information-RL-AdditionRqstTDD CRITICALITY reject TYPE RL-Information-RL-AdditionRqstTDD PRESENCE mandatory },
  ...
}

RL-Information-RL-AdditionRqstTDD ::= SEQUENCE {
  rL-ID                RL-ID,

```

```

c-ID                C-ID,
frameOffset         FrameOffset,
diversityControlField DiversityControlField,
primaryCCPCH-RSCP   PrimaryCCPCH-RSCP   OPTIONAL,
DL-TimeSlot-ISCP-Info DL-TimeSlot-ISCP-Info   OPTIONAL,
--for 3.84Mcps TDD only
iE-Extensions      ProtocolExtensionContainer { {RL-Information-RL-AdditionRqstTDD-ExtIEs} } OPTIONAL,
...
}

RL-Information-RL-AdditionRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-DL-Timeslot-ISCP-LCR-Information-RL-AdditionRqstTDD CRITICALITY reject      EXTENSION   DL-TimeSlot-ISCP-LCR-Information   PRESENCE
optional   }|
  --for 1.28Mcps TDD only
  { ID id-RL-Specific-DCH-Info          CRITICALITY ignore      EXTENSION   RL-Specific-DCH-Info PRESENCE   optional }|
  { ID id-DelayedActivation CRITICALITY reject EXTENSION DelayedActivation PRESENCE optional },
  ...
}

RadioLinkAdditionRequestTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-Permanent-NAS-UE-Identity          CRITICALITY ignore      EXTENSION Permanent-NAS-UE-Identity   PRESENCE optional },
  ...
}

-- *****
--
-- RADIO LINK ADDITION RESPONSE FDD
--
-- *****

RadioLinkAdditionResponseFDD ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container          {{RadioLinkAdditionResponseFDD-IEs}},
  protocolExtensions   ProtocolExtensionContainer {{RadioLinkAdditionResponseFDD-Extensions}}
  ...
}

RadioLinkAdditionResponseFDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-RL-InformationResponseList-RL-AdditionRspFDD CRITICALITY ignore TYPE RL-InformationResponseList-RL-AdditionRspFDD PRESENCE mandatory
  } |
  { ID id-CriticalityDiagnostics          CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional },
  ...
}

RL-InformationResponseList-RL-AdditionRspFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF ProtocolIE-Single-Container { {RL-
InformationResponseItemIEs-RL-AdditionRspFDD} }

RL-InformationResponseItemIEs-RL-AdditionRspFDD RNSAP-PROTOCOL-IES ::= {
  { ID id-RL-InformationResponseItem-RL-AdditionRspFDD CRITICALITY ignore TYPE RL-InformationResponseItem-RL-AdditionRspFDD PRESENCE
mandatory }
}

```

```

RL-InformationResponseItem-RL-AdditionRspFDD ::= SEQUENCE {
  rL-ID                               RL-ID,
  rL-Set-ID                           RL-Set-ID,
  uRA-Information                      URA-Information OPTIONAL,
  sAI                                  SAI,
  gA-Cell                             GA-Cell OPTIONAL,
  gA-AccessPointPosition              GA-AccessPointPosition OPTIONAL,
  received-total-wide-band-power      Received-total-wide-band-power,
  secondary-CCPCH-Info                Secondary-CCPCH-Info OPTIONAL,
  dl-CodeInformation                  DL-CodeInformationList-RL-AdditionRspFDD,
  diversityIndication                 DiversityIndication-RL-AdditionRspFDD,
  -- This IE represents both the Diversity Indication IE and the choice based on the diversity indication as described in
  -- the tabular message format in subclause 9.1.
  sSDT-SupportIndicator               SSDT-SupportIndicator,
  minUL-SIR                           UL-SIR,
  maxUL-SIR                           UL-SIR,
  closedlooptimingadjustmentmode      Closedlooptimingadjustmentmode OPTIONAL,
  maximumAllowedULTxPower             MaximumAllowedULTxPower,
  maximumDLTxPower                   DL-Power,
  minimumDLTxPower                   DL-Power,
  neighbouring-UMTS-CellInformation    Neighbouring-UMTS-CellInformation OPTIONAL,
  neighbouring-GSM-CellInformation     Neighbouring-GSM-CellInformation OPTIONAL,
  pC-Preamble                         PC-Preamble,
  sRB-Delay                           SRB-Delay,
  primaryCPICH-Power                  PrimaryCPICH-Power,
  iE-Extensions                       ProtocolExtensionContainer { {RL-InformationResponseItem-RL-AdditionRspFDD-ExtIEs} } OPTIONAL,
  ...
}

RL-InformationResponseItem-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-GA-CellAdditionalShapes      CRITICALITY ignore EXTENSION GA-CellAdditionalShapes PRESENCE optional }|
  { ID id-DL-PowerBalancing-ActivationIndicator CRITICALITY ignore EXTENSION DL-PowerBalancing-ActivationIndicator PRESENCE optional }|
  { ID id-TFCI-PC-SupportIndicator      CRITICALITY ignore EXTENSION TFCI-PC-SupportIndicator PRESENCE optional }|
  { ID id-HCS-Prio                     CRITICALITY ignore EXTENSION HCS-Prio PRESENCE optional },
  ...
}

DL-CodeInformationList-RL-AdditionRspFDD ::= ProtocolIE-Single-Container {{ DL-CodeInformationListIEs-RL-AdditionRspFDD }}

DL-CodeInformationListIEs-RL-AdditionRspFDD RNSAP-PROTOCOL-IES ::= {
  { ID id-FDD-DL-CodeInformation      CRITICALITY ignore TYPE FDD-DL-CodeInformation PRESENCE mandatory }
}

DiversityIndication-RL-AdditionRspFDD ::= CHOICE {
  combining                           Combining-RL-AdditionRspFDD,
  nonCombining                         NonCombining-RL-AdditionRspFDD
}

Combining-RL-AdditionRspFDD ::= SEQUENCE {
  rL-ID                               RL-ID,

```

```

    iE-Extensions          ProtocolExtensionContainer { { CombiningItem-RL-AdditionRspFDD-ExtIEs } } OPTIONAL,
    ...
}

CombiningItem-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-DCH-InformationResponse          CRITICALITY ignore  EXTENSION DCH-InformationResponse          PRESENCE optional },
    ...
}

NonCombining-RL-AdditionRspFDD ::= SEQUENCE {
    dCH-InformationResponse          DCH-InformationResponse,
    iE-Extensions                    ProtocolExtensionContainer { { NonCombiningItem-RL-AdditionRspFDD-ExtIEs } } OPTIONAL,
    ...
}

NonCombiningItem-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RadioLinkAdditionResponseFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- RADIO LINK ADDITION RESPONSE TDD
--
-- *****

RadioLinkAdditionResponseTDD ::= SEQUENCE {
    protocolIEs                ProtocolIE-Container    {{RadioLinkAdditionResponseTDD-IEs}},
    protocolExtensions          ProtocolExtensionContainer {{RadioLinkAdditionResponseTDD-Extensions}}          OPTIONAL,
    ...
}

RadioLinkAdditionResponseTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationResponse-RL-AdditionRspTDD          CRITICALITY ignore  TYPE RL-InformationResponse-RL-AdditionRspTDD  PRESENCE optional } |
    --Mandatory for 3.84Mcps TDD only
    { ID id-CriticalityDiagnostics          CRITICALITY ignore  TYPE CriticalityDiagnostics          PRESENCE optional },
    ...
}

RL-InformationResponse-RL-AdditionRspTDD ::= SEQUENCE {
    rL-ID                        RL-ID,
    uRA-Information              URA-Information          OPTIONAL,
    sAI                          SAI,
    gA-Cell                      GA-Cell          OPTIONAL,
    gA-AccessPointPosition       GA-AccessPointPosition  OPTIONAL,
    ul-TimeSlot-ISCP-Info        UL-TimeSlot-ISCP-Info,
    minUL-SIR                    UL-SIR,
    maxUL-SIR                    UL-SIR,

```

```

maximumAllowedULTxPower      MaximumAllowedULTxPower ,
maximumDLTxPower            DL-Power ,
minimumDLTxPower            DL-Power ,
pCCPCH-Power                PCCPCH-Power ,
timingAdvanceApplied         TimingAdvanceApplied ,
alphaValue                   AlphaValue ,
ul-PhysCH-SF-Variation       UL-PhysCH-SF-Variation ,
synchronisationConfiguration SynchronisationConfiguration ,
secondary-CCPCH-Info-TDD     Secondary-CCPCH-Info-TDD           OPTIONAL ,
ul-CCTrCHInformationList-RL-AdditionRspTDD UL-CCTrCHInformationList-RL-AdditionRspTDD OPTIONAL ,
dl-CCTrCHInformationList-RL-AdditionRspTDD DL-CCTrCHInformationList-RL-AdditionRspTDD OPTIONAL ,
dCH-Information              DCH-Information-RL-AdditionRspTDD           OPTIONAL ,
dSCH-InformationResponse      DSCH-InformationResponse-RL-AdditionRspTDD           OPTIONAL ,
uSCH-InformationResponse      USCH-InformationResponse-RL-AdditionRspTDD           OPTIONAL ,
neighbouring-UMTS-CellInformation Neighbouring-UMTS-CellInformation OPTIONAL ,
neighbouring-GSM-CellInformation Neighbouring-GSM-CellInformation OPTIONAL ,
iE-Extensions                 ProtocolExtensionContainer { {RL-InformationResponse-RL-AdditionRspTDD-ExtIEs} } OPTIONAL ,
...
}

RL-InformationResponse-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-GA-CellAdditionalShapes      CRITICALITY ignore EXTENSION GA-CellAdditionalShapes PRESENCE optional } |
  { ID id-HCS-Prio                     CRITICALITY ignore EXTENSION HCS-Prio PRESENCE optional } ,
  ...
}

UL-CCTrCHInformationList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container { {UL-CCTrCHInformationListIEs-RL-AdditionRspTDD} }

UL-CCTrCHInformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-UL-CCTrCH-InformationListIE-RL-AdditionRspTDD CRITICALITY ignore TYPE UL-CCTrCHInformationListIE-RL-AdditionRspTDD PRESENCE mandatory }
}

UL-CCTrCHInformationListIE-RL-AdditionRspTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCHInformationItem-RL-AdditionRspTDD

UL-CCTrCHInformationItem-RL-AdditionRspTDD ::= SEQUENCE {
  cCTrCH-ID          CCTrCH-ID ,
  ul-DPCH-Information UL-DPCH-InformationList-RL-AdditionRspTDD           OPTIONAL ,
  iE-Extensions      ProtocolExtensionContainer { {UL-CCTrCHInformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL ,
  ...
}

UL-CCTrCHInformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

UL-DPCH-InformationList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container { {UL-DPCH-InformationListIEs-RL-AdditionRspTDD} }

UL-DPCH-InformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-UL-DPCH-InformationItem-RL-AdditionRspTDD CRITICALITY ignore TYPE UL-DPCH-InformationItem-RL-AdditionRspTDD PRESENCE mandatory }
}

```



```

UL-DPCH-InformationItem-RL-AdditionRspTDD ::= SEQUENCE {
    repetitionPeriod      RepetitionPeriod,
    repetitionLength      RepetitionLength,
    tDD-DPCHOffset        TDD-DPCHOffset,
    uL-Timeslot-Information UL-Timeslot-Information,
    iE-Extensions         ProtocolExtensionContainer { {UL-DPCH-InformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    ...
}

UL-DPCH-InformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CCTrCHInformationList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container {{DL-CCTrCHInformationListIEs-RL-AdditionRspTDD}}

DL-CCTrCHInformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-CCTrCH-InformationListIE-RL-AdditionRspTDD    CRITICALITY ignore    TYPE DL-CCTrCHInformationListIE-RL-AdditionRspTDD    PRESENCE mandatory
    }
}

DL-CCTrCHInformationListIE-RL-AdditionRspTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCHInformationItem-RL-AdditionRspTDD

DL-CCTrCHInformationItem-RL-AdditionRspTDD ::= SEQUENCE {
    cCTrCH-ID          CCTrCH-ID,
    dl-DPCH-Information DL-DPCH-InformationList-RL-AdditionRspTDD    OPTIONAL,
    iE-Extensions      ProtocolExtensionContainer { {DL-CCTrCHInformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    ...
}

DL-CCTrCHInformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-InformationList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container { {DL-DPCH-InformationListIEs-RL-AdditionRspTDD} }

DL-DPCH-InformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationItem-RL-AdditionRspTDD    CRITICALITY ignore    TYPE DL-DPCH-InformationItem-RL-AdditionRspTDD    PRESENCE mandatory
    }
}

DL-DPCH-InformationItem-RL-AdditionRspTDD ::= SEQUENCE {
    repetitionPeriod      RepetitionPeriod,
    repetitionLength      RepetitionLength,
    tDD-DPCHOffset        TDD-DPCHOffset,
    dL-Timeslot-Information DL-Timeslot-Information,
    iE-Extensions         ProtocolExtensionContainer { {DL-DPCH-InformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    ...
}

DL-DPCH-InformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

}

DCH-Information-RL-AdditionRspTDD ::= SEQUENCE {
    diversityIndication      DiversityIndication-RL-AdditionRspTDD,
    -- This IE represents both the Diversity Indication IE and the choice based on the diversity indication as described in
    -- the tabular message format in subclause 9.1.
    iE-Extensions            ProtocolExtensionContainer { { DCH-Information-RL-AdditionRspTDD-ExtIEs } } OPTIONAL,
    ...
}

DCH-Information-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DiversityIndication-RL-AdditionRspTDD ::= CHOICE {
    combining      Combining-RL-AdditionRspTDD,
    nonCombining  NonCombining-RL-AdditionRspTDD
}

Combining-RL-AdditionRspTDD ::= SEQUENCE {
    rL-ID          RL-ID,
    iE-Extensions ProtocolExtensionContainer { { CombiningItem-RL-AdditionRspTDD-ExtIEs } } OPTIONAL,
    ...
}

CombiningItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-DCH-InformationResponse      CRITICALITY ignore EXTENSION DCH-InformationResponse      PRESENCE optional },
    ...
}

NonCombining-RL-AdditionRspTDD ::= SEQUENCE {
    dCH-InformationResponse DCH-InformationResponse,
    iE-Extensions          ProtocolExtensionContainer { { NonCombiningItem-RL-AdditionRspTDD-ExtIEs } } OPTIONAL,
    ...
}

NonCombiningItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DSCH-InformationResponse-RL-AdditionRspTDD ::= ProtocolIE-Single-Container {{DSCH-InformationListIEs-RL-AdditionRspTDD}}

DSCH-InformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DSCH-InformationListIE-RL-AdditionRspTDD      CRITICALITY ignore TYPE DSCH-InformationListIE-RL-AdditionRspTDD      PRESENCE mandatory }
}

DSCH-InformationListIE-RL-AdditionRspTDD ::= SEQUENCE (SIZE(0..maxNoOfDSCHs)) OF DSCHInformationItem-RL-AdditionRspTDD

DSCHInformationItem-RL-AdditionRspTDD ::= SEQUENCE {
    dsch-ID          DSCH-ID,
    transportFormatManagement TransportFormatManagement,

```

```

    dSCH-FlowControlInformation    DSCH-FlowControlInformation,
    diversityIndication            DiversityIndication-RL-AdditionRspTDD2 OPTIONAL,
    -- diversityIndication present, if CHOICE = nonCombining
    iE-Extensions                  ProtocolExtensionContainer { {DSCHInformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    ...
}

DSCHInformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DiversityIndication-RL-AdditionRspTDD2 ::= SEQUENCE {
    bindingID                      BindingID    OPTIONAL,
    transportLayerAddress          TransportLayerAddress    OPTIONAL,
    iE-Extensions                  ProtocolExtensionContainer { {DiversityIndication-RL-AdditionRspTDD2-ExtIEs} } OPTIONAL,
    ...
}

DiversityIndication-RL-AdditionRspTDD2-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

USCH-InformationResponse-RL-AdditionRspTDD ::= ProtocolIE-Single-Container {{USCH-InformationListIEs-RL-AdditionRspTDD}}

USCH-InformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-USCH-InformationListIE-RL-AdditionRspTDD    CRITICALITY ignore    TYPE USCH-InformationListIE-RL-AdditionRspTDD    PRESENCE mandatory }
}

USCH-InformationListIE-RL-AdditionRspTDD ::= SEQUENCE (SIZE(0..maxNoOfUSCHs)) OF USCHInformationItem-RL-AdditionRspTDD

USCHInformationItem-RL-AdditionRspTDD ::= SEQUENCE {
    uSCH-ID                        USCH-ID,
    transportFormatManagement      TransportFormatManagement,
    diversityIndication            DiversityIndication-RL-AdditionRspTDD2 OPTIONAL,
    -- diversityIndication present, if CHOICE = nonCombining
    iE-Extensions                  ProtocolExtensionContainer { {USCHInformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    ...
}

USCHInformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RadioLinkAdditionResponseTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-RL-LCR-InformationResponse-RL-AdditionRspTDD    CRITICALITY ignore    EXTENSION    RL-LCR-InformationResponse-RL-AdditionRspTDD
    PRESENCE mandatory },
    --Mandatory for 1.28Mcps TDD only
    ...
}

RL-LCR-InformationResponse-RL-AdditionRspTDD ::= SEQUENCE {
    rL-ID                          RL-ID,

```

```

uRA-Information          URA-Information,
sAI                      SAI,
gA-Cell                  GA-Cell      OPTIONAL,
gA-AccessPointPosition  GA-AccessPointPosition  OPTIONAL,
ul-TimeSlot-ISCP-LCR-Info  UL-TimeSlot-ISCP-LCR-Info,
maxUL-SIR                UL-SIR,
minUL-SIR                UL-SIR,
pCCPCH-Power             PCCPCH-Power,
maximumAllowedULTxPower  MaximumAllowedULTxPower,
maximumDLTxPower         DL-Power,
minimumDLTxPower         DL-Power,
alphaValue               AlphaValue,
ul-PhysCH-SF-Variation  UL-PhysCH-SF-Variation,
synchronisationConfiguration  SynchronisationConfiguration,
secondary-LCR-CCPCH-Info-TDD  Secondary-LCR-CCPCH-Info-TDD      OPTIONAL,
ul-CCTrCH-LCR-Information  UL-CCTrCH-LCR-InformationList-RL-AdditionRspTDD  OPTIONAL,
dl-CCTrCH-LCR-Information  DL-CCTrCH-LCR-InformationList-RL-AdditionRspTDD  OPTIONAL,
dCH-InformationResponse   DCH-InformationResponseList-RL-AdditionRspTDD  OPTIONAL,
dsch-LCR-InformationResponse  DSCH-LCR-InformationResponse-RL-AdditionRspTDD  OPTIONAL,
usch-LCR-InformationResponse  USCH-LCR-InformationResponse-RL-AdditionRspTDD  OPTIONAL,
neighbouring-UMTS-CellInformation  Neighbouring-UMTS-CellInformation  OPTIONAL,
neighbouring-GSM-CellInformation  Neighbouring-GSM-CellInformation  OPTIONAL,
iE-Extensions            ProtocolExtensionContainer { { RL-LCR-InformationResponseList-RL-AdditionRspTDD-ExtIEs } }  OPTIONAL,
...
}

RL-LCR-InformationResponseList-RL-AdditionRspTDD-ExtIEs  RNSAP-PROTOCOL-EXTENSION ::= {
...
}

UL-CCTrCH-LCR-InformationList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container {{UL-CCTrCH-LCR-InformationListIEs-RL-AdditionRspTDD }}

UL-CCTrCH-LCR-InformationListIEs-RL-AdditionRspTDD  RNSAP-PROTOCOL-IES ::= {
  { ID id-UL-CCTrCH-LCR-InformationListIE-RL-AdditionRspTDD  CRITICALITY ignore  TYPE UL-CCTrCH-LCR-InformationListIE-RL-AdditionRspTDD  PRESENCE
mandatory }
}

UL-CCTrCH-LCR-InformationListIE-RL-AdditionRspTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHsLCR)) OF UL-CCTrCH-LCR-InformationItem-RL-AdditionRspTDD

UL-CCTrCH-LCR-InformationItem-RL-AdditionRspTDD ::= SEQUENCE {
  cCTrCH-ID          CCTrCH-ID,
  ul-DPCH-LCR-Information  UL-DPCH-LCR-InformationList-RL-AdditionRspTDD      OPTIONAL,
  iE-Extensions      ProtocolExtensionContainer { {UL-CCTrCH-LCR-InformationItem-RL-AdditionRspTDD-ExtIEs} }  OPTIONAL,
  ...
}

UL-CCTrCH-LCR-InformationItem-RL-AdditionRspTDD-ExtIEs  RNSAP-PROTOCOL-EXTENSION ::= {
...
}

UL-DPCH-LCR-InformationList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container { {UL-DPCH-LCR-InformationListIEs-RL-AdditionRspTDD} }

```

```

UL-DPCH-LCR-InformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-UL-DPCH-LCR-InformationItem-RL-AdditionRspTDD      CRITICALITY ignore  TYPE UL-DPCH-LCR-InformationItem-RL-AdditionRspTDD  PRESENCE
  mandatory }
}

UL-DPCH-LCR-InformationItem-RL-AdditionRspTDD ::= SEQUENCE {
  repetitionPeriod      RepetitionPeriod,
  repetitionLength      RepetitionLength,
  tDD-DPCHOffset        TDD-DPCHOffset,
  uL-TimeslotLCR-Information  UL-TimeslotLCR-Information,
  iE-Extensions          ProtocolExtensionContainer { {UL-DPCH-LCR-InformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
  ...
}

UL-DPCH-LCR-InformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-CCTrCH-LCR-InformationList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container { {DL-CCTrCH-LCR-InformationListIEs-RL-AdditionRspTDD} }

DL-CCTrCH-LCR-InformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-DL-CCTrCH-LCR-InformationListIE-RL-AdditionRspTDD  CRITICALITY ignore  TYPE DL-CCTrCH-LCR-InformationListIE-RL-AdditionRspTDD  PRESENCE
  mandatory }
}

DL-CCTrCH-LCR-InformationListIE-RL-AdditionRspTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHsLCR)) OF DL-CCTrCH-LCR-InformationItem-RL-AdditionRspTDD

DL-CCTrCH-LCR-InformationItem-RL-AdditionRspTDD ::= SEQUENCE {
  cCTrCH-ID              CCTrCH-ID,
  dl-DPCH-LCR-Information  DL-DPCH-LCR-InformationList-RL-AdditionRspTDD      OPTIONAL,
  iE-Extensions            ProtocolExtensionContainer { {DL-CCTrCH-LCR-InformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
  ...
}

DL-CCTrCH-LCR-InformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-DPCH-LCR-InformationList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container { {DL-DPCH-LCR-InformationListIEs-RL-AdditionRspTDD} }

DL-DPCH-LCR-InformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-DL-DPCH-LCR-InformationItem-RL-AdditionRspTDD      CRITICALITY ignore  TYPE DL-DPCH-LCR-InformationItem-RL-AdditionRspTDD  PRESENCE
  mandatory }
}

DL-DPCH-LCR-InformationItem-RL-AdditionRspTDD ::= SEQUENCE {
  repetitionPeriod      RepetitionPeriod,
  repetitionLength      RepetitionLength,
  tDD-DPCHOffset        TDD-DPCHOffset,
  dL-TimeslotLCR-Information  DL-TimeslotLCR-Information,
}

```

```

    tSTD-Indicator          TSTD-Indicator,
    iE-Extensions          ProtocolExtensionContainer { {DL-DPCH-LCR-InformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    ...
}

DL-DPCH-LCR-InformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-InformationResponseList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container {{DCH-InformationResponseListIEs-RL-AdditionRspTDD}}

DCH-InformationResponseListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DCH-InformationResponse    CRITICALITY ignore    TYPE DCH-InformationResponse    PRESENCE mandatory }
}

DSCH-LCR-InformationResponse-RL-AdditionRspTDD ::= ProtocolIE-Single-Container {{DSCH-LCR-InformationList-RL-AdditionRspTDD}}

DSCH-LCR-InformationList-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DSCH-LCR-InformationListIEs-RL-AdditionRspTDD    CRITICALITY ignore    TYPE DSCH-LCR-InformationListIEs-RL-AdditionRspTDD    PRESENCE
    mandatory }
}

DSCH-LCR-InformationListIEs-RL-AdditionRspTDD ::= SEQUENCE (SIZE(0..maxNoOfDSCHsLCR)) OF DSCH-LCR-InformationItem-RL-AdditionRspTDD

DSCH-LCR-InformationItem-RL-AdditionRspTDD ::= SEQUENCE {
    dsch-ID                DSCH-ID,
    dsch-FlowControlInformation    DSCH-FlowControlInformation,
    bindingID              BindingID    OPTIONAL,
    transportLayerAddress    TransportLayerAddress    OPTIONAL,
    transportFormatManagement    TransportFormatManagement,
    iE-Extensions          ProtocolExtensionContainer { {DSCH-LCR-InformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    ...
}

DSCH-LCR-InformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

USCH-LCR-InformationResponse-RL-AdditionRspTDD ::= ProtocolIE-Single-Container {{USCH-LCR-InformationList-RL-AdditionRspTDD}}

USCH-LCR-InformationList-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-USCH-LCR-InformationListIEs-RL-AdditionRspTDD    CRITICALITY ignore    TYPE USCH-LCR-InformationListIEs-RL-AdditionRspTDD    PRESENCE
    mandatory }
}

USCH-LCR-InformationListIEs-RL-AdditionRspTDD ::= SEQUENCE (SIZE(0..maxNoOfUSCHsLCR)) OF USCH-LCR-InformationItem-RL-AdditionRspTDD

USCH-LCR-InformationItem-RL-AdditionRspTDD ::= SEQUENCE {
    usch-ID                USCH-ID,
    transportFormatManagement    TransportFormatManagement,
    diversityIndication        DiversityIndication-RL-AdditionRspTDD2    OPTIONAL,

```

```

    iE-Extensions          ProtocolExtensionContainer { {USCH-LCR-InformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
  }
  ...
}
USCH-LCR-InformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}
-- *****
--
-- RADIO LINK ADDITION FAILURE FDD
--
-- *****

RadioLinkAdditionFailureFDD ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container      {{RadioLinkAdditionFailureFDD-IEs}},
  protocolExtensions  ProtocolExtensionContainer {{RadioLinkAdditionFailureFDD-Extensions}}          OPTIONAL,
  ...
}

RadioLinkAdditionFailureFDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-CauseLevel-RL-AdditionFailureFDD          CRITICALITY ignore          TYPE CauseLevel-RL-AdditionFailureFDD
  PRESENCE mandatory }|
  { ID id-CriticalityDiagnostics          CRITICALITY ignore TYPE CriticalityDiagnostics          PRESENCE optional },
  ...
}

CauseLevel-RL-AdditionFailureFDD ::= CHOICE {
  generalCause          GeneralCauseList-RL-AdditionFailureFDD,
  rLSpecificCause      RLSpecificCauseList-RL-AdditionFailureFDD,
  ...
}

GeneralCauseList-RL-AdditionFailureFDD ::= SEQUENCE {
  cause                Cause,
  iE-Extensions        ProtocolExtensionContainer { { GeneralCauseItem-RL-AdditionFailureFDD-ExtIEs} }          OPTIONAL,
  ...
}

GeneralCauseItem-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

RLSpecificCauseList-RL-AdditionFailureFDD ::= SEQUENCE {
  unsuccessful-RL-InformationRespList-RL-AdditionFailureFDD          UnsuccessfulRL-InformationResponseList-RL-AdditionFailureFDD,
  successful-RL-InformationRespList-RL-AdditionFailureFDD          SuccessfulRL-InformationResponseList-RL-AdditionFailureFDD          OPTIONAL,
  iE-Extensions          ProtocolExtensionContainer { { RLSpecificCauseItem-RL-AdditionFailureFDD-ExtIEs} }          OPTIONAL,
  ...
}

RLSpecificCauseItem-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {

```

```

}
...
}

UnsuccessfulRL-InformationResponseList-RL-AdditionFailureFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF ProtocolIE-Single-Container { {UnsuccessfulRL-
InformationResponse-RL-AdditionFailureFDD-IEs} }

UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD    CRITICALITY ignore  TYPE UnsuccessfulRL-InformationResponse-RL-
AdditionFailureFDD          PRESENCE mandatory }
}

UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD ::= SEQUENCE {
  rL-ID                RL-ID,
  cause                Cause,
  iE-Extensions       ProtocolExtensionContainer { {UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD-ExtIEs} } OPTIONAL,
  ...
}

UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

SuccessfulRL-InformationResponseList-RL-AdditionFailureFDD ::= SEQUENCE (SIZE (0..maxNrOfRLs-2)) OF ProtocolIE-Single-Container { {SuccessfulRL-
InformationResponse-RL-AdditionFailureFDD-IEs} }

SuccessfulRL-InformationResponse-RL-AdditionFailureFDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-SuccessfulRL-InformationResponse-RL-AdditionFailureFDD    CRITICALITY ignore  TYPE SuccessfulRL-InformationResponse-RL-AdditionFailureFDD
  PRESENCE mandatory }
}

SuccessfulRL-InformationResponse-RL-AdditionFailureFDD ::= SEQUENCE {
  rL-ID                RL-ID,
  rL-Set-ID            RL-Set-ID,
  uRA-Information      URA-Information    OPTIONAL,
  sAI                  SAI,
  gA-Cell              GA-Cell    OPTIONAL,
  gA-AccessPointPosition GA-AccessPointPosition    OPTIONAL,
  received-total-wide-band-power Received-total-wide-band-power,
  secondary-CCPCH-Info Secondary-CCPCH-Info    OPTIONAL,
  dl-CodeInformation   DL-CodeInformationList-RL-AdditionFailureFDD,
  diversityIndication DiversityIndication-RL-AdditionFailureFDD,
  -- This IE represents both the Diversity Indication IE and the choice based on the diversity indication as described in
  -- the tabular message format in subclause 9.1.
  sSDT-SupportIndicator SSDT-SupportIndicator,
  minUL-SIR            UL-SIR,
  maxUL-SIR            UL-SIR,
  closedlooptimingadjustmentmode Closedlooptimingadjustmentmode    OPTIONAL,
  maximumAllowedULTxPower MaximumAllowedULTxPower,
  maximumDLTxPower    DL-Power,
  minimumDLTxPower    DL-Power,
  neighbouring-UMTS-CellInformation Neighbouring-UMTS-CellInformation    OPTIONAL,

```



```

    neighbouring-GSM-CellInformation    Neighbouring-GSM-CellInformation OPTIONAL,
    primaryCPICH-Power                  PrimaryCPICH-Power,
    pC-Preamble                          PC-Preamble,
    sRB-Delay                            SRB-Delay,
    iE-Extensions                        ProtocolExtensionContainer { {SuccessfulRL-InformationResponse-RL-AdditionFailureFDD-ExtIEs} } OPTIONAL,
    ...
}

SuccessfulRL-InformationResponse-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-GA-CellAdditionalShapes          CRITICALITY ignore EXTENSION GA-CellAdditionalShapes          PRESENCE optional }|
  { ID id-DL-PowerBalancing-ActivationIndicator CRITICALITY ignore EXTENSION DL-PowerBalancing-ActivationIndicator PRESENCE optional }|
  { ID id-TFCI-PC-SupportIndicator          CRITICALITY ignore EXTENSION TFCI-PC-SupportIndicator          PRESENCE optional }|
  { ID id-HCS-Prio                          CRITICALITY ignore EXTENSION HCS-Prio                          PRESENCE optional },
  ...
}

DL-CodeInformationList-RL-AdditionFailureFDD ::= ProtocolIE-Single-Container {{ DL-CodeInformationListIEs-RL-AdditionFailureFDD }}

DL-CodeInformationListIEs-RL-AdditionFailureFDD RNSAP-PROTOCOL-IES ::= {
  { ID id-FDD-DL-CodeInformation          CRITICALITY ignore TYPE FDD-DL-CodeInformation          PRESENCE mandatory }
}

DiversityIndication-RL-AdditionFailureFDD ::= CHOICE {
  combining                               Combining-RL-AdditionFailureFDD,
  nonCombining                            NonCombining-RL-AdditionFailureFDD
}

Combining-RL-AdditionFailureFDD ::= SEQUENCE {
  rL-ID                                   RL-ID,
  iE-Extensions                           ProtocolExtensionContainer { { CombiningItem-RL-AdditionFailureFDD-ExtIEs} } OPTIONAL,
  ...
}

CombiningItem-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-DCH-InformationResponse          CRITICALITY ignore EXTENSION DCH-InformationResponse          PRESENCE optional },
  ...
}

NonCombining-RL-AdditionFailureFDD ::= SEQUENCE {
  dCH-InformationResponse                  DCH-InformationResponse,
  iE-Extensions                           ProtocolExtensionContainer { { NonCombiningItem-RL-AdditionFailureFDD-ExtIEs} } OPTIONAL,
  ...
}

NonCombiningItem-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

RadioLinkAdditionFailureFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

}
-- *****
--
-- RADIO LINK ADDITION FAILURE TDD
--
-- *****

RadioLinkAdditionFailureTDD ::= SEQUENCE {
    protocolIEs                ProtocolIE-Container    {{RadioLinkAdditionFailureTDD-IEs}},
    protocolExtensions          ProtocolExtensionContainer {{RadioLinkAdditionFailureTDD-Extensions}}    OPTIONAL,
    ...
}

RadioLinkAdditionFailureTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-CauseLevel-RL-AdditionFailureTDD    CRITICALITY ignore    TYPE CauseLevel-RL-AdditionFailureTDD    PRESENCE mandatory }|
    { ID id-CriticalityDiagnostics              CRITICALITY ignore    TYPE CriticalityDiagnostics        PRESENCE optional },
    ...
}

CauseLevel-RL-AdditionFailureTDD ::= CHOICE {
    generalCause                GeneralCauseList-RL-AdditionFailureTDD,
    rLSpecificCause             RLSpecificCauseList-RL-AdditionFailureTDD,
    ...
}

GeneralCauseList-RL-AdditionFailureTDD ::= SEQUENCE {
    cause                        Cause,
    iE-Extensions                ProtocolExtensionContainer { { GeneralCauseItem-RL-AdditionFailureTDD-ExtIEs } }    OPTIONAL,
    ...
}

GeneralCauseItem-RL-AdditionFailureTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RLSpecificCauseList-RL-AdditionFailureTDD ::= SEQUENCE {
    unsuccessful-RL-InformationRespItem-RL-AdditionFailureTDD    Unsuccessful-RL-InformationRespItem-RL-AdditionFailureTDD,
    iE-Extensions                                                  ProtocolExtensionContainer { { RLSpecificCauseItem-RL-AdditionFailureTDD-ExtIEs } }
    OPTIONAL,
    ...
}

RLSpecificCauseItem-RL-AdditionFailureTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Unsuccessful-RL-InformationRespItem-RL-AdditionFailureTDD ::= ProtocolIE-Single-Container { {Unsuccessful-RL-InformationRespItemIE-RL-AdditionFailureTDD} }

Unsuccessful-RL-InformationRespItemIE-RL-AdditionFailureTDD RNSAP-PROTOCOL-IES ::= {

```

```

    { ID id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureTDD      CRITICALITY ignore    TYPE UnsuccessfulRL-InformationResponse-RL-
AdditionFailureTDD PRESENCE mandatory}
}

UnsuccessfulRL-InformationResponse-RL-AdditionFailureTDD ::= SEQUENCE {
    rL-ID                RL-ID,
    cause                Cause,
    iE-Extensions        ProtocolExtensionContainer { {UnsuccessfulRL-InformationResponse-RL-AdditionFailureTDD-ExtIEs} } OPTIONAL,
    ...
}

UnsuccessfulRL-InformationResponse-RL-AdditionFailureTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RadioLinkAdditionFailureTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- RADIO LINK DELETION REQUEST
--
-- *****

RadioLinkDeletionRequest ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkDeletionRequest-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{RadioLinkDeletionRequest-Extensions}}          OPTIONAL,
    ...
}

RadioLinkDeletionRequest-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationList-RL-DeletionRqst CRITICALITY notify TYPE RL-InformationList-RL-DeletionRqst PRESENCE mandatory },
    ...
}

RL-InformationList-RL-DeletionRqst ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-Information-RL-DeletionRqst-IEs} }

RL-Information-RL-DeletionRqst-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-Information-RL-DeletionRqst CRITICALITY notify TYPE RL-Information-RL-DeletionRqst PRESENCE mandatory }
}

RL-Information-RL-DeletionRqst ::= SEQUENCE {
    rL-ID                RL-ID,
    iE-Extensions        ProtocolExtensionContainer { {RL-Information-RL-DeletionRqst-ExtIEs} } OPTIONAL,
    ...
}

RL-Information-RL-DeletionRqst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

RadioLinkDeletionRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- RADIO LINK DELETION RESPONSE
--
-- *****

RadioLinkDeletionResponse ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container    {{RadioLinkDeletionResponse-IEs}},
  protocolExtensions  ProtocolExtensionContainer {{RadioLinkDeletionResponse-Extensions}}      OPTIONAL,
  ...
}

RadioLinkDeletionResponse-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-CriticalityDiagnostics          CRITICALITY ignore  TYPE CriticalityDiagnostics          PRESENCE optional },
  ...
}

RadioLinkDeletionResponse-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- RADIO LINK RECONFIGURATION PREPARE FDD
--
-- *****

RadioLinkReconfigurationPrepareFDD ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container    {{RadioLinkReconfigurationPrepareFDD-IEs}},
  protocolExtensions  ProtocolExtensionContainer {{RadioLinkReconfigurationPrepareFDD-Extensions}}      OPTIONAL,
  ...
}

RadioLinkReconfigurationPrepareFDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-AllowedQueuingTime          CRITICALITY reject  TYPE AllowedQueuingTime          PRESENCE optional } |
  { ID id-UL-DPCH-Information-RL-ReconfPrepFDD          CRITICALITY reject  TYPE UL-DPCH-Information-RL-ReconfPrepFDD          PRESENCE optional } |
  { ID id-DL-DPCH-Information-RL-ReconfPrepFDD          CRITICALITY reject  TYPE DL-DPCH-Information-RL-ReconfPrepFDD          PRESENCE optional } |
  { ID id-FDD-DCHs-to-Modify          CRITICALITY reject  TYPE FDD-DCHs-to-Modify          PRESENCE optional } |
  { ID id-DCHs-to-Add-FDD          CRITICALITY reject  TYPE DCH-FDD-Information          PRESENCE optional } |
  { ID id-DCH-DeleteList-RL-ReconfPrepFDD          CRITICALITY reject  TYPE DCH-DeleteList-RL-ReconfPrepFDD          PRESENCE optional } |
  { ID id-DSCH-Modify-RL-ReconfPrepFDD          CRITICALITY reject  TYPE DSCH-Modify-RL-ReconfPrepFDD          PRESENCE optional } |
  { ID id-DSCHs-to-Add-FDD          CRITICALITY reject  TYPE DSCH-FDD-Information          PRESENCE optional } |
  { ID id-DSCH-Delete-RL-ReconfPrepFDD          CRITICALITY reject  TYPE DSCH-Delete-RL-ReconfPrepFDD          PRESENCE optional } |
  { ID id-RL-InformationList-RL-ReconfPrepFDD          CRITICALITY reject  TYPE RL-InformationList-RL-ReconfPrepFDD          PRESENCE optional } |
  { ID id-Transmission-Gap-Pattern-Sequence-Information          CRITICALITY reject  TYPE Transmission-Gap-Pattern-Sequence-Information          PRESENCE optional },
  ...
}

```

```

}

UL-DPCH-Information-RL-ReconfPrepFDD ::= SEQUENCE {
    ul-ScramblingCode          UL-ScramblingCode          OPTIONAL,
    ul-SIRTarget               UL-SIR                     OPTIONAL,
    minUL-ChannelisationCodeLength  MinUL-ChannelisationCodeLength  OPTIONAL,
    maxNrOfUL-DPDCHs          MaxNrOfUL-DPDCHs          OPTIONAL
    -- This IE shall be present if minUL-ChannelisationCodeLength equals to 4 --,
    ul-PunctureLimit          PunctureLimit              OPTIONAL,
    tFCS                       TFCS                    OPTIONAL,
    ul-DPCCH-SlotFormat        UL-DPCCH-SlotFormat        OPTIONAL,
    diversityMode              DiversityMode              OPTIONAL,
    sSDT-CellIDLength          SSdT-CellID-Length          OPTIONAL,
    s-FieldLength              S-FieldLength              OPTIONAL,
    iE-Extensions              ProtocolExtensionContainer { {UL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs} } OPTIONAL,
    ...
}

UL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-Information-RL-ReconfPrepFDD ::= SEQUENCE {
    tFCS                       TFCS                    OPTIONAL,
    dl-DPCH-SlotFormat          DL-DPCH-SlotFormat          OPTIONAL,
    nrOfDLchannelisationcodes  NrOfDLchannelisationcodes  OPTIONAL,
    tFCI-SignallingMode         TFCI-SignallingMode         OPTIONAL,
    tFCI-Presence               TFCI-Presence               OPTIONAL
    -- This IE shall be present if DL DPCH Slot Format IE is from 12 to 16 --,
    multiplexingPosition        MultiplexingPosition        OPTIONAL,
    limitedPowerIncrease        LimitedPowerIncrease        OPTIONAL,
    iE-Extensions              ProtocolExtensionContainer { {DL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs} } OPTIONAL,
    ...
}

DL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-SplitType  CRITICALITY reject EXTENSION  SplitType  PRESENCE optional  }|
    { ID id-LengthOfTFCI2  CRITICALITY reject EXTENSION  LengthOfTFCI2  PRESENCE optional  },
    ...
}

DCH-DeleteList-RL-ReconfPrepFDD ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfPrepFDD

DCH-DeleteItem-RL-ReconfPrepFDD ::= SEQUENCE {
    dCH-ID                      DCH-ID,
    iE-Extensions              ProtocolExtensionContainer { {DCH-DeleteItem-RL-ReconfPrepFDD-ExtIEs} } OPTIONAL,
    ...
}

DCH-DeleteItem-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

}

DSCH-Modify-RL-ReconfPrepFDD ::= SEQUENCE {
    dSCH-Information          DSCH-ModifyInfo-RL-ReconfPrepFDD    OPTIONAL,
    pdSCH-RL-ID              RL-ID                                OPTIONAL,
    tFCS                     TFCS                                OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { {DSCH-Modify-RL-ReconfPrepFDD-ExtIEs} } OPTIONAL,
    ...
}

DSCH-Modify-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-EnhancedDSCHPCIndicator          CRITICALITY ignore EXTENSION EnhancedDSCHPCIndicator    PRESENCE optional }|
    { ID id-EnhancedDSCHPC                  CRITICALITY ignore EXTENSION EnhancedDSCHPC          PRESENCE conditional },
    -- The IE shall be present if the Enhanced DSCH PC Indicator IE is set to "Enhanced DSCH PC Active in the UE".
    ...
}

DSCH-ModifyInfo-RL-ReconfPrepFDD ::= SEQUENCE (SIZE(0..maxNoOfDSCHs)) OF DSCH-ModifyInformationItem-RL-ReconfPrepFDD

DSCH-ModifyInformationItem-RL-ReconfPrepFDD ::= SEQUENCE {
    dSCH-ID                  DSCH-ID,
    trChSourceStatisticsDescriptor TrCh-SrcStatisticsDescr OPTIONAL,
    transportFormatSet       TransportFormatSet          OPTIONAL,
    allocationRetentionPriority AllocationRetentionPriority OPTIONAL,
    schedulingPriorityIndicator SchedulingPriorityIndicator OPTIONAL,
    bLER                     BLER                        OPTIONAL,
    transportBearerRequestIndicator TransportBearerRequestIndicator,
    iE-Extensions            ProtocolExtensionContainer { {DSCH-ModifyInformationItem-RL-ReconfPrepFDD-ExtIEs} } OPTIONAL,
    ...
}

DSCH-ModifyInformationItem-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-TrafficClass          CRITICALITY ignore EXTENSION TrafficClass          PRESENCE optional }|
    { ID id-BindingID             CRITICALITY ignore EXTENSION BindingID          PRESENCE optional }|
    -- Shall be ignored if bearer establishment with ALCAP.
    { ID id-TransportLayerAddress CRITICALITY ignore EXTENSION TransportLayerAddress PRESENCE optional },
    -- Shall be ignored if bearer establishment with ALCAP.
    ...
}

DSCH-Delete-RL-ReconfPrepFDD ::= SEQUENCE {
    dSCH-Information          DSCH-Info-Delete-RL-ReconfPrepFDD,
    iE-Extensions            ProtocolExtensionContainer { {DSCH-Delete-RL-ReconfPrepFDD-ExtIEs} } OPTIONAL,
    ...
}

DSCH-Delete-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DSCH-Info-Delete-RL-ReconfPrepFDD ::= SEQUENCE (SIZE(1..maxNoOfDSCHs)) OF DSCH-DeleteInformationItem-RL-REconfPrepFDD

```

```

DSCH-DeleteInformationItem-RL-ReconfPrepFDD ::= SEQUENCE {
    dSCH-ID          DSCH-ID,
    iE-Extensions    ProtocolExtensionContainer { {DSCH-DeleteInformationItem-RL-ReconfPrepFDD-ExtIEs} } OPTIONAL,
    ...
}

DSCH-DeleteInformationItem-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-InformationList-RL-ReconfPrepFDD          ::= SEQUENCE (SIZE (0..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-Information-RL-ReconfPrepFDD-IEs} }

RL-Information-RL-ReconfPrepFDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-Information-RL-ReconfPrepFDD          CRITICALITY reject  TYPE RL-Information-RL-ReconfPrepFDD          PRESENCE mandatory }
}

RL-Information-RL-ReconfPrepFDD ::= SEQUENCE {
    rL-ID          RL-ID,
    sSDT-Indication          SSDT-Indication          OPTIONAL,
    sSDT-CellIdentity        SSDT-CellID          OPTIONAL
    -- The IE shall be present if the sSDT-Indication is set to 'sSDT-active-in-the-UE' --,
    transmitDiversityIndicator          TransmitDiversityIndicator          OPTIONAL,
    -- This IE shall be present if Diversity Mode IE is present in UL DPCH Information IE and is not equal to "none"
    iE-Extensions          ProtocolExtensionContainer { {RL-Information-RL-ReconfPrepFDD-ExtIEs} } OPTIONAL,
    ...
}

RL-Information-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-SSDT-CellIDforEDSCHPC CRITICALITY ignore EXTENSION SSDT-CellID          PRESENCE conditional }|
    -- This IE shall be present if Enhanced DSCH PC IE is present in either the DSCHs to Modify IE or the DSCHs to Add IE.
    { ID id-DLReferencePower          CRITICALITY ignore EXTENSION DL-Power          PRESENCE optional }|
    { ID id-RL-Specific-DCH-Info          CRITICALITY ignore EXTENSION RL-Specific-DCH-Info PRESENCE optional }|
    { ID id-DL-DPCH-TimingAdjustment CRITICALITY reject EXTENSION DL-DPCH-TimingAdjustment PRESENCE optional },
    ...
}

RadioLinkReconfigurationPrepareFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-HSDSCH-Information-to-Modify          CRITICALITY reject EXTENSION HSDSCH-Information-to-Modify          PRESENCE optional }|
    { ID id-HSDSCH-FDD-Information-to-Add          CRITICALITY reject EXTENSION HSDSCH-FDD-Information          PRESENCE optional }|
    { ID id-HSDSCH-FDD-Information-to-Delete          CRITICALITY reject EXTENSION HSDSCH-DeleteList-RL-ReconfPrepFDD PRESENCE optional }|
    { ID id-HSPDSCH-RL-ID          CRITICALITY reject EXTENSION RL-ID          PRESENCE optional},
    ...
}

HSDSCH-DeleteList-RL-ReconfPrepFDD ::= SEQUENCE (SIZE (1..maxNrOfMACdFlows)) OF HSDSCH-DeleteItem-RL-ReconfPrepFDD

HSDSCH-DeleteItem-RL-ReconfPrepFDD ::= SEQUENCE {
    hSDSCH-MACdFlow-ID          HSDSCH-MACdFlow-ID,
    iE-Extensions          ProtocolExtensionContainer { { HSDSCH-DeleteItem-RL-ReconfPrepFDD-ExtIEs} } OPTIONAL,
}

```

```

}
...
}
HSDSCH-DeleteItem-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}
-- *****
--
-- RADIO LINK RECONFIGURATION PREPARE TDD
--
-- *****

RadioLinkReconfigurationPrepareTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{RadioLinkReconfigurationPrepareTDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{RadioLinkReconfigurationPrepareTDD-Extensions}}
    OPTIONAL,
    ...
}

RadioLinkReconfigurationPrepareTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-AllowedQueuingTime          CRITICALITY reject  TYPE AllowedQueuingTime          PRESENCE optional } |
    { ID id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD  CRITICALITY notify  TYPE UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD PRESENCE optional } |
    optional { ID id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD  CRITICALITY notify  TYPE UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD PRESENCE optional } |
    { ID id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD  CRITICALITY notify  TYPE UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD PRESENCE optional } |
    { ID id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD  CRITICALITY notify  TYPE DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD PRESENCE optional } |
    optional { ID id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD  CRITICALITY notify  TYPE DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD PRESENCE optional } |
    { ID id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD  CRITICALITY notify  TYPE DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD PRESENCE optional } |
    { ID id-TDD-DCHs-to-Modify          CRITICALITY reject  TYPE TDD-DCHs-to-Modify          PRESENCE optional } |
    { ID id-DCHs-to-Add-TDD             CRITICALITY reject  TYPE DCH-TDD-Information          PRESENCE optional } |
    { ID id-DCH-DeleteList-RL-ReconfPrepTDD  CRITICALITY reject  TYPE DCH-DeleteList-RL-ReconfPrepTDD  PRESENCE optional } |
    { ID id-DSCH-ModifyList-RL-ReconfPrepTDD  CRITICALITY reject  TYPE DSCH-ModifyList-RL-ReconfPrepTDD  PRESENCE optional } |
    { ID id-DSCHs-to-Add-TDD            CRITICALITY reject  TYPE DSCH-TDD-Information          PRESENCE optional } |
    { ID id-DSCH-DeleteList-RL-ReconfPrepTDD  CRITICALITY reject  TYPE DSCH-DeleteList-RL-ReconfPrepTDD  PRESENCE optional } |
    { ID id-USCH-ModifyList-RL-ReconfPrepTDD  CRITICALITY reject  TYPE USCH-ModifyList-RL-ReconfPrepTDD  PRESENCE optional } |
    { ID id-USCHs-to-Add                 CRITICALITY reject  TYPE USCH-Information             PRESENCE optional } |
    { ID id-USCH-DeleteList-RL-ReconfPrepTDD  CRITICALITY reject  TYPE USCH-DeleteList-RL-ReconfPrepTDD  PRESENCE optional },
    ...
}

UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {UL-CCTrCH-AddInformation-RL-ReconfPrepTDD-IEs} }

UL-CCTrCH-AddInformation-RL-ReconfPrepTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-UL-CCTrCH-AddInformation-RL-ReconfPrepTDD  CRITICALITY notify  TYPE UL-CCTrCH-AddInformation-RL-ReconfPrepTDD  PRESENCE mandatory }
}

UL-CCTrCH-AddInformation-RL-ReconfPrepTDD ::= SEQUENCE {

```



```

    cCTrCH-ID          CCTrCH-ID,
    tFCS               TFCS,
    tFCI-Coding        tFCI-Coding,
    punctureLimit      PunctureLimit,
    iE-Extensions      ProtocolExtensionContainer { {UL-CCTrCH-AddInformation-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
    ...
}

UL-CCTrCH-AddInformation-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-UL-SIRTarget          CRITICALITY reject          EXTENSION          UL-SIR          PRESENCE optional},
  -- This IE shall be mandatory for 1.28Mcps TDD, not applicable for 3.84Mcps TDD.
  ...
}

UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {UL-CCTrCH-
ModifyInformation-RL-ReconfPrepTDD-IEs} }

UL-CCTrCH-ModifyInformation-RL-ReconfPrepTDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-UL-CCTrCH-ModifyInformation-RL-ReconfPrepTDD          CRITICALITY notify          TYPE UL-CCTrCH-ModifyInformation-RL-ReconfPrepTDD          PRESENCE mandatory
  }
}

UL-CCTrCH-ModifyInformation-RL-ReconfPrepTDD ::= SEQUENCE {
  cCTrCH-ID          CCTrCH-ID,
  tFCS               TFCS          OPTIONAL,
  tFCI-Coding        tFCI-Coding          OPTIONAL,
  punctureLimit      PunctureLimit          OPTIONAL,
  iE-Extensions      ProtocolExtensionContainer { {UL-CCTrCH-ModifyInformation-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
  ...
}

UL-CCTrCH-ModifyInformation-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-UL-SIRTarget          CRITICALITY reject          EXTENSION          UL-SIR          PRESENCE optional},
  -- This IE shall be applicable for 1.28Mcps TDD only.
  ...
}

UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {UL-CCTrCH-
DeleteInformation-RL-ReconfPrepTDD-IEs} }

UL-CCTrCH-DeleteInformation-RL-ReconfPrepTDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-UL-CCTrCH-DeleteInformation-RL-ReconfPrepTDD          CRITICALITY notify          TYPE UL-CCTrCH-DeleteInformation-RL-ReconfPrepTDD          PRESENCE mandatory
  }
}

UL-CCTrCH-DeleteInformation-RL-ReconfPrepTDD ::= SEQUENCE {
  cCTrCH-ID          CCTrCH-ID,
  iE-Extensions      ProtocolExtensionContainer { {UL-CCTrCH-DeleteInformation-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
  ...
}

```

```

UL-CCTrCH-DeleteInformation-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {DL-CCTrCH-AddInformation-
RL-ReconfPrepTDD-IEs} }

DL-CCTrCH-AddInformation-RL-ReconfPrepTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD CRITICALITY notify TYPE DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD PRESENCE mandatory
    }
}

DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCTrCH-ID          CCTrCH-ID,
    tFCS              TFCS,
    tFCI-Coding       TFCI-Coding,
    punctureLimit     PunctureLimit,
    cCTrCH-TPCList    CCTrCH-TPCAddList-RL-ReconfPrepTDD OPTIONAL,
    iE-Extensions     ProtocolExtensionContainer { {DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
    ...
}

DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

CCTrCH-TPCAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF CCTrCH-TPCAddItem-RL-ReconfPrepTDD

CCTrCH-TPCAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCTrCH-ID          CCTrCH-ID,
    iE-Extensions     ProtocolExtensionContainer { { CCTrCH-TPCAddItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
    ...
}

CCTrCH-TPCAddItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {DL-CCTrCH-
ModifyInformation-RL-ReconfPrepTDD-IEs} }

DL-CCTrCH-ModifyInformation-RL-ReconfPrepTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD CRITICALITY notify TYPE DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD PRESENCE
    mandatory }
}

DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCTrCH-ID          CCTrCH-ID,
    tFCS              TFCS OPTIONAL,
    tFCI-Coding       TFCI-Coding OPTIONAL,
    punctureLimit     PunctureLimit OPTIONAL,
}

```

```

    cCtRCH-TPCList          CCTrCH-TPCModifyList-RL-ReconfPrepTDD      OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { {DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
    ...
}

DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

CCTrCH-TPCModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF CCTrCH-TPCModifyItem-RL-ReconfPrepTDD

CCTrCH-TPCModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCtRCH-ID              CCTrCH-ID,
    iE-Extensions          ProtocolExtensionContainer { { CCTrCH-TPCModifyItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
    ...
}

CCTrCH-TPCModifyItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {DL-CCTrCH-DeleteInformation-RL-ReconfPrepTDD-IEs} }

DL-CCTrCH-DeleteInformation-RL-ReconfPrepTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD    CRITICALITY notify TYPE DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD PRESENCE mandatory }
}

DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCtRCH-ID              CCTrCH-ID,
    iE-Extensions          ProtocolExtensionContainer { {DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
    ...
}

DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfPrepTDD

DCH-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dCH-ID                 DCH-ID,
    iE-Extensions          ProtocolExtensionContainer { {DCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
    ...
}

DCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

DSCH-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE(0..maxNoOfDSCHs)) OF DSCH-ModifyItem-RL-ReconfPrepTDD

DSCH-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dSCH-ID                DSCH-ID,
    dl-ccTrCHID            CCTrCH-ID                               OPTIONAL,
    trChSourceStatisticsDescriptor TrCH-SrcStatisticsDescr OPTIONAL,
    transportFormatSet     TransportFormatSet                   OPTIONAL,
    allocationRetentionPriority AllocationRetentionPriority      OPTIONAL,
    schedulingPriorityIndicator SchedulingPriorityIndicator      OPTIONAL,
    bLER                   BLER                                 OPTIONAL,
    transportBearerRequestIndicator TransportBearerRequestIndicator,
    iE-Extensions          ProtocolExtensionContainer { {DSCH-ModifyItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
    ...
}

DSCH-ModifyItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-TrafficClass          CRITICALITY ignore EXTENSION TrafficClass          PRESENCE optional }|
    { ID id-BindingID            CRITICALITY ignore EXTENSION BindingID            PRESENCE optional }|
    -- Shall be ignored if bearer establishment with ALCAP.
    { ID id-TransportLayerAddress CRITICALITY ignore EXTENSION TransportLayerAddress PRESENCE optional },
    -- Shall be ignored if bearer establishment with ALCAP.
    ...
}

DSCH-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE(0..maxNoOfDSCHs)) OF DSCH-DeleteItem-RL-ReconfPrepTDD

DSCH-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dSCH-ID                DSCH-ID,
    iE-Extensions          ProtocolExtensionContainer { {DSCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
    ...
}

DSCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

USCH-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE(0..maxNoOfUSCHs)) OF USCH-ModifyItem-RL-ReconfPrepTDD

USCH-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    uSCH-ID                USCH-ID,
    ul-ccTrCHID            CCTrCH-ID                               OPTIONAL,
    trChSourceStatisticsDescriptor TrCH-SrcStatisticsDescr OPTIONAL,
    transportFormatSet     TransportFormatSet                   OPTIONAL,
    allocationRetentionPriority AllocationRetentionPriority      OPTIONAL,
    schedulingPriorityIndicator SchedulingPriorityIndicator      OPTIONAL,
    bLER                   BLER                                 OPTIONAL,
    transportBearerRequestIndicator TransportBearerRequestIndicator,
    rb-Info                RB-Info                               OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { {USCH-ModifyItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
    ...
}

```

```

USCH-ModifyItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-TrafficClass          CRITICALITY ignore  EXTENSION TrafficClass          PRESENCE optional }|
  { ID id-BindingID             CRITICALITY ignore  EXTENSION BindingID             PRESENCE optional }|
  -- Shall be ignored if bearer establishment with ALCAP.
  { ID id-TransportLayerAddress CRITICALITY ignore  EXTENSION TransportLayerAddress PRESENCE optional },
  -- Shall be ignored if bearer establishment with ALCAP.
  ...
}

USCH-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE(0..maxNoOfUSCHs)) OF USCH-DeleteItem-RL-ReconfPrepTDD

USCH-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
  uSCH-ID          USCH-ID,
  iE-Extensions    ProtocolExtensionContainer { {USCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
  ...
}

USCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

RadioLinkReconfigurationPrepareTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-PrimaryCCPCH-RSCP-RL-ReconfPrepTDD CRITICALITY ignore  EXTENSION PrimaryCCPCH-RSCP PRESENCE optional }|
  { ID id-DL-TimeSlot-ISCP-Info-RL-ReconfPrepTDD CRITICALITY ignore  EXTENSION DL-TimeSlot-ISCP-Info PRESENCE optional }|
  { ID id-DL-Timeslot-ISCP-LCR-Information-RL-ReconfPrepTDD CRITICALITY ignore  EXTENSION DL-TimeSlot-ISCP-LCR-Information PRESENCE optional }|
  }|
  { ID id-HSDSCH-Information-to-Modify          CRITICALITY reject  EXTENSION HSDSCH-Information-to-Modify          PRESENCE optional }|
  { ID id-HSDSCH-TDD-Information-to-Add        CRITICALITY reject  EXTENSION HSDSCH-TDD-Information          PRESENCE optional }|
  { ID id-HSDSCH-TDD-Information-to-Delete    CRITICALITY reject  EXTENSION HSDSCH-DeleteList-RL-ReconfPrepTDD PRESENCE optional }|
  { ID id-HSPDSCH-RL-ID                       CRITICALITY reject  EXTENSION RL-ID                       PRESENCE optional},
  ...
}

HSDSCH-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfMACdFlows)) OF HSDSCH-DeleteItem-RL-ReconfPrepTDD

HSDSCH-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
  hSDSCH-MACdFlow-ID          HSDSCH-MACdFlow-ID,
  iE-Extensions              ProtocolExtensionContainer { { HSDSCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
  ...
}

HSDSCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- RADIO LINK RECONFIGURATION READY FDD
--
-- *****

```

```

RadioLinkReconfigurationReadyFDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkReconfigurationReadyFDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{RadioLinkReconfigurationReadyFDD-Extensions}}
    ...
}

RadioLinkReconfigurationReadyFDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationResponseList-RL-ReconfReadyFDD    CRITICALITY ignore  TYPE RL-InformationResponseList-RL-ReconfReadyFDD    PRESENCE optional
    } |
    { ID id-CriticalityDiagnostics          CRITICALITY ignore  TYPE CriticalityDiagnostics          PRESENCE optional },
    ...
}

RL-InformationResponseList-RL-ReconfReadyFDD ::= SEQUENCE (SIZE (0..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-InformationResponse-RL-ReconfReadyFDD-IEs} }

RL-InformationResponse-RL-ReconfReadyFDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationResponseItem-RL-ReconfReadyFDD    CRITICALITY ignore  TYPE RL-InformationResponseItem-RL-ReconfReadyFDD    PRESENCE mandatory
    }
}

RL-InformationResponseItem-RL-ReconfReadyFDD ::= SEQUENCE {
    rL-ID                RL-ID,
    max-UL-SIR           UL-SIR          OPTIONAL,
    min-UL-SIR           UL-SIR          OPTIONAL,
    maximumDLTxPower     DL-Power       OPTIONAL,
    minimumDLTxPower     DL-Power       OPTIONAL,
    secondary-CCPCH-Info Secondary-CCPCH-Info OPTIONAL,
    dl-CodeInformationList DL-CodeInformationList-RL-ReconfReadyFDD OPTIONAL,
    dCHInformationResponse DCH-InformationResponseList-RL-ReconfReadyFDD OPTIONAL,
    dSCHsToBeAddedOrModified DSCHsToBeAddedOrModified-RL-ReconfReadyFDD OPTIONAL,
    iE-Extensions       ProtocolExtensionContainer { {RL-InformationResponseItem-RL-ReconfReadyFDD-ExtIEs} } OPTIONAL,
    ...
}

RL-InformationResponseItem-RL-ReconfReadyFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-PowerBalancing-UpdatedIndicator    CRITICALITY ignore    EXTENSION    DL-PowerBalancing-UpdatedIndicator    PRESENCE optional}|
    { ID id-HSDSCH-FDD-Information-Response      CRITICALITY ignore    EXTENSION    HSDSCH-FDD-Information-Response      PRESENCE optional},
    ...
}

DL-CodeInformationList-RL-ReconfReadyFDD ::= ProtocolIE-Single-Container {{ DL-CodeInformationListIEs-RL-ReconfReadyFDD }}

DL-CodeInformationListIEs-RL-ReconfReadyFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-FDD-DL-CodeInformation    CRITICALITY ignore  TYPE FDD-DL-CodeInformation    PRESENCE mandatory }
}

DCH-InformationResponseList-RL-ReconfReadyFDD ::= ProtocolIE-Single-Container { {DCH-InformationResponseListIEs-RL-ReconfReadyFDD} }

DCH-InformationResponseListIEs-RL-ReconfReadyFDD RNSAP-PROTOCOL-IES ::= {

```

```

    { ID id-DCH-InformationResponse      CRITICALITY ignore  TYPE DCH-InformationResponse      PRESENCE mandatory }
  }
DSCHsToBeAddedOrModified-RL-ReconfReadyFDD ::= ProtocolIE-Single-Container { {DSCHsToBeAddedOrModifiedIEs-RL-ReconfReadyFDD} }
DSCHsToBeAddedOrModifiedIEs-RL-ReconfReadyFDD RNSAP-PROTOCOL-IES ::= {
  { ID id-DSCHsToBeAddedOrModified-FDD   CRITICALITY ignore  TYPE DSCH-FDD-InformationResponse  PRESENCE mandatory }
}
RadioLinkReconfigurationReadyFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-DSCH-RNTI                      CRITICALITY ignore  EXTENSION DSCH-RNTI             PRESENCE optional } |
  { ID id-HSDSCH-RNTI                   CRITICALITY reject  EXTENSION HSDSCH-RNTI          PRESENCE optional },
  ...
}
-- *****
--
-- RADIO LINK RECONFIGURATION READY TDD
--
-- *****

RadioLinkReconfigurationReadyTDD ::= SEQUENCE {
  protocolIEs                ProtocolIE-Container    {{RadioLinkReconfigurationReadyTDD-IEs}},
  protocolExtensions          ProtocolExtensionContainer {{RadioLinkReconfigurationReadyTDD-Extensions}}
  ...
}
RadioLinkReconfigurationReadyTDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-RL-InformationResponse-RL-ReconfReadyTDD
    CRITICALITY ignore  TYPE RL-InformationResponse-RL-ReconfReadyTDD  PRESENCE optional } |
  { ID id-CriticalityDiagnostics
    CRITICALITY ignore  TYPE CriticalityDiagnostics                     PRESENCE optional },
  ...
}
RL-InformationResponse-RL-ReconfReadyTDD ::= SEQUENCE {
  rL-ID                      RL-ID,
  max-UL-SIR                  UL-SIR                OPTIONAL,
  min-UL-SIR                  UL-SIR                OPTIONAL,
  maximumDLTxPower           DL-Power              OPTIONAL,
  minimumDLTxPower           DL-Power              OPTIONAL,
  secondary-CCPCH-Info-TDD    Secondary-CCPCH-Info-TDD  OPTIONAL,
  ul-CCTrCH-Information       UL-CCTrCH-InformationList-RL-ReconfReadyTDD  OPTIONAL,
  dl-CCTrCH-Information       DL-CCTrCH-InformationList-RL-ReconfReadyTDD  OPTIONAL,
  dCHInformationResponse      DCH-InformationResponseList-RL-ReconfReadyTDD  OPTIONAL,
  dSCHsToBeAddedOrModified    DSCHToBeAddedOrModified-RL-ReconfReadyTDD  OPTIONAL,
  uSCHsToBeAddedOrModified    USCHToBeAddedOrModified-RL-ReconfReadyTDD  OPTIONAL,
  IE-Extensions               ProtocolExtensionContainer { {RL-InformationResponse-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
  ...
}
RL-InformationResponse-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {

```

```

    { ID id-HSDSCH-TDD-Information-Response          CRITICALITY ignore          EXTENSION HSDSCH-TDD-Information-Response          PRESENCE optional},
    ...
}

UL-CCTrCH-InformationList-RL-ReconfReadyTDD ::= ProtocolIE-Single-Container {{UL-CCTrCHInformationListIEs-RL-ReconfReadyTDD}}

UL-CCTrCHInformationListIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-UL-CCTrCH-InformationListIE-RL-ReconfReadyTDD          CRITICALITY ignore          TYPE UL-CCTrCHInformationListIE-RL-ReconfReadyTDD          PRESENCE mandatory
    }
}

UL-CCTrCHInformationListIE-RL-ReconfReadyTDD ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationItem-RL-ReconfReadyTDD

UL-CCTrCH-InformationItem-RL-ReconfReadyTDD ::= SEQUENCE {
    cCCTrCH-ID                CCTrCH-ID,
    ul-DPCH-AddInformation      UL-DPCH-InformationAddList-RL-ReconfReadyTDD          OPTIONAL,
    --For 3.84Mcps TDD only
    ul-DPCH-ModifyInformation    UL-DPCH-InformationModifyList-RL-ReconfReadyTDD          OPTIONAL,
    --For 3.84Mcps TDD only
    ul-DPCH-DeleteInformation    UL-DPCH-InformationDeleteList-RL-ReconfReadyTDD          OPTIONAL,
    iE-Extensions              ProtocolExtensionContainer { {UL-CCTrCH-InformationItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
    ...
}

UL-CCTrCH-InformationItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfReadyTDD          CRITICALITY ignore          EXTENSION          UL-DPCH-LCR-InformationAddList-RL-ReconfReadyTDD
    PRESENCE optional },
    --For 1.28Mcps TDD only
    ...
}

UL-DPCH-LCR-InformationAddList-RL-ReconfReadyTDD ::= ProtocolIE-Single-Container {{UL-DPCH-LCR-InformationAddListIEs-RL-ReconfReadyTDD}}

UL-DPCH-LCR-InformationAddListIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfReadyTDD          CRITICALITY ignore          TYPE UL-DPCH-LCR-InformationAddListIE-RL-ReconfReadyTDD          PRESENCE
    mandatory }
}

UL-DPCH-LCR-InformationAddListIE-RL-ReconfReadyTDD ::= SEQUENCE {
    repetitionPeriod            RepetitionPeriod,
    repetitionLength            RepetitionLength,
    tDD-DPCHOffset              TDD-DPCHOffset,
    uL-TimeslotLCR-Info          UL-TimeslotLCR-Information,
    iE-Extensions              ProtocolExtensionContainer { {UL-DPCH-LCR-InformationAddItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
    ...
}

UL-DPCH-LCR-InformationAddItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```



```

UL-DPCH-InformationAddList-RL-ReconfReadyTDD ::= ProtocolIE-Single-Container {{UL-DPCH-InformationAddListIEs-RL-ReconfReadyTDD}}

UL-DPCH-InformationAddListIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-UL-DPCH-InformationAddListIE-RL-ReconfReadyTDD  CRITICALITY ignore TYPE UL-DPCH-InformationAddListIE-RL-ReconfReadyTDD  PRESENCE
optional }
}

UL-DPCH-InformationAddListIE-RL-ReconfReadyTDD ::= SEQUENCE {
  repetitionPeriod          RepetitionPeriod,
  repetitionLength          RepetitionLength,
  tDD-DPCHOffset           TDD-DPCHOffset,
  rxTimingDeviationForTA   RxTimingDeviationForTA          OPTIONAL,
  uL-Timeslot-Information   UL-Timeslot-Information,
  iE-Extensions            ProtocolExtensionContainer { {UL-DPCH-InformationAddItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
  ...
}

UL-DPCH-InformationAddItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

UL-DPCH-InformationModifyList-RL-ReconfReadyTDD ::= ProtocolIE-Single-Container {{UL-DPCH-InformationModifyListIEs-RL-ReconfReadyTDD}}

UL-DPCH-InformationModifyListIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-UL-DPCH-InformationModifyListIE-RL-ReconfReadyTDD  CRITICALITY ignore TYPE UL-DPCH-InformationModifyListIE-RL-ReconfReadyTDD  PRESENCE
mandatory }
}

UL-DPCH-InformationModifyListIE-RL-ReconfReadyTDD ::= SEQUENCE {
  repetitionPeriod          RepetitionPeriod          OPTIONAL,
  repetitionLength          RepetitionLength          OPTIONAL,
  tDD-DPCHOffset           TDD-DPCHOffset            OPTIONAL,
  uL-Timeslot-InformationModifyList-RL-ReconfReadyTDD  UL-Timeslot-InformationModifyList-RL-ReconfReadyTDD  OPTIONAL,
  --For 3.84Mcps TDD only
  iE-Extensions            ProtocolExtensionContainer { {UL-DPCH-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
  ...
}

UL-DPCH-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-UL-Timeslot-LCR-InformationModifyList-RL-ReconfReadyTDD  CRITICALITY ignore EXTENSION UL-TimeslotLCR-InformationModifyList-RL-
ReconfReadyTDD  PRESENCE optional },
  --For 1.28Mcps TDD only
  ...
}

UL-TimeslotLCR-InformationModifyList-RL-ReconfReadyTDD ::= SEQUENCE ( SIZE (1..maxNrOfTsLCR)) OF UL-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD

UL-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD ::= SEQUENCE {
  timeSlotLCR              TimeSlotLCR,
  midambleShiftLCR        MidambleShiftLCR          OPTIONAL,
  tFCI-Presence            TFCI-Presence              OPTIONAL,
}

```

```

    tDD-uL-Code-LCR-Information      TDD-UL-Code-LCR-InformationModifyList-RL-ReconfReadyTDD      OPTIONAL,
    iE-Extensions                    ProtocolExtensionContainer { {UL-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
    ...
}

TDD-UL-Code-LCR-InformationModifyList-RL-ReconfReadyTDD ::= SEQUENCE ( SIZE (1..maxNrOfDPCHsLCR)) OF TDD-UL-Code-LCR-InformationModifyItem-RL-
ReconfReadyTDD

TDD-UL-Code-LCR-InformationModifyItem-RL-ReconfReadyTDD ::= SEQUENCE {
    dPCH-ID                          DPCH-ID,
    tDD-ChannelisationCodeLCR        TDD-ChannelisationCodeLCR      OPTIONAL,
    iE-Extensions                    ProtocolExtensionContainer { {TDD-UL-Code-LCR-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
    ...
}

TDD-UL-Code-LCR-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Timeslot-InformationModifyList-RL-ReconfReadyTDD ::= SEQUENCE ( SIZE (1..maxNrOfTS)) OF UL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD

UL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD ::= SEQUENCE {
    timeSlot                          TimeSlot,
    midambleShiftAndBurstType          MidambleShiftAndBurstType      OPTIONAL,
    tFCI-Presence                      TFCI-Presence              OPTIONAL,
    uL-Code-Information                TDD-UL-Code-InformationModifyList-RL-ReconfReadyTDD      OPTIONAL,
    iE-Extensions                    ProtocolExtensionContainer { {UL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
    ...
}

UL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

TDD-UL-Code-InformationModifyList-RL-ReconfReadyTDD ::= SEQUENCE ( SIZE (1..maxNrOfDPCHs)) OF TDD-UL-Code-InformationModifyItem-RL-ReconfReadyTDD

TDD-UL-Code-InformationModifyItem-RL-ReconfReadyTDD ::= SEQUENCE {
    dPCH-ID                          DPCH-ID,
    tDD-ChannelisationCode            TDD-ChannelisationCode      OPTIONAL,
    iE-Extensions                    ProtocolExtensionContainer { {TDD-UL-Code-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
    ...
}

TDD-UL-Code-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

UL-DPCH-InformationDeleteList-RL-ReconfReadyTDD ::= ProtocolIE-Single-Container {{UL-DPCH-InformationDeleteListIEs-RL-ReconfReadyTDD}}

UL-DPCH-InformationDeleteListIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-UL-DPCH-InformationDeleteListIE-RL-ReconfReadyTDD  CRITICALITY ignore  TYPE UL-DPCH-InformationDeleteListIE-RL-ReconfReadyTDD  PRESENCE
  mandatory }
}

UL-DPCH-InformationDeleteListIE-RL-ReconfReadyTDD ::= SEQUENCE (SIZE (0..maxNrOfDPCHs)) OF UL-DPCH-InformationDeleteItem-RL-ReconfReadyTDD

UL-DPCH-InformationDeleteItem-RL-ReconfReadyTDD ::= SEQUENCE {
  dPCH-ID                DPCH-ID,
  iE-Extensions          ProtocolExtensionContainer { {UL-DPCH-InformationDeleteList-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
  ...
}

UL-DPCH-InformationDeleteList-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-CCTrCH-InformationList-RL-ReconfReadyTDD          ::= ProtocolIE-Single-Container {{DL-CCTrCHInformationListIEs-RL-ReconfReadyTDD}}

DL-CCTrCHInformationListIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-DL-CCTrCH-InformationListIE-RL-ReconfReadyTDD  CRITICALITY ignore  TYPE DL-CCTrCHInformationListIE-RL-ReconfReadyTDD  PRESENCE mandatory
  }
}

DL-CCTrCHInformationListIE-RL-ReconfReadyTDD ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationItem-RL-ReconfReadyTDD

DL-CCTrCH-InformationItem-RL-ReconfReadyTDD ::= SEQUENCE {
  cCTrCH-ID                CCTrCH-ID,
  dl-DPCH-AddInformation    DL-DPCH-InformationAddList-RL-ReconfReadyTDD          OPTIONAL,
  --For 3.84Mcps TDD only
  dl-DPCH-ModifyInformation DL-DPCH-InformationModifyList-RL-ReconfReadyTDD      OPTIONAL,
  --For 3.84Mcps TDD only
  dl-DPCH-DeleteInformation DL-DPCH-InformationDeleteList-RL-ReconfReadyTDD      OPTIONAL,
  iE-Extensions            ProtocolExtensionContainer { {DL-CCTrCH-InformationItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
  ...
}

DL-CCTrCH-InformationItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-DL-DPCH-LCR-InformationAddListIE-RL-ReconfReadyTDD  CRITICALITY ignore          EXTENSION  DL-DPCH-LCR-InformationAddList-RL-
  ReconfReadyTDD  PRESENCE optional},
  --For 1.28Mcps TDD only
  ...
}

DL-DPCH-LCR-InformationAddList-RL-ReconfReadyTDD ::= ProtocolIE-Single-Container {{DL-DPCH-LCR-InformationAddListIEs-RL-ReconfReadyTDD}}

DL-DPCH-LCR-InformationAddListIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-DL-DPCH-LCR-InformationAddListIE-RL-ReconfReadyTDD  CRITICALITY ignore  TYPE DL-DPCH-LCR-InformationAddListIE-RL-ReconfReadyTDD  PRESENCE
  mandatory }
}

```

```

}

DL-DPCH-LCR-InformationAddListIE-RL-ReconfReadyTDD ::= SEQUENCE {
    repetitionPeriod          RepetitionPeriod,
    repetitionLength          RepetitionLength,
    tDD-DPCHOffset            TDD-DPCHOffset,
    dL-TimeslotLCR-Info        DL-TimeslotLCR-Information,
    iE-Extensions              ProtocolExtensionContainer { {DL-DPCH-LCR-InformationAddItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
    ...
}

DL-DPCH-LCR-InformationAddItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-InformationAddList-RL-ReconfReadyTDD ::= ProtocolIE-Single-Container {{DL-DPCH-InformationAddListIEs-RL-ReconfReadyTDD}}

DL-DPCH-InformationAddListIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationAddListIE-RL-ReconfReadyTDD    CRITICALITY ignore TYPE DL-DPCH-InformationAddListIE-RL-ReconfReadyTDD    PRESENCE
    mandatory }
}

DL-DPCH-InformationAddListIE-RL-ReconfReadyTDD ::= SEQUENCE {
    repetitionPeriod          RepetitionPeriod,
    repetitionLength          RepetitionLength,
    tDD-DPCHOffset            TDD-DPCHOffset,
    dL-Timeslot-Information    DL-Timeslot-Information,
    iE-Extensions              ProtocolExtensionContainer { {DL-DPCH-InformationAddItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
    ...
}

DL-DPCH-InformationAddItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-InformationModifyList-RL-ReconfReadyTDD ::= ProtocolIE-Single-Container {{DL-DPCH-InformationModifyListIEs-RL-ReconfReadyTDD}}

DL-DPCH-InformationModifyListIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationModifyListIE-RL-ReconfReadyTDD    CRITICALITY ignore TYPE DL-DPCH-InformationModifyListIE-RL-ReconfReadyTDD    PRESENCE
    mandatory }
}

DL-DPCH-InformationModifyListIE-RL-ReconfReadyTDD ::= SEQUENCE {
    repetitionPeriod          RepetitionPeriod          OPTIONAL,
    repetitionLength          RepetitionLength           OPTIONAL,
    tDD-DPCHOffset            TDD-DPCHOffset            OPTIONAL,
    dL-Timeslot-InformationModifyList-RL-ReconfReadyTDD    DL-Timeslot-InformationModifyList-RL-ReconfReadyTDD    OPTIONAL,
    --For 3.84Mcps TDD only
    iE-Extensions              ProtocolExtensionContainer { {DL-DPCH-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
    ...
}

```

```

DL-DPCH-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-DL-Timeslot-LCR-InformationModifyList-RL-ReconfReadyTDD CRITICALITY ignore EXTENSION DL-TimeslotLCR-InformationModifyList-RL-
ReconfReadyTDD PRESENCE optional },
  --For 1.28Mcps TDD only
  ...
}

DL-TimeslotLCR-InformationModifyList-RL-ReconfReadyTDD ::= SEQUENCE ( SIZE (1..maxNrOfTsLCR)) OF DL-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD

DL-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD ::= SEQUENCE {
  timeSlotLCR TimeSlotLCR,
  midambleShiftLCR MidambleShiftLCR OPTIONAL,
  tFCI-Presence TFCI-Presence OPTIONAL,
  tDD-dL-Code-LCR-Information TDD-DL-Code-LCR-InformationModifyList-RL-ReconfReadyTDD OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { {DL-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
  ...
}

TDD-DL-Code-LCR-InformationModifyList-RL-ReconfReadyTDD ::= SEQUENCE ( SIZE (1..maxNrOfDPCHsLCR)) OF TDD-DL-Code-LCR-InformationModifyItem-RL-
ReconfReadyTDD

TDD-DL-Code-LCR-InformationModifyItem-RL-ReconfReadyTDD ::= SEQUENCE {
  dPCH-ID DPCH-ID,
  tDD-ChannelisationCodeLCR TDD-ChannelisationCodeLCR OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { {TDD-DL-Code-LCR-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
  ...
}

TDD-DL-Code-LCR-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-Timeslot-InformationModifyList-RL-ReconfReadyTDD ::= SEQUENCE ( SIZE (1..maxNrOfTs)) OF DL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD

DL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD ::= SEQUENCE {
  timeSlot TimeSlot,
  midambleShiftAndBurstType MidambleShiftAndBurstType OPTIONAL,
  tFCI-Presence TFCI-Presence OPTIONAL,
  dL-Code-Information TDD-DL-Code-InformationModifyList-RL-ReconfReadyTDD OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { {DL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
  ...
}

DL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

TDD-DL-Code-InformationModifyList-RL-ReconfReadyTDD ::= SEQUENCE ( SIZE (1..maxNrOfDPCHs)) OF TDD-DL-Code-InformationModifyItem-RL-ReconfReadyTDD

TDD-DL-Code-InformationModifyItem-RL-ReconfReadyTDD ::= SEQUENCE {
    dPCH-ID                DPCH-ID,
    tDD-ChannelisationCode TDD-ChannelisationCode OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { {TDD-DL-Code-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
    ...
}

TDD-DL-Code-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-InformationDeleteList-RL-ReconfReadyTDD ::= ProtocolIE-Single-Container {{DL-DPCH-InformationDeleteListIEs-RL-ReconfReadyTDD}}

DL-DPCH-InformationDeleteListIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationDeleteListIE-RL-ReconfReadyTDD CRITICALITY ignore TYPE DL-DPCH-InformationDeleteListIE-RL-ReconfReadyTDD PRESENCE
    mandatory }
}

DL-DPCH-InformationDeleteListIE-RL-ReconfReadyTDD ::= SEQUENCE (SIZE (0..maxNrOfDPCHs)) OF DL-DPCH-InformationDeleteItem-RL-ReconfReadyTDD

DL-DPCH-InformationDeleteItem-RL-ReconfReadyTDD ::= SEQUENCE {
    dPCH-ID                DPCH-ID,
    iE-Extensions          ProtocolExtensionContainer { {DL-DPCH-InformationDeleteList-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
    ...
}

DL-DPCH-InformationDeleteList-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-InformationResponseList-RL-ReconfReadyTDD ::= ProtocolIE-Single-Container { {DCH-InformationResponseListIEs-RL-ReconfReadyTDD} }

DCH-InformationResponseListIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DCH-InformationResponse CRITICALITY ignore TYPE DCH-InformationResponse PRESENCE mandatory }
}

DSCHToBeAddedOrModified-RL-ReconfReadyTDD ::= ProtocolIE-Single-Container { {DSCHToBeAddedOrModifiedIEs-RL-ReconfReadyTDD} }

DSCHToBeAddedOrModifiedIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DSCHToBeAddedOrModifiedList-RL-ReconfReadyTDD CRITICALITY ignore TYPE DSCHToBeAddedOrModifiedList-RL-ReconfReadyTDD PRESENCE mandatory
    }
}

DSCHToBeAddedOrModifiedList-RL-ReconfReadyTDD ::= SEQUENCE (SIZE (0..maxNoOfDSCHs)) OF DSCHToBeAddedOrModifiedItem-RL-ReconfReadyTDD

DSCHToBeAddedOrModifiedItem-RL-ReconfReadyTDD ::= SEQUENCE {
    dsch-ID                DSCH-ID,
    transportFormatManagement TransportFormatManagement,

```

```

    dSCH-FlowControlInformation DSCH-FlowControlInformation,
    bindingID BindingID OPTIONAL,
    transportLayerAddress TransportLayerAddress OPTIONAL,
    iE-Extensions ProtocolExtensionContainer { {DSCHToBeAddedOrModifiedItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
    ...
}

DSCHToBeAddedOrModifiedItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

USCHToBeAddedOrModified-RL-ReconfReadyTDD ::= ProtocolIE-Single-Container { {USCHToBeAddedOrModifiedIEs-RL-ReconfReadyTDD}
}USCHToBeAddedOrModifiedIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-USCHToBeAddedOrModifiedList-RL-ReconfReadyTDD CRITICALITY ignore TYPE USCHToBeAddedOrModifiedList-RL-ReconfReadyTDD PRESENCE mandatory
    }
}

USCHToBeAddedOrModifiedList-RL-ReconfReadyTDD ::= SEQUENCE (SIZE (0..maxNoOfUSCHs)) OF USCHToBeAddedOrModifiedItem-RL-ReconfReadyTDD

USCHToBeAddedOrModifiedItem-RL-ReconfReadyTDD ::= SEQUENCE {
    uSCH-ID USCH-ID,
    transportFormatManagement TransportFormatManagement,
    bindingID BindingID OPTIONAL,
    transportLayerAddress TransportLayerAddress OPTIONAL,
    iE-Extensions ProtocolExtensionContainer { {USCHToBeAddedOrModifiedItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
    ...
}

USCHToBeAddedOrModifiedItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RadioLinkReconfigurationReadyTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-RL-ReconfigurationReadyTDD-RL-Information CRITICALITY ignore EXTENSION RL-ReconfigurationReadyTDD-RL-Information PRESENCE
    optional}|
    { ID id-HSDSCH-RNTI CRITICALITY reject EXTENSION HSDSCH-RNTI PRESENCE optional },
    ...
}

RL-ReconfigurationReadyTDD-RL-Information ::= SEQUENCE {
    rL-ID RL-ID,
    rL-Specific-DCH-Info RL-Specific-DCH-Info OPTIONAL,
    iE-Extensions ProtocolExtensionContainer { { RL-ReconfigurationReadyTDD-RL-Information-ExtIEs} } OPTIONAL,
    ...
}

RL-ReconfigurationReadyTDD-RL-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****

```

```

--
-- RADIO LINK RECONFIGURATION COMMIT
--
-- *****

RadioLinkReconfigurationCommit ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container          {{RadioLinkReconfigurationCommit-IEs}},
    protocolExtensions   ProtocolExtensionContainer    {{RadioLinkReconfigurationCommit-Extensions}}
    ...
}
OPTIONAL,

RadioLinkReconfigurationCommit-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-CFN          CRITICALITY ignore  TYPE CFN          PRESENCE mandatory } |
    { ID id-Active-Pattern-Sequence-Information CRITICALITY ignore  TYPE Active-Pattern-Sequence-Information PRESENCE optional } ,--FDD only
    ...
}

RadioLinkReconfigurationCommit-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- RADIO LINK RECONFIGURATION FAILURE
--
-- *****

RadioLinkReconfigurationFailure ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container          {{RadioLinkReconfigurationFailure-IEs}},
    protocolExtensions   ProtocolExtensionContainer    {{RadioLinkReconfigurationFailure-Extensions}}
    ...
}
OPTIONAL,

RadioLinkReconfigurationFailure-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-CauseLevel-RL-ReconfFailure      CRITICALITY ignore  TYPE CauseLevel-RL-ReconfFailure  PRESENCE mandatory } |
    { ID id-CriticalityDiagnostics          CRITICALITY ignore  TYPE CriticalityDiagnostics       PRESENCE optional } ,
    ...
}

CauseLevel-RL-ReconfFailure ::= CHOICE {
    generalCause          GeneralCauseList-RL-ReconfFailure,
    rLSpecificCause       RLSpecificCauseList-RL-ReconfFailure,
    ...
}

GeneralCauseList-RL-ReconfFailure ::= SEQUENCE {
    cause                 Cause,
    iE-Extensions         ProtocolExtensionContainer { { GeneralCauseItem-RL-ReconfFailure-ExtIEs} }
    ...
}
OPTIONAL,

```



```

GeneralCauseItem-RL-ReconfFailure-ExtIEs  RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

RLSpecificCauseList-RL-ReconfFailure ::= SEQUENCE {
  rL-ReconfigurationFailureList-RL-ReconfFailure  RL-ReconfigurationFailureList-RL-ReconfFailure  OPTIONAL,
  iE-Extensions                                     ProtocolExtensionContainer { { RLSpecificCauseItem-RL-ReconfFailure-ExtIEs} }  OPTIONAL,
  ...
}

RLSpecificCauseItem-RL-ReconfFailure-ExtIEs  RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

RL-ReconfigurationFailureList-RL-ReconfFailure ::= SEQUENCE (SIZE (0..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-ReconfigurationFailure-RL-ReconfFailure-IEs} }

RL-ReconfigurationFailure-RL-ReconfFailure-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-RL-ReconfigurationFailure-RL-ReconfFail CRITICALITY ignore TYPE RL-ReconfigurationFailure-RL-ReconfFail PRESENCE mandatory }
}

RL-ReconfigurationFailure-RL-ReconfFail ::= SEQUENCE {
  rL-ID          RL-ID,
  cause          Cause,
  iE-Extensions  ProtocolExtensionContainer { {RL-ReconfigurationFailure-RL-ReconfFailure-ExtIEs} } OPTIONAL,
  ...
}

RL-ReconfigurationFailure-RL-ReconfFailure-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

RadioLinkReconfigurationFailure-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- RADIO LINK RECONFIGURATION CANCEL
--
-- *****

RadioLinkReconfigurationCancel ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container  {{RadioLinkReconfigurationCancel-IEs}},
  protocolExtensions  ProtocolExtensionContainer {{RadioLinkReconfigurationCancel-Extensions}}  OPTIONAL,
  ...
}

RadioLinkReconfigurationCancel-IEs RNSAP-PROTOCOL-IES ::= {
  ...
}

```

```

RadioLinkReconfigurationCancel-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- RADIO LINK RECONFIGURATION REQUEST FDD
--
-- *****

RadioLinkReconfigurationRequestFDD ::= SEQUENCE {
  protocolIES                ProtocolIE-Container    {{RadioLinkReconfigurationRequestFDD-IEs}},
  protocolExtensions          ProtocolExtensionContainer {{RadioLinkReconfigurationRequestFDD-Extensions}}      OPTIONAL,
  ...
}

RadioLinkReconfigurationRequestFDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-AllowedQueuingTime      CRITICALITY reject TYPE AllowedQueuingTime      PRESENCE optional } |
  { ID id-UL-DPCH-Information-RL-ReconfRqstFDD CRITICALITY reject TYPE UL-DPCH-Information-RL-ReconfRqstFDD PRESENCE optional } |
  { ID id-DL-DPCH-Information-RL-ReconfRqstFDD CRITICALITY reject TYPE DL-DPCH-Information-RL-ReconfRqstFDD PRESENCE optional } |
  { ID id-FDD-DCHs-to-Modify      CRITICALITY reject TYPE FDD-DCHs-to-Modify      PRESENCE optional } |
  { ID id-DCHs-to-Add-FDD         CRITICALITY reject TYPE DCH-FDD-Information      PRESENCE optional } |
  { ID id-DCH-DeleteList-RL-ReconfRqstFDD CRITICALITY reject TYPE DCH-DeleteList-RL-ReconfRqstFDD PRESENCE optional } |
  { ID id-Transmission-Gap-Pattern-Sequence-Information CRITICALITY reject TYPE Transmission-Gap-Pattern-Sequence-Information PRESENCE optional },
  ...
}

UL-DPCH-Information-RL-ReconfRqstFDD ::= SEQUENCE {
  tFCS                TFCS      OPTIONAL,
  iE-Extensions        ProtocolExtensionContainer { {UL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs} } OPTIONAL,
  ...
}

UL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-DPCH-Information-RL-ReconfRqstFDD ::= SEQUENCE {
  tFCS                TFCS      OPTIONAL,
  tFCI-SignallingMode TFCS-SignallingMode OPTIONAL,
  limitedPowerIncrease LimitedPowerIncrease OPTIONAL,
  iE-Extensions        ProtocolExtensionContainer { {DL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs} } OPTIONAL,
  ...
}

DL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DCH-DeleteList-RL-ReconfRqstFDD ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfRqstFDD

```

```

DCH-DeleteItem-RL-ReconfRqstFDD ::= SEQUENCE {
    dCH-ID                DCH-ID,
    iE-Extensions         ProtocolExtensionContainer { {DCH-DeleteItem-RL-ReconfRqstFDD-ExtIEs} } OPTIONAL,
    ...
}

DCH-DeleteItem-RL-ReconfRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RadioLinkReconfigurationRequestFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-RL-ReconfigurationRequestFDD-RL-InformationList CRITICALITY ignore     EXTENSION   RL-ReconfigurationRequestFDD-RL-InformationList
    PRESENCE   optional}|
    { ID id-DL-ReferencePowerInformation          CRITICALITY ignore  EXTENSION   DL-ReferencePowerInformation          PRESENCE optional },
    ...
}

RL-ReconfigurationRequestFDD-RL-InformationList ::= SEQUENCE (SIZE (0..maxNrOfRLs)) OF ProtocolIE-Single-Container {
    {RL-ReconfigurationRequestFDD-RL-Information-ListItem} }

RL-ReconfigurationRequestFDD-RL-Information-ListItem RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-ReconfigurationRequestFDD-RL-Information-IEs CRITICALITY ignore  TYPE RL-ReconfigurationRequestFDD-RL-Information-IEs PRESENCE optional
    }
}

RL-ReconfigurationRequestFDD-RL-Information-IEs ::= SEQUENCE {
    rL-ID                RL-ID,
    rL-Specific-DCH-Info  RL-Specific-DCH-Info OPTIONAL,
    iE-Extensions         ProtocolExtensionContainer { { RL-ReconfigurationRequestFDD-RL-Information-ExtIEs} } OPTIONAL,
    ...
}

RL-ReconfigurationRequestFDD-RL-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- RADIO LINK RECONFIGURATION REQUEST TDD
--
-- *****

RadioLinkReconfigurationRequestTDD ::= SEQUENCE {
    protocolIEs           ProtocolIE-Container      {{RadioLinkReconfigurationRequestTDD-IEs}},
    protocolExtensions    ProtocolExtensionContainer {{RadioLinkReconfigurationRequestTDD-Extensions}}
    ...
}

RadioLinkReconfigurationRequestTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-AllowedQueuingTime          CRITICALITY reject  TYPE AllowedQueuingTime          PRESENCE optional } |

```

```

    { ID id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD    CRITICALITY notify  TYPE UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD  PRESENCE
optional    } |
    { ID id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD    CRITICALITY notify  TYPE UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD  PRESENCE
optional    } |
    { ID id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD    CRITICALITY notify  TYPE DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD  PRESENCE
optional    } |
    { ID id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD    CRITICALITY notify  TYPE DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD  PRESENCE
optional    } |
    { ID id-TDD-DCHs-to-Modify          CRITICALITY reject  TYPE TDD-DCHs-to-Modify          PRESENCE optional  } |
    { ID id-DCHs-to-Add-TDD             CRITICALITY reject  TYPE DCH-TDD-Information          PRESENCE optional  } |
    { ID id-DCH-DeleteList-RL-ReconfRqstTDD    CRITICALITY reject  TYPE DCH-DeleteList-RL-ReconfRqstTDD    PRESENCE optional },
    ...
}

UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {UL-CCTrCH-
InformationModifyList-RL-ReconfRqstTDD-IEs} }

UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD    CRITICALITY notify  TYPE UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD  PRESENCE
mandatory    }
}

UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD ::= SEQUENCE {
    cCTrCH-ID                CCTrCH-ID,
    tFCS                      TFCS          OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { {UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {UL-CCTrCH-
InformationDeleteList-RL-ReconfRqstTDD-IEs} }

UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD    CRITICALITY notify  TYPE UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD  PRESENCE
mandatory    }
}

UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD ::= SEQUENCE {
    cCTrCH-ID                CCTrCH-ID,
    iE-Extensions            ProtocolExtensionContainer { {UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {DL-CCTrCH-
InformationModifyList-RL-ReconfRqstTDD-IEs} }

DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD    CRITICALITY notify  TYPE DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD  PRESENCE
mandatory }
}

DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD ::= SEQUENCE {
  cCTrCH-ID          CCTrCH-ID,
  tFCS              OPTIONAL,
  iE-Extensions     ProtocolExtensionContainer { {DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs} } OPTIONAL,
  ...
}

DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {DL-CCTrCH-
InformationDeleteList-RL-ReconfRqstTDD-IEs} }

DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD    CRITICALITY notify  TYPE DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD  PRESENCE
mandatory }
}

DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD ::= SEQUENCE {
  cCTrCH-ID          CCTrCH-ID,
  iE-Extensions     ProtocolExtensionContainer { {DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD-ExtIEs} } OPTIONAL,
  ...
}

DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DCH-DeleteList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE(0..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfRqstTDD

DCH-DeleteItem-RL-ReconfRqstTDD ::= SEQUENCE {
  dCH-ID            DCH-ID,
  iE-Extensions     ProtocolExtensionContainer { {DCH-DeleteItem-RL-ReconfRqstTDD-ExtIEs} } OPTIONAL,
  ...
}

DCH-DeleteItem-RL-ReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

RadioLinkReconfigurationRequestTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {

```

```

    { ID id-RL-ReconfigurationRequestTDD-RL-Information    CRITICALITY ignore      EXTENSION    RL-ReconfigurationRequestTDD-RL-Information    PRESENCE
      optional},
      ...
    }

RL-ReconfigurationRequestTDD-RL-Information ::= SEQUENCE {
    rL-ID                RL-ID,
    rL-Specific-DCH-Info  RL-Specific-DCH-Info OPTIONAL,
    iE-Extensions        ProtocolExtensionContainer { { RL-ReconfigurationRequestTDD-RL-Information-ExtIEs } } OPTIONAL,
    ...
}

RL-ReconfigurationRequestTDD-RL-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- RADIO LINK RECONFIGURATION RESPONSE FDD
--
-- *****

RadioLinkReconfigurationResponseFDD ::= SEQUENCE {
    protocolIEs                ProtocolIE-Container    {{RadioLinkReconfigurationResponseFDD-IEs}},
    protocolExtensions         ProtocolExtensionContainer {{RadioLinkReconfigurationResponseFDD-Extensions}}      OPTIONAL,
    ...
}

RadioLinkReconfigurationResponseFDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationResponseList-RL-ReconfRspFDD    CRITICALITY ignore  TYPE RL-InformationResponseList-RL-ReconfRspFDD    PRESENCE optional
    } |
    { ID id-CriticalityDiagnostics                        CRITICALITY ignore  TYPE CriticalityDiagnostics                        PRESENCE optional },
    ...
}

RL-InformationResponseList-RL-ReconfRspFDD ::= SEQUENCE (SIZE (0..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-InformationResponse-RL-ReconfRspFDD-IEs} }

RL-InformationResponse-RL-ReconfRspFDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationResponseItem-RL-ReconfRspFDD    CRITICALITY ignore  TYPE RL-InformationResponseItem-RL-ReconfRspFDD    PRESENCE mandatory
    }
}

RL-InformationResponseItem-RL-ReconfRspFDD ::= SEQUENCE {
    rL-ID                RL-ID,
    max-UL-SIR           UL-SIR            OPTIONAL,
    min-UL-SIR           UL-SIR            OPTIONAL,
    maximumDLTxPower     DL-Power          OPTIONAL,
    minimumDLTxPower     DL-Power          OPTIONAL,
    secondary-CCPCH-Info  Secondary-CCPCH-Info    OPTIONAL,
    dCHsInformationResponseList  DCH-InformationResponseList-RL-ReconfRspFDD OPTIONAL,
}

```

```

    dL-CodeInformationList-RL-ReconfResp    DL-CodeInformationList-RL-ReconfRspFDD  OPTIONAL,
    iE-Extensions                          ProtocolExtensionContainer { {RL-InformationResponseItem-RL-ReconfRspFDD-ExtIEs} } OPTIONAL,
    ...
}

RL-InformationResponseItem-RL-ReconfRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-PowerBalancing-UpdatedIndicator  CRITICALITY ignore      EXTENSION      DL-PowerBalancing-UpdatedIndicator      PRESENCE optional},
    ...
}

DCH-InformationResponseList-RL-ReconfRspFDD ::= ProtocolIE-Single-Container { {DCH-InformationResponseListIEs-RL-ReconfRspFDD} }

DCH-InformationResponseListIEs-RL-ReconfRspFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DCH-InformationResponse      CRITICALITY ignore  TYPE DCH-InformationResponse      PRESENCE mandatory }
}

DL-CodeInformationList-RL-ReconfRspFDD ::= ProtocolIE-Single-Container {{ DL-CodeInformationListIEs-RL-ReconfRspFDD }}

DL-CodeInformationListIEs-RL-ReconfRspFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-FDD-DL-CodeInformation      CRITICALITY ignore  TYPE FDD-DL-CodeInformation      PRESENCE optional }
}

RadioLinkReconfigurationResponseFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- RADIO LINK RECONFIGURATION RESPONSE TDD
--
-- *****

RadioLinkReconfigurationResponseTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container      {{RadioLinkReconfigurationResponseTDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{RadioLinkReconfigurationResponseTDD-Extensions}}      OPTIONAL,
    ...
}

RadioLinkReconfigurationResponseTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationResponse-RL-ReconfRspTDD      CRITICALITY ignore  TYPE RL-InformationResponse-RL-ReconfRspTDD      PRESENCE optional } |
    { ID id-CriticalityDiagnostics      CRITICALITY ignore  TYPE CriticalityDiagnostics      PRESENCE optional },
    ...
}

RL-InformationResponse-RL-ReconfRspTDD ::= SEQUENCE {
    rL-ID                RL-ID,
    max-UL-SIR           UL-SIR      OPTIONAL,
    min-UL-SIR           UL-SIR      OPTIONAL,
    maximumDLTxPower     DL-Power     OPTIONAL,
    minimumDLTxPower     DL-Power     OPTIONAL,
    dCHsInformationResponseList  DCH-InformationResponseList-RL-ReconfRspTDD  OPTIONAL,

```

```

    iE-Extensions          ProtocolExtensionContainer { {RL-InformationResponse-RL-ReconfRspTDD-ExtIEs} } OPTIONAL,
    ...
}
RL-InformationResponse-RL-ReconfRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}
DCH-InformationResponseList-RL-ReconfRspTDD ::= ProtocolIE-Single-Container { {DCH-InformationResponseListIEs-RL-ReconfRspTDD} }
DCH-InformationResponseListIEs-RL-ReconfRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DCH-InformationResponse CRITICALITY ignore TYPE DCH-InformationResponse PRESENCE optional }
}
RadioLinkReconfigurationResponseTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}
-- *****
--
-- RADIO LINK FAILURE INDICATION
--
-- *****

RadioLinkFailureIndication ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container      {{RadioLinkFailureIndication-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{RadioLinkFailureIndication-Extensions}}          OPTIONAL,
    ...
}
RadioLinkFailureIndication-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-Reporting-Object-RL-FailureInd CRITICALITY ignore TYPE Reporting-Object-RL-FailureInd PRESENCE mandatory },
    ...
}
Reporting-Object-RL-FailureInd ::= CHOICE {
    rL                    RL-RL-FailureInd,
    rL-Set                RL-Set-RL-FailureInd, --FDD only
    ...,
    cCTrCH                CCTrCH-RL-FailureInd --TDD only
}
RL-RL-FailureInd ::= SEQUENCE {
    rL-InformationList-RL-FailureInd    RL-InformationList-RL-FailureInd,
    iE-Extensions                      ProtocolExtensionContainer { { RLItem-RL-FailureInd-ExtIEs} } OPTIONAL,
    ...
}
RLItem-RL-FailureInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```



```

RL-InformationList-RL-FailureInd ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-Information-RL-FailureInd-IEs} }

RL-Information-RL-FailureInd-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-RL-Information-RL-FailureInd          CRITICALITY ignore  TYPE RL-Information-RL-FailureInd          PRESENCE mandatory  }
}

RL-Information-RL-FailureInd ::= SEQUENCE {
  rL-ID                RL-ID,
  cause                Cause,
  iE-Extensions        ProtocolExtensionContainer { {RL-Information-RL-FailureInd-ExtIEs} } OPTIONAL,
  ...
}

RL-Information-RL-FailureInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

RL-Set-RL-FailureInd ::= SEQUENCE {
  rL-Set-InformationList-RL-FailureInd  RL-Set-InformationList-RL-FailureInd,
  iE-Extensions                          ProtocolExtensionContainer { { RL-SetItem-RL-FailureInd-ExtIEs} } OPTIONAL,
  ...
}

RL-SetItem-RL-FailureInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

RL-Set-InformationList-RL-FailureInd ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container { {RL-Set-Information-RL-FailureInd-IEs} }

RL-Set-Information-RL-FailureInd-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-RL-Set-Information-RL-FailureInd          CRITICALITY ignore  TYPE RL-Set-Information-RL-FailureInd          PRESENCE mandatory  }
}

RL-Set-Information-RL-FailureInd ::= SEQUENCE {
  rL-Set-ID                RL-Set-ID,
  cause                    Cause,
  iE-Extensions            ProtocolExtensionContainer { {RL-Set-Information-RL-FailureInd-ExtIEs} } OPTIONAL,
  ...
}

RL-Set-Information-RL-FailureInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

RadioLinkFailureIndication-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

CCTrCH-RL-FailureInd ::= SEQUENCE {

```

```

    rL-ID                RL-ID,
    cCTrCH-InformationList-RL-FailureInd  CCTrCH-InformationList-RL-FailureInd,
    iE-Extensions        ProtocolExtensionContainer { { CCTrCHItem-RL-FailureInd-ExtIEs } }    OPTIONAL,
    ...
}

CCTrCHItem-RL-FailureInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

CCTrCH-InformationList-RL-FailureInd ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ CCTrCH-InformationItemIE-RL-FailureInd}}

CCTrCH-InformationItemIE-RL-FailureInd RNSAP-PROTOCOL-IES ::= {
    { ID id-CCTrCH-InformationItem-RL-FailureInd    CRITICALITY ignore          TYPE CCTrCH-InformationItem-RL-FailureInd    PRESENCE
    mandatory}
}

CCTrCH-InformationItem-RL-FailureInd ::= SEQUENCE {
    cCTrCH-ID                CCTrCH-ID,
    cause                    Cause,
    iE-Extensions            ProtocolExtensionContainer { { CCTrCH-InformationItem-RL-FailureInd-ExtIEs } }    OPTIONAL,
    ...
}

CCTrCH-InformationItem-RL-FailureInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- RADIO LINK PREEMPTION REQUIRED INDICATION
--
-- *****

RadioLinkPreemptionRequiredIndication ::= SEQUENCE {
    protocolIEs                ProtocolIE-Container    {{RadioLinkPreemptionRequiredIndication-IEs}},
    protocolExtensions          ProtocolExtensionContainer {{RadioLinkPreemptionRequiredIndication-Extensions}}    OPTIONAL,
    ...
}

RadioLinkPreemptionRequiredIndication-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationList-RL-PreemptRequiredInd    CRITICALITY ignore    TYPE RL-InformationList-RL-PreemptRequiredInd    PRESENCE optional },
    ...
}

RL-InformationList-RL-PreemptRequiredInd ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-InformationItemIEs-RL-PreemptRequiredInd} }

RL-InformationItemIEs-RL-PreemptRequiredInd RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationItem-RL-PreemptRequiredInd    CRITICALITY ignore    TYPE RL-InformationItem-RL-PreemptRequiredInd    PRESENCE mandatory
}

```

```

}

RL-InformationItem-RL-PreemptRequiredInd ::= SEQUENCE {
    rL-ID                RL-ID,
    iE-Extensions        ProtocolExtensionContainer { {RL-Information-RL-PreemptRequiredInd-ExtIEs} } OPTIONAL,
    ...
}

RL-Information-RL-PreemptRequiredInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RadioLinkPreemptionRequiredIndication-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- RADIO LINK RESTORE INDICATION
--
-- *****

RadioLinkRestoreIndication ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkRestoreIndication-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{RadioLinkRestoreIndication-Extensions}}          OPTIONAL,
    ...
}

RadioLinkRestoreIndication-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-Reporting-Object-RL-RestoreInd    CRITICALITY ignore    TYPE Reporting-Object-RL-RestoreInd    PRESENCE mandatory    },
    ...
}

Reporting-Object-RL-RestoreInd ::= CHOICE {
    rL                RL-RL-RestoreInd,
    rL-Set            RL-Set-RL-RestoreInd, --FDD only
    ...,
    cCTrCH            CCTrCH-RL-RestoreInd --TDD only
}

RL-RL-RestoreInd ::= SEQUENCE {
    rL-InformationList-RL-RestoreInd        RL-InformationList-RL-RestoreInd,
    iE-Extensions                          ProtocolExtensionContainer { { RLItem-RL-RestoreInd-ExtIEs } } OPTIONAL,
    ...
}

RLItem-RL-RestoreInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-InformationList-RL-RestoreInd          ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-Information-RL-RestoreInd-IEs} }

```

```

RL-Information-RL-RestoreInd-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-RL-Information-RL-RestoreInd          CRITICALITY ignore  TYPE RL-Information-RL-RestoreInd          PRESENCE mandatory  }
}

RL-Information-RL-RestoreInd ::= SEQUENCE {
  rL-ID          RL-ID,
  iE-Extensions  ProtocolExtensionContainer { {RL-Information-RL-RestoreInd-ExtIEs} } OPTIONAL,
  ...
}

RL-Information-RL-RestoreInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

RL-Set-RL-RestoreInd ::= SEQUENCE {
  rL-Set-InformationList-RL-RestoreInd  RL-Set-InformationList-RL-RestoreInd,
  iE-Extensions                          ProtocolExtensionContainer { { RL-SetItem-RL-RestoreInd-ExtIEs } } OPTIONAL,
  ...
}

RL-SetItem-RL-RestoreInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

RL-Set-InformationList-RL-RestoreInd          ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container { {RL-Set-Information-RL-RestoreInd-IEs} }

RL-Set-Information-RL-RestoreInd-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-RL-Set-Information-RL-RestoreInd          CRITICALITY ignore  TYPE RL-Set-Information-RL-RestoreInd          PRESENCE mandatory  }
}

RL-Set-Information-RL-RestoreInd ::= SEQUENCE {
  rL-Set-ID          RL-Set-ID,
  iE-Extensions      ProtocolExtensionContainer { {RL-Set-Information-RL-RestoreInd-ExtIEs} } OPTIONAL,
  ...
}

RL-Set-Information-RL-RestoreInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

RadioLinkRestoreIndication-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

CCTrCH-RL-RestoreInd ::= SEQUENCE {
  rL-ID          RL-ID,
  CCTrCH-InformationList-RL-RestoreInd  CCTrCH-InformationList-RL-RestoreInd,
  iE-Extensions  ProtocolExtensionContainer { { CCTrCHItem-RL-RestoreInd-ExtIEs } }          OPTIONAL,
  ...
}

```

```

}
CCTrCHItem-RL-RestoreInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}
CCTrCH-InformationList-RL-RestoreInd ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ CCTrCH-InformationItemIE-RL-RestoreInd}}
CCTrCH-InformationItemIE-RL-RestoreInd RNSAP-PROTOCOL-IES ::= {
  { ID id-CCTrCH-InformationItem-RL-RestoreInd          CRITICALITY ignore          TYPE CCTrCH-InformationItem-RL-RestoreInd          PRESENCE
    mandatory}
}
CCTrCH-InformationItem-RL-RestoreInd ::= SEQUENCE {
  cCCTrCH-ID          CCTrCH-ID,
  iE-Extensions      ProtocolExtensionContainer { { CCTrCH-InformationItem-RL-RestoreInd-ExtIEs } } OPTIONAL,
  ...
}
CCTrCH-InformationItem-RL-RestoreInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}
-- *****
--
-- DOWNLINK POWER CONTROL REQUEST
--
-- *****

DL-PowerControlRequest ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container    {{DL-PowerControlRequest-IEs}},
  protocolExtensions  ProtocolExtensionContainer {{DL-PowerControlRequest-Extensions}}          OPTIONAL,
  ...
}
DL-PowerControlRequest-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-PowerAdjustmentType          CRITICALITY ignore TYPE PowerAdjustmentType          PRESENCE mandatory} |
  { ID id-DLReferencePower              CRITICALITY ignore TYPE DL-Power              PRESENCE conditional} |
  -- This IE shall be present if Power Adjustment Type IE equals to 'Common'
  { ID id-InnerLoopDLPCStatus          CRITICALITY ignore TYPE InnerLoopDLPCStatus          PRESENCE optional } |
  { ID id-DLReferencePowerList-DL-PC-Rqst CRITICALITY ignore TYPE DL-ReferencePowerInformationList-DL-PC-Rqst PRESENCE conditional} |
  -- This IE shall be present if Power Adjustment Type IE equals to 'Individual'
  { ID id-MaxAdjustmentStep            CRITICALITY ignore TYPE MaxAdjustmentStep            PRESENCE conditional} |
  -- This IE shall be present if Power Adjustment Type IE equals to 'Common' or 'Individual'
  { ID id-AdjustmentPeriod             CRITICALITY ignore TYPE AdjustmentPeriod             PRESENCE conditional} |
  -- This IE shall be present if Power Adjustment Type IE equals to 'Common' or 'Individual'
  { ID id-AdjustmentRatio              CRITICALITY ignore TYPE ScaledAdjustmentRatio              PRESENCE conditional},
  -- This IE shall be present if Power Adjustment Type IE equals to 'Common' or 'Individual'
  ...
}

```

```

DL-ReferencePowerInformationList-DL-PC-Rqst      ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {DL-ReferencePowerInformation-
DL-PC-Rqst-IEs} }

DL-ReferencePowerInformation-DL-PC-Rqst-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-DL-ReferencePowerInformation-DL-PC-Rqst CRITICALITY ignore TYPE DL-ReferencePowerInformation-DL-PC-Rqst PRESENCE mandatory }
}

DL-ReferencePowerInformation-DL-PC-Rqst ::= SEQUENCE {
  rL-ID                RL-ID,
  dl-Reference-Power   DL-Power,
  iE-Extensions        ProtocolExtensionContainer { {DL-ReferencePowerInformation-DL-PC-Rqst-ExtIEs} } OPTIONAL,
  ...
}

DL-ReferencePowerInformation-DL-PC-Rqst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-PowerControlRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- DOWNLINK POWER TIMESLOT CONTROL REQUEST TDD
--
-- *****

DL-PowerTimeslotControlRequest ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container   {{DL-PowerTimeslotControlRequest-IEs}},
  protocolExtensions   ProtocolExtensionContainer {{DL-PowerTimeslotControlRequest-Extensions}}          OPTIONAL,
  ...
}

DL-PowerTimeslotControlRequest-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-timeSlot-ISCP CRITICALITY ignore TYPE DL-TimeSlot-ISCP-Info PRESENCE optional},
  --Mandatory for 3.84Mcps TDD only
  ...
}

DL-PowerTimeslotControlRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-timeSlot-ISCP-LCR-List-DL-PC-Rqst-TDD CRITICALITY ignore EXTENSION DL-TimeSlot-ISCP-LCR-Information PRESENCE optional}|
  --Mandatory for 1.28Mcps TDD only
  { ID id-PrimCCPCH-RSCP-DL-PC-RqstTDD CRITICALITY ignore EXTENSION PrimaryCCPCH-RSCP PRESENCE optional },
  ...
}

-- *****
--
-- PHYSICAL CHANNEL RECONFIGURATION REQUEST FDD
--

```

```

-- *****
PhysicalChannelReconfigurationRequestFDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{PhysicalChannelReconfigurationRequestFDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{PhysicalChannelReconfigurationRequestFDD-Extensions}}
    ...
}
PhysicalChannelReconfigurationRequestFDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-Information-PhyChReconfRqstFDD  CRITICALITY reject  TYPE RL-Information-PhyChReconfRqstFDD  PRESENCE mandatory  },
    ...
}
RL-Information-PhyChReconfRqstFDD ::= SEQUENCE {
    rL-ID                RL-ID,
    dl-CodeInformation   DL-CodeInformationList-PhyChReconfRqstFDD,
    iE-Extensions       ProtocolExtensionContainer { {RL-Information-PhyChReconfRqstFDD-ExtIEs} } OPTIONAL,
    ...
}
RL-Information-PhyChReconfRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}
DL-CodeInformationList-PhyChReconfRqstFDD ::= ProtocolIE-Single-Container { {DL-CodeInformationListIEs-PhyChReconfRqstFDD} }
DL-CodeInformationListIEs-PhyChReconfRqstFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-FDD-DL-CodeInformation  CRITICALITY notify  TYPE FDD-DL-CodeInformation  PRESENCE mandatory  }
}
PhysicalChannelReconfigurationRequestFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}
-- *****
--
-- PHYSICAL CHANNEL RECONFIGURATION REQUEST TDD
--
-- *****

PhysicalChannelReconfigurationRequestTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{PhysicalChannelReconfigurationRequestTDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{PhysicalChannelReconfigurationRequestTDD-Extensions}}
    ...
}
PhysicalChannelReconfigurationRequestTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-Information-PhyChReconfRqstTDD  CRITICALITY reject  TYPE RL-Information-PhyChReconfRqstTDD  PRESENCE mandatory  },
    ...
}

```

```

RL-Information-PhyChReconfRqstTDD ::= SEQUENCE {
    rL-ID                RL-ID,
    ul-CCTrCH-Information    UL-CCTrCH-InformationList-PhyChReconfRqstTDD    OPTIONAL,
    dl-CCTrCH-Information    DL-CCTrCH-InformationList-PhyChReconfRqstTDD    OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { {RL-Information-PhyChReconfRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

RL-Information-PhyChReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-CCTrCH-InformationList-PhyChReconfRqstTDD ::= ProtocolIE-Single-Container { {UL-CCTrCH-InformationListIEs-PhyChReconfRqstTDD} }

UL-CCTrCH-InformationListIEs-PhyChReconfRqstTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-UL-CCTrCH-InformationListIE-PhyChReconfRqstTDD    CRITICALITY reject    TYPE UL-CCTrCH-InformationListIE-PhyChReconfRqstTDD    PRESENCE
mandatory }
}

UL-CCTrCH-InformationListIE-PhyChReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationItem-PhyChReconfRqstTDD

UL-CCTrCH-InformationItem-PhyChReconfRqstTDD ::= SEQUENCE {
    cTrCH-ID                CCTrCH-ID,
    ul-DPCH-Information    UL-DPCH-InformationList-PhyChReconfRqstTDD,
    iE-Extensions          ProtocolExtensionContainer { {UL-CCTrCH-InformationItem-PhyChReconfRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

UL-CCTrCH-InformationItem-PhyChReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-DPCH-InformationList-PhyChReconfRqstTDD ::= ProtocolIE-Single-Container {{UL-DPCH-InformationListIEs-PhyChReconfRqstTDD}}

UL-DPCH-InformationListIEs-PhyChReconfRqstTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-InformationItem-PhyChReconfRqstTDD    CRITICALITY notify    TYPE UL-DPCH-InformationItem-PhyChReconfRqstTDD    PRESENCE mandatory }
}

UL-DPCH-InformationItem-PhyChReconfRqstTDD ::= SEQUENCE {
    repetitionPeriod        RepetitionPeriod    OPTIONAL,
    repetitionLength        RepetitionLength    OPTIONAL,
    tDD-DPCHOffset          TDD-DPCHOffset    OPTIONAL,
    uL-Timeslot-InformationList-PhyChReconfRqstTDD    UL-Timeslot-InformationList-PhyChReconfRqstTDD    OPTIONAL,
    --For 3.84Mcps TDD only
    iE-Extensions          ProtocolExtensionContainer { {UL-DPCH-InformationItem-PhyChReconfRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

UL-DPCH-InformationItem-PhyChReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-UL-Timeslot-LCR-InformationList-PhyChReconfRqstTDD    CRITICALITY reject    EXTENSION UL-TimeslotLCR-InformationList-PhyChReconfRqstTDD
PRESENCE optional },
}

```



```

--For 1.28Mcps TDD only
...
}

UL-TimeslotLCR-InformationList-PhyChReconfRqstTDD ::= SEQUENCE ( SIZE (1..maxNrOfTsLCR)) OF UL-TimeslotLCR-InformationItem-PhyChReconfRqstTDD

UL-TimeslotLCR-InformationItem-PhyChReconfRqstTDD ::= SEQUENCE {
    timeSlotLCR                TimeSlotLCR,
    midambleShiftLCR           MidambleShiftLCR          OPTIONAL,
    tFCI-Presence              TFCI-Presence            OPTIONAL,
    uL-Code-LCR-Information    TDD-UL-Code-LCR-Information  OPTIONAL,
    iE-Extensions              ProtocolExtensionContainer { {UL-TimeslotLCR-InformationItem-PhyChReconfRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

UL-TimeslotLCR-InformationItem-PhyChReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Timeslot-InformationList-PhyChReconfRqstTDD ::= SEQUENCE ( SIZE (1..maxNrOfTs)) OF UL-Timeslot-InformationItem-PhyChReconfRqstTDD

UL-Timeslot-InformationItem-PhyChReconfRqstTDD ::= SEQUENCE {
    timeSlot                TimeSlot,
    midambleShiftAndBurstType MidambleShiftAndBurstType  OPTIONAL,
    tFCI-Presence           TFCI-Presence            OPTIONAL,
    uL-Code-Information     TDD-UL-Code-Information  OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { {UL-Timeslot-InformationItem-PhyChReconfRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

UL-Timeslot-InformationItem-PhyChReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CCTrCH-InformationList-PhyChReconfRqstTDD ::= ProtocolIE-Single-Container { {DL-CCTrCH-InformationListIEs-PhyChReconfRqstTDD} }

DL-CCTrCH-InformationListIEs-PhyChReconfRqstTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-CCTrCH-InformationListIE-PhyChReconfRqstTDD CRITICALITY reject TYPE DL-CCTrCH-InformationListIE-PhyChReconfRqstTDD PRESENCE
mandatory }
}

DL-CCTrCH-InformationListIE-PhyChReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationItem-PhyChReconfRqstTDD

DL-CCTrCH-InformationItem-PhyChReconfRqstTDD ::= SEQUENCE {
    cCTrCH-ID                CCTrCH-ID,
    dl-DPCH-Information     DL-DPCH-InformationList-PhyChReconfRqstTDD,
    iE-Extensions          ProtocolExtensionContainer { {DL-CCTrCH-InformationItem-PhyChReconfRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

DL-CCTrCH-InformationItem-PhyChReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {

```

```

}
...
DL-DPCH-InformationList-PhyChReconfRqstTDD ::= ProtocolIE-Single-Container {{DL-DPCH-InformationListIEs-PhyChReconfRqstTDD}}

DL-DPCH-InformationListIEs-PhyChReconfRqstTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-DL-DPCH-InformationItem-PhyChReconfRqstTDD CRITICALITY notify TYPE DL-DPCH-InformationItem-PhyChReconfRqstTDD PRESENCE mandatory }
}

DL-DPCH-InformationItem-PhyChReconfRqstTDD ::= SEQUENCE {
  repetitionPeriod          RepetitionPeriod          OPTIONAL,
  repetitionLength          RepetitionLength           OPTIONAL,
  tDD-DPCHOffset            TDD-DPCHOffset            OPTIONAL,
  dL-Timeslot-InformationList-PhyChReconfRqstTDD      DL-Timeslot-InformationList-PhyChReconfRqstTDD  OPTIONAL,
  iE-Extensions             ProtocolExtensionContainer { {DL-DPCH-InformationItem-PhyChReconfRqstTDD-ExtIEs} } OPTIONAL,
  ...
}

DL-DPCH-InformationItem-PhyChReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-DL-Timeslot-LCR-InformationList-PhyChReconfRqstTDD CRITICALITY reject EXTENSION DL-TimeslotLCR-InformationList-PhyChReconfRqstTDD
  PRESENCE optional },
  --For 1.28Mcps TDD only
  ...
}

DL-TimeslotLCR-InformationList-PhyChReconfRqstTDD ::= SEQUENCE ( SIZE (1..maxNrOfTsLCR)) OF DL-TimeslotLCR-InformationItem-PhyChReconfRqstTDD

DL-TimeslotLCR-InformationItem-PhyChReconfRqstTDD ::= SEQUENCE {
  timeSlotLCR              TimeSlotLCR,
  midambleShiftLCR        MidambleShiftLCR          OPTIONAL,
  tFCI-Presence            TFCI-Presence              OPTIONAL,
  dL-Code-LCR-Information  TDD-DL-Code-LCR-Information  OPTIONAL,
  iE-Extensions           ProtocolExtensionContainer { {DL-TimeslotLCR-InformationItem-PhyChReconfRqstTDD-ExtIEs} } OPTIONAL,
  ...
}

DL-TimeslotLCR-InformationItem-PhyChReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-Timeslot-InformationList-PhyChReconfRqstTDD ::= SEQUENCE ( SIZE (1..maxNrOfTs)) OF DL-Timeslot-InformationItem-PhyChReconfRqstTDD

DL-Timeslot-InformationItem-PhyChReconfRqstTDD ::= SEQUENCE {
  timeSlot                  TimeSlot,
  midambleShiftAndBurstType MidambleShiftAndBurstType  OPTIONAL,
  tFCI-Presence             TFCI-Presence              OPTIONAL,
  dL-Code-Information       TDD-DL-Code-Information  OPTIONAL,
  iE-Extensions            ProtocolExtensionContainer { {DL-Timeslot-InformationItem-PhyChReconfRqstTDD-ExtIEs} } OPTIONAL,
  ...
}

```

```

DL-Timeslot-InformationItem-PhyChReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

PhysicalChannelReconfigurationRequestTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- PHYSICAL CHANNEL RECONFIGURATION COMMAND
--
-- *****

PhysicalChannelReconfigurationCommand ::= SEQUENCE {
    protocolIEs                ProtocolIE-Container    {{PhysicalChannelReconfigurationCommand-IEs}},
    protocolExtensions          ProtocolExtensionContainer {{PhysicalChannelReconfigurationCommand-Extensions}}
    ...
}

PhysicalChannelReconfigurationCommand-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-CFN                CRITICALITY ignore TYPE CFN                PRESENCE mandatory } |
    { ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional },
    ...
}

PhysicalChannelReconfigurationCommand-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- PHYSICAL CHANNEL RECONFIGURATION FAILURE
--
-- *****

PhysicalChannelReconfigurationFailure ::= SEQUENCE {
    protocolIEs                ProtocolIE-Container    {{PhysicalChannelReconfigurationFailure-IEs}},
    protocolExtensions          ProtocolExtensionContainer {{PhysicalChannelReconfigurationFailure-Extensions}}
    ...
}

PhysicalChannelReconfigurationFailure-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-Cause                CRITICALITY ignore TYPE Cause                PRESENCE mandatory } |
    { ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional },
    ...
}

PhysicalChannelReconfigurationFailure-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

-- *****
--
-- RADIO LINK CONGESTION INDICATION
--
-- *****

RadioLinkCongestionIndication ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkCongestionIndication-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{RadioLinkCongestionIndication-Extensions}} OPTIONAL,
    ...
}

RadioLinkCongestionIndication-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-CongestionCause          CRITICALITY ignore TYPE CongestionCause          PRESENCE optional }|
    { ID id-RL-InformationList-RL-CongestInd CRITICALITY ignore TYPE RL-InformationList-RL-CongestInd PRESENCE mandatory },
    ...
}

RL-InformationList-RL-CongestInd ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-InformationItemIEs-RL-CongestInd} }

RL-InformationItemIEs-RL-CongestInd RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationItem-RL-CongestInd CRITICALITY ignore TYPE RL-InformationItem-RL-CongestInd PRESENCE mandatory }
}

RL-InformationItem-RL-CongestInd ::= SEQUENCE {
    rL-ID          RL-ID,
    dCH-Rate-Information DCH-Rate-Information-RL-CongestInd,
    iE-Extensions   ProtocolExtensionContainer { {RL-Information-RL-CongestInd-ExtIEs} } OPTIONAL,
    ...
}

DCH-Rate-Information-RL-CongestInd ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF ProtocolIE-Single-Container { {DCH-Rate-InformationItemIEs-RL-CongestInd} }

DCH-Rate-InformationItemIEs-RL-CongestInd RNSAP-PROTOCOL-IES ::= {
    { ID id-DCH-Rate-InformationItem-RL-CongestInd CRITICALITY ignore TYPE DCH-Rate-InformationItem-RL-CongestInd PRESENCE mandatory }
}

DCH-Rate-InformationItem-RL-CongestInd ::= SEQUENCE {
    dCH-ID          DCH-ID,
    allowed-Rate-Information Allowed-Rate-Information OPTIONAL,
    iE-Extensions   ProtocolExtensionContainer { {DCH-Rate-InformationItem-RL-CongestInd-ExtIEs} } OPTIONAL,
    ...
}

DCH-Rate-InformationItem-RL-CongestInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-Information-RL-CongestInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {

```

```

}
...
RadioLinkCongestionIndication-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
}
...
-- *****
--
-- UPLINK SIGNALLING TRANSFER INDICATION FDD
--
-- *****

UplinkSignallingTransferIndicationFDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{UplinkSignallingTransferIndicationFDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{UplinkSignallingTransferIndicationFDD-Extensions}}
    ...
}

UplinkSignallingTransferIndicationFDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-UC-ID          CRITICALITY ignore TYPE UC-ID          PRESENCE mandatory } |
    { ID id-SAI            CRITICALITY ignore TYPE SAI            PRESENCE mandatory } |
    { ID id-GA-Cell        CRITICALITY ignore TYPE GA-Cell        PRESENCE optional } |
    { ID id-C-RNTI         CRITICALITY ignore TYPE C-RNTI         PRESENCE mandatory } |
    { ID id-S-RNTI         CRITICALITY ignore TYPE S-RNTI         PRESENCE mandatory } |
    { ID id-D-RNTI         CRITICALITY ignore TYPE D-RNTI         PRESENCE optional } |
    { ID id-PropagationDelay CRITICALITY ignore TYPE PropagationDelay PRESENCE mandatory } |
    { ID id-STTD-SupportIndicator CRITICALITY ignore TYPE STTD-SupportIndicator PRESENCE mandatory } |
    { ID id-ClosedLoopModel1-SupportIndicator CRITICALITY ignore TYPE ClosedLoopModel1-SupportIndicator PRESENCE mandatory } |
    { ID id-ClosedLoopMode2-SupportIndicator CRITICALITY ignore TYPE ClosedLoopMode2-SupportIndicator PRESENCE mandatory } |
    { ID id-L3-Information CRITICALITY ignore TYPE L3-Information PRESENCE mandatory } |
    { ID id-CN-PS-DomainIdentifier CRITICALITY ignore TYPE CN-PS-DomainIdentifier PRESENCE optional } |
    { ID id-CN-CS-DomainIdentifier CRITICALITY ignore TYPE CN-CS-DomainIdentifier PRESENCE optional } |
    { ID id-URA-Information CRITICALITY ignore TYPE URA-Information PRESENCE optional },
    ...
}

UplinkSignallingTransferIndicationFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-GA-CellAdditionalShapes CRITICALITY ignore EXTENSION GA-CellAdditionalShapes PRESENCE optional } |
    { ID id-DPC-Mode-Change-SupportIndicator CRITICALITY ignore EXTENSION DPC-Mode-Change-SupportIndicator PRESENCE optional } |
    { ID id-CommonTransportChannelResourcesInitialisationNotRequired CRITICALITY ignore EXTENSION
CommonTransportChannelResourcesInitialisationNotRequired PRESENCE optional } |
    { ID id-CellCapabilityContainer-FDD CRITICALITY ignore EXTENSION CellCapabilityContainer-FDD PRESENCE optional } |
    { ID id-CellCapabilityContainer-TDD CRITICALITY ignore EXTENSION CellCapabilityContainer-TDD PRESENCE optional } |
    { ID id-CellCapabilityContainer-TDD-LCR CRITICALITY ignore EXTENSION CellCapabilityContainer-TDD-LCR PRESENCE optional },
    ...
}

-- *****
--
-- UPLINK SIGNALLING TRANSFER INDICATION TDD

```

```

--
-- *****
UplinkSignallingTransferIndicationTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{UplinkSignallingTransferIndicationTDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{UplinkSignallingTransferIndicationTDD-Extensions}}
    ...
}
OPTIONAL,

UplinkSignallingTransferIndicationTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-UC-ID          CRITICALITY ignore TYPE UC-ID          PRESENCE mandatory } |
    { ID id-SAI            CRITICALITY ignore TYPE SAI            PRESENCE mandatory } |
    { ID id-GA-Cell       CRITICALITY ignore TYPE GA-Cell       PRESENCE optional } |
    { ID id-C-RNTI        CRITICALITY ignore TYPE C-RNTI        PRESENCE mandatory } |
    { ID id-S-RNTI        CRITICALITY ignore TYPE S-RNTI        PRESENCE mandatory } |
    { ID id-D-RNTI        CRITICALITY ignore TYPE D-RNTI        PRESENCE optional } |
    { ID id-RxTimingDeviationForTA CRITICALITY ignore TYPE RxTimingDeviationForTA PRESENCE mandatory } |
    { ID id-L3-Information CRITICALITY ignore TYPE L3-Information PRESENCE mandatory } |
    { ID id-CN-PS-DomainIdentifier CRITICALITY ignore TYPE CN-PS-DomainIdentifier PRESENCE optional } |
    { ID id-CN-CS-DomainIdentifier CRITICALITY ignore TYPE CN-CS-DomainIdentifier PRESENCE optional } |
    { ID id-URA-Information CRITICALITY ignore TYPE URA-Information PRESENCE optional },
    ...
}

UplinkSignallingTransferIndicationTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-GA-CellAdditionalShapes CRITICALITY ignore EXTENSION GA-CellAdditionalShapes PRESENCE optional } |
    { ID id-CommonTransportChannelResourcesInitialisationNotRequired CRITICALITY ignore EXTENSION
CommonTransportChannelResourcesInitialisationNotRequired PRESENCE optional } |
    { ID id-CellCapabilityContainer-FDD CRITICALITY ignore EXTENSION CellCapabilityContainer-FDD PRESENCE optional } |
    { ID id-CellCapabilityContainer-TDD CRITICALITY ignore EXTENSION CellCapabilityContainer-TDD PRESENCE optional } |
    { ID id-CellCapabilityContainer-TDD-LCR CRITICALITY ignore EXTENSION CellCapabilityContainer-TDD-LCR PRESENCE optional },
    ...
}

-- *****
--
-- DOWNLINK SIGNALLING TRANSFER REQUEST
--
-- *****

DownlinkSignallingTransferRequest ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{DownlinkSignallingTransferRequest-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{DownlinkSignallingTransferRequest-Extensions}}
    ...
}
OPTIONAL,

DownlinkSignallingTransferRequest-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-C-ID          CRITICALITY ignore TYPE C-ID          PRESENCE mandatory } |
    { ID id-D-RNTI        CRITICALITY ignore TYPE D-RNTI        PRESENCE mandatory } |
    { ID id-L3-Information CRITICALITY ignore TYPE L3-Information PRESENCE mandatory } |
    { ID id-D-RNTI-ReleaseIndication CRITICALITY ignore TYPE D-RNTI-ReleaseIndication PRESENCE mandatory },
}

```

```

}
...
DownlinkSignallingTransferRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
}
...
-- *****
--
-- RELOCATION COMMIT
--
-- *****

RelocationCommit ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RelocationCommit-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{RelocationCommit-Extensions}}          OPTIONAL,
    ...
}

RelocationCommit-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-D-RNTI          CRITICALITY ignore TYPE D-RNTI          PRESENCE optional } |
    { ID id-RANAP-RelocationInformation CRITICALITY ignore TYPE RANAP-RelocationInformation PRESENCE optional },
    ...
}

RelocationCommit-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
}
...
-- *****
--
-- PAGING REQUEST
--
-- *****

PagingRequest ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{PagingRequest-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{PagingRequest-Extensions}}          OPTIONAL,
    ...
}

PagingRequest-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-PagingArea-PagingRqst          CRITICALITY ignore TYPE PagingArea-PagingRqst          PRESENCE mandatory } |
    { ID id-SRNC-ID          CRITICALITY ignore TYPE RNC-ID          PRESENCE mandatory } |
    { ID id-S-RNTI          CRITICALITY ignore TYPE S-RNTI          PRESENCE mandatory } |
    { ID id-IMSI          CRITICALITY ignore TYPE IMSI          PRESENCE mandatory } |
    { ID id-DRXCycleLengthCoefficient          CRITICALITY ignore TYPE DRXCycleLengthCoefficient          PRESENCE mandatory } |
    { ID id-CNOriginatedPage-PagingRqst          CRITICALITY ignore TYPE CNOriginatedPage-PagingRqst          PRESENCE optional } |
    ...
}

```

```

PagingArea-PagingRqst ::= CHOICE {
    uRA                URA-PagingRqst,
    cell               Cell-PagingRqst,
    ...
}

URA-PagingRqst ::= SEQUENCE {
    uRA-ID             URA-ID,
    iE-Extensions     ProtocolExtensionContainer { { URAItem-PagingRqst-ExtIEs } } OPTIONAL,
    ...
}

URAItem-PagingRqst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Cell-PagingRqst ::= SEQUENCE {
    c-ID              C-ID,
    iE-Extensions     ProtocolExtensionContainer { { CellItem-PagingRqst-ExtIEs } } OPTIONAL,
    ...
}

CellItem-PagingRqst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

CNOriginatedPage-PagingRqst ::= SEQUENCE {
    pagingCause       PagingCause,
    cNDomainType      CNDomainType,
    pagingRecordType  PagingRecordType,
    iE-Extensions     ProtocolExtensionContainer { { CNOriginatedPage-PagingRqst-ExtIEs } } OPTIONAL,
    ...
}

CNOriginatedPage-PagingRqst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

PagingRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- DEDICATED MEASUREMENT INITIATION REQUEST
--
-- *****

DedicatedMeasurementInitiationRequest ::= SEQUENCE {
    protocolIEs       ProtocolIE-Container  {{DedicatedMeasurementInitiationRequest-IEs}},
    protocolExtensions ProtocolExtensionContainer {{DedicatedMeasurementInitiationRequest-Extensions}}
                                                    OPTIONAL,

```



```

}
...
DedicatedMeasurementInitiationRequest-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-MeasurementID          CRITICALITY reject  TYPE MeasurementID          PRESENCE mandatory } |
  { ID id-DedicatedMeasurementObjectType-DM-Rqst  CRITICALITY reject  TYPE DedicatedMeasurementObjectType-DM-Rqst PRESENCE mandatory } |
  -- This IE represents both the Dedicated Measurement Object Type IE and the choice based on the Dedicated Measurement Object Type
  -- as described in the tabular message format in subclause 9.1.
  { ID id-DedicatedMeasurementType          CRITICALITY reject  TYPE DedicatedMeasurementType          PRESENCE mandatory } |
  { ID id-MeasurementFilterCoefficient      CRITICALITY reject  TYPE MeasurementFilterCoefficient      PRESENCE optional } |
  { ID id-ReportCharacteristics            CRITICALITY reject  TYPE ReportCharacteristics            PRESENCE mandatory } |
  { ID id-CFNReportingIndicator            CRITICALITY reject  TYPE FNReportingIndicator            PRESENCE mandatory } |
  { ID id-CFN                              CRITICALITY reject  TYPE CFN                              PRESENCE optional } ,
  ...
}

DedicatedMeasurementObjectType-DM-Rqst ::= CHOICE {
  rL          RL-DM-Rqst,
  rLS         RL-Set-DM-Rqst,
  allRL       All-RL-DM-Rqst,
  allRLS      All-RL-Set-DM-Rqst,
  ...
}

RL-DM-Rqst ::= SEQUENCE {
  rL-InformationList-DM-Rqst    RL-InformationList-DM-Rqst,
  iE-Extensions                 ProtocolExtensionContainer { { RLItem-DM-Rqst-ExtIEs } } OPTIONAL,
  ...
}

RLItem-DM-Rqst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

RL-InformationList-DM-Rqst          ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-Information-DM-Rqst-IEs} }

RL-Information-DM-Rqst-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-RL-InformationItem-DM-Rqst    CRITICALITY reject  TYPE RL-InformationItem-DM-Rqst    PRESENCE mandatory }
}

RL-InformationItem-DM-Rqst ::= SEQUENCE {
  rL-ID          RL-ID,
  dPCH-ID        DPCH-ID    OPTIONAL,
  iE-Extensions  ProtocolExtensionContainer { {RL-InformationItem-DM-Rqst-ExtIEs} } OPTIONAL,
  ...
}

RL-InformationItem-DM-Rqst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

RL-Set-DM-Rqst ::= SEQUENCE {
    rL-Set-InformationList-DM-Rqst  RL-Set-InformationList-DM-Rqst,
    iE-Extensions                    ProtocolExtensionContainer { { RL-SetItem-DM-Rqst-ExtIEs } } OPTIONAL,
    ...
}

RL-SetItem-DM-Rqst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-Set-InformationList-DM-Rqst ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container { {RL-Set-Information-DM-Rqst-IEs} }

RL-Set-Information-DM-Rqst-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-Set-InformationItem-DM-Rqst          CRITICALITY ignore  TYPE RL-Set-InformationItem-DM-Rqst          PRESENCE mandatory }
}

RL-Set-InformationItem-DM-Rqst ::= SEQUENCE {
    rL-Set-ID                RL-Set-ID,
    iE-Extensions            ProtocolExtensionContainer { {RL-Set-InformationItem-DM-Rqst-ExtIEs} } OPTIONAL,
    ...
}

RL-Set-InformationItem-DM-Rqst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

All-RL-DM-Rqst ::= NULL

All-RL-Set-DM-Rqst ::= NULL

DedicatedMeasurementInitiationRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- DEDICATED MEASUREMENT INITIATION RESPONSE
--
-- *****

DedicatedMeasurementInitiationResponse ::= SEQUENCE {
    protocolIEs                ProtocolIE-Container        {{DedicatedMeasurementInitiationResponse-IEs}},
    protocolExtensions          ProtocolExtensionContainer  {{DedicatedMeasurementInitiationResponse-Extensions}}
    ...
}

DedicatedMeasurementInitiationResponse-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-MeasurementID          CRITICALITY ignore  TYPE MeasurementID          PRESENCE mandatory } |
    { ID id-DedicatedMeasurementObjectType-DM-Rsp  CRITICALITY ignore  TYPE DedicatedMeasurementObjectType-DM-Rsp  PRESENCE optional } |
    { ID id-CriticalityDiagnostics          CRITICALITY ignore  TYPE CriticalityDiagnostics          PRESENCE optional },
}

```

```

}
...
DedicatedMeasurementObjectType-DM-Rsp ::= CHOICE {
    rLs                RL-DM-Rsp,
    rLS                RL-Set-DM-Rsp,
    allRL              RL-DM-Rsp,
    allRLS             RL-Set-DM-Rsp,
    ...
}

RL-DM-Rsp ::= SEQUENCE {
    rL-InformationList-DM-Rsp    RL-InformationList-DM-Rsp,
    iE-Extensions                ProtocolExtensionContainer { { RLItem-DM-Rsp-ExtIEs } } OPTIONAL,
    ...
}

RLItem-DM-Rsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-Set-DM-Rsp ::= SEQUENCE {
    rL-Set-InformationList-DM-Rsp    RL-Set-InformationList-DM-Rsp,
    iE-Extensions                    ProtocolExtensionContainer { { RL-SetItem-DM-Rsp-ExtIEs } } OPTIONAL,
    ...
}

RL-SetItem-DM-Rsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-InformationList-DM-Rsp                ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-Information-DM-Rsp-IEs} }

RL-Information-DM-Rsp-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationItem-DM-Rsp    CRITICALITY ignore    TYPE RL-InformationItem-DM-Rsp    PRESENCE mandatory    }
}

RL-InformationItem-DM-Rsp ::= SEQUENCE {
    rL-ID                RL-ID,
    dPCH-ID              DPCH-ID                OPTIONAL,
    dedicatedMeasurementValue    DedicatedMeasurementValue,
    cFN                  CFN                    OPTIONAL,
    iE-Extensions        ProtocolExtensionContainer { {RL-InformationItem-DM-Rsp-ExtIEs} } OPTIONAL,
    ...
}

RL-InformationItem-DM-Rsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

RL-Set-InformationList-DM-Rsp ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container { {RL-Set-Information-DM-Rsp-IEs}
}

RL-Set-Information-DM-Rsp-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-RL-Set-InformationItem-DM-Rsp          CRITICALITY ignore  TYPE RL-Set-InformationItem-DM-Rsp          PRESENCE mandatory  }
}

RL-Set-InformationItem-DM-Rsp ::= SEQUENCE {
  rL-Set-ID                RL-Set-ID,
  dedicatedMeasurementValue DedicatedMeasurementValue,
  cFN                      CFN                      OPTIONAL,
  iE-Extensions            ProtocolExtensionContainer { {RL-Set-InformationItem-DM-Rspns-ExtIEs} } OPTIONAL,
  ...
}

RL-Set-InformationItem-DM-Rspns-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DedicatedMeasurementInitiationResponse-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- DEDICATED MEASUREMENT INITIATION FAILURE
--
-- *****

DedicatedMeasurementInitiationFailure ::= SEQUENCE {
  protocolIEs                ProtocolIE-Container      {{DedicatedMeasurementInitiationFailure-IEs}},
  protocolExtensions         ProtocolExtensionContainer {{DedicatedMeasurementInitiationFailure-Extensions}}
  ...
}

DedicatedMeasurementInitiationFailure-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-MeasurementID          CRITICALITY ignore  TYPE MeasurementID          PRESENCE mandatory  } |
  { ID id-Cause                  CRITICALITY ignore  TYPE Cause                  PRESENCE mandatory  } |
  { ID id-CriticalityDiagnostics CRITICALITY ignore  TYPE CriticalityDiagnostics PRESENCE optional  },
  ...
}

DedicatedMeasurementInitiationFailure-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- DEDICATED MEASUREMENT REPORT
--
-- *****

```

```

DedicatedMeasurementReport ::= SEQUENCE {
    protocolIEs                ProtocolIE-Container    {{DedicatedMeasurementReport-IEs}},
    protocolExtensions          ProtocolExtensionContainer {{DedicatedMeasurementReport-Extensions}}
    ...
}

DedicatedMeasurementReport-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-MeasurementID          CRITICALITY ignore TYPE MeasurementID          PRESENCE mandatory } |
    { ID id-DedicatedMeasurementObjectType-DM-Rprt CRITICALITY ignore TYPE DedicatedMeasurementObjectType-DM-Rprt PRESENCE mandatory },
    ...
}

DedicatedMeasurementObjectType-DM-Rprt ::= CHOICE {
    rLs                RL-DM-Rprt,
    rLS                RL-Set-DM-Rprt,
    allRL              RL-DM-Rprt,
    allRLS             RL-Set-DM-Rprt,
    ...
}

RL-DM-Rprt ::= SEQUENCE {
    rL-InformationList-DM-Rprt    RL-InformationList-DM-Rprt,
    iE-Extensions                ProtocolExtensionContainer { { RLItem-DM-Rprt-ExtIEs } } OPTIONAL,
    ...
}

RLItem-DM-Rprt-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-Set-DM-Rprt ::= SEQUENCE {
    rL-Set-InformationList-DM-Rprt    RL-Set-InformationList-DM-Rprt,
    iE-Extensions                    ProtocolExtensionContainer { { RL-SetItem-DM-Rprt-ExtIEs } } OPTIONAL,
    ...
}

RL-SetItem-DM-Rprt-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-InformationList-DM-Rprt ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-Information-DM-Rprt-IEs} }

RL-Information-DM-Rprt-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationItem-DM-Rprt CRITICALITY ignore TYPE RL-InformationItem-DM-Rprt PRESENCE mandatory }
}

RL-InformationItem-DM-Rprt ::= SEQUENCE {
    rL-ID                RL-ID,
    dPCH-ID              DPCH-ID                OPTIONAL,
    dedicatedMeasurementValueInformation    DedicatedMeasurementValueInformation,
}

```

```

    iE-Extensions          ProtocolExtensionContainer { {RL-InformationItem-DM-Rprt-ExtIEs} } OPTIONAL,
    ...
}

RL-InformationItem-DM-Rprt-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-Set-InformationList-DM-Rprt          ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container { {RL-Set-Information-DM-Rprt-
IEs} }

RL-Set-Information-DM-Rprt-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-Set-InformationItem-DM-Rprt          CRITICALITY ignore TYPE RL-Set-InformationItem-DM-Rprt          PRESENCE mandatory }
}

RL-Set-InformationItem-DM-Rprt ::= SEQUENCE {
    rL-Set-ID          RL-Set-ID,
    dedicatedMeasurementValueInformation          DedicatedMeasurementValueInformation,
    iE-Extensions          ProtocolExtensionContainer { {RL-Set-InformationItem-DM-Rprt-ExtIEs} } OPTIONAL,
    ...
}

RL-Set-InformationItem-DM-Rprt-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DedicatedMeasurementReport-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- DEDICATED MEASUREMENT TERMINATION REQUEST
--
-- *****

DedicatedMeasurementTerminationRequest ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container          {{DedicatedMeasurementTerminationRequest-IEs}},
    protocolExtensions          ProtocolExtensionContainer {{DedicatedMeasurementTerminationRequest-Extensions}}          OPTIONAL,
    ...
}

DedicatedMeasurementTerminationRequest-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-MeasurementID          CRITICALITY ignore TYPE MeasurementID          PRESENCE mandatory },
    ...
}

DedicatedMeasurementTerminationRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

-- *****
--
-- DEDICATED MEASUREMENT FAILURE INDICATION
--
-- *****

DedicatedMeasurementFailureIndication ::= SEQUENCE {
    protocolIEs                ProtocolIE-Container    {{DedicatedMeasurementFailureIndication-IEs}},
    protocolExtensions         ProtocolExtensionContainer {{DedicatedMeasurementFailureIndication-Extensions}}
    ...
}

DedicatedMeasurementFailureIndication-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-MeasurementID      CRITICALITY ignore TYPE MeasurementID      PRESENCE mandatory } |
    { ID id-Cause              CRITICALITY ignore TYPE Cause              PRESENCE mandatory },
    ...
}

DedicatedMeasurementFailureIndication-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- COMMON TRANSPORT CHANNEL RESOURCES RELEASE REQUEST
--
-- *****

CommonTransportChannelResourcesReleaseRequest ::= SEQUENCE {
    protocolIEs                ProtocolIE-Container    {{CommonTransportChannelResourcesReleaseRequest-IEs}},
    protocolExtensions         ProtocolExtensionContainer {{CommonTransportChannelResourcesReleaseRequest-Extensions}}
    ...
}

CommonTransportChannelResourcesReleaseRequest-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-D-RNTI            CRITICALITY ignore TYPE D-RNTI            PRESENCE mandatory },
    ...
}

CommonTransportChannelResourcesReleaseRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- COMMON TRANSPORT CHANNEL RESOURCES REQUEST
--
-- *****

CommonTransportChannelResourcesRequest ::= SEQUENCE {
    protocolIEs                ProtocolIE-Container    {{CommonTransportChannelResourcesRequest-IEs}},

```

```

    protocolExtensions          ProtocolExtensionContainer {{CommonTransportChannelResourcesRequest-Extensions}}      OPTIONAL,
    ...
}

CommonTransportChannelResourcesRequest-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-D-RNTI                CRITICALITY reject  TYPE D-RNTI                PRESENCE mandatory } |
  { ID id-C-ID                  CRITICALITY reject  TYPE C-ID                  PRESENCE optional } |
  { ID id-TransportBearerRequestIndicator  CRITICALITY reject  TYPE TransportBearerRequestIndicator  PRESENCE mandatory } |
  { ID id-TransportBearerID      CRITICALITY reject  TYPE TransportBearerID                PRESENCE mandatory },
  ...
}

CommonTransportChannelResourcesRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-Permanent-NAS-UE-Identity          CRITICALITY ignore          EXTENSION Permanent-NAS-UE-Identity  PRESENCE optional }|
  { ID id-BindingID                          CRITICALITY ignore          EXTENSION BindingID                  PRESENCE optional }|
  -- Shall be ignored if bearer establishment with ALCAP.
  { ID id-TransportLayerAddress              CRITICALITY ignore          EXTENSION TransportLayerAddress      PRESENCE optional },
  -- Shall be ignored if bearer establishment with ALCAP.
  ...
}

-- *****
--
-- COMMON TRANSPORT CHANNEL RESOURCES RESPONSE FDD
--
-- *****

CommonTransportChannelResourcesResponseFDD ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container    {{CommonTransportChannelResourcesResponseFDD-IEs}},
  protocolExtensions  ProtocolExtensionContainer {{CommonTransportChannelResourcesResponseFDD-Extensions}}      OPTIONAL,
  ...
}

CommonTransportChannelResourcesResponseFDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-S-RNTI                CRITICALITY ignore  TYPE S-RNTI                PRESENCE mandatory } |
  { ID id-C-RNTI                CRITICALITY ignore  TYPE C-RNTI                PRESENCE optional } |
  { ID id-FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspFDD  CRITICALITY ignore  TYPE FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspFDD  PRESENCE
mandatory } |
  { ID id-TransportLayerAddress          CRITICALITY ignore  TYPE TransportLayerAddress          PRESENCE optional } |
  { ID id-BindingID                      CRITICALITY ignore  TYPE BindingID                      PRESENCE optional } |
  { ID id-CriticalityDiagnostics         CRITICALITY ignore  TYPE CriticalityDiagnostics         PRESENCE optional },
  ...
}

FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspFDD ::= SEQUENCE {
  fACH-FlowControlInformation  FACH-FlowControlInformation-CTCH-ResourceRspFDD,
  IE-Extensions                ProtocolExtensionContainer { {FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspFDD-ExtIEs} } OPTIONAL,
  ...
}

FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {

```



```

}
...
FACH-FlowControlInformation-CTCH-ResourceRspFDD ::= ProtocolIE-Single-Container {{ FACH-FlowControlInformationIEs-CTCH-ResourceRspFDD }}

FACH-FlowControlInformationIEs-CTCH-ResourceRspFDD RNSAP-PROTOCOL-IES ::= {
  { ID id-FACH-FlowControlInformation CRITICALITY ignore TYPE FACH-FlowControlInformation PRESENCE mandatory }
}

CommonTransportChannelResourcesResponseFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-C-ID CRITICALITY ignore EXTENSION C-ID PRESENCE mandatory },
  ...
}

-- *****
--
-- COMMON TRANSPORT CHANNEL RESOURCES RESPONSE TDD
--
-- *****

CommonTransportChannelResourcesResponseTDD ::= SEQUENCE {
  protocolIEs ProtocolIE-Container {{CommonTransportChannelResourcesResponseTDD-IEs}},
  protocolExtensions ProtocolExtensionContainer {{CommonTransportChannelResourcesResponseTDD-Extensions}} OPTIONAL,
  ...
}

CommonTransportChannelResourcesResponseTDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-S-RNTI CRITICALITY ignore TYPE S-RNTI PRESENCE mandatory } |
  { ID id-C-RNTI CRITICALITY ignore TYPE C-RNTI PRESENCE optional } |
  { ID id-FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspTDD CRITICALITY ignore TYPE FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspTDD PRESENCE
mandatory } |
  { ID id-TransportLayerAddress CRITICALITY ignore TYPE TransportLayerAddress PRESENCE optional } |
  { ID id-BindingID CRITICALITY ignore TYPE BindingID PRESENCE optional } |
  { ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional },
  ...
}

FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspTDD ::= SEQUENCE {
  fACH-FlowControlInformation FACH-FlowControlInformation-CTCH-ResourceRspTDD,
  iE-Extensions ProtocolExtensionContainer { {FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspTDD-ExtIEs} } OPTIONAL,
  ...
}

FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

FACH-FlowControlInformation-CTCH-ResourceRspTDD ::= ProtocolIE-Single-Container {{ FACH-FlowControlInformationIEs-CTCH-ResourceRspTDD }}

FACH-FlowControlInformationIEs-CTCH-ResourceRspTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-FACH-FlowControlInformation CRITICALITY ignore TYPE FACH-FlowControlInformation PRESENCE mandatory }
}

```

```

}

CommonTransportChannelResourcesResponseTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-C-ID          CRITICALITY ignore      EXTENSION  C-ID          PRESENCE mandatory },
  ...
}

-- *****
--
-- COMMON TRANSPORT CHANNEL RESOURCES FAILURE
--
-- *****

CommonTransportChannelResourcesFailure ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container  {{CommonTransportChannelResourcesFailure-IEs}},
  protocolExtensions  ProtocolExtensionContainer {{CommonTransportChannelResourcesFailure-Extensions}}  OPTIONAL,
  ...
}

CommonTransportChannelResourcesFailure-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-S-RNTI          CRITICALITY ignore  TYPE S-RNTI          PRESENCE mandatory } |
  { ID id-Cause          CRITICALITY ignore  TYPE Cause          PRESENCE mandatory } |
  { ID id-CriticalityDiagnostics  CRITICALITY ignore  TYPE CriticalityDiagnostics  PRESENCE optional },
  ...
}

CommonTransportChannelResourcesFailure-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- COMPRESSED MODE COMMAND
--
-- *****

CompressedModeCommand ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container  {{CompressedModeCommand-IEs}},
  protocolExtensions  ProtocolExtensionContainer {{CompressedModeCommand-Extensions}}  OPTIONAL,
  ...
}

CompressedModeCommand-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-Active-Pattern-Sequence-Information  CRITICALITY ignore  TYPE Active-Pattern-Sequence-Information  PRESENCE mandatory },
  ...
}

CompressedModeCommand-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

-- *****
--
-- ERROR INDICATION
--
-- *****

ErrorIndication ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{ErrorIndication-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{ErrorIndication-Extensions}}    OPTIONAL,
    ...
}

ErrorIndication-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-Cause          CRITICALITY ignore TYPE Cause          PRESENCE optional } |
    { ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional },
    ...
}

ErrorIndication-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-S-RNTI          CRITICALITY ignore EXTENSION S-RNTI          PRESENCE optional } |
    { ID id-D-RNTI          CRITICALITY ignore EXTENSION D-RNTI          PRESENCE optional },
    ...
}

-- *****
--
-- COMMON MEASUREMENT INITIATION REQUEST
--
-- *****

CommonMeasurementInitiationRequest ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CommonMeasurementInitiationRequest-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{CommonMeasurementInitiationRequest-Extensions}}    OPTIONAL,
    ...
}

CommonMeasurementInitiationRequest-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-MeasurementID          CRITICALITY reject          TYPE MeasurementID          PRESENCE mandatory
    } |
    { ID id-CommonMeasurementObjectType-CM-Rqst          CRITICALITY reject          TYPE CommonMeasurementObjectType-CM-Rqst          PRESENCE
    mandatory } |
    -- This IE represents both the Common Measurement Object Type IE and the choice based on the Common Measurement Object Type
    -- as described in the tabular message format in subclause 9.1.
    { ID id-CommonMeasurementType          CRITICALITY reject          TYPE CommonMeasurementType          PRESENCE mandatory
    } |
    { ID id-MeasurementFilterCoefficient          CRITICALITY reject          TYPE MeasurementFilterCoefficient          PRESENCE optional } |
    { ID id-ReportCharacteristics          CRITICALITY reject          TYPE ReportCharacteristics          PRESENCE mandatory
    } |
    { ID id-SFNReportingIndicator          CRITICALITY reject          TYPE FNReportingIndicator          PRESENCE mandatory
    } |
    { ID id-SFN          CRITICALITY reject          TYPE SFN          PRESENCE optional
    }
}

```

```

    }|
    { ID id-CommonMeasurementAccuracy          CRITICALITY reject          TYPE CommonMeasurementAccuracy          PRESENCE optional
    },
    ...
}

CommonMeasurementInitiationRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

CommonMeasurementObjectType-CM-Rqst ::= CHOICE {
    cell Cell-CM-Rqst,
    ...
}

Cell-CM-Rqst ::= SEQUENCE {
    uC-ID UC-ID,
    timeSlot TimeSlot OPTIONAL, --3.84Mcps TDD only
    timeSlotLCR TimeSlotLCR OPTIONAL, --1.28Mcps TDD only
    neighbouringCellMeasurementInformation SEQUENCE (SIZE (1..maxNrOfMeasNCell)) OF
        CHOICE {
            neighbouringFDDCellMeasurementInformation NeighbouringFDDCellMeasurementInformation,
            neighbouringTDDCellMeasurementInformation NeighbouringTDDCellMeasurementInformation,
            ...,
            extension-neighbouringCellMeasurementInformation Extension-neighbouringCellMeasurementInformation
        },
    iE-Extensions ProtocolExtensionContainer { { CellItem-CM-Rqst-ExtIEs } } OPTIONAL,
    ...
}

Extension-neighbouringCellMeasurementInformation ::= ProtocolIE-Single-Container {{ Extension-neighbouringCellMeasurementInformationIE }}

Extension-neighbouringCellMeasurementInformationIE RNSAPNBAP-PROTOCOL-IES ::= {
    { ID id-neighbouringTDDCellMeasurementInformationLCR CRITICALITY reject TYPEEXTENSION NeighbouringTDDCellMeasurementInformationLCR PRESENCE
mandatory },
    ...
}

CellItem-CM-Rqst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- COMMON MEASUREMENT INITIATION RESPONSE
--
-- *****

CommonMeasurementInitiationResponse ::= SEQUENCE {
    protocolIEs ProtocolIE-Container {{CommonMeasurementInitiationResponse-IEs}},
    protocolExtensions ProtocolExtensionContainer {{CommonMeasurementInitiationResponse-Extensions}} OPTIONAL,

```

```

}
...
CommonMeasurementInitiationResponse-IEs RNSAP-PROTOCOL-IES ::= {
  { ID      id-MeasurementID                CRITICALITY ignore          TYPE      MeasurementID                PRESENCE mandatory }|
  }|
  { ID      id-CommonMeasurementObjectType-CM-Rsp  CRITICALITY ignore          TYPE      CommonMeasurementObjectType-CM-Rsp  PRESENCE optional }|
  { ID      id-SFN                            CRITICALITY ignore          TYPE      SFN                                PRESENCE optional }|
  { ID      id-CriticalityDiagnostics           CRITICALITY ignore          TYPE      CriticalityDiagnostics               PRESENCE optional }|
  { ID      id-CommonMeasurementAccuracy        CRITICALITY reject          TYPE      CommonMeasurementAccuracy           PRESENCE optional
  },
  ...
}

CommonMeasurementInitiationResponse-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

CommonMeasurementObjectType-CM-Rsp ::= CHOICE {
  cell                Cell-CM-Rsp,
  ...
}

Cell-CM-Rsp ::= SEQUENCE {
  commonMeasurementValue      CommonMeasurementValue,
  iE-Extensions               ProtocolExtensionContainer { { CellItem-CM-Rsp-ExtIEs } }  OPTIONAL,
  ...
}

CellItem-CM-Rsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- COMMON MEASUREMENT INITIATION FAILURE
--
-- *****

CommonMeasurementInitiationFailure ::= SEQUENCE {
  protocolIEs              ProtocolIE-Container  {{CommonMeasurementInitiationFailure-IEs}},
  protocolExtensions       ProtocolExtensionContainer  {{CommonMeasurementInitiationFailure-Extensions}}  OPTIONAL,
  ...
}

CommonMeasurementInitiationFailure-IEs RNSAP-PROTOCOL-IES ::= {
  { ID      id-MeasurementID                CRITICALITY ignore          TYPE      MeasurementID                PRESENCE mandatory }|
  { ID      id-Cause                        CRITICALITY ignore          TYPE      Cause                        PRESENCE mandatory }|
  { ID      id-CriticalityDiagnostics       CRITICALITY ignore          TYPE      CriticalityDiagnostics        PRESENCE optional },
  ...
}

```

```

CommonMeasurementInitiationFailure-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- COMMON MEASUREMENT REPORT
--
-- *****

CommonMeasurementReport ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container    {{CommonMeasurementReport-IEs}},
  protocolExtensions  ProtocolExtensionContainer {{CommonMeasurementReport-Extensions}}  OPTIONAL,
  ...
}

CommonMeasurementReport-IEs RNSAP-PROTOCOL-IES ::= {
  { ID      id-MeasurementID          CRITICALITY ignore          TYPE      MeasurementID          PRESENCE mandatory }|
  { ID      id-CommonMeasurementObjectType-CM-Rprt  CRITICALITY ignore          TYPE      CommonMeasurementObjectType-CM-Rprt  PRESENCE mandatory
  }|
  { ID      id-SFN                    CRITICALITY ignore          TYPE      SFN                    PRESENCE optional },
  ...
}

CommonMeasurementReport-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

CommonMeasurementObjectType-CM-Rprt ::= CHOICE {
  cell                Cell-CM-Rprt,
  ...
}

Cell-CM-Rprt ::= SEQUENCE {
  commonMeasurementValueInformation  CommonMeasurementValueInformation,
  iE-Extensions                      ProtocolExtensionContainer {{ CellItem-CM-Rprt-ExtIEs }}  OPTIONAL,
  ...
}

CellItem-CM-Rprt-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- COMMON MEASUREMENT TERMINATION REQUEST
--
-- *****

```

```

CommonMeasurementTerminationRequest ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CommonMeasurementTerminationRequest-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CommonMeasurementTerminationRequest-Extensions}} OPTIONAL,
    ...
}

CommonMeasurementTerminationRequest-IEs RNSAP-PROTOCOL-IES ::= {
    { ID      id-MeasurementID          CRITICALITY ignore          TYPE      MeasurementID          PRESENCE mandatory },
    ...
}

CommonMeasurementTerminationRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- COMMON MEASUREMENT FAILURE INDICATION
--
-- *****

CommonMeasurementFailureIndication ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CommonMeasurementFailureIndication-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CommonMeasurementFailureIndication-Extensions}} OPTIONAL,
    ...
}

CommonMeasurementFailureIndication-IEs RNSAP-PROTOCOL-IES ::= {
    { ID      id-MeasurementID          CRITICALITY ignore          TYPE      MeasurementID          PRESENCE mandatory }|
    { ID      id-Cause                 CRITICALITY ignore          TYPE      Cause                 PRESENCE mandatory }|
    ...
}

CommonMeasurementFailureIndication-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- INFORMATION EXCHANGE INITIATION REQUEST
--
-- *****

InformationExchangeInitiationRequest ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{InformationExchangeInitiationRequest-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{InformationExchangeInitiationRequest-Extensions}} OPTIONAL,
    ...
}

InformationExchangeInitiationRequest-IEs RNSAP-PROTOCOL-IES ::= {
    { ID      id-InformationExchangeID          CRITICALITY reject          TYPE      InformationExchangeID          PRESENCE mandatory }|

```

```

    { ID      id-InformationExchangeObjectType-InfEx-Rqst      CRITICALITY reject      TYPE      InformationExchangeObjectType-InfEx-Rqst      PRESENCE
      mandatory      }|
    -- This IE represents both the Information Exchange Object Type IE and the choice based on the Information Exchange Object Type
    -- as described in the tabular message format in subclause 9.1.
    { ID      id-InformationType      CRITICALITY reject      TYPE      InformationType      PRESENCE mandatory      }|
    { ID      id-InformationReportCharacteristics      CRITICALITY reject      TYPE      InformationReportCharacteristics      PRESENCE mandatory      },
    ...
  }

InformationExchangeInitiationRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

InformationExchangeObjectType-InfEx-Rqst ::= CHOICE {
  cell      Cell-InfEx-Rqst,
  ...
}

Cell-InfEx-Rqst ::= SEQUENCE {
  c-ID      C-ID,
  iE-Extensions      ProtocolExtensionContainer { { CellItem-InfEx-Rqst-ExtIEs } }      OPTIONAL,
  ...
}

CellItem-InfEx-Rqst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- INFORMATION EXCHANGE INITIATION RESPONSE
--
-- *****

InformationExchangeInitiationResponse ::= SEQUENCE {
  protocolIEs      ProtocolIE-Container      {{InformationExchangeInitiationResponse-IEs}},
  protocolExtensions      ProtocolExtensionContainer      {{InformationExchangeInitiationResponse-Extensions}}      OPTIONAL,
  ...
}

InformationExchangeInitiationResponse-IEs RNSAP-PROTOCOL-IES ::= {
  { ID      id-InformationExchangeID      CRITICALITY ignore      TYPE      InformationExchangeID      PRESENCE mandatory
    }|
  { ID      id-InformationExchangeObjectType-InfEx-Rsp      CRITICALITY ignore      TYPE      InformationExchangeObjectType-InfEx-Rsp      PRESENCE
    optional      }|
  { ID      id-CriticalityDiagnostics      CRITICALITY ignore      TYPE      CriticalityDiagnostics      PRESENCE optional },
  ...
}

```



```

InformationExchangeInitiationResponse-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

InformationExchangeObjectType-InfEx-Rsp ::= CHOICE {
  cell          Cell-InfEx-Rsp,
  ...
}

Cell-InfEx-Rsp ::= SEQUENCE {
  requestedDataValue      RequestedDataValue,
  iE-Extensions          ProtocolExtensionContainer { { CellItem-InfEx-Rsp-ExtIEs} } OPTIONAL,
  ...
}

CellItem-InfEx-Rsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- INFORMATION EXCHANGE INITIATION FAILURE
--
-- *****

InformationExchangeInitiationFailure ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container {{InformationExchangeInitiationFailure-IEs}},
  protocolExtensions  ProtocolExtensionContainer {{InformationExchangeInitiationFailure-Extensions}} OPTIONAL,
  ...
}

InformationExchangeInitiationFailure-IEs RNSAP-PROTOCOL-IES ::= {
  { ID   id-InformationExchangeID          CRITICALITY  ignore      TYPE  InformationExchangeID      PRESENCE mandatory }|
  { ID   id-Cause                          CRITICALITY  ignore      TYPE  Cause                          PRESENCE mandatory }|
  { ID   id-CriticalityDiagnostics          CRITICALITY  ignore      TYPE  CriticalityDiagnostics          PRESENCE optional },
  ...
}

InformationExchangeInitiationFailure-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- INFORMATION REPORT
--
-- *****

InformationReport ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container {{InformationReport-IEs}},

```

```

    protocolExtensions      ProtocolExtensionContainer  {{InformationReport-Extensions}}      OPTIONAL,
    ...
}

InformationReport-IEs RNSAP-PROTOCOL-IES ::= {
  { ID      id-InformationExchangeID                CRITICALITY ignore                TYPE      InformationExchangeID                PRESENCE
    mandatory  }|
  { ID      id-InformationExchangeObjectType-InfEx-Rprt  CRITICALITY ignore                TYPE      InformationExchangeObjectType-InfEx-Rprt  PRESENCE
    mandatory  },
  ...
}

InformationReport-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

InformationExchangeObjectType-InfEx-Rprt ::= CHOICE {
  cell                Cell-InfEx-Rprt,
  ...
}

Cell-InfEx-Rprt ::= SEQUENCE {
  requestedDataValueInformation  RequestedDataValueInformation,
  iE-Extensions                  ProtocolExtensionContainer  {{ CellItem-InfEx-Rprt-ExtIEs }}      OPTIONAL,
  ...
}

CellItem-InfEx-Rprt-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- INFORMATION EXCHANGE TERMINATION REQUEST
--
-- *****

InformationExchangeTerminationRequest ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container  {{InformationExchangeTerminationRequest-IEs}},
  protocolExtensions  ProtocolExtensionContainer  {{InformationExchangeTerminationRequest-Extensions}}      OPTIONAL,
  ...
}

InformationExchangeTerminationRequest-IEs RNSAP-PROTOCOL-IES ::= {
  { ID      id-InformationExchangeID                CRITICALITY  ignore                TYPE      InformationExchangeID                PRESENCE mandatory},
  ...
}

InformationExchangeTerminationRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {

```

```

}
...

-- *****
--
-- INFORMATION EXCHANGE FAILURE INDICATION
--
-- *****

InformationExchangeFailureIndication ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{InformationExchangeFailureIndication-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{InformationExchangeFailureIndication-Extensions}}    OPTIONAL,
    ...
}

InformationExchangeFailureIndication-IEs RNSAP-PROTOCOL-IES ::= {
    { ID    id-InformationExchangeID          CRITICALITY ignore          TYPE    InformationExchangeID          PRESENCE mandatory } |
    { ID    id-Cause                          CRITICALITY ignore          TYPE    Cause                          PRESENCE mandatory } |
    ...
}

InformationExchangeFailureIndication-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- RESET REQUEST
--
-- *****

ResetRequest ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{ResetRequest-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{ResetRequest-Extensions}}    OPTIONAL,
    ...
}

ResetRequest-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RNC-ID          CRITICALITY reject    TYPE RNC-ID          PRESENCE mandatory } |
    { ID id-ResetIndicator  CRITICALITY reject    TYPE ResetIndicator  PRESENCE mandatory },
    ...
}

ResetRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

ResetIndicator ::= CHOICE {
    context          ContextList-Reset,
    all-contexts     NULL,
}

```

```

}
...
ContextList-Reset ::= SEQUENCE {
    contextInfoList-Reset      ContextInfoList-Reset,
    iE-Extensions              ProtocolExtensionContainer  { {ContextItem-Reset-ExtIEs} }    OPTIONAL,
    ...
}

ContextItem-Reset-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

ContextInfoList-Reset ::= SEQUENCE (SIZE (1.. maxResetContext)) OF ProtocolIE-Single-Container {{ ContextInfoItemIE-Reset }}

ContextInfoItemIE-Reset RNSAP-PROTOCOL-IES ::= {
    {ID id-ContextInfoItem-Reset      CRITICALITY reject      TYPE ContextInfoItem-Reset      PRESENCE mandatory}
}

ContextInfoItem-Reset ::= SEQUENCE {
    contextType-Reset          ContextType-Reset,
    iE-Extensions              ProtocolExtensionContainer  { { ContextInfoItem-Reset-ExtIEs} }    OPTIONAL,
    ...
}

ContextInfoItem-Reset-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

ContextType-Reset ::= CHOICE {
    sRNTI                      S-RNTI,
    dRNTI                      D-RNTI,
    ...
}

-- *****
--
-- RESET RESPONSE
--
-- *****

ResetResponse ::= SEQUENCE {
    protocolIEs                ProtocolIE-Container      {{ResetResponse-IEs}},
    protocolExtensions          ProtocolExtensionContainer {{ResetResponse-Extensions}}    OPTIONAL,
    ...
}

ResetResponse-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RNC-ID              CRITICALITY ignore TYPE RNC-ID      PRESENCE mandatory} |
    { ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional},
    ...
}

```

```

}
ResetResponse-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}
-- *****
--
-- RADIO LINK ACTIVATION COMMAND FDD
--
-- *****

RadioLinkActivationCommandFDD ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container    {{RadioLinkActivationCommandFDD-IEs}},
  protocolExtensions   ProtocolExtensionContainer {{RadioLinkActivationCommandFDD-Extensions}}    OPTIONAL,
  ...
}

RadioLinkActivationCommandFDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-DelayedActivationList-RL-ActivationCmdFDD    CRITICALITY reject  TYPE    DelayedActivationInformationList-RL-ActivationCmdFDD
  PRESENCE    mandatory  },
  ...
}

RadioLinkActivationCommandFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DelayedActivationInformationList-RL-ActivationCmdFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {
  { DelayedActivationInformation-RL-ActivationCmdFDD-IEs } }

DelayedActivationInformation-RL-ActivationCmdFDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-DelayedActivationInformation-RL-ActivationCmdFDD    CRITICALITY reject  TYPE DelayedActivationInformation-RL-ActivationCmdFDD    PRESENCE
  optional  }
}

DelayedActivationInformation-RL-ActivationCmdFDD ::= SEQUENCE {
  rL-ID          RL-ID,
  delayed-activation-update  DelayedActivationUpdate,
  iE-Extensions   ProtocolExtensionContainer { { DelayedActivationInformation-RL-ActivationCmdFDD-ExtIEs } } OPTIONAL,
  ...
}

DelayedActivationInformation-RL-ActivationCmdFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}
-- *****
--
-- RADIO LINK ACTIVATION COMMAND TDD
--

```

```

-- *****

RadioLinkActivationCommandTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkActivationCommandTDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{RadioLinkActivationCommandTDD-Extensions}}    OPTIONAL,
    ...
}

RadioLinkActivationCommandTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-DelayedActivationList-RL-ActivationCmdTDD    CRITICALITY reject    TYPE    DelayedActivationInformationList-RL-ActivationCmdTDD
    PRESENCE    mandatory    },
    ...
}

RadioLinkActivationCommandTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DelayedActivationInformationList-RL-ActivationCmdTDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {
    { DelayedActivationInformation-RL-ActivationCmdTDD-IEs } }

DelayedActivationInformation-RL-ActivationCmdTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-DelayedActivationInformation-RL-ActivationCmdTDD    CRITICALITY reject    TYPE    DelayedActivationInformation-RL-ActivationCmdTDD    PRESENCE
    optional    }
}

DelayedActivationInformation-RL-ActivationCmdTDD ::= SEQUENCE {
    rL-ID                RL-ID,
    delayed-activation-update    DelayedActivationUpdate,
    iE-Extensions         ProtocolExtensionContainer { { DelayedActivationInformation-RL-ActivationCmdTDD-ExtIEs } } OPTIONAL,
    ...
}

DelayedActivationInformation-RL-ActivationCmdTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- PRIVATE MESSAGE
--
-- *****

PrivateMessage ::= SEQUENCE {
    privateIEs          PrivateIE-Container    {{PrivateMessage-IEs}},
    ...
}

PrivateMessage-IEs RNSAP-PRIVATE-IES ::= {
    ...
}

```

END

9.3.4 Information Element Definitions

```
-- *****
--
-- Information Element Definitions
--
-- *****

RNSAP-IEs {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) rnsap (1) version1 (1) rnsap-IEs (2) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

IMPORTS
    maxCodeNumComp-1,
    maxNrOfFACHs,
    maxFACHCountPlus1,
    maxIBSEG,
    maxNoOfDSCHs,
    maxNoOfUSCHs,
    maxNoTFCIGroups,
    maxNoCodeGroups,
    maxNrOfDCHs,
    maxNrOfDL-Codes,
    maxNrOfDLTs,
    maxNrOfDLTsLCR,
    maxNrOfDPCHs,
    maxNrOfDPCHsLCR,
    maxNrOfErrors,
    maxNrOfFDDNeighboursPerRNC,
    maxNrOfMACcshSDU-Length,
    maxNrOfNeighbouringRNCs,
    maxNrOfTDDNeighboursPerRNC,
    maxNrOfLCRTDDNeighboursPerRNC,
    maxNrOfTS,
    maxNrOfULTs,
    maxNrOfULTsLCR,
    maxNrOfGSMNeighboursPerRNC,
    maxRateMatching,
    maxNrOfPoints,
    maxNoOfRB,
    maxNrOfRLs,
    maxNrOfTFCs,
    maxNrOfTFS,
```

maxCTFC,
maxRNCinURA-1,
maxNrOfSCCPCHs,
maxTFCI1Combs,
maxTFCI2Combs,
maxTFCI2Combs-1,
maxTGPS,
maxTTI-Count,
maxNoGPSTypes,
maxNoSat,
maxNrOfHARQProc,
maxNrOfHSSCCHCodes,
maxNrOfMACdFlows,
maxNrOfMACdFlows-1,
maxNrOfPDUIndexes,
maxNrOfPDUIndexes-1,
maxNrOfPrioQueues,
maxNrOfPrioQueues-1,

id-Allowed-Rate-Information,
id-AntennaColocationIndicator,
id-BindingID,
id-Cell-Capacity-Class-Value,
id-Cell-Capacity-Class-Value-ThresholdInformation,
id-CellCapabilityContainer-FDD,
id-CellCapabilityContainer-TDD,
id-CellCapabilityContainer-TDD-LCR,
id-CoverageIndicator,
id-DPC-Mode-Change-SupportIndicator,
id-Guaranteed-Rate-Information,
id-HCS-Prio,
id-Load-Value,
id-Load-Value-IncrDecrThres,
id-Neighbouring-GSM-CellInformation,
id-Neighbouring-UMTS-CellInformationItem,
id-neighbouring-LCR-TDD-CellInformation,
id-NRT-Load-Information-Value,
id-NRT-Load-Information-Value-IncrDecrThres,
id-OnModification,
id-Received-Total-Wideband-Power-Value,
id-Received-Total-Wideband-Power-Value-IncrDecrThres,
id-RT-Load-Value,
id-RT-Load-Value-IncrDecrThres,
id-SFNMeasurementThresholdInformation,
id-TrafficClass,
id-Transmitted-Carrier-Power-Value,
id-Transmitted-Carrier-Power-Value-IncrDecrThres,
id-TUTRANGPSMeasurementThresholdInformation,
id-UL-Timeslot-ISCP-Value,
id-UL-Timeslot-ISCP-Value-IncrDecrThres,
maxNrOfLevels,


```

maxNrOfMeasNCell,
maxNrOfMeasNCell-1,
id-MessageStructure,
id-EnhancedDSCHPC,
id-RestrictionStateIndicator,
id-Rx-Timing-Deviation-Value-LCR,
id-TransportLayerAddress,
id-TypeOfError,
id-Angle-Of-Arrival-Value-LCR,
id-IPDL-TDD-ParametersLCR,
id-NRT-Load-information-Value
FROM RNSAP-Constants

Criticality,
ProcedureID,
ProtocolIE-ID,
TransactionID,
TriggeringMessage
FROM RNSAP-CommonDataTypes

ProtocolIE-Single-Container{},
ProtocolExtensionContainer{},
RNSAP-PROTOCOL-IES,
RNSAP-PROTOCOL-EXTENSION
FROM RNSAP-Containers;

-- A

Active-Pattern-Sequence-Information ::= SEQUENCE {
    cmConfigurationChangeCFN      CFN,
    transmission-Gap-Pattern-Sequence-Status  Transmission-Gap-Pattern-Sequence-Status-List  OPTIONAL,
    iE-Extensions      ProtocolExtensionContainer { {Active-Pattern-Sequence-Information-ExtIEs} } OPTIONAL,
    ...
}

Active-Pattern-Sequence-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

AdjustmentPeriod      ::= INTEGER(1..256)
-- Unit Frame

AllocationRetentionPriority ::= SEQUENCE {
    priorityLevel      PriorityLevel,
    pre-emptionCapability      Pre-emptionCapability,
    pre-emptionVulnerability      Pre-emptionVulnerability,
    iE-Extensions      ProtocolExtensionContainer { {AllocationRetentionPriority-ExtIEs} } OPTIONAL,
    ...
}

AllocationRetentionPriority-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {

```

```

}
...
}
Allowed-Rate-Information ::= SEQUENCE {
    allowed-UL-Rate      Allowed-Rate OPTIONAL,
    allowed-DL-Rate      Allowed-Rate OPTIONAL,
    iE-Extensions        ProtocolExtensionContainer { {Allowed-Rate-Information-ExtIEs} } OPTIONAL,
    ...
}
Allowed-Rate-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}
Allowed-Rate ::= INTEGER (1..maxNrOfTFs)
AllowedQueuingTime ::= INTEGER (1..60)
-- seconds
AlphaValue ::= INTEGER (0..8)
-- Actual value = Alpha / 8
Angle-Of-Arrival-Value-LCR ::= SEQUENCE OF{
    aOA-LCR              AOA-LCR,
    aOA-LCR-Accuracy-Class AOA-LCR-Accuracy-Class,
    iE-Extensions        ProtocolExtensionContainer { {Angle-Of-Arrival-Value-LCR-ExtIEs} } OPTIONAL,
    ...
}
Angle-Of-Arrival-Value-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}
AOA-LCR ::= INTEGER (0..719)
-- Angle Of Arrival for 1.28Mcps TDD
AOA-LCR-Accuracy-Class ::= ENUMERATED {a,b,c,d,e,f,g,h,...}
AntennaColocationIndicator ::= ENUMERATED {
    co-located,
    ...
}
-- B
BadSatellites ::= SEQUENCE {
    badSatelliteInformation SEQUENCE (SIZE (1..maxNoSat)) OF
        SEQUENCE {
            badSAT-ID          SAT-ID,
            iE-Extensions      ProtocolExtensionContainer { { BadSatelliteInformation-ExtIEs} } OPTIONAL,
            ...

```

```

    },
    iE-Extensions          ProtocolExtensionContainer { { BadSatellites-ExtIEs } }    OPTIONAL,
    ...
}

BadSatelliteInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

BadSatellites-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Band-Indicator ::= ENUMERATED {
    dcs1800Band,
    pcs1900Band,
    ...
}

BCC ::= BIT STRING (SIZE (3))

BCCH-ARFCN ::= INTEGER (0..1023)

BetaCD ::= INTEGER (0..15)

BindingID          ::= OCTET STRING (SIZE (1..4,...))
-- If the Binding ID includes an UDP port, the UDP port is included in octet 1 and 2.

BLER               ::= INTEGER (-63..0)
-- Step 0.1 (Range -6.3..0). It is the Log10 of the BLER

SCTD-Indicator    ::= ENUMERATED {
    active,
    inactive
}

BSIC ::= SEQUENCE {
    nCC      NCC,
    bCC      BCC
}

BurstModeParameters ::= SEQUENCE {
    burstStart      INTEGER (0..15),
    burstLength     INTEGER (10..25),
    burstFreq       INTEGER (1..16),
    iE-Extensions   ProtocolExtensionContainer { { BurstModeParameters-ExtIEs } }    OPTIONAL,
    ...
}

BurstModeParameters-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```
}  
  
-- C  
  
Cause ::= CHOICE {  
    radioNetwork      CauseRadioNetwork,  
    transport         CauseTransport,  
    protocol          CauseProtocol,  
    misc              CauseMisc,  
    ...  
}  
  
CauseMisc ::= ENUMERATED {  
    control-processing-overload,  
    hardware-failure,  
    om-intervention,  
    not-enough-user-plane-processing-resources,  
    unspecified,  
    ...  
}  
  
CauseProtocol ::= ENUMERATED {  
    transfer-syntax-error,  
    abstract-syntax-error-reject,  
    abstract-syntax-error-ignore-and-notify,  
    message-not-compatible-with-receiver-state,  
    semantic-error,  
    unspecified,  
    abstract-syntax-error-falsely-constructed-message,  
    ...  
}  
  
CauseRadioNetwork ::= ENUMERATED {  
    unknown-C-ID,  
    cell-not-available,  
    power-level-not-supported,  
    ul-scrambling-code-already-in-use,  
    dl-radio-resources-not-available,  
    ul-radio-resources-not-available,  
    measurement-not-supported-for-the-object,  
    combining-resources-not-available,  
    combining-not-supported,  
    reconfiguration-not-allowed,  
    requested-configuration-not-supported,  
    synchronisation-failure,  
    requested-tx-diversity-mode-not-supported,  
    measurement-temporarily-not-available,  
    unspecified,  
    invalid-CM-settings,  
    reconfiguration-CFN-not-elapsed,  
    number-of-DL-codes-not-supported,  
    ...  
}
```

```

dedicated-transport-channel-type-not-supported,
dl-shared-channel-type-not-supported,
ul-shared-channel-type-not-supported,
common-transport-channel-type-not-supported,
ul-spreading-factor-not-supported,
dl-spreading-factor-not-supported,
cm-not-supported,
transaction-not-supported-by-destination-node-b,
rl-already-activated-or-allocated,
...,
number-of-UL-codes-not-supported,
cell-reserved-for-operator-use,
dpc-mode-change-not-supported,
information-temporarily-not-available,
information-provision-not-supported-for-the-object,
power-balancing-status-not-compatible,
delayed-activation-not-supported,
rl-timing-adjustment-not-supported
}

CauseTransport ::= ENUMERATED {
    transport-resource-unavailable,
    unspecified,
    ...
}

CellCapabilityContainer-FDD ::= BIT STRING (SIZE (32))
-- First bit: Flexible Hard Split Support Indicator
-- Second bit: Delayed Activation Support Indicator
-- Note that undefined bits are considered as a spare bit and spare bits shall be set to 0 by the transmitter and shall be ignored by the receiver.

CellCapabilityContainer-TDD ::= BIT STRING (SIZE (32))
-- First bit: Delayed Activation Support Indicator
-- Note that undefined bits are considered as a spare bit and spare bits shall be set to 0 by the transmitter and shall be ignored by the receiver.

CellCapabilityContainer-TDD-LCR ::= BIT STRING (SIZE (32))
-- First bit: Delayed Activation Support Indicator
-- Note that undefined bits are considered as a spare bit and spare bits shall be set to 0 by the transmitter and shall be ignored by the receiver.

C-ID                ::= INTEGER (0..65535)

CCTrCH-ID           ::= INTEGER (0..15)

Cell-Capacity-Class-Value ::= SEQUENCE {
    uplinkCellCapacityClassValue    INTEGER(1..100,...),
    downlinkCellCapacityClassValue  INTEGER(1..100,...)
}

Cell-Capacity-Class-Value-ThresholdInformation ::= INTEGER(1..100,...)

CellIndividualOffset ::= INTEGER (-20..20)

```

```
CellParameterID ::= INTEGER (0..127,...)

CFN ::= INTEGER (0..255)

CGI ::= SEQUENCE {
    LAI SEQUENCE {
        pLMN-Identity PLMN-Identity,
        lAC LAC,
        iE-Extensions ProtocolExtensionContainer { {LAI-ExtIEs} } OPTIONAL,
        ...
    },
    cI CI,
    iE-Extensions ProtocolExtensionContainer { {CGI-ExtIEs} } OPTIONAL
}

LAI-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

CGI-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

ChannelCodingType ::= ENUMERATED {
    no-codingTDD,
    convolutional-coding,
    turbo-coding,
    ...
}

ChipOffset ::= INTEGER (0..38399)

CI ::= OCTET STRING (SIZE (2))

ClosedLoopModel-SupportIndicator ::= ENUMERATED {
    closedLoop-Model-Supported,
    closedLoop-Model-not-Supported
}

ClosedLoopMode2-SupportIndicator ::= ENUMERATED {
    closedLoop-Mode2-Supported,
    closedLoop-Mode2-not-Supported
}

Closedlooptimingadjustmentmode ::= ENUMERATED {
    adj-1-slot,
    adj-2-slot,
    ...
}
```

```

CodeNumber ::= INTEGER (0..maxCodeNumComp-1)

CodingRate ::= ENUMERATED {
    half,
    third,
    ...
}

CommonMeasurementAccuracy ::= CHOICE {
    tUTRANGPSMeasurementAccuracyClass    TUTRANGPSAccuracyClass,
    ...
}

CommonMeasurementType ::= ENUMERATED {
    uTRAN-GPS-timing-of-cell-frames-for-LCS,
    sFN-SFN-observerd-time-difference,
    load,
    transmitted-carrier-power,
    received-total-wide-band-power,
    uplink-timeslot-iscp,
    ...,
    rT-load,
    nRT-load-Information
}

CommonMeasurementValue ::= CHOICE {
    tUTRANGPSMeasurementValueInformation    TUTRANGPSMeasurementValueInformation,
    sFNSFNMeasurementValueInformation      SFNSFNMeasurementValueInformation,
    loadValue                               LoadValue,
    transmittedCarrierPowerValue           INTEGER(0..100),
    receivedTotalWideBandPowerValue       INTEGER(0..621),
    uplinkTimeslotISCPValue                UL-TimeslotISCP,
    ...,
    rTLoadValue                             RTLoadValue,
    nRTLoadInformationValue                 NRTLoadInformationValue
}

CommonMeasurementValueInformation ::= CHOICE {
    measurementAvailable    CommonMeasurementAvailable,
    measurementnotAvailable    NULL
}

CommonMeasurementAvailable ::= SEQUENCE {
    commonMeasurementValue    CommonMeasurementValue,
    iE-Extensions              ProtocolExtensionContainer { { CommonMeasurementAvailableItem-ExtIEs} }    OPTIONAL,
    ...
}

CommonMeasurementAvailableItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

CongestionCause ::= ENUMERATED {
    uTRAN-dynamic-resources,
    uTRAN-semistatic-resources,
    ...
}

CommonTransportChannelResourcesInitialisationNotRequired ::= ENUMERATED {
    not-Required
}

CoverageIndicator ::= ENUMERATED {
    overlap,
    covers,
    containedIn,
    ...
}

CRC-Size ::= ENUMERATED {
    v0,
    v8,
    v12,
    v16,
    v24,
    ...
}

CriticalityDiagnostics ::= SEQUENCE {
    procedureID          ProcedureID          OPTIONAL,
    triggeringMessage    TriggeringMessage    OPTIONAL,
    procedureCriticality Criticality          OPTIONAL,
    transactionID       TransactionID        OPTIONAL,
    iEsCriticalityDiagnostics CriticalityDiagnostics-IE-List OPTIONAL,
    iE-Extensions       ProtocolExtensionContainer { {CriticalityDiagnostics-ExtIEs} } OPTIONAL,
    ...
}

CriticalityDiagnostics-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

CriticalityDiagnostics-IE-List ::= SEQUENCE (SIZE (1..maxNrOfErrors)) OF
    SEQUENCE {
        iECriticality          Criticality,
        iE-ID                  ProtocolIE-ID,
        repetitionNumber       RepetitionNumber0 OPTIONAL,
        iE-Extensions          ProtocolExtensionContainer { {CriticalityDiagnostics-IE-List-ExtIEs} } OPTIONAL,
        ...
    }

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

```



```

{ ID id-MessageStructure      CRITICALITY ignore      EXTENSION MessageStructure      PRESENCE optional }|
{ ID id-TypeOfError          CRITICALITY ignore      EXTENSION TypeOfError          PRESENCE mandatory },
  ...
}

```

```

MessageStructure ::= SEQUENCE (SIZE (1..maxNrOfLevels)) OF
  SEQUENCE {
    iE-ID                ProtocolIE-ID,
    repetitionNumber    RepetitionNumber1      OPTIONAL,
    iE-Extensions       ProtocolExtensionContainer { {MessageStructure-ExtIEs} } OPTIONAL,
    ...
  }

```

```

MessageStructure-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

CN-CS-DomainIdentifier ::= SEQUENCE {
  pLMN-Identity    PLMN-Identity,
  lAC              LAC,
  iE-Extensions    ProtocolExtensionContainer { {CN-CS-DomainIdentifier-ExtIEs} } OPTIONAL
}

```

```

CN-CS-DomainIdentifier-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

CN-PS-DomainIdentifier ::= SEQUENCE {
  pLMN-Identity    PLMN-Identity,
  lAC              LAC,
  rAC              RAC,
  iE-Extensions    ProtocolExtensionContainer { {CN-PS-DomainIdentifier-ExtIEs} } OPTIONAL
}

```

```

CN-PS-DomainIdentifier-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

CNDomainType ::= ENUMERATED {
  cs-domain,
  ps-domain,
  dont-care,
  ...
}

```

-- See in [16]

```

C-RNTI ::= INTEGER (0..65535)

```

```

-- D
DATA-ID ::= INTEGER (0..3)

```

```

DCH-FDD-Information ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-FDD-InformationItem

DCH-FDD-InformationItem ::= SEQUENCE {
    payloadCRC-PresenceIndicator    PayloadCRC-PresenceIndicator,
    ul-FP-Mode                       UL-FP-Mode,
    toAWS                             ToAWS,
    toAWE                             ToAWE,
    dCH-SpecificInformationList      DCH-Specific-FDD-InformationList,
    iE-Extensions                    ProtocolExtensionContainer { {DCH-FDD-InformationItem-ExtIEs} } OPTIONAL,
    ...
}

DCH-FDD-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-Specific-FDD-InformationList ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-Specific-FDD-Item

DCH-Specific-FDD-Item ::= SEQUENCE {
    dCH-ID                            DCH-ID,
    trCH-SrcStatisticsDescr           TrCH-SrcStatisticsDescr,
    ul-transportFormatSet             TransportFormatSet,
    dl-transportFormatSet             TransportFormatSet,
    ul-BLER                           BLER,
    dl-BLER                           BLER,
    allocationRetentionPriority        AllocationRetentionPriority,
    frameHandlingPriority              FrameHandlingPriority,
    qE-Selector                       QE-Selector,
    dRACControl                       DRACControl,
    iE-Extensions                    ProtocolExtensionContainer { {DCH-FDD-SpecificItem-ExtIEs} } OPTIONAL,
    ...
}

DCH-FDD-SpecificItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-Guaranteed-Rate-Information    CRITICALITY ignore EXTENSION Guaranteed-Rate-Information    PRESENCE optional }|
    { ID id-TrafficClass                  CRITICALITY ignore EXTENSION TrafficClass PRESENCE mandatory},
    ...
}

DCH-ID ::= INTEGER (0..255)

DCH-InformationResponse ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-InformationResponseItem

DCH-InformationResponseItem ::= SEQUENCE {
    dCH-ID                            DCH-ID,
    bindingID                          BindingID OPTIONAL,
    transportLayerAddress               TransportLayerAddress OPTIONAL,
    iE-Extensions                      ProtocolExtensionContainer { {DCH-InformationResponseItem-ExtIEs} } OPTIONAL,
    ...
}

```

```

DCH-InformationResponseItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-Allowed-Rate-Information      CRITICALITY ignore  EXTENSION Allowed-Rate-Information      PRESENCE optional },
  ...
}

DCH-TDD-Information ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-TDD-InformationItem

DCH-TDD-InformationItem ::= SEQUENCE {
  payloadCRC-PresenceIndicator      PayloadCRC-PresenceIndicator,
  ul-FP-Mode                         UL-FP-Mode,
  toAWS                              ToAWS,
  toAWE                              ToAWE,
  dCH-SpecificInformationList       DCH-Specific-TDD-InformationList,
  iE-Extensions                     ProtocolExtensionContainer { {DCH-TDD-InformationItem-ExtIEs} } OPTIONAL,
  ...
}

DCH-TDD-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DCH-Specific-TDD-InformationList ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-Specific-TDD-Item

DCH-Specific-TDD-Item ::= SEQUENCE {
  dCH-ID                             DCH-ID,
  ul-cCtRCH-ID                       CCTrCH-ID, -- UL CCTrCH in which the DCH is mapped
  dl-cCtRCH-ID                       CCTrCH-ID, -- DL CCTrCH in which the DCH is mapped
  trCH-SrcStatisticsDescr            TrCH-SrcStatisticsDescr,
  ul-transportFormatSet              TransportFormatSet,
  dl-transportFormatSet              TransportFormatSet,
  ul-BLER                             BLER,
  dl-BLER                             BLER,
  allocationRetentionPriority         AllocationRetentionPriority,
  frameHandlingPriority               FrameHandlingPriority,
  qE-Selector                         QE-Selector      OPTIONAL,
  -- This IE shall be present if DCH is part of set of Co-ordinated DCHs
  iE-Extensions                     ProtocolExtensionContainer { {DCH-Specific-TDD-Item-ExtIEs} } OPTIONAL,
  ...
}

DCH-Specific-TDD-Item-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-Guaranteed-Rate-Information  CRITICALITY ignore  EXTENSION Guaranteed-Rate-Information  PRESENCE optional }|
  { ID id-TrafficClass                 CRITICALITY ignore  EXTENSION TrafficClass      PRESENCE mandatory },
  ...
}

DedicatedMeasurementType ::= ENUMERATED {
  sir,
  sir-error,
  transmitted-code-power,
}

```

```

    rSCP,
    rx-timing-deviation,
    round-trip-time,
    ...,
    rx-timing-deviation-LCR,
    angle-Of-Arrival-LCR
}

DedicatedMeasurementValue ::= CHOICE {
    sIR-Value          SIR-Value,
    sIR-ErrorValue    SIR-Error-Value,
    transmittedCodePowerValue  Transmitted-Code-Power-Value,
    rSCP              RSCP-Value, -- TDD only
    rxTimingDeviationValue  Rx-Timing-Deviation-Value, -- 3.84Mcps TDD only
    roundTripTime     Round-Trip-Time-Value, -- FDD only
    ...,
    extension-DedicatedMeasurementValue  Extension-DedicatedMeasurementValue
}

Extension-DedicatedMeasurementValue ::= ProtocolIE-Single-Container {{ Extension-DedicatedMeasurementValueIE }}

Extension-DedicatedMeasurementValueIE RNSAP-PROTOCOL-IES ::= {
    { ID id-Rx-Timing-Deviation-Value-LCR  CRITICALITY reject  TYPE Rx-Timing-Deviation-Value-LCR  PRESENCE mandatory } |
    { ID id-Angle-Of-Arrival-Value-LCR  CRITICALITY reject  TYPEEXTENSION Angle-Of-Arrival-Value-LCR PRESENCE mandatory },
    ...
}

DedicatedMeasurementValueInformation ::= CHOICE {
    measurementAvailable      DedicatedMeasurementAvailable,
    measurementnotAvailable   DedicatedMeasurementnotAvailable
}

DedicatedMeasurementAvailable ::= SEQUENCE {
    dedicatedmeasurementValue  DedicatedMeasurementValue,
    cFN                        CFN                      OPTIONAL,
    ie-Extensions              ProtocolExtensionContainer { { DedicatedMeasurementAvailableItem-ExtIEs} }  OPTIONAL,
    ...
}

DedicatedMeasurementAvailableItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DedicatedMeasurementnotAvailable ::= NULL

DelayedActivation ::= CHOICE {
    cfn                      CFN,
    separate-indication     NULL
}

DelayedActivationUpdate ::= CHOICE {

```

```

    activate      Activate-Info,
    deactivate    Deactivate-Info
}

Activate-Info ::= SEQUENCE {
    activation-type      Execution-Type,
    initial-dl-tx-power  DL-Power,
    firstRLS-Indicator   FirstRLS-Indicator           OPTIONAL, --FDD Only
    propagation-delay    PropagationDelay            OPTIONAL, --FDD Only
    iE-Extensions        ProtocolExtensionContainer { { Activate-Info-ExtIEs } }  OPTIONAL,
    ...
}

Activate-Info-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Deactivate-Info ::= SEQUENCE {
    deactivation-type    Execution-Type,
    iE-Extensions        ProtocolExtensionContainer { { Deactivate-Info-ExtIEs } }  OPTIONAL,
    ...
}

Deactivate-Info-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Execution-Type ::= CHOICE {
    synchronised    CFN,
    unsynchronised NULL
}

DeltaSIR          ::= INTEGER (0..30)
-- Step 0.1 dB, Range 0..3 dB.

DGPSCorrections ::= SEQUENCE {
    gPSTOW          GPSTOW,
    gPS-Status-Health GPS-Status-Health,
    satellite-DGPSCorrections-Information SEQUENCE (SIZE (1..maxNoSat)) OF
        SEQUENCE {
            SAT-ID          SAT-ID,
            iode-dgps        BIT STRING (SIZE (8)),
            uDRE            UDRE,
            pRC              PRC,
            range-Correction-Rate Range-Correction-Rate,
            iE-Extensions    ProtocolExtensionContainer { { Satellite-DGPSCorrections-Information-ExtIEs } }  OPTIONAL,
            ...
        },
    iE-Extensions    ProtocolExtensionContainer { { DGPSCorrections-ExtIEs } }  OPTIONAL,
}

```

```
...
}

Satellite-DGPSCorrections-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DGPSCorrections-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DGPSThreshold ::= SEQUENCE {
  pRCDeviation          PRCDeviation,
  iE-Extensions         ProtocolExtensionContainer { { DGPSThreshold-ExtIEs} }   OPTIONAL,
  ...
}

DGPSThreshold-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DiversityControlField ::= ENUMERATED {
  may,
  must,
  must-not
}

DiversityMode ::= ENUMERATED {
  none,
  sTTD,
  closedLoopModel,
  closedLoopMode2,
  ...
}

DL-DPCH-SlotFormat ::= INTEGER (0..16,...)

DL-DPCH-TimingAdjustment ::= ENUMERATED {
  timing-advance,
  timing-delay
}

DL-Power ::= INTEGER (-350..150)
-- Value = DL-Power / 10
-- Unit dB, Range -35dB .. +15dB, Step 0.1dB

DL-PowerBalancing-Information ::= SEQUENCE {
  powerAdjustmentType PowerAdjustmentType,
```

```

DLReferencePower                DL-Power                OPTIONAL,
-- This IE shall be present if Power Adjustment Type IE equals to 'Common'
DLReferencePowerList-DL-PC-Rqst  DL-ReferencePowerInformationList  OPTIONAL,
-- This IE shall be present if Power Adjustment Type IE equals to 'Individual'
maxAdjustmentStep                MaxAdjustmentStep                OPTIONAL,
-- This IE shall be present if Power Adjustment Type IE equals to 'Common' or 'Individual'
adjustmentPeriod                 AdjustmentPeriod                 OPTIONAL,
-- This IE shall be present if Power Adjustment Type IE equals to 'Common' or 'Individual'
adjustmentRatio                  ScaledAdjustmentRatio  OPTIONAL,
-- This IE shall be present if Power Adjustment Type IE equals to 'Common' or 'Individual'
iE-Extensions                    ProtocolExtensionContainer { { DL-PowerBalancing-Information-ExtIEs } } OPTIONAL,
...
}

DL-PowerBalancing-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-ReferencePowerInformationList ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF DL-ReferencePowerInformationItem

DL-ReferencePowerInformationItem ::= SEQUENCE {
    rL-ID                RL-ID,
    dl-Reference-Power   DL-Power,
    iE-Extensions        ProtocolExtensionContainer { {DL-ReferencePowerInformationItem-ExtIEs} } OPTIONAL,
    ...
}

DL-ReferencePowerInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-PowerBalancing-ActivationIndicator ::= ENUMERATED {
    dL-PowerBalancing-Activated
}

DL-PowerBalancing-UpdatedIndicator ::= ENUMERATED {
    dL-PowerBalancing-Updated
}

DL-ReferencePowerInformationList ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF DL-ReferencePowerInformationItem

DL-ReferencePowerInformationItem ::= SEQUENCE {
  rL-ID                RL-ID,
  dl-Reference-Power   DL-Power,
  iE-Extensions        ProtocolExtensionContainer { {DL-ReferencePowerInformationItem-ExtIEs} } OPTIONAL,
  ...
}

DL-ReferencePowerInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

DL-ReferencePowerInformation ::= SEQUENCE {
    common-DL-ReferencePowerInformation    DL-Power            OPTIONAL,
    individual-DL-ReferencePowerInformation DL-ReferencePowerInformationList OPTIONAL,
    iE-Extensions                          ProtocolExtensionContainer { { DL-ReferencePowerInformation-ExtIEs } } OPTIONAL,
    ...
}

DL-ReferencePowerInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

D-RNTI ::= INTEGER (0..1048575)

D-RNTI-ReleaseIndication ::= ENUMERATED {
    release-D-RNTI,
    not-release-D-RNTI
}

DL-ScramblingCode ::= INTEGER (0..15)

DL-FrameType ::= ENUMERATED {
    typeA,
    typeB,
    ...
}

DL-Timeslot-Information ::= SEQUENCE ( SIZE (1..maxNrOfTS)) OF DL-Timeslot-InformationItem

DL-Timeslot-InformationItem ::= SEQUENCE {
    timeSlot                TimeSlot,
    midambleShiftAndBurstType MidambleShiftAndBurstType,
    tFCI-Presence           TFCI-Presence,
    dL-Code-Information     TDD-DL-Code-Information,
    iE-Extensions           ProtocolExtensionContainer { {DL-Timeslot-InformationItem-ExtIEs} } OPTIONAL,
    ...
}

DL-Timeslot-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-TimeslotLCR-Information ::= SEQUENCE (SIZE (1.. maxNrOfDLTsLCR)) OF DL-TimeslotLCR-InformationItem

DL-TimeslotLCR-InformationItem ::= SEQUENCE {
    timeSlotLCR                TimeSlotLCR,
    midambleShiftLCR           MidambleShiftLCR,
    tFCI-Presence              TFCI-Presence,
    dL-Code-LCR-Information     TDD-DL-Code-LCR-Information,
    iE-Extensions              ProtocolExtensionContainer { { DL-TimeslotLCR-InformationItem-ExtIEs } } OPTIONAL,
    ...
}

```



```

}

DL-TimeslotLCR-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-TimeSlot-ISCP-Info ::= SEQUENCE (SIZE (1..maxNrOfDLTs)) OF DL-TimeSlot-ISCP-InfoItem

DL-TimeSlot-ISCP-InfoItem ::= SEQUENCE {
  timeSlot                TimeSlot,
  dL-TimeslotISCP         DL-TimeslotISCP,
  iE-Extensions           ProtocolExtensionContainer { { DL-TimeSlot-ISCP-InfoItem-ExtIEs } } OPTIONAL,
  ...
}

DL-TimeSlot-ISCP-InfoItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-TimeSlot-ISCP-LCR-Information ::= SEQUENCE (SIZE (1..maxNrOfDLTsLCR)) OF DL-TimeSlot-ISCP-LCR-InfoItem

DL-TimeSlot-ISCP-LCR-InfoItem ::= SEQUENCE {
  timeSlotLCR             TimeSlotLCR,
  dL-TimeslotISCP         DL-TimeslotISCP,
  iE-Extensions           ProtocolExtensionContainer { { DL-TimeSlot-ISCP-LCR-InfoItem-ExtIEs } } OPTIONAL,
  ...
}

DL-TimeSlot-ISCP-LCR-InfoItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-TimeslotISCP          ::= INTEGER (0..91)
-- According to mapping in [24]

Downlink-Compressed-Mode-Method ::= ENUMERATED {
  puncturing,
  sFdiv2,
  higher-layer-scheduling,
  ...
}

DPC-Mode ::= ENUMERATED {
  mode0,
  mode1,
  ...
}

DPC-Mode-Change-SupportIndicator ::= ENUMERATED {
  dPC-ModeChangeSupported
}

```

```

DPCH-ID ::= INTEGER (0..239)

DPCHConstantValue ::= INTEGER (-10..10)
-- Unit dB, Step 1dB

DRACControl ::= ENUMERATED {
    requested,
    not-requested
}

DRXCycleLengthCoefficient ::= INTEGER (3..9)
-- See in [16]

DSCH-FDD-Information ::= SEQUENCE {
    dSCH-Specific-Information DSCH-Specific-FDD-Item,
    pdSCH-RL-ID RL-ID,
    tFCS TFCS,
    iE-Extensions ProtocolExtensionContainer { {DSCH-FDD-Information-ExtIEs} } OPTIONAL,
    ...
}

DSCH-FDD-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-EnhancedDSCHPC CRITICALITY ignore EXTENSION EnhancedDSCHPC PRESENCE optional },
    ...
}

DSCH-RNTI ::= INTEGER (0..65535)

DSCH-Specific-FDD-Item ::= SEQUENCE {
    dSCH-ID DSCH-ID,
    trChSourceStatisticsDescriptor TrCH-SrcStatisticsDescr,
    transportFormatSet TransportFormatSet,
    allocationRetentionPriority AllocationRetentionPriority,
    schedulingPriorityIndicator SchedulingPriorityIndicator,
    bLER BLER,
    iE-Extensions ProtocolExtensionContainer { {DSCH-Specific-FDD-Item-ExtIEs} } OPTIONAL,
    ...
}

DSCH-Specific-FDD-Item-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-TrafficClass CRITICALITY ignore EXTENSION TrafficClass PRESENCE mandatory } |
    { ID id-BindingID CRITICALITY ignore EXTENSION BindingID PRESENCE optional } |
    -- Shall be ignored if bearer establishment with ALCAP.
    { ID id-TransportLayerAddress CRITICALITY ignore EXTENSION TransportLayerAddress PRESENCE optional },
    -- Shall be ignored if bearer establishment with ALCAP.
    ...
}

DSCH-FDD-InformationResponse ::= SEQUENCE {
    dsch-Specific-InformationResponse DSCH-Specific-FDD-InformationResponse,

```

```

    pdSCHCodeMapping          PDSCHCodeMapping,
    iE-Extensions             ProtocolExtensionContainer { { DSCH-FDD-InformationResponse-ExtIEs } } OPTIONAL,
    ...
}

DSCH-FDD-InformationResponse RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DSCH-Specific-FDD-InformationResponse ::= SEQUENCE (SIZE(1..maxNoOfDSCHs)) OF DSCH-Specific-FDD-Response-Item

DSCH-Specific-FDD-Response-Item ::= SEQUENCE {
    dsch-ID                   DSCH-ID,
    dsch-FlowControlInformation DSCH-FlowControlInformation,
    bindingID                 BindingID OPTIONAL,
    transportLayerAddress     TransportLayerAddress OPTIONAL,
    iE-Extensions             ProtocolExtensionContainer { {DSCH-Specific-FDD-Response-Item-ExtIEs} } OPTIONAL,
    ...
}

DSCH-Specific-FDD-Response-Item-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DSCH-FlowControlInformation ::= SEQUENCE (SIZE(1..16)) OF DSCH-FlowControlItem

DSCH-FlowControlItem ::= SEQUENCE {
    dsch-SchedulingPriority    SchedulingPriorityIndicator,
    mac-c-sh-SDU-Lengths      MAC-c-sh-SDU-LengthList,
    iE-Extensions             ProtocolExtensionContainer { {DSCH-FlowControlItem-ExtIEs} } OPTIONAL,
    ...
}

DSCH-FlowControlItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DSCH-ID ::= INTEGER (0..255)

DSCH-TDD-Information ::= SEQUENCE (SIZE (1..maxNoOfDSCHs)) OF DSCH-TDD-InformationItem

DSCH-TDD-InformationItem ::= SEQUENCE {
    dsch-ID                   DSCH-ID,
    dl-ccTrCHID              CCTrCH-ID, -- DL CCTrCH in which the DSCH is mapped
    trChSourceStatisticsDescriptor TrCH-SourceStatisticsDescr,
    transportFormatSet        TransportFormatSet,
    allocationRetentionPriority AllocationRetentionPriority,
    schedulingPriorityIndicator SchedulingPriorityIndicator,
    bLER                      BLER,
    iE-Extensions             ProtocolExtensionContainer { {DSCH-TDD-InformationItem-ExtIEs} } OPTIONAL,
    ...
}

```

```

}
DSCH-TDD-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-TrafficClass      CRITICALITY ignore  EXTENSION TrafficClass      PRESENCE mandatory } |
  { ID id-BindingID        CRITICALITY ignore  EXTENSION BindingID          PRESENCE optional } |
  -- Shall be ignored if bearer establishment with ALCAP.
  { ID id-TransportLayerAddress CRITICALITY ignore  EXTENSION TransportLayerAddress PRESENCE optional },
  -- Shall be ignored if bearer establishment with ALCAP.
  ...
}
-- E

EnhancedDSCHPC ::= SEQUENCE {
  enhancedDSCHPCWnd EnhancedDSCHPCWnd,
  enhancedDSCHPCCounter EnhancedDSCHPCCounter,
  enhancedDSCHPowerOffset EnhancedDSCHPowerOffset,
  ...
}

EnhancedDSCHPCCounter ::= INTEGER (1..50)

EnhancedDSCHPCIndicator ::= ENUMERATED {
  enhancedDSCHPCActiveInTheUE,
  enhancedDSCHPCNotActiveInTheUE
}

EnhancedDSCHPCWnd ::= INTEGER (1..10)

EnhancedDSCHPowerOffset ::= INTEGER (-15..0)

Enhanced-PrimaryCPICH-EcNo ::= INTEGER (0..49)

EventA ::= SEQUENCE {
  measurementTreshold MeasurementThreshold,
  measurementHysteresisTime MeasurementHysteresisTime OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { {EventA-ExtIEs} } OPTIONAL,
  ...
}

EventA-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

EventB ::= SEQUENCE {
  measurementTreshold MeasurementThreshold,
  measurementHysteresisTime MeasurementHysteresisTime OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { {EventB-ExtIEs} } OPTIONAL,
  ...
}

```

```
EventB-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

EventC ::= SEQUENCE {
    measurementIncreaseDecreaseThreshold    MeasurementIncreaseDecreaseThreshold,
    measurementChangeTime                  MeasurementChangeTime,
    iE-Extensions                          ProtocolExtensionContainer { {EventC-ExtIEs} } OPTIONAL,
    ...
}

EventC-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

EventD ::= SEQUENCE {
    measurementIncreaseDecreaseThreshold    MeasurementIncreaseDecreaseThreshold,
    measurementChangeTime                  MeasurementChangeTime,
    iE-Extensions                          ProtocolExtensionContainer { {EventD-ExtIEs} } OPTIONAL,
    ...
}

EventD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

EventE ::= SEQUENCE {
    measurementThreshold1                  MeasurementThreshold,
    measurementThreshold2                  MeasurementThreshold OPTIONAL,
    measurementHysteresisTime              MeasurementHysteresisTime OPTIONAL,
    reportPeriodicity                      ReportPeriodicity OPTIONAL,
    iE-Extensions                          ProtocolExtensionContainer { {EventE-ExtIEs} } OPTIONAL,
    ...
}

EventE-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

EventF ::= SEQUENCE {
    measurementThreshold1                  MeasurementThreshold,
    measurementThreshold2                  MeasurementThreshold OPTIONAL,
    measurementHysteresisTime              MeasurementHysteresisTime OPTIONAL,
    reportPeriodicity                      ReportPeriodicity OPTIONAL,
    iE-Extensions                          ProtocolExtensionContainer { {EventF-ExtIEs} } OPTIONAL,
    ...
}

EventF-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

```

}

-- F

FACH-FlowControlInformation ::= SEQUENCE (SIZE (1..16)) OF FACH-FlowControlInformationItem

FACH-FlowControlInformationItem ::= SEQUENCE {
    fACH-SchedulingPriority      SchedulingPriorityIndicator,
    mAC-c-sh-SDU-Lengths        MAC-c-sh-SDU-LengthList,
    fACH-InitialWindowSize      FACH-InitialWindowSize,
    iE-Extensions                ProtocolExtensionContainer { {FACH-FlowControlInformationItem-ExtIEs} } OPTIONAL,
    ...
}

FACH-FlowControlInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

FACH-InitialWindowSize ::= INTEGER { unlimited(255) } (0..255)
-- Number of frames MAC-c-sh SDUs.
-- 255 = Unlimited number of FACH data frames

FACH-InformationList ::= SEQUENCE (SIZE(0.. maxNrOfFACHs)) OF FACH-InformationItem

FACH-InformationItem ::= SEQUENCE {
    transportFormatSet          TransportFormatSet,
    iE-Extensions                ProtocolExtensionContainer { { FACH-InformationItem-ExtIEs} } OPTIONAL,
    ...
}

FACH-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

FACH-PCH-InformationList ::= SEQUENCE (SIZE(1..maxFACHCountPlus1)) OF FACH-PCH-InformationItem

FACH-PCH-InformationItem ::= SEQUENCE {
    transportFormatSet          TransportFormatSet,
    iE-Extensions                ProtocolExtensionContainer { { FACH-PCH-InformationItem-ExtIEs} } OPTIONAL,
    ...
}

FACH-PCH-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

FDD-DCHs-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF FDD-DCHs-to-ModifyItem

FDD-DCHs-to-ModifyItem ::= SEQUENCE {
    ul-FP-Mode                  UL-FP-Mode          OPTIONAL,
    toAWS                        ToAWS              OPTIONAL,
}

```

```

toAWE                                ToAWE            OPTIONAL,
transportBearerRequestIndicator      TransportBearerRequestIndicator,
dCH-SpecificInformationList          FDD-DCHs-to-ModifySpecificInformationList,
iE-Extensions                        ProtocolExtensionContainer { {FDD-DCHs-to-ModifyItem-ExtIEs} } OPTIONAL,
...
}

FDD-DCHs-to-ModifyItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

FDD-DCHs-to-ModifySpecificInformationList ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF FDD-DCHs-to-ModifySpecificItem

FDD-DCHs-to-ModifySpecificItem ::= SEQUENCE {
dCH-ID                               DCH-ID,
ul-TransportformatSet                TransportFormatSet      OPTIONAL,
dl-TransportformatSet                TransportFormatSet      OPTIONAL,
allocationRetentionPriority           AllocationRetentionPriority OPTIONAL,
frameHandlingPriority                 FrameHandlingPriority   OPTIONAL,
dRACControl                           DRACControl            OPTIONAL,
iE-Extensions                        ProtocolExtensionContainer { {FDD-DCHs-to-ModifySpecificItem-ExtIEs} } OPTIONAL,
...
}

FDD-DCHs-to-ModifySpecificItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-Guaranteed-Rate-Information  CRITICALITY ignore EXTENSION Guaranteed-Rate-Information  PRESENCE optional }|
  { ID id-TrafficClass                 CRITICALITY ignore EXTENSION TrafficClass          PRESENCE optional }|
  ...
}

FDD-DL-ChannelisationCodeNumber ::= INTEGER (0..511)
-- According to the mapping in [27]. The maximum value is equal to the DL spreading factor -1--

FDD-DL-CodeInformation ::= SEQUENCE (SIZE (1..maxNrOfDL-Codes)) OF FDD-DL-CodeInformationItem

FDD-DL-CodeInformationItem ::= SEQUENCE {
dl-ScramblingCode                    DL-ScramblingCode,
fDD-DL-ChannelisationCodeNumber      FDD-DL-ChannelisationCodeNumber,
transmission-Gap-Pattern-Sequence-ScramblingCode-Information Transmission-Gap-Pattern-Sequence-ScramblingCode-Information OPTIONAL,
iE-Extensions                        ProtocolExtensionContainer { {FDD-DL-CodeInformationItem-ExtIEs} } OPTIONAL,
...
}

FDD-DL-CodeInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

FDD-S-CCPCH-Offset ::= INTEGER (0..149)

FDD-TPC-DownlinkStepSize ::= ENUMERATED {
step-size0-5,

```

```
    step-size1,
    step-size1-5,
    step-size2,
    ...
}

SchedulingPriorityIndicator ::= INTEGER { lowest(0), highest(15) } (0..15)

FirstRLS-Indicator ::= ENUMERATED {
    first-RLS,
    not-first-RLS
}

FNReportingIndicator ::= ENUMERATED {
    fN-reporting-required,
    fN-reporting-not-required
}

FrameHandlingPriority ::= INTEGER { lowest(0), highest(15) } (0..15)

FrameOffset ::= INTEGER (0..255)
-- Frames

-- G

GapLength ::= INTEGER (1..14)
-- Unit Slot

GapDuration ::= INTEGER (1..144,...)
-- Unit Frame

GA-Cell ::= SEQUENCE (SIZE (1..maxNrOfPoints)) OF
    SEQUENCE {
        cell-GAIgeographicalCoordinate GeographicalCoordinate,
        iE-Extensions ProtocolExtensionContainer { {GA-Cell-ExtIEs} } OPTIONAL,
        ...
    }

GA-Cell-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

GA-CellAdditionalShapes ::= CHOICE {
    pointWithUncertainty GA-PointWithUncertainty,
    pointWithUncertaintyEllipse GA-PointWithUncertaintyEllipse,
    pointWithAltitude GA-PointWithAltitude,
    pointWithAltitudeAndUncertaintyEllipsoid GA-PointWithAltitudeAndUncertaintyEllipsoid,
    ellipsoidArc GA-EllipsoidArc,
    ...
}
```



```

GA-AltitudeAndDirection ::= SEQUENCE {
    directionOfAltitude    ENUMERATED {height, depth},
    altitude                INTEGER (0..32767),
    ...
}

GA-EllipsoidArc ::= SEQUENCE {
    geographicalCoordinates GeographicalCoordinate,
    innerRadius             INTEGER (0..65535),
    uncertaintyRadius       INTEGER (0..127),
    offsetAngle             INTEGER (0..179),
    includedAngle           INTEGER (0..179),
    confidence              INTEGER (0..127),
    iE-Extensions           ProtocolExtensionContainer { { GA-EllipsoidArc-ExtIEs } } OPTIONAL,
    ...
}

GA-EllipsoidArc-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

GA-PointWithAltitude ::= SEQUENCE {
    geographicalCoordinates GeographicalCoordinate,
    altitudeAndDirection   GA-AltitudeAndDirection,
    iE-Extensions           ProtocolExtensionContainer { { GA-PointWithAltitude-ExtIEs } } OPTIONAL,
    ...
}

GA-PointWithAltitude-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

GA-PointWithAltitudeAndUncertaintyEllipsoid ::= SEQUENCE {
    geographicalCoordinates GeographicalCoordinate,
    altitudeAndDirection   GA-AltitudeAndDirection,
    uncertaintyEllipse      GA-UncertaintyEllipse,
    uncertaintyAltitude     INTEGER (0..127),
    confidence              INTEGER (0..127),
    iE-Extensions           ProtocolExtensionContainer { { GA-PointWithAltitudeAndUncertaintyEllipsoid-ExtIEs } } OPTIONAL,
    ...
}

GA-PointWithAltitudeAndUncertaintyEllipsoid-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

GA-PointWithUnCertaintyEllipse ::= SEQUENCE {
    geographicalCoordinates GeographicalCoordinate,
    uncertaintyEllipse      GA-UncertaintyEllipse,
    confidence              INTEGER (0..127),
    iE-Extensions           ProtocolExtensionContainer { { GA-PointWithUnCertaintyEllipse-ExtIEs } } OPTIONAL,
}

```

```

}
...
}
GA-PointWithUncertaintyEllipse-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}
GA-UncertaintyEllipse ::= SEQUENCE {
    uncertaintySemi-major      INTEGER (0..127),
    uncertaintySemi-minor      INTEGER (0..127),
    orientationOfMajorAxis     INTEGER (0..179),
    ...
}
GA-PointWithUncertainty ::= SEQUENCE {
    geographicalCoordinates     GeographicalCoordinate,
    iE-Extensions               ProtocolExtensionContainer { {GA-PointWithUncertainty-ExtIEs} } OPTIONAL,
    uncertaintyCode             INTEGER (0..127)
}
GA-PointWithUncertainty-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}
GA-AccessPointPosition ::= SEQUENCE {
    geographicalCoordinate      GeographicalCoordinate,
    iE-Extensions               ProtocolExtensionContainer { {GA-AccessPoint-ExtIEs} } OPTIONAL,
    ...
}
GA-AccessPoint-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}
GeographicalCoordinate ::= SEQUENCE {
    latitudeSign                ENUMERATED { north, south },
    latitude                    INTEGER (0..8388607),
    longitude                    INTEGER (-8388608..8388607),
    iE-Extensions               ProtocolExtensionContainer { {GeographicalCoordinate-ExtIEs} } OPTIONAL,
    ...
}
GeographicalCoordinate-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}
GPS-Almanac ::= SEQUENCE {
    wna-alm                    BIT STRING (SIZE (8)),
    satellite-Almanac-Information SEQUENCE (SIZE (1..maxNoSat)) OF
        SEQUENCE {
            DATA-ID            DATA-ID,

```

```

    SAT-ID                SAT-ID,
    gps-e-alm              BIT STRING (SIZE (16)),
    gps-toa-alm            BIT STRING (SIZE (8)),
    gps-delta-I-alm        BIT STRING (SIZE (16)),
    omegadot-alm           BIT STRING (SIZE (16)),
    svhealth-alm           BIT STRING (SIZE (8)),
    gps-a-sqrt-alm         BIT STRING (SIZE (24)),
    omegazero-alm          BIT STRING (SIZE (24)),
    m-zero-alm             BIT STRING (SIZE (24)),
    gps-omega-alm          BIT STRING (SIZE (24)),
    gps-af-zero-alm        BIT STRING (SIZE (11)),
    gps-af-one-alm         BIT STRING (SIZE (11)),
    iE-Extensions          ProtocolExtensionContainer { { Satellite-Almanac-Information-ExtIEs } }    OPTIONAL,
    ...
  },
  sVGlobalHealth-alm      BIT STRING (SIZE (364))    OPTIONAL,
  iE-Extensions           ProtocolExtensionContainer { { GPS-Almanac-ExtIEs } }                OPTIONAL,
  ...
}

Satellite-Almanac-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

GPS-Almanac-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

GPSInformation ::= SEQUENCE (SIZE (1..maxNoGPSTypes)) OF
  SEQUENCE {
    gPSInformationItem    ENUMERATED {
      GPS-NavigationModel-and-TimeRecovery,
      GPS-Ionospheric-Model,
      GPS-UTC-Model,
      GPS-Almanac,
      GPS-RealTime-Integrity,
      ...
    },
    iE-Extensions          ProtocolExtensionContainer { { GPSInformation-ExtIEs } }    OPTIONAL,
    ...
  }
-- This IE shall be present if the Information Type IE indicates 'GPS Information'

GPSInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

GPS-Ionospheric-Model ::= SEQUENCE {
  alpha-zero-ionos        BIT STRING (SIZE (8)),
  alpha-one-ionos          BIT STRING (SIZE (8)),
  alpha-two-ionos          BIT STRING (SIZE (8)),

```

```

alpha-three-ionos      BIT STRING (SIZE (8)),
beta-zero-ionos       BIT STRING (SIZE (8)),
beta-one-ionos        BIT STRING (SIZE (8)),
beta-two-ionos        BIT STRING (SIZE (8)),
beta-three-ionos      BIT STRING (SIZE (8)),
iE-Extensions         ProtocolExtensionContainer { { GPS-Ionospheric-Model-ExtIEs } }    OPTIONAL,
...
}

GPS-Ionospheric-Model-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

GPS-NavigationModel-and-TimeRecovery ::= SEQUENCE (SIZE (1..maxNoSat)) OF
SEQUENCE {
tx-tow-nav             INTEGER (0..1048575),
sAT-ID                SAT-ID,
tIm-message-nav       BIT STRING (SIZE (14)),
tIm-revd-c-nav        BIT STRING (SIZE (2)),
ho-word-nav           BIT STRING (SIZE (22)),
w-n-nav               BIT STRING (SIZE (10)),
ca-or-p-on-l2-nav     BIT STRING (SIZE (2)),
user-range-accuracy-index-nav BIT STRING (SIZE (4)),
sv-health-nav         BIT STRING (SIZE (6)),
iodc-nav              BIT STRING (SIZE (10)),
l2-p-dataflag-nav     BIT STRING (SIZE (1)),
sfl-reserved-nav      BIT STRING (SIZE (87)),
t-gd-nav              BIT STRING (SIZE (8)),
t-oc-nav              BIT STRING (SIZE (16)),
a-f-2-nav             BIT STRING (SIZE (8)),
a-f-1-nav             BIT STRING (SIZE (16)),
a-f-zero-nav          BIT STRING (SIZE (22)),
c-rs-nav              BIT STRING (SIZE (16)),
delta-n-nav           BIT STRING (SIZE (16)),
m-zero-nav            BIT STRING (SIZE (32)),
c-uc-nav              BIT STRING (SIZE (16)),
gps-e-nav             BIT STRING (SIZE (32)),
c-us-nav              BIT STRING (SIZE (16)),
a-sqrt-nav            BIT STRING (SIZE (32)),
t-oe-nav              BIT STRING (SIZE (16)),
fit-interval-flag-nav BIT STRING (SIZE (1)),
aodo-nav              BIT STRING (SIZE (5)),
c-ic-nav              BIT STRING (SIZE (16)),
omega-zero-nav        BIT STRING (SIZE (32)),
c-is-nav              BIT STRING (SIZE (16)),
i-zero-nav            BIT STRING (SIZE (32)),
c-rc-nav              BIT STRING (SIZE (16)),
gps-omega-nav         BIT STRING (SIZE (32)),
omegadot-nav          BIT STRING (SIZE (24)),
idot-nav              BIT STRING (SIZE (14)),
spare-zero-fill       BIT STRING (SIZE (20)),

```

```

        iE-Extensions          ProtocolExtensionContainer { { GPS-NavigationModel-and-TimeRecoveryItem-ExtIEs } } OPTIONAL,
        ...
    }

GPS-NavigationModel-and-TimeRecoveryItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

GPS-RealTime-Integrity ::= CHOICE {
    badSatellites             BadSatellites,
    noBadSatellite           NULL
}

GPS-RX-POS ::= SEQUENCE {
    geographicalCoordinate    GeographicalCoordinate,
    altitudeAndDirection     GA-AltitudeAndDirection,
    iE-Extensions            ProtocolExtensionContainer { { GPS-RX-POS-ExtIEs } } OPTIONAL,
    ...
}

GPS-RX-POS-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

GPS-Status-Health ::= ENUMERATED {
    udre-1-0,
    udre-0-75,
    udre-0-5,
    udre-0-3,
    udre-0-1,
    no-data,
    invalid-data
}

GPSTOW ::= INTEGER (0..604799)

GPS-UTC-Model ::= SEQUENCE {
    a-one-utc                 BIT STRING (SIZE (24)),
    a-zero-utc                BIT STRING (SIZE (32)),
    t-ot-utc                  BIT STRING (SIZE (8)),
    delta-t-ls-utc            BIT STRING (SIZE (8)),
    w-n-t-utc                 BIT STRING (SIZE (8)),
    w-n-lsf-utc               BIT STRING (SIZE (8)),
    dn-utc                    BIT STRING (SIZE (8)),
    delta-t-lsf-utc           BIT STRING (SIZE (8)),
    iE-Extensions            ProtocolExtensionContainer { { GPS-UTC-Model-ExtIEs } } OPTIONAL,
    ...
}

GPS-UTC-Model-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

}

Guaranteed-Rate-Information ::= SEQUENCE {
    guaranteed-UL-Rate      Guaranteed-Rate OPTIONAL,
    guaranteed-DL-Rate      Guaranteed-Rate OPTIONAL,
    iE-Extensions           ProtocolExtensionContainer { {Guaranteed-Rate-Information-ExtIEs} } OPTIONAL,
    ...
}

Guaranteed-Rate-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Guaranteed-Rate          ::= INTEGER (1..maxNrOfTFs)

-- H

HARQ-FDD-InfoList ::= SEQUENCE (SIZE (1..maxNrOfHARQProc)) OF HARQ-FDD-InfoItem

HARQ-FDD-InfoItem ::= SEQUENCE {
    process-Memory-Size      INTEGER (1..172800,...),
    iE-Extensions            ProtocolExtensionContainer { { HARQ-FDD-InfoItem-ExtIEs } }          OPTIONAL,
    ...
}

HARQ-FDD-InfoItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

HARQ-TDD-InfoList ::= SEQUENCE (SIZE (1..maxNrOfHARQProc)) OF HARQ-TDD-InfoItem

HARQ-TDD-InfoItem ::= SEQUENCE {
    process-Memory-Size      INTEGER (1..168960,...),
    iE-Extensions            ProtocolExtensionContainer { { HARQ-TDD-InfoItem-ExtIEs } }          OPTIONAL,
    ...
}

HARQ-TDD-InfoItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

HCS-Prio          ::= INTEGER (0..7)
-- 0 = lowest priority, ...7 = highest priority

HSDSCH-FDD-Information ::= SEQUENCE {
    hSDSCH-MACdFlow-Specific-Info      HSDSCH-MACdFlow-Specific-InfoList,
    uE-Capabilities-InfoFDD            UE-Capabilities-InfoFDD,
    HARQ-FDD-Info                      HARQ-FDD-InfoList,
    measurement-Feedback-Offset        Measurement-Feedback-Offset,
    iE-Extensions                      ProtocolExtensionContainer { { HSDSCH-FDD-Information-ExtIEs } }          OPTIONAL,
    ...
}

```

```

}

HSDSCH-FDD-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

HSDSCH-FDD-Information-Response ::= SEQUENCE {
  hSDSCH-MACdFlow-Specific-InfoList-Response      HSDSCH-MACdFlow-Specific-InfoList-Response,
  hSSCCH-Specific-InfoList-Response                HSSCCH-FDD-Specific-InfoList-Response,
  measurement-Feedback-Reporting-Cycle-k1          Measurement-Feedback-Reporting-Cycle,
  measurement-Feedback-Reporting-Cycle-k2          Measurement-Feedback-Reporting-Cycle,
  iE-Extensions                                     ProtocolExtensionContainer { { HSDSCH-FDD-Information-Response-ExtIEs } }      OPTIONAL,
  ...
}

HSDSCH-FDD-Information-Response-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

HSDSCH-Information-to-Modify ::= SEQUENCE {
  hSDSCH-MACdFlow-Specific-InfoList-to-Modify      HSDSCH-MACdFlow-Specific-InfoList-to-Modify      OPTIONAL,
  measurement-Reporting-Cycle                       ENUMERATED {k1, k2}                                OPTIONAL,
  -- Only for FDD
  iE-Extensions                                     ProtocolExtensionContainer { { HSDSCH-Information-to-Modify-ExtIEs } }      OPTIONAL,
  ...
}

HSDSCH-Information-to-Modify-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

HSDSCH-MACdFlow-ID ::= INTEGER (0..maxNrOfMACdFlows-1)

HSDSCH-MACdFlow-Specific-InfoList ::= SEQUENCE (SIZE (1..maxNrOfMACdFlows)) OF HSDSCH-MACdFlow-Specific-InfoItem

HSDSCH-MACdFlow-Specific-InfoItem ::= SEQUENCE {
  hSDSCH-MACdFlow-ID                                HSDSCH-MACdFlow-ID,
  bLER                                                BLER,
  allocationRetentionPriority                         AllocationRetentionPriority,
  priorityQueue-Info                                 PriorityQueue-InfoList,
  iE-Extensions                                     ProtocolExtensionContainer { { HSDSCH-MACdFlow-Specific-InfoItem-ExtIEs } }      OPTIONAL,
  ...
}

HSDSCH-MACdFlow-Specific-InfoItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

HSDSCH-MACdFlow-Specific-InfoList-Response ::= SEQUENCE (SIZE (1..maxNrOfMACdFlows)) OF HSDSCH-MACdFlow-Specific-InfoItem-Response

HSDSCH-MACdFlow-Specific-InfoItem-Response ::= SEQUENCE {

```

```

    hSDSCH-MACdFlow-ID          HSDSCH-MACdFlow-ID,
    bindingID                    BindingID                    OPTIONAL,
    transportLayerAddress        TransportLayerAddress    OPTIONAL,
    iE-Extensions                ProtocolExtensionContainer { { HSDSCH-MACdFlow-Specific-InfoItem-Response-ExtIEs } } OPTIONAL,
    ...
}

HSDSCH-MACdFlow-Specific-InfoItem-Response-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSDSCH-MACdFlow-Specific-InfoList-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfMACdFlows)) OF HSDSCH-MACdFlow-Specific-InfoItem-to-Modify

HSDSCH-MACdFlow-Specific-InfoItem-to-Modify ::= SEQUENCE {
    hSDSCH-MACdFlow-ID          HSDSCH-MACdFlow-ID,
    bLER                        BLER                        OPTIONAL,
    allocationRetentionPriority AllocationRetentionPriority    OPTIONAL,
    priorityQueue-Info-to-Modify PriorityQueue-InfoList-to-Modify    OPTIONAL,
    transportBearerRequestIndicator TransportBearerRequestIndicator,
    iE-Extensions                ProtocolExtensionContainer { { HSDSCH-MACdFlow-Specific-InfoItem-to-Modify-ExtIEs } } OPTIONAL,
    ...
}

HSDSCH-MACdFlow-Specific-InfoItem-to-Modify-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSDSCH-RNTI ::= INTEGER (0..65535)

HSDSCH-TDD-Information ::= SEQUENCE {
    hSDSCH-MACdFlow-Specific-InfoList HSDSCH-MACdFlow-Specific-InfoList,
    UE-Capabilities-InfoTDD           UE-Capabilities-InfoTDD,
    HARQ-TDD-InfoList                 HARQ-TDD-InfoList,
    iE-Extensions                      ProtocolExtensionContainer { { HSDSCH-TDD-Information-ExtIEs } } OPTIONAL,
    ...
}

HSDSCH-TDD-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSDSCH-TDD-Information-Response ::= SEQUENCE {
    hSDSCH-MACdFlow-Specific-InfoList-Response HSDSCH-MACdFlow-Specific-InfoList-Response,
    HSSCCH-TDD-Specific-InfoList-Response      HSSCCH-TDD-Specific-InfoList-Response    OPTIONAL,
    HSSCCH-TDD-Specific-InfoList-Response-LCR  HSSCCH-TDD-Specific-InfoList-Response-LCR    OPTIONAL,
    iE-Extensions                              ProtocolExtensionContainer { { HSDSCH-TDD-Information-Response-ExtIEs } } OPTIONAL,
    ...
}

HSDSCH-TDD-Information-Response-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```



```

}

HSSCCH-FDD-Specific-InfoList-Response ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHCodes)) OF HSSCCH-FDD-Specific-InfoItem-Response

HSSCCH-FDD-Specific-InfoItem-Response ::= SEQUENCE {
    code-Number                INTEGER (0..127),
    iE-Extensions              ProtocolExtensionContainer { { HSSCCH-FDD-Specific-InfoItem-Response-ExtIEs } }    OPTIONAL,
    ...
}

HSSCCH-FDD-Specific-InfoItem-Response-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSSCCH-TDD-Specific-InfoList-Response ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHCodes)) OF HSSCCH-TDD-Specific-InfoItem-Response

HSSCCH-TDD-Specific-InfoItem-Response ::= SEQUENCE {
    timeslot                  TimeSlot,
    midambleShiftAndBurstType MidambleShiftAndBurstType,
    tDD-ChannelisationCode    TDD-ChannelisationCode,
    hSSICH-Info               HSSICH-Info,
    iE-Extensions              ProtocolExtensionContainer { { HSSCCH-TDD-Specific-InfoItem-Response-ExtIEs } }    OPTIONAL,
    ...
}

HSSCCH-TDD-Specific-InfoItem-Response-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSSCCH-TDD-Specific-InfoList-Response-LCR ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHCodes)) OF HSSCCH-TDD-Specific-InfoItem-Response-LCR

HSSCCH-TDD-Specific-InfoItem-Response-LCR ::= SEQUENCE {
    timeslotLCR                TimeSlotLCR,
    midambleShiftLCR           MidambleShiftLCR,
    tDD-ChannelisationCodeLCR  TDD-ChannelisationCodeLCR,
    hSSICH-InfoLCR            HSSICH-InfoLCR,
    iE-Extensions              ProtocolExtensionContainer { { HSSCCH-TDD-Specific-InfoItem-Response-LCR-ExtIEs } }    OPTIONAL,
    ...
}

HSSCCH-TDD-Specific-InfoItem-Response-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSSICH-Info ::= SEQUENCE {
    timeslot                  TimeSlot,
    midambleShiftAndBurstType MidambleShiftAndBurstType,
    tDD-ChannelisationCode    TDD-ChannelisationCode,
    iE-Extensions              ProtocolExtensionContainer { { HSSICH-Info-ExtIEs } }    OPTIONAL,
    ...
}

```

```

HSSICH-Info-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSSICH-InfoLCR ::= SEQUENCE {
    timeslotLCR                TimeSlotLCR,
    midambleShiftLCR           MidambleShiftLCR,
    tDD-ChannelisationCodeLCR  TDD-ChannelisationCodeLCR,
    iE-Extensions              ProtocolExtensionContainer { { HSSICH-Info-LCR-ExtIEs } } OPTIONAL,
    ...
}

HSSICH-Info-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- I

IB-SchedulingInformation ::= SEQUENCE {
    iB-SG-Rep                  IB-SG-REP,
    iB-segmentInformationList  IB-SegmentInformationList,
    iE-Extensions              ProtocolExtensionContainer { { IB-SchedulingInformation-ExtIEs } } OPTIONAL,
    ...
}

IB-SchedulingInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

IB-SegmentInformationList ::= SEQUENCE (SIZE(1..maxIBSEG)) OF IB-SegmentInformationItem

IB-SegmentInformationItem ::= SEQUENCE {
    iB-SG-POS                  IB-SG-POS,
    iE-Extensions              ProtocolExtensionContainer { { IB-SegmentInformationItem-ExtIEs } } OPTIONAL,
    ...
}

IB-SegmentInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

IB-SG-POS ::= INTEGER (0..4094)
-- Only even positions allowed

IB-SG-REP ::= ENUMERATED {rep4, rep8, rep16, rep32, rep64, rep128, rep256, rep512, rep1024, rep2048, rep4096}

IMSI ::= OCTET STRING (SIZE(3..8))

InformationAvailable ::= SEQUENCE {
    requestedDataValue         RequestedDataValue,

```

```

    iE-Extensions          ProtocolExtensionContainer { { InformationAvailable-ExtIEs } }          OPTIONAL,
    ...
}

InformationAvailable-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

InformationExchangeID ::= INTEGER (0..1048575)

InformationNotAvailable ::= NULL

InformationReportCharacteristics ::= CHOICE {
    onDemand                NULL,
    periodic                PeriodicInformation,
    onModification          OnModificationInformation,
    ...
}

InformationReportPeriodicity ::= CHOICE {
    min                    INTEGER (1..60,...),
-- Unit min, Step lmin
    hour                  INTEGER (1..24,...),
-- Unit hour, Step lhour
    ...
}

InformationThreshold ::= CHOICE {
    dGPSThreshold          DGPSThreshold,
    ...,
    extension-InformationThreshold    Extension-InformationThreshold
}

Extension-InformationThreshold ::= ProtocolIE-Single-Container {{ Extension-InformationThresholdIE }}

Extension-InformationThresholdIE RNSAP-PROTOCOL-IES ::= {
    { ID id-Cell-Capacity-Class-Value-ThresholdInformation CRITICALITY reject TYPE Cell-Capacity-Class-Value-ThresholdInformation PRESENCE
mandatory}
}

InformationType ::= SEQUENCE {
    informationTypeItem    ENUMERATED {
        gA-AccessPointPositionwithAltitude,
        gA-AccessPointPosition,
        iPDLParameters,
        gPSInformation,
        dGPSCorrections,
        gPS-RX-POS,
        sFNSFN-GA-AccessPointPosition,
        ...,
        cell-Capacity-Class
    }
}

```

```

    },
    gPSInformation          GPSInformation          OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { InformationType-ExtIEs } } OPTIONAL,
    ...
}

-- The GPS Information IE shall be present if the Information Exchange Type IE indicates 'GPS Information'

InformationType-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

InnerLoopDLPCStatus ::= ENUMERATED {active, inactive}

IPDLParameters ::= CHOICE {
    iPDL-FDD-Parameters      IPDL-FDD-Parameters,
    iPDL-TDD-Parameters      IPDL-TDD-Parameters,    --3.84Mcps TDD only
    ...,
    extension--IPDLParameters Extension--IPDLParameters
}

Extension--IPDLParameters ::= ProtocolIE-Single-Container {{ Extension--IPDLParametersIE }}

Extension--IPDLParametersIE RNSAP-PROTOCOL-IES ::= {
    { ID id-IPDL-TDD-ParametersLCR CRITICALITY reject TYPEEXTENSION IPDL-TDD-ParametersLCR PRESENCE mandatory },
    ...
}

IPDL-FDD-Parameters ::= SEQUENCE {
    iPSpacingFDD              IPSpacingFDD,
    iPLength                  IPLength,
    iPOffset                  IPOffset,
    seed                      Seed,
    burstModeParameters      BurstModeParameters OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { { IPDL-FDD-Parameters-ExtIEs } } OPTIONAL,
    ...
}

IPDL-FDD-Parameters-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

IPDL-TDD-Parameters ::= SEQUENCE {
    iPSpacingTDD              IPSpacingTDD,
    iPStart                   IPStart,
    iPSlot                    IPSlot,
    iP-P-CCPCH                IP-P-CCPCH,
    burstModeParameters      BurstModeParameters OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { { IPDL-TDD-Parameters-ExtIEs } } OPTIONAL,
    ...
}

```

```
-- The BurstModeParameters IE shall be included if the Idle Periods are arranged in Burst Mode.

IPDL-TDD-Parameters-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

IPDL-TDD-ParametersLCR ::= SEQUENCE {
    iPSpacingTDD          IPSpacingTDD,
    iPStart               IPStart,
    iPSub                 IPSub,
    burstModeParameters  BurstModeParameters OPTIONAL,
    iE-Extensions         ProtocolExtensionContainer { { IPDL-TDD-ParametersLCR-ExtIEs } } OPTIONAL,
    ...
}

-- The BurstModeParameters IE shall be included if the Idle Periods are arranged in Burst Mode.

IPDL-TDD-ParametersLCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

IPLength ::= ENUMERATED {
    ipl5,
    ipl10,
    ...
}

IPOffset ::= INTEGER (0..9)

IP-P-CCPCH ::= ENUMERATED {
    switchOff-1-Frame,
    switchOff-2-Frames
}

IPSlot ::= INTEGER (0..14)

IPSpacingFDD ::= ENUMERATED {
    ipsF5,
    ipsF7,
    ipsF10,
    ipsF15,
    ipsF20,
    ipsF30,
    ipsF40,
    ipsF50,
    ...
}

IPSpacingTDD ::= ENUMERATED {
    ipst30,
```

```
    ipsT40,  
    ipsT50,  
    ipsT70,  
    ipsT100,  
    ...  
}  
  
IPStart ::= INTEGER (0..4095)  
  
IPSub ::= ENUMERATED {  
    first,  
    second,  
    both  
}  
  
-- J  
-- K  
-- L  
  
LAC          ::= OCTET STRING (SIZE (2)) --(EXCEPT ('0000'H|'FFFF'H))  
  
LengthOfTFICI2 ::= INTEGER(1..10)  
  
LimitedPowerIncrease ::= ENUMERATED {  
    used,  
    not-used  
}  
  
L3-Information          ::= BIT STRING  
  
Load-Value-IncrDecrThres ::= INTEGER(0..100)  
  
Load-Value ::= INTEGER(0..100)  
  
LoadValue ::= SEQUENCE {  
    uplinkLoadValue    INTEGER(0..100),  
    downlinkLoadValue  INTEGER(0..100)  
}  
  
-- M  
  
MaxNrOfUL-DPCHs          ::= INTEGER (1..6)  
  
MAC-c-sh-SDU-Length      ::= INTEGER (1..5000)  
  
MAC-c-sh-SDU-LengthList ::= SEQUENCE(SIZE(1..maxNrOfMACcshSDU-Length)) OF MAC-c-sh-SDU-Length  
  
MACdPDU-Size ::= INTEGER (1..5000,...)  
  
MACdPDU-Size-IndexList ::= SEQUENCE (SIZE (1..maxNrOfPDUIndexes)) OF MACdPDU-Size-IndexItem
```

```

MACdPDU-Size-IndexItem ::= SEQUENCE {
    sID                               SID,
    mACdPDU-Size                       MACdPDU-Size,
    iE-Extensions                       ProtocolExtensionContainer { { MACdPDU-Size-IndexItem-ExtIEs } } OPTIONAL,
    ...
}

MACdPDU-Size-IndexItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

MACdPDU-Size-IndexList-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfPDUIndexes)) OF MACdPDU-Size-IndexItem-to-Modify

MACdPDU-Size-IndexItem-to-Modify ::= SEQUENCE {
    sID                               SID,
    mACdPDU-Size                       MACdPDU-Size OPTIONAL,
    iE-Extensions                       ProtocolExtensionContainer { { MACdPDU-Size-IndexItem-to-Modify-ExtIEs } } OPTIONAL,
    ...
}

MACdPDU-Size-IndexItem-to-Modify-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

MaximumAllowedULTxPower ::= INTEGER (-50..33)

MaxNrDLPhysicalchannels ::= INTEGER (1..224)

MaxNrTimeslots ::= INTEGER (1..14)

MaxNrULPhysicalchannels ::= INTEGER (1..2)

MaxTFCIvalue ::= INTEGER (1..1023)

MeasurementFilterCoefficient ::= ENUMERATED{k0, k1, k2, k3, k4, k5, k6, k7, k8, k9, k11, k13, k15, k17, k19,...}
-- Measurement Filter Coefficient to be used for measurement

MeasurementID ::= INTEGER (0..1048575)

MinimumSpreadingFactor ::= INTEGER (1..16)

Multi-code-info ::= INTEGER (1..16)

MultipleURAsIndicator ::= ENUMERATED {
    multiple-URAs-exist,
    single-URA-exists
}

MaxAdjustmentStep ::= INTEGER(1..10)
-- Unit Slot

```

```

MeasurementChangeTime ::= INTEGER (1..6000,...)
-- The MeasurementChangeTime gives the MeasurementChangeTime
-- in number of 10 ms periods.
-- E.g. Value 6000 means 60000ms(1min)
-- Unit is ms, Step is 10 ms

Measurement-Feedback-Offset ::= INTEGER (0..79,...)

Measurement-Feedback-Reporting-Cycle ::= ENUMERATED {
    v0,
    v1,
    v5,
    v10,
    v20,
    v40,
    v80,
    ...
}

MeasurementHysteresisTime ::= INTEGER (1..6000,...)
-- The MeasurementHysteresisTime gives the
-- MeasurementHysteresisTime in number of 10 ms periods.
-- E.g. Value 6000 means 60000ms(1min)
-- Unit is ms, Step is 10ms

MeasurementIncreaseDecreaseThreshold ::= CHOICE {
    sir                               SIR-Value-IncrDecrThres,
    sir-error                          SIR-Error-Value-IncrDecrThres,
    transmitted-code-power             Transmitted-Code-Power-Value-IncrDecrThres,
    rscp                                RSCP-Value-IncrDecrThres,
    round-trip-time                    Round-Trip-Time-IncrDecrThres,
    ...,
    extension-MeasurementIncreaseDecreaseThreshold Extension-MeasurementIncreaseDecreaseThreshold
}

Extension-MeasurementIncreaseDecreaseThreshold ::= ProtocolIE-Single-Container {{ Extension-MeasurementIncreaseDecreaseThresholdIE }}

Extension-MeasurementIncreaseDecreaseThresholdIE RNSAP-PROTOCOL-IES ::= {
    { ID id-Load-Value-IncrDecrThres CRITICALITY reject TYPE Load-Value-IncrDecrThres PRESENCE mandatory }|
    { ID id-Transmitted-Carrier-Power-Value-IncrDecrThres CRITICALITY reject TYPE Transmitted-Carrier-Power-Value-IncrDecrThres PRESENCE mandatory
} |
    { ID id-Received-Total-Wideband-Power-Value-IncrDecrThres CRITICALITY reject TYPE Received-Total-Wideband-Power-Value-IncrDecrThres PRESENCE
mandatory }|
    { ID id-UL-Timeslot-ISCP-Value-IncrDecrThres CRITICALITY reject TYPE UL-Timeslot-ISCP-Value-IncrDecrThres PRESENCE mandatory }|
    { ID id-RT-Load-Value-IncrDecrThres CRITICALITY reject TYPE RT-Load-Value-IncrDecrThres PRESENCE mandatory }|
    { ID id-NRT-Load-Information-Value-IncrDecrThres CRITICALITY reject TYPE NRT-Load-Information-Value-IncrDecrThres PRESENCE mandatory }
}

MeasurementThreshold ::= CHOICE {
    sir                               SIR-Value,
    sir-error                          SIR-Error-Value,

```



```

transmitted-code-power      Transmitted-Code-Power-Value,
rscp                        RSCP-Value,
rx-timing-deviation        Rx-Timing-Deviation-Value,
round-trip-time            Round-Trip-Time-Value,
...
extension-MeasurementThreshold Extension-MeasurementThreshold
}

Extension-MeasurementThreshold ::= ProtocolIE-Single-Container {{ Extension-MeasurementThresholdIE }}

Extension-MeasurementThresholdIE RNSAP-PROTOCOL-IES ::= {
  { ID id-TUTRANGPSMeasurementThresholdInformation CRITICALITY reject TYPE TUTRANGPSMeasurementThresholdInformation PRESENCE mandatory }}
  { ID id-SFNFSNMeasurementThresholdInformation CRITICALITY reject TYPE SFNFSNMeasurementThresholdInformation PRESENCE mandatory }}|
  { ID id-Load-Value CRITICALITY reject TYPE Load-Value PRESENCE mandatory }}|
  { ID id-Transmitted-Carrier-Power-Value CRITICALITY reject TYPE Transmitted-Carrier-Power-Value PRESENCE mandatory }}|
  { ID id-Received-Total-Wideband-Power-Value CRITICALITY reject TYPE Received-Total-Wideband-Power-Value PRESENCE mandatory }}|
  { ID id-UL-Timeslot-ISCP-Value CRITICALITY reject TYPE UL-Timeslot-ISCP-Value PRESENCE mandatory }}|
  { ID id-RT-Load-Value CRITICALITY reject TYPE RT-Load-Value PRESENCE mandatory }}|
  { ID id-NRT-Load-information-Value CRITICALITY reject TYPE NRT-Load-Information-Value PRESENCE mandatory }}
}

MidambleConfigurationBurstType1And3 ::= ENUMERATED {v4, v8, v16}

MidambleConfigurationBurstType2 ::= ENUMERATED {v3, v6}

MidambleShiftAndBurstType ::= CHOICE {
  type1 SEQUENCE {
    midambleConfigurationBurstType1And3 MidambleConfigurationBurstType1And3,
    midambleAllocationMode CHOICE {
      defaultMidamble NULL,
      commonMidamble NULL,
      ueSpecificMidamble MidambleShiftLong,
      ...
    },
    ...
  },
  type2 SEQUENCE {
    midambleConfigurationBurstType2 MidambleConfigurationBurstType2,
    midambleAllocationMode CHOICE {
      defaultMidamble NULL,
      commonMidamble NULL,
      ueSpecificMidamble MidambleShiftShort,
      ...
    },
    ...
  },
  type3 SEQUENCE {
    midambleConfigurationBurstType1And3 MidambleConfigurationBurstType1And3,
    midambleAllocationMode CHOICE {
      defaultMidamble NULL,
      ueSpecificMidamble MidambleShiftLong,

```

```

    },
    ...
  },
  ...
}

MidambleShiftLong ::= INTEGER (0..15)

MidambleShiftShort ::= INTEGER (0..5)

MidambleShiftLCR ::= SEQUENCE {
  midambleAllocationMode MidambleAllocationMode,
  midambleShift MidambleShiftLong OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { {MidambleShiftLCR-ExtIEs} } OPTIONAL,
  ...
}

MidambleAllocationMode ::= ENUMERATED {
  defaultMidamble,
  commonMidamble,
  uESpecificMidamble,
  ...
}

MidambleShiftLCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

MinUL-ChannelisationCodeLength ::= ENUMERATED {
  v4,
  v8,
  v16,
  v32,
  v64,
  v128,
  v256
}

Modulation ::= ENUMERATED {
  qPSK,
  eightPSK,
  ...
}

MultiplexingPosition ::= ENUMERATED {
  fixed,
  flexible
}

-- N

```

NCC ::= BIT STRING (SIZE (3))

Neighbouring-UMTS-CellInformation ::= SEQUENCE (SIZE (1..maxNrOfNeighbouringRNCs)) OF ProtocolIE-Single-Container {{ Neighbouring-UMTS-CellInformationItemIE }}

Neighbouring-UMTS-CellInformationItemIE RNSAP-PROTOCOL-IES ::= {
 { ID id-Neighbouring-UMTS-CellInformationItem CRITICALITY ignore TYPE Neighbouring-UMTS-CellInformationItem PRESENCE mandatory }
 }

Neighbouring-UMTS-CellInformationItem ::= SEQUENCE {
 rNC-ID RNC-ID,
 cN-PS-DomainIdentifier CN-PS-DomainIdentifier OPTIONAL,
 cN-CS-DomainIdentifier CN-CS-DomainIdentifier OPTIONAL,
 neighbouring-FDD-CellInformation Neighbouring-FDD-CellInformation OPTIONAL,
 neighbouring-TDD-CellInformation Neighbouring-TDD-CellInformation OPTIONAL,
 iE-Extensions ProtocolExtensionContainer { {Neighbouring-UMTS-CellInformationItem-ExtIEs} } OPTIONAL,
 ...
 }

Neighbouring-UMTS-CellInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
 { ID id-neighbouring-LCR-TDD-CellInformation CRITICALITY ignore EXTENSION Neighbouring-LCR-TDD-CellInformation PRESENCE optional },
 ...
 }

Neighbouring-FDD-CellInformation ::= SEQUENCE (SIZE (1..maxNrOfFDDNeighboursPerRNC,...)) OF Neighbouring-FDD-CellInformationItem

Neighbouring-FDD-CellInformationItem ::= SEQUENCE {
 c-ID C-ID,
 uARFCNforNu UARFCN,
 uARFCNforNd UARFCN,
 frameOffset FrameOffset OPTIONAL,
 primaryScramblingCode PrimaryScramblingCode,
 primaryCPICH-Power PrimaryCPICH-Power OPTIONAL,
 cellIndividualOffset CellIndividualOffset OPTIONAL,
 txDiversityIndicator TxDiversityIndicator,
 sTTD-SupportIndicator STTD-SupportIndicator OPTIONAL,
 closedLoopModel1-SupportIndicator ClosedLoopModel1-SupportIndicator OPTIONAL,
 closedLoopMode2-SupportIndicator ClosedLoopMode2-SupportIndicator OPTIONAL,
 iE-Extensions ProtocolExtensionContainer { { Neighbouring-FDD-CellInformationItem-ExtIEs} } OPTIONAL,
 ...
 }

Neighbouring-FDD-CellInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
 { ID id-RestrictionStateIndicator CRITICALITY ignore EXTENSION RestrictionStateIndicator PRESENCE optional }|
 { ID id-DPC-Mode-Change-SupportIndicator CRITICALITY ignore EXTENSION DPC-Mode-Change-SupportIndicator PRESENCE optional }|
 { ID id-CoverageIndicator CRITICALITY ignore EXTENSION CoverageIndicator PRESENCE optional }|
 { ID id-AntennaColocationIndicator CRITICALITY ignore EXTENSION AntennaColocationIndicator PRESENCE optional }|
 { ID id-HCS-Prio CRITICALITY ignore EXTENSION HCS-Prio PRESENCE optional }|
 { ID id-CellCapabilityContainer-FDD CRITICALITY ignore EXTENSION CellCapabilityContainer-FDD PRESENCE optional },

```

}
...
}

NeighbouringFDDCellMeasurementInformation ::= SEQUENCE {
    uC-ID                UC-ID,
    uARFCN               UARFCN,
    primaryScramblingCode PrimaryScramblingCode,
    iE-Extensions       ProtocolExtensionContainer { { NeighbouringFDDCellMeasurementInformationItem-ExtIEs } } OPTIONAL,
    ...
}

NeighbouringFDDCellMeasurementInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Neighbouring-GSM-CellInformation ::= ProtocolIE-Single-Container {{ Neighbouring-GSM-CellInformationIE }}

Neighbouring-GSM-CellInformationIE RNSAP-PROTOCOL-IES ::= {
    { ID id-Neighbouring-GSM-CellInformation    CRITICALITY ignore    TYPE    Neighbouring-GSM-CellInformationIEs    PRESENCE mandatory }
}

Neighbouring-GSM-CellInformationIEs ::= SEQUENCE ( SIZE (1..maxNrOfGSMNeighboursPerRNC,...)) OF Neighbouring-GSM-CellInformationItem

Neighbouring-GSM-CellInformationItem ::= SEQUENCE {
    CGI                CGI,
    cellIndividualOffset CellIndividualOffset    OPTIONAL,
    bSIC               BSIC,
    band-Indicator     Band-Indicator,
    bCCH-ARFCN         BCCH-ARFCN,
    iE-Extensions       ProtocolExtensionContainer { { Neighbouring-GSM-CellInformationItem-ExtIEs } } OPTIONAL,
    ...
}

Neighbouring-GSM-CellInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-CoverageIndicator    CRITICALITY ignore    EXTENSION CoverageIndicator    PRESENCE optional } |
    { ID id-AntennaColocationIndicator    CRITICALITY ignore    EXTENSION AntennaColocationIndicator    PRESENCE optional } |
    { ID id-HCS-Prio            CRITICALITY ignore    EXTENSION HCS-Prio            PRESENCE optional },
    ...
}

Neighbouring-TDD-CellInformation ::= SEQUENCE ( SIZE (1..maxNrOfTDDNeighboursPerRNC,...)) OF Neighbouring-TDD-CellInformationItem

Neighbouring-TDD-CellInformationItem ::= SEQUENCE {
    c-ID                C-ID,
    uARFCNforNt         UARFCN,
    frameOffset         FrameOffset    OPTIONAL,
    cellParameterID     CellParameterID,
    syncCase            SyncCase,
    timeSlot            TimeSlot    OPTIONAL
    -- This IE shall be present if Sync Case = Case1 -- ,
}

```

```

    SCH-TimeSlot          SCH-TimeSlot          OPTIONAL
    -- This IE shall be present if Sync Case = Case2 -- ,
    SCTD-Indicator        SCTD-Indicator,
    cellIndividualOffset  CellIndividualOffset  OPTIONAL,
    dPCHConstantValue    DPCHConstantValue    OPTIONAL,
    pCCPCH-Power         PCCPCH-Power         OPTIONAL,
    iE-Extensions        ProtocolExtensionContainer { { Neighbouring-TDD-CellInformationItem-ExtIEs} } OPTIONAL,
    ...
}

Neighbouring-TDD-CellInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-RestrictionStateIndicator          CRITICALITY ignore          EXTENSION RestrictionStateIndicator    PRESENCE optional }|
  { ID id-CoverageIndicator                  CRITICALITY ignore          EXTENSION CoverageIndicator            PRESENCE optional }|
  { ID id-AntennaColocationIndicator         CRITICALITY ignore          EXTENSION AntennaColocationIndicator    PRESENCE optional }|
  { ID id-HCS-Prio                           CRITICALITY ignore          EXTENSION HCS-Prio                     PRESENCE optional }|
  { ID id-CellCapabilityContainer-TDD        CRITICALITY ignore          EXTENSION CellCapabilityContainer-TDD    PRESENCE optional },
  ...
}

NeighbouringTDDCellMeasurementInformation ::= SEQUENCE {
  uC-ID          UC-ID,
  uARFCN         UARFCN,
  cellParameterID CellParameterID,
  timeSlot       TimeSlot          OPTIONAL,
  midambleShiftAndBurstType MidambleShiftAndBurstType  OPTIONAL,
  iE-Extensions  ProtocolExtensionContainer { { NeighbouringTDDCellMeasurementInformationItem-ExtIEs} } OPTIONAL,
  ...
}

NeighbouringTDDCellMeasurementInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

NeighbouringTDDCellMeasurementInformationLCR ::= SEQUENCE {
  uC-ID          UC-ID,
  uARFCN         UARFCN,
  cellParameterID CellParameterID,
  timeSlotLCR    TimeSlotLCR          OPTIONAL,
  midambleShiftLCR MidambleShiftLCR      OPTIONAL,
  iE-Extensions  ProtocolExtensionContainer { { NeighbouringTDDCellMeasurementInformationLCRItem-ExtIEs} } OPTIONAL,
  ...
}

NeighbouringTDDCellMeasurementInformationLCRItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

Neighbouring-LCR-TDD-CellInformation ::= SEQUENCE (SIZE (1.. maxNrOfLCRTDDNeighboursPerRNC,...)) OF Neighbouring-LCR-TDD-CellInformationItem

Neighbouring-LCR-TDD-CellInformationItem ::= SEQUENCE {

```

```

c-ID                C-ID,
uARFCNforNt        UARFCN,
frameOffset        FrameOffset      OPTIONAL,
cellParameterID    CellParameterID,
sCTD-Indicator     SCTD-Indicator,
cellIndividualOffset CellIndividualOffset OPTIONAL,
dPCHConstantValue DPCHConstantValue OPTIONAL,
pCCPCH-Power       PCCPCH-Power     OPTIONAL,
restrictionStateIndicator RestrictionStateIndicator OPTIONAL,
iE-Extensions      ProtocolExtensionContainer { { Neighbouring-LCR-TDD-CellInformationItem-ExtIEs } } OPTIONAL,
...
}

Neighbouring-LCR-TDD-CellInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-CellCapabilityContainer-TDD-LCR CRITICALITY ignore EXTENSION CellCapabilityContainer-TDD-LCR PRESENCE optional },
  ...
}

NrOfDLchannelisationcodes ::= INTEGER (1..8)

NrOfTransportBlocks ::= INTEGER (0..512)

NRT-Load-Information-Value-IncrDecrThres ::= INTEGER(0..3)

NRT-Load-Information-Value ::= INTEGER(0..3)

NRTLoadinformationValue ::= SEQUENCE {
  uplinkNRTLoadInformationValue INTEGER(0..3),
  downlinkNRTLoadInformationValue INTEGER(0..3)
}

-- 0

OnModification ::= SEQUENCE {
  measurementThreshold MeasurementThreshold,
  iE-Extensions ProtocolExtensionContainer { {OnModification-ExtIEs} } OPTIONAL,
  ...
}

OnModification-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

OnModificationInformation ::= SEQUENCE {
  informationThreshold InformationThreshold OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { {OnModificationInformation-ExtIEs} } OPTIONAL,
  ...
}

OnModificationInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {

```

```
    ...
}

-- P

PagingCause ::= ENUMERATED {
    terminating-conversational-call,
    terminating-streaming-call,
    terminating-interactive-call,
    terminating-background-call,
    terminating-low-priority-signalling,
    ...,
    terminating-high-priority-signalling,
    terminating-cause-unknown
}
-- See in [16]

PagingRecordType ::= ENUMERATED {
    imsi-gsm-map,
    tmsi-gsm-map,
    p-tmsi-gsm-map,
    imsi-ds-41,
    tmsi-ds-41,
    ...
}
-- See in [16]

PayloadCRC-PresenceIndicator ::= ENUMERATED {
    crc-included,
    crc-not-included
}

PCCPCH-Power ::= INTEGER (-150..400,...)
-- PCCPCH-power = power * 10
-- If power <= -15 PCCPCH shall be set to -150
-- If power >= 40 PCCPCH shall be set to 400
-- Unit dBm, Range -15dBm .. +40 dBm, Step 0.1dBm

PCH-InformationList ::= SEQUENCE (SIZE(0..1)) OF PCH-InformationItem

PCH-InformationItem ::= SEQUENCE {
    transportFormatSet      TransportFormatSet,
    iE-Extensions           ProtocolExtensionContainer { { PCH-InformationItem-ExtIEs } } OPTIONAL,
    ...
}

PCH-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

PC-Preamble ::= INTEGER(0..7,...)
```

```

PDSCHCodeMapping ::= SEQUENCE {
    dL-ScramblingCode      DL-ScramblingCode,
    signallingMethod       PDSCHCodeMapping-SignallingMethod,
    iE-Extensions          ProtocolExtensionContainer { { PDSCHCodeMapping-ExtIEs} } OPTIONAL,
    ...
}

PDSCHCodeMapping-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

PDSCHCodeMapping-SignallingMethod ::= CHOICE {
    pDSCHCodeMapping-SignallingMethod-CodeRange      PDSCHCodeMapping-SignallingMethod-CodeRange,
    pDSCHCodeMapping-SignallingMethod-TFCIRange      PDSCHCodeMapping-SignallingMethod-TFCIRange,
    pDSCHCodeMapping-SignallingMethod-Explicit      PDSCHCodeMapping-SignallingMethod-Explicit,
    ...,
    pDSCHCodeMapping-SignallingMethod-Replace      PDSCHCodeMapping-SignallingMethod-Replace
}

PDSCHCodeMapping-SignallingMethod-CodeRange ::= SEQUENCE (SIZE (1..maxNoCodeGroups)) OF
SEQUENCE {
    spreadingFactor      SpreadingFactor,
    multi-code-info      Multi-code-info,
    start-CodeNumber     CodeNumber,
    stop-CodeNumber      CodeNumber,
    iE-Extensions        ProtocolExtensionContainer { { PDSCHCodeMapping-SignallingMethod-CodeRange-ExtIEs} } OPTIONAL,
    ...
}

PDSCHCodeMapping-SignallingMethod-CodeRange-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

PDSCHCodeMapping-SignallingMethod-TFCIRange ::= SEQUENCE (SIZE (1..maxNoTFCIGroups)) OF
SEQUENCE {
    maxTFCIvalue      MaxTFCIvalue,
    spreadingFactor    SpreadingFactor,
    multi-code-info    Multi-code-info,
    codeNumber         CodeNumber,
    iE-Extensions      ProtocolExtensionContainer { { PDSCHCodeMapping-SignallingMethod-TFCIRange-ExtIEs} } OPTIONAL,
    ...
}

PDSCHCodeMapping-SignallingMethod-TFCIRange-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

PDSCHCodeMapping-SignallingMethod-Explicit ::= SEQUENCE (SIZE (1..maxTFCI2Combs)) OF
SEQUENCE {
    spreadingFactor      SpreadingFactor,

```



```

        multi-code-info      Multi-code-info,
        codeNumber           CodeNumber,
        iE-Extensions        ProtocolExtensionContainer { { PDSCHCodeMapping-SignallingMethod-Explicit-ExtIEs} } OPTIONAL,
        ...
    }

PDSCHCodeMapping-SignallingMethod-Explicit-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

PDSCHCodeMapping-SignallingMethod-Replace ::= SEQUENCE (SIZE (1..maxTFCI2Combs)) OF
SEQUENCE {
    tfci-Field2              TFCS-MaxTFCI-field2-Value,
    spreadingFactor          SpreadingFactor,
    multi-CodeInfo           Multi-code-info,
    codeNumber               CodeNumber,
    iE-Extensions            ProtocolExtensionContainer { { PDSCHCodeMapping-SignallingMethod-Replace-ExtIEs} } OPTIONAL,
    ...
}

PDSCHCodeMapping-SignallingMethod-Replace-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Periodic ::= SEQUENCE {
    reportPeriodicity        ReportPeriodicity,
    iE-Extensions            ProtocolExtensionContainer { {Periodic-ExtIEs} } OPTIONAL,
    ...
}

Periodic-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

PeriodicInformation ::= SEQUENCE {
    informationReportPeriodicity InformationReportPeriodicity,
    iE-Extensions            ProtocolExtensionContainer { {PeriodicInformation-ExtIEs} } OPTIONAL,
    ...
}

PeriodicInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Permanent-NAS-UE-Identity ::= CHOICE {
    imsi                     IMSI,
    ...
}

PLMN-Identity ::= OCTET STRING (SIZE(3))

```

```
PowerAdjustmentType ::= ENUMERATED {
    none,
    common,
    individual
}

PowerOffset          ::= INTEGER (0..24)

PRC ::= INTEGER (-2047..2047)
--pseudo range correction; scaling factor 0.32 meters

PRCDeviation ::= ENUMERATED {
    prcd1,
    prcd2,
    prcd5,
    prcd10,
    ...
}

Pre-emptionCapability ::= ENUMERATED {
    shall-not-trigger-pre-emption,
    may-trigger-pre-emption
}

Pre-emptionVulnerability ::= ENUMERATED {
    not-pre-emptable,
    pre-emptable
}

PredictedSFNSFNDeviationLimit ::= INTEGER (1..256)
-- Unit chip, Step 1/16 chip, Range 1/16..16 chip

PredictedTUTRANGPSDeviationLimit ::= INTEGER (1..256)
-- Unit chip, Step 1/16 chip, Range 1/16..16 chip

PrimaryCPICH-Power      ::= INTEGER (-100..500)
-- step 0.1 (Range -10.0..50.0) Unit is dBm

PrimaryCPICH-EcNo       ::= INTEGER (-30..30)

PrimaryCCPCH-RSCP       ::= INTEGER (0..91)
-- According to mapping in [14]

PrimaryScramblingCode   ::= INTEGER (0..511)

PriorityLevel            ::= INTEGER (0..15)
-- 0 = spare, 1 = highest priority, ...14 = lowest priority and 15 = no priority

PriorityQueue-Id ::= INTEGER (0..maxNrOfPrioQueues-1)

PriorityQueue-InfoList ::= SEQUENCE (SIZE (1..maxNrOfPrioQueues)) OF PriorityQueue-InfoItem
```

```

PriorityQueue-InfoItem ::= SEQUENCE {
    priorityQueue-Id          PriorityQueue-Id,
    schedulingPriorityIndicator SchedulingPriorityIndicator,
    mAcDpDU-Size-Index        MACdPDU-Size-IndexList,
    iE-Extensions             ProtocolExtensionContainer { { PriorityQueue-InfoItem-ExtIEs } } OPTIONAL,
    ...
}

PriorityQueue-InfoItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

PriorityQueue-InfoList-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfPrioQueues)) OF PriorityQueue-InfoItem-to-Modify

PriorityQueue-InfoItem-to-Modify ::= SEQUENCE {
    priorityQueue-Id          PriorityQueue-Id,
    schedulingPriorityIndicator SchedulingPriorityIndicator OPTIONAL,
    mAcDpDU-Size-Index-to-Modify MACdPDU-Size-IndexList-to-Modify OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { { PriorityQueue-InfoItem-to-Modify-ExtIEs } } OPTIONAL,
    ...
}

PriorityQueue-InfoItem-to-Modify-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

PropagationDelay          ::= INTEGER (0..255)

PunctureLimit             ::= INTEGER (0..15)
-- 0: 40%; 1: 44%; ... 14: 96%; 15: 100

-- Q

QE-Selector ::= ENUMERATED {
    selected,
    non-selected
}

-- R

RAC                      ::= OCTET STRING (SIZE(1))

RANAP-RelocationInformation ::= BIT STRING

Range-Correction-Rate ::= INTEGER (-127..127)
-- scaling factor 0.032 m/s

RateMatchingAttribute     ::= INTEGER (1..maxRateMatching)

```

```
RB-Identity                ::= INTEGER (0..31)

RB-Info ::= SEQUENCE (SIZE(1..maxNoOfRB)) OF RB-Identity

Received-Total-Wideband-Power-Value ::= Received-total-wide-band-power

Received-Total-Wideband-Power-Value-IncrDecrThres ::= INTEGER(0..620)
-- Unit dB Step 0.1dB
-- e.g. value 100 means 10dB

RefTFNumber ::= INTEGER (0..15)

RepetitionLength          ::= INTEGER (1..63)

RepetitionPeriod ::= ENUMERATED {
    v1,
    v2,
    v4,
    v8,
    v16,
    v32,
    v64
}

RepetitionNumber0 ::= INTEGER (0..255)

RepetitionNumber1 ::= INTEGER (1..256)

ReportCharacteristics ::= CHOICE {
    onDemand          NULL,
    periodic          Periodic,
    eventA            EventA,
    eventB            EventB,
    eventC            EventC,
    eventD            EventD,
    eventE            EventE,
    eventF            EventF,
    ...,
    extension-ReportCharacteristics    Extension-ReportCharacteristics
}

Extension-ReportCharacteristics ::= ProtocolIE-Single-Container {{ Extension-ReportCharacteristicsIE }}

Extension-ReportCharacteristicsIE RNSAP-PROTOCOL-IES ::= {
    { ID id-OnModification    CRITICALITY reject    TYPE OnModification    PRESENCE mandatory }
}

ReportPeriodicity ::= CHOICE {
    ten-msec          INTEGER (1..6000,...),
    -- The Report Periodicity gives the reporting periodicity in number of 10 ms periods.
    -- E.g. value 6000 means 60000ms (i.e. 1min)
```

```

-- Unit ms, Step 10ms
  min          INTEGER (1..60,...),
-- Unit min, Step 1min
  ...
}

RequestedDataValue ::= SEQUENCE {
  gA-AccessPointPositionwithAltitude    GA-AccessPointPositionwithOptionalAltitude  OPTIONAL,
  iPDLParameters                        IPDLParameters                        OPTIONAL,
  dGPSCorrections                       DGPSCorrections                       OPTIONAL,
  gPS-NavigationModel-and-TimeRecovery   GPS-NavigationModel-and-TimeRecovery   OPTIONAL,
  gPS-Ionospheric-Model                  GPS-Ionospheric-Model                  OPTIONAL,
  gPS-UTC-Model                          GPS-UTC-Model                          OPTIONAL,
  gPS-Almanac                            GPS-Almanac                            OPTIONAL,
  gPS-RealTime-Integrity                  GPS-RealTime-Integrity                  OPTIONAL,
  gPS-RX-POS                             GPS-RX-POS                             OPTIONAL,
  sFNSFN-GA-AccessPointPosition          GA-AccessPointPositionwithOptionalAltitude  OPTIONAL,
  iE-Extensions                          ProtocolExtensionContainer { { RequestedDataValue-ExtIEs} }  OPTIONAL,
  ...
}

RequestedDataValue-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-Cell-Capacity-Class-Value  CRITICALITY reject  EXTENSIONTYPE Cell-Capacity-Class-Value  PRESENCE mandatory },
  ...
}

RequestedDataValueInformation ::= CHOICE {
  informationAvailable      InformationAvailable,
  informationNotAvailable   InformationNotAvailable
}

RestrictionStateIndicator ::= ENUMERATED {
  cellNotResevedForOperatorUse,
  cellResevedForOperatorUse,
  ...
}

RL-ID ::= INTEGER (0..31)

RL-Set-ID ::= INTEGER (0..31)

RL-Specific-DCH-Info ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF RL-Specific-DCH-Info-Item

RL-Specific-DCH-Info-Item ::= SEQUENCE {
  dCH-id          DCH-ID,
  bindingID      BindingID OPTIONAL,
  -- Shall be ignored if bearer establishment with ALCAP.                                     OPTIONAL,
  transportLayerAddress  TransportLayerAddress  OPTIONAL,
  -- Shall be ignored if bearer establishment with ALCAP.
  iE-Extensions      ProtocolExtensionContainer { { RL-Specific-DCH-Info-Item-ExtIEs} }  OPTIONAL,
  ...
}

```

```
}
RL-Specific-DCH-Info-Item-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}
RNC-ID ::= INTEGER (0..4095)
Round-Trip-Time-IncrDecrThres ::= INTEGER(0..32766)
Round-Trip-Time-Value ::= INTEGER(0..32767)
-- According to mapping in [23]
RSCP-Value ::= INTEGER (0..127)
-- According to mapping in [24]
RSCP-Value-IncrDecrThres ::= INTEGER (0..126)
Received-total-wide-band-power ::= INTEGER (0..621)
-- According to mapping in [23]
RT-Load-Value-IncrDecrThres ::= INTEGER(0..100)
RT-Load-Value ::= INTEGER(0..100)
RTLoadValue ::= SEQUENCE {
  uplinkRTLoadValue INTEGER(0..100),
  downlinkRTLoadValue INTEGER(0..100)
}
RxTimingDeviationForTA ::= INTEGER (0..127)
-- As specified in [5], ch. 6.2.7.6
-- For 1.28Mcps TDD this IE must be set to 0.
Rx-Timing-Deviation-Value ::= INTEGER (0..8191)
--According to mapping in [24][3.84Mcps TDD only]
Rx-Timing-Deviation-Value-LCR ::= INTEGER (0..255)
--According to mapping in [24][1.28Mcps TDD only]
-- S
SAC ::= OCTET STRING (SIZE (2))
SAI ::= SEQUENCE {
  pLMN-Identity PLMN-Identity,
  lAC LAC,
  sAC SAC,
  iE-Extensions ProtocolExtensionContainer { {SAI-ExtIEs} } OPTIONAL
}
```

```

SAI-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

SAT-ID ::= INTEGER (0..63)

SCH-TimeSlot ::= INTEGER (0..6)

ScaledAdjustmentRatio ::= INTEGER(0..100)
-- AdjustmentRatio = ScaledAdjustmentRatio / 100

Secondary-CCPCH-Info ::= SEQUENCE {
    fdd-S-CCPCH-Offset          FDD-S-CCPCH-Offset,
    dl-ScramblingCode          DL-ScramblingCode,
    fdd-DL-ChannelisationCodeNumber FDD-DL-ChannelisationCodeNumber,
    dl-TFCS                    TFCS,
    secondaryCCPCH-SlotFormat   SecondaryCCPCH-SlotFormat,
    tFCI-Presence              TFCI-Presence OPTIONAL,
    -- This IE shall be present only if the Secondary CCPCH Slot Format IE is equal to any of the values from 8 to 17
    multiplexingPosition       MultiplexingPosition,
    sTTD-Indicator            STTD-Indicator,
    fACH-PCH-InformationList   FACH-PCH-InformationList,
    iB-schedulingInformation   IB-SchedulingInformation,
    iE-Extensions              ProtocolExtensionContainer { { Secondary-CCPCH-Info-ExtIEs } } OPTIONAL,
    ...
}

Secondary-CCPCH-Info-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Secondary-CCPCH-Info-TDD ::= SEQUENCE {
    dl-TFCS                    TFCS,
    tFCI-Coding                TFCI-Coding,
    secondary-CCPCH-TDD-InformationList Secondary-CCPCH-TDD-InformationList,
    fACH-InformationList       FACH-InformationList,
    pCH-InformationList        PCH-InformationList,
    iE-Extensions              ProtocolExtensionContainer { { Secondary-CCPCH-Info-TDD-ExtIEs } } OPTIONAL,
    ...
}

Secondary-CCPCH-Info-TDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Secondary-LCR-CCPCH-Info-TDD ::= SEQUENCE {
    dl-TFCS                    TFCS,
    tFCI-Coding                TFCI-Coding,
    secondary-LCR-CCPCH-TDD-InformationList Secondary-LCR-CCPCH-TDD-InformationList,
    fACH-InformationList       FACH-InformationList,
    pCH-InformationList        PCH-InformationList,
}

```

```

    iE-Extensions          ProtocolExtensionContainer { { Secondary-LCR-CCPCH-Info-TDD-ExtIEs } } OPTIONAL,
    ...
}

Secondary-LCR-CCPCH-Info-TDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Secondary-CCPCH-TDD-InformationList ::= SEQUENCE (SIZE(0.. maxNrOfSCCPCHs)) OF Secondary-CCPCH-TDD-InformationItem

Secondary-CCPCH-TDD-InformationItem ::= SEQUENCE {
    timeSlot                TimeSlot,
    midambleShiftAndBurstType MidambleShiftAndBurstType,
    tFCI-Presence           TFCI-Presence,
    secondary-CCPCH-TDD-Code-Information Secondary-CCPCH-TDD-Code-Information,
    tDD-PhysicalChannelOffset TDD-PhysicalChannelOffset,
    repetitionLength        RepetitionLength,
    repetitionPeriod        RepetitionPeriod,
    iE-Extensions           ProtocolExtensionContainer { { Secondary-CCPCH-TDD-InformationItem-ExtIEs } } OPTIONAL,
    ...
}

Secondary-CCPCH-TDD-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Secondary-LCR-CCPCH-TDD-InformationList ::= SEQUENCE (SIZE(0.. maxNrOfSCCPCHs)) OF Secondary-LCR-CCPCH-TDD-InformationItem

Secondary-LCR-CCPCH-TDD-InformationItem ::= SEQUENCE {
    timeSlotLCR              TimeSlotLCR,
    midambleShiftLCR         MidambleShiftLCR,
    tFCI-Presence            TFCI-Presence,
    secondary-LCR-CCPCH-TDD-Code-Information Secondary-LCR-CCPCH-TDD-Code-Information,
    tDD-PhysicalChannelOffset TDD-PhysicalChannelOffset,
    repetitionLength         RepetitionLength,
    repetitionPeriod         RepetitionPeriod,
    iE-Extensions           ProtocolExtensionContainer { { Secondary-LCR-CCPCH-TDD-InformationItem-ExtIEs } } OPTIONAL,
    ...
}

Secondary-LCR-CCPCH-TDD-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Secondary-CCPCH-TDD-Code-Information ::= SEQUENCE ( SIZE (1..maxNrOfSCCPCHs)) OF Secondary-CCPCH-TDD-Code-InformationItem

Secondary-CCPCH-TDD-Code-InformationItem ::= SEQUENCE {
    tDD-ChannelisationCode   TDD-ChannelisationCode,
    iE-Extensions           ProtocolExtensionContainer { {Secondary-CCPCH-TDD-Code-InformationItem-ExtIEs } } OPTIONAL,
    ...
}

```



```

Secondary-CCPCH-TDD-Code-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Secondary-LCR-CCPCH-TDD-Code-Information ::= SEQUENCE ( SIZE (1..maxNrOfSCCPCHs)) OF Secondary-LCR-CCPCH-TDD-Code-InformationItem

Secondary-LCR-CCPCH-TDD-Code-InformationItem ::= SEQUENCE {
    tDD-ChannelisationCodeLCR          TDD-ChannelisationCodeLCR,
    iE-Extensions                      ProtocolExtensionContainer { {Secondary-LCR-CCPCH-TDD-Code-InformationItem-ExtIEs} } OPTIONAL,
    ...
}

Secondary-LCR-CCPCH-TDD-Code-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

SecondInterleavingMode ::= ENUMERATED {
    frame-related,
    timeslot-related,
    ...
}

Seed ::= INTEGER (0..63)

SFN ::= INTEGER (0..4095)

SFNSFN-FDD ::= INTEGER(0..614399)

SFNSFN-TDD ::= INTEGER(0..40961)

SID ::= INTEGER (0..maxNrOfPDUIndexes-1)

GA-AccessPointPositionwithOptionalAltitude ::= SEQUENCE {
    geographicalCoordinate             GeographicalCoordinate,
    altitudeAndDirection              GA-AltitudeAndDirection OPTIONAL,
    iE-Extensions                    ProtocolExtensionContainer { { GA-AccessPointPositionwithOptionalAltitude-ExtIEs} } OPTIONAL,
    ...
}

GA-AccessPointPositionwithOptionalAltitude-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

SFNSFNChangeLimit ::= INTEGER (1..256)
-- Unit chip, Step 1/16 chip, Range 1/16..16 chip

SFNSFNDriftRate ::= INTEGER (-100..100)
-- Unit chip/s, Step 1/256 chip/s, Range -100/256..+100/256 chip/s

SFNSFNDriftRateQuality ::= INTEGER (0..100)

```

```

-- Unit chip/s, Step 1/256 chip/s, Range 0..100/256 chip/s

SFNSFNMeasurementThresholdInformation ::= SEQUENCE {
    sFNSFNChangeLimit          SFNSFNChangeLimit          OPTIONAL,
    predictedSFNSFNDeviationLimit PredictedSFNSFNDeviationLimit OPTIONAL,
    iE-Extensions              ProtocolExtensionContainer { { SFNSFNMeasurementThresholdInformation-ExtIEs} } OPTIONAL,
    ...
}

SFNSFNMeasurementThresholdInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

SFNSFNMeasurementValueInformation ::= SEQUENCE {
    successfulNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformation SEQUENCE (SIZE(1..maxNrOfMeasNCell)) OF
        SEQUENCE {
            uC-ID          UC-ID,
            sFNSFNValue    SFNSFNValue,
            sFNSFNQuality  SFNSFNQuality          OPTIONAL,
            sFNSFNDriftRate SFNSFNDriftRate,
            sFNSFNDriftRateQuality SFNSFNDriftRateQuality,
            sFNSFNTimeStampInformation SFNSFNTimeStampInformation,
            iE-Extensions  ProtocolExtensionContainer { {
                SuccessfulNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-ExtIEs} } OPTIONAL,
            ...
        },
    unsuccessfulNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformation SEQUENCE (SIZE(0..maxNrOfMeasNCell-1)) OF
        SEQUENCE {
            uC-ID          UC-ID,
            iE-Extensions  ProtocolExtensionContainer { { UnsuccessfulNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-
                ExtIEs} } OPTIONAL,
            ...
        },
    iE-Extensions          ProtocolExtensionContainer { { SFNSFNMeasurementValueInformationItem-ExtIEs} } OPTIONAL,
    ...
}

SFNSFNMeasurementValueInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

SuccessfulNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

UnsuccessfulNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```
}

SFNSFNQuality ::= INTEGER (0..255)
-- Unit chip, Step 1/16 chip, Range 0.. 255/16 chip

SFNSFNTimeStampInformation ::= CHOICE {
    sFNSFNTimeStamp-FDD      SFN,
    sFNSFNTimeStamp-TDD      SFNSFNTimeStamp-TDD,
    ...
}

SFNSFNTimeStamp-TDD ::= SEQUENCE {
    sFN                      SFN,
    timeSlot                 TimeSlot,
    iE-Extensions            ProtocolExtensionContainer { { SFNSFNTimeStamp-ExtIEs} } OPTIONAL,
    ...
}

SFNSFNTimeStamp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

SFNSFNValue ::= CHOICE {
    sFNSFN-FDD              SFNSFN-FDD,
    sFNSFN-TDD              SFNSFN-TDD,
    ...
}

SID ::= INTEGER (0..maxNrOfPDUIndexes-1)

SIR-Error-Value          ::= INTEGER (0..125)

SIR-Error-Value-IncrDecrThres      ::= INTEGER (0..124)

SIR-Value                ::= INTEGER (0..63)
-- According to mapping in 25.215/25.225

SIR-Value-IncrDecrThres ::= INTEGER (0..62)

SecondaryCCPCH-SlotFormat      ::= INTEGER (0..17,...)
-- refer to 25.211

S-FieldLength                ::= ENUMERATED {
    v1,
    v2,
    ...
}
```

```
SpecialBurstScheduling ::= INTEGER (1..256)

SplitType ::= ENUMERATED {
    hard,
    logical
}

SpreadingFactor          ::= INTEGER (4| 8| 16| 32| 64| 128| 256)

S-RNTI                   ::= INTEGER (0..1048575)
-- From 0 to 2^20-1

SRB-Delay ::= INTEGER(0..7,...)

SSDT-CellID ::= ENUMERATED {
    a,
    b,
    c,
    d,
    e,
    f,
    g,
    h
}

SSDT-CellID-Length ::= ENUMERATED {
    short,
    medium,
    long
}

SSDT-Indication ::= ENUMERATED {
    sSDT-active-in-the-UE,
    sSDT-not-active-in-the-UE
}

SSDT-SupportIndicator ::= ENUMERATED {
    sSDT-supported,
    sSDT-not-supported
}

STTD-Indicator ::= ENUMERATED {
    active,
    inactive
}

STTD-SupportIndicator ::= ENUMERATED {
    sTTD-Supported,
    sTTD-not-Supported
}
```

```
SyncCase ::= INTEGER (1..2,...)

SynchronisationConfiguration ::= SEQUENCE {
    n-INSYNC-IND          INTEGER (1..256),
    n-OUTSYNC-IND        INTEGER (1..256),
    t-RLFFAILURE         INTEGER (0..255),
    -- Unit seconds, Range 0s .. 25.5s, Step 0.1s
    iE-Extensions        ProtocolExtensionContainer { { SynchronisationConfiguration-ExtIEs} } OPTIONAL,
    ...
}

SynchronisationConfiguration-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- T

TDD-ChannelisationCode ::= ENUMERATED {
    chCode1div1,
    chCode2div1,
    chCode2div2,
    chCode4div1,
    chCode4div2,
    chCode4div3,
    chCode4div4,
    chCode8div1,
    chCode8div2,
    chCode8div3,
    chCode8div4,
    chCode8div5,
    chCode8div6,
    chCode8div7,
    chCode8div8,
    chCode16div1,
    chCode16div2,
    chCode16div3,
    chCode16div4,
    chCode16div5,
    chCode16div6,
    chCode16div7,
    chCode16div8,
    chCode16div9,
    chCode16div10,
    chCode16div11,
    chCode16div12,
    chCode16div13,
    chCode16div14,
    chCode16div15,
    chCode16div16,
    ...
}
```

```

}

TDD-ChannelisationCodeLCR ::= SEQUENCE {
    tDD-ChannelisationCode      TDD-ChannelisationCode,
    modulation                   Modulation, -- Modulation options for 1.28Mcps TDD in contrast to 3.84Mcps TDD
    ...
}

TDD-DCHs-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF TDD-DCHs-to-ModifyItem

TDD-DCHs-to-ModifyItem ::= SEQUENCE {
    ul-FP-Mode                   UL-FP-Mode    OPTIONAL,
    toAWS                        ToAWS        OPTIONAL,
    toAWE                         ToAWE       OPTIONAL,
    transportBearerRequestIndicator TransportBearerRequestIndicator,
    dCH-SpecificInformationList  TDD-DCHs-to-ModifySpecificInformationList,
    iE-Extensions                ProtocolExtensionContainer { {TDD-DCHs-to-ModifyItem-ExtIEs} } OPTIONAL,
    ...
}

TDD-DCHs-to-ModifyItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

TDD-DCHs-to-ModifySpecificInformationList ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF TDD-DCHs-to-ModifySpecificItem

TDD-DCHs-to-ModifySpecificItem ::= SEQUENCE {
    dCH-ID                       DCH-ID,
    ul-CCTrCH-ID                 CCTrCH-ID    OPTIONAL,
    dl-CCTrCH-ID                 CCTrCH-ID    OPTIONAL,
    ul-TransportformatSet        TransportFormatSet OPTIONAL,
    dl-TransportformatSet        TransportFormatSet OPTIONAL,
    allocationRetentionPriority   AllocationRetentionPriority OPTIONAL,
    frameHandlingPriority         FrameHandlingPriority OPTIONAL,
    iE-Extensions                ProtocolExtensionContainer { {TDD-DCHs-to-ModifySpecificItem-ExtIEs} } OPTIONAL,
    ...
}

TDD-DCHs-to-ModifySpecificItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-Guaranteed-Rate-Information      CRITICALITY ignore EXTENSION Guaranteed-Rate-Information      PRESENCE optional }|
    { ID id-TrafficClass                    CRITICALITY ignore EXTENSION TrafficClass          PRESENCE optional},
    ...
}

TDD-DL-Code-Information ::= SEQUENCE ( SIZE (1..maxNrOfDPCHs)) OF TDD-DL-Code-InformationItem

TDD-DL-Code-InformationItem ::= SEQUENCE {
    dPCH-ID                      DPCH-ID,
    tDD-ChannelisationCode        TDD-ChannelisationCode,
    iE-Extensions                 ProtocolExtensionContainer { {TDD-DL-Code-InformationItem-ExtIEs} } OPTIONAL,
    ...
}

```

```

}

TDD-DL-Code-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

TDD-DL-Code-LCR-Information ::= SEQUENCE (SIZE (1..maxNrOfDPCHsLCR)) OF TDD-DL-Code-LCR-InformationItem

TDD-DL-Code-LCR-InformationItem ::= SEQUENCE {
  dPCH-ID                DPCH-ID,
  tdd-ChannelisationCodeLCR  TDD-ChannelisationCodeLCR,
  iE-Extensions          ProtocolExtensionContainer { { TDD-DL-Code-LCR-InformationItem-ExtIEs } } OPTIONAL,
  ...
}

TDD-DL-Code-LCR-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

TDD-DPCHOffset ::= CHOICE {
  initialOffset      INTEGER (0..255),
  noinitialOffset    INTEGER (0..63)
}

TDD-PhysicalChannelOffset ::= INTEGER (0..63)

TDD-TPC-DownlinkStepSize ::= ENUMERATED {
  step-size1,
  step-size2,
  step-size3,
  ...
}

TDD-UL-Code-Information ::= SEQUENCE ( SIZE (1..maxNrOfDPCHs)) OF TDD-UL-Code-InformationItem

TDD-UL-Code-InformationItem ::= SEQUENCE {
  dPCH-ID                DPCH-ID,
  tDD-ChannelisationCode  TDD-ChannelisationCode,
  iE-Extensions          ProtocolExtensionContainer { {TDD-UL-Code-InformationItem-ExtIEs} } OPTIONAL,
  ...
}

TDD-UL-Code-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

TDD-UL-Code-LCR-Information ::= SEQUENCE (SIZE (1..maxNrOfDPCHsLCR)) OF TDD-UL-Code-LCR-InformationItem

TDD-UL-Code-LCR-InformationItem ::= SEQUENCE {
  dPCH-ID                DPCH-ID,
  tdd-ChannelisationCodeLCR  TDD-ChannelisationCodeLCR,

```

```

    iE-Extensions          ProtocolExtensionContainer { { TDD-UL-Code-LCR-InformationItem-ExtIEs } } OPTIONAL,
    ...
}

TDD-UL-Code-LCR-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

TFCI-Coding ::= ENUMERATED {
    v4,
    v8,
    v16,
    v32,
    ...
}

TFCI-PC-SupportIndicator ::= ENUMERATED {
    tFCI-PC-model-supported,
    tFCI-PC-mode2-supported
}

TFCI-Presence ::= ENUMERATED {
    present,
    not-present
}

TFCI-SignallingMode ::= ENUMERATED {
    normal,
    split
}

TGD ::= INTEGER (0|15..269)
-- 0 = Undefined, only one transmission gap in the transmission gap pattern sequence

TGPRC ::= INTEGER (0..511)
-- 0 = infinity

TGPSID ::= INTEGER (1.. maxTGPS)

TGSN ::= INTEGER (0..14)

TimeSlot ::= INTEGER (0..14)

TimeSlotLCR ::= INTEGER (0..6)

TimingAdvanceApplied ::= ENUMERATED {
    yes,
    no
}

ToAWE ::= INTEGER (0..2559)
```



```

ToAWS ::= INTEGER (0..1279)

TrafficClass ::= ENUMERATED {
    conversational,
    streaming,
    interactive,
    background,
    ...
}

Transmission-Gap-Pattern-Sequence-Information ::= SEQUENCE (SIZE (1..maxTGPS)) OF
SEQUENCE {
    tGPSID          TGPSID,
    tGSN           TGSN,
    tGL1           GapLength,
    tGL2           GapLength OPTIONAL,
    tGD            TGD,
    tGPL1          GapDuration,
    tGPL2          GapDuration OPTIONAL,
    uL-DL-mode     UL-DL-mode,
    downlink-Compressed-Mode-Method Downlink-Compressed-Mode-Method OPTIONAL,
    -- This IE shall be present if the value of the UL/DL mode IE is "DL only" or "UL/DL"
    uplink-Compressed-Mode-Method Uplink-Compressed-Mode-Method OPTIONAL,
    -- This IE shall be present if the value of the UL/DL mode IE is "UL only" or "UL/DL"
    dL-FrameType   DL-FrameType,
    delta-SIR1     DeltaSIR,
    delta-SIR-after1 DeltaSIR,
    delta-SIR2     DeltaSIR OPTIONAL,
    delta-SIR-after2 DeltaSIR OPTIONAL,
    iE-Extensions ProtocolExtensionContainer { {Transmission-Gap-Pattern-Sequence-Information-ExtIEs} } OPTIONAL,
    ...
}

Transmission-Gap-Pattern-Sequence-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Transmission-Gap-Pattern-Sequence-ScramblingCode-Information ::= ENUMERATED{
    code-change,
    nocode-change
}

Transmission-Gap-Pattern-Sequence-Status-List ::= SEQUENCE (SIZE (0..maxTGPS)) OF
SEQUENCE {
    tGPSID          TGPSID,
    tGPRC           TGPRC,
    tGCFN          CFN,
    iE-Extensions ProtocolExtensionContainer { { Transmission-Gap-Pattern-Sequence-Status-List-ExtIEs } } OPTIONAL,
    ...
}

```

```
Transmission-Gap-Pattern-Sequence-Status-List-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

TransmissionTimeIntervalDynamic ::= ENUMERATED {
    msec-10,
    msec-20,
    msec-40,
    msec-80,
    ...
}

TransmissionTimeIntervalSemiStatic ::= ENUMERATED {
    msec-10,
    msec-20,
    msec-40,
    msec-80,
    dynamic,
    ...
}

TransmitDiversityIndicator ::= ENUMERATED {
    active,
    inactive
}

Transmitted-Carrier-Power-Value ::= INTEGER(0..100)
-- according to mapping in [23] and [24]

Transmitted-Carrier-Power-Value-IncrDecrThres ::= INTEGER(0..100)
-- according to mapping in [23] and [24]

TUTRANGPS ::= SEQUENCE {
    ms-part    INTEGER (0..16383),
    ls-part    INTEGER (0..4294967295)
}

TUTRANGPSChangeLimit ::= INTEGER (1..256)
-- Unit chip, Step 1/16 chip, Range 1/16..16 chip

TUTRANGPSDriftRate ::= INTEGER (-50..50)
-- Unit chip/s, Step 1/256 chip/s, Range -50/256..+50/256 chip/s

TUTRANGPSDriftRateQuality ::= INTEGER (0..50)
-- Unit chip/s, Step 1/256 chip/s, Range 0..50/256 chip/s

TUTRANGPSAccuracyClass ::= ENUMERATED {
    accuracy-class-A,
    accuracy-class-B,
    accuracy-class-C,
}
```

```

}
...
TUTRANGPSMeasurementThresholdInformation ::= SEQUENCE {
    tUTRANGPSChangeLimit          TUTRANGPSChangeLimit          OPTIONAL,
    predictedTUTRANGPSDeviationLimit PredictedTUTRANGPSDeviationLimit OPTIONAL,
    iE-Extensions                  ProtocolExtensionContainer { { TUTRANGPSMeasurementThresholdInformation-ExtIEs} } OPTIONAL,
    ...
}

TUTRANGPSMeasurementThresholdInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

TUTRANGPSMeasurementValueInformation ::= SEQUENCE {
    tUTRANGPS                      TUTRANGPS,
    tUTRANGPSQuality                TUTRANGPSQuality,
    tUTRANGPSDriftRate              TUTRANGPSDriftRate,
    tUTRANGPSDriftRateQuality        TUTRANGPSDriftRateQuality,
    iEe-Extensions                  ProtocolExtensionContainer { { TUTRANGPSMeasurementValueInformationItem-ExtIEs} } OPTIONAL,
    ...
}

TUTRANGPSMeasurementValueInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

TUTRANGPSQuality ::= INTEGER (0..255)
-- Unit chip, Step 1/16 chip, Range 0.. 255/16 chip

TransportBearerID ::= INTEGER (0..4095)

TransportBearerRequestIndicator ::= ENUMERATED {
    bearer-requested,
    bearer-not-requested,
    ...
}

TransportBlockSize ::= INTEGER (0..5000)
-- Unit is bits

TransportFormatCombination-Beta ::= CHOICE {
    signalledGainFactors SEQUENCE {
        betaC          BetaCD,
        betaD          BetaCD,
        refTFCNumber   RefTFCNumber OPTIONAL,
        iE-Extensions  ProtocolExtensionContainer { { SignalledGainFactors-ExtIEs} } OPTIONAL,
        ...
    },

```

```

    refTFCNumber          RefTFCNumber,
    ...
}

SignalledGainFactors-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

TFCS ::= SEQUENCE {
    tFCSvalues          CHOICE {
        no-Split-in-TFCI          TFCs-TFCSList,
        split-in-TFCI            SEQUENCE {
            transportFormatCombination-DCH    TFCs-DCHList,
            signallingMethod                CHOICE {
                tFCI-Range                    TFCs-MappingOnDSCHList,
                explicit                      TFCs-DSCHList,
                ...
            },
            iE-Extensions                ProtocolExtensionContainer { { Split-in-TFCI-ExtIEs } } OPTIONAL,
            ...
        },
        ...
    },
    iE-Extensions          ProtocolExtensionContainer { { TFCS-ExtIEs } } OPTIONAL,
    ...
}

Split-in-TFCI-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

TFCS-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

TFCS-TFCSList ::= SEQUENCE (SIZE (1..maxNrOfTFCS)) OF
    SEQUENCE {
        cTFC                TFCs-CTFC,
        tFC-Beta            TransportFormatCombination-Beta    OPTIONAL,
        -- The IE shall be present if the TFCS concerns a UL DPCH [FDD - or PRACH channel in FDD]
        iE-Extensions          ProtocolExtensionContainer { { TFCS-TFCSList-ExtIEs } } OPTIONAL,
        ...
    }

TFCS-TFCSList-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

TFCS-CTFC ::= CHOICE {
    ctfc2bit                INTEGER (0..3),
    ctfc4bit                INTEGER (0..15),
}

```

```

ctfc6bit                INTEGER (0..63),
ctfc8bit                INTEGER (0..255),
ctfc12bit               INTEGER (0..4095),
ctfc16bit               INTEGER (0..65535),
ctfcmaxbit              INTEGER (0..maxCTFC)
}

TFCS-DCHList ::= SEQUENCE (SIZE (1..maxTFCI1Combs)) OF
  SEQUENCE {
    cTFC                TFCS-CTFC,
    iE-Extensions       ProtocolExtensionContainer { { TFCS-DCHList-ExtIEs} } OPTIONAL,
    ...
  }

TFCS-DCHList-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

TFCS-MappingOnDSCHList ::= SEQUENCE (SIZE (1..maxNoTFCIGroups)) OF
  SEQUENCE {
    maxTFCI-field2-Value TFCS-MaxTFCI-field2-Value,
    cTFC-DSCH            TFCS-CTFC,
    iE-Extensions        ProtocolExtensionContainer { { TFCS-MappingOnDSCHList-ExtIEs} } OPTIONAL,
    ...
  }

TFCS-MappingOnDSCHList-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

TFCS-MaxTFCI-field2-Value ::= INTEGER (1..maxTFCI2Combs-1)

TFCS-DSCHList ::= SEQUENCE (SIZE (1..maxTFCI2Combs)) OF
  SEQUENCE {
    cTFC-DSCH           TFCS-CTFC,
    iE-Extensions       ProtocolExtensionContainer { { TFCS-DSCHList-ExtIEs} } OPTIONAL,
    ...
  }

TFCS-DSCHList-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

TransportFormatSet ::= SEQUENCE {
  dynamicParts          TransportFormatSet-DynamicPartList,
  semi-staticPart       TransportFormatSet-Semi-staticPart,
  iE-Extensions         ProtocolExtensionContainer { {TransportFormatSet-ExtIEs} } OPTIONAL,
  ...
}

TransportFormatSet-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {

```

```

}
...
TransportFormatSet-DynamicPartList ::= SEQUENCE (SIZE (1..maxNrOfTFs)) OF
SEQUENCE {
  nrOfTransportBlocks      NrOfTransportBlocks,
  transportBlockSize      TransportBlockSize OPTIONAL
  -- This IE shall be present if nrOfTransportBlocks is greater than 0 --,
  mode                    TransportFormatSet-ModeDP,
  iE-Extensions          ProtocolExtensionContainer { {TransportFormatSet-DynamicPartList-ExtIEs} } OPTIONAL,
  ...
}

TransportFormatSet-DynamicPartList-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

TransportFormatSet-ModeDP ::= CHOICE {
  tdd                    TDD-TransportFormatSet-ModeDP,
  notApplicable          NULL,
  ...
}

TDD-TransportFormatSet-ModeDP ::= SEQUENCE {
  transmissionTimeIntervalInformation TransmissionTimeIntervalInformation OPTIONAL,
  -- This IE shall be present if the "Transmission Time Interval" of the "Semi-static Transport Format Information" is "dynamic". Otherwise it is
  absent.
  iE-Extensions          ProtocolExtensionContainer { {TDD-TransportFormatSet-ModeDP-ExtIEs} } OPTIONAL,
  ...
}

TDD-TransportFormatSet-ModeDP-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

TransmissionTimeIntervalInformation ::= SEQUENCE (SIZE (1..maxTTI-Count)) OF
SEQUENCE {
  transmissionTimeInterval TransmissionTimeIntervalDynamic,
  iE-Extensions          ProtocolExtensionContainer { {TransmissionTimeIntervalInformation-ExtIEs} } OPTIONAL,
  ...
}

TransmissionTimeIntervalInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

Transmitted-Code-Power-Value ::= INTEGER (0..127)
-- According to mapping in 25.215/25.225

Transmitted-Code-Power-Value-IncrDecrThres ::= INTEGER (0..112,...)

```

```
TransportFormatManagement ::= ENUMERATED {
    cell-based,
    ue-based,
    ...
}

TransportFormatSet-Semi-staticPart ::= SEQUENCE {
    transmissionTime      TransmissionTimeIntervalSemiStatic,
    channelCoding         ChannelCodingType,
    codingRate            CodingRate OPTIONAL
    -- This IE shall be present if channelCoding is 'convolutional' or 'turbo' --,
    rateMatchingAttribute RateMatchingAttribute,
    cRC-Size              CRC-Size,
    mode                  TransportFormatSet-ModeSSP,
    iE-Extensions        ProtocolExtensionContainer { {TransportFormatSet-Semi-staticPart-ExtIEs} } OPTIONAL,
    ...
}

TransportFormatSet-Semi-staticPart-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

TransportFormatSet-ModeSSP ::= CHOICE {
    tdd                SecondInterleavingMode,
    notApplicable      NULL,
    ...
}

TransportLayerAddress ::= BIT STRING (SIZE(1..160, ...))

TrCH-SrcStatisticsDescr ::= ENUMERATED {
    speech,
    rRC,
    unknown,
    ...
}

TSTD-Indicator ::= ENUMERATED {
    active,
    inactive
}

TSTD-Support-Indicator ::= ENUMERATED {
    tSTD-supported,
    tSTD-not-supported
}

TxDiversityIndicator ::= ENUMERATED {
    true,
    false
}
```

```

TypeOfError ::= ENUMERATED {
    not-understood,
    missing,
    ...
}

-- U

UARFCN          ::= INTEGER (0..16383,...)
-- Corresponds to: 0.0Hz..3276.6Mhz. See 25.101, 25.105

UDRE ::= ENUMERATED {
    lessThan1,
    between1-and-4,
    between4-and-8,
    over8,
    ...
}

UE-Capabilities-InfoFDD ::= SEQUENCE {
    hSDSCH-TrCH-Bits-Per-HSDSCH-TTI          ENUMERATED {v7300, v14600, v20456, v28800,...},
    hSDSCH-Multi-Code-Capability            ENUMERATED {v5, v10, v15,...},
    min-Inter-TTI-Interval                  INTEGER (1..3,...),
    mAChs-Reordering-Buffer-Size            INTEGER (1..300,...),
    iE-Extensions                           ProtocolExtensionContainer { { UE-Capabilities-InfoFDD-ExtIEs } } OPTIONAL,
    ...
}

UE-Capabilities-InfoFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

UE-Capabilities-InfoTDD ::= SEQUENCE {
    hSDSCH-TrCH-Bits-Per-HSDSCH-TTI          ENUMERATED {v7040, v10228, v14080,...},
    hSDSCH-Multi-Code-Capability            ENUMERATED {v8, v12, v16,...},
    mAChs-Reordering-Buffer-Size            INTEGER (1..300,...),
    iE-Extensions                           ProtocolExtensionContainer { { UE-Capabilities-InfoTDD-ExtIEs } } OPTIONAL,
    ...
}

UE-Capabilities-InfoTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-DL-mode ::= ENUMERATED {
    ul-only,
    dl-only,
    both-ul-and-dl
}

```


UL-Timeslot-Information ::= SEQUENCE (SIZE (1..maxNrOfTS)) OF UL-Timeslot-InformationItem

```

UL-Timeslot-InformationItem ::= SEQUENCE {
    timeSlot                TimeSlot,
    midambleShiftAndBurstType  MidambleShiftAndBurstType,
    tFCI-Presence            TFCI-Presence,
    uL-Code-Information       TDD-UL-Code-Information,
    iE-Extensions            ProtocolExtensionContainer { {UL-Timeslot-InformationItem-ExtIEs} } OPTIONAL,
    ...
}

```

```

UL-Timeslot-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

UL-TimeslotLCR-Information ::= SEQUENCE (SIZE (1..maxNrOfULTsLCR)) OF UL-TimeslotLCR-InformationItem

```

UL-TimeslotLCR-InformationItem ::= SEQUENCE {
    timeSlotLCR                TimeSlotLCR,
    midambleShiftLCR          MidambleShiftLCR,
    tFCI-Presence              TFCI-Presence,
    uL-Code-LCR-InformationList TDD-UL-Code-LCR-Information,
    iE-Extensions              ProtocolExtensionContainer { { UL-TimeslotLCR-InformationItem-ExtIEs} } OPTIONAL,
    ...
}

```

```

UL-TimeslotLCR-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

UL-TimeSlot-ISCP-Info ::= SEQUENCE (SIZE (1..maxNrOfULTs)) OF UL-TimeSlot-ISCP-InfoItem

```

UL-TimeSlot-ISCP-InfoItem ::= SEQUENCE {
    timeSlot                TimeSlot,
    uL-TimeslotISCP         UL-TimeslotISCP,
    iE-Extensions            ProtocolExtensionContainer { { UL-TimeSlot-ISCP-InfoItem-ExtIEs} } OPTIONAL,
    ...
}

```

```

UL-TimeSlot-ISCP-InfoItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

UL-TimeSlot-ISCP-LCR-Info ::= SEQUENCE (SIZE (1..maxNrOfULTsLCR)) OF UL-TimeSlot-ISCP-LCR-InfoItem

```

UL-TimeSlot-ISCP-LCR-InfoItem ::= SEQUENCE {
    timeSlotLCR                TimeSlotLCR,
    iSCP                        UL-Timeslot-ISCP-Value,
    iE-Extensions              ProtocolExtensionContainer { { UL-TimeSlot-ISCP-LCR-InfoItem-ExtIEs} } OPTIONAL,
    ...
}

```

```

UL-TimeSlot-ISCP-LCR-InfoItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Timeslot-ISCP-Value ::= UL-TimeslotISCP

UL-Timeslot-ISCP-Value-IncrDecrThres ::= INTEGER(0..126)
-- Unit dB. Step 0.5dB
-- e.g. Value 100 means 50dB

Uplink-Compressed-Mode-Method ::= ENUMERATED {
    sFdiv2,
    higher-layer-scheduling,
    ...
}

UL-SIR ::= INTEGER (-82..173)
-- The UL-SIR gives the UL-SIR in number of 0.1 dB steps.
-- E.g. Value 173 means 17.3 dB
-- Unit dB. Step 0.1 dB.

UC-ID ::= SEQUENCE {
    rNC-ID          RNC-ID,
    c-ID            C-ID,
    iE-Extensions  ProtocolExtensionContainer { {UC-ID-ExtIEs} } OPTIONAL,
    ...
}

UC-ID-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-DPCCH-SlotFormat ::= INTEGER (0..5,...)

UL-FP-Mode ::= ENUMERATED {
    normal,
    silent,
    ...
}

UL-PhysCH-SF-Variation ::= ENUMERATED {
    sf-variation-supported,
    sf-variation-not-supported
}

UL-ScramblingCode ::= SEQUENCE {
    ul-ScramblingCodeNumber    UL-ScramblingCodeNumber,
    ul-ScramblingCodeLength    UL-ScramblingCodeLength,
    iE-Extensions              ProtocolExtensionContainer { {UL-ScramblingCode-ExtIEs} } OPTIONAL
}

```

```

UL-ScramblingCode-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-ScramblingCodeLength ::= ENUMERATED {
    short,
    long
}

UL-ScramblingCodeNumber ::= INTEGER (0..16777215)

UL-TimeslotISCP ::= INTEGER (0..127)
-- According to mapping in [14]

URA-ID ::= INTEGER (0..65535)

URA-Information ::= SEQUENCE {
    uRA-ID URA-ID,
    multipleURAsIndicator MultipleURAsIndicator,
    rNCsWithCellsInTheAccessedURA-List RNCsWithCellsInTheAccessedURA-List OPTIONAL,
    iE-Extensions ProtocolExtensionContainer { {URA-Information-ExtIEs} } OPTIONAL,
    ...
}

URA-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RNCsWithCellsInTheAccessedURA-List ::= SEQUENCE (SIZE (1..maxRNCinURA-1)) OF RNCsWithCellsInTheAccessedURA-Item

RNCsWithCellsInTheAccessedURA-Item ::= SEQUENCE {
    rNC-ID RNC-ID,
    iE-Extensions ProtocolExtensionContainer { {RNCsWithCellsInTheAccessedURA-Item-ExtIEs} } OPTIONAL,
    ...
}

RNCsWithCellsInTheAccessedURA-Item-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

USCH-ID ::= INTEGER (0..255)

USCH-Information ::= SEQUENCE (SIZE (1..maxNoOfUSCHs)) OF USCH-InformationItem

USCH-InformationItem ::= SEQUENCE {
    uSCH-ID USCH-ID,
    ul-CCTrCH-ID CCTrCH-ID,
    trChSourceStatisticsDescriptor TrCh-SrcStatisticsDescr,
    transportFormatSet TransportFormatSet,
    allocationRetentionPriority AllocationRetentionPriority,

```

```

    schedulingPriorityIndicator      SchedulingPriorityIndicator,
    rb-Info                         RB-Info,
    iE-Extensions                   ProtocolExtensionContainer { {USCH-InformationItem-ExtIEs} } OPTIONAL,
    ...
}

USCH-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-TrafficClass          CRITICALITY ignore  EXTENSION TrafficClass    PRESENCE mandatory } |
  { ID id-BindingID            CRITICALITY ignore  EXTENSION BindingID    PRESENCE optional } |
  -- Shall be ignored if bearer establishment with ALCAP.
  { ID id-TransportLayerAddress CRITICALITY ignore  EXTENSION TransportLayerAddress PRESENCE optional },
  -- Shall be ignored if bearer establishment with ALCAP.
  ...
}

-- V
-- W
-- X
-- Y
-- Z

END

```

9.3.5 Common Definitions

```

-- *****
--
-- Common definitions
--
-- *****

RNSAP-CommonDataTypes {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) rnsap (1) version1 (1) rnsap-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)

ProcedureID ::= SEQUENCE {
    procedureCode  ProcedureCode,
    ddMode        ENUMERATED { tdd, fdd, common, ... }
}

ProtocolIE-ID   ::= INTEGER (0..maxProtocolIEs)

TransactionID   ::= CHOICE {
    shortTransActionId  INTEGER (0..127),
    longTransActionId   INTEGER (0..32767)
}

TriggeringMessage ::= ENUMERATED { initiating-message, successful-outcome, unsuccessful-outcome, outcome }

END

```

9.3.6 Constant Definitions

```

-- *****
--
-- Constant definitions
--
-- *****

RNSAP-Constants {
    itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
    umts-Access (20) modules (3) rnsap (1) version1 (1) rnsap-Constants (4) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

IMPORTS
    ProcedureCode,

```

```

ProtocolIE-ID
FROM RNSAP-CommonDataTypes;

-- *****
--
-- Elementary Procedures
--
-- *****

id-commonTransportChannelResourcesInitialisation      ProcedureCode ::= 0
id-commonTransportChannelResourcesRelease             ProcedureCode ::= 1
id-compressedModeCommand                             ProcedureCode ::= 2
id-downlinkPowerControl                              ProcedureCode ::= 3
id-downlinkPowerTimeslotControl                      ProcedureCode ::= 4
id-downlinkSignallingTransfer                        ProcedureCode ::= 5
id-errorIndication                                  ProcedureCode ::= 6
id-dedicatedMeasurementFailure                       ProcedureCode ::= 7
id-dedicatedMeasurementInitiation                   ProcedureCode ::= 8
id-dedicatedMeasurementReporting                    ProcedureCode ::= 9
id-dedicatedMeasurementTermination                  ProcedureCode ::= 10
id-paging                                             ProcedureCode ::= 11
id-physicalChannelReconfiguration                    ProcedureCode ::= 12
id-privateMessage                                    ProcedureCode ::= 13
id-radioLinkAddition                                ProcedureCode ::= 14
id-radioLinkCongestion                              ProcedureCode ::= 34
id-radioLinkDeletion                                ProcedureCode ::= 15
id-radioLinkFailure                                  ProcedureCode ::= 16
id-radioLinkPreemption                              ProcedureCode ::= 17
id-radioLinkRestoration                             ProcedureCode ::= 18
id-radioLinkSetup                                    ProcedureCode ::= 19
id-relocationCommit                                  ProcedureCode ::= 20
id-synchronisedRadioLinkReconfigurationCancellation  ProcedureCode ::= 21
id-synchronisedRadioLinkReconfigurationCommit        ProcedureCode ::= 22
id-synchronisedRadioLinkReconfigurationPreparation   ProcedureCode ::= 23
id-unSynchronisedRadioLinkReconfiguration           ProcedureCode ::= 24
id-uplinkSignallingTransfer                          ProcedureCode ::= 25
id-commonMeasurementFailure                          ProcedureCode ::= 26
id-commonMeasurementInitiation                       ProcedureCode ::= 27
id-commonMeasurementReporting                        ProcedureCode ::= 28
id-commonMeasurementTermination                     ProcedureCode ::= 29
id-informationExchangeFailure                        ProcedureCode ::= 30
id-informationExchangeInitiation                    ProcedureCode ::= 31
id-informationReporting                              ProcedureCode ::= 32
id-informationExchangeTermination                   ProcedureCode ::= 33
id-reset                                             ProcedureCode ::= 35
id-radioLinkActivation                              ProcedureCode ::= 36

-- *****
--
-- Lists
--

```

```

-- *****
maxCodeNumComp-1          INTEGER ::= 255
maxRateMatching           INTEGER ::= 256
maxNoCodeGroups           INTEGER ::= 256
maxNoOfDSCHs             INTEGER ::= 10
maxNoOfDSCHsLCR          INTEGER ::= 10
maxNoOfRB                 INTEGER ::= 32
maxNoOfUSCHs             INTEGER ::= 10
maxNoOfUSCHsLCR          INTEGER ::= 10
maxNoTFCIGroups          INTEGER ::= 256
maxNrOfTFCs              INTEGER ::= 1024
maxNrOfTFs               INTEGER ::= 32
maxNrOfCCTrCHs           INTEGER ::= 16
maxNrOfCCTrCHsLCR        INTEGER ::= 16
maxNrOfDCHs              INTEGER ::= 128
maxNrOfDL-Codes          INTEGER ::= 8
maxNrOfDPCHs             INTEGER ::= 240
maxNrOfDPCHsLCR          INTEGER ::= 240
maxNrOfErrors            INTEGER ::= 256
maxNrOfMACcshSDU-Length  INTEGER ::= 16
maxNrOfPoints            INTEGER ::= 15
maxNrOfRLs               INTEGER ::= 16
maxNrOfRLSets            INTEGER ::= maxNrOfRLs
maxNrOfRLs-1             INTEGER ::= 15 -- maxNrOfRLs - 1
maxNrOfRLs-2             INTEGER ::= 14 -- maxNrOfRLs - 2
maxNrOfULTs              INTEGER ::= 15
maxNrOfULTsLCR           INTEGER ::= 6
maxNrOfDLTs             INTEGER ::= 15
maxNrOfDLTsLCR           INTEGER ::= 6
maxRNCinURA-1          INTEGER ::= 15
maxTTI-Count             INTEGER ::= 4
maxCTFC                  INTEGER ::= 16777215
maxNrOfNeighbouringRNCs  INTEGER ::= 10
maxNrOfFDDNeighboursPerRNC INTEGER ::= 256
maxNrOfGSMNeighboursPerRNC INTEGER ::= 256
maxNrOfTDDNeighboursPerRNC INTEGER ::= 256
maxNrOfFACHs             INTEGER ::= 8
maxNrOfLCRTDDNeighboursPerRNC INTEGER ::= 256
maxFACHCountPlus1       INTEGER ::= 10
maxIBSEG                 INTEGER ::= 16
maxNrOfSCCPCHs          INTEGER ::= 8
maxTFCI1Combs            INTEGER ::= 512
maxTFCI2Combs            INTEGER ::= 1024
maxTFCI2Combs-1         INTEGER ::= 1023
maxTGPS                  INTEGER ::= 6
maxNrOfTS                INTEGER ::= 15
maxNrOfLevels            INTEGER ::= 256
maxNrOfTsLCR            INTEGER ::= 6
maxNoSat                 INTEGER ::= 16
maxNoGPSTypes           INTEGER ::= 8

```

```

maxNrOfMeasNCell                INTEGER ::= 96
maxNrOfMeasNCell-1              INTEGER ::= 95 -- maxNrOfMeasNCell - 1
maxResetContext                 INTEGER ::= 250
maxNrOfHARQProc                 INTEGER ::= 8
maxNrOfHSSCCHCodes             INTEGER ::= 128
maxNrOfMACdFlows               INTEGER ::= 8
maxNrOfMACdFlows-1             INTEGER ::= 7 -- maxNrOfMACdFlows - 1
maxNrOfPDUIndexes              INTEGER ::= 8
maxNrOfPDUIndexes-1           INTEGER ::= 7 -- maxNrOfPDUIndexes - 1
maxNrOfPrioQueues              INTEGER ::= 8
maxNrOfPrioQueues-1           INTEGER ::= 7 -- maxNrOfPrioQueues - 1

-- *****
--
-- IEs
--
-- *****

id-AllowedQueuingTime           ProtocolIE-ID ::= 4
id-AllowedRate-Information      ProtocolIE-ID ::= 42
id-AntennaColocationIndicator  ProtocolIE-ID ::= 309
id-BindingID                   ProtocolIE-ID ::= 5
id-C-ID                        ProtocolIE-ID ::= 6
id-C-RNTI                      ProtocolIE-ID ::= 7
id-Cell-Capacity-Class-Value   ProtocolIE-ID ::= 303
id-Cell-Capacity-Class-Value-ThresholdInformation ProtocolIE-ID ::= 304
id-CFN                         ProtocolIE-ID ::= 8
id-CN-CS-DomainIdentifier      ProtocolIE-ID ::= 9
id-CN-PS-DomainIdentifier      ProtocolIE-ID ::= 10
id-Cause                       ProtocolIE-ID ::= 11
id-CoverageIndicator           ProtocolIE-ID ::= 310
id-CriticalityDiagnostics      ProtocolIE-ID ::= 20
id-ContextInfoItem-Reset      ProtocolIE-ID ::= 211
id-D-RNTI                     ProtocolIE-ID ::= 21
id-D-RNTI-ReleaseIndication    ProtocolIE-ID ::= 22
id-DCHs-to-Add-FDD            ProtocolIE-ID ::= 26
id-DCHs-to-Add-TDD            ProtocolIE-ID ::= 27
id-DCH-DeleteList-RL-ReconfPrepFDD ProtocolIE-ID ::= 30
id-DCH-DeleteList-RL-ReconfPrepTDD ProtocolIE-ID ::= 31
id-DCH-DeleteList-RL-ReconfRqstFDD ProtocolIE-ID ::= 32
id-DCH-DeleteList-RL-ReconfRqstTDD ProtocolIE-ID ::= 33
id-DCH-FDD-Information        ProtocolIE-ID ::= 34
id-DCH-TDD-Information        ProtocolIE-ID ::= 35
id-FDD-DCHs-to-Modify         ProtocolIE-ID ::= 39
id-TDD-DCHs-to-Modify         ProtocolIE-ID ::= 40
id-DCH-InformationResponse    ProtocolIE-ID ::= 43
id-DCH-Rate-InformationItem-RL-CongestInd ProtocolIE-ID ::= 38
id-DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD ProtocolIE-ID ::= 44
id-DL-CCTrCH-InformationListIE-RL-ReconfReadyTDD ProtocolIE-ID ::= 45
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD ProtocolIE-ID ::= 46
id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD ProtocolIE-ID ::= 47

```


id-DL-CCTrCH-InformationListIE-PhyChReconfRqstTDD	ProtocolIE-ID ::= 48
id-DL-CCTrCH-InformationListIE-RL-AdditionRspTDD	ProtocolIE-ID ::= 49
id-DL-CCTrCH-InformationListIE-RL-SetupRspTDD	ProtocolIE-ID ::= 50
id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 51
id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 52
id-DL-CCTrCH-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 53
id-FDD-DL-CodeInformation	ProtocolIE-ID ::= 54
id-DL-DPCH-Information-RL-ReconfPrepFDD	ProtocolIE-ID ::= 59
id-DL-DPCH-Information-RL-SetupRqstFDD	ProtocolIE-ID ::= 60
id-DL-DPCH-Information-RL-ReconfRqstFDD	ProtocolIE-ID ::= 61
id-DL-DPCH-InformationItem-PhyChReconfRqstTDD	ProtocolIE-ID ::= 62
id-DL-DPCH-InformationItem-RL-AdditionRspTDD	ProtocolIE-ID ::= 63
id-DL-DPCH-InformationItem-RL-SetupRspTDD	ProtocolIE-ID ::= 64
id-DL-DPCH-TimingAdjustment	ProtocolIE-ID ::= 278
id-DLReferencePower	ProtocolIE-ID ::= 67
id-DLReferencePowerList-DL-PC-Rqst	ProtocolIE-ID ::= 68
id-DL-ReferencePowerInformation-DL-PC-Rqst	ProtocolIE-ID ::= 69
id-DPC-Mode	ProtocolIE-ID ::= 12
id-DRXCycleLengthCoefficient	ProtocolIE-ID ::= 70
id-DedicatedMeasurementObjectType-DM-Rprt	ProtocolIE-ID ::= 71
id-DedicatedMeasurementObjectType-DM-Rqst	ProtocolIE-ID ::= 72
id-DedicatedMeasurementObjectType-DM-Rsp	ProtocolIE-ID ::= 73
id-DedicatedMeasurementType	ProtocolIE-ID ::= 74
id-FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspFDD	ProtocolIE-ID ::= 82
id-FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspTDD	ProtocolIE-ID ::= 83
id-Guaranteed-Rate-Information	ProtocolIE-ID ::= 41
id-IMSI	ProtocolIE-ID ::= 84
id-HCS-Prio	ProtocolIE-ID ::= 311
id-L3-Information	ProtocolIE-ID ::= 85
id-AdjustmentPeriod	ProtocolIE-ID ::= 90
id-MaxAdjustmentStep	ProtocolIE-ID ::= 91
id-MeasurementFilterCoefficient	ProtocolIE-ID ::= 92
id-MessageStructure	ProtocolIE-ID ::= 57
id-MeasurementID	ProtocolIE-ID ::= 93
id-Neighbouring-GSM-CellInformation	ProtocolIE-ID ::= 13
id-Neighbouring-UMTS-CellInformationItem	ProtocolIE-ID ::= 95
id-NRT-Load-Information-Value	ProtocolIE-ID ::= 305
id-NRT-Load-Information-Value-IncrDecrThres	ProtocolIE-ID ::= 306
id-PagingArea-PagingRqst	ProtocolIE-ID ::= 102
id-FACH-FlowControlInformation	ProtocolIE-ID ::= 103
id-Permanent-NAS-UE-Identity	ProtocolIE-ID ::= 17
id-PowerAdjustmentType	ProtocolIE-ID ::= 107
id-RANAP-RelocationInformation	ProtocolIE-ID ::= 109
id-RL-Information-PhyChReconfRqstFDD	ProtocolIE-ID ::= 110
id-RL-Information-PhyChReconfRqstTDD	ProtocolIE-ID ::= 111
id-RL-Information-RL-AdditionRqstFDD	ProtocolIE-ID ::= 112
id-RL-Information-RL-AdditionRqstTDD	ProtocolIE-ID ::= 113
id-RL-Information-RL-DeletionRqst	ProtocolIE-ID ::= 114
id-RL-Information-RL-FailureInd	ProtocolIE-ID ::= 115
id-RL-Information-RL-ReconfPrepFDD	ProtocolIE-ID ::= 116
id-RL-Information-RL-RestoreInd	ProtocolIE-ID ::= 117

id-RL-Information-RL-SetupRqstFDD	ProtocolIE-ID ::= 118
id-RL-Information-RL-SetupRqstTDD	ProtocolIE-ID ::= 119
id-RL-InformationItem-RL-CongestInd	ProtocolIE-ID ::= 55
id-RL-InformationItem-DM-Rprt	ProtocolIE-ID ::= 120
id-RL-InformationItem-DM-Rqst	ProtocolIE-ID ::= 121
id-RL-InformationItem-DM-Rsp	ProtocolIE-ID ::= 122
id-RL-InformationItem-RL-PreemptRequiredInd	ProtocolIE-ID ::= 2
id-RL-InformationItem-RL-SetupRqstFDD	ProtocolIE-ID ::= 123
id-RL-InformationList-RL-CongestInd	ProtocolIE-ID ::= 56
id-RL-InformationList-RL-AdditionRqstFDD	ProtocolIE-ID ::= 124
id-RL-InformationList-RL-DeletionRqst	ProtocolIE-ID ::= 125
id-RL-InformationList-RL-PreemptRequiredInd	ProtocolIE-ID ::= 1
id-RL-InformationList-RL-ReconfPrepFDD	ProtocolIE-ID ::= 126
id-RL-InformationResponse-RL-AdditionRspTDD	ProtocolIE-ID ::= 127
id-RL-InformationResponse-RL-ReconfReadyTDD	ProtocolIE-ID ::= 128
id-RL-InformationResponse-RL-SetupRspTDD	ProtocolIE-ID ::= 129
id-RL-InformationResponseItem-RL-AdditionRspFDD	ProtocolIE-ID ::= 130
id-RL-InformationResponseItem-RL-ReconfReadyFDD	ProtocolIE-ID ::= 131
id-RL-InformationResponseItem-RL-ReconfRspFDD	ProtocolIE-ID ::= 132
id-RL-InformationResponseItem-RL-SetupRspFDD	ProtocolIE-ID ::= 133
id-RL-InformationResponseList-RL-AdditionRspFDD	ProtocolIE-ID ::= 134
id-RL-InformationResponseList-RL-ReconfReadyFDD	ProtocolIE-ID ::= 135
id-RL-InformationResponseList-RL-ReconfRspFDD	ProtocolIE-ID ::= 136
id-RL-InformationResponseList-RL-ReconfRspTDD	ProtocolIE-ID ::= 28
id-RL-InformationResponseList-RL-SetupRspFDD	ProtocolIE-ID ::= 137
id-RL-ReconfigurationFailure-RL-ReconfFail	ProtocolIE-ID ::= 141
id-RL-Set-InformationItem-DM-Rprt	ProtocolIE-ID ::= 143
id-RL-Set-InformationItem-DM-Rqst	ProtocolIE-ID ::= 144
id-RL-Set-InformationItem-DM-Rsp	ProtocolIE-ID ::= 145
id-RL-Set-Information-RL-FailureInd	ProtocolIE-ID ::= 146
id-RL-Set-Information-RL-RestoreInd	ProtocolIE-ID ::= 147
id-ReportCharacteristics	ProtocolIE-ID ::= 152
id-Reporting-Object-RL-FailureInd	ProtocolIE-ID ::= 153
id-Reporting-Object-RL-RestoreInd	ProtocolIE-ID ::= 154
id-RT-Load-Value	ProtocolIE-ID ::= 307
id-RT-Load-Value-IncrDecrThres	ProtocolIE-ID ::= 308
id-S-RNTI	ProtocolIE-ID ::= 155
id-ResetIndicator	ProtocolIE-ID ::= 244
id-RNC-ID	ProtocolIE-ID ::= 245
id-SAI	ProtocolIE-ID ::= 156
id-SRNC-ID	ProtocolIE-ID ::= 157
id-SuccessfulRL-InformationResponse-RL-AdditionFailureFDD	ProtocolIE-ID ::= 159
id-SuccessfulRL-InformationResponse-RL-SetupFailureFDD	ProtocolIE-ID ::= 160
id-TransportBearerID	ProtocolIE-ID ::= 163
id-TransportBearerRequestIndicator	ProtocolIE-ID ::= 164
id-TransportLayerAddress	ProtocolIE-ID ::= 165
id-TypeOfError	ProtocolIE-ID ::= 140
id-UC-ID	ProtocolIE-ID ::= 166
id-UL-CCTrCH-AddInformation-RL-ReconfPrepTDD	ProtocolIE-ID ::= 167
id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 169
id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD	ProtocolIE-ID ::= 171

id-UL-CCTrCH-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 172
id-UL-CCTrCH-InformationListIE-PhyChReconfRqstTDD	ProtocolIE-ID ::= 173
id-UL-CCTrCH-InformationListIE-RL-AdditionRspTDD	ProtocolIE-ID ::= 174
id-UL-CCTrCH-InformationListIE-RL-ReconfReadyTDD	ProtocolIE-ID ::= 175
id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD	ProtocolIE-ID ::= 176
id-UL-DPCH-Information-RL-ReconfPrepFDD	ProtocolIE-ID ::= 177
id-UL-DPCH-Information-RL-ReconfRqstFDD	ProtocolIE-ID ::= 178
id-UL-DPCH-Information-RL-SetupRqstFDD	ProtocolIE-ID ::= 179
id-UL-DPCH-InformationItem-PhyChReconfRqstTDD	ProtocolIE-ID ::= 180
id-UL-DPCH-InformationItem-RL-AdditionRspTDD	ProtocolIE-ID ::= 181
id-UL-DPCH-InformationItem-RL-SetupRspTDD	ProtocolIE-ID ::= 182
id-UL-DPCH-InformationAddListIE-RL-ReconfReadyTDD	ProtocolIE-ID ::= 183
id-UL-SIRTarget	ProtocolIE-ID ::= 184
id-URA-Information	ProtocolIE-ID ::= 185
id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD	ProtocolIE-ID ::= 188
id-UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD	ProtocolIE-ID ::= 189
id-UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD	ProtocolIE-ID ::= 190
id-Active-Pattern-Sequence-Information	ProtocolIE-ID ::= 193
id-AdjustmentRatio	ProtocolIE-ID ::= 194
id-CauseLevel-RL-AdditionFailureFDD	ProtocolIE-ID ::= 197
id-CauseLevel-RL-AdditionFailureTDD	ProtocolIE-ID ::= 198
id-CauseLevel-RL-ReconfFailure	ProtocolIE-ID ::= 199
id-CauseLevel-RL-SetupFailureFDD	ProtocolIE-ID ::= 200
id-CauseLevel-RL-SetupFailureTDD	ProtocolIE-ID ::= 201
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD	ProtocolIE-ID ::= 205
id-DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD	ProtocolIE-ID ::= 206
id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 207
id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 208
id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 209
id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 210
id-DL-DPCH-InformationAddListIE-RL-ReconfReadyTDD	ProtocolIE-ID ::= 212
id-DL-DPCH-InformationDeleteListIE-RL-ReconfReadyTDD	ProtocolIE-ID ::= 213
id-DL-DPCH-InformationModifyListIE-RL-ReconfReadyTDD	ProtocolIE-ID ::= 214
id-DSCHs-to-Add-TDD	ProtocolIE-ID ::= 215
id-DSCHs-to-Add-FDD	ProtocolIE-ID ::= 216
id-DSCH-DeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 217
id-DSCH-Delete-RL-ReconfPrepFDD	ProtocolIE-ID ::= 218
id-DSCH-FDD-Information	ProtocolIE-ID ::= 219
id-DSCH-InformationListIE-RL-AdditionRspTDD	ProtocolIE-ID ::= 220
id-DSCH-InformationListIEs-RL-SetupRspTDD	ProtocolIE-ID ::= 221
id-DSCH-TDD-Information	ProtocolIE-ID ::= 222
id-DSCH-FDD-InformationResponse	ProtocolIE-ID ::= 223
id-DSCH-Information-RL-SetupRqstFDD	ProtocolIE-ID ::= 226
id-DSCH-ModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 227
id-DSCH-Modify-RL-ReconfPrepFDD	ProtocolIE-ID ::= 228
id-DSCHsToBeAddedOrModified-FDD	ProtocolIE-ID ::= 229
id-DSCHToBeAddedOrModifiedList-RL-ReconfReadyTDD	ProtocolIE-ID ::= 230
id-EnhancedDSCHPC	ProtocolIE-ID ::= 29
id-EnhancedDSCHPCIndicator	ProtocolIE-ID ::= 225
id-GA-Cell	ProtocolIE-ID ::= 232
id-GA-CellAdditionalShapes	ProtocolIE-ID ::= 3

id-SSDT-CellIDforEDSCHPC	ProtocolIE-ID ::= 246
id-Transmission-Gap-Pattern-Sequence-Information	ProtocolIE-ID ::= 255
id-UL-CCTrCH-DeleteInformation-RL-ReconfPrepTDD	ProtocolIE-ID ::= 256
id-UL-CCTrCH-ModifyInformation-RL-ReconfPrepTDD	ProtocolIE-ID ::= 257
id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 258
id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 259
id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 260
id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 261
id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 262
id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 263
id-UL-DPCH-InformationDeleteListIE-RL-ReconfReadyTDD	ProtocolIE-ID ::= 264
id-UL-DPCH-InformationModifyListIE-RL-ReconfReadyTDD	ProtocolIE-ID ::= 265
id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureTDD	ProtocolIE-ID ::= 266
id-USCHs-to-Add	ProtocolIE-ID ::= 267
id-USCH-DeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 268
id-USCH-InformationListIE-RL-AdditionRspTDD	ProtocolIE-ID ::= 269
id-USCH-InformationListIEs-RL-SetupRspTDD	ProtocolIE-ID ::= 270
id-USCH-Information	ProtocolIE-ID ::= 271
id-USCH-ModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 272
id-USCHToBeAddedOrModifiedList-RL-ReconfReadyTDD	ProtocolIE-ID ::= 273
id-DL-Physical-Channel-Information-RL-SetupRqstTDD	ProtocolIE-ID ::= 274
id-UL-Physical-Channel-Information-RL-SetupRqstTDD	ProtocolIE-ID ::= 275
id-ClosedLoopModel-SupportIndicator	ProtocolIE-ID ::= 276
id-ClosedLoopMode2-SupportIndicator	ProtocolIE-ID ::= 277
id-STTD-SupportIndicator	ProtocolIE-ID ::= 279
id-CFNReportingIndicator	ProtocolIE-ID ::= 14
id-CNOriginatedPage-PagingRqst	ProtocolIE-ID ::= 23
id-InnerLoopDLPCStatus	ProtocolIE-ID ::= 24
id-PropagationDelay	ProtocolIE-ID ::= 25
id-RxTimingDeviationForTA	ProtocolIE-ID ::= 36
id-timeSlot-ISCP	ProtocolIE-ID ::= 37
id-CCTrCH-InformationItem-RL-FailureInd	ProtocolIE-ID ::= 15
id-CCTrCH-InformationItem-RL-RestoreInd	ProtocolIE-ID ::= 16
id-CommonMeasurementAccuracy	ProtocolIE-ID ::= 280
id-CommonMeasurementObjectType-CM-Rprt	ProtocolIE-ID ::= 281
id-CommonMeasurementObjectType-CM-Rqst	ProtocolIE-ID ::= 282
id-CommonMeasurementObjectType-CM-Rsp	ProtocolIE-ID ::= 283
id-CommonMeasurementType	ProtocolIE-ID ::= 284
id-CongestionCause	ProtocolIE-ID ::= 18
id-SFN	ProtocolIE-ID ::= 285
id-SFNReportingIndicator	ProtocolIE-ID ::= 286
id-InformationExchangeID	ProtocolIE-ID ::= 287
id-InformationExchangeObjectType-InfEx-Rprt	ProtocolIE-ID ::= 288
id-InformationExchangeObjectType-InfEx-Rqst	ProtocolIE-ID ::= 289
id-InformationExchangeObjectType-InfEx-Rsp	ProtocolIE-ID ::= 290
id-InformationReportCharacteristics	ProtocolIE-ID ::= 291
id-InformationType	ProtocolIE-ID ::= 292
id-neighbouring-LCR-TDD-CellInformation	ProtocolIE-ID ::= 58
id-DL-Timeslot-ISCP-LCR-Information-RL-SetupRqstTDD	ProtocolIE-ID ::= 65
id-RL-LCR-InformationResponse-RL-SetupRspTDD	ProtocolIE-ID ::= 66
id-UL-CCTrCH-LCR-InformationListIE-RL-SetupRspTDD	ProtocolIE-ID ::= 75

id-UL-DPCH-LCR-InformationItem-RL-SetupRspTDD	ProtocolIE-ID ::= 76
id-DL-CCTrCH-LCR-InformationListIE-RL-SetupRspTDD	ProtocolIE-ID ::= 77
id-DL-DPCH-LCR-InformationItem-RL-SetupRspTDD	ProtocolIE-ID ::= 78
id-DSCH-LCR-InformationListIEs-RL-SetupRspTDD	ProtocolIE-ID ::= 79
id-USCH-LCR-InformationListIEs-RL-SetupRspTDD	ProtocolIE-ID ::= 80
id-DL-Timeslot-ISCP-LCR-Information-RL-AdditionRqstTDD	ProtocolIE-ID ::= 81
id-RL-LCR-InformationResponse-RL-AdditionRspTDD	ProtocolIE-ID ::= 86
id-UL-CCTrCH-LCR-InformationListIE-RL-AdditionRspTDD	ProtocolIE-ID ::= 87
id-UL-DPCH-LCR-InformationItem-RL-AdditionRspTDD	ProtocolIE-ID ::= 88
id-DL-CCTrCH-LCR-InformationListIE-RL-AdditionRspTDD	ProtocolIE-ID ::= 89
id-DL-DPCH-LCR-InformationItem-RL-AdditionRspTDD	ProtocolIE-ID ::= 94
id-DSCH-LCR-InformationListIEs-RL-AdditionRspTDD	ProtocolIE-ID ::= 96
id-USCH-LCR-InformationListIEs-RL-AdditionRspTDD	ProtocolIE-ID ::= 97
id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfReadyTDD	ProtocolIE-ID ::= 98
id-UL-Timeslot-LCR-InformationModifyList-RL-ReconfReadyTDD	ProtocolIE-ID ::= 100
id-DL-DPCH-LCR-InformationAddListIE-RL-ReconfReadyTDD	ProtocolIE-ID ::= 101
id-DL-Timeslot-LCR-InformationModifyList-RL-ReconfReadyTDD	ProtocolIE-ID ::= 104
id-UL-Timeslot-LCR-InformationList-PhyChReconfRqstTDD	ProtocolIE-ID ::= 105
id-DL-Timeslot-LCR-InformationList-PhyChReconfRqstTDD	ProtocolIE-ID ::= 106
id-timeSlot-ISCP-LCR-List-DL-PC-Rqst-TDD	ProtocolIE-ID ::= 138
id-TSTD-Support-Indicator-RL-SetupRqstTDD	ProtocolIE-ID ::= 139
id-RestrictionStateIndicator	ProtocolIE-ID ::= 142
id-Load-Value	ProtocolIE-ID ::= 233
id-Load-Value-IncrDecrThres	ProtocolIE-ID ::= 234
id-OnModification	ProtocolIE-ID ::= 235
id-Received-Total-Wideband-Power-Value	ProtocolIE-ID ::= 236
id-Received-Total-Wideband-Power-Value-IncrDecrThres	ProtocolIE-ID ::= 237
id-SFNsFNMeasurementThresholdInformation	ProtocolIE-ID ::= 238
id-Transmitted-Carrier-Power-Value	ProtocolIE-ID ::= 239
id-Transmitted-Carrier-Power-Value-IncrDecrThres	ProtocolIE-ID ::= 240
id-TUTRANGPSMeasurementThresholdInformation	ProtocolIE-ID ::= 241
id-UL-Timeslot-ISCP-Value	ProtocolIE-ID ::= 242
id-UL-Timeslot-ISCP-Value-IncrDecrThres	ProtocolIE-ID ::= 243
id-Rx-Timing-Deviation-Value-LCR	ProtocolIE-ID ::= 293
id-DPC-Mode-Change-SupportIndicator	ProtocolIE-ID ::= 19
id-SplitType	ProtocolIE-ID ::= 247
id-LengthOfTFCI2	ProtocolIE-ID ::= 295
id-PrimaryCCPCH-RSCP-RL-ReconfPrepTDD	ProtocolIE-ID ::= 202
id-DL-TimeSlot-ISCP-Info-RL-ReconfPrepTDD	ProtocolIE-ID ::= 203
id-DL-Timeslot-ISCP-LCR-Information-RL-ReconfPrepTDD	ProtocolIE-ID ::= 204
id-DSCH-RNTI	ProtocolIE-ID ::= 249
id-DL-PowerBalancing-Information	ProtocolIE-ID ::= 296
id-DL-PowerBalancing-ActivationIndicator	ProtocolIE-ID ::= 297
id-DL-PowerBalancing-UpdatedIndicator	ProtocolIE-ID ::= 298
id-DL-ReferencePowerInformation	ProtocolIE-ID ::= 299
id-Enhanced-PrimaryCPICH-EcNo	ProtocolIE-ID ::= 224
id-IPDL-TDD-ParametersLCR	ProtocolIE-ID ::= 252
id-CellCapabilityContainer-FDD	ProtocolIE-ID ::= 300
id-CellCapabilityContainer-TDD	ProtocolIE-ID ::= 301
id-CellCapabilityContainer-TDD-LCR	ProtocolIE-ID ::= 302
id-RL-Specific-DCH-Info	ProtocolIE-ID ::= 317 xxx

id-RL-ReconfigurationRequestFDD-RL-InformationList	ProtocolIE-ID ::= 318xxx
id-RL-ReconfigurationRequestFDD-RL-Information-IEs	ProtocolIE-ID ::= 319xxx
id-RL-ReconfigurationReadyTDD-RL-Information	ProtocolIE-ID ::= 320xxx
id-RL-ReconfigurationRequestTDD-RL-Information	ProtocolIE-ID ::= 321xxx
id-CommonTransportChannelResourcesInitialisationNotRequired	ProtocolIE-ID ::= 250
id-DelayedActivation	ProtocolIE-ID ::= 312
id-DelayedActivationList-RL-ActivationCmdFDD	ProtocolIE-ID ::= 313
id-DelayedActivationInformation-RL-ActivationCmdFDD	ProtocolIE-ID ::= 314
id-DelayedActivationList-RL-ActivationCmdTDD	ProtocolIE-ID ::= 315
id-DelayedActivationInformation-RL-ActivationCmdTDD	ProtocolIE-ID ::= 316
id-neighbouringTDDCellMeasurementInformationLCR	ProtocolIE-ID ::= 251
id-UL-SIR-Target-CCTrCH-InformationItem-RL-SetupRspTDD	ProtocolIE-ID ::= 150
id-UL-SIR-Target-CCTrCH-LCR-InformationItem-RL-SetupRspTDD	ProtocolIE-ID ::= 151
id-PrimCCPCH-RSCP-DL-PC-RqstTDD	ProtocolIE-ID ::= 451
id-HSDSCH-FDD-Information	ProtocolIE-ID ::= 452
id-HSDSCH-FDD-Information-Response	ProtocolIE-ID ::= 453
id-HSDSCH-FDD-Information-to-Add	ProtocolIE-ID ::= 454
id-HSDSCH-FDD-Information-to-Delete	ProtocolIE-ID ::= 455
id-HSDSCH-Information-to-Modify	ProtocolIE-ID ::= 456
id-HSDSCH-RNTI	ProtocolIE-ID ::= 457
id-HSDSCH-TDD-Information	ProtocolIE-ID ::= 458
id-HSDSCH-TDD-Information-Response	ProtocolIE-ID ::= 459
id-HSDSCH-TDD-Information-Response-LCR	ProtocolIE-ID ::= 460
id-HSDSCH-TDD-Information-to-Add	ProtocolIE-ID ::= 461
id-HSDSCH-TDD-Information-to-Delete	ProtocolIE-ID ::= 462
id-HSPDSCH-RL-ID	ProtocolIE-ID ::= 463
id-Angle-Of-Arrival-Value-LCR	ProtocolIE-ID ::= 148
id-TrafficClass	ProtocolIE-ID ::= 158
id-TFCI-PC-SupportIndicator	ProtocolIE-ID ::= 248
<u>id-NRT-Load-information-Value</u>	<u>ProtocolIE-ID ::= 322</u>

END

9.3.7 Container Definitions

```
-- *****
--
-- Container definitions
--
-- *****

RNSAP-Containers {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) rnsap (1) version1 (1) rnsap-Containers (5) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

-- *****
```

```

--
-- IE parameter types from other modules.
--
-- *****

IMPORTS
    maxPrivateIEs,
    maxProtocolExtensions,
    maxProtocolIEs,
    Criticality,
    Presence,
    PrivateIE-ID,
    ProtocolIE-ID
FROM RNSAP-CommonDataTypes;

-- *****
--
-- Class Definition for Protocol IEs
--
-- *****

RNSAP-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 IEs
--
-- *****

RNSAP-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
--
-- *****

RNSAP-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
--
-- *****

RNSAP-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 {RNSAP-PROTOCOL-IES : IEsSetParam} ::=

```



```

SEQUENCE (SIZE (0..maxProtocolIEs)) OF
ProtocolIE-Field {{IEsSetParam}}

ProtocolIE-Single-Container {RNSAP-PROTOCOL-IES : IEsSetParam} ::=
ProtocolIE-Field {{IEsSetParam}}

ProtocolIE-Field {RNSAP-PROTOCOL-IES : IEsSetParam} ::= SEQUENCE {
id RNSAP-PROTOCOL-IES.&id ({IEsSetParam}),
criticality RNSAP-PROTOCOL-IES.&criticality ({IEsSetParam}@id)},
value RNSAP-PROTOCOL-IES.&Value ({IEsSetParam}@id)
}

-- *****
--
-- Container for Protocol IE Pairs
--
-- *****

ProtocolIE-ContainerPair {RNSAP-PROTOCOL-IES-PAIR : IEsSetParam} ::=
SEQUENCE (SIZE (0..maxProtocolIEs)) OF
ProtocolIE-FieldPair {{IEsSetParam}}

ProtocolIE-FieldPair {RNSAP-PROTOCOL-IES-PAIR : IEsSetParam} ::= SEQUENCE {
id RNSAP-PROTOCOL-IES-PAIR.&id ({IEsSetParam}),
firstCriticality RNSAP-PROTOCOL-IES-PAIR.&firstCriticality ({IEsSetParam}@id)},
firstValue RNSAP-PROTOCOL-IES-PAIR.&FirstValue ({IEsSetParam}@id)},
secondCriticality RNSAP-PROTOCOL-IES-PAIR.&secondCriticality ({IEsSetParam}@id)},
secondValue RNSAP-PROTOCOL-IES-PAIR.&SecondValue ({IEsSetParam}@id)
}

-- *****
--
-- Container Lists for Protocol IE Containers
--
-- *****

ProtocolIE-ContainerList {INTEGER : lowerBound, INTEGER : upperBound, RNSAP-PROTOCOL-IES : IEsSetParam} ::=
SEQUENCE (SIZE (lowerBound..upperBound)) OF
ProtocolIE-Container {{IEsSetParam}}

ProtocolIE-ContainerPairList {INTEGER : lowerBound, INTEGER : upperBound, RNSAP-PROTOCOL-IES-PAIR : IEsSetParam} ::=
SEQUENCE (SIZE (lowerBound..upperBound)) OF
ProtocolIE-ContainerPair {{IEsSetParam}}

-- *****
--
-- Container for Protocol Extensions
--
-- *****

ProtocolExtensionContainer {RNSAP-PROTOCOL-EXTENSION : ExtensionSetParam} ::=

```

```
SEQUENCE (SIZE (1..maxProtocolExtensions)) OF
ProtocolExtensionField {{ExtensionSetParam}}

ProtocolExtensionField {RNSAP-PROTOCOL-EXTENSION : ExtensionSetParam} ::= SEQUENCE {
  id          RNSAP-PROTOCOL-EXTENSION.&id          ({ExtensionSetParam}),
  criticality RNSAP-PROTOCOL-EXTENSION.&criticality ({ExtensionSetParam}@id),
  extensionValue RNSAP-PROTOCOL-EXTENSION.&Extension ({ExtensionSetParam}@id)
}

-- *****
--
-- Container for Private IEs
--
-- *****

PrivateIE-Container {RNSAP-PRIVATE-IES : IEsSetParam} ::=
SEQUENCE (SIZE (1..maxPrivateIEs)) OF
PrivateIE-Field {{IEsSetParam}}

PrivateIE-Field {RNSAP-PRIVATE-IES : IEsSetParam} ::= SEQUENCE {
  id          RNSAP-PRIVATE-IES.&id          ({IEsSetParam}),
  criticality RNSAP-PRIVATE-IES.&criticality ({IEsSetParam}@id),
  value      RNSAP-PRIVATE-IES.&Value      ({IEsSetParam}@id)
}

END
```

CHANGE REQUEST

⌘ **25.423 CR 664** ⌘ ev **1** ⌘ Current version: **5.0.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

Title:	⌘ DSCH Support Indicator in Cell Capability Container		
Source:	⌘ R-WG3		
Work item code:	⌘ TEI	Date:	⌘ May 2002
Category:	⌘ F	Release:	⌘ R5
	<i>Use one of the following categories:</i> F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900 .		<i>Use one of the following releases:</i> 2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) REL-4 (Release 4) REL-5 (Release 5)

Reason for change:	⌘ Currently in Release 5, the SRNC does not know if DSCH is supported on cells in a DRNC. This CR adds a DSCH support indicator into the Cell Capability container in RL Set-up Response and UL Signalling Transfer messages, so that the SRNC is aware that a cell supports DSCH, and can control the UE connection accordingly. This change is needed for DSCH because it otherwise unnecessary DSCH resource allocation failures may be returned from DRNC to SRNC when the requested cell does not support DSCH.
Summary of change:	⌘ The DSCH support indicator is added to the Cell Capability Container IE. <u>Impact Analysis:</u> Impact assessment towards the previous version of the specification (same release): This CR has isolated impact with the previous version of the specification (same release) because it only affects one function, namely DSCH.
Consequences if not approved:	⌘ Unnecessary signalling may be exchanged between SRNC and DRNC.

Clauses affected:	⌘ 9.2.2D; 9.2.3.1a; 9.2.3.1b; 9.3.3		
Other specs affected:	⌘ <input type="checkbox"/> Other core specifications	⌘ <input type="checkbox"/>	
	<input type="checkbox"/> Test specifications		
	<input type="checkbox"/> O&M Specifications		
Other comments:	⌘		

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at: http://www.3gpp.org/3G_Specs/CRs.htm. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked ☹ contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <ftp://ftp.3gpp.org/specs/> For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

9.2.2.D Cell Capability Container FDD

The Cell Capability Container FDD indicates which functionalities a cell supports.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Cell Capability Container FDD			BIT STRING (32)	Each bit indicates whether a cell supports a particular functionality or not. The value 1 of a bit indicates that the corresponding functionality is supported in a cell and value 0 indicates that the corresponding functionality is not supported in a cell. Each bit is defined as follows. The first bit: Flexible Hard Split Support Indicator The second bit: Delayed Activation Support Indicator <u>The fourth bit: DSCH Support Indicator</u> Note that undefined bits are considered as a spare bit and spare bits shall be set to 0 by the transmitter and shall be ignored by the receiver.

/*Partly omitted*/

9.2.3.1a Cell Capability Container TDD

The Cell Capability Container TDD indicates which functionalities a cell supports.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Cell Capability Container TDD			BIT STRING (32)	Each bit indicates whether a cell supports a particular functionality or not. The value 1 of a bit indicates that the corresponding functionality is supported in a cell and value 0 indicates that the corresponding functionality is not supported in a cell. Each bit is defined as follows. The first bit: Delayed Activation Support Indicator <u>The third bit: DSCH Support Indicator</u> Note that undefined bits are considered as a spare bit and spare bits shall be set to 0 by the transmitter and shall be ignored by the receiver.

9.2.3.1b Cell Capability Container TDD LCR

The Cell Capability Container TDD LCR indicates which functionalities a cell supports.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Cell Capability Container TDD LCR			BIT STRING (32)	Each bit indicates whether a cell supports a particular functionality or not. The value 1 of a bit indicates that the corresponding functionality is supported in a cell and value 0 indicates that the corresponding functionality is not supported in a cell. Each bit is defined as follows. The first bit: Delayed Activation Support Indicator The third bit: DSCH Support Indicator Note that undefined bits are considered as a spare bit and spare bits shall be set to 0 by the transmitter and shall be ignored by the receiver.

9.3.3 PDU Definitions

<<UNAFECTED PARTS OMITTED>>

```
-- C

Cause ::= CHOICE {
    radioNetwork      CauseRadioNetwork,
    transport         CauseTransport,
    protocol          CauseProtocol,
    misc              CauseMisc,
    ...
}

CauseMisc ::= ENUMERATED {
    control-processing-overload,
    hardware-failure,
    om-intervention,
    not-enough-user-plane-processing-resources,
    unspecified,
    ...
}

CauseProtocol ::= ENUMERATED {
    transfer-syntax-error,
    abstract-syntax-error-reject,
    abstract-syntax-error-ignore-and-notify,
    message-not-compatible-with-receiver-state,
    semantic-error,
    unspecified,
    abstract-syntax-error-falsely-constructed-message,
    ...
}

CauseRadioNetwork ::= ENUMERATED {
    unknown-C-ID,
    cell-not-available,
    power-level-not-supported,
    ul-scrambling-code-already-in-use,
    dl-radio-resources-not-available,
    ul-radio-resources-not-available,
    measurement-not-supported-for-the-object,
    combining-resources-not-available,
    combining-not-supported,
    reconfiguration-not-allowed,
    requested-configuration-not-supported,
    synchronisation-failure,
    requested-tx-diversity-mode-not-supported,
    measurement-temporarily-not-available,
    unspecified,
    invalid-CM-settings,
    reconfiguration-CFN-not-elapsed,
    number-of-DL-codes-not-supported,
    dedicated-transport-channel-type-not-supported,
    dl-shared-channel-type-not-supported,
    ul-shared-channel-type-not-supported,
    common-transport-channel-type-not-supported,
    ul-spreading-factor-not-supported,
    dl-spreading-factor-not-supported,
    cm-not-supported,
    transaction-not-supported-by-destination-node-b,
    rl-already-activated-or-allocated,
    ...,
    number-of-UL-codes-not-supported,
    cell-reserved-for-operator-use,
    dpc-mode-change-not-supported,
    information-temporarily-not-available,
    information-provision-not-supported-for-the-object,
    power-balancing-status-not-compatible,
    delayed-activation-not-supported,
    rl-timing-adjustment-not-supported
}
```

```
CauseTransport ::= ENUMERATED {  
    transport-resource-unavailable,  
    unspecified,  
    ...  
}
```

```
CellCapabilityContainer-FDD ::= BIT STRING (SIZE (32))
```

```
-- First bit: Flexible Hard Split Support Indicator
```

```
-- Second bit: Delayed Activation Support Indicator
```

```
-- Fourth bit: DSCH Support Indicator
```

```
-- Note that undefined bits are considered as a spare bit and spare bits shall be set to 0 by the transmitter and shall be ignored by the receiver.
```

```
CellCapabilityContainer-TDD ::= BIT STRING (SIZE (32))
```

```
-- First bit: Delayed Activation Support Indicator
```

```
-- Third bit: DSCH Support Indicator
```

```
-- Note that undefined bits are considered as a spare bit and spare bits shall be set to 0 by the transmitter and shall be ignored by the receiver.
```

```
CellCapabilityContainer-TDD-LCR ::= BIT STRING (SIZE (32))
```

```
-- First bit: Delayed Activation Support Indicator
```

```
-- Third bit: DSCH Support Indicator
```

```
-- Note that undefined bits are considered as a spare bit and spare bits shall be set to 0 by the transmitter and shall be ignored by the receiver.
```


3GPP TSG-RAN3 Meeting #29
Gyeongju, Korea, 13th – 17th May 2002

Tdoc R3-021637

CR-Form-v5.1

CHANGE REQUEST

⌘ **25.423 CR 669** ⌘ rev **1** ⌘ Current version: **5.0.0** ⌘

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

Title: ⌘ Support of lur-g procedures

Source: ⌘ R-WG3

Work item code: ⌘ TEI

Date: ⌘ May 2002

Category: ⌘ **B**

Release: ⌘ REL-5

Use one of the following categories:

F (correction)

A (corresponds to a correction in an earlier release)

B (addition of feature),

C (functional modification of feature)

D (editorial modification)

Detailed explanations of the above categories can be found in 3GPP [TR 21.900](#).

Use one of the following releases:

2 (GSM Phase 2)

R96 (Release 1996)

R97 (Release 1997)

R98 (Release 1998)

R99 (Release 1999)

REL-4 (Release 4)

REL-5 (Release 5)

Reason for change: ⌘ Modifications to RNSAP are necessary in order to support UTRAN/GERAN interworking over the lur-g interface.

Summary of change: ⌘ GERAN related references, definitions and abbreviations are updated to the relevant sections.

The term BSS is used to indicate the GERAN controller in line with 43.051 GERAN Overall description, stage 2. The notation RNC/BSS is added to text describing procedures and functions, which are applicable to the lur-g interface.

[UTRAN-...] and [GERAN-...] notation is introduced to procedures, which are applicable on the lur-g interface, in order to differentiate which parts of the text are applicable to the UTRAN or GERAN controller only.

The following procedures are updated to enable operation over lur-g:

- Uplink signalling transfer
- Downlink signalling transfer
- Relocation commit
- Paging
- Error indication
- Common measurement initiation, reporting, termination, failure
-

In general, the same messages and information elements are used on the lur-g interface as on lur. The only exception is that a new GERAN specific UPLINK SIGNALLING TRANSFER INDICATION message is introduced. Elsewhere, notes are added to the semantic description fields in messages to indicate that a UTRAN specific IE is used for GERAN signalling as well. This applies to the

		URA/GRA ids and UTRAN/GERAN specific cell identifiers.												
Consequences if not approved:	⌘	If this CR is not approved, lur-g will not be supported. <u>Impact Analysis:</u> Impact assessment towards the previous version of the specification (same release): This CR has no impact with the previous version of the specification (same release).												
Clauses affected:	⌘	2, 3.1, 3.3, 4.4, 5.1, 7, 8.2.1, 8.2.2, 8.2.3, 8.2.4, 8.5.1, 8.5.2, 8.5.3, 8.5.4, 8.5.5,8.5.6 8.5.7, 8.5.8, 8.5.9, 9.1.24, 9.1.25, 9.1.27, 9.1.43, 9.1.44, 9.1.46, 9.1.49, 9.2.1.12C, 9.2.1.12D, 9.2.1.13, 9.2.1.31E, 9.3.2, 9.3.3, 9.3.6												
Other specs affected:	⌘	<table border="0"><tr><td><input type="checkbox"/></td><td>Other core specifications</td><td>⌘</td><td></td></tr><tr><td><input type="checkbox"/></td><td>Test specifications</td><td></td><td></td></tr><tr><td><input type="checkbox"/></td><td>O&M Specifications</td><td></td><td></td></tr></table>	<input type="checkbox"/>	Other core specifications	⌘		<input type="checkbox"/>	Test specifications			<input type="checkbox"/>	O&M Specifications		
<input type="checkbox"/>	Other core specifications	⌘												
<input type="checkbox"/>	Test specifications													
<input type="checkbox"/>	O&M Specifications													
Other comments:	⌘	The approval of this CR depends on the approval of GERAN lu-mode discussion												

1 Scope

The present document specifies the radio network layer signalling procedures of the control plane between RNCs in UTRAN, [between RNC in UTRAN and BSS in GERAN Iu mode](#) and [between BSSs in GERAN Iu mode](#).

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

- [1] 3GPP TS 23.003: "Numbering, addressing and identification".
- [2] 3GPP TS 25.413: "UTRAN Iu Interface RANAP Signalling".
- [3] 3GPP TS 25.426: "UTRAN Iur and Iub Interface Data Transport & Transport Layer Signalling for DCH Data Streams".
- [4] 3GPP TS 25.427: "UTRAN Iur and Iub Interface User Plane Protocols for DCH Data Streams".
- [5] 3GPP TS 25.435: "UTRAN Iub interface User Plane Protocols for Common Transport Channel Data Streams".
- [6] 3GPP TS 25.104: "UTRA (BS) FDD; Radio transmission and Reception".
- [7] 3GPP TS 25.105: "UTRA (BS) TDD; Radio Transmission and Reception".
- [8] 3GPP TS 25.211: "Physical Channels and Mapping of Transport Channels onto Physical Channels (FDD)".
- [9] 3GPP TS 25.212: "Multiplexing and Channel Coding (FDD)".
- [10] 3GPP TS 25.214: "Physical Layer Procedures (FDD)".
- [11] 3GPP TS 25.215: "Physical Layer – Measurements (FDD)".
- [12] 3GPP TS 25.221: "Physical Channels and Mapping of Transport Channels onto Physical Channels (TDD)".
- [13] 3GPP TS 25.223: "Spreading and Modulation (TDD)".
- [14] 3GPP TS 25.225: "Physical Layer – Measurements (TDD)".
- [15] 3GPP TS 25.304: "UE Procedures in Idle Mode"
- [16] 3GPP TS 25.331: "RRC Protocol Specification".
- [17] 3GPP TS 25.402: "Synchronisation in UTRAN, Stage 2".
- [18] ITU-T Recommendation X.680 (12/97): "Information technology - Abstract Syntax Notation One (ASN.1): Specification of basic notation".
- [19] ITU-T Recommendation X.681 (12/97): "Information technology - Abstract Syntax Notation One (ASN.1): Information object specification".

- [20] ITU-T Recommendation X.691 (12/97): "Information technology - ASN.1 encoding rules - Specification of Packed Encoding Rules (PER)".
- [21] 3GPP TS 25.213: "Spreading and modulation (FDD)".
- [22] 3GPP TS 25.224: "Physical Layer Procedures (TDD)".
- [23] 3GPP TS 25.133 (V3.3): "Requirements for support of Radio Resource management (FDD)".
- [24] 3GPP TS 25.123 (V3.5): "Requirements for support of Radio Resource management (TDD)".
- [25] 3GPP TS 23.032: "Universal Graphical Area Description (GAD)".
- [26] 3GPP TS 25.302: "Services Provided by the Physical Layer".
- [27] 3GPP TS 25.213: "Spreading and modulation (FDD)".
- [28] 3GPP TR 25.921: "Guidelines and Principles for Protocol Description and Error Handling".
- [29] GSM TS 05.05: "Digital cellular telecommunications system (Phase 2+); Radio transmission and reception".
- [30] ICD-GPS-200: "Navstar GPS Space Segment/Navigation User Interface".
- [31] RTCM-SC104: "RTCM Recommended Standards for Differential GNSS Service (v.2.2)".
- [32] 3GPP TS 25.425: "UTRAN Iur and Iub Interface User Plane Protocols for Common Transport Channel data streams".
- [33] IETF RFC 2460 "Internet Protocol, Version 6 (IPv6) Specification".
- [34] IETF RFC 768 "User Datagram Protocol", (8/1980)
- [35] 3GPP TS 25.424: " UTRAN Iur Interface Data Transport & Transport Signalling for Common Transport Channel Data Streams".
- [36] [3GPP TS 44.118: " Mobile radio interface layer 3 specification; Radio Resource Control \(RRC\) Protocol Iu mode".](#)
- [37] [3GPP TS 43.930: "Iur-g interface; Stage 2".](#)

3.1 Definitions

For the purposes of the present document, the following terms and definitions apply:

Elementary Procedure: RNSAP protocol consists of Elementary Procedures (EPs). An Elementary Procedure is a unit of interaction between two RNCs. An EP consists of an initiating message and possibly a response message. Two kinds of EPs are used:

- **Class 1:** Elementary Procedures with response (success or failure);
- **Class 2:** Elementary Procedures without response.

For Class 1 EPs, the types of responses can be as follows:

Successful

- A signalling message explicitly indicates that the elementary procedure has been successfully completed with the receipt of the response.

Unsuccessful

- A signalling message explicitly indicates that the EP failed.

Class 2 EPs are considered always successful.

Prepared Reconfiguration: A Prepared Reconfiguration exists when the Synchronised Radio Link Reconfiguration Preparation procedure has been completed successfully. The Prepared Reconfiguration does not exist any more after either of the procedures Synchronised Radio Link Reconfiguration Commit or Synchronised Radio Link Reconfiguration Cancellation has been completed.

UE Context: The UE Context contains the necessary information for the DRNC/[DBSS](#) to communicate with a specific UE. The UE Context is created by the Radio Link Setup procedure or by the Uplink Signalling Transfer procedure when the UE makes its first access in a cell controlled by the DRNS/[DBSS](#). The UE Context is deleted by the Radio Link Deletion procedure, by the Common Transport Channel Resources Release procedure, or by the Downlink Signalling Transfer procedure when neither any Radio Links nor any common transport channels are established towards the concerning UE. The UE Context is identified by the SCCP Connection for messages using connection oriented mode of the signalling bearer and the D-RNTI for messages using connectionless mode of the signalling bearer, unless specified otherwise in the procedure text.

Distant RNC Context: The Distant RNC context is created by the first Common Measurement Initiation Procedure or Information Exchange Initiation Procedure initiated by one RNC/[BSS](#) and requested from another RNC/[BSS](#). The Distant RNC Context is deleted after the Common Measurement Termination, the Common Measurement Failure, the Information Exchange Termination or the Information Exchange Failure procedure when there is no more Common Measurement and no more Information to be provided by the requested RNC/[BSS](#) to the requesting RNC/[BSS](#). The Distant RNC Context is identified by an SCCP connection as, for common measurements and information exchange, only the connection oriented mode of the signalling bearer is used.

Real Time (RT): Real time bearer services are those services associated with RABs whose traffic class is defined as *Conversational* or *Streaming*.

Non Real Time (NRT): Non Real time bearer services are those services associated with RABs whose traffic class is defined as *Interactive* or *Background*.

[Signalling radio bearer 2 \(SRB2\):](#) [The signalling radio bearer 2 is used by the UE to access a GERAN cell in order to perform RRC procedures \[36\].](#)

3.3 Abbreviations

For the purposes of the present document, the following abbreviations apply:

A-GPS	Assisted-GPS
ALCAP	Access Link Control Application Part
ASN.1	Abstract Syntax Notation One
BLER	Block Error Rate
<u>BSS</u>	<u>Base Station Subsystem</u>
CCCH	Common Control Channel
CCPCH	Common Control Physical Channel
CCTrCH	Coded Composite Transport Channel
CFN	Connection Frame Number
CM	Compressed Mode
CN	Core Network
CPCH	Common Packet Channel
CPICH	Common Pilot Channel
<u>CBSS</u>	<u>Controlling BSS</u>
CRNC	Controlling RNC
<u>DBSS</u>	<u>Drift BSS</u>
DCH	Dedicated Channel
DGPS	Differential GPS
DL	Downlink
DPCCCH	Dedicated Physical Control Channel
DPCH	Dedicated Physical Channel
DRNC	Drift RNC
DRNS	Drift RNS
D-RNTI	Drift Radio Network Temporary Identifier
DRX	Discontinuous Reception
DSCH	Downlink Shared Channel
EP	Elementary Procedure
FACH	Forward Access Channel
FDD	Frequency Division Duplex
FP	Frame Protocol
<u>GERAN</u>	<u>GSM EDGE Radio Access Network</u>
GPS	Global Positioning System
<u>GRA</u>	<u>GERAN Registration Area</u>
IE	Information Element
IMSI	International Mobile Subscriber Identity
IP	Internet Protocol
IPDL	Idle Period DownLink
ISCP	Interference Signal Code Power
LCS	Location Services
MAC	Medium Access Control
<u>MS</u>	<u>Mobile Station</u>
NAS	Non Access Stratum
O&M	Operation and Maintenance
P-CCPCH	Primary CCPCH
PCH	Paging Channel
P-CIPCH	Primary CIPCH
PCPCH	Physical Common Packet Channel
PDU	Protocol Data Unit
PICH	Paging Indication Channel
PRACH	Physical Random Access Channel
RACH	Random Access Channel
RL	Radio Link
RLC	Radio Link Control
RLS	Radio Link Set
RNS	Radio Network Subsystem
RNSAP	Radio Network Subsystem Application Part
RNTI	Radio Network Temporary Identifier

RRC	Radio Resource Control
RSCP	Received Signal Code Power
SBSS	Serving BSS
S-CCPCH	Secondary CCPCH
SCH	Synchronisation Channel
SCTD	Space Code Transmit Diversity
SDU	Service Data Unit
SFN	System Frame Number
SIR	Signal-to-Interference Ratio
SRB2	Signalling radio bearer 2
SRNC	Serving RNC
SRNS	Serving RNS
SSDT	Site Selection Diversity Transmission
STTD	Space Time Transmit Diversity
TDD	Time Division Duplex
TFCI	Transport Format Combination Indicator
TFCS	Transport Format Combination Set
TFS	Transport Format Set
ToAWS	Time of Arrival Window Endpoint
TPC	Transmit Power Control
TrCh	Transport Channel
TSTD	Time Switched Transmit Diversity
UARFCN	UTRA Absolute Radio Frequency Channel Number
UDP	User Datagram Protocol
UE	User Equipment
UL	Uplink
URA	UTRAN Registration Area
USCH	Uplink Shared Channel
UTRA	Universal Terrestrial Radio Access
UTRAN	Universal Terrestrial Radio Access Network

4.4 Specification Notations

For the purposes of the present document, the following notations apply:

- [FDD] This tagging of a word indicates that the word preceding the tag "[FDD]" applies only to FDD. This tagging of a heading indicates that the heading preceding the tag "[FDD]" and the section following the heading applies only to FDD.
- [TDD] This tagging of a word indicates that the word preceding the tag "[TDD]" applies only to TDD, including 3.84Mcps TDD and 1.28Mcps TDD. This tagging of a heading indicates that the heading preceding the tag "[TDD]" and the section following the heading applies only to TDD, including 3.84Mcps TDD and 1.28Mcps TDD.
- [3.84Mcps TDD] This tagging of a word indicates that the word preceding the tag "[3.84Mcps TDD]" applies only to 3.84Mcps TDD. This tagging of a heading indicates that the heading preceding the tag "[3.84Mcps TDD]" and the section following the heading applies only to 3.84Mcps TDD.
- [1.28Mcps TDD] This tagging of a word indicates that the word preceding the tag "[1.28Mcps TDD]" applies only to 1.28Mcps TDD. This tagging of a heading indicates that the heading preceding the tag "[1.28Mcps TDD]" and the section following the heading applies only to 1.28Mcps TDD.
- [FDD - ...] This tagging indicates that the enclosed text following the "[FDD - " applies only to FDD. Multiple sequential paragraphs applying only to FDD are enclosed separately to enable insertion of TDD specific (or common) paragraphs between the FDD specific paragraphs.
- [TDD - ...] This tagging indicates that the enclosed text following the "[TDD - " applies only to TDD including 3.84Mcps TDD and 1.28Mcps TDD. Multiple sequential paragraphs applying only to TDD are enclosed separately to enable insertion of FDD specific (or common) paragraphs between the TDD specific paragraphs.
- [3.84Mcps TDD - ...] This tagging indicates that the enclosed text following the "[3.84Mcps TDD - " applies only to 3.84Mcps TDD. Multiple sequential paragraphs applying only to 3.84Mcps TDD are enclosed separately to enable insertion of FDD and TDD specific (or common) paragraphs between the 3.84Mcps TDD specific paragraphs.
- [1.28Mcps TDD - ...] This tagging indicates that the enclosed text following the "[1.28Mcps TDD - " applies only to 1.28Mcps TDD. Multiple sequential paragraphs applying only to 1.28Mcps TDD are enclosed separately to enable insertion of FDD and TDD specific (or common) paragraphs between the 1.28Mcps TDD specific paragraphs.
- [GERAN - ...] This tagging indicates that the enclosed text following the "[GERAN - " applies only to GERAN **lu mode**. Multiple sequential paragraphs applying only to GERAN are enclosed separately to enable insertion of **UTRAN specific (or common) paragraphs between the GERAN specific paragraphs. This tagging is used only in the sections describing procedures used on the **lur-g interface, which are listed in section 7.****
- [UTRAN - ...] This tagging indicates that the enclosed text following the "[UTRAN - " applies only to UTRAN. Multiple sequential paragraphs applying only to UTRAN are enclosed separately to enable insertion of **GERAN specific (or common) paragraphs between the UTRAN specific paragraphs. This tagging is used only in the sections describing procedures used on the **lur-g interface, which are listed in section 7.****
- Procedure When referring to an elementary procedure in the specification, the Procedure Name is written with the first letters in each word in upper case characters followed by the word "procedure", e.g. Radio Link Setup procedure.
- Message When referring to a message in the specification, the MESSAGE NAME is written with all letters in upper case characters followed by the word "message", e.g. RADIO LINK SETUP REQUEST message.

- IE When referring to an information element (IE) in the specification, the *Information Element Name* is written with the first letters in each word in upper case characters and all letters in Italic font followed by the abbreviation "IE", e.g. *Transport Format Set IE*.
- Value of an IE When referring to the value of an information element (IE) in the specification, the "Value" is written as it is specified in subclause 9.2 enclosed by quotation marks, e.g. "Abstract Syntax Error (Reject)" or "SSDT Active in the UE".

5.1 RNSAP Procedure Modules

The Iur interface RNSAP procedures are divided into four modules as follows:

1. RNSAP Basic Mobility Procedures;
2. RNSAP DCH Procedures;
3. RNSAP Common Transport Channel Procedures;
4. RNSAP Global Procedures.

The Basic Mobility Procedures module contains procedures used to handle the mobility within UTRAN, [within GERAN and between UTRAN and GERAN](#).

The DCH Procedures module contains procedures that are used to handle DCHs, DSCHs, and USCHs between two RNSs. If procedures from this module are not used in a specific Iur, then the usage of DCH, DSCH, and USCH traffic between corresponding RNSs is not possible.

The Common Transport Channel Procedures module contains procedures that are used to control common transport channel data streams (excluding the DSCH and USCH) over Iur interface.

The Global Procedures module contains procedures that are not related to a specific UE. The procedures in this module are in contrast to the above modules involving two peer CRNCs/[CBSSs](#).

7 Functions of RNSAP

The RNSAP protocol provides the following functions:

- Radio Link Management. This function allows the SRNC to manage radio links using dedicated resources in a DRNS;
- Physical Channel Reconfiguration. This function allows the DRNC to reallocate the physical channel resources for a Radio Link;
- Radio Link Supervision. This function allows the DRNC to report failures and restorations of a Radio Link;
- Compressed Mode Control [FDD]. This function allows the SRNC to control the usage of compressed mode within a DRNS;
- Measurements on Dedicated Resources. This function allows the SRNC to initiate measurements on dedicated resources in the DRNS. The function also allows the DRNC to report the result of the measurements;
- DL Power Drifting Correction [FDD]. This function allows the SRNC to adjust the DL power level of one or more Radio Links in order to avoid DL power drifting between the Radio Links;
- DCH Rate Control. This function allows the DRNC to limit the rate of each DCH configured for the Radio Link(s) of a UE in order to avoid congestion situations in a cell;
- CCCH Signalling Transfer. This function allows the SRNC and DRNC to pass information between the UE and the SRNC on a CCCH controlled by the DRNS;
- GERAN Signalling Transfer. This function allows the SBSS and DBSS, the SRNC and DBSS or the SBSS and DRNC to pass information between the UE/MS and the SRNC/SBSS on a SRB2/CCCH controlled by the DBSS/DRNC;
- Paging. This function allows the SRNC/SBSS to page a UE in a URA/GRA or a cell in the DRNS;
- Common Transport Channel Resources Management. This function allows the SRNC to utilise Common Transport Channel Resources within the DRNS (excluding DSCH resources for FDD);
- Relocation Execution. This function allows the SRNC/SBSS to finalise a Relocation previously prepared via other interfaces;
- Reporting of General Error Situations. This function allows reporting of general error situations, for which function specific error messages have not been defined.
- DL Power Timeslot Correction [TDD]. This function enables the DRNS to apply an individual offset to the transmission power in each timeslot according to the downlink interference level at the UE.
- Measurements on Common Resources. This function allows an RNC/BSS to request from another RNC/BSS to initiate measurements on Common Resources. The function also allows the requested RNC/BSS to report the result of the measurements.
- Information Exchange. This function allows an RNC to request from another RNC the transfer of information. The function also allows the requested RNC to report the requested information.
- Resetting the Iur. This function is used to completely or partly reset the Iur interface.

The mapping between the above functions and RNSAP elementary procedures is shown in the Table 1.

Table 1: Mapping between functions and RNSAP elementary procedures

Function	Elementary Procedure(s)
Radio Link Management	a) Radio Link Setup b) Radio Link Addition c) Radio Link Deletion d) Unsynchronised Radio Link Reconfiguration e) Synchronised Radio Link Reconfiguration Preparation f) Synchronised Radio Link Reconfiguration Commit g) Synchronised Radio Link Reconfiguration Cancellation h) Radio Link Pre-emption
Physical Channel Reconfiguration	Physical Channel Reconfiguration
Radio Link Supervision	a) Radio Link Failure b) Radio Link Restoration
Compressed Mode Control [FDD]	a) Radio Link Setup b) Radio Link Addition c) Compressed Mode Command d) Unsynchronised Radio Link Reconfiguration e) Synchronised Radio Link Reconfiguration Preparation f) Synchronised Radio Link Reconfiguration Commit g) Synchronised Radio Link Reconfiguration Cancellation
Measurements on Dedicated Resources	a) Dedicated Measurement Initiation b) Dedicated Measurement Reporting c) Dedicated Measurement Termination d) Dedicated Measurement Failure
DL Power Drifting Correction [FDD]	Downlink Power Control
DCH Rate Control	a) Radio Link Setup b) Radio Link Addition c) Unsynchronised Radio Link Reconfiguration d) Synchronised Radio Link Reconfiguration Preparation e) Radio Link Congestion
CCCH Signalling Transfer	a) Uplink Signalling Transfer b) Downlink Signalling Transfer
GERAN Signalling Transfer	a) GERAN Uplink Signalling Transfer b) Downlink Signalling Transfer
Paging	Paging
Common Transport Channel Resources Management	a) Common Transport Channel Resources Initiation b) Common Transport Channel Resources Release
Relocation Execution	Relocation Commit
Reporting of General Error Situations	Error Indication
Measurements on Common Resources	a) Common Measurement Initiation b) Common Measurement Reporting c) Common Measurement Termination d) Common Measurement Failure
Information Exchange	a) Information Exchange Initiation b) Information Reporting c) Information Exchange Termination d) Information Exchange Failure
DL Power Timeslot Correction [TDD]	Downlink Power Timeslot Control
Reset	Reset

[The functions and RNSAP elementary procedures, which are applicable on the Iur-g interface are shown in the Table x.](#)

Table x: RNSAP elementary procedures applicable on the lur-g interface

Function	Elementary Procedure(s)
<u>GERAN Signalling Transfer</u>	a) <u>GERAN Uplink Signalling Transfer</u> b) <u>Downlink Signalling Transfer</u>
<u>Paging</u>	<u>Paging</u>
<u>Relocation Execution</u>	<u>Relocation Commit</u>
<u>Reporting of General Error Situations</u>	<u>Error Indication</u>
<u>Measurements on Common Resources</u>	a) <u>Common Measurement Initiation</u> b) <u>Common Measurement Reporting</u> c) <u>Common Measurement Termination</u> d) <u>Common Measurement Failure</u>
<u>Information Exchange</u>	a) <u>Information Exchange Initiation</u> b) <u>Information Reporting</u> c) <u>Information Exchange Termination</u> d) <u>Information Exchange Failure</u>

8.2.1 Uplink Signalling Transfer

8.2.1.1 General

The procedure is used by the DRNC to forward a Uu message received on the CCCH to the SRNC.

This procedure shall use the connectionless mode of the signalling bearer.

8.2.1.2 Successful Operation

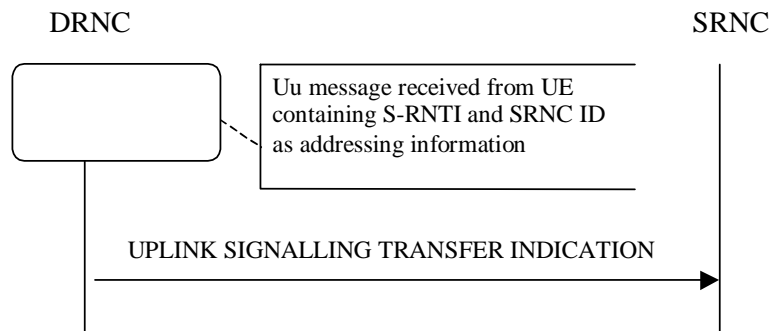


Figure 1: Uplink Signalling Transfer procedure, Successful Operation

When the DRNC receives an Uu message on the CCCH where the UE addressing information is U-RNTI, i.e. S-RNTI and SRNC-ID, DRNC shall send the UPLINK SIGNALLING TRANSFER INDICATION message to the SRNC identified by the SRNC-ID received from the UE.

If at least one URA Identity is being broadcast in the cell where the Uu message was received (the accessed cell), the DRNC shall include a URA Identity for this cell in the *URA ID IE*, the *Multiple URAs Indicator IE* indicating whether or not multiple URA Identities are being broadcast in the accessed cell, and the RNC Identity of all other RNCs that are having at least one cell within the URA where the Uu message was received in the *URA Information IE* in the UPLINK SIGNALLING TRANSFER INDICATION message.

The DRNC shall include in the message the C-RNTI that it allocates to identify the UE in the radio interface in the accessed cell. If there is no valid C-RNTI for the UE in the accessed cell, the DRNC shall allocate a new C-RNTI for the UE. If the DRNC allocates a new C-RNTI it shall also release any C-RNTI previously allocated for the UE.

If the DRNC has any RACH, [FDD - CPCH], and/or FACH resources allocated for the UE identified by the U-RNTI in another cell than the accessed cell in which the Mac SDU sizes, flow control settings (including credits) and/or transport bearer are different from those in the old cell, then the DRNC shall not include the *Common Transport Channel Resources Initialisation not Required IE* in the UPLINK SIGNALLING TRANSFER INDICATION message. In addition the DRNC shall release these RACH, [FDD - CPCH,] and/or FACH resources in old cell.

If the DRNC has any RACH, [FDD - CPCH], and/or FACH resources allocated for the UE identified by the U-RNTI in another cell than the accessed cell in which the Mac SDU sizes, flow control settings (including credits) and transport bearer are the same as in the old cell, there is no need for Common Transport Channel Resources Initialisation to be initiated. In that case, DRNC may include the *Common Transport Channel Resources Initialisation not Required IE* in the UPLINK SIGNALLING TRANSFER INDICATION message. In addition, the DRNC shall move these RACH, [FDD - CPCH,] and/or FACH resources to the new cell. If no Common Transport Channel Resources Initialisation procedure is executed, the currently applicable Mac SDU sizes, flow control settings (including credits) and transport bearer shall continue to be used while the UE is in the new cell.

If no context exists for this UE in the DRNC, the DRNC shall create a UE Context for this UE, allocate a D-RNTI for the UE Context, and include the *D-RNTI IE* and the identifiers for the CN CS Domain and CN PS Domain that the DRNC is connected to in the UPLINK SIGNALLING TRANSFER INDICATION message. These CN Domain Identifiers shall be based on the LAC and RAC respectively of the cell where the message was received from the UE.

Depending on local configuration in the DRNC, it may include the geographical co-ordinates of the cell, represented either by the *Cell GAI IE* or by the *Cell GA Additional Shapes IE*, where the Uu message was received in the UPLINK SIGNALLING TRANSFER INDICATION message.

[FDD - The DRNC shall include the *DPC Mode Change Support Indicator* IE in the UPLINK SIGNALLING TRANSFER INDICATION message if the accessed cell supports DPC mode change.]

[FDD- The DRNC shall include the *Flexible Hard Split Support Indicator* IE in the UPLINK SIGNALLING TRANSFER INDICATION message if the accessed cell supports TFCI flexible hard split mode.]

The DRNC shall include [FDD - the *Cell Capability Container FDD* IE], [3.84Mcps TDD - the *Cell Capability Container TDD* IE] and/or [1.28Mcps TDD - the *Cell Capability Container TDD LCR* IE] in the UPLINK SIGNALLING TRANSFER INDICATION message if the accessed cell supports any functionalities listed in [FDD - 9.2.1.5a], [3.84Mcps TDD - 9.2.1.5aa] and [1.28 Mcps - TDD 9.2.1.5ab].

8.2.1.3 Abnormal Conditions

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8.2.1x GERAN Uplink Signalling Transfer

8.2.1x.1 General

The procedure is used by the DBSS to forward a Um message received on the SRB2 to the SBSS/SRNC. The procedure is also used by the DRNC to forward a Uu message received on the CCCH to the SBSS.

This procedure shall use the connectionless mode of the signalling bearer.

8.2.1x.2 Successful Operation

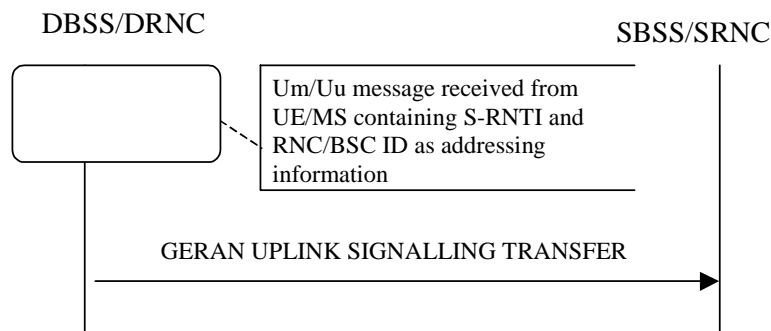


Figure 1x: GERAN Uplink Signalling Transfer procedure, Successful Operation

When the DBSS receives an Um message on the SRB2 where the MS addressing information is G-RNTI, i.e. S-RNTI and BSC-ID, DBSS shall send the GERAN UPLINK SIGNALLING TRANSFER INDICATION message to the SBSS/SRNC identified by the BSC-ID received from the MS.

Alternatively, when the DRNC receives an Uu message on the CCCH where the UE addressing information is U-RNTI, i.e. S-RNTI and SRNC-ID, and where the SRNC-ID points to a GERAN BSS, the DRNC shall send the GERAN UPLINK SIGNALLING TRANSFER INDICATION message to the SBSS identified by SRNC-ID received from the UE.

If at least one GRA/URA Identity is being broadcast in the cell where the Um/Uu message was received (the accessed cell), the DBSS/DRNC shall include a GRA/URA Identity for this cell in the *URA ID IE*, the *Multiple URAs Indicator IE* indicating whether or not multiple GRA/URA Identities are being broadcast in the accessed cell, and the RNC/BSS Identity of all other RNC/BSSs that are having at least one cell within the GRA/URA where the Um/Uu message was received in the *URA Information IE* in the GERAN UPLINK SIGNALLING TRANSFER INDICATION message.

If no context exists for this UE/MS in the DBSS/DRNC, the DBSS/DRNC shall create a UE Context for this UE/MS, allocate a D-RNTI for the UE Context, and include the *D-RNTI IE* and the identifiers for the CN CS Domain and CN PS Domain that the DBSS/DRNC is connected to in the GERAN UPLINK SIGNALLING TRANSFER INDICATION message. These CN Domain Identifiers shall be based on the LAC and RAC respectively of the cell where the message was received from the UE/MS.

8.2.1x.3 Abnormal Conditions

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8.2.2 Downlink Signalling Transfer

8.2.2.1 General

The procedure is used by the SRNC/SBSS to request to the DRNC/DBSS the transfer of a Uu/Um message on the CCCH/SRB2 in a cell. When used, the procedure is in response to a received Uplink Signalling Transfer procedure.

This procedure shall use the connectionless mode of the signalling bearer.

8.2.2.2 Successful Operation

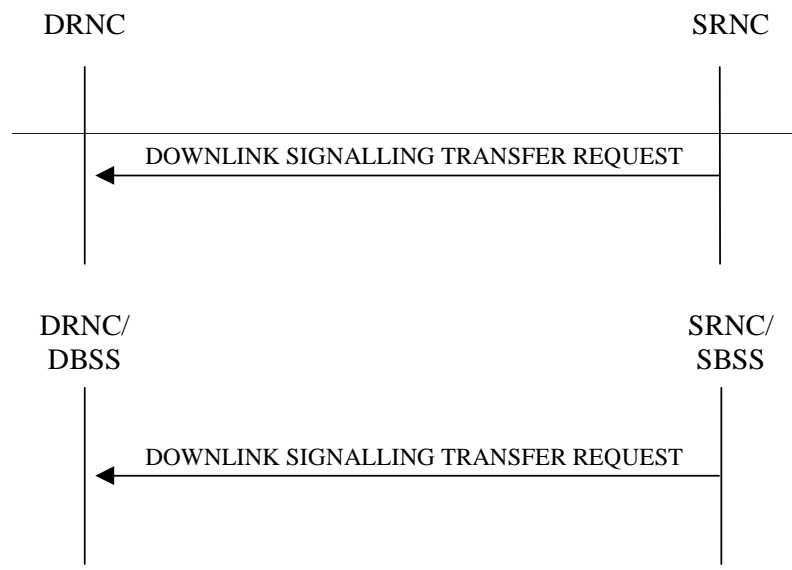


Figure 2: Downlink Signalling Transfer procedure, Successful Operation

The procedure consists of the DOWNLINK SIGNALLING TRANSFER REQUEST message sent by the SRNC/SBSS to the DRNC/DBSS.

The message contains the Cell Identifier (C-Id) contained in the received UPLINK SIGNALLING TRANSFER INDICATION message and the D-RNTI.

At the reception of the message, the DRNC/DBSS shall send the L3 Information on the CCCH/SRB2 in the cell indicated by the C-Id IE to the UE identified by the D-RNTI IE.

[UTRAN - If the D-RNTI Release Indication IE is set to "Release D-RNTI" and the DRNS has no dedicated resources (DCH, [TDD - USCH,] and/or DSCH) allocated for the UE, the DRNS shall release the D-RNTI and thus the UE Context and any RACH, [FDD - CPCH,] and FACH resources and any C-RNTI allocated to the UE Context at the reception of the DOWNLINK SIGNALLING TRANSFER REQUEST message.]

[UTRAN - If the D-RNTI Release Indication IE is set to "Release D-RNTI" and the DRNS has dedicated resources allocated for the UE, the DRNS shall only release any RACH, [FDD - CPCH,] and FACH resources and any C-RNTI allocated to the UE Context at the reception of the DOWNLINK SIGNALLING TRANSFER REQUEST message.]

8.2.2.3 Abnormal Conditions

If the user identified by the D-RNTI IE has already accessed another cell controlled by the DRNC/DBSS than the cell identified by the C-Id IE in the DOWNLINK SIGNALLING TRANSFER REQUEST message, the message shall be ignored.

[GERAN – If the DRNC receives from the SBSS the DOWNLINK SIGNALLING TRANSFER REQUEST message, in which the D-RNTI Release Indication IE is set to "not Release D-RNTI", the DRNC shall ignore this IE and release the D-RNTI.]

[GERAN – If the DBSS receives from the SBSS/SRNC the DOWNLINK SIGNALLING TRANSFER REQUEST message, in which the D-RNTI Release Indication IE is set to "not Release D-RNTI", the DBSS shall ignore this IE and release the D-RNTI.]

8.2.3 Relocation Commit

8.2.3.1 General

The Relocation Commit procedure is used by source RNC/BSS to execute the Relocation. This procedure supports the Relocation procedures described in [2].

This procedure shall use the signalling bearer mode specified below.

8.2.3.2 Successful Operation

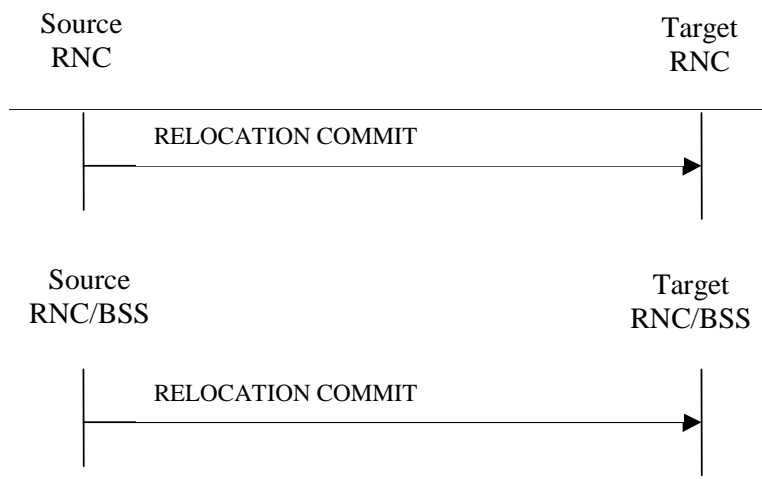


Figure 3: Relocation Commit procedure, Successful Operation

The source RNC/BSS sends the RELOCATION COMMIT message to the target RNC/BSS to request the target RNC/BSS to proceed with the Relocation.

[UTRAN - When the UE is utilising one or more radio links in the DRNC the message shall be sent using the connection oriented service of the signalling bearer and no further identification of the UE context in the DRNC is required. If on the other hand, the UE is not utilising any radio link the message shall be sent using the connectionless service of the signalling bearer and the *D-RNTI* IE shall be included in the message to identify the UE context in the DRNC.]

[GERAN - The message shall be sent using the connectionless service of the signalling bearer and the *D-RNTI* IE shall be included in the message to identify the UE/MS context in the DBSS.]

At reception of the RELOCATION COMMIT message from the source RNC/BSS, the target RNC/BSS finalises the Relocation. If the message contains the transparent *RANAP Relocation Information* IE the target RNC/BSS shall use this information when finalising the Relocation.

8.2.3.3 Abnormal Conditions

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8.2.4 Paging

8.2.4.1 General

This procedure is used by the SRNC/SBSS to indicate to a CRNC/CBSS that a UE shall be paged in a cell or URA/GRA that is under the control of the CRNC/CBSS.

This procedure shall use the connectionless mode of the signalling bearer.

8.2.4.2 Successful Operation

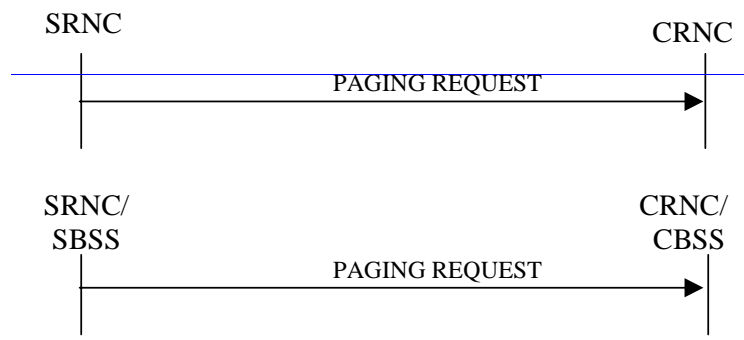


Figure 4: Paging procedure, Successful Operation

The procedure is initiated with a PAGING REQUEST message sent from the SRNC/SBSS to the CRNC/CBSS.

[UTRAN - If the message contains the *C-Id* IE, the CRNC shall page in the indicated cell.] Alternatively, if the message contains the *URA-Id* IE, the CRNC/CBSS shall page in all cells that it controls in the indicated URA/GRA.

If the PAGING REQUEST message includes the *CN Originated Page to Connected Mode UE* IE, the CRNC/CBSS shall include the information contained in the *CN Originated Page to Connected Mode UE* IE when paging the UE.

[UTRAN- The CRNC shall calculate the Paging Occasions from the *IMSI* IE and the *DRX Cycle Length Coefficient* IE according to specification in ref. [15] and apply transmission on PICH and PCH accordingly.]

[GERAN- The CBSS shall calculate the Paging Occasions from the *IMSI* IE and the *GERAN DRX Cycle Length Coefficient* IE according to specification in ref. [36] and apply transmission on PCCCH or PACCH accordingly.]

8.2.4.3 Abnormal Conditions

[GERAN- If the DRNC receives a PAGING REQUEST message from the SBSS, which contains the *C-Id* IE, the message shall be ignored.]

[GERAN- If the DBSS receives a PAGING REQUEST message from the SBSS/SRNC, which contains the *C-Id* IE, the message shall be ignored.]

8.5.1 Error Indication

8.5.1.1 General

The Error Indication procedure is initiated by a node to report detected errors in a received message, provided they cannot be reported by an appropriate response message.

This procedure shall use the signalling bearer mode specified below.

8.5.1.2 Successful Operation

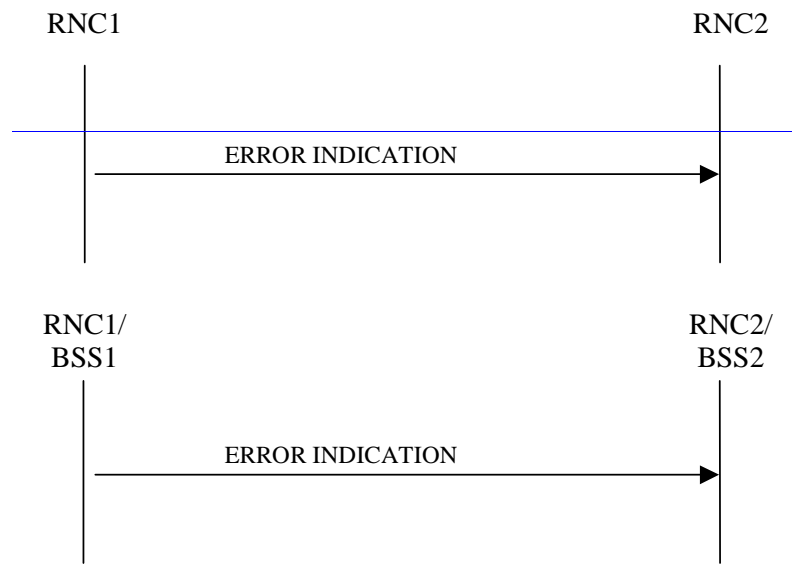


Figure 30: Error Indication procedure, Successful Operation

When the conditions defined in clause 10 are fulfilled, the Error Indication procedure is initiated by an ERROR INDICATION message sent from the receiving node. This message shall use the same mode of the signalling bearer and the same signalling bearer connection (if connection oriented) as the message that triggers the procedure.

When the ERROR INDICATION message is sent from a DRNC/DBSS to an SRNC/SBSS using connectionless mode of the signalling bearer, the *S-RNTI* IE shall be included in the message if available. When the ERROR INDICATION message is sent from an SRNC/SBSS to a DRNC/DBSS using connectionless mode of the signalling bearer, the *D-RNTI* IE shall be included in the message if available.

When a message using connectionless mode of the signalling bearer is received for a specified UE Context in a DRNC/DBSS with an invalid *D-RNTI* IE, the DRNC/DBSS shall include the *D-RNTI* from the received message in the *D-RNTI* IE in the ERROR INDICATION message, unless another handling is specified in the procedure text for the affected procedure.

When a message using connectionless mode of the signalling bearer is received for a specified UE in an SRNC/SBSS with an invalid *S-RNTI* IE, the SRNC/SBSS shall include the *S-RNTI* from the received message in the *S-RNTI* IE in the ERROR INDICATION message, unless another handling is specified in the procedure text for the affected procedure.

The ERROR INDICATION message shall include either the *Cause* IE, or the *Criticality Diagnostics* IE, or both the *Cause* IE and the *Criticality Diagnostics* IE.

Typical cause values for the ERROR INDICATION message are:

Protocol Causes:

- Transfer Syntax Error
- Abstract Syntax Error (Reject)

- Abstract Syntax Error (Ignore and Notify)
- Message not Compatible with Receiver State
- Unspecified

8.5.2 Common Measurement Initiation

8.5.2.1 General

This procedure is used by an RNC/BSS to request the initiation of measurements of common resources to another RNC/BSS. The requesting RNC/BSS is referred to as RNC₁/BSS₁ and the RNC/BSS to which the request is sent is referred to as RNC₂/BSS₂.

[GERAN - For measurements made in GERAN cells, only the following measurement types are applicable:

- Load

- RT load

- NRT load information]

This procedure uses the signalling bearer connection for the relevant Distant RNC Context.

8.5.2.2 Successful Operation

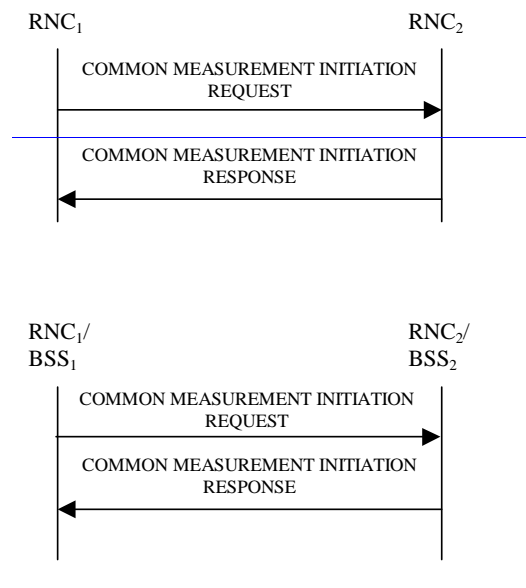


Figure 30A: Common Measurement Initiation procedure, Successful Operation

The procedure is initiated with a COMMON MEASUREMENT INITIATION REQUEST message sent from the RNC₁/BSS₁ to the RNC₂/BSS₂.

Upon reception, the RNC₂/BSS₂ shall initiate the requested measurement according to the parameters given in the request.

Unless specified below, the meaning of the parameters are given in other specifications.

[TDD- If the Time Slot Information is provided in the *Common Measurement Object Type* IE , the measurement request shall apply to the requested time slot individually.]

[UTRAN - If the *Common Measurement Type* IE is not set to 'SFN-SFN Observed Time Difference' and the *SFN Reporting Indicator* IE is set to "FN Reporting Required", the *SFN* IE shall be included in the measurement report or in the measurement response, the latter only in the case the *Report Characteristics* IE is set to 'On-Demand'. The reported SFN shall be the SFN at the time when the measurement value was reported by the layer 3 filter, referred to as point C in the measurement model [26]. If the *Common Measurement Type* IE is set to 'SFN-SFN Observed Time Difference', then the *SFN Reporting Indicator* IE is ignored.]

[UTRAN - If the *SFN* IE is provided, it indicates the frame for which the first measurement shall be provided. The provided measurement value shall be the one reported by the layer 3 filter, referred to as point C in the measurement

model [26]. Furthermore, if the *SFN* IE is present and if the *Common Measurement Object Type* IE is set to “UP Neighbouring Cell”, then the *SFN* IE relates to the Radio Frames of the Reference Cell identified by the first *UTRAN Cell Identifier* IE.]

Common measurement type

[UTRAN - If the *Common Measurement Type* IE is set to 'SFN-SFN Observed Time Difference', then the RNC₂ shall initiate the SFN-SFN Observed Time Difference measurements between the reference cell identified by *C-ID* IE and the neighbouring cells identified by the *UTRAN Cell Identifier* IE (*UC-Id*).]

If the *Common Measurement Type* IE is set to 'load', the RNC₂/BSS₂ shall initiate measurements of uplink and downlink load on the measured object. If either uplink or downlink load satisfies the requested report characteristics, the RNC₂/BSS₂ shall report the result of both uplink and downlink measurements.

If the *Common Measurement Type* IE is set to "RT load", the RNC₂/BSS₂ shall initiate measurements of uplink and downlink estimated share of RT (Real Time) traffic of the load of the measured object. If either uplink or downlink RT load satisfies the requested report characteristics, the RNC₂/BSS₂ shall report the result of both uplink and downlink measurements.

If the *Common Measurement Type* IE is set to "NRT load Information", the RNC₂/BSS₂ shall initiate measurements of uplink and downlink NRT (Non Real Time) load situation on the measured object. If either uplink or downlink NRT load satisfies the requested report characteristics, the RNC₂/BSS₂ shall report the result of both uplink and downlink measurements.

Report characteristics

The *Report Characteristics* IE indicates how the reporting of the measurement shall be performed. See also Annex B.

If the *Report Characteristics* IE is set to 'On-Demand', the RNC₂/BSS₂ shall report the result of the requested measurement immediately.

If the *Report Characteristics* IE is set to 'Periodic', the RNC₂/BSS₂ shall periodically initiate a Measurement Reporting procedure for this measurement, with the requested report frequency. Furthermore, if the *Common Measurement Type* IE is set to 'SFN-SFN Observed Time Difference', then all the available measurements shall be reported in the *Successful Neighbouring cell SFN-SFN Observed Time Difference Measurement Information* IE and the neighbouring cells with no measurement result available shall be reported in the *Unsuccessful Neighbouring cell SFN-SFN Observed Time Difference Measurement Information* IE.

If the *Report Characteristics* IE is set to 'Event A', the RNC₂/BSS₂ shall initiate a Measurement Reporting procedure when the measured entity rises above the requested threshold and stays there for the requested hysteresis time. If no hysteresis time is given, the RNC₂/BSS₂ shall use the value zero for the hysteresis time.

If the *Report Characteristics* IE is set to 'Event B', the RNC₂/BSS₂ shall initiate a Measurement Reporting procedure when the measured entity falls below the requested threshold and stays there for the requested hysteresis time. If no hysteresis time is given, the RNC₂ shall use the value zero for the hysteresis time.

If the *Report Characteristics* IE is set to 'Event C', the RNC₂/BSS₂ shall initiate a Measurement Reporting procedure when the measured entity rises more than the requested threshold within the requested time. After having reported this type of event, the next C event reporting for the same measurement cannot be initiated before the rising/falling time has elapsed since the previous event reporting.

If the *Report Characteristics* IE is set to 'Event D', the RNC₂/BSS₂ shall initiate a Measurement Reporting procedure when the measured entity falls more than the requested threshold within the requested time. After having reported this type of event, the next D event reporting for the same measurement cannot be initiated before the rising/falling time has elapsed since the previous event reporting.

If the *Report Characteristics* IE is set to 'Event E', the RNC₂/BSS₂ shall initiate the Measurement Reporting procedure when the measured entity rises above the 'Measurement Threshold 1' and stays there for the 'Measurement Hysteresis Time' (Report A). When the conditions for Report A are met and the *Report Periodicity* IE is provided, the RNC₂/BSS₂ shall initiate the Measurement Reporting procedure periodically. If the conditions for Report A have been met and the measured entity falls below the 'Measurement Threshold 2' and stays there for the 'Measurement Hysteresis Time', the RNC₂/BSS₂ shall initiate the Common Measurement Reporting procedure (Report B) as well as terminating any corresponding periodic reporting. If 'Measurement Threshold 2' is not present, the RNC₂/BSS₂ shall use 'Measurement Threshold 1' instead. If no 'Measurement Hysteresis Time' is provided, the RNC₂/BSS₂ shall use the value zero as hysteresis times for both Report A and Report B.

If the *Report Characteristics* IE is set to 'Event F', the RNC₂/BSS₂ shall initiate the Measurement Reporting procedure when the measured entity falls below the 'Measurement Threshold 1' and stays there for the 'Measurement Hysteresis Time' (Report A). When the conditions for Report A are met and the *Report Periodicity* IE is provided the RNC₂/BSS₂ shall also initiate the Measurement Reporting procedure periodically. If the conditions for Report A have been met and the measured entity rises above the 'Measurement Threshold 2' and stays there for the 'Measurement Hysteresis Time', the RNC₂/BSS₂ shall initiate the Common Measurement Reporting procedure (Report B) as well as terminating any corresponding periodic reporting. If 'Measurement Threshold 2' is not present, the RNC₂/BSS₂ shall use 'Measurement Threshold 1' instead. If no 'Measurement Hysteresis Time' is provided, the RNC₂/BSS₂ shall use the value zero as hysteresis times for both Report A and Report B.

[UTRAN - If the *Report Characteristics* IE is set to 'On Modification', the RNC₂ shall report the result of the requested measurement immediately. Then the RNC₂ shall initiate the Common Measurement Reporting procedure in accordance to the following conditions:

1. If the *Common Measurement Type* IE is set to 'UTRAN GPS Timing of Cell Frame for LCS':

- If the *T_{UTRAN-GPS} Change Limit* IE is included in the *T_{UTRAN-GPS} Measurement Threshold Information* IE, the RNC₂ shall each time a new measurement result is received after point C in the measurement model [25], calculate the change of T_{UTRAN-GPS} value (F_n). The RNC₂ shall initiate the Common Measurement Reporting procedure and set n equal to zero when the absolute value of F_n rises above the threshold indicated by the *T_{UTRAN-GPS} Change Limit* IE. The change of T_{UTRAN-GPS} value (F_n) is calculated according to the following:

$$F_n = 0 \text{ for } n = 0$$

$$F_n = (M_n - M_{n-1}) \bmod 37158912000000 - ((SFN_n - SFN_{n-1}) \bmod 4096) * 10 * 3.84 * 10^3 * 16 + F_{n-1} \text{ for } n > 0$$

F_n is the change of the T_{UTRAN-GPS} value expressed in unit [1/16 chip] when n measurement results has been received after first Common Measurement Reporting at initiation or after the last event was triggered.

M_n is the latest measurement result received after point C in the measurement model [25], measured at SFN_n.

M_{n-1} is the previous measurement result received after point C in the measurement model [25], measured at SFN_{n-1}.

M₁ is the first measurement result received after point C in the measurement model [25], after first Common Measurement Reporting at initiation or after the last event was triggered.

M₀ is equal to the value reported in the first Common Measurement Reporting at initiation or in the Common Measurement Reporting when the event was triggered.

- If the *Predicted T_{UTRAN-GPS} Deviation Limit* IE is included in the *T_{UTRAN-GPS} Measurement Threshold Information* IE, the RNC₂ shall, each time a new measurement result is received after point C in the measurement model [25], update the P_n and F_n. The RNC₂ shall initiate the Common Measurement Reporting procedure and set n equal to zero when F_n rises above the threshold indicated by the *Predicted T_{UTRAN-GPS} Deviation Limit* IE. The P_n and F_n are calculated according to the following:

$$P_n = b \text{ for } n = 0$$

$$P_n = ((a/16) * ((SFN_n - SFN_{n-1}) \bmod 4096) / 100 + ((SFN_n - SFN_{n-1}) \bmod 4096) * 10 * 3.84 * 10^3 * 16 + P_{n-1}) \bmod 37158912000000 \text{ for } n > 0$$

$$F_n = \min((M_n - P_n) \bmod 37158912000000, (P_n - M_n) \bmod 37158912000000) \text{ for } n > 0$$

P_n is the predicted T_{UTRAN-GPS} value when n measurement results has been received after first Common Measurement Reporting at initiation or after the last event was triggered.

a is the last reported T_{UTRAN-GPS} Drift Rate value.

b is the last reported T_{UTRAN-GPS} value.

F_n is the deviation of the last measurement result from the predicted T_{UTRAN-GPS} value (P_n) when n measurements have been received after first Common Measurement Reporting at initiation or after the last event was triggered.

M_n is the latest measurement result received after point C in the measurement model [25], measured at SFN_n.

M_1 is the first measurement result received after point C in the measurement model [25], after first Common Measurement Reporting at initiation or after the last event was triggered.

The $T_{\text{UTRAN-GPS}}$ Drift Rate is determined by the DRNS in an implementation-dependent way after point B (see model of physical layer measurements in [26]).

2. If the *Common Measurement Type* IE is set to ‘SFN-SFN Observed Time Difference’:

- If the *SFN-SFN Change Limit* IE is included in the *SFN-SFN Measurement Threshold Information* IE, the RNC₂ shall each time a new measurement result is received after point C in the measurement model [25], calculate the change of SFN-SFN value (F_n). The RNC₂ shall initiate the Common Measurement Reporting procedure in order to report the particular SFN-SFN measurement which has triggered the event and set n equal to zero when the absolute value of F_n rises above the threshold indicated by the *SFN-SFN Change Limit* IE. The change of the SFN-SFN value is calculated according to the following:

$$F_n = 0 \text{ for } n = 0$$

$$[\text{FDD} - F_n = (M_n - a) \bmod 614400 \text{ for } n > 0]$$

$$[\text{TDD} - F_n = (M_n - a) \bmod 40960 \text{ for } n > 0]$$

F_n is the change of the SFN-SFN value expressed in unit [1/16 chip] when n measurement results has been received after first Common Measurement Reporting at initiation or after the last event was triggered.

a is the last reported SFN-SFN.

M_n is the latest measurement result received after point C in the measurement model [25], measured at SFN_n.

M_1 is the first measurement result received after point C in the measurement model [25], after first Common Measurement Reporting at initiation or after the last event was triggered.

- If the *Predicted SFN-SFN Deviation Limit* IE is included in the *SFN-SFN Measurement Threshold Information* IE, the RNC₂ shall each time a new measurement result is received after point C in the measurement model [25], update the P_n and F_n . The RNC₂ shall initiate the Common Measurement Reporting procedure in order to report the particular SFN-SFN measurement which has triggered the event and set n equal to zero when F_n rises above the threshold indicated by the *Predicted SFN-SFN Deviation Limit* IE. The P_n and F_n are calculated according to the following:

$$P_n = b \text{ for } n = 0$$

$$[\text{FDD} - P_n = ((a/16) * ((SFN_n - SFN_{n-1}) \bmod 4096) / 100 + P_{n-1}) \bmod 614400 \text{ for } n > 0]$$

$$F_n = \min((M_n - P_n) \bmod 614400, (P_n - M_n) \bmod 614400) \text{ for } n > 0]$$

$$[\text{TDD} - P_n = ((a/16) * (15 * (SFN_n - SFN_{n-1}) \bmod 4096 + (TS_n - TS_{n-1}) / 1500 + P_{n-1}) \bmod 40960 \text{ for } n > 0]$$

$$F_n = \min((M_n - P_n) \bmod 40960, (P_n - M_n) \bmod 40960) \text{ for } n > 0]$$

P_n is the predicted SFN-SFN value when n measurement results has been received after first Common Measurement Reporting at initiation or after the last event was triggered.

a is the last reported SFN-SFN Drift Rate value.

b is the last reported SFN-SFN value.

F_n is the deviation of the last measurement result from the predicted SFN-SFN value (P_n) when n measurements has been received after first Common Measurement Reporting at initiation or after the last event was triggered.

M_n is the latest measurement result received after point C in the measurement model [25], measured at the [TDD - Time Slot TS_n] of the Frame SFN_n.

M_1 is the first measurement result received after point C in the measurement model [25], after first Common Measurement Reporting at initiation or after the last event was triggered.

The SFN-SFN Drift Rate is determined by the DRNS in an implementation-dependent way after point B (see model of physical layer measurements in [26]).]

If the *Report Characteristics* IE is not set to 'On-Demand', the RNC₂/BSS₂ is required to perform reporting for a common measurement object, in accordance with the conditions provided in the COMMON MEASUREMENT INITIATION REQUEST message, as long as the object exists. If no common measurement object(s) for which a measurement is defined exists any more the RNC₂/BSS₂ shall terminate the measurement locally without reporting this to RNC₁/BSS₁.

If at the start of the measurement, the reporting criteria are fulfilled for any of Event A, Event B, Event E or Event F, the RNC₂/BSS₂ shall initiate a Measurement Reporting procedure immediately, and then continue with the measurements as specified in the COMMON MEASUREMENT INITIATION REQUEST message.

Common measurement accuracy

[UTRAN] - If the *Common Measurement Type* IE is set to 'UTRAN GPS Timing of Cell Frames for LCS', then the *UTRAN GPS Timing Measurement Minimum Accuracy Class* IE included in the *Report Characteristics* IE indicates the minimum accuracy class required in the measurements.

- If the *UTRAN GPS Timing Measurement Minimum Accuracy Class* IE indicates 'Class A', then the concerned RNC₂ shall perform the measurement with the highest supported accuracy according to any of the accuracy classes A, B or C.
- If the *UTRAN GPS Timing Measurement Minimum Accuracy Class* IE indicates the 'Class B', then the concerned RNC₂ shall perform the measurements with the highest supported accuracy according to class B or C.
- If the *UTRAN GPS Timing Measurement Minimum Accuracy Class* IE indicates 'Class C', then the concerned RNC₂ shall perform the measurements with the highest supported accuracy according to class C only.
- If the *Common Measurement Type* IE is set to 'SFN-SFN Observed Time Difference', then the concerned RNC₂ shall initiate the SFN-SFN observed Time Difference measurements between the reference cell identified by *UC-ID* IE and the neighbouring cells identified by their UC-ID. The *Report Characteristics* IE applies to each of these measurements.]

Higher layer filtering

[UTRAN] The *Measurement Filter Coefficient* IE indicates how filtering of the measurement values shall be performed before measurement event evaluation and reporting.

The averaging shall be performed according to the following formula.

$$F_n = (1 - a) \cdot F_{n-1} + a \cdot M_n$$

The variables in the formula are defined as follows

F_n is the updated filtered measurement result

F_{n-1} is the old filtered measurement result

M_n is the latest received measurement result from physical layer measurements, the unit used for M_n is the same unit as the reported unit in the COMMON MEASUREMENT INITIATION RESPONSE, COMMON MEASUREMENT REPORT messages or the unit used in the event evaluation (i.e. same unit as for F_n).

$a = 1/2^{(k/2)}$ -, where k is the parameter received in the *Measurement Filter Coefficient* IE. If the *Measurement Filter Coefficient* IE is not present, a shall be set to 1 (no filtering).

In order to initialise the averaging filter, F_0 is set to M_1 when the first measurement result from the physical layer measurement is received.]

Response message

If the RNC₂/BSS₂ was able to initiate the measurement requested by RNC₁/BSS₁ it shall respond with the COMMON MEASUREMENT INITIATION RESPONSE message sent. The message shall include the same Measurement ID that was used in the measurement request. Only in the case when the *Report Characteristics* IE is set to "On-Demand" **[UTRAN]** - or "On Modification", the COMMON MEASUREMENT INITIATION RESPONSE message shall contain the measurement result. It shall also the *Common Measurement Achieved Accuracy* IE in the *Common Measurement Value* IE if the *Common Measurement Type* IE is set to 'UTRAN GPS Timing of Cell Frame for LCS'.

[UTRAN] - Furthermore, if the *Common Measurement Type* IE is set to 'SFN-SFN Observed Time Difference', then all the available measurements shall be reported in the *Successful Neighbouring cell SFN-SFN Observed Time Difference*

Measurement Information IE and the neighbouring cells with no measurement result available shall be reported in the Unsuccessful Neighbouring cell SFN-SFN Observed Time Difference Measurement Information IE.]

8.5.2.3 Unsuccessful Operation

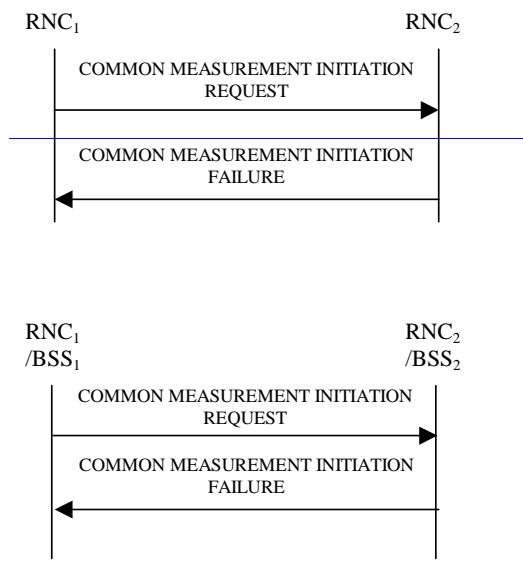


Figure 30B: Common Measurement Initiation procedure, Unsuccessful Operation

If the requested measurement cannot be initiated, the RNC₂/BSS₂ shall send a COMMON MEASUREMENT INITIATION FAILURE message. The message shall include the same Measurement ID that was used in the COMMON MEASUREMENT INITIATION REQUEST message and the Cause IE set to an appropriate value.

Typical cause values are as follows:

Radio Network Layer Cause

- Measurement not supported for the object.
- Measurement Temporarily not Available

8.5.2.4 Abnormal Conditions

[UTRAN - If the COMMON MEASUREMENT INITIATION REQUEST message contains the SFN-SFN Measurement Threshold Information IE (in the Measurement Threshold IE contained in the Report Characteristics IE) and it does not contain at least one IE, the RNC₂ shall reject the procedure using the COMMON MEASUREMENT INITIATION FAILURE message.]

[UTRAN - If the COMMON MEASUREMENT INITIATION REQUEST message contains the T_{UTRAN-GPS} Measurement Threshold Information IE (in the Measurement Threshold IE contained in the Report Characteristics IE) and it does not contain at least one IE, the RNC₂ shall reject the procedure using the COMMON MEASUREMENT INITIATION FAILURE message.]

[UTRAN - If the Common Measurement Type IE is set to 'UTRAN GPS Timing of Cell Frame for LCS', but the T_{UTRAN-GPS} Measurement Minimum Accuracy Class IE in the Common Measurement Accuracy IE is not received in the COMMON MEASUREMENT INITIATION REQUEST message, the RNC₂ shall regard the Common Measurement Initiation procedure as failed.]

If the Common Measurement Type received in the Common Measurement Type IE is not "load", "RT load" or "NRT load Information", and if the Common Measurement Type received in the Common Measurement Type IE is not defined in ref. [11] or [15] to be measured on the Common Measurement Object Type received in the Common Measurement Object Type IE in the COMMON MEASUREMENT INITIATION REQUEST message the RNC₂/BSS₂ shall regard the Common Measurement Initiation procedure as failed.

If the *Common Measurement Type* IE is set to 'SFN-SFN Observed Time Difference', but the *Neighbouring Cell Measurement Information* IE is not received in the COMMON MEASUREMENT INITIATION REQUEST message, the RNC₂ shall regard the Common Measurement Initiation procedure as failed.

The allowed combinations of the Common measurement type and Report characteristics type are shown in the table below marked with "X". For not allowed combinations, the RNC₂/DRNS/BSS₂ shall regard the Common Measurement Initiation procedure as failed.

Table 4: Allowed Common measurement type and Report characteristics type combinations

Common measurement type	Report characteristics type								
	On Demand	Periodic	Event A	Event B	Event C	Event D	Event E	Event F	On Modification
Received total wide band power	X	X	X	X	X	X	X	X	
Transmitted Carrier Power	X	X	X	X	X	X	X	X	
UL Timeslot ISCP	X	X	X	X	X	X	X	X	
Load	X	X	X	X	X	X	X	X	
UTRAN GPS Timing of Cell Frames for LCS	X	X							X
SFN-SFN Observed Time Difference	X	X							X
RT load	X	X	X	X	X	X	X	X	
NRT load Information	X	X	X	X	X	X	X	X	

[TDD - If the common measurement type requires the Time Slot Information but the [3.84Mcps TDD - *Time Slot* IE] [1.28Mcps TDD – *Time Slot LCR* IE] is not provided in the *Common Measurement Object Type* IE in the COMMON MEASUREMENT INITIATION REQUEST message the DRNS shall regard the Common Measurement Initiation procedure as failed.]

The measurements which can be requested on the Iur and Iur-g interfaces are shown in the table below marked with "X".

Table xx: Allowed Common measurement type on Iur and Iur-g interfaces

Common Measurement Type	Interface	
	Iur	Iur-g
Received total wide band power	X	
Transmitted Carrier Power	X	
UL Timeslot ISCP	X	
Load	X	X
UTRAN GPS Timing of Cell Frames for LCS	X	
SFN-SFN Observed Time Difference	X	
RT load	X	X
NRT load Information	X	X

[GERAN – If the RNC₂ receives from the BSS₁ a COMMON MEASUREMENT INITIATION REQUEST message where a measurement, which is not applicable on the Iur-g interface, is requested, the RNC₂ shall regard the Common Measurement Initiation procedure as failed.]

[GERAN - If the BSS₂ receives from the BSS₁ / RNC₁ a COMMON MEASUREMENT INITIATION REQUEST message where a measurement, which is not applicable on the Iur-g interface, is requested, the BSS₂ shall regard the Common Measurement Initiation procedure as failed.]

[GERAN – If the RNC₂ receives from the BSS₁ a COMMON MEASUREMENT INITIATION REQUEST message where the *SFN reporting indicator* IE is set to "FN Reporting Required", the RNC₂ shall ignore that IE.]

[GERAN – If the BSS₂ receives from the BSS₁/RNC₁ a COMMON MEASUREMENT INITIATION REQUEST message where the *SFN reporting indicator IE* is set to "FN Reporting Required", the BSS₂ shall ignore that IE.]

8.5.3 Common Measurement Reporting

8.5.3.1 General

This procedure is used by an RNC/BSS to report the result of measurements requested by another RNC using the Common Measurement Initiation.

This procedure uses the signalling bearer connection for the relevant Distant RNC Context.

8.5.3.2 Successful Operation

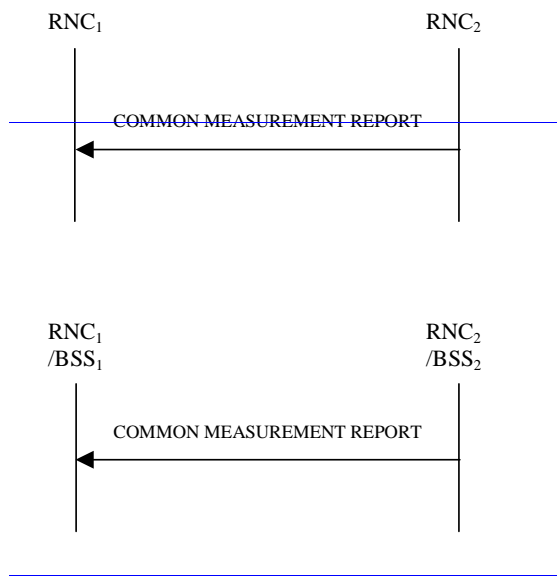


Figure 30C: Common Measurement Reporting procedure, Successful Operation

If the requested measurement reporting criteria are met, the RNC₂/BSS₂ shall initiate a Measurement Reporting procedure. Unless specified below, the meaning of the parameters are given in other specifications.

The *Common Measurement ID* IE shall be set to the Common Measurement ID provided by RNC₁/BSS₁ when initiating the measurement with the Common Measurement Initiation procedure.

UTRAN - If the achieved measurement accuracy does not fulfil the given accuracy requirement, the Measurement not available shall be reported.

UTRAN - The RNC₂ shall include the *Common Measurement Achieved Accuracy* IE in the *Common Measurement Value* IE if the measurement was initiated for the 'UTRAN GPS Timing of Cell Frame for LCS' measurement type by the Common Measurement Initiation procedure.

8.5.3.3 Abnormal Conditions

-

8.5.4 Common Measurement Termination

8.5.4.1 General

This procedure is used by an RNC/BSS to terminate a measurement previously requested by the Common Measurement Initiation procedure.

This procedure uses the signalling bearer connection for the relevant Distant RNC Context.

8.5.4.2 Successful Operation

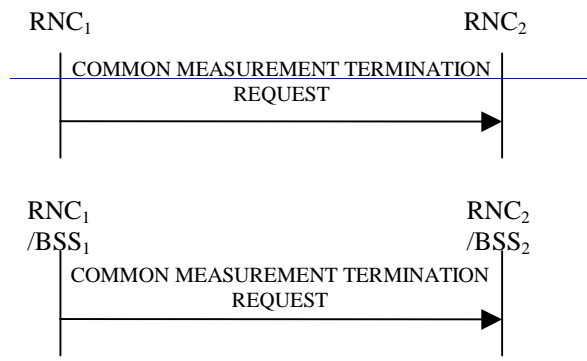


Figure 30D: Common Measurement Termination procedure, Successful Operation

This procedure is initiated with a COMMON MEASUREMENT TERMINATION REQUEST message.

Upon reception, RNC₂/BSS₂ shall terminate reporting of measurements corresponding to the Common Measurement ID.

8.5.4.3 Abnormal Conditions

-

8.5.5 Common Measurement Failure

8.5.5.1 General

This procedure is used by an RNC/BSS to notify another RNC/BSS that a measurement previously requested by the Common Measurement Initiation procedure can no longer be reported.

This procedure uses the signalling bearer connection for the relevant Distant RNC Context.

8.5.5.2 Successful Operation

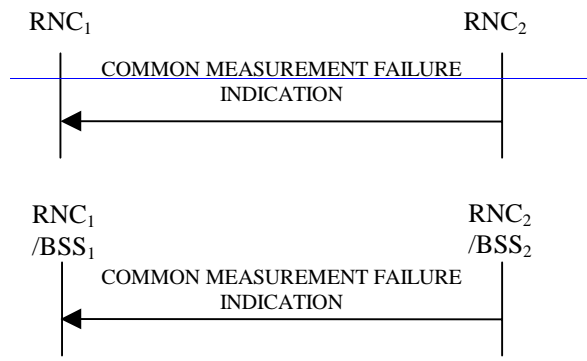


Figure 30E: Common Measurement Failure procedure, Successful Operation

This procedure is initiated with a COMMON MEASUREMENT FAILURE INDICATION message, sent from RNC₂/BSS₂ to RNC₁/BSS₁ to inform the RNC₁/BSS₁ that a previously requested measurement can no longer be reported. RNC₂ has locally terminated the indicated measurement.

8.5.5.3 Abnormal Conditions

-

8.5.6 Information Exchange Initiation

8.5.6.1 General

This procedure is used by a RNC/BSS to request the initiation of an information exchange with another RNC/BSS.

[GERAN - For the [exchange of information on GERAN cells, only the following information type is applicable:](#)

- [Cell Capacity Class](#)]

This procedure uses the signalling bearer connection for the relevant Distant RNC Context.

8.5.6.2 Successful Operation

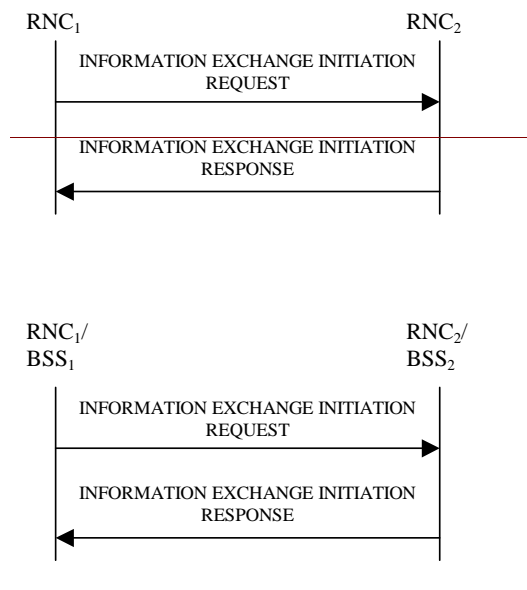


Figure 30F: Information Exchange Initiation procedure, Successful Operation

The procedure is initiated with an INFORMATION EXCHANGE INITIATION REQUEST message sent from RNC₁/BSS₁ to RNC₂/BSS₂.

Upon reception, the RNC₂/BSS₂ shall provide the requested information according to the parameters given in the request. Unless specified below, the meaning of the parameters are given in other specifications.

Information Report Characteristics:

The *Information Report Characteristics* IE indicates how the reporting of the information shall be performed.

If the *Information Report Characteristics* IE is set to 'On-Demand', the RNC₂/BSS₂ shall report the requested information immediately.

If the *Information Report Characteristics* IE is set to 'Periodic', the RNC₂/BSS₂ shall periodically initiate the Information Reporting procedure for all the requested information, with the requested report frequency.

If the *Information Report Characteristics* IE is set to 'On-Modification', the RNC₂/BSS₂ shall report the requested information immediately and then shall initiate the Information Reporting procedure in accordance to the following conditions:

- [UTRAN - If the *Information Type Item* IE is set to 'IPDL Parameters', the RNC₂ shall initiate the Information Reporting procedure when any change in the parameters occurs.]
- [UTRAN - If the *Information Type Item* IE is set to 'DGPS Corrections', the RNC₂ shall initiate the Information Reporting procedure for this specific Information Type when either the PRC has drifted from the previously reported value more than the threshold indicated in the *PRC Deviation* IE or a change has occurred in the IODE.]
- [UTRAN - If the *Information Type Item* IE is set to 'GPS Information' and the *GPS Information Item* IE includes 'GPS Navigation Model & Recovery Assistance', the RNC₂ shall initiate the Information Reporting procedure for this specific GPS Information Type when a change has occurred regarding either the IODC or the list of visible satellites, identified by the *SatID* IEs.]
- [UTRAN - If the *Information Type Item* IE is set to 'GPS Information' and the *GPS Information Item* IE includes 'GPS Ionospheric Model', the RNC₂ shall initiate the Information Reporting procedure for this specific GPS Information Type when any change has occurred.]
- [UTRAN - If the *Information Type Item* IE is set to 'GPS Information' and the *GPS Information Item* IE includes 'GPS UTC Model', the RNC₂ shall initiate the Information Reporting procedure for this specific GPS Information Type when a change has occurred in the *t_ot* parameter.]

- [UTRAN - If the *Information Type Item* IE is set to 'GPS Information' and the *GPS Information Item* IE includes 'GPS Almanac', the RNC₂ shall initiate the Information Reporting procedure for this specific GPS Information Type when any change has occurred.]
- [UTRAN - If the *Information Type Item* IE is set to 'GPS Information' and the *GPS Information Item* IE includes 'GPS Real-Time Integrity', the RNC₂ shall initiate the Information Reporting procedure for this specific GPS Information Type when any change has occurred.]
- If the *Information Type* IE is set to "Cell Capacity Class", the RNC₂ shall initiate the Information Reporting procedure for uplink and downlink cell capacity class. If either uplink or downlink cell capacity class satisfies the requested report characteristics, the RNC₂ shall report the result of both uplink and downlink cell capacity information.

Response message:

If the RNC₂/BSS₂ was able to determine the information requested by the RNC₁/BSS₁, it shall respond with the INFORMATION EXCHANGE INITIATION RESPONSE message. The message shall include the same Information Exchange ID that was included in the INFORMATION EXCHANGE REQUEST message. When the *Report Characteristics* IE is set to "On-Demand" or "On Modification" or "Periodic", the INFORMATION EXCHANGE INITIATION RESPONSE message shall contain the requested data.

8.5.6.3 Unsuccessful Operation

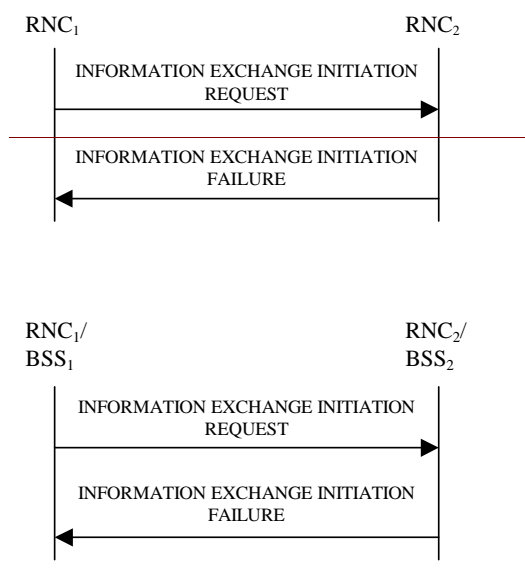


Figure 30G: Information Exchange Initiation procedure, Unsuccessful Operation

If the requested Information Type received in the *Information Type* IE indicates a type of information that RNC₂/BSS₂ cannot provide, the RNC₂/BSS₂ shall regard the Information Exchange Initiation procedure as failed.

If the requested information provision cannot be carried out, the RNC₂/BSS₂ shall send the INFORMATION EXCHANGE INITIATION FAILURE message. The message shall include the same Information Exchange ID that was used in the INFORMATION EXCHANGE INITIATION REQUEST message and the *Cause* IE set to an appropriate value.

Typical cause values are as follows:

Radio Network Layer Cause:

Information temporarily not available.

Information Provision not supported for the object.

8.5.6.4 Abnormal Conditions

[UTRAN - If the *Information Report Characteristics* IE is set to ‘On Modification’, and the *Information Type Item* IE is set to ‘DGPS Corrections’, but the *Information Threshold* IE is not received in the INFORMATION EXCHANGE INITIATION REQUEST message, the RNC₂ shall regard the Information Exchange Initiation procedure as failed.]

The information which can be requested on the Iur and Iur-g interfaces are shown in the table below marked with “X”. For information, which are not applicable on the Iur-g interface, the BSS shall regard the Information Exchange Initiation procedure as failed.

Table xx: Allowed Information types on Iur and Iur-g interfaces

Information Type	Interface	
	Iur	Iur-g
IPDL Parameters	X	
DGPS Corrections	X	
GPS Information	X	
Cell Capacity Class	X	X

8.5.7 Information Reporting

8.5.7.1 General

This procedure is used by a RNC/BSS to report the result of information requested by another RNC/BSS using the Information Exchange Initiation.

This procedure uses the signalling bearer connection for the relevant Distant RNC Context.

8.5.7.2 Successful Operation

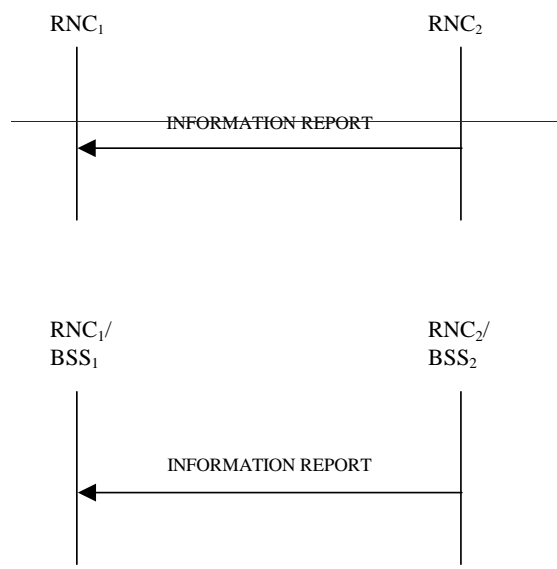


Figure 30H: Information Reporting procedure, Successful Operation

If the requested information reporting criteria are met, the RNC₂/BSS₂ shall initiate an Information Reporting procedure. Unless specified below, the meaning of the parameters are given in other specifications.

The *Information Exchange ID* IE shall be set to the Information Exchange ID provided by the RNC₁/BSS₁ when initiating the information exchange with the Information Exchange Initiation procedure.

The *Requested Data Value* IE shall include at least one IE containing the data to be reported.

8.5.7.3 Abnormal Conditions

-

8.5.8 Information Exchange Termination

8.5.8.1 General

This procedure is used by a RNC/BSS to terminate the information exchange requested using the Information Exchange Initiation.

This procedure uses the signalling bearer connection for the relevant Distant RNC Context.

8.5.8.2 Successful Operation

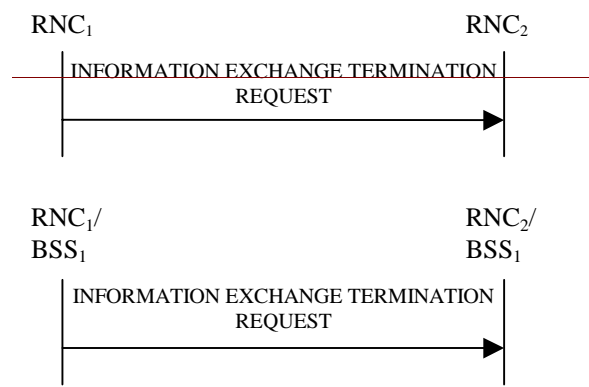


Figure 30I: Information Exchange Termination procedure, Successful Operation

This procedure is initiated with a INFORMATION EXCHANGE TERMINATION REQUEST message.

Upon reception, the RNC/BSS₂ shall terminate the information exchange corresponding to the Information Exchange ID.

8.5.8.3 Abnormal Conditions

-

8.5.9 Information Exchange Failure

8.5.9.1 General

This procedure is used by a RNC/BSS to notify another that the information exchange it previously requested using the Information Exchange Initiation can no longer be reported.

This procedure uses the signalling bearer connection for the relevant Distant RNC Context.

8.5.9.2 Successful Operation

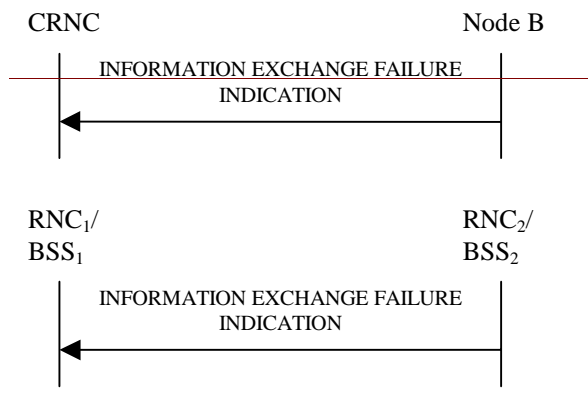


Figure 30J: Information Exchange Failure procedure, Successful Operation

This procedure is initiated with a INFORMATION EXCHANGE FAILURE INDICATION message, sent from the RNC₂/BSS₂ to the RNC₁/BSS₁, to inform the RNC₁/BSS₁ that information previously requested by the Information Exchange Initiation procedure can no longer be reported. The message shall include the same Information Exchange ID that was used in the INFORMATION EXCHANGE INITIATION REQUEST message and the Cause IE set to an appropriate value.

Typical cause values are as follows:

Radio Network Layer Cause:

Information temporarily not available.

9.1.24 UPLINK SIGNALLING TRANSFER INDICATION

9.1.24.1 FDD Message

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		–	
UC-Id	M		9.2.1.71		YES	ignore
SAI	M		9.2.1.52		YES	ignore
Cell GAI	O		9.2.1.5A		YES	ignore
C-RNTI	M		9.2.1.14		YES	ignore
S-RNTI	M		9.2.1.54		YES	ignore
D-RNTI	O		9.2.1.24		YES	ignore
Propagation Delay	M		9.2.2.33		YES	ignore
STTD Support Indicator	M		9.2.2.45		YES	ignore
Closed Loop Mode1 Support Indicator	M		9.2.2.2		YES	ignore
Closed Loop Mode2 Support Indicator	M		9.2.2.3		YES	ignore
L3 Information	M		9.2.1.32		YES	ignore
CN PS Domain Identifier	O		9.2.1.12		YES	ignore
CN CS Domain Identifier	O		9.2.1.11		YES	ignore
URA Information	O		9.2.1.70B		YES	ignore
Cell GA Additional Shapes	O		9.2.1.5B		YES	ignore
DPC Mode Change Support Indicator	O		9.2.2.56		YES	ignore
Common Transport Channel Resources Initialisation not required	O		9.2.1.12F		YES	Ignore
Cell Capability Container FDD	O		9.2.2.D		YES	ignore
Cell Capability Container TDD	O		9.2.3.1a		YES	ignore
Cell Capability Container TDD LCR	O		9.2.3.1b		YES	ignore

9.1.24.2 TDD Message

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		–	
UC-Id	M		9.2.1.71		YES	ignore
SAI	M		9.2.1.52		YES	ignore
Cell GAI	O		9.2.1.5A		YES	Ignore
C-RNTI	M		9.2.1.14		YES	ignore
S-RNTI	M		9.2.1.54		YES	ignore
D-RNTI	O		9.2.1.24		YES	ignore
Rx Timing Deviation	M		9.2.3.7A		YES	ignore
L3 Information	M		9.2.1.32		YES	ignore
CN PS Domain Identifier	O		9.2.1.12		YES	ignore
CN CS Domain Identifier	O		9.2.1.11		YES	ignore
URA Information	O		9.2.1.70B		YES	ignore
Cell GA Additional Shapes	O		9.2.1.5B		YES	ignore
Common Transport Channel Resources Initialisation not required	O		9.2.1.12F		YES	ignore
Cell Capability Container FDD	O		9.2.2.D		YES	ignore
Cell Capability Container TDD	O		9.2.3.1a		YES	ignore
Cell Capability Container TDD LCR	O		9.2.3.1b		YES	ignore

9.1.24x GERAN UPLINK SIGNALLING TRANSFER INDICATION

<u>IE/Group Name</u>	<u>Presence</u>	<u>Range</u>	<u>IE type and reference</u>	<u>Semantics description</u>	<u>Criticality</u>	<u>Assigned Criticality</u>
Message Type	M		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		=	
UC-Id	M		9.2.1.71	UC-Id may be a GERAN cell identifier.	YES	ignore
SAI	M		9.2.1.52		YES	ignore
S-RNTI	M		9.2.1.54		YES	ignore
D-RNTI	O		9.2.1.24		YES	ignore
L3 Information	M		9.2.1.32		YES	ignore
CN PS Domain Identifier	O		9.2.1.12		YES	ignore
CN CS Domain Identifier	O		9.2.1.11		YES	ignore
URA Information	O		9.2.1.70B	URA information may be GRA information	YES	ignore

9.1.25 DOWNLINK SIGNALLING TRANSFER REQUEST

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		–	
C-Id	M		9.2.1.6	May be a GERAN cell identifier	YES	ignore
D-RNTI	M		9.2.1.24		YES	ignore
L3 Information	M		9.2.1.32		YES	ignore
D-RNTI Release Indication	M		9.2.1.25		YES	ignore

9.1.27 PAGING REQUEST

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		–	
CHOICE <i>Paging Area</i>	M				YES	ignore
> <i>URA</i>					–	
>>URA-ID	M		9.2.1.70	May be a GRA-ID.	–	
> <i>Cell</i>				UTRAN only	–	
>>C-Id	M		9.2.1.6		–	
SRNC-Id	M		RNC-Id 9.2.1.50	May be a BSC-Id.	YES	ignore
S-RNTI	M		9.2.1.53		YES	ignore
IMSI	M		9.2.1.31		YES	ignore
DRX Cycle Length Coefficient	M		9.2.1.26		YES	ignore
CN Originated Page to Connected Mode UE		0..1			YES	ignore
>Paging Cause	M		9.2.1.41E		–	
>CN Domain Type	M		9.2.1.11A		–	
>Paging Record Type	M		9.2.1.41F		–	

9.1.43 COMMON MEASUREMENT INITIATION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		–	
Measurement ID	M		9.2.1.37		YES	reject
Common Measurement Object Type	M		9.2.1.12B		YES	reject
CHOICE <i>Common Measurement Object Type</i>	M				YES	reject
>Cell					–	
>>UTRAN Cell Identifier	M		9.2.1.71	May be a GERAN Cell Identifier	–	
>>Time Slot	O		9.2.1.56	3.84Mcps TDD only	–	
>>Time Slot LCR	O		9.2.3.12a	1.28Mcps TDD only	–	
>>Neighbouring Cell Measurement Information		<i>0..<maxnoof MeasNCells ></i>		UTRAN only	–	
>>>CHOICE <i>Neighbouring Cell Measurement Information</i>					–	
>>>> <i>Neighbouring FDD Cell Measurement Information</i>				FDD only	–	
>>>>> Neighbouring FDD Cell Measurement Information	M		9.2.1.41G		–	
>>>>> <i>Neighbouring TDD Cell Measurement Information</i>				3.84Mcps TDD only	–	
>>>>> Neighbouring TDD Cell Measurement Information	M		9.2.1.41H		–	
>>>>> <i>Neighbouring TDD Cell Measurement Information</i> LCR				1.28Mcps TDD only		
>>>>>> Neighbouring TDD Cell Measurement InformationLCR	M		9.2.1.41Dd		–	
Common Measurement Type	M		9.2.1.12C		YES	reject
Measurement Filter Coefficient	O		9.2.1.41	UTRAN only	YES	reject
Report Characteristics	M		9.2.1.48		YES	reject
SFN reporting indicator	M		FN reporting indicator 9.2.1.28A		YES	reject
SFN	O		9.2.1.52A	UTRAN only	YES	reject
Common Measurement Accuracy	O		9.2.1.12A	UTRAN only	YES	reject

9.1.44 COMMON MEASUREMENT INITIATION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		–	
Measurement ID	M		9.2.1.37		YES	ignore
CHOICE <i>Common Measurement Object Type</i>	O			Common Measurement Object Type that the measurement was initiated with.	YES	ignore
>Cell					–	
>>Common Measurement value	M		9.2.1.12D		–	
SFN	O		9.2.1.52A	Common Measurement Time Reference. UTRAN only	YES	ignore
Criticality Diagnostics	O		9.2.1.13		YES	ignore
Common Measurement Achieved Accuracy	O		Common Measurement Accuracy 9.2.1.12A	UTRAN only	YES	ignore

9.1.46 COMMON MEASUREMENT REPORT

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		–	
Measurement ID	M		9.2.1.37		YES	ignore
CHOICE <i>Common Measurement Object Type</i>	M			Common Measurement Object Type that the measurement was initiated with.	YES	ignore
>Cell					–	
>>Common Measurement Value Information	M		9.2.1.12E		–	
SFN	O		9.2.1.52A	Common Measurement Time Reference, UTRAN only	YES	ignore

9.1.49 INFORMATION EXCHANGE INITIATION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		-	
Information Exchange ID	M		9.2.1.31A		YES	reject
Information Exchange Object Type	M		9.2.1.31B		YES	reject
CHOICE <i>Information Exchange Object Type</i>	M				YES	reject
>Cell					-	
>>C-ID	M		9.2.1.6	May be a GERAN cell identifier	YES	reject
Information Type	M		9.2.1.31E		YES	reject
Information Report Characteristics	M		9.2.1.31C		YES	reject

9.2.1.12C Common Measurement Type

The Common Measurement Type identifies which measurement that shall be performed.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common Measurement Type			ENUMERATED (UTRAN GPS Timing of Cell Frames for LCS, SFN-SFN Observed Time Difference, load, transmitted carrier power, received total wide band power, UL timeslot ISCP, ..., RT Load, NRT Load Information)	UL timeslot ISCP shall only be used by TDD For measurements, which are requested on the Iur-g interface, only load, RT Load and NRT Load information are used.

9.2.1.12D Common Measurement Value

The Common Measurement Value shall be the most recent value for this measurement, for which the reporting criteria were met.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE <i>Common Measurement Value</i>				
> <i>T_{UTRAN-GPS} Measurement Value Information</i>				UTRAN only
>>T _{UTRAN-GPS} Measurement Value Information	M		9.2.1.59D	
> <i>SFN-SFN Measurement Value Information</i>				UTRAN only
>>SFN-SFN Measurement Value Information	M		9.2.1.52C	
>Load Value				
>>Load Value	M		9.2.1.33A	
> <i>Transmitted Carrier Power Value</i>				UTRAN only
>>Transmitted Carrier Power Value	M		Transmitted Carrier Power 9.2.1.59A	
> <i>Received Total Wide Band Power Value</i>				UTRAN only
>>Received Total Wide Band Power Value	M		Received Total Wide Band Power 9.2.2.35A	
> <i>UL Timeslot ISCP Value</i>				TDD Only
>>UL Timeslot ISCP Value	M		UL Timeslot ISCP 9.2.3.13A	
> <i>RT Load Value</i>				
>>RT Load Value	M		9.2.1.50B	
> <i>NRT Load Information Value</i>				
>>NRT Load Information Value	M		9.2.1.41I	

9.2.1.13 Criticality Diagnostics

The *Criticality Diagnostics* IE is sent by an RNC when parts of a received message have not been comprehended or were missing, or if the message contained logical errors. When applicable, it contains information about which IEs that were not comprehended or were missing.

For further details on how to use the *Criticality Diagnostics* IE, see Annex C.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Procedure ID		0..1		Procedure ID is to be used if Criticality Diagnostics is part of Error Indication procedure, and not within the response message of the same procedure that caused the error
>Procedure Code	M		INTEGER (0..255)	
>Ddmode	M		ENUMERATED (FDD, TDD, Common)	Common = common to FDD and TDD. Common Ddmode is also applicable for Iur-g procedures listed in section 7.
Triggering Message	O		ENUMERATED (initiating message, successful outcome, unsuccessful outcome, outcome)	The Triggering Message is used only if the Criticality Diagnostics is part of Error Indication.
Procedure Criticality	O		ENUMERATED (reject, ignore, notify)	This Procedure Criticality is used for reporting the Criticality of the Triggering message (Procedure).
Transaction ID	O		Transaction ID	
Information Element Criticality Diagnostics		<i>0..<maxnoof errors></i>		
>IE Criticality	M		ENUMERATED (reject, ignore, notify)	The IE Criticality is used for reporting the criticality of the triggering IE. The value "Ignore" shall never be used.
>IE Id	M		INTEGER (0..65535)	The IE Id of the not understood or missing IE as defined in the ASN.1 part of the specification.
>Repetition Number	O		INTEGER (0..255)	<p>The <i>Repetition Number</i> IE gives</p> <ul style="list-style-type: none"> in case of a not understood IE: The number of occurrences of the reported IE up to and including the not understood occurrence in case of a missing IE: The number of occurrences up to but not including the missing occurrence. <p>Note: All the counted occurrences of the reported IE must have the same topdown hierarchical message structure of IEs with assigned criticality above them.</p>
>Message Structure	O		9.2.1.39A	The <i>Message Structure</i> IE describes the structure where the not understood or

				missing IE was detected. This IE is included if the not understood IE is not the top level of the message.
>Type of Error	M		ENUMERATED(not understood, missing, ...)	

Range bound	Explanation
Maxnooferrors	Maximum number of IE errors allowed to be reported with a single message.

9.2.1.31E Information Type

The Information Type indicates which kind of information the RNS shall provide.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Information Type Item	M		ENUMERATED (UTRAN Access Point Position with Altitude, IPDL Parameters, GPS Information, DGPS Corrections, GPS RX Pos, SFN-SFN Measurement Reference Point Position, ..., Cell Capacity Class)	For information exchange on the Iur-g interface, only the Cell Capacity Class is used.
GPS Information	C-GPS	1..<maxnoofGPSTypes>		
>GPS Information Item			ENUMERATED (GPS Navigation Model and Time Recovery, GPS Ionospheric Model, GPS UTC Model, GPS Almanac, GPS Real-Time Integrity, ...)	

Condition	Explanation
GPS	This IE shall be present if the <i>Information Type</i> IE indicates 'GPS Information'

Range Bound	Explanation
MaxnoofGPSTypes	Maximum number of GPS Information Types supported in one Information Exchange.

9.3.2 Elementary Procedure Definitions

```
-- *****
--
-- Elementary Procedure definitions
--
-- *****

RNSAP-PDU-Descriptions {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) rnsap (1) version1 (1) rnsap-PDU-Descriptions (0) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

-- *****
--
-- IE parameter types from other modules.
--
-- *****

IMPORTS
    Criticality,
    ProcedureID,
    TransactionID
FROM RNSAP-CommonDataTypes

    CommonMeasurementFailureIndication,
    CommonMeasurementInitiationFailure,
    CommonMeasurementInitiationRequest,
    CommonMeasurementInitiationResponse,
    CommonMeasurementReport,
    CommonMeasurementTerminationRequest,
    CommonTransportChannelResourcesFailure,
    CommonTransportChannelResourcesRequest,
    CommonTransportChannelResourcesReleaseRequest,
    CommonTransportChannelResourcesResponseFDD,
    CommonTransportChannelResourcesResponseTDD,
    CompressedModeCommand,
    DedicatedMeasurementFailureIndication,
    DedicatedMeasurementInitiationFailure,
    DedicatedMeasurementInitiationRequest,
    DedicatedMeasurementInitiationResponse,
    DedicatedMeasurementReport,
    DedicatedMeasurementTerminationRequest,
    DL-PowerControlRequest,
    DL-PowerTimeslotControlRequest,
    DownlinkSignallingTransferRequest,
```

ErrorIndication,
InformationExchangeFailureIndication,
InformationExchangeInitiationFailure,
InformationExchangeInitiationRequest,
InformationExchangeInitiationResponse,
InformationExchangeTerminationRequest,
InformationReport,
PagingRequest,
PhysicalChannelReconfigurationCommand,
PhysicalChannelReconfigurationFailure,
PhysicalChannelReconfigurationRequestFDD,
PhysicalChannelReconfigurationRequestTDD,
PrivateMessage,
RadioLinkActivationCommandFDD,
RadioLinkActivationCommandTDD,
RadioLinkAdditionFailureFDD,
RadioLinkAdditionFailureTDD,
RadioLinkAdditionRequestFDD,
RadioLinkAdditionRequestTDD,
RadioLinkAdditionResponseFDD,
RadioLinkAdditionResponseTDD,
RadioLinkCongestionIndication,
RadioLinkDeletionRequest,
RadioLinkDeletionResponse,
RadioLinkFailureIndication,
RadioLinkPreemptionRequiredIndication,
RadioLinkReconfigurationCancel,
RadioLinkReconfigurationCommit,
RadioLinkReconfigurationFailure,
RadioLinkReconfigurationPrepareFDD,
RadioLinkReconfigurationPrepareTDD,
RadioLinkReconfigurationReadyFDD,
RadioLinkReconfigurationReadyTDD,
RadioLinkReconfigurationRequestFDD,
RadioLinkReconfigurationRequestTDD,
RadioLinkReconfigurationResponseFDD,
RadioLinkReconfigurationResponseTDD,
RadioLinkRestoreIndication,
RadioLinkSetupFailureFDD,
RadioLinkSetupFailureTDD,
RadioLinkSetupRequestFDD,
RadioLinkSetupRequestTDD,
RadioLinkSetupResponseFDD,
RadioLinkSetupResponseTDD,
RelocationCommit,
ResetRequest,
ResetResponse,
UplinkSignallingTransferIndicationFDD,
UplinkSignallingTransferIndicationTDD,
[GERANUplinkSignallingTransferIndication](#)

FROM RNSAP-PDU-Contents

id-commonMeasurementFailure,

```

id-commonMeasurementInitiation,
id-commonMeasurementReporting,
id-commonMeasurementTermination,
id-commonTransportChannelResourcesInitialisation,
id-commonTransportChannelResourcesRelease,
id-compressedModeCommand,
id-downlinkPowerControl,
id-downlinkSignallingTransfer,
id-downlinkPowerTimeslotControl,
id-errorIndication,
id-informationExchangeFailure,
id-informationExchangeInitiation,
id-informationReporting,
id-informationExchangeTermination,
id-dedicatedMeasurementFailure,
id-dedicatedMeasurementInitiation,
id-dedicatedMeasurementReporting,
id-dedicatedMeasurementTermination,
id-paging,
id-physicalChannelReconfiguration,
id-privateMessage,
id-radioLinkActivation,
id-radioLinkAddition,
id-radioLinkCongestion,
id-radioLinkDeletion,
id-radioLinkFailure,
id-radioLinkPreemption,
id-radioLinkRestoration,
id-radioLinkSetup,
id-relocationCommit,
id-reset,
id-synchronisedRadioLinkReconfigurationCancellation,
id-synchronisedRadioLinkReconfigurationCommit,
id-synchronisedRadioLinkReconfigurationPreparation,
id-unsynchronisedRadioLinkReconfiguration,
id-uplinkSignallingTransfer,
id-gERANuplinkSignallingTransfer

```

FROM RNSAP-Constants;

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<Parts of the ASN.1 module is omitted>

```

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```

```

-- *****
--
-- Interface Elementary Procedure List
--
-- *****

```

```

RNSAP-ELEMENTARY-PROCEDURES RNSAP-ELEMENTARY-PROCEDURE ::= {
  RNSAP-ELEMENTARY-PROCEDURES-CLASS-1 |
  RNSAP-ELEMENTARY-PROCEDURES-CLASS-2 |
  RNSAP-ELEMENTARY-PROCEDURES-CLASS-3 |
  ...
}

RNSAP-ELEMENTARY-PROCEDURES-CLASS-1 RNSAP-ELEMENTARY-PROCEDURE ::= {
  radioLinkSetupFDD |
  radioLinkSetupTDD |
  radioLinkAdditionFDD |
  radioLinkAdditionTDD |
  radioLinkDeletion |
  synchronisedRadioLinkReconfigurationPreparationFDD |
  synchronisedRadioLinkReconfigurationPreparationTDD |
  unSynchronisedRadioLinkReconfigurationFDD |
  unSynchronisedRadioLinkReconfigurationTDD |
  physicalChannelReconfigurationFDD |
  physicalChannelReconfigurationTDD |
  dedicatedMeasurementInitiation |
  commonTransportChannelResourcesInitialisationFDD |
  commonTransportChannelResourcesInitialisationTDD |
  ... |
  commonMeasurementInitiation |
  informationExchangeInitiation |
  reset
}

RNSAP-ELEMENTARY-PROCEDURES-CLASS-2 RNSAP-ELEMENTARY-PROCEDURE ::= {
  uplinkSignallingTransferFDD |
  uplinkSignallingTransferTDD |
  downlinkSignallingTransfer |
  relocationCommit |
  paging |
  synchronisedRadioLinkReconfigurationCommit |
  synchronisedRadioLinkReconfigurationCancellation |
  radioLinkFailure |
  radioLinkPreemption |
  radioLinkRestoration |
  dedicatedMeasurementReporting |
  dedicatedMeasurementTermination |
  dedicatedMeasurementFailure |
  downlinkPowerControlFDD |
  downlinkPowerTimeslotControl |
  compressedModeCommandFDD |
  commonTransportChannelResourcesRelease |
  errorIndication |
  privateMessage |
  ... |
  radioLinkCongestion |
  commonMeasurementFailure |
  commonMeasurementReporting |
  commonMeasurementTermination
}

```



```

informationExchangeFailure
informationExchangeTermination
informationReporting
radioLinkActivationFDD
radioLinkActivationTDD
gERANuplinkSignallingTransfer
}

RNSAP-ELEMENTARY-PROCEDURES-CLASS-3 RNSAP-ELEMENTARY-PROCEDURE ::= {
    ...
}

-- *****
--
-- Interface Elementary Procedures
--
-- *****

radioLinkSetupFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE  RadioLinkSetupRequestFDD
    SUCCESSFUL OUTCOME  RadioLinkSetupResponseFDD
    UNSUCCESSFUL OUTCOME  RadioLinkSetupFailureFDD
    PROCEDURE ID        { procedureCode id-radioLinkSetup, ddMode fdd }
    CRITICALITY         reject
}

radioLinkSetupTDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE  RadioLinkSetupRequestTDD
    SUCCESSFUL OUTCOME  RadioLinkSetupResponseTDD
    UNSUCCESSFUL OUTCOME  RadioLinkSetupFailureTDD
    PROCEDURE ID        { procedureCode id-radioLinkSetup, ddMode tdd }
    CRITICALITY         reject
}

radioLinkAdditionFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE  RadioLinkAdditionRequestFDD
    SUCCESSFUL OUTCOME  RadioLinkAdditionResponseFDD
    UNSUCCESSFUL OUTCOME  RadioLinkAdditionFailureFDD
    PROCEDURE ID        { procedureCode id-radioLinkAddition , ddMode fdd }
    CRITICALITY         reject
}

radioLinkAdditionTDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE  RadioLinkAdditionRequestTDD
    SUCCESSFUL OUTCOME  RadioLinkAdditionResponseTDD
    UNSUCCESSFUL OUTCOME  RadioLinkAdditionFailureTDD
    PROCEDURE ID        { procedureCode id-radioLinkAddition , ddMode tdd }
    CRITICALITY         reject
}

radioLinkDeletion RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE  RadioLinkDeletionRequest
    SUCCESSFUL OUTCOME  RadioLinkDeletionResponse
}

```

```
PROCEDURE ID      { procedureCode id-radioLinkDeletion, ddMode common }
CRITICALITY      reject
}

synchronisedRadioLinkReconfigurationPreparationFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE  RadioLinkReconfigurationPrepareFDD
  SUCCESSFUL OUTCOME  RadioLinkReconfigurationReadyFDD
  UNSUCCESSFUL OUTCOME RadioLinkReconfigurationFailure
  PROCEDURE ID        { procedureCode id-synchronisedRadioLinkReconfigurationPreparation, ddMode fdd }
  CRITICALITY        reject
}

synchronisedRadioLinkReconfigurationPreparationTDD RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE  RadioLinkReconfigurationPrepareTDD
  SUCCESSFUL OUTCOME  RadioLinkReconfigurationReadyTDD
  UNSUCCESSFUL OUTCOME RadioLinkReconfigurationFailure
  PROCEDURE ID        { procedureCode id-synchronisedRadioLinkReconfigurationPreparation, ddMode tdd }
  CRITICALITY        reject
}

unSynchronisedRadioLinkReconfigurationFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE  RadioLinkReconfigurationRequestFDD
  SUCCESSFUL OUTCOME  RadioLinkReconfigurationResponseFDD
  UNSUCCESSFUL OUTCOME RadioLinkReconfigurationFailure
  PROCEDURE ID        { procedureCode id-unSynchronisedRadioLinkReconfiguration, ddMode fdd }
  CRITICALITY        reject
}

unSynchronisedRadioLinkReconfigurationTDD RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE  RadioLinkReconfigurationRequestTDD
  SUCCESSFUL OUTCOME  RadioLinkReconfigurationResponseTDD
  UNSUCCESSFUL OUTCOME RadioLinkReconfigurationFailure
  PROCEDURE ID        { procedureCode id-unSynchronisedRadioLinkReconfiguration, ddMode tdd }
  CRITICALITY        reject
}

physicalChannelReconfigurationFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE  PhysicalChannelReconfigurationRequestFDD
  SUCCESSFUL OUTCOME  PhysicalChannelReconfigurationCommand
  UNSUCCESSFUL OUTCOME PhysicalChannelReconfigurationFailure
  PROCEDURE ID        { procedureCode id-physicalChannelReconfiguration, ddMode fdd }
  CRITICALITY        reject
}

physicalChannelReconfigurationTDD RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE  PhysicalChannelReconfigurationRequestTDD
  SUCCESSFUL OUTCOME  PhysicalChannelReconfigurationCommand
  UNSUCCESSFUL OUTCOME PhysicalChannelReconfigurationFailure
  PROCEDURE ID        { procedureCode id-physicalChannelReconfiguration, ddMode tdd }
  CRITICALITY        reject
}

dedicatedMeasurementInitiation RNSAP-ELEMENTARY-PROCEDURE ::= {
```

```
INITIATING MESSAGE DedicatedMeasurementInitiationRequest
SUCCESSFUL OUTCOME DedicatedMeasurementInitiationResponse
UNSUCCESSFUL OUTCOME DedicatedMeasurementInitiationFailure
PROCEDURE ID { procedureCode id-dedicatedMeasurementInitiation, ddMode common }
CRITICALITY reject
}

commonTransportChannelResourcesInitialisationFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE CommonTransportChannelResourcesRequest
  SUCCESSFUL OUTCOME CommonTransportChannelResourcesResponseFDD
  UNSUCCESSFUL OUTCOME CommonTransportChannelResourcesFailure
  PROCEDURE ID { procedureCode id-commonTransportChannelResourcesInitialisation, ddMode fdd }
  CRITICALITY reject
}

commonTransportChannelResourcesInitialisationTDD RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE CommonTransportChannelResourcesRequest
  SUCCESSFUL OUTCOME CommonTransportChannelResourcesResponseTDD
  UNSUCCESSFUL OUTCOME CommonTransportChannelResourcesFailure
  PROCEDURE ID { procedureCode id-commonTransportChannelResourcesInitialisation, ddMode tdd }
  CRITICALITY reject
}

uplinkSignallingTransferFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE UplinkSignallingTransferIndicationFDD
  PROCEDURE ID { procedureCode id-uplinkSignallingTransfer, ddMode fdd }
  CRITICALITY ignore
}

uplinkSignallingTransferTDD RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE UplinkSignallingTransferIndicationTDD
  PROCEDURE ID { procedureCode id-uplinkSignallingTransfer, ddMode tdd }
  CRITICALITY ignore
}

downlinkSignallingTransfer RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE DownlinkSignallingTransferRequest
  PROCEDURE ID { procedureCode id-downlinkSignallingTransfer, ddMode common }
  CRITICALITY ignore
}

relocationCommit RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE RelocationCommit
  PROCEDURE ID { procedureCode id-relocationCommit, ddMode common }
  CRITICALITY ignore
}

paging RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE PagingRequest
  PROCEDURE ID { procedureCode id-paging, ddMode common }
  CRITICALITY ignore
}
```

```
synchronisedRadioLinkReconfigurationCommit RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE  RadioLinkReconfigurationCommit
  PROCEDURE ID        { procedureCode id-synchronisedRadioLinkReconfigurationCommit, ddMode common }
  CRITICALITY         ignore
}

synchronisedRadioLinkReconfigurationCancellation RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE  RadioLinkReconfigurationCancel
  PROCEDURE ID        { procedureCode id-synchronisedRadioLinkReconfigurationCancellation, ddMode common }
  CRITICALITY         ignore
}

radioLinkFailure RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE  RadioLinkFailureIndication
  PROCEDURE ID        { procedureCode id-radioLinkFailure, ddMode common }
  CRITICALITY         ignore
}

radioLinkPreemption RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE  RadioLinkPreemptionRequiredIndication
  PROCEDURE ID        { procedureCode id-radioLinkPreemption, ddMode common }
  CRITICALITY         ignore
}

radioLinkRestoration RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE  RadioLinkRestoreIndication
  PROCEDURE ID        { procedureCode id-radioLinkRestoration, ddMode common }
  CRITICALITY         ignore
}

dedicatedMeasurementReporting RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE  DedicatedMeasurementReport
  PROCEDURE ID        { procedureCode id-dedicatedMeasurementReporting, ddMode common }
  CRITICALITY         ignore
}

dedicatedMeasurementTermination RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE  DedicatedMeasurementTerminationRequest
  PROCEDURE ID        { procedureCode id-dedicatedMeasurementTermination, ddMode common }
  CRITICALITY         ignore
}

dedicatedMeasurementFailure RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE  DedicatedMeasurementFailureIndication
  PROCEDURE ID        { procedureCode id-dedicatedMeasurementFailure, ddMode common }
  CRITICALITY         ignore
}

radioLinkCongestion RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE  RadioLinkCongestionIndication
  PROCEDURE ID        { procedureCode id-radioLinkCongestion, ddMode common }
  CRITICALITY         reject
}
```

```
downlinkPowerControlFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE DL-PowerControlRequest
  PROCEDURE ID       { procedureCode id-downlinkPowerControl, ddMode fdd }
  CRITICALITY        ignore
}

downlinkPowerTimeslotControl RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE DL-PowerTimeslotControlRequest
  PROCEDURE ID       { procedureCode id-downlinkPowerTimeslotControl, ddMode tdd }
  CRITICALITY        ignore
}

compressedModeCommandFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE CompressedModeCommand
  PROCEDURE ID       { procedureCode id-compressedModeCommand, ddMode fdd }
  CRITICALITY        ignore
}

commonTransportChannelResourcesRelease RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE CommonTransportChannelResourcesReleaseRequest
  PROCEDURE ID       { procedureCode id-commonTransportChannelResourcesRelease, ddMode common }
  CRITICALITY        ignore
}

errorIndication RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE ErrorIndication
  PROCEDURE ID       { procedureCode id-errorIndication, ddMode common }
  CRITICALITY        ignore
}

commonMeasurementInitiation RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      CommonMeasurementInitiationRequest
  SUCCESSFUL OUTCOME      CommonMeasurementInitiationResponse
  UNSUCCESSFUL OUTCOME    CommonMeasurementInitiationFailure
  PROCEDURE ID            { procedureCode id-commonMeasurementInitiation, ddMode common }
  CRITICALITY              reject
}

commonMeasurementReporting RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      CommonMeasurementReport
  PROCEDURE ID            { procedureCode id-commonMeasurementReporting, ddMode common }
  CRITICALITY              ignore
}

commonMeasurementTermination RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      CommonMeasurementTerminationRequest
  PROCEDURE ID            { procedureCode id-commonMeasurementTermination, ddMode common }
  CRITICALITY              ignore
}

commonMeasurementFailure RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      CommonMeasurementFailureIndication
```

```
PROCEDURE ID      { procedureCode id-commonMeasurementFailure, ddMode common }
CRITICALITY      ignore
}

informationExchangeInitiation RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      InformationExchangeInitiationRequest
  SUCCESSFUL OUTCOME      InformationExchangeInitiationResponse
  UNSUCCESSFUL OUTCOME    InformationExchangeInitiationFailure
  PROCEDURE ID            { procedureCode id-informationExchangeInitiation, ddMode common }
  CRITICALITY             reject
}

informationReporting RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      InformationReport
  PROCEDURE ID            { procedureCode id-informationReporting, ddMode common }
  CRITICALITY             ignore
}

informationExchangeTermination RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      InformationExchangeTerminationRequest
  PROCEDURE ID            { procedureCode id-informationExchangeTermination, ddMode common }
  CRITICALITY             ignore
}

informationExchangeFailure RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      InformationExchangeFailureIndication
  PROCEDURE ID            { procedureCode id-informationExchangeFailure, ddMode common }
  CRITICALITY             ignore
}

privateMessage RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      PrivateMessage
  PROCEDURE ID            { procedureCode id-privateMessage, ddMode common }
  CRITICALITY             ignore
}

reset RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      ResetRequest
  SUCCESSFUL OUTCOME      ResetResponse
  PROCEDURE ID            { procedureCode id-reset, ddMode common }
  CRITICALITY             reject
}

radioLinkActivationFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      RadioLinkActivationCommandFDD
  PROCEDURE ID            { procedureCode id-radioLinkActivation, ddMode fdd }
  CRITICALITY             ignore
}

radioLinkActivationTDD RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      RadioLinkActivationCommandTDD
```

```

PROCEDURE ID      { procedureCode id-radioLinkActivation, ddMode tdd }
CRITICALITY      ignore
}

GERANuplinkSignallingTransfer RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE GERANuplinkSignallingTransferIndication
  PROCEDURE ID      { procedureCode id-GERANuplinkSignallingTransfer, ddMode common }
  CRITICALITY      ignore
}

END

```

9.3.3 PDU Definitions

```

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<Parts of the ASN.1 module is omitted>
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.

-- *****
--
-- DOWNLINK SIGNALLING TRANSFER REQUEST
--
-- *****

DownlinkSignallingTransferRequest ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container          {{DownlinkSignallingTransferRequest-IEs}},
  protocolExtensions  ProtocolExtensionContainer    {{DownlinkSignallingTransferRequest-Extensions}}      OPTIONAL,
  ...
}

DownlinkSignallingTransferRequest-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-C-ID          CRITICALITY ignore TYPE C-ID          PRESENCE mandatory } |
  -- May be a GERAN cell identifier
  { ID id-D-RNTI        CRITICALITY ignore TYPE D-RNTI        PRESENCE mandatory } |
  { ID id-L3-Information CRITICALITY ignore TYPE L3-Information PRESENCE mandatory } |
  { ID id-D-RNTI-ReleaseIndication CRITICALITY ignore TYPE D-RNTI-ReleaseIndication PRESENCE mandatory },
  ...
}

DownlinkSignallingTransferRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

-- *****
--
-- RELOCATION COMMIT
--
-- *****

RelocationCommit ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RelocationCommit-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{RelocationCommit-Extensions}}           OPTIONAL,
    ...
}

RelocationCommit-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-D-RNTI          CRITICALITY ignore TYPE D-RNTI          PRESENCE optional } |
    { ID id-RANAP-RelocationInformation CRITICALITY ignore TYPE RANAP-RelocationInformation PRESENCE optional },
    ...
}

RelocationCommit-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- PAGING REQUEST
--
-- *****

PagingRequest ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{PagingRequest-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{PagingRequest-Extensions}}           OPTIONAL,
    ...
}

PagingRequest-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-PagingArea-PagingRqst          CRITICALITY ignore TYPE PagingArea-PagingRqst          PRESENCE mandatory } |
    { ID id-SRNC-ID          CRITICALITY ignore TYPE RNC-ID          PRESENCE mandatory } | -- May be a BSC-Id. |
    { ID id-S-RNTI          CRITICALITY ignore TYPE S-RNTI          PRESENCE mandatory } |
    { ID id-IMSI          CRITICALITY ignore TYPE IMSI          PRESENCE mandatory } |
    { ID id-DRXCycleLengthCoefficient          CRITICALITY ignore TYPE DRXCycleLengthCoefficient          PRESENCE mandatory } |
    { ID id-CNOriginatedPage-PagingRqst          CRITICALITY ignore TYPE CNOriginatedPage-PagingRqst          PRESENCE optional },
    ...
}

PagingArea-PagingRqst ::= CHOICE {
    uRA          URA-PagingRqst, -- May be a GRA-ID. |
    cell          Cell-PagingRqst, -- UTRAN only |
    ...
}

.
.

```



```

.
.<Parts of the ASN.1 module is omitted>
.
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*****
--
-- COMMON MEASUREMENT INITIATION REQUEST
--
-- *****

CommonMeasurementInitiationRequest ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CommonMeasurementInitiationRequest-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CommonMeasurementInitiationRequest-Extensions}}    OPTIONAL,
    ...
}

CommonMeasurementInitiationRequest-IEs RNSAP-PROTOCOL-IES ::= {
    { ID      id-MeasurementID                CRITICALITY reject          TYPE      MeasurementID                PRESENCE mandatory
    }|
    { ID      id-CommonMeasurementObjectType-CM-Rqst          CRITICALITY reject          TYPE      CommonMeasurementObjectType-CM-Rqst          PRESENCE
    mandatory }|
    -- This IE represents both the Common Measurement Object Type IE and the choice based on the Common Measurement Object Type
    -- as described in the tabular message format in subclause 9.1.
    { ID      id-CommonMeasurementType                CRITICALITY reject          TYPE      CommonMeasurementType                PRESENCE mandatory
    }|
    { ID      id-MeasurementFilterCoefficient          CRITICALITY reject          TYPE      MeasurementFilterCoefficient          PRESENCE optional
    }|
    -- UTRAN only
    { ID      id-ReportCharacteristics                CRITICALITY reject          TYPE      ReportCharacteristics                PRESENCE mandatory
    }|
    { ID      id-SFNReportingIndicator                CRITICALITY reject          TYPE      SFNReportingIndicator                PRESENCE mandatory
    }|
    { ID      id-SFN                                  CRITICALITY reject          TYPE      SFN                                  PRESENCE optional
    }|
    -- UTRAN only
    { ID      id-CommonMeasurementAccuracy            CRITICALITY reject          TYPE      CommonMeasurementAccuracy            PRESENCE optional
    },
    -- UTRAN only
    ...
}

CommonMeasurementInitiationRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

CommonMeasurementObjectType-CM-Rqst ::= CHOICE {
    cell          Cell-CM-Rqst,
    ...
}

Cell-CM-Rqst ::= SEQUENCE {

```

```

uC-ID UC-ID,
-- May be a GERAN cell identifier
timeSlot TimeSlot OPTIONAL, --3.84Mcps TDD only
timeSlotLCR TimeSlotLCR OPTIONAL, --1.28Mcps TDD only
neighbouringCellMeasurementInformation SEQUENCE (SIZE (1..maxNrOfMeasNCell)) OF
  CHOICE {
    neighbouringFDDCellMeasurementInformation NeighbouringFDDCellMeasurementInformation,
    neighbouringTDDCellMeasurementInformation NeighbouringTDDCellMeasurementInformation,
    ...,
    extension-neighbouringCellMeasurementInformation Extension-neighbouringCellMeasurementInformation
  },
-- UTRAN only
iE-Extensions ProtocolExtensionContainer { { CellItem-CM-Rqst-ExtIEs } } OPTIONAL,
...
}

Extension-neighbouringCellMeasurementInformation ::= ProtocolIE-Single-Container {{ Extension-neighbouringCellMeasurementInformationIE }}

Extension-neighbouringCellMeasurementInformationIE NBAP-PROTOCOL-IES ::= {
  { ID id-neighbouringTDDCellMeasurementInformationLCR CRITICALITY reject EXTENSION NeighbouringTDDCellMeasurementInformationLCR PRESENCE
  mandatory },
  ...
}

CellItem-CM-Rqst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- COMMON MEASUREMENT INITIATION RESPONSE
--
-- *****

CommonMeasurementInitiationResponse ::= SEQUENCE {
  protocolIEs ProtocolIE-Container {{CommonMeasurementInitiationResponse-IEs}},
  protocolExtensions ProtocolExtensionContainer {{CommonMeasurementInitiationResponse-Extensions}} OPTIONAL,
  ...
}

CommonMeasurementInitiationResponse-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-MeasurementID CRITICALITY ignore TYPE MeasurementID PRESENCE mandatory
  }|
  { ID id-CommonMeasurementObjectType-CM-Rsp CRITICALITY ignore TYPE CommonMeasurementObjectType-CM-Rsp PRESENCE optional
  }|
  { ID id-SFN CRITICALITY ignore TYPE SFN PRESENCE optional
  }|
  -- UTRAN only
  { ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional
  }|
  { ID id-CommonMeasurementAccuracy CRITICALITY reject TYPE CommonMeasurementAccuracy PRESENCE optional
  },
  -- UTRAN only

```

```

}
...
}
CommonMeasurementInitiationResponse-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
...
}
CommonMeasurementObjectType-CM-Rsp ::= CHOICE {
cell Cell-CM-Rsp,
...
}
Cell-CM-Rsp ::= SEQUENCE {
commonMeasurementValue CommonMeasurementValue,
iE-Extensions ProtocolExtensionContainer { { CellItem-CM-Rsp-ExtIEs } } OPTIONAL,
...
}
CellItem-CM-Rsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}
-- *****
--
-- COMMON MEASUREMENT INITIATION FAILURE
--
-- *****
CommonMeasurementInitiationFailure ::= SEQUENCE {
protocolIEs ProtocolIE-Container {{CommonMeasurementInitiationFailure-IEs}},
protocolExtensions ProtocolExtensionContainer {{CommonMeasurementInitiationFailure-Extensions}} OPTIONAL,
...
}
CommonMeasurementInitiationFailure-IEs RNSAP-PROTOCOL-IES ::= {
{ ID id-MeasurementID CRITICALITY ignore TYPE MeasurementID PRESENCE mandatory }|
{ ID id-Cause CRITICALITY ignore TYPE Cause PRESENCE mandatory }|
{ ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional },
...
}
CommonMeasurementInitiationFailure-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
...
}
-- *****
--
-- COMMON MEASUREMENT REPORT
--
-- *****
CommonMeasurementReport ::= SEQUENCE {
protocolIEs ProtocolIE-Container {{CommonMeasurementReport-IEs}},

```

```

    protocolExtensions      ProtocolExtensionContainer  {{CommonMeasurementReport-Extensions}}  OPTIONAL,
    ...
}

CommonMeasurementReport-IEs RNSAP-PROTOCOL-IES ::= {
  { ID      id-MeasurementID          CRITICALITY ignore          TYPE      MeasurementID          PRESENCE mandatory }|
  { ID      id-CommonMeasurementObjectType-CM-Rprt  CRITICALITY ignore          TYPE      CommonMeasurementObjectType-CM-Rprt  PRESENCE mandatory
  }|
  { ID      id-SFN                    CRITICALITY ignore          TYPE      SFN                    PRESENCE optional },
  -- UTRAN only
  ...
}

CommonMeasurementReport-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

CommonMeasurementObjectType-CM-Rprt ::= CHOICE {
  cell          Cell-CM-Rprt,
  ...
}

Cell-CM-Rprt ::= SEQUENCE {
  commonMeasurementValueInformation  CommonMeasurementValueInformation,
  iE-Extensions                      ProtocolExtensionContainer  {{ CellItem-CM-Rprt-ExtIEs }}  OPTIONAL,
  ...
}

CellItem-CM-Rprt-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

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<Parts of the ASN.1 module is omitted>
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.
-- *****
--
-- INFORMATION EXCHANGE INITIATION REQUEST
--
-- *****

InformationExchangeInitiationRequest ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container  {{InformationExchangeInitiationRequest-IEs}},
  protocolExtensions  ProtocolExtensionContainer  {{InformationExchangeInitiationRequest-Extensions}}  OPTIONAL,
  ...
}

```

```

InformationExchangeInitiationRequest-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-InformationExchangeID CRITICALITY reject TYPE InformationExchangeID PRESENCE mandatory
  }|
  { ID id-InformationExchangeObjectType-InfEx-Rqst CRITICALITY reject TYPE InformationExchangeObjectType-InfEx-Rqst PRESENCE
  mandatory }|
  -- This IE represents both the Information Exchange Object Type IE and the choice based on the Information Exchange Object Type
  -- as described in the tabular message format in subclause 9.1.
  { ID id-InformationType CRITICALITY reject TYPE InformationType PRESENCE mandatory
  }|
  { ID id-InformationReportCharacteristics CRITICALITY reject TYPE InformationReportCharacteristics PRESENCE mandatory
  },
  ...
}

InformationExchangeInitiationRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

InformationExchangeObjectType-InfEx-Rqst ::= CHOICE {
  cell Cell-InfEx-Rqst,
  ...
}

Cell-InfEx-Rqst ::= SEQUENCE {
  c-ID C-ID, --May be a GERAN cell identifier
  iE-Extensions ProtocolExtensionContainer { { CellItem-InfEx-Rqst-ExtIEs} } OPTIONAL,
  ...
}

CellItem-InfEx-Rqst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

.
.
.
<Parts of the ASN.1 module is omitted>
.
.
.

-- *****
--
-- RADIO LINK ACTIVATION COMMAND TDD
--
-- *****

RadioLinkActivationCommandTDD ::= SEQUENCE {
  protocolIEs ProtocolIE-Container {{RadioLinkActivationCommandTDD-IEs}},

```

```

    protocolExtensions      ProtocolExtensionContainer  {{RadioLinkActivationCommandTDD-Extensions}}      OPTIONAL,
    ...
}

RadioLinkActivationCommandTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-DelayedActivationList-RL-ActivationCmdTDD      CRITICALITY reject  TYPE      DelayedActivationInformationList-RL-ActivationCmdTDD
    PRESENCE      mandatory  },
    ...
}

RadioLinkActivationCommandTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DelayedActivationInformationList-RL-ActivationCmdTDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {
    { DelayedActivationInformation-RL-ActivationCmdTDD-IEs } }

DelayedActivationInformation-RL-ActivationCmdTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-DelayedActivationInformation-RL-ActivationCmdTDD      CRITICALITY reject  TYPE DelayedActivationInformation-RL-ActivationCmdTDD      PRESENCE
    optional  }
}

DelayedActivationInformation-RL-ActivationCmdTDD ::= SEQUENCE {
    rL-ID                RL-ID,
    delayed-activation-update  DelayedActivationUpdate,
    iE-Extensions        ProtocolExtensionContainer { { DelayedActivationInformation-RL-ActivationCmdTDD-ExtIEs } } OPTIONAL,
    ...
}

DelayedActivationInformation-RL-ActivationCmdTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- GERAN UPLINK SIGNALLING TRANSFER INDICATION
--
-- *****

GERANUplinkSignallingTransferIndication ::= SEQUENCE {
    protocolIEs                ProtocolIE-Container      {{GERANUplinkSignallingTransferIndication-IEs}},
    protocolExtensions        ProtocolExtensionContainer {{GERANUplinkSignallingTransferIndication-Extensions}} OPTIONAL,
    ...
}

GERANUplinkSignallingTransferIndication-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-UC-ID                CRITICALITY ignore  TYPE UC-ID                PRESENCE mandatory } |
    { ID id-SAI                  CRITICALITY ignore  TYPE SAI                  PRESENCE mandatory } |
    { ID id-S-RNTI               CRITICALITY ignore  TYPE S-RNTI              PRESENCE mandatory } |
    { ID id-D-RNTI               CRITICALITY ignore  TYPE D-RNTI              PRESENCE optional  } |
    { ID id-L3-Information        CRITICALITY ignore  TYPE L3-Information      PRESENCE mandatory } |
    { ID id-CN-PS-DomainIdentifier CRITICALITY ignore  TYPE CN-PS-DomainIdentifier PRESENCE optional  } |
}

```

```
{ ID id-CN-CS-DomainIdentifier CRITICALITY ignore TYPE CN-CS-DomainIdentifier PRESENCE optional } |
{ ID id-URA-Information CRITICALITY ignore TYPE URA-Information PRESENCE optional },
-- URA information may be GRA information
...
}

GERANUplinkSignallingTransferIndication-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
...
}

-- *****
--
-- PRIVATE MESSAGE
--
-- *****

PrivateMessage ::= SEQUENCE {
    privateIEs PrivateIE-Container {{PrivateMessage-IEs}},
    ...
}

PrivateMessage-IEs RNSAP-PRIVATE-IES ::= {
    ...
}

END
```

9.3.6 Constant Definitions

```
-- *****
--
-- Constant definitions
--
-- *****

RNSAP-Constants {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) rnsap (1) version1 (1) rnsap-Constants (4) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

IMPORTS
    ProcedureCode,
    ProtocolIE-ID
FROM RNSAP-CommonDataTypes;

-- *****
--
-- Elementary Procedures
--
-- *****

id-commonTransportChannelResourcesInitialisation      ProcedureCode ::= 0
id-commonTransportChannelResourcesRelease             ProcedureCode ::= 1
id-compressedModeCommand                             ProcedureCode ::= 2
id-downlinkPowerControl                              ProcedureCode ::= 3
id-downlinkPowerTimeslotControl                      ProcedureCode ::= 4
id-downlinkSignallingTransfer                        ProcedureCode ::= 5
id-errorIndication                                   ProcedureCode ::= 6
id-dedicatedMeasurementFailure                       ProcedureCode ::= 7
id-dedicatedMeasurementInitiation                   ProcedureCode ::= 8
id-dedicatedMeasurementReporting                     ProcedureCode ::= 9
id-dedicatedMeasurementTermination                   ProcedureCode ::= 10
id-paging                                             ProcedureCode ::= 11
id-physicalChannelReconfiguration                    ProcedureCode ::= 12
id-privateMessage                                    ProcedureCode ::= 13
id-radioLinkAddition                                 ProcedureCode ::= 14
id-radioLinkCongestion                              ProcedureCode ::= 34
id-radioLinkDeletion                                ProcedureCode ::= 15
id-radioLinkFailure                                  ProcedureCode ::= 16
id-radioLinkPreemption                               ProcedureCode ::= 17
id-radioLinkRestoration                             ProcedureCode ::= 18
id-radioLinkSetup                                    ProcedureCode ::= 19
id-relocationCommit                                  ProcedureCode ::= 20
id-synchronisedRadioLinkReconfigurationCancellation ProcedureCode ::= 21
id-synchronisedRadioLinkReconfigurationCommit        ProcedureCode ::= 22
```


id-synchronisedRadioLinkReconfigurationPreparation	ProcedureCode ::= 23
id-unSynchronisedRadioLinkReconfiguration	ProcedureCode ::= 24
id-uplinkSignallingTransfer	ProcedureCode ::= 25
id-commonMeasurementFailure	ProcedureCode ::= 26
id-commonMeasurementInitiation	ProcedureCode ::= 27
id-commonMeasurementReporting	ProcedureCode ::= 28
id-commonMeasurementTermination	ProcedureCode ::= 29
id-informationExchangeFailure	ProcedureCode ::= 30
id-informationExchangeInitiation	ProcedureCode ::= 31
id-informationReporting	ProcedureCode ::= 32
id-informationExchangeTermination	ProcedureCode ::= 33
id-reset	ProcedureCode ::= 35
id-radioLinkActivation	ProcedureCode ::= 36
<u>id-gERANuplinkSignallingTransfer</u>	ProcedureCode ::= 37

•
•
•
•

<Parts of the ASN.1 module is omitted>

```
CommonMeasurementAccuracy ::= CHOICE {
    tUTRANGPSMeasurementAccuracyClass    TUTRANGPSAccuracyClass,
    ...
}
```

```
CommonMeasurementType ::= ENUMERATED {
    uTRAN-GPS-timing-of-cell-frames-for-LCS,
    sFN-SFN-observerd-time-difference,
    load,
    transmitted-carrier-power,
    received-total-wide-band-power,
    uplink-timeslot-iscp,
    ...,
    rT-load,
    nRT-load-Information
}
```

-- For measurements on the Iur-g interface, only load, RT Load and NRT Load information are requested.

```
CommonMeasurementValue ::= CHOICE {
    tUTRANGPSMeasurementValueInformation    TUTRANGPSMeasurementValueInformation,
    sFNSFNMeasurementValueInformation      SFNSFNMeasurementValueInformation,
    loadValue                               LoadValue,
    transmittedCarrierPowerValue           INTEGER(0..100),
    receivedTotalWideBandPowerValue       INTEGER(0..621),
    uplinkTimeslotISCPValue               UL-TimeslotISCP,
    ...,
    rTLoadValue                             RTLoadValue,
```

```
nRTLoadInformationValue          NRTLoadInformationValue
}
-- For measurements on the Iur-g interface, only load, RT Load and NRT Load values are reported.

CommonMeasurementValueInformation ::= CHOICE {
  measurementAvailable          CommonMeasurementAvailable,
  measurementnotAvailable      NULL
}

.
.
.
<Parts of the ASN.1 module is omitted>
.
.

InformationThreshold ::= CHOICE {
  dGPSThreshold          DGPSThreshold,
  ...,
  extension-InformationThreshold      Extension-InformationThreshold
}

Extension-InformationThreshold ::= ProtocolIE-Single-Container {{ Extension-InformationThresholdIE }}

Extension-InformationThresholdIE RNSAP-PROTOCOL-IES ::= {
  { ID id-Cell-Capacity-Class-Value-ThresholdInformation CRITICALITY reject TYPE Cell-Capacity-Class-Value-ThresholdInformation PRESENCE
  mandatory}
}

InformationType ::= SEQUENCE {
  informationTypeItem      ENUMERATED {
    gA-AccessPointPositionwithAltitude,
    gA-AccessPointPosition,
    iPDLParameters,
    gPSInformation,
    dGPSCorrections,
    gPS-RX-POS,
    sFNSFN-GA-AccessPointPosition,
    ...,
    cell-Capacity-Class
  },
  gPSInformation          GPSInformation          OPTIONAL,
  iE-Extensions          ProtocolExtensionContainer { { InformationType-ExtIEs} }          OPTIONAL,
  ...
}

-- The GPS Information IE shall be present if the Information Exchange Type IE indicates 'GPS Information'
-- For information exchange on the Iur-g interface, only the Cell Capacity Class is used.
```

```
InformationType-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

InnerLoopDLPCStatus ::= ENUMERATED {active, inactive}

IPDLParameters ::= CHOICE {
    iPDL-FDD-Parameters      IPDL-FDD-Parameters,
    iPDL-TDD-Parameters     IPDL-TDD-Parameters,    --3.84Mcps TDD only
    ...,
    extension- IPDLParameters  Extension- IPDLParameters
}
```

3GPP TSG-RAN3 Meeting #29
Gyeongju, KOREA, 13th – 17th May 2002

Tdoc R3-021255

CR-Form-v5	CHANGE REQUEST
⌘ 25.433 CR 655 ⌘ rev <input type="text"/> ⌘ Current version: 5.0.0 ⌘	

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

Title:	⌘ Removal of syntax errors from ASN.1		
Source:	⌘ R-WG3		
Work item code:	⌘ TEI	Date:	⌘ 2002-May
Category:	⌘ F	Release:	⌘ REL5
	Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:
	F (correction)		2 (GSM Phase 2)
	A (corresponds to a correction in an earlier release)		R96 (Release 1996)
	B (addition of feature),		R97 (Release 1997)
	C (functional modification of feature)		R98 (Release 1998)
	D (editorial modification)		R99 (Release 1999)
	Detailed explanations of the above categories can be found in 3GPP TR 21.900 .		REL-4 (Release 4)
			REL-5 (Release 5)

Reason for change:	⌘ There are several syntax errors in ASN.1.
Summary of change:	⌘ Syntax errors in ASN.1 were removed (please see revision makers).
Consequences if not approved:	⌘ If this CR is not approved, syntax errors still remain in ASN.1. <u>Impact Analysis:</u> Impact assessment towards the previous version of the specification (same release): This CR has non isolated impact with the previous version of the specification (same release) because syntax errors affect several procedures. This CR has an impact under protocol point of view. The impact can not be considered isolated because syntax errors affect several procedures.

Clauses affected:	⌘ 9.3.2, 9.3.3, 9.3.4 and 9.3.6
Other specs affected:	⌘ <input type="checkbox"/> Other core specifications ⌘ <input type="checkbox"/> <input type="checkbox"/> Test specifications <input type="checkbox"/> O&M Specifications
Other comments:	⌘

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at: http://www.3gpp.org/3G_Specs/CRs.htm. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be

downloaded from the 3GPP server under <ftp://ftp.3gpp.org/specs/> For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.

- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

9.3.2 Elementary Procedure Definitions

```
-- *****
--
-- Elementary Procedure definitions
--
-- *****

NBAP-PDU-Descriptions {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-PDU-Descriptions (0) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

-- *****
--
-- IE parameter types from other modules.
--
-- *****

IMPORTS
    Criticality,
    ProcedureID,
    MessageDiscriminator,
    TransactionID
FROM NBAP-CommonDataTypes

    CommonTransportChannelSetupRequestFDD,
    CommonTransportChannelSetupRequestTDD,
    CommonTransportChannelSetupResponse,
    CommonTransportChannelSetupFailure,
    CommonTransportChannelReconfigurationRequestFDD,
    CommonTransportChannelReconfigurationRequestTDD,
    CommonTransportChannelReconfigurationResponse,
    CommonTransportChannelReconfigurationFailure,
    CommonTransportChannelDeletionRequest,
    CommonTransportChannelDeletionResponse,
    BlockResourceRequest,
    BlockResourceResponse,
    BlockResourceFailure,
    UnblockResourceIndication,
    AuditFailure,
    AuditRequiredIndication,
    AuditRequest,
    AuditResponse,
    CommonMeasurementInitiationRequest,
    CommonMeasurementInitiationResponse,
    CommonMeasurementInitiationFailure,
    CommonMeasurementReport,
```

CommonMeasurementTerminationRequest,
CommonMeasurementFailureIndication,
CellSetupRequestFDD,
CellSetupRequestTDD,
CellSetupResponse,
CellSetupFailure,
CellReconfigurationRequestFDD,
CellReconfigurationRequestTDD,
CellReconfigurationResponse,
CellReconfigurationFailure,
CellDeletionRequest,
CellDeletionResponse,
InformationExchangeInitiationRequest,
InformationExchangeInitiationResponse,
InformationExchangeInitiationFailure,
InformationReport,
InformationExchangeTerminationRequest,
InformationExchangeFailureIndication,
BearerRearrangementIndication,
ResourceStatusIndication,
SystemInformationUpdateRequest,
SystemInformationUpdateResponse,
SystemInformationUpdateFailure,
ResetRequest,
ResetResponse,
RadioLinkActivationCommandFDD,
RadioLinkActivationCommandTDD,
RadioLinkPreemptionRequiredIndication,
RadioLinkSetupRequestFDD,
RadioLinkSetupRequestTDD,
RadioLinkSetupResponseFDD,
RadioLinkSetupResponseTDD,
RadioLinkSetupFailureFDD,
RadioLinkSetupFailureTDD,
RadioLinkAdditionRequestFDD,
RadioLinkAdditionRequestTDD,
RadioLinkAdditionResponseFDD,
RadioLinkAdditionResponseTDD,
RadioLinkAdditionFailureFDD,
RadioLinkAdditionFailureTDD,
RadioLinkReconfigurationPrepareFDD,
RadioLinkReconfigurationPrepareTDD,
RadioLinkReconfigurationReady,
RadioLinkReconfigurationFailure,
RadioLinkReconfigurationCommit,
RadioLinkReconfigurationCancel,
RadioLinkReconfigurationRequestFDD,
RadioLinkReconfigurationRequestTDD,
RadioLinkReconfigurationResponse,
RadioLinkDeletionRequest,
RadioLinkDeletionResponse,
DL-PowerControlRequest,
DL-PowerTimeslotControlRequest,

DedicatedMeasurementInitiationRequest,
DedicatedMeasurementInitiationResponse,
DedicatedMeasurementInitiationFailure,
DedicatedMeasurementReport,
DedicatedMeasurementTerminationRequest,
DedicatedMeasurementFailureIndication,
RadioLinkFailureIndication,
RadioLinkRestoreIndication,
CompressedModeCommand,
ErrorIndication,
PrivateMessage,
PhysicalSharedChannelReconfigurationRequestTDD,
PhysicalSharedChannelReconfigurationRequestFDD,
PhysicalSharedChannelReconfigurationResponse,
PhysicalSharedChannelReconfigurationFailure,
CellSynchronisationInitiationRequestTDD,
CellSynchronisationInitiationResponseTDD,
CellSynchronisationInitiationFailureTDD,
CellSynchronisationReconfigurationRequestTDD,
CellSynchronisationReconfigurationResponseTDD,
CellSynchronisationReconfigurationFailureTDD,
CellSynchronisationAdjustmentRequestTDD,
CellSynchronisationAdjustmentResponseTDD,
CellSynchronisationAdjustmentFailureTDD,
CellSynchronisationReportTDD,
CellSynchronisationTerminationRequestTDD,
CellSynchronisationFailureIndicationTDD

FROM NBAP-PDU-Contents

id-audit,
id-auditRequired,
id-blockResource,
id-cellDeletion,
id-cellReconfiguration,
id-cellSetup,
id-cellSynchronisationInitiation,
id-cellSynchronisationReconfiguration,
id-cellSynchronisationReporting,
id-cellSynchronisationTermination,
id-cellSynchronisationFailure,
id-commonMeasurementFailure,
id-commonMeasurementInitiation,
id-commonMeasurementReport,
id-commonMeasurementTermination,
id-commonTransportChannelDelete,
id-commonTransportChannelReconfigure,
id-commonTransportChannelSetup,
id-compressedModeCommand,
id-dedicatedMeasurementFailure,
id-dedicatedMeasurementInitiation,
id-dedicatedMeasurementReport,
id-dedicatedMeasurementTermination,
id-downlinkPowerControl,


```

    id-downlinkPowerTimeslotControl,
    id-errorIndicationForDedicated,
    id-errorIndicationForCommon,
    id-informationExchangeFailure,
    id-informationExchangeInitiation,
    id-informationReporting,
    id-informationExchangeTermination,
    id-BearerRearrangement,
    id-physicalSharedChannelReconfiguration,
    id-privateMessageForDedicated,
    id-privateMessageForCommon,
    id-radioLinkActivation,
    id-radioLinkAddition,
    id-radioLinkDeletion,
    id-radioLinkFailure,
    id-radioLinkPreemption,
    id-radioLinkRestoration,
    id-radioLinkSetup,
    id-reset,
    id-resourceStatusIndication,
    id-cellSynchronisationAdjustment,
    id-synchronisedRadioLinkReconfigurationCancellation,
    id-synchronisedRadioLinkReconfigurationCommit,
    id-synchronisedRadioLinkReconfigurationPreparation,
    id-systemInformationUpdate,
    id-unblockResource,
    id-unSynchronisedRadioLinkReconfiguration
FROM NBAP-Constants;

-- *****
--
-- Interface Elementary Procedure Class
--
-- *****

NBAP-ELEMENTARY-PROCEDURE ::= CLASS {
    &InitiatingMessage           ,
    &SuccessfulOutcome           OPTIONAL,
    &UnsuccessfulOutcome        OPTIONAL,
    &Outcome                     OPTIONAL,
    &messageDiscriminator        MessageDiscriminator,
    &procedureID                 ProcedureID    UNIQUE,
    &criticality                  Criticality    DEFAULT ignore
}

WITH SYNTAX {
    INITIATING MESSAGE           &InitiatingMessage
    [SUCCESSFUL OUTCOME         &SuccessfulOutcome]
    [UNSUCCESSFUL OUTCOME      &UnsuccessfulOutcome]
    [OUTCOME                    &Outcome]
    MESSAGE DISCRIMINATOR      &messageDiscriminator
    PROCEDURE ID                &procedureID
    [CRITICALITY                &criticality]
}

```

```

}

-- *****
--
-- Interface PDU Definition
--
-- *****

NBAP-PDU ::= CHOICE {
    initiatingMessage      InitiatingMessage,
    successfulOutcome      SuccessfulOutcome,
    unsuccessfulOutcome    UnsuccessfulOutcome,
    outcome                Outcome,
    ...
}

InitiatingMessage ::= SEQUENCE {
    procedureID            NBAP-ELEMENTARY-PROCEDURE.&procedureID   ({NBAP-ELEMENTARY-PROCEDURES}),
    criticality            NBAP-ELEMENTARY-PROCEDURE.&criticality   ({NBAP-ELEMENTARY-PROCEDURES}@procedureID),
    messageDiscriminator  NBAP-ELEMENTARY-PROCEDURE.&messageDiscriminator({NBAP-ELEMENTARY-PROCEDURES}@procedureID}),
    transactionID         TransactionID,
    value                 NBAP-ELEMENTARY-PROCEDURE.&InitiatingMessage({NBAP-ELEMENTARY-PROCEDURES}@procedureID)
}

SuccessfulOutcome ::= SEQUENCE {
    procedureID            NBAP-ELEMENTARY-PROCEDURE.&procedureID   ({NBAP-ELEMENTARY-PROCEDURES}),
    criticality            NBAP-ELEMENTARY-PROCEDURE.&criticality   ({NBAP-ELEMENTARY-PROCEDURES}@procedureID),
    messageDiscriminator  NBAP-ELEMENTARY-PROCEDURE.&messageDiscriminator({NBAP-ELEMENTARY-PROCEDURES}@procedureID}),
    transactionID         TransactionID,
    value                 NBAP-ELEMENTARY-PROCEDURE.&SuccessfulOutcome({NBAP-ELEMENTARY-PROCEDURES}@procedureID)
}

UnsuccessfulOutcome ::= SEQUENCE {
    procedureID            NBAP-ELEMENTARY-PROCEDURE.&procedureID   ({NBAP-ELEMENTARY-PROCEDURES}),
    criticality            NBAP-ELEMENTARY-PROCEDURE.&criticality   ({NBAP-ELEMENTARY-PROCEDURES}@procedureID),
    messageDiscriminator  NBAP-ELEMENTARY-PROCEDURE.&messageDiscriminator({NBAP-ELEMENTARY-PROCEDURES}@procedureID}),
    transactionID         TransactionID,
    value                 NBAP-ELEMENTARY-PROCEDURE.&UnsuccessfulOutcome({NBAP-ELEMENTARY-PROCEDURES}@procedureID)
}

Outcome ::= SEQUENCE {
    procedureID            NBAP-ELEMENTARY-PROCEDURE.&procedureID   ({NBAP-ELEMENTARY-PROCEDURES}),
    criticality            NBAP-ELEMENTARY-PROCEDURE.&criticality   ({NBAP-ELEMENTARY-PROCEDURES}@procedureID),
    messageDiscriminator  NBAP-ELEMENTARY-PROCEDURE.&messageDiscriminator({NBAP-ELEMENTARY-PROCEDURES}@procedureID}),
    transactionID         TransactionID,
    value                 NBAP-ELEMENTARY-PROCEDURE.&Outcome   ({NBAP-ELEMENTARY-PROCEDURES}@procedureID)
}

-- *****
--
-- Interface Elementary Procedure List
--
-- *****

```

```

NBAP-ELEMENTARY-PROCEDURES NBAP-ELEMENTARY-PROCEDURE ::= {
    NBAP-ELEMENTARY-PROCEDURES-CLASS-1      |
    NBAP-ELEMENTARY-PROCEDURES-CLASS-2      ,
    ...
}

NBAP-ELEMENTARY-PROCEDURES-CLASS-1 NBAP-ELEMENTARY-PROCEDURE ::= {
    cellSetupFDD
    cellSetupTDD
    cellReconfigurationFDD
    cellReconfigurationTDD
    cellDeletion
    commonTransportChannelSetupFDD
    commonTransportChannelSetupTDD
    commonTransportChannelReconfigureFDD
    commonTransportChannelReconfigureTDD
    commonTransportChannelDelete
    audit
    blockResource
    radioLinkSetupFDD
    radioLinkSetupTDD
    systemInformationUpdate
    commonMeasurementInitiation
    radioLinkAdditionFDD
    radioLinkAdditionTDD
    radioLinkDeletion
    reset
    synchronisedRadioLinkReconfigurationPreparationFDD
    synchronisedRadioLinkReconfigurationPreparationTDD
    unSynchronisedRadioLinkReconfigurationFDD
    unSynchronisedRadioLinkReconfigurationTDD
    dedicatedMeasurementInitiation
    physicalSharedChannelReconfigurationTDD
    ...
    informationExchangeInitiation
    cellSynchronisationInitiationTDD
    cellSynchronisationReconfigurationTDD
    cellSynchronisationAdjustmentTDD
    physicalSharedChannelReconfigurationFDD
}

NBAP-ELEMENTARY-PROCEDURES-CLASS-2 NBAP-ELEMENTARY-PROCEDURE ::= {
    resourceStatusIndication
    auditRequired
    commonMeasurementReport
    commonMeasurementTermination
    commonMeasurementFailure
    synchronisedRadioLinkReconfigurationCommit
    synchronisedRadioLinkReconfigurationCancellation
    radioLinkFailure
    radioLinkPreemption
    radioLinkRestoration
}

```

```

dedicatedMeasurementReport
dedicatedMeasurementTermination
dedicatedMeasurementFailure
downlinkPowerControlFDD
downlinkPowerTimeslotControl
compressedModeCommand
unblockResource
errorIndicationForDedicated
errorIndicationForCommon
privateMessageForDedicated
privateMessageForCommon
...
informationReporting
informationExchangeTermination
informationExchangeFailure
cellSynchronisationReportingTDD
cellSynchronisationTerminationTDD
cellSynchronisationFailureTDD
BearerRearrangement
radioLinkActivationFDD
radioLinkActivationTDD
}

-- *****
--
-- Interface Elementary Procedures
--
-- *****

-- Class 1

-- *** CellSetup (FDD) ***
cellSetupFDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      CellSetupRequestFDD
    SUCCESSFUL OUTCOME      CellSetupResponse
    UNSUCCESSFUL OUTCOME    CellSetupFailure
    MESSAGE DISCRIMINATOR   common
    PROCEDURE ID            { procedureCode id-cellSetup, ddMode fdd }
    CRITICALITY             reject
}

-- *** CellSetup (TDD) ***
cellSetupTDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      CellSetupRequestTDD
    SUCCESSFUL OUTCOME      CellSetupResponse
    UNSUCCESSFUL OUTCOME    CellSetupFailure
    MESSAGE DISCRIMINATOR   common
    PROCEDURE ID            { procedureCode id-cellSetup, ddMode tdd }
    CRITICALITY             reject
}

-- *** CellReconfiguration(FDD) ***
cellReconfigurationFDD NBAP-ELEMENTARY-PROCEDURE ::= {

```

```
INITIATING MESSAGE      CellReconfigurationRequestFDD
SUCCESSFUL OUTCOME      CellReconfigurationResponse
UNSUCCESSFUL OUTCOME    CellReconfigurationFailure
MESSAGE DISCRIMINATOR   common
PROCEDURE ID            { procedureCode id-cellReconfiguration, ddMode fdd }
CRITICALITY             reject
}

-- *** CellReconfiguration(TDD) ***
cellReconfigurationTDD NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      CellReconfigurationRequestTDD
  SUCCESSFUL OUTCOME      CellReconfigurationResponse
  UNSUCCESSFUL OUTCOME    CellReconfigurationFailure
  MESSAGE DISCRIMINATOR   common
  PROCEDURE ID            { procedureCode id-cellReconfiguration, ddMode tdd }
  CRITICALITY             reject
}

-- *** CellDeletion ***
cellDeletion NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      CellDeletionRequest
  SUCCESSFUL OUTCOME      CellDeletionResponse
  MESSAGE DISCRIMINATOR   common
  PROCEDURE ID            { procedureCode id-cellDeletion, ddMode common }
  CRITICALITY             reject
}

-- *** CommonTransportChannelSetup (FDD) ***
commonTransportChannelSetupFDD NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      CommonTransportChannelSetupRequestFDD
  SUCCESSFUL OUTCOME      CommonTransportChannelSetupResponse
  UNSUCCESSFUL OUTCOME    CommonTransportChannelSetupFailure
  MESSAGE DISCRIMINATOR   common
  PROCEDURE ID            { procedureCode id-commonTransportChannelSetup, ddMode fdd }
  CRITICALITY             reject
}

-- *** CommonTransportChannelSetup (TDD) ***
commonTransportChannelSetupTDD NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      CommonTransportChannelSetupRequestTDD
  SUCCESSFUL OUTCOME      CommonTransportChannelSetupResponse
  UNSUCCESSFUL OUTCOME    CommonTransportChannelSetupFailure
  MESSAGE DISCRIMINATOR   common
  PROCEDURE ID            { procedureCode id-commonTransportChannelSetup, ddMode tdd }
  CRITICALITY             reject
}

-- *** CommonTransportChannelReconfigure (FDD) ***
commonTransportChannelReconfigureFDD NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      CommonTransportChannelReconfigurationRequestFDD
  SUCCESSFUL OUTCOME      CommonTransportChannelReconfigurationResponse
  UNSUCCESSFUL OUTCOME    CommonTransportChannelReconfigurationFailure
  MESSAGE DISCRIMINATOR   common
}
```

```

    PROCEDURE ID          { procedureCode id-commonTransportChannelReconfigure, ddMode fdd }
    CRITICALITY          reject
}

-- *** CommonTransportChannelReconfigure (TDD) ***
commonTransportChannelReconfigureTDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE    CommonTransportChannelReconfigurationRequestTDD
    SUCCESSFUL OUTCOME    CommonTransportChannelReconfigurationResponse
    UNSUCCESSFUL OUTCOME  CommonTransportChannelReconfigurationFailure
    MESSAGE DISCRIMINATOR common
    PROCEDURE ID          { procedureCode id-commonTransportChannelReconfigure, ddMode tdd }
    CRITICALITY          reject
}

-- *** CommonTransportChannelDelete ***
commonTransportChannelDelete NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE    CommonTransportChannelDeletionRequest
    SUCCESSFUL OUTCOME    CommonTransportChannelDeletionResponse
    MESSAGE DISCRIMINATOR common
    PROCEDURE ID          { procedureCode id-commonTransportChannelDelete, ddMode common }
    CRITICALITY          reject
}

-- *** Audit ***
audit NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE    AuditRequest
    SUCCESSFUL OUTCOME    AuditResponse
    UNSUCCESSFUL OUTCOME  AuditFailure
    MESSAGE DISCRIMINATOR common
    PROCEDURE ID          { procedureCode id-audit, ddMode common }
    CRITICALITY          reject
}

-- *** BlockResourceRequest ***
blockResource NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE    BlockResourceRequest
    SUCCESSFUL OUTCOME    BlockResourceResponse
    UNSUCCESSFUL OUTCOME  BlockResourceFailure
    MESSAGE DISCRIMINATOR common
    PROCEDURE ID          { procedureCode id-blockResource, ddMode common }
    CRITICALITY          reject
}

-- *** RadioLinkSetup (FDD) ***
radioLinkSetupFDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE    RadioLinkSetupRequestFDD
    SUCCESSFUL OUTCOME    RadioLinkSetupResponseFDD
    UNSUCCESSFUL OUTCOME  RadioLinkSetupFailureFDD
    MESSAGE DISCRIMINATOR common
    PROCEDURE ID          { procedureCode id-radioLinkSetup, ddMode fdd }
    CRITICALITY          reject
}

```

```
-- *** RadioLinkSetup (TDD) ***
radioLinkSetupTDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      RadioLinkSetupRequestTDD
    SUCCESSFUL OUTCOME      RadioLinkSetupResponseTDD
    UNSUCCESSFUL OUTCOME    RadioLinkSetupFailureTDD
    MESSAGE DISCRIMINATOR   common
    PROCEDURE ID            { procedureCode id-radioLinkSetup, ddMode tdd }
    CRITICALITY             reject
}

-- *** SystemInformationUpdate ***
systemInformationUpdate NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      SystemInformationUpdateRequest
    SUCCESSFUL OUTCOME      SystemInformationUpdateResponse
    UNSUCCESSFUL OUTCOME    SystemInformationUpdateFailure
    MESSAGE DISCRIMINATOR   common
    PROCEDURE ID            { procedureCode id-systemInformationUpdate, ddMode common }
    CRITICALITY             reject
}

-- *** Reset ***
reset NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      ResetRequest
    SUCCESSFUL OUTCOME      ResetResponse
    MESSAGE DISCRIMINATOR   common
    PROCEDURE ID            { procedureCode id-reset, ddMode common }
    CRITICALITY             reject
}

-- *** CommonMeasurementInitiation ***
commonMeasurementInitiation NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      CommonMeasurementInitiationRequest
    SUCCESSFUL OUTCOME      CommonMeasurementInitiationResponse
    UNSUCCESSFUL OUTCOME    CommonMeasurementInitiationFailure
    MESSAGE DISCRIMINATOR   common
    PROCEDURE ID            { procedureCode id-commonMeasurementInitiation, ddMode common }
    CRITICALITY             reject
}

-- *** RadioLinkAddition (FDD) ***
radioLinkAdditionFDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      RadioLinkAdditionRequestFDD
    SUCCESSFUL OUTCOME      RadioLinkAdditionResponseFDD
    UNSUCCESSFUL OUTCOME    RadioLinkAdditionFailureFDD
    MESSAGE DISCRIMINATOR   dedicated
    PROCEDURE ID            { procedureCode id-radioLinkAddition, ddMode fdd }
    CRITICALITY             reject
}

-- *** RadioLinkAddition (TDD) ***
radioLinkAdditionTDD NBAP-ELEMENTARY-PROCEDURE ::= {
```

```

INITIATING MESSAGE      RadioLinkAdditionRequestTDD
SUCCESSFUL OUTCOME      RadioLinkAdditionResponseTDD
UNSUCCESSFUL OUTCOME    RadioLinkAdditionFailureTDD
MESSAGE DISCRIMINATOR   dedicated
PROCEDURE ID            { procedureCode id-radioLinkAddition, ddMode tdd }
CRITICALITY             reject
}

-- *** RadioLinkDeletion ***
radioLinkDeletion NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      RadioLinkDeletionRequest
  SUCCESSFUL OUTCOME      RadioLinkDeletionResponse
  MESSAGE DISCRIMINATOR   dedicated
  PROCEDURE ID            { procedureCode id-radioLinkDeletion, ddMode common }
  CRITICALITY             reject
}

-- *** SynchronisedRadioLinkReconfigurationPreparation (FDD) ***
synchronisedRadioLinkReconfigurationPreparationFDD NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      RadioLinkReconfigurationPrepareFDD
  SUCCESSFUL OUTCOME      RadioLinkReconfigurationReady
  UNSUCCESSFUL OUTCOME    RadioLinkReconfigurationFailure
  MESSAGE DISCRIMINATOR   dedicated
  PROCEDURE ID            { procedureCode id-synchronisedRadioLinkReconfigurationPreparation, ddMode fdd }
  CRITICALITY             reject
}

-- *** SynchronisedRadioLinkReconfigurationPreparation (TDD) ***
synchronisedRadioLinkReconfigurationPreparationTDD NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      RadioLinkReconfigurationPrepareTDD
  SUCCESSFUL OUTCOME      RadioLinkReconfigurationReady
  UNSUCCESSFUL OUTCOME    RadioLinkReconfigurationFailure
  MESSAGE DISCRIMINATOR   dedicated
  PROCEDURE ID            { procedureCode id-synchronisedRadioLinkReconfigurationPreparation, ddMode tdd }
  CRITICALITY             reject
}

-- *** UnSynchronisedRadioLinkReconfiguration (FDD) ***
unSynchronisedRadioLinkReconfigurationFDD NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      RadioLinkReconfigurationRequestFDD
  SUCCESSFUL OUTCOME      RadioLinkReconfigurationResponse
  UNSUCCESSFUL OUTCOME    RadioLinkReconfigurationFailure
  MESSAGE DISCRIMINATOR   dedicated
  PROCEDURE ID            { procedureCode id-unSynchronisedRadioLinkReconfiguration, ddMode fdd }
  CRITICALITY             reject
}

-- *** UnSynchronisedRadioLinkReconfiguration (TDD) ***
unSynchronisedRadioLinkReconfigurationTDD NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      RadioLinkReconfigurationRequestTDD
  SUCCESSFUL OUTCOME      RadioLinkReconfigurationResponse
  UNSUCCESSFUL OUTCOME    RadioLinkReconfigurationFailure
  MESSAGE DISCRIMINATOR   dedicated

```



```

PROCEDURE ID          { procedureCode id-unSynchronisedRadioLinkReconfiguration, ddMode tdd }
CRITICALITY          reject
}

-- *** DedicatedMeasurementInitiation ***
dedicatedMeasurementInitiation NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE    DedicatedMeasurementInitiationRequest
  SUCCESSFUL OUTCOME    DedicatedMeasurementInitiationResponse
  UNSUCCESSFUL OUTCOME  DedicatedMeasurementInitiationFailure
  MESSAGE DISCRIMINATOR dedicated
  PROCEDURE ID          { procedureCode id-dedicatedMeasurementInitiation, ddMode common }
  CRITICALITY          reject
}

-- *** PhysicalSharedChannelReconfiguration (FDD) ***
physicalSharedChannelReconfigurationFDD NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE    PhysicalSharedChannelReconfigurationRequestFDD
  SUCCESSFUL OUTCOME    PhysicalSharedChannelReconfigurationResponse
  UNSUCCESSFUL OUTCOME  PhysicalSharedChannelReconfigurationFailure
  MESSAGE DISCRIMINATOR common
  PROCEDURE ID          { procedureCode id-physicalSharedChannelReconfiguration, ddMode fdd }
  CRITICALITY          reject
}

-- *** PhysicalSharedChannelReconfiguration (TDD) ***
physicalSharedChannelReconfigurationTDD NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE    PhysicalSharedChannelReconfigurationRequestTDD
  SUCCESSFUL OUTCOME    PhysicalSharedChannelReconfigurationResponseTDD
  UNSUCCESSFUL OUTCOME  PhysicalSharedChannelReconfigurationFailureTDD
  MESSAGE DISCRIMINATOR common
  PROCEDURE ID          { procedureCode id-physicalSharedChannelReconfiguration, ddMode tdd }
  CRITICALITY          reject
}

--*** InformationExchangeInitiation ***
informationExchangeInitiation NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE    InformationExchangeInitiationRequest
  SUCCESSFUL OUTCOME    InformationExchangeInitiationResponse
  UNSUCCESSFUL OUTCOME  InformationExchangeInitiationFailure
  MESSAGE DISCRIMINATOR common
  PROCEDURE ID          { procedureCode id-informationExchangeInitiation, ddMode common }
  CRITICALITY          reject
}

-- *** CellSynchronisationInitiation (TDD only) ***
cellSynchronisationInitiationTDD NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE    CellSynchronisationInitiationRequestTDD
  SUCCESSFUL OUTCOME    CellSynchronisationInitiationResponseTDD
  UNSUCCESSFUL OUTCOME  CellSynchronisationInitiationFailureTDD
  MESSAGE DISCRIMINATOR common
  PROCEDURE ID          { procedureCode id-cellSynchronisationInitiation, ddMode tdd }
  CRITICALITY          reject
}

```

```
-- *** CellSynchronisationReconfiguration (TDD only) ***
cellSynchronisationReconfigurationTDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE    CellSynchronisationReconfigurationRequestTDD
    SUCCESSFUL OUTCOME    CellSynchronisationReconfigurationResponseTDD
    UNSUCCESSFUL OUTCOME  CellSynchronisationReconfigurationFailureTDD
    MESSAGE DISCRIMINATOR common
    PROCEDURE ID          { procedureCode id-cellSynchronisationReconfiguration, ddMode tdd }
    CRITICALITY           reject
}

-- *** CellSynchronisationAdjustment (TDD only) ***
cellSynchronisationAdjustmentTDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE    CellSynchronisationAdjustmentRequestTDD
    SUCCESSFUL OUTCOME    CellSynchronisationAdjustmentResponseTDD
    UNSUCCESSFUL OUTCOME  CellSynchronisationAdjustmentFailureTDD
    MESSAGE DISCRIMINATOR common
    PROCEDURE ID          { procedureCode id-cellSynchronisationAdjustment, ddMode tdd }
    CRITICALITY           reject
}

-- Class 2

-- *** ResourceStatusIndication ***
resourceStatusIndication NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE    ResourceStatusIndication
    MESSAGE DISCRIMINATOR common
    PROCEDURE ID          { procedureCode id-resourceStatusIndication, ddMode common }
    CRITICALITY           ignore
}

-- *** AuditRequired ***
auditRequired NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE    AuditRequiredIndication
    MESSAGE DISCRIMINATOR common
    PROCEDURE ID          { procedureCode id-auditRequired, ddMode common }
    CRITICALITY           ignore
}

-- *** CommonMeasurementReport ***
commonMeasurementReport NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE    CommonMeasurementReport
    MESSAGE DISCRIMINATOR common
    PROCEDURE ID          { procedureCode id-commonMeasurementReport, ddMode common }
    CRITICALITY           ignore
}

-- *** CommonMeasurementTermination ***
commonMeasurementTermination NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE    CommonMeasurementTerminationRequest
    MESSAGE DISCRIMINATOR common
    PROCEDURE ID          { procedureCode id-commonMeasurementTermination, ddMode common }
    CRITICALITY           ignore
}
```

```
}

-- *** CommonMeasurementFailure ***
commonMeasurementFailure NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      CommonMeasurementFailureIndication
    MESSAGE DISCRIMINATOR   common
    PROCEDURE ID            { procedureCode id-commonMeasurementFailure, ddMode common }
    CRITICALITY             ignore
}

-- *** SynchronisedRadioLinkReconfirurationCommit ***
synchronisedRadioLinkReconfigurationCommit NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      RadioLinkReconfigurationCommit
    MESSAGE DISCRIMINATOR   dedicated
    PROCEDURE ID            { procedureCode id-synchronisedRadioLinkReconfigurationCommit, ddMode common }
    CRITICALITY             ignore
}

-- *** SynchronisedRadioReconfigurationCancellation ***
synchronisedRadioLinkReconfigurationCancellation NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      RadioLinkReconfigurationCancel
    MESSAGE DISCRIMINATOR   dedicated
    PROCEDURE ID            { procedureCode id-synchronisedRadioLinkReconfigurationCancellation, ddMode common }
    CRITICALITY             ignore
}

-- *** RadioLinkFailure ***
radioLinkFailure NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      RadioLinkFailureIndication
    MESSAGE DISCRIMINATOR   dedicated
    PROCEDURE ID            { procedureCode id-radioLinkFailure, ddMode common }
    CRITICALITY             ignore
}

-- *** RadioLinkPreemption ***
radioLinkPreemption NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      RadioLinkPreemptionRequiredIndication
    MESSAGE DISCRIMINATOR   dedicated
    PROCEDURE ID            { procedureCode id-radioLinkPreemption, ddMode common }
    CRITICALITY             ignore
}

-- *** RadioLinkRestoration ***
radioLinkRestoration NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      RadioLinkRestoreIndication
    MESSAGE DISCRIMINATOR   dedicated
    PROCEDURE ID            { procedureCode id-radioLinkRestoration, ddMode common }
    CRITICALITY             ignore
}

-- *** DedicatedMeasurementReport ***
dedicatedMeasurementReport NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      DedicatedMeasurementReport

```

```
    MESSAGE DISCRIMINATOR    dedicated
    PROCEDURE ID             { procedureCode id-dedicatedMeasurementReport, ddMode common }
    CRITICALITY              ignore
}

-- *** DedicatedMeasurementTermination ***
dedicatedMeasurementTermination NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      DedicatedMeasurementTerminationRequest
    MESSAGE DISCRIMINATOR   dedicated
    PROCEDURE ID            { procedureCode id-dedicatedMeasurementTermination, ddMode common }
    CRITICALITY             ignore
}

-- *** DedicatedMeasurementFailure ***
dedicatedMeasurementFailure NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      DedicatedMeasurementFailureIndication
    MESSAGE DISCRIMINATOR   dedicated
    PROCEDURE ID            { procedureCode id-dedicatedMeasurementFailure, ddMode common }
    CRITICALITY             ignore
}

-- *** DLPowerControl (FDD only) ***
downlinkPowerControlFDD NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      DL-PowerControlRequest
    MESSAGE DISCRIMINATOR   dedicated
    PROCEDURE ID            { procedureCode id-downlinkPowerControl, ddMode fdd }
    CRITICALITY             ignore
}

-- *** DLPowerTimeslotControl (TDD only) ***
downlinkPowerTimeslotControl NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      DL-PowerTimeslotControlRequest
    MESSAGE DISCRIMINATOR   dedicated
    PROCEDURE ID            { procedureCode id-downlinkPowerTimeslotControl, ddMode tdd }
    CRITICALITY             ignore
}

-- *** CompressedModeCommand (FDD only) ***
compressedModeCommand NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      CompressedModeCommand
    MESSAGE DISCRIMINATOR   dedicated
    PROCEDURE ID            { procedureCode id-compressedModeCommand, ddMode fdd }
    CRITICALITY             ignore
}

-- *** UnblockResourceIndication ***
unblockResource NBAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE      UnblockResourceIndication
    MESSAGE DISCRIMINATOR   common
    PROCEDURE ID            { procedureCode id-unblockResource, ddMode common }
    CRITICALITY             ignore
}
```

```
-- *** ErrorIndication for Dedicated procedures ***
errorIndicationForDedicated NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      ErrorIndication
  MESSAGE DISCRIMINATOR   dedicated
  PROCEDURE ID            { procedureCode id-errorIndicationForDedicated, ddMode common }
  CRITICALITY             ignore
}

-- *** ErrorIndication for Common procedures ***
errorIndicationForCommon NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      ErrorIndication
  MESSAGE DISCRIMINATOR   common
  PROCEDURE ID            { procedureCode id-errorIndicationForCommon, ddMode common }
  CRITICALITY             ignore
}

-- *** CellSynchronisationReporting (TDD only) ***
cellSynchronisationReportingTDD NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      CellSynchronisationReportTDD
  MESSAGE DISCRIMINATOR   common
  PROCEDURE ID            { procedureCode id-cellSynchronisationReporting, ddMode tdd }
  CRITICALITY             ignore
}

-- *** CellSynchronisationTermination (TDD only) ***
cellSynchronisationTerminationTDD NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      CellSynchronisationTerminationRequestTDD
  MESSAGE DISCRIMINATOR   common
  PROCEDURE ID            { procedureCode id-cellSynchronisationTermination, ddMode tdd }
  CRITICALITY             ignore
}

-- *** CellSynchronisationFailure (TDD only) ***
cellSynchronisationFailureTDD NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      CellSynchronisationFailureIndicationTDD
  MESSAGE DISCRIMINATOR   common
  PROCEDURE ID            { procedureCode id-cellSynchronisationFailure, ddMode tdd }
  CRITICALITY             ignore
}

-- *** PrivateMessage for Dedicated procedures ***
privateMessageForDedicated NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      PrivateMessage
  MESSAGE DISCRIMINATOR   dedicated
  PROCEDURE ID            { procedureCode id-privateMessageForDedicated, ddMode common }
  CRITICALITY             ignore
}

-- *** PrivateMessage for Common procedures ***
privateMessageForCommon NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE      PrivateMessage
  MESSAGE DISCRIMINATOR   common
  PROCEDURE ID            { procedureCode id-privateMessageForCommon, ddMode common }
}
```

```
    CRITICALITY          ignore
  }

-- *** InformationReporting ***
informationReporting NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE    InformationReport
  MESSAGE DISCRIMINATOR common
  PROCEDURE ID          { procedureCode id-informationReporting, ddMode common }
  CRITICALITY          ignore
}

-- *** InformationExchangeTermination ***
informationExchangeTermination NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE    InformationExchangeTerminationRequest
  MESSAGE DISCRIMINATOR common
  PROCEDURE ID          { procedureCode id-informationExchangeTermination, ddMode common }
  CRITICALITY          ignore
}

-- *** InformationExchangeFailure ***
informationExchangeFailure NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE    InformationExchangeFailureIndication
  MESSAGE DISCRIMINATOR common
  PROCEDURE ID          { procedureCode id-informationExchangeFailure, ddMode common }
  CRITICALITY          ignore
}

-- *** BearerRearrangement ***
BearerRearrangement NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE    BearerRearrangementIndication
  MESSAGE DISCRIMINATOR dedicated
  PROCEDURE ID          { procedureCode id-BearerRearrangement, ddMode common }
  CRITICALITY          ignore
}

-- *** RadioLinkActivation (FDD) ***
radioLinkActivationFDD NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE    RadioLinkActivationCommandFDD
  MESSAGE DISCRIMINATOR dedicated
  PROCEDURE ID          { procedureCode id-radioLinkActivation, ddMode fdd }
  CRITICALITY          ignore
}

-- *** RadioLinkActivation (TDD) ***
radioLinkActivationTDD NBAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE    RadioLinkActivationCommandTDD
  MESSAGE DISCRIMINATOR dedicated
  PROCEDURE ID          { procedureCode id-radioLinkActivation, ddMode tdd }
  CRITICALITY          ignore
}

END
```

9.3.3 PDU Definitions

```
-- *****
--
-- PDU definitions for NBAP.
--
-- *****

NBAP-PDU-Contents {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-PDU-Contents (1) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

-- *****
--
-- IE parameter types from other modules.
--
-- *****

IMPORTS
  Active-Pattern-Sequence-Information,
  AddorDeleteIndicator,
  AICH-Power,
  AICH-TransmissionTiming,
  AllocationRetentionPriority,
  APPreambleSignature,
  APSubChannelNumber,
  AvailabilityStatus,
  BCCH-ModificationTime,
  BindingID,
  BlockingPriorityIndicator,
  SCTD-Indicator,
  Cause,
  CTrCH-ID,
  CDSubChannelNumbers,
  CellParameterID,
  CellSyncBurstAvailabilityIndicator,
  CellSyncBurstCode,
  CellSyncBurstCodeShift,
  CellSyncBurstRepetitionPeriod,
  CellSyncBurstSIR,
  CellSyncBurstTiming,
  CellSyncBurstTimingThreshold,
  CFN,
  Channel-Assignment-Indication,
  ChipOffset,
  C-ID,
```

ClosedloopTimingAdjustmentMode,
CommonChannelsCapacityConsumptionLaw,
Compressed-Mode-Deactivation-Flag,
CommonMeasurementAccuracy,
CommonMeasurementType,
CommonMeasurementValue,
CommonMeasurementValueInformation,
CommonPhysicalChannelID,
Common-PhysicalChannel-Status-Information,
Common-TransportChannel-Status-Information,
CommonTransportChannelID,
CommonTransportChannel-InformationResponse,
CommunicationControlPortID,
ConfigurationGenerationID,
ConstantValue,
CriticalityDiagnostics,
CPCH-Allowed-Total-Rate,
CPCHScramblingCodeNumber,
CPCH-UL-DPCCH-SlotFormat,
CRNC-CommunicationContextID,
CSBMeasurementID,
CSBTransmissionID,
DCH-FDD-Information,
DCH-InformationResponse,
DCH-ID,
FDD-DCHs-to-Modify,
TDD-DCHs-to-Modify,
DCH-TDD-Information,
DedicatedChannelsCapacityConsumptionLaw,
DedicatedMeasurementType,
DedicatedMeasurementValue,
DedicatedMeasurementValueInformation,
DelayedActivation,
DelayedActivationUpdate,
DiversityControlField,
DiversityMode,
DL-DPCH-SlotFormat,
DL-DPCH-TimingAdjustment,
DL-or-Global-CapacityCredit,
DL-Power,
DL-PowerBalancing-Information,
DL-PowerBalancing-ActivationIndicator,
DLPowerAveragingWindowSize,
DL-PowerBalancing-UpdatedIndicator,
DL-ScramblingCode,
DL-TimeslotISCP,
DL-Timeslot-Information,
DL-TimeslotLCR-Information,
DL-TimeslotISCPInfo,
DL-TimeslotISCPInfoLCR,
DL-TPC-Pattern01Count,
DPC-Mode,
DPCH-ID,

DSCH-ID,
DSCH-FDD-Common-Information,
DSCH-FDD-Information,
DSCH-InformationResponse,
DSCH-TDD-Information,
DwPCH-Power,
End-Of-Audit-Sequence-Indicator,
EnhancedDSCHPC,
EnhancedDSCHPCCounter,
EnhancedDSCHPCIndicator,
EnhancedDSCHPCWnd,
EnhancedDSCHPowerOffset,
FDD-DL-ChannelisationCodeNumber,
FDD-DL-CodeInformation,
FDD-S-CCPCH-Offset,
FDD-TPC-DownlinkStepSize,
FirstRLS-Indicator,
FNReportingIndicator,
FPACH-Power,
FrameAdjustmentValue,
FrameHandlingPriority,
FrameOffset,
HS-PDSCH-FDD-Code-Information,
HS-SCCH-ID,
HS-SCCH-FDD-Code-Information,
IB-OC-ID,
IB-SG-DATA,
IB-SG-POS,
IB-SG-REP,
IB-Type,
IndicationType,
InformationExchangeID,
InformationReportCharacteristics,
InformationType,
InnerLoopDLPCStatus,
IPDL-FDD-Parameters,
IPDL-TDD-Parameters,
IPDL-Indicator,
IPDL-TDD-Parameters-LCR,
LimitedPowerIncrease,
Local-Cell-ID,
MaximumDL-PowerCapability,
Maximum-PDSCH-Power,
MaximumTransmissionPower,
Max-Number-of-PCPCHes,
MaxNrOfUL-DPDCHs,
MaxPRACH-MidambleShifts,
MeasurementFilterCoefficient,
MeasurementID,
MidambleAllocationMode,
MidambleShiftAndBurstType,
MidambleShiftLCR,
MinimumDL-PowerCapability,

MinSpreadingFactor,
MinUL-ChannelisationCodeLength,
MultiplexingPosition,
NEOT,
NCyclesPerSFNperiod,
NFmax,
NRepetitionsPerCyclePeriod,
N-INSYNC-IND,
N-OUTSYNC-IND,
NeighbouringCellMeasurementInformation,
NeighbouringFDDCellMeasurementInformation,
NeighbouringTDDCellMeasurementInformation,
NodeB-CommunicationContextID,
NStartMessage,
NSubCyclesPerCyclePeriod,
PagingIndicatorLength,
PayloadCRC-PresenceIndicator,
PCCPCH-Power,
PCP-Length,
PDSCH-CodeMapping,
PDSCHSet-ID,
PDSCH-ID,
PICH-Mode,
PICH-Power,
PowerAdjustmentType,
PowerOffset,
PowerRaiseLimit,
PRACH-Midamble,
PreambleSignatures,
PreambleThreshold,
PredictedSFNSFNDeviationLimit,
PredictedTUTRANGPSDeviationLimit,
PrimaryCPICH-Power,
PrimaryScramblingCode,
PropagationDelay,
SCH-TimeSlot,
PunctureLimit,
PUSCHSet-ID,
PUSCH-ID,
QE-Selector,
RACH-SlotFormat,
RACH-SubChannelNumbers,
ReferenceClockAvailability,
ReferenceSFNOffset,
RepetitionLength,
RepetitionPeriod,
ReportCharacteristics,
RequestedDataValue,
RequestedDataValueInformation,
ResourceOperationalState,
RL-Set-ID,
RL-ID,
RL-Specific-DCH-Info,

Received-total-wide-band-power-Value,
AdjustmentPeriod,
ScaledAdjustmentRatio,
MaxAdjustmentStep,
RNC-ID,
ScramblingCodeNumber,
SecondaryCCPCH-SlotFormat,
Segment-Type,
S-FieldLength,
SFN,
SFNSFNChangeLimit,
SFNSFNDriftRate,
SFNSFNDriftRateQuality,
SFNSFNQuality,
ShutdownTimer,
SIB-Originator,
SpecialBurstScheduling,
SignallingBearerRequestIndicator,
SSDT-Cell-Identity,
SSDT-CellID-Length,
SSDT-Indication,
Start-Of-Audit-Sequence-Indicator,
STTD-Indicator,
SSDT-SupportIndicator,
SyncCase,
SYNCD1CodeId,
SyncFrameNumber,
SynchronisationReportCharacteristics,
SynchronisationReportType,
T-Cell,
T-RLFFAILURE,
TDD-ChannelisationCode,
TDD-ChannelisationCodeLCR,
TDD-DL-Code-LCR-Information,
TDD-DPCHOffset,
TDD-TPC-DownlinkStepSize,
TDD-PhysicalChannelOffset,
TDD-UL-Code-LCR-Information,
TFCI2-BearerInformationResponse,
TFCI2BearerRequestIndicator,
TFCI-Coding,
TFCI-Presence,
TFCI-SignallingMode,
TFCS,
TimeSlot,
TimeSlotLCR,
TimeSlotDirection,
TimeSlotStatus,
TimingAdjustmentValue,
TimingAdvanceApplied,
ToAWE,
ToAWS,
TransmissionDiversityApplied,

```
TransmitDiversityIndicator,  
TransmissionGapPatternSequenceCodeInformation,  
Transmission-Gap-Pattern-Sequence-Information,  
TransportBearerRequestIndicator,  
TransportFormatSet,  
TransportLayerAddress,  
TSTD-Indicator,  
TUTRANGPS,  
TUTRANGPSChangeLimit,  
TUTRANGPSDriftRate,  
TUTRANGPSDriftRateQuality,  
TUTRANGPSQuality,  
UARFCN,  
UC-Id,  
USCH-Information,  
USCH-InformationResponse,  
UL-CapacityCredit,  
UL-DPCCH-SlotFormat,  
UL-SIR,  
UL-FP-Mode,  
UL-PhysCH-SF-Variation,  
UL-ScramblingCode,  
UL-Timeslot-Information,  
UL-TimeslotLCR-Information,  
UL-TimeSlot-ISCP-Info,  
UL-TimeSlot-ISCP-LCR-Info,  
UL-TimeSlotISCP-Value,  
UL-TimeSlotISCP-Value-IncrDecrThres,  
USCH-ID,  
HSDSCH-FDD-Information,  
HSDSCH-FDD-Information-Response,  
HSDSCH-Information-to-Modify,  
HSDSCH-MACdFlow-ID,  
HSDSCH-RNTI,  
HSDSCH-TDD-Information,  
HSDSCH-TDD-Information-Response,  
PrimaryCCPCH-RSCP
```

FROM NBAP-IEs

```
PrivateIE-Container{},  
ProtocolExtensionContainer{},  
ProtocolIE-Container{},  
ProtocolIE-Single-Container{},  
ProtocolIE-ContainerList{},  
NBAP-PRIVATE-IES,  
NBAP-PROTOCOL-IES,  
NBAP-PROTOCOL-EXTENSION
```

FROM NBAP-Containers

```
id-Active-Pattern-Sequence-Information,  
id-AdjustmentRatio,  
id-AICH-Information,
```

id-AICH-ParametersListIE-CTCH-ReconfRqstFDD,
id-AP-AICH-Information,
id-AP-AICH-ParametersListIE-CTCH-ReconfRqstFDD,
id-BCH-Information,
id-BCCH-ModificationTime,
id-bindingID,
id-BlockingPriorityIndicator,
id-Cause,
id-CauseLevel-PSCH-ReconfFailureTDD,
id-CauseLevel-RL-AdditionFailureFDD,
id-CauseLevel-RL-AdditionFailureTDD,
id-CauseLevel-RL-ReconfFailure,
id-CauseLevel-RL-SetupFailureFDD,
id-CauseLevel-RL-SetupFailureTDD,
id-CauseLevel-SyncAdjustmntFailureTDD,
id-CCP-InformationItem-AuditRsp,
id-CCP-InformationList-AuditRsp,
id-CCP-InformationItem-ResourceStatusInd,
id-CCTrCH-InformationItem-RL-FailureInd,
id-CCTrCH-InformationItem-RL-RestoreInd,
id-CCTrCH-Initial-DL-Power-RL-AdditionRqstTDD,
id-CCTrCH-Initial-DL-Power-RL-ReconfPrepTDD,
id-CCTrCH-Initial-DL-Power-RL-SetupRqstTDD,
id-CDCA-ICH-Information,
id-CDCA-ICH-ParametersListIE-CTCH-ReconfRqstFDD,
id-CellAdjustmentInfo-SyncAdjustmntRqstTDD,
id-CellAdjustmentInfoItem-SyncAdjustmentRqstTDD,
id-Cell-InformationItem-AuditRsp,
id-Cell-InformationItem-ResourceStatusInd,
id-Cell-InformationList-AuditRsp,
id-CellParameterID,
id-CellSyncBurstTransInit-CellSyncInitiationRqstTDD,
id-CellSyncBurstMeasureInit-CellSyncInitiationRqstTDD,
id-cellSyncBurstRepetitionPeriod,
id-CellSyncBurstTransReconfiguration-CellSyncReconfRqstTDD,
id-CellSyncBurstTransReconfInfo-CellSyncReconfRqstTDD,
id-CellSyncBurstMeasReconfiguration-CellSyncReconfRqstTDD,
id-CellSyncBurstMeasInfoList-CellSyncReconfRqstTDD,
id-CellSyncBurstInfoList-CellSyncReconfRqstTDD,
id-CellSyncInfo-CellSyncReprtTDD,
id-CFN,
id-CFNReportingIndicator,
id-C-ID,
id-Closed-Loop-Timing-Adjustment-Mode,
id-CommonMeasurementAccuracy,
id-CommonMeasurementObjectType-CM-Rprt,
id-CommonMeasurementObjectType-CM-Rqst,
id-CommonMeasurementObjectType-CM-Rsp,
id-CommonMeasurementType,
id-CommonPhysicalChannelID,
id-CommonPhysicalChannelType-CTCH-ReconfRqstFDD,
id-CommonPhysicalChannelType-CTCH-SetupRqstFDD,
id-CommonPhysicalChannelType-CTCH-SetupRqstTDD,

id-CommunicationContextInfoItem-Reset,
id-CommunicationControlPortID,
id-CommunicationControlPortInfoItem-Reset,
id-Compressed-Mode-Deactivation-Flag,
id-ConfigurationGenerationID,
id-CPCH-Information,
id-CPCH-Parameters-CTCH-SetupRsp,
id-CPCH-ParametersListIE-CTCH-ReconfRqstFDD,
id-CRNC-CommunicationContextID,
id-CriticalityDiagnostics,
id-CSBTransmissionID,
id-CSBMeasurementID,
id-DCHs-to-Add-FDD,
id-DCHs-to-Add-TDD,
id-DCH-AddList-RL-ReconfPrepTDD,
id-DCH-DeleteList-RL-ReconfPrepFDD,
id-DCH-DeleteList-RL-ReconfPrepTDD,
id-DCH-DeleteList-RL-ReconfRqstFDD,
id-DCH-DeleteList-RL-ReconfRqstTDD,
id-DCH-FDD-Information,
id-DCH-TDD-Information,
id-DCH-InformationResponse,
id-DCH-RearrangeList-Bearer-RearrangeInd,
id-DSCH-RearrangeList-Bearer-RearrangeInd,
id-FDD-DCHs-to-Modify,
id-TDD-DCHs-to-Modify,
id-DedicatedMeasurementObjectType-DM-Rprt,
id-DedicatedMeasurementObjectType-DM-Rqst,
id-DedicatedMeasurementObjectType-DM-Rsp,
id-DedicatedMeasurementType,
id-DelayedActivation,
id-DelayedActivationList-RL-ActivationCmdFDD,
id-DelayedActivationList-RL-ActivationCmdTDD,
id-DelayedActivationInformation-RL-ActivationCmdFDD,
id-DelayedActivationInformation-RL-ActivationCmdTDD,
id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD,
id-DL-CCTrCH-InformationList-RL-AdditionRqstTDD,
id-DL-CCTrCH-InformationList-RL-SetupRqstTDD,
id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD,
id-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD,
id-DL-DPCH-InformationItem-RL-AdditionRqstTDD,
id-DL-DPCH-InformationList-RL-SetupRqstTDD,
id-DL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD,
id-DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD,
id-DL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD,
id-DL-DPCH-Information-RL-ReconfPrepFDD,
id-DL-DPCH-Information-RL-ReconfRqstFDD,

id-DL-DPCH-Information-RL-SetupRqstFDD,
id-DL-DPCH-TimingAdjustment,
id-DL-PowerBalancing-Information,
id-DL-PowerBalancing-ActivationIndicator,
id-DL-ReferencePowerInformationItem-DL-PC-Rqst,
id-DL-PowerBalancing-UpdatedIndicator,
id-DLReferencePower,
id-DLReferencePowerList-DL-PC-Rqst,
id-DL-TPC-Pattern01Count,
id-DPC-Mode,
id-DPCHConstant,
id-DSCH-AddItem-RL-ReconfPrepFDD,
id-DSCHs-to-Add-FDD,
id-DSCH-DeleteItem-RL-ReconfPrepFDD,
id-DSCH-DeleteList-RL-ReconfPrepFDD,
id-DSCHs-to-Add-TDD,
id-DSCH-Information-DeleteList-RL-ReconfPrepTDD,
id-DSCH-Information-ModifyList-RL-ReconfPrepTDD,
id-DSCH-InformationResponse,
id-DSCH-FDD-Information,
id-DSCH-FDD-Common-Information,
id-DSCH-TDD-Information,
id-DSCH-ModifyItem-RL-ReconfPrepFDD,
id-DSCH-ModifyList-RL-ReconfPrepFDD,
id-End-Of-Audit-Sequence-Indicator,
id-EnhancedDSCHPC,
id-EnhancedDSCHPCIndicator,
id-FACH-Information,
id-FACH-ParametersList-CTCH-ReconfRqstTDD,
id-FACH-ParametersList-CTCH-SetupRsp,
id-FACH-ParametersListIE-CTCH-ReconfRqstFDD,
id-FACH-ParametersListIE-CTCH-SetupRqstFDD,
id-FACH-ParametersListIE-CTCH-SetupRqstTDD,
id-IndicationType-ResourceStatusInd,
id-InformationExchangeID,
id-InformationExchangeObjectType-InfEx-Rqst,
id-InformationExchangeObjectType-InfEx-Rsp,
id-InformationExchangeObjectType-InfEx-Rprt,
id-InformationReportCharacteristics,
id-InformationType,
id-InitDL-Power,
id-InnerLoopDLPCStatus,
id-IntStdPhCellSyncInfoItem-CellSyncReprtTDD,
id-IPDLParameter-Information-Cell-ReconfRqstFDD,
id-IPDLParameter-Information-Cell-SetupRqstFDD,
id-IPDLParameter-Information-Cell-ReconfRqstTDD,
id-IPDLParameter-Information-Cell-SetupRqstTDD,
id-LateEntranceCellSyncInfoItem-CellSyncReprtTDD,
id-Limited-power-increase-information-Cell-SetupRqstFDD,
id-Local-Cell-ID,
id-Local-Cell-Group-InformationItem-AuditRsp,
id-Local-Cell-Group-InformationItem-ResourceStatusInd,
id-Local-Cell-Group-InformationItem2-ResourceStatusInd,

id-Local-Cell-Group-InformationList-AuditRsp,
id-Local-Cell-InformationItem-AuditRsp,
id-Local-Cell-InformationItem-ResourceStatusInd,
id-Local-Cell-InformationItem2-ResourceStatusInd,
id-Local-Cell-InformationList-AuditRsp,
id-AdjustmentPeriod,
id-MaxAdjustmentStep,
id-MaximumTransmissionPower,
id-MeasurementFilterCoefficient,
id-MeasurementID,
id-MIB-SB-SIB-InformationList-SystemInfoUpdateRqst,
id-NCyclesPerSFNperiod,
id-NeighbouringCellMeasurementInformation,
id-NodeB-CommunicationContextID,
id-NRepetitionsPerCyclePeriod,
id-P-CCPCH-Information,
id-P-CPICH-Information,
id-P-SCH-Information,
id-PCCPCH-Information-Cell-ReconfRqstTDD,
id-PCCPCH-Information-Cell-SetupRqstTDD,
id-PCH-Parameters-CTCH-ReconfRqstTDD,
id-PCH-Parameters-CTCH-SetupRsp,
id-PCH-ParametersItem-CTCH-ReconfRqstFDD,
id-PCH-ParametersItem-CTCH-SetupRqstFDD,
id-PCH-ParametersItem-CTCH-SetupRqstTDD,
id-PCH-Information,
id-PCPCH-Information,
id-PICH-ParametersItem-CTCH-ReconfRqstFDD,
id-PDSCH-Information-AddListIE-PSCH-ReconfRqst,
id-PDSCH-Information-Cell-SetupRqstFDD,
id-PDSCH-Information-Cell-ReconfRqstFDD,
id-PDSCH-Information-ModifyListIE-PSCH-ReconfRqst,
id-PDSCHSets-AddList-PSCH-ReconfRqst,
id-PDSCHSets-DeleteList-PSCH-ReconfRqst,
id-PDSCHSets-ModifyList-PSCH-ReconfRqst,
id-PICH-Information,
id-PICH-Parameters-CTCH-ReconfRqstTDD,
id-PICH-ParametersItem-CTCH-SetupRqstTDD,
id-PowerAdjustmentType,
id-Power-Local-Cell-Group-InformationItem-AuditRsp,
id-Power-Local-Cell-Group-InformationItem-ResourceStatusInd,
id-Power-Local-Cell-Group-InformationItem2-ResourceStatusInd,
id-Power-Local-Cell-Group-InformationList-AuditRsp,
id-Power-Local-Cell-Group-InformationList-ResourceStatusInd,
id-Power-Local-Cell-Group-InformationList2-ResourceStatusInd,
id-Power-Local-Cell-Group-ID,
id-PRACH-Information,
id-PRACHConstant,
id-PRACH-ParametersItem-CTCH-SetupRqstTDD,
id-PRACH-ParametersListIE-CTCH-ReconfRqstFDD,
id-PrimaryCCPCH-Information-Cell-ReconfRqstFDD,
id-PrimaryCCPCH-Information-Cell-SetupRqstFDD,
id-PrimaryCPICH-Information-Cell-ReconfRqstFDD,

id-PrimaryCPICH-Information-Cell-SetupRqstFDD,
id-PrimarySCH-Information-Cell-ReconfRqstFDD,
id-PrimarySCH-Information-Cell-SetupRqstFDD,
id-PrimaryScramblingCode,
id-SCH-Information-Cell-ReconfRqstTDD,
id-SCH-Information-Cell-SetupRqstTDD,
id-PUSCH-Information-AddListIE-PSCH-ReconfRqst,
id-PUSCH-Information-ModifyListIE-PSCH-ReconfRqst,
id-PUSCHConstant,
id-PUSCHSets-AddList-PSCH-ReconfRqst,
id-PUSCHSets-DeleteList-PSCH-ReconfRqst,
id-PUSCHSets-ModifyList-PSCH-ReconfRqst,
id-RACH-Information,
id-RACH-Parameters-CTCH-SetupRsp,
id-RACH-ParametersItem-CTCH-SetupRqstFDD,
id-RACH-ParameterItem-CTCH-SetupRqstTDD,
id-ReferenceClockAvailability,
id-ReferenceSFNoffset,
id-ReportCharacteristics,
id-Reporting-Object-RL-FailureInd,
id-Reporting-Object-RL-RestoreInd,
id-ResetIndicator,
id-RL-InformationItem-DM-Rprt,
id-RL-InformationItem-DM-Rqst,
id-RL-InformationItem-DM-Rsp,
id-RL-InformationItem-RL-AdditionRqstFDD,
id-RL-InformationItem-RL-DeletionRqst,
id-RL-InformationItem-RL-FailureInd,
id-RL-InformationItem-RL-PreemptRequiredInd,
id-RL-InformationItem-RL-ReconfPrepFDD,
id-RL-InformationItem-RL-ReconfRqstFDD,
id-RL-InformationItem-RL-RestoreInd,
id-RL-InformationItem-RL-SetupRqstFDD,
id-RL-InformationList-RL-AdditionRqstFDD,
id-RL-InformationList-RL-DeletionRqst,
id-RL-InformationList-RL-PreemptRequiredInd,
id-RL-InformationList-RL-ReconfPrepFDD,
id-RL-InformationList-RL-ReconfRqstFDD,
id-RL-InformationList-RL-SetupRqstFDD,
id-RL-InformationResponseItem-RL-AdditionRspFDD,
id-RL-InformationResponseItem-RL-ReconfReady,
id-RL-InformationResponseItem-RL-ReconfRsp,
id-RL-InformationResponseItem-RL-SetupRspFDD,
id-RL-InformationResponseList-RL-AdditionRspFDD,
id-RL-InformationResponseList-RL-ReconfReady,
id-RL-InformationResponseList-RL-ReconfRsp,
id-RL-InformationResponseList-RL-SetupRspFDD,
id-RL-InformationResponse-RL-AdditionRspTDD,
id-RL-InformationResponse-RL-SetupRspTDD,
id-RL-Information-RL-AdditionRqstTDD,
id-RL-Information-RL-ReconfRqstTDD,
id-RL-Information-RL-ReconfPrepTDD,
id-RL-Information-RL-SetupRqstTDD,

id-RL-ReconfigurationFailureItem-RL-ReconfFailure,
id-RL-Set-InformationItem-DM-Rprt,
id-RL-Set-InformationItem-DM-Rsp,
id-RL-Set-InformationItem-RL-FailureInd,
id-RL-Set-InformationItem-RL-RestoreInd,
id-RL-Specific-DCH-Info,
id-S-CCPCH-Information,
id-S-CPICH-Information,
id-SCH-Information,
id-S-SCH-Information,
id-Secondary-CCPCHListIE-CTCH-ReconfRqstTDD,
id-Secondary-CCPCH-parameterListIE-CTCH-SetupRqstTDD,
id-Secondary-CCPCH-Parameters-CTCH-ReconfRqstTDD,
id-SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD,
id-SecondaryCPICH-InformationItem-Cell-SetupRqstFDD,
id-SecondaryCPICH-InformationList-Cell-ReconfRqstFDD,
id-SecondaryCPICH-InformationList-Cell-SetupRqstFDD,
id-SecondarySCH-Information-Cell-ReconfRqstFDD,
id-SecondarySCH-Information-Cell-SetupRqstFDD,
id-SegmentInformationListIE-SystemInfoUpdate,
id-SFN,
id-SFNReportingIndicator,
id-ShutdownTimer,
id-SignallingBearerRequestIndicator,
id-SSDT-CellIDforEDSCHPC,
id-Start-Of-Audit-Sequence-Indicator,
id-Successful-RL-InformationRespItem-RL-AdditionFailureFDD,
id-Successful-RL-InformationRespItem-RL-SetupFailureFDD,
id-Synchronisation-Configuration-Cell-ReconfRqst,
id-Synchronisation-Configuration-Cell-SetupRqst,
id-SyncCase,
id-SyncCaseIndicatorItem-Cell-SetupRqstTDD-PSCH,
id-SyncFrameNumber,
id-SynchronisationReportType,
id-SynchronisationReportCharacteristics,
id-SyncReportType-CellSyncReprtTDD,
id-T-Cell,
id-TargetCommunicationControlPortID,
id-TFCI2-Bearer-Information-RL-SetupRqstFDD,
id-TFCI2-BearerInformationResponse,
id-TFCI2BearerRequestIndicator,
id-TFCI2-BearerSpecificInformation-RL-ReconfPrepFDD,
id-Transmission-Gap-Pattern-Sequence-Information,
id-TimeSlotConfigurationList-Cell-ReconfRqstTDD,
id-TimeSlotConfigurationList-Cell-SetupRqstTDD,
id-timeslotInfo-CellSyncInitiationRqstTDD,
id-TimeslotISCPInfo,
id-TimingAdvanceApplied,
id-TransmissionDiversityApplied,
id-transportlayeraddress,
id-UARFCNforNt,
id-UARFCNforNd,
id-UARFCNforNu,

id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD,
id-UL-CCTrCH-InformationList-RL-AdditionRqstTDD,
id-UL-CCTrCH-InformationList-RL-SetupRqstTDD,
id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD,
id-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD,
id-UL-DPCH-InformationItem-RL-AdditionRqstTDD,
id-UL-DPCH-InformationList-RL-SetupRqstTDD,
id-UL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD,
id-UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD,
id-UL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD,
id-UL-DPCH-Information-RL-ReconfPrepFDD,
id-UL-DPCH-Information-RL-ReconfRqstFDD,
id-UL-DPCH-Information-RL-SetupRqstFDD,
id-Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD,
id-Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD,
id-Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD,
id-Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD,
id-Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD,
id-Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD,
id-Unsuccessful-RL-InformationResp-RL-SetupFailureTDD,
id-USCH-Information-Add,
id-USCH-Information-DeleteList-RL-ReconfPrepTDD,
id-USCH-Information-ModifyList-RL-ReconfPrepTDD,
id-USCH-InformationResponse,
id-USCH-Information,
id-USCH-RearrangeList-Bearer-RearrangeInd,
id-DL-DPCH-LCR-Information-RL-SetupRqstTDD,
id-DL-DPCH-LCR-InformationList-RL-SetupRqstTDD,
id-DwPCH-LCR-Information,
id-DwPCH-LCR-Information-AuditRsp,
id-DwPCH-LCR-InformationList-AuditRsp,
id-DwPCH-LCR-Information-Cell-SetupRqstTDD,
id-DwPCH-LCR-Information-Cell-ReconfRqstTDD,
id-DwPCH-LCR-Information-ResourceStatusInd,
id-maxFACH-Power-LCR-CTCH-SetupRqstTDD,
id-maxFACH-Power-LCR-CTCH-ReconfRqstTDD,
id-FPACH-LCR-Information,
id-FPACH-LCR-Information-AuditRsp,
id-FPACH-LCR-InformationList-AuditRsp,
id-FPACH-LCR-InformationList-ResourceStatusInd,
id-FPACH-LCR-Parameters-CTCH-SetupRqstTDD,
id-FPACH-LCR-ParametersItem-CTCH-SetupRqstTDD,
id-FPACH-LCR-Parameters-CTCH-ReconfRqstTDD,
id-PCCPCH-LCR-Information-Cell-SetupRqstTDD,
id-PCH-Power-LCR-CTCH-SetupRqstTDD,
id-PCH-Power-LCR-CTCH-ReconfRqstTDD,
id-PICH-LCR-Parameters-CTCH-SetupRqstTDD,

id-PICH-LCR-ParametersItem-CTCH-SetupRqstTDD,
 id-PRACH-LCR-ParametersList-CTCH-SetupRqstTDD,
 id-PRACH-LCR-ParametersListIE-CTCH-SetupRqstTDD,
 id-RL-InformationResponse-LCR-RL-SetupRspTDD,
 id-Secondary-CCPCH-LCR-parameterListIE-CTCH-SetupRqstTDD,
 id-Secondary-CCPCH-LCR-parameterList-CTCH-SetupRqstTDD,
 id-TimeSlot,
 id-TimeSlotConfigurationList-LCR-Cell-ReconfRqstTDD,
 id-TimeSlotConfigurationList-LCR-Cell-SetupRqstTDD,
 id-TimeslotISCP-LCR-InfoList-RL-SetupRqstTDD,
 id-TimeSlotLCR-CM-Rqst,
 id-UL-DPCH-LCR-Information-RL-SetupRqstTDD,
 id-UL-DPCH-LCR-InformationList-RL-SetupRqstTDD,
 id-DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD,
 id-UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD,
 id-TimeslotISCP-InformationList-LCR-RL-AdditionRqstTDD,
 id-DL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD,
 id-DL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD,
 id-DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD,
 id-DL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD,
 id-DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD,
 id-TimeslotISCPInfoList-LCR-DL-PC-RqstTDD,
 id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD,
 id-UL-DPCH-LCR-InformationModify-AddList,
 id-UL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD,
 id-UL-TimeslotLCR-Information-RL-ReconfPrepTDD,
 id-UL-SIRTarget,
 id-PDSCH-AddInformation-LCR-PSCH-ReconfRqst,
 id-PDSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst,
 id-PDSCH-ModifyInformation-LCR-PSCH-ReconfRqst,
 id-PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst,
 id-PUSCH-AddInformation-LCR-PSCH-ReconfRqst,
 id-PUSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst,
 id-PUSCH-ModifyInformation-LCR-PSCH-ReconfRqst,
 id-PUSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst,
 id-PUSCH-Info-DM-Rqst,
 id-PUSCH-Info-DM-Rsp,
 id-PUSCH-Info-DM-Rprt,
 id-RL-InformationResponse-LCR-RL-AdditionRspTDD,
 id-IPDLParameter-Information-LCR-Cell-SetupRqstTDD,
 id-IPDLParameter-Information-LCR-Cell-ReconfRqstTDD,
 id-HS-PDSCH-HS-SCCH-MaxPower-PSCH-ReconfRqst,
 id-HS-PDSCH-HS-SCCH-ScramblingCode-PSCH-ReconfRqst,
 id-HS-PDSCH-FDD-Code-Information-PSCH-ReconfRqst,
 id-HS-SCCH-FDD-Code-Information-PSCH-ReconfRqst,
 id-HS-PDSCH-TDD-Information-PSCH-ReconfRqst,
 id-Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRqst,
 id-Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRqst,
 id-Delete-From-HS-SCCH-Resource-Pool-PSCH-ReconfRqst,
~~id-neighbouringTDDCellMeasurementInformationLCR,~~
 id-SYNCD1CodeId-TransInitLCR-CellSyncInitiationRqstTDD,
 id-SYNCD1CodeId-MeasureInitLCR-CellSyncInitiationRqstTDD,
 id-SYNCD1CodeIdTransReconfInfoLCR-CellSyncReconfRqstTDD,

id-SYNCD1CodeIdMeasReconfigurationLCR-CellSyncReconfRqstTDD,
 id-SYNCD1CodeIdMeasInfoList-CellSyncReconfRqstTDD,
 id-SyncDLCodeIdsMeasInfoList-CellSyncReprtTDD,
~~id-SyncDLCodeIdThreInfoLCR,~~
 id-NSubCyclesPerCyclePeriod-CellSyncReconfRqstTDD,
 id-DwPCH-Power,
~~id-AccumulatedClockupdate-CellSyncReprtTDD,~~
~~id-Angle-Of-Arrival-Value-LCR,~~
 id-HSDSCH-FDD-Information,
 id-HSDSCH-FDD-Information-Response,
 id-HSDSCH-FDD-Information-to-Add,
 id-HSDSCH-FDD-Information-to-Delete,
 id-HSDSCH-Information-to-Modify,
 id-HSDSCH-RNTI,
 id-HSDSCH-TDD-Information,
 id-HSDSCH-TDD-Information-Response,
 id-HSDSCH-TDD-Information-Response-LCR,
 id-HSDSCH-TDD-Information-to-Add,
 id-HSDSCH-TDD-Information-to-Delete,
 id-HSPDSCH-RL-ID,
 id-PrimCCPCH-RSCP-DL-PC-RqstTDD,

maxNrOfCCTrCHs,
 maxNrOfCellSyncBursts,
 maxNrOfCodes,
 maxNrOfCPCHs,
 maxNrOfDCHs,
 maxNrOfDLTSSs,
 maxNrOfDLTSLCRs,
 maxNrOfDPCHs,
 maxNrOfDSCHs,
 maxNrOfFACHs,
 maxNrOfRLs,
 maxNrOfRLs-1,
 maxNrOfRLs-2,
 maxNrOfRLSets,
 maxNrOfPCPCHs,
 maxNrOfPDSCHs,
 maxNrOfPUSCHs,
 maxNrOfPRACHLCRs,
 maxNrOfPDSCHSets,
 maxNrOfPUSCHSets,
 maxNrOfReceptsPerSyncFrame,
 maxNrOfSCCPCHs,
 maxNrOfSCCPCHLCRs,
 maxNrOfULTSSs,
 maxNrOfULTSLCRs,
 maxNrOfUSCHs,
 maxAPSigNum,
 maxCPCHCell,
 maxFACHCell,
 maxFPACHCell,
 maxNoofLen,

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maxRACHCell,
maxPCPCHCell,
maxPRACHCell,
maxSCCPCHCell,
maxSCPICHCell,
maxCellinNodeB,
maxCCPinNodeB,
maxCommunicationContext,
maxLocalCellinNodeB,
maxNrOfSlotFormatsPRACH,
maxNrOfCellSyncBursts,
maxNrOfReceptsPerSyncFrame,
maxIB,
maxIBSEG,
maxNrOfHSSCCHs,
maxNrOfSyncFramesLCR,
maxNrOfReceptionsperSyncFrameLCR,
maxNrOfSyncDLCodesLCR,
maxNrOfMACdFlows
FROM NBAP-Constants;

-- *****
--
-- COMMON TRANSPORT CHANNEL SETUP REQUEST FDD
--
-- *****

CommonTransportChannelSetupRequestFDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{CommonTransportChannelSetupRequestFDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer  {{CommonTransportChannelSetupRequestFDD-Extensions}}    OPTIONAL,
    ...
}

CommonTransportChannelSetupRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CommonTransportChannelSetupRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-C-ID          CRITICALITY reject TYPE C-ID
      PRESENCE mandatory }|
    { ID id-ConfigurationGenerationID CRITICALITY reject TYPE ConfigurationGenerationID
      PRESENCE mandatory }|
    { ID id-CommonPhysicalChannelType-CTCH-SetupRqstFDD CRITICALITY ignore TYPE CommonPhysicalChannelType-CTCH-
      SetupRqstFDD PRESENCE mandatory },
    ...
}

CommonPhysicalChannelType-CTCH-SetupRqstFDD ::= CHOICE {
    secondary-CCPCH-parameters Secondary-CCPCH-CTCH-SetupRqstFDD,
    pRACH-parameters PRACH-CTCH-SetupRqstFDD,
    pCPCHes-parameters PCPCH-CTCH-SetupRqstFDD,
    ...
}

```

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Secondary-CCPCH-CTCH-SetupRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID          CommonPhysicalChannelID,
    fdd-S-CCPCH-Offset                FDD-S-CCPCH-Offset,
    dl-ScramblingCode                 DL-ScramblingCode OPTIONAL,
    -- This IE shall be present if the PCH parameters IE is not present
    fdd-DL-ChannelisationCodeNumber   FDD-DL-ChannelisationCodeNumber,
    tFCS                               TFCS,
    secondary-CCPCH-SlotFormat        SecondaryCCPCH-SlotFormat,
    tFCI-Presence                      TFCI-Presence OPTIONAL,
    -- This IE shall be present if the Secondary CCPCH Slot Format is set to any of the values from 8 to 17
    multiplexingPosition              MultiplexingPosition,
    powerOffsetInformation             PowerOffsetInformation-CTCH-SetupRqstFDD,
    sttd-Indicator                    STTD-Indicator,
    fach-Parameters                   FACH-ParametersList-CTCH-SetupRqstFDD OPTIONAL,
    pch-Parameters                    PCH-Parameters-CTCH-SetupRqstFDD OPTIONAL,
    ie-Extensions                     ProtocolExtensionContainer { { Secondary-CCPCHItem-CTCH-SetupRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

Secondary-CCPCHItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PowerOffsetInformation-CTCH-SetupRqstFDD ::= SEQUENCE {
    p01-ForTFCI-Bits                 PowerOffset,
    p03-ForPilotBits                 PowerOffset,
    ie-Extensions                     ProtocolExtensionContainer { { PowerOffsetInformation-CTCH-SetupRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

PowerOffsetInformation-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

FACH-ParametersList-CTCH-SetupRqstFDD ::= ProtocolIE-Single-Container {{ FACH-ParametersListIEs-CTCH-SetupRqstFDD }}

FACH-ParametersListIEs-CTCH-SetupRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-FACH-ParametersListIE-CTCH-SetupRqstFDD CRITICALITY reject TYPE FACH-ParametersListIE-CTCH-SetupRqstFDD PRESENCE mandatory }
}

FACH-ParametersListIE-CTCH-SetupRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfFACHs)) OF FACH-ParametersItem-CTCH-SetupRqstFDD

FACH-ParametersItem-CTCH-SetupRqstFDD ::= SEQUENCE {
    commonTransportChannelID          CommonTransportChannelID,
    transportFormatSet                TransportFormatSet,
    toAWS                              ToAWS,
    toAWE                              ToAWE,
    maxFACH-Power                     DL-Power,
    ie-Extensions                     ProtocolExtensionContainer { { FACH-ParametersItem-CTCH-SetupRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

```

```
FACH-ParametersItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-bindingID CRITICALITY ignore EXTENSION BindingID PRESENCE optional }|
  { ID id-transportlayeraddress CRITICALITY ignore EXTENSION TransportLayerAddress PRESENCE optional },
  ...
}
```

```
PCH-Parameters-CTCH-SetupRqstFDD ::= ProtocolIE-Single-Container {{ PCH-ParametersIE-CTCH-SetupRqstFDD }}
```

```
PCH-ParametersIE-CTCH-SetupRqstFDD NBAP-PROTOCOL-IES ::= {
  { ID id-PCH-ParametersItem-CTCH-SetupRqstFDD CRITICALITY reject TYPE PCH-ParametersItem-CTCH-SetupRqstFDD PRESENCE mandatory }
}
```

```
PCH-ParametersItem-CTCH-SetupRqstFDD ::= SEQUENCE {
  commonTransportChannelID CommonTransportChannelID,
  transportFormatSet TransportFormatSet,
  toAWS ToAWS,
  toAWE ToAWE,
  pCH-Power DL-Power,
  pICH-Parameters PICH-Parameters-CTCH-SetupRqstFDD,
  iE-Extensions ProtocolExtensionContainer { { PCH-ParametersItem-CTCH-SetupRqstFDD-ExtIEs } } OPTIONAL,
  ...
}
```

```
PCH-ParametersItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-bindingID CRITICALITY ignore EXTENSION BindingID PRESENCE optional }|
  { ID id-transportlayeraddress CRITICALITY ignore EXTENSION TransportLayerAddress PRESENCE optional },
  ...
}
```

```
PICH-Parameters-CTCH-SetupRqstFDD ::= SEQUENCE {
  commonPhysicalChannelID CommonPhysicalChannelID,
  fdd-dl-ChannelisationCodeNumber FDD-DL-ChannelisationCodeNumber,
  pICH-Power PICH-Power,
  pICH-Mode PICH-Mode,
  sTTD-Indicator sTTD-Indicator,
  iE-Extensions ProtocolExtensionContainer { { PICH-Parameters-CTCH-SetupRqstFDD-ExtIEs } } OPTIONAL,
  ...
}
```

```
PICH-Parameters-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

```
PRACH-CTCH-SetupRqstFDD ::= SEQUENCE {
  commonPhysicalChannelID CommonPhysicalChannelID,
  scramblingCodeNumber ScramblingCodeNumber,
  tFCS TFCS,
  preambleSignatures PreambleSignatures,
  allowedSlotFormatInformation AllowedSlotFormatInformationList-CTCH-SetupRqstFDD,
  rACH-SubChannelNumbers RACH-SubChannelNumbers,
  ul-punctureLimit PunctureLimit,
  preambleThreshold PreambleThreshold,
  rACH-Parameters RACH-Parameters-CTCH-SetupRqstFDD,
}
```



```

    aICH-Parameters
    iE-Extensions
    ...
}

PRACHItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

AllowedSlotFormatInformationList-CTCH-SetupRqstFDD ::= SEQUENCE (SIZE (1.. maxNrOfSlotFormatsPRACH)) OF AllowedSlotFormatInformationItem-CTCH-SetupRqstFDD

AllowedSlotFormatInformationItem-CTCH-SetupRqstFDD ::= SEQUENCE {
    rACHSlotFormat          RACH-SlotFormat,
    iE-Extensions          ProtocolExtensionContainer { { AllowedSlotFormatInformationItem-CTCH-SetupRqstFDD-ExtIEs } }
    OPTIONAL,
    ...
}

AllowedSlotFormatInformationItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RACH-Parameters-CTCH-SetupRqstFDD ::= ProtocolIE-Single-Container {{ RACH-ParametersIE-CTCH-SetupRqstFDD }}

RACH-ParametersIE-CTCH-SetupRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-RACH-ParametersItem-CTCH-SetupRqstFDD    CRITICALITY reject    TYPE RACH-ParametersItem-CTCH-SetupRqstFDD    PRESENCE mandatory }
}

RACH-ParametersItem-CTCH-SetupRqstFDD ::= SEQUENCE {
    commonTransportChannelID      CommonTransportChannelID,
    transportFormatSet            TransportFormatSet,
    iE-Extensions                ProtocolExtensionContainer { { RACH-ParametersItem-CTCH-SetupRqstFDD-ExtIEs } }    OPTIONAL,
    ...
}

RACH-ParametersItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-bindingID              CRITICALITY ignore    EXTENSION BindingID              PRESENCE optional }|
    { ID id-transportlayeraddress  CRITICALITY ignore    EXTENSION TransportLayerAddress  PRESENCE optional },
    ...
}

AICH-Parameters-CTCH-SetupRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID      CommonPhysicalChannelID,
    aICH-TransmissionTiming      AICH-TransmissionTiming,
    fdd-dl-ChannelisationCodeNumber FDD-DL-ChannelisationCodeNumber,
    aICH-Power                   AICH-Power,
    sTTD-Indicator               STTD-Indicator,
    iE-Extensions                ProtocolExtensionContainer { { AICH-Parameters-CTCH-SetupRqstFDD-ExtIEs } }    OPTIONAL,
    ...
}

AICH-Parameters-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```

```

}
...
}
PCPCH-CTCH-SetupRqstFDD ::= SEQUENCE {
    cPCH-Parameters          CPCH-Parameters-CTCH-SetupRqstFDD,
    iE-Extensions            ProtocolExtensionContainer { { PCPCHItem-CTCH-SetupRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

PCPCHItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CPCH-Parameters-CTCH-SetupRqstFDD ::= SEQUENCE {
    commonTransportChannelID      CommonTransportChannelID,
    transportFormatSet            TransportFormatSet,
    aPPreambleScramblingCode      CPCHScramblingCodeNumber,
    cDPreambleScramblingCode      CPCHScramblingCodeNumber,
    tFCS                           TFCS,
    cDSignatures                   PreambleSignatures          OPTIONAL,
    cSubChannelNumbers             CDSUBCHANNELNUMBERS        OPTIONAL,
    punctureLimit                  PunctureLimit,
    cPCH-UL-DPCCH-SlotFormat       CPCH-UL-DPCCH-SlotFormat,
    uL-SIR                          UL-SIR,
    initialDL-transmissionPower     DL-Power,
    maximumDLPower                 DL-Power,
    minimumDLPower                 DL-Power,
    pO2-ForTPC-Bits                PowerOffset,
    fDD-TPC-DownlinkStepSize       FDD-TPC-DownlinkStepSize,
    nStartMessage                  NStartMessage,
    nEOT                            NEOT,
    channel-Assignment-Indication   Channel-Assignment-Indication,
    cPCH-Allowed-Total-Rate         CPCH-Allowed-Total-Rate,
    pCPCHChannelInformationList     PCPCHChannelInformationList-CTCH-SetupRqstFDD,
    vCAMMapping-InformationList     VCAMMapping-InformationList-CTCH-SetupRqstFDD OPTIONAL,
    -- this IE shall be present if the Channel Assignment Indication is set to "CA Active" --
    aP-AICH-Parameters              AP-AICH-Parameters-CTCH-SetupRqstFDD,
    cDCA-ICH-Parameters              CDCA-ICH-Parameters-CTCH-SetupRqstFDD,
    iE-Extensions                    ProtocolExtensionContainer { { CPCH-Parameters-CTCH-SetupRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

CPCH-Parameters-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID      id-bindingID              CRITICALITY ignore      EXTENSION BindingID          PRESENCE optional }|
    { ID      id-transportlayeraddress  CRITICALITY ignore      EXTENSION TransportLayerAddress PRESENCE optional },
    ...
}

PCPCHChannelInformationList-CTCH-SetupRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfPCPCHs)) OF PCPCHChannelInformationItem-CTCH-SetupRqstFDD

PCPCHChannelInformationItem-CTCH-SetupRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID          CommonPhysicalChannelID,
    cPCHScramblingCodeNumber         CPCHScramblingCodeNumber,

```

```

    dL-ScramblingCode          DL-ScramblingCode,
    fdd-dl-ChannelisationCodeNumber  FDD-DL-ChannelisationCodeNumber,
    pCP-Length                 PCP-Length,
    uCSM-Information           UCSM-Information-CTCH-SetupRqstFDD    OPTIONAL,
    -- this IE shall be present if the Channel Assignment Indication is equal to "CA Inactive" --
    iE-Extensions              ProtocolExtensionContainer { { PCPCHChannelInformationItem-CTCH-SetupRqstFDD-ExtIEs } }    OPTIONAL,
    ...
}

```

```

PCPCHChannelInformationItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

UCSM-Information-CTCH-SetupRqstFDD ::= SEQUENCE {
    minUL-ChannelisationCodeLength  MinUL-ChannelisationCodeLength,
    nFmax                            NFmax,
    channelRequestParameters        ChannelRequestParametersList-CTCH-SetupRqstFDD    OPTIONAL,
    iE-Extensions                    ProtocolExtensionContainer { { UCSM-InformationItem-CTCH-SetupRqstFDD-ExtIEs } }    OPTIONAL,
    ...
}

```

```

UCSM-InformationItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

ChannelRequestParametersList-CTCH-SetupRqstFDD ::= SEQUENCE (SIZE (1..maxAPSigNum)) OF ChannelRequestParametersItem-CTCH-SetupRqstFDD

```

```

ChannelRequestParametersItem-CTCH-SetupRqstFDD ::= SEQUENCE {
    aPPreambleSignature            APPreambleSignature,
    aPSubChannelNumber             APSubChannelNumber    OPTIONAL,
    iE-Extensions                  ProtocolExtensionContainer { { ChannelRequestParametersItem-CTCH-SetupRqstFDD-ExtIEs } }    OPTIONAL,
    ...
}

```

```

ChannelRequestParametersItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

VCAMMapping-InformationList-CTCH-SetupRqstFDD ::= SEQUENCE (SIZE (1..maxNoofLen)) OF VCAMMapping-InformationItem-CTCH-SetupRqstFDD

```

```

VCAMMapping-InformationItem-CTCH-SetupRqstFDD ::= SEQUENCE {
    minUL-ChannelisationCodeLength  MinUL-ChannelisationCodeLength,
    nFmax                            NFmax,
    max-Number-of-PCPCHes           Max-Number-of-PCPCHes,
    sFRequestParameters             SFRequestParametersList-CTCH-SetupRqstFDD,
    iE-Extensions                    ProtocolExtensionContainer { { VCAMMapping-InformationItem-CTCH-SetupRqstFDD-ExtIEs } }    OPTIONAL,
    ...
}

```

```

VCAMMapping-InformationItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

SFRequestParametersList-CTCH-SetupRqstFDD ::= SEQUENCE (SIZE (1..maxAPSigNum)) OF SFRequestParametersItem-CTCH-SetupRqstFDD

SFRequestParametersItem-CTCH-SetupRqstFDD ::= SEQUENCE {
    aPPreambleSignature      APPreambleSignature,
    aPSubChannelNumber       APSubChannelNumber      OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { { SFRequestParametersItem-CTCH-SetupRqstFDD-ExtIEs} }    OPTIONAL,
    ...
}

SFRequestParametersItem-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

AP-AICH-Parameters-CTCH-SetupRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID      CommonPhysicalChannelID,
    fdd-dl-ChannelisationCodeNumber      FDD-DL-ChannelisationCodeNumber,
    aP-AICH-Power                AICH-Power,
    cSICH-Power                  AICH-Power,
    sTTD-Indicator               STTD-Indicator,
    iE-Extensions                ProtocolExtensionContainer { { AP-AICH-Parameters-CTCH-SetupRqstFDD-ExtIEs} }    OPTIONAL,
    ...
}

AP-AICH-Parameters-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CDCA-ICH-Parameters-CTCH-SetupRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID      CommonPhysicalChannelID,
    fdd-dl-ChannelisationCodeNumber      FDD-DL-ChannelisationCodeNumber,
    cDCA-ICH-Power               AICH-Power,
    sTTD-Indicator               STTD-Indicator,
    iE-Extensions                ProtocolExtensionContainer { { CDCA-ICH-Parameters-CTCH-SetupRqstFDD-ExtIEs} }    OPTIONAL,
    ...
}

CDCA-ICH-Parameters-CTCH-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- COMMON TRANSPORT CHANNEL SETUP REQUEST TDD
--
-- *****

CommonTransportChannelSetupRequestTDD ::= SEQUENCE {
    protocolIEs                ProtocolIE-Container {{CommonTransportChannelSetupRequestTDD-IEs}},
    protocolExtensions         ProtocolExtensionContainer {{CommonTransportChannelSetupRequestTDD-Extensions}}    OPTIONAL,
    ...
}

CommonTransportChannelSetupRequestTDD-IEs NBAP-PROTOCOL-IES ::= {

```

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```

{ ID id-C-ID
  PRESENCE mandatory }|
{ ID id-ConfigurationGenerationID
  PRESENCE mandatory }|
{ ID id-CommonPhysicalChannelType-CTCH-SetupRqstTDD
  PRESENCE mandatory },
...
}

CommonTransportChannelSetupRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

CommonPhysicalChannelType-CTCH-SetupRqstTDD ::= CHOICE {
  secondary-CCPCH-parameters Secondary-CCPCH-CTCH-SetupRqstTDD,
  pRACH-parameters PRACH-CTCH-SetupRqstTDD,
  ...
}

Secondary-CCPCH-CTCH-SetupRqstTDD ::= SEQUENCE {
  sCCPCH-CCTrCH-ID CCTrCH-ID,
  tFCS TFCS,
  tFCI-Coding TFCI-Coding,
  punctureLimit PunctureLimit,
  secondaryCCPCH-parameterList Secondary-CCPCH-parameterList-CTCH-SetupRqstTDD,
  fACH-ParametersList FACH-ParametersList-CTCH-SetupRqstTDD OPTIONAL,
  pCH-Parameters PCH-Parameters-CTCH-SetupRqstTDD OPTIONAL,
  iE-Extensions ProtocolExtensionContainer {{Secondary-CCPCHItem-CTCH-SetupRqstTDD-ExtIEs}} OPTIONAL,
  ...
}

Secondary-CCPCHItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-Secondary-CCPCH-LCR-parameterList-CTCH-SetupRqstTDD
  parameterList-CTCH-SetupRqstTDD PRESENCE optional },
  ...
}

Secondary-CCPCH-parameterList-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ Secondary-CCPCH-parameterListIEs-CTCH-SetupRqstTDD }}

Secondary-CCPCH-parameterListIEs-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-Secondary-CCPCH-parameterListIE-CTCH-SetupRqstTDD
  CRITICALITY reject TYPE Secondary-CCPCH-parameterListIE-CTCH-SetupRqstTDD PRESENCE
  mandatory } -- Mandatory for 3.84Mcps TDD only
}

Secondary-CCPCH-parameterListIE-CTCH-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfSCCPCHs)) OF Secondary-CCPCH-parameterItem-CTCH-SetupRqstTDD

Secondary-CCPCH-parameterItem-CTCH-SetupRqstTDD ::= SEQUENCE {
  commonPhysicalChannelID CommonPhysicalChannelID,
  tdd-ChannelisationCode TDD-ChannelisationCode,
  timeslot TimeSlot,
  midambleShiftandBurstType MidambleShiftAndBurstType,
  tdd-PhysicalChannelOffset TDD-PhysicalChannelOffset,
  repetitionPeriod RepetitionPeriod,
}

```

```

    repetitionLength      RepetitionLength,
    s-CCPCH-Power         DL-Power,
    iE-Extensions         ProtocolExtensionContainer { { Secondary-CCPCH-parameterItem-CTCH-SetupRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

Secondary-CCPCH-parameterItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

FACH-ParametersList-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ FACH-ParametersListIEs-CTCH-SetupRqstTDD }}

FACH-ParametersListIEs-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-FACH-ParametersListIE-CTCH-SetupRqstTDD    CRITICALITY reject    TYPE FACH-ParametersListIE-CTCH-SetupRqstTDD PRESENCE mandatory }
}

FACH-ParametersListIE-CTCH-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfFACHs)) OF FACH-ParametersItem-CTCH-SetupRqstTDD

FACH-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE {
    commonTransportChannelID      CommonTransportChannelID,
    fACH-CCTrCH-ID                CCTrCH-ID,
    dl-TransportFormatSet         TransportFormatSet,
    toAWS                          ToAWS,
    toAWE                          ToAWE,
    iE-Extensions                 ProtocolExtensionContainer { { FACH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

FACH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-maxFACH-Power-LCR-CTCH-SetupRqstTDD        CRITICALITY reject    EXTENSION DL-Power          PRESENCE optional }|
    -- For 1.28Mcps TDD only
    { ID id-bindingID                                CRITICALITY ignore    EXTENSION BindingID          PRESENCE optional }|
    { ID id-transportlayeraddress                    CRITICALITY ignore    EXTENSION TransportLayerAddress PRESENCE optional },
    ...
}

PCH-Parameters-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ PCH-ParametersIE-CTCH-SetupRqstTDD }}

PCH-ParametersIE-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-PCH-ParametersItem-CTCH-SetupRqstTDD    CRITICALITY reject    TYPE PCH-ParametersItem-CTCH-SetupRqstTDD PRESENCE mandatory }
}

PCH-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE {
    commonTransportChannelID      CommonTransportChannelID,
    pCH-CCTrCH-ID                CCTrCH-ID,
    dl-TransportFormatSet         TransportFormatSet,
    toAWS                          ToAWS,
    toAWE                          ToAWE,
    pICH-Parameters               PICH-Parameters-CTCH-SetupRqstTDD,
    iE-Extensions                 ProtocolExtensionContainer { { PCH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

```

```

PCH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-PCH-Power-LCR-CTCH-SetupRqstTDD          CRITICALITY reject      EXTENSION  DL-Power          PRESENCE  optional }|
  -- For 1.28Mcps TDD only
  { ID id-PICH-LCR-Parameters-CTCH-SetupRqstTDD      CRITICALITY reject      EXTENSION          PICH-LCR-Parameters-CTCH-
SetupRqstTDD          PRESENCE  optional }| -- Mandatory for 1.28Mcps TDD only
  { ID id-bindingID                                  CRITICALITY ignore      EXTENSION  BindingID          PRESENCE  optional }|
  { ID id-transportlayeraddress                      CRITICALITY ignore      EXTENSION  TransportLayerAddress  PRESENCE  optional },
  ...
}

PICH-Parameters-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ PICH-ParametersIE-CTCH-SetupRqstTDD }}

PICH-ParametersIE-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-PICH-ParametersItem-CTCH-SetupRqstTDD      CRITICALITY reject      TYPE PICH-ParametersItem-CTCH-SetupRqstTDD  PRESENCE  optional }
} -- Mandatory for 3.84Mcps TDD only

PICH-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE {
  commonPhysicalChannelID          CommonPhysicalChannelID,
  tdd-ChannelisationCode           TDD-ChannelisationCode,
  timeSlot                          TimeSlot,
  midambleShiftAndBurstType        MidambleShiftAndBurstType,
  tdd-PhysicalChannelOffset        TDD-PhysicalChannelOffset,
  repetitionPeriod                 RepetitionPeriod,
  repetitionLength                 RepetitionLength,
  pagingIndicatorLength            PagingIndicatorLength,
  pICH-Power                       PICH-Power,
  IE-Extensions                    ProtocolExtensionContainer { { PICH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs } }  OPTIONAL,
  ...
}

PICH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

PICH-LCR-Parameters-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ PICH-LCR-ParametersIE-CTCH-SetupRqstTDD }}

PICH-LCR-ParametersIE-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-PICH-LCR-ParametersItem-CTCH-SetupRqstTDD  CRITICALITY reject      TYPE PICH-LCR-ParametersItem-CTCH-SetupRqstTDD  PRESENCE  mandatory }
} -- Mandatory for 1.28Mcps TDD

PICH-LCR-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE {
  commonPhysicalChannelID          CommonPhysicalChannelID,
  tdd-ChannelisationCodeLCR        TDD-ChannelisationCodeLCR,
  timeSlotLCR                     TimeSlotLCR,
  midambleShiftLCR                MidambleShiftLCR,
  tdd-PhysicalChannelOffset        TDD-PhysicalChannelOffset,
  repetitionPeriod                 RepetitionPeriod,
  repetitionLength                 RepetitionLength,
  pagingIndicatorLength            PagingIndicatorLength,
  PICH-Power                       PICH-Power,
  IE-Extensions                    ProtocolExtensionContainer { { PICH-LCR-ParametersItem-CTCH-SetupRqstTDD-ExtIEs } }  OPTIONAL,
  ...
}

```

```

PICH-LCR-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Secondary-CCPCH-LCR-parameterList-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ Secondary-CCPCH-LCR-parameterListIEs-CTCH-SetupRqstTDD }}

Secondary-CCPCH-LCR-parameterListIEs-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-Secondary-CCPCH-LCR-parameterListIE-CTCH-SetupRqstTDD    CRITICALITY reject    TYPE Secondary-CCPCH-LCR-parameterListIE-CTCH-SetupRqstTDD
      PRESENCE optional } -- Mandatory for 1.28Mcps TDD only
}

Secondary-CCPCH-LCR-parameterListIE-CTCH-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfSCCPCHLCRs)) OF Secondary-CCPCH-LCR-parameterItem-CTCH-SetupRqstTDD

Secondary-CCPCH-LCR-parameterItem-CTCH-SetupRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID                CommonPhysicalChannelID,
    tdd-ChannelisationCodeLCR              TDD-ChannelisationCodeLCR,
    timeslotLCR                             TimeSlotLCR,
    midambleShiftLCR                       MidambleShiftLCR,
    tdd-PhysicalChannelOffset               TDD-PhysicalChannelOffset,
    repetitionPeriod                       RepetitionPeriod,
    repetitionLength                       RepetitionLength,
    s-CCPCH-Power                          DL-Power,
    iE-Extensions                          ProtocolExtensionContainer { { Secondary-CCPCH-LCR-parameterItem-CTCH-SetupRqstTDD-ExtIEs } }
    OPTIONAL,
    ...
}

Secondary-CCPCH-LCR-parameterItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PRACH-CTCH-SetupRqstTDD ::= SEQUENCE {
    prach-Parameters-CTCH-SetupRqstTDD      PRACH-Parameters-CTCH-SetupRqstTDD,
    iE-Extensions                          ProtocolExtensionContainer { { PRACH-CTCH-SetupRqstTDD-ExtIEs } }    OPTIONAL,
    ...
}

PRACH-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-PRACH-LCR-ParametersList-CTCH-SetupRqstTDD    CRITICALITY reject    EXTENSION    PRACH-LCR-ParametersList-CTCH-SetupRqstTDD
      PRESENCE optional } | -- Mandatory for 1.28Mcps TDD only
    { ID id-FPACH-LCR-Parameters-CTCH-SetupRqstTDD    CRITICALITY reject    EXTENSION    FPACH-LCR-Parameters-CTCH-SetupRqstTDD
      PRESENCE optional }, -- Mandatory for 1.28Mcps TDD only
    ...
}

PRACH-Parameters-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ PRACH-ParametersIE-CTCH-SetupRqstTDD }}

PRACH-ParametersIE-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-PRACH-ParametersItem-CTCH-SetupRqstTDD    CRITICALITY reject    TYPE PRACH-ParametersItem-CTCH-SetupRqstTDD    PRESENCE optional }
} -- Mandatory for 3.84Mcps TDD only

```



```

PRACH-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID          CommonPhysicalChannelID,
    tFCS                             TFCS,
    timeslot                          TimeSlot,
    tdd-ChannelisationCode           TDD-ChannelisationCode,
    maxPRACH-MidambleShifts         MaxPRACH-MidambleShifts,
    pRACH-Midamble                    PRACH-Midamble,
    rACH                              RACH-Parameter-CTCH-SetupRqstTDD,
    iE-Extensions                    ProtocolExtensionContainer { { PRACH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs } }    OPTIONAL,
    ...
}

PRACH-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RACH-Parameter-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ RACH-ParameterIE-CTCH-SetupRqstTDD }}

RACH-ParameterIE-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-RACH-ParameterItem-CTCH-SetupRqstTDD    CRITICALITY reject    TYPE RACH-ParameterItem-CTCH-SetupRqstTDD    PRESENCE mandatory }
}

RACH-ParameterItem-CTCH-SetupRqstTDD ::= SEQUENCE {
    commonTransportChannelID          CommonTransportChannelID,
    uL-TransportFormatSet             TransportFormatSet,
    iE-Extensions                    ProtocolExtensionContainer { { RACH-ParameterItem-CTCH-SetupRqstTDD-ExtIEs } }    OPTIONAL,
    ...
}

RACH-ParameterItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-bindingID                    CRITICALITY ignore            EXTENSION BindingID                PRESENCE optional }|
    { ID id-transportlayeraddress        CRITICALITY ignore            EXTENSION TransportLayerAddress    PRESENCE optional },
    ...
}

PRACH-LCR-ParametersList-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ PRACH-LCR-ParametersListIEs-CTCH-SetupRqstTDD }}

PRACH-LCR-ParametersListIEs-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-PRACH-LCR-ParametersListIE-CTCH-SetupRqstTDD    CRITICALITY reject    TYPE PRACH-LCR-ParametersListIE-CTCH-SetupRqstTDD    PRESENCE optional }
}

PRACH-LCR-ParametersListIE-CTCH-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfPRACHLCRs)) OF PRACH-LCR-ParametersItem-CTCH-SetupRqstTDD

PRACH-LCR-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID          CommonPhysicalChannelID,
    tFCS                             TFCS,
    timeslotLCR                      TimeSlotLCR,
    tdd-ChannelisationCodeLCR        TDD-ChannelisationCodeLCR,
    maxPRACH-MidambleShifts         MaxPRACH-MidambleShifts,
    pRACH-Midamble                    PRACH-Midamble,
    rACH                              RACH-Parameter-CTCH-SetupRqstTDD,
}

```

```

    iE-Extensions          ProtocolExtensionContainer { { PRACH-LCR-ParametersItem-CTCH-SetupRqstTDD-ExtIEs} }    OPTIONAL,
    ...
}

PRACH-LCR-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

FPACH-LCR-Parameters-CTCH-SetupRqstTDD ::= ProtocolIE-Single-Container {{ FPACH-LCR-ParametersIE-CTCH-SetupRqstTDD }}

FPACH-LCR-ParametersIE-CTCH-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-FPACH-LCR-ParametersItem-CTCH-SetupRqstTDD    CRITICALITY reject TYPE FPACH-LCR-ParametersItem-CTCH-SetupRqstTDD PRESENCE optional }
}

FPACH-LCR-ParametersItem-CTCH-SetupRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID          CommonPhysicalChannelID,
    tdd-ChannelisationCodeLCR        TDD-ChannelisationCodeLCR,
    timeslotLCR                      TimeSlotLCR,
    midambleShiftLCR                MidambleShiftLCR,
    fPACH-Power                      FPACH-Power,
    iE-Extensions                    ProtocolExtensionContainer { { FPACH-LCR-ParametersItem-CTCH-SetupRqstTDD-ExtIEs} }    OPTIONAL,
    ...
}

FPACH-LCR-ParametersItem-CTCH-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- COMMON TRANSPORT CHANNEL SETUP RESPONSE
--
-- *****

CommonTransportChannelSetupResponse ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{CommonTransportChannelSetupResponse-IEs}},
    protocolExtensions   ProtocolExtensionContainer  {{CommonTransportChannelSetupResponse-Extensions}}    OPTIONAL,
    ...
}

CommonTransportChannelSetupResponse-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-FACH-ParametersList-CTCH-SetupRsp    CRITICALITY ignore    TYPE    FACH-CommonTransportChannel-InformationResponse    PRESENCE optional }|
    { ID id-PCH-Parameters-CTCH-SetupRsp        CRITICALITY ignore    TYPE    CommonTransportChannel-InformationResponse    PRESENCE optional }|
    { ID id-RACH-Parameters-CTCH-SetupRsp        CRITICALITY ignore    TYPE    CommonTransportChannel-InformationResponse    PRESENCE optional }|
    { ID id-CPCH-Parameters-CTCH-SetupRsp        CRITICALITY ignore    TYPE    CommonTransportChannel-InformationResponse    PRESENCE optional }|
    { ID id-CriticalityDiagnostics                CRITICALITY ignore    TYPE    CriticalityDiagnostics                PRESENCE optional },
    ...
}

```

```

CommonTransportChannelSetupResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

FACH-CommonTransportChannel-InformationResponse ::= SEQUENCE (SIZE (1..maxNrOfFACHs)) OF CommonTransportChannel-InformationResponse

-- *****
--
-- COMMON TRANSPORT CHANNEL SETUP FAILURE
--
-- *****

CommonTransportChannelSetupFailure ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CommonTransportChannelSetupFailure-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CommonTransportChannelSetupFailure-Extensions}}    OPTIONAL,
    ...
}

CommonTransportChannelSetupFailure-IEs NBAP-PROTOCOL-IES ::= {
    { ID   id-Cause          CRITICALITY ignore   TYPE   Cause          PRESENCE mandatory }|
    { ID   id-CriticalityDiagnostics CRITICALITY ignore   TYPE   CriticalityDiagnostics PRESENCE optional   },
    ...
}

CommonTransportChannelSetupFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST FDD
--
-- *****

CommonTransportChannelReconfigurationRequestFDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CommonTransportChannelReconfigurationRequestFDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CommonTransportChannelReconfigurationRequestFDD-Extensions}}    OPTIONAL,
    ...
}

CommonTransportChannelReconfigurationRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID   id-C-ID          CRITICALITY reject   TYPE   C-ID          PRESENCE mandatory }|
    { ID   id-ConfigurationGenerationID          CRITICALITY reject   TYPE   ConfigurationGenerationID          PRESENCE mandatory }|
    { ID   id-CommonPhysicalChannelType-CTCH-ReconfRqstFDD CRITICALITY reject   TYPE   CommonPhysicalChannelType-CTCH-ReconfRqstFDD PRESENCE mandatory },
    ...
}

CommonTransportChannelReconfigurationRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

CommonPhysicalChannelType-CTCH-ReconfRqstFDD ::= CHOICE {
    secondary-CCPCH-parameters      Secondary-CCPCHList-CTCH-ReconfRqstFDD,
    pRACH-parameters                PRACHList-CTCH-ReconfRqstFDD,
    cPCH-parameters                 CPCHList-CTCH-ReconfRqstFDD,
    ...
}

Secondary-CCPCHList-CTCH-ReconfRqstFDD ::= SEQUENCE {
    fACH-ParametersList-CTCH-ReconfRqstFDD  FACH-ParametersList-CTCH-ReconfRqstFDD  OPTIONAL,
    pCH-Parameters-CTCH-ReconfRqstFDD      PCH-Parameters-CTCH-ReconfRqstFDD      OPTIONAL,
    pICH-Parameters-CTCH-ReconfRqstFDD     PICH-Parameters-CTCH-ReconfRqstFDD     OPTIONAL,
    iE-Extensions                          ProtocolExtensionContainer { { Secondary-CCPCH-CTCH-ReconfRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

Secondary-CCPCH-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

FACH-ParametersList-CTCH-ReconfRqstFDD ::= ProtocolIE-Single-Container {{ FACH-ParametersListIEs-CTCH-ReconfRqstFDD }}

FACH-ParametersListIEs-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-FACH-ParametersListIE-CTCH-ReconfRqstFDD  CRITICALITY reject  TYPE FACH-ParametersListIE-CTCH-ReconfRqstFDD  PRESENCE mandatory }
}

FACH-ParametersListIE-CTCH-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxFACHCell)) OF FACH-ParametersItem-CTCH-ReconfRqstFDD

FACH-ParametersItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
    commonTransportChannelID          CommonTransportChannelID,
    maxFACH-Power                     DL-Power          OPTIONAL,
    toAWS                             ToAWS             OPTIONAL,
    toAWE                             ToAWE             OPTIONAL,
    iE-Extensions                     ProtocolExtensionContainer { { FACH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs } }  OPTIONAL,
    ...
}

FACH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PCH-Parameters-CTCH-ReconfRqstFDD ::= ProtocolIE-Single-Container {{ PCH-ParametersIE-CTCH-ReconfRqstFDD }}

PCH-ParametersIE-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-PCH-ParametersItem-CTCH-ReconfRqstFDD  CRITICALITY reject  TYPE PCH-ParametersItem-CTCH-ReconfRqstFDD  PRESENCE mandatory }
}

PCH-ParametersItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
    commonTransportChannelID          CommonTransportChannelID,
    pCH-Power                         DL-Power          OPTIONAL,
    toAWS                             ToAWS             OPTIONAL,
    toAWE                             ToAWE             OPTIONAL,
    iE-Extensions                     ProtocolExtensionContainer { { PCH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs } }  OPTIONAL,
}

```

```

}
...
}
PCH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
PICH-Parameters-CTCH-ReconfRqstFDD ::= ProtocolIE-Single-Container {{ PICH-ParametersIE-CTCH-ReconfRqstFDD }}
PICH-ParametersIE-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
  { ID id-PICH-ParametersItem-CTCH-ReconfRqstFDD CRITICALITY reject TYPE PICH-ParametersItem-CTCH-ReconfRqstFDD PRESENCE mandatory }
}
PICH-ParametersItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
  commonPhysicalChannelID          CommonPhysicalChannelID,
  pICH-Power                        PICH-Power          OPTIONAL,
  iE-Extensions                     ProtocolExtensionContainer { { PICH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs } } OPTIONAL,
  ...
}
PICH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
PRACHList-CTCH-ReconfRqstFDD ::= SEQUENCE {
  pRACH-ParametersList-CTCH-ReconfRqstFDD PRACH-ParametersList-CTCH-ReconfRqstFDD OPTIONAL,
  aICH-ParametersList-CTCH-ReconfRqstFDD  AICH-ParametersList-CTCH-ReconfRqstFDD OPTIONAL,
  iE-Extensions                          ProtocolExtensionContainer { { PRACH-CTCH-ReconfRqstFDD-ExtIEs } } OPTIONAL,
  ...
}
PRACH-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
PRACH-ParametersList-CTCH-ReconfRqstFDD ::= ProtocolIE-Single-Container {{ PRACH-ParametersListIEs-CTCH-ReconfRqstFDD }}
PRACH-ParametersListIEs-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
  { ID id-PRACH-ParametersListIE-CTCH-ReconfRqstFDD CRITICALITY reject TYPE PRACH-ParametersListIE-CTCH-ReconfRqstFDD PRESENCE mandatory }
}
PRACH-ParametersListIE-CTCH-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF PRACH-ParametersItem-CTCH-ReconfRqstFDD
PRACH-ParametersItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
  commonPhysicalChannelID          CommonPhysicalChannelID,
  preambleSignatures               PreambleSignatures          OPTIONAL,
  allowedSlotFormatInformation      AllowedSlotFormatInformationList-CTCH-ReconfRqstFDD OPTIONAL,
  rACH-SubChannelNumbers            RACH-SubChannelNumbers    OPTIONAL,
  iE-Extensions                     ProtocolExtensionContainer { { PRACH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs } } OPTIONAL,
  ...
}
PRACH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```

```

}
...
}

AllowedSlotFormatInformationList-CTCH-ReconfRqstFDD ::= SEQUENCE (SIZE (1.. maxNrOfSlotFormatsPRACH)) OF AllowedSlotFormatInformationItem-CTCH-
ReconfRqstFDD

AllowedSlotFormatInformationItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
    rACH-SlotFormat          RACH-SlotFormat,
    iE-Extensions           ProtocolExtensionContainer { { AllowedSlotFormatInformationItem-CTCH-ReconfRqstFDD-ExtIEs} }
    OPTIONAL,
    ...
}

AllowedSlotFormatInformationItem-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

AICH-ParametersList-CTCH-ReconfRqstFDD ::= ProtocolIE-Single-Container { { AICH-ParametersListIEs-CTCH-ReconfRqstFDD } }

AICH-ParametersListIEs-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-AICH-ParametersListIE-CTCH-ReconfRqstFDD    CRITICALITY reject    TYPE AICH-ParametersListIE-CTCH-ReconfRqstFDD    PRESENCE mandatory }
}

AICH-ParametersListIE-CTCH-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF AICH-ParametersItem-CTCH-ReconfRqstFDD

AICH-ParametersItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID    CommonPhysicalChannelID,
    aICH-Power                 AICH-Power    OPTIONAL,
    iE-Extensions              ProtocolExtensionContainer { { AICH-ParametersItemIE-CTCH-ReconfRqstFDD-ExtIEs} }    OPTIONAL,
    ...
}

AICH-ParametersItemIE-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CPCHList-CTCH-ReconfRqstFDD ::= SEQUENCE {
    cPCH-ParametersList-CTCH-ReconfRqstFDD    CPCH-ParametersList-CTCH-ReconfRqstFDD    OPTIONAL,
    aP-AICH-ParametersList-CTCH-ReconfRqstFDD    AP-AICH-ParametersList-CTCH-ReconfRqstFDD    OPTIONAL,
    cDCA-ICH-ParametersList-CTCH-ReconfRqstFDD    CDCA-ICH-ParametersList-CTCH-ReconfRqstFDD    OPTIONAL,
    iE-Extensions    ProtocolExtensionContainer { { CPCHListItem-CTCH-ReconfRqstFDD-ExtIEs} }    OPTIONAL,
    ...
}

CPCHListItem-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CPCH-ParametersList-CTCH-ReconfRqstFDD ::= ProtocolIE-Single-Container { { CPCH-ParametersListIEs-CTCH-ReconfRqstFDD } }

CPCH-ParametersListIEs-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-CPCH-ParametersListIE-CTCH-ReconfRqstFDD    CRITICALITY reject    TYPE CPCH-ParametersListIE-CTCH-ReconfRqstFDD    PRESENCE mandatory }
}

```

```

CPCH-ParametersListIE-CTCH-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfCPCHs)) OF CPCH-ParametersItem-CTCH-ReconfRqstFDD

CPCH-ParametersItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
    commonTransportChannelID      CommonTransportChannelID,
    uL-SIR                        UL-SIR                OPTIONAL,
    initialDL-transmissionPower    DL-Power          OPTIONAL,
    maximumDLPower                DL-Power          OPTIONAL,
    minimumDLPower                DL-Power          OPTIONAL,
    iE-Extensions                 ProtocolExtensionContainer { { CPCH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

CPCH-ParametersItem-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

AP-AICH-ParametersList-CTCH-ReconfRqstFDD ::= ProtocolIE-Single-Container {{ AP-AICH-ParametersListIEs-CTCH-ReconfRqstFDD }}

AP-AICH-ParametersListIEs-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-AP-AICH-ParametersListIE-CTCH-ReconfRqstFDD CRITICALITY reject TYPE AP-AICH-ParametersListIE-CTCH-ReconfRqstFDD PRESENCE mandatory }
}

AP-AICH-ParametersListIE-CTCH-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfCPCHs)) OF AP-AICH-ParametersItem-CTCH-ReconfRqstFDD

AP-AICH-ParametersItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID      CommonPhysicalChannelID,
    aP-AICH-Power                AICH-Power      OPTIONAL,
    cSICH-Power                  AICH-Power      OPTIONAL,
    iE-Extensions                 ProtocolExtensionContainer { { AP-AICH-ParametersItemIE-CTCH-ReconfRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

AP-AICH-ParametersItemIE-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CDCA-ICH-ParametersList-CTCH-ReconfRqstFDD ::= ProtocolIE-Single-Container {{ CDCA-ICH-ParametersListIEs-CTCH-ReconfRqstFDD }}

CDCA-ICH-ParametersListIEs-CTCH-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-CDCA-ICH-ParametersListIE-CTCH-ReconfRqstFDD CRITICALITY reject TYPE CDCA-ICH-ParametersListIE-CTCH-ReconfRqstFDD PRESENCE mandatory }
}

CDCA-ICH-ParametersListIE-CTCH-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfCPCHs)) OF CDCA-ICH-ParametersItem-CTCH-ReconfRqstFDD

CDCA-ICH-ParametersItem-CTCH-ReconfRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID      CommonPhysicalChannelID,
    cDCA-ICH-Power               AICH-Power      OPTIONAL,
    iE-Extensions                 ProtocolExtensionContainer { { CDCA-ICH-ParametersItemIE-CTCH-ReconfRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

```

```

CDCA-ICH-ParametersItemIE-CTCH-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST TDD
--
-- *****

CommonTransportChannelReconfigurationRequestTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CommonTransportChannelReconfigurationRequestTDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CommonTransportChannelReconfigurationRequestTDD-Extensions}} OPTIONAL,
    ...
}

CommonTransportChannelReconfigurationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-C-ID          CRITICALITY reject     TYPE C-ID
      PRESENCE mandatory }|
    { ID id-ConfigurationGenerationID
      CRITICALITY reject     TYPE ConfigurationGenerationID
      PRESENCE mandatory }|
    { ID id-Secondary-CCPCH-Parameters-CTCH-ReconfRqstTDD
      CRITICALITY reject     TYPE Secondary-CCPCH-Parameters-CTCH-ReconfRqstTDD
      PRESENCE optional }|
    { ID id-PICH-Parameters-CTCH-ReconfRqstTDD
      CRITICALITY reject     TYPE PICH-Parameters-CTCH-ReconfRqstTDD
      PRESENCE optional }|
    { ID id-FACH-ParametersList-CTCH-ReconfRqstTDD
      CRITICALITY reject     TYPE FACH-ParametersList-CTCH-ReconfRqstTDD
      PRESENCE optional }|
    { ID id-PCH-Parameters-CTCH-ReconfRqstTDD
      CRITICALITY reject     TYPE PCH-Parameters-CTCH-ReconfRqstTDD
      PRESENCE optional },
    ...
}

CommonTransportChannelReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-FPACH-LCR-Parameters-CTCH-ReconfRqstTDD
      CRITICALITY reject     EXTENSION FPACH-LCR-Parameters-CTCH-ReconfRqstTDD
      PRESENCE optional }, -- Mandatory For 3.84Mcps TDD only
    ...
}

Secondary-CCPCH-Parameters-CTCH-ReconfRqstTDD ::= SEQUENCE {
    cCTrCH-ID          CCTrCH-ID,
    secondaryCCPCHList Secondary-CCPCHList-CTCH-ReconfRqstTDD OPTIONAL,
    iE-Extensions     ProtocolExtensionContainer { { Secondary-CCPCH-CTCH-ReconfRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

Secondary-CCPCH-CTCH-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Secondary-CCPCHList-CTCH-ReconfRqstTDD ::= ProtocolIE-Single-Container { { Secondary-CCPCHListIEs-CTCH-ReconfRqstTDD } }

Secondary-CCPCHListIEs-CTCH-ReconfRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-Secondary-CCPCHListIE-CTCH-ReconfRqstTDD
      CRITICALITY reject     TYPE Secondary-CCPCHListIE-CTCH-ReconfRqstTDD
      PRESENCE mandatory }
}

Secondary-CCPCHListIE-CTCH-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfSCCPCHs)) OF Secondary-CCPCHItem-CTCH-ReconfRqstTDD

```



```

Secondary-CCPCHItem-CTCH-ReconfRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID      CommonPhysicalChannelID,
    sCCPCH-Power                 DL-Power          OPTIONAL,
    iE-Extensions                ProtocolExtensionContainer { { Secondary-CCPCHItem-CTCH-ReconfRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

Secondary-CCPCHItem-CTCH-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PICH-Parameters-CTCH-ReconfRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID      CommonPhysicalChannelID,
    pICH-Power                   PICH-Power          OPTIONAL,
    iE-Extensions                ProtocolExtensionContainer { { PICH-Parameters-CTCH-ReconfRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

PICH-Parameters-CTCH-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

FACH-ParametersList-CTCH-ReconfRqstTDD ::= SEQUENCE (SIZE (0..maxNrOfFACHs)) OF FACH-ParametersItem-CTCH-ReconfRqstTDD

FACH-ParametersItem-CTCH-ReconfRqstTDD ::= SEQUENCE {
    commonTransportChannelID      CommonTransportChannelID,
    toAWS                         ToAWS              OPTIONAL,
    toAWE                         ToAWE              OPTIONAL,
    iE-Extensions                ProtocolExtensionContainer { { FACH-ParametersItem-CTCH-ReconfRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

FACH-ParametersItem-CTCH-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID      id-maxFACH-Power-LCR-CTCH-ReconfRqstTDD      CRITICALITY reject      EXTENSION      DL-Power      PRESENCE      optional },
    -- For 3.84Mcps TDD only
    ...
}

PCH-Parameters-CTCH-ReconfRqstTDD ::= SEQUENCE {
    commonTransportChannelID      CommonTransportChannelID,
    toAWS                         ToAWS              OPTIONAL,
    toAWE                         ToAWE              OPTIONAL,
    iE-Extensions                ProtocolExtensionContainer { { PCH-Parameters-CTCH-ReconfRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

PCH-Parameters-CTCH-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID      id-PCH-Power-LCR-CTCH-ReconfRqstTDD          CRITICALITY reject      EXTENSION      DL-Power      PRESENCE      optional },
    ... -- For 3.84Mcps TDD only
}

FPACH-LCR-Parameters-CTCH-ReconfRqstTDD ::= SEQUENCE {

```

```

    commonPhysicalChannelId      CommonPhysicalChannelID,
    fPACHPower                   FPACH-Power      OPTIONAL,
    iE-Extensions                 ProtocolExtensionContainer { { FPACH-LCR-Parameters-CTCH-ReconfRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

FPACH-LCR-Parameters-CTCH-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- COMMON TRANSPORT CHANNEL RECONFIGURATION RESPONSE
--
-- *****

CommonTransportChannelReconfigurationResponse ::= SEQUENCE {
    protocolIEs      ProtocolIE-Container  {{CommonTransportChannelReconfigurationResponse-IEs}},
    protocolExtensions  ProtocolExtensionContainer  {{CommonTransportChannelReconfigurationResponse-Extensions}} OPTIONAL,
    ...
}

CommonTransportChannelReconfigurationResponse-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-CriticalityDiagnostics      CRITICALITY ignore      TYPE    CriticalityDiagnostics      PRESENCE optional },
    ...
}

CommonTransportChannelReconfigurationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- COMMON TRANSPORT CHANNEL RECONFIGURATION FAILURE
--
-- *****

CommonTransportChannelReconfigurationFailure ::= SEQUENCE {
    protocolIEs      ProtocolIE-Container  {{CommonTransportChannelReconfigurationFailure-IEs}},
    protocolExtensions  ProtocolExtensionContainer  {{CommonTransportChannelReconfigurationFailure-Extensions}} OPTIONAL,
    ...
}

CommonTransportChannelReconfigurationFailure-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-Cause      CRITICALITY ignore      TYPE    Cause      PRESENCE mandatory }|
    { ID    id-CriticalityDiagnostics      CRITICALITY ignore      TYPE    CriticalityDiagnostics      PRESENCE optional },
    ...
}

CommonTransportChannelReconfigurationFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

-- *****
--
-- COMMON TRANSPORT CHANNEL DELETION REQUEST
--
-- *****

CommonTransportChannelDeletionRequest ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CommonTransportChannelDeletionRequest-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CommonTransportChannelDeletionRequest-Extensions}}    OPTIONAL,
    ...
}

CommonTransportChannelDeletionRequest-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-C-ID                CRITICALITY reject    TYPE    C-ID                PRESENCE    mandatory}|
    { ID    id-CommonPhysicalChannelID    CRITICALITY reject    TYPE    CommonPhysicalChannelID    PRESENCE mandatory}|
    { ID    id-ConfigurationGenerationID    CRITICALITY reject    TYPE    ConfigurationGenerationID    PRESENCE mandatory},
    ...
}

CommonTransportChannelDeletionRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- COMMON TRANSPORT CHANNEL DELETION RESPONSE
--
-- *****

CommonTransportChannelDeletionResponse ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CommonTransportChannelDeletionResponse-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CommonTransportChannelDeletionResponse-Extensions}}    OPTIONAL,
    ...
}

CommonTransportChannelDeletionResponse-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-CriticalityDiagnostics    CRITICALITY    ignore    TYPE    CriticalityDiagnostics    PRESENCE    optional},
    ...
}

CommonTransportChannelDeletionResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- BLOCK RESOURCE REQUEST
--
-- *****

BlockResourceRequest ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{BlockResourceRequest-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{BlockResourceRequest-Extensions}}    OPTIONAL,

```

```

}
...
BlockResourceRequest-IEs NBAP-PROTOCOL-IES ::= {
  { ID    id-C-ID                CRITICALITY reject      TYPE    C-ID                PRESENCE mandatory }|
  { ID    id-BlockingPriorityIndicator  CRITICALITY reject      TYPE    BlockingPriorityIndicator  PRESENCE mandatory }|
  { ID    id-ShutdownTimer          CRITICALITY reject      TYPE    ShutdownTimer            PRESENCE conditional },
  -- The IE shall be present if the Blocking Priority Indicator IE indicates 'Normal Priority'--
  ...
}

BlockResourceRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- BLOCK RESOURCE RESPONSE
--
-- *****

BlockResourceResponse ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container      {{BlockResourceResponse-IEs}},
  protocolExtensions   ProtocolExtensionContainer {{BlockResourceResponse-Extensions}}
  ...
}
OPTIONAL,

BlockResourceResponse-IEs NBAP-PROTOCOL-IES ::= {
  { ID    id-CriticalityDiagnostics  CRITICALITY ignore      TYPE    CriticalityDiagnostics  PRESENCE optional},
  ...
}

BlockResourceResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- BLOCK RESOURCE FAILURE
--
-- *****

BlockResourceFailure ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container      {{BlockResourceFailure-IEs}},
  protocolExtensions   ProtocolExtensionContainer {{BlockResourceFailure-Extensions}}
  ...
}
OPTIONAL,

BlockResourceFailure-IEs NBAP-PROTOCOL-IES ::= {
  { ID    id-Cause                CRITICALITY ignore      TYPE    Cause                PRESENCE mandatory }|
  { ID    id-CriticalityDiagnostics  CRITICALITY ignore      TYPE    CriticalityDiagnostics  PRESENCE optional },
  ...
}

```

```

BlockResourceFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- UNBLOCK RESOURCE INDICATION
--
-- *****

UnblockResourceIndication ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{UnblockResourceIndication-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{UnblockResourceIndication-Extensions}}    OPTIONAL,
    ...
}

UnblockResourceIndication-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-C-ID          CRITICALITY      ignore      TYPE      C-ID          PRESENCE      mandatory},
    ...
}

UnblockResourceIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- AUDIT REQUIRED INDICATION
--
-- *****

AuditRequiredIndication ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{AuditRequiredIndication-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{AuditRequiredIndication-Extensions}}    OPTIONAL,
    ...
}

AuditRequiredIndication-IEs NBAP-PROTOCOL-IES ::= {
    ...
}

AuditRequiredIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- AUDIT REQUEST
--
-- *****

AuditRequest ::= SEQUENCE {

```

```

    protocolIEs          ProtocolIE-Container  {{AuditRequest-IEs}},
    protocolExtensions   ProtocolExtensionContainer  {{AuditRequest-Extensions}}  OPTIONAL,
    ...
}

AuditRequest-IEs NBAP-PROTOCOL-IES ::= {
  { ID    id-Start-Of-Audit-Sequence-Indicator    CRITICALITY    reject    TYPE    Start-Of-Audit-Sequence-Indicator    PRESENCE    mandatory },
  ...
}

AuditRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- AUDIT RESPONSE
--
-- *****

AuditResponse ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container  {{AuditResponse-IEs}},
  protocolExtensions   ProtocolExtensionContainer  {{AuditResponse-Extensions}}  OPTIONAL,
  ...
}

AuditResponse-IEs NBAP-PROTOCOL-IES ::= {
  { ID    id-End-Of-Audit-Sequence-Indicator    CRITICALITY    ignore    TYPE    End-Of-Audit-Sequence-Indicator    PRESENCE    mandatory }|
  { ID    id-Cell-InformationList-AuditRsp      CRITICALITY    ignore    TYPE    Cell-InformationList-AuditRsp      PRESENCE
  optional }|
  { ID    id-CCP-InformationList-AuditRsp      CRITICALITY    ignore    TYPE    CCP-InformationList-AuditRsp      PRESENCE    optional
  }|
  -- CCP (Communication Control Port) --
  { ID    id-Local-Cell-InformationList-AuditRsp    CRITICALITY    ignore    TYPE    Local-Cell-InformationList-AuditRsp    PRESENCE
  optional }|
  { ID    id-Local-Cell-Group-InformationList-AuditRsp    CRITICALITY    ignore    TYPE    Local-Cell-Group-InformationList-AuditRsp    PRESENCE
  optional }|
  { ID    id-CriticalityDiagnostics            CRITICALITY    ignore    TYPE    CriticalityDiagnostics            PRESENCE    optional
  },
  ...
}

AuditResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  { ID    id-Power-Local-Cell-Group-InformationList-AuditRsp    CRITICALITY    ignore    EXTENSION    Power-Local-Cell-Group-
  InformationList-AuditRsp    PRESENCE    optional },
  ...
}

Cell-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxCellInNodeB)) OF ProtocolIE-Single-Container {{ Cell-InformationItemIE-AuditRsp}}

Cell-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID    id-Cell-InformationItem-AuditRsp    CRITICALITY    ignore    TYPE    Cell-InformationItem-AuditRsp    PRESENCE    optional }
}

```

```

Cell-InformationItem-AuditRsp ::= SEQUENCE {
  c-ID                               C-ID,
  configurationGenerationID          ConfigurationGenerationID,
  resourceOperationalState           ResourceOperationalState,
  availabilityStatus                 AvailabilityStatus,
  local-Cell-ID                     Local-Cell-ID,
  primary-SCH-Information            P-SCH-Information-AuditRsp           OPTIONAL,
  secondary-SCH-Information          S-SCH-Information-AuditRsp           OPTIONAL,
  primary-CPICH-Information          P-CPICH-Information-AuditRsp        OPTIONAL,
  secondary-CPICH-InformationList    S-CPICH-InformationList-AuditRsp    OPTIONAL,
  primary-CCPCH-Information          P-CCPCH-Information-AuditRsp        OPTIONAL,
  bCH-Information                   BCH-Information-AuditRsp           OPTIONAL,
  secondary-CCPCH-InformationList    S-CCPCH-InformationList-AuditRsp    OPTIONAL,
  pCH-Information                   PCH-Information-AuditRsp           OPTIONAL,
  pICH-Information                  PICH-Information-AuditRsp          OPTIONAL,
  fACH-InformationList              FACH-InformationList-AuditRsp      OPTIONAL,
  pRACH-InformationList              PRACH-InformationList-AuditRsp     OPTIONAL,
  rACH-InformationList              RACH-InformationList-AuditRsp     OPTIONAL,
  aICH-InformationList              AICH-InformationList-AuditRsp     OPTIONAL,
  pCPCH-InformationList             PCPCH-InformationList-AuditRsp     OPTIONAL,
  cPCH-InformationList              CPCH-InformationList-AuditRsp     OPTIONAL,
  aP-AICH-InformationList           AP-AICH-InformationList-AuditRsp   OPTIONAL,
  cDCA-ICH-InformationList          CDCA-ICH-InformationList-AuditRsp  OPTIONAL,
  sCH-Information                   SCH-Information-AuditRsp           OPTIONAL,
  iE-Extensions                     ProtocolExtensionContainer { { Cell-InformationItem-AuditRsp-ExtIEs } } OPTIONAL,
  ...
}

Cell-InformationItem-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-FPACH-LCR-InformationList-AuditRsp    CRITICALITY ignore EXTENSION FPACH-LCR-InformationList-AuditRsp    PRESENCE optional }|
  -- For 1.28Mcps TDD only
  { ID id-DwPCH-LCR-InformationList-AuditRsp    CRITICALITY ignore EXTENSION DwPCH-LCR-InformationList-AuditRsp    PRESENCE optional },
  -- For 1.28Mcps TDD only
  ...
}

P-SCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ P-SCH-InformationIE-AuditRsp }}

P-SCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-P-SCH-Information    CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information    PRESENCE mandatory }
}

S-SCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ S-SCH-InformationIE-AuditRsp }}

S-SCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-S-SCH-Information    CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information    PRESENCE mandatory }
}

P-CPICH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ P-CPICH-InformationIE-AuditRsp }}

P-CPICH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-P-CPICH-Information    CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information    PRESENCE mandatory }
}

```

```

}

S-CPICH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxSCPICHCell)) OF ProtocolIE-Single-Container {{ S-CPICH-InformationItemIE-AuditRsp }}

S-CPICH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-S-CPICH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information  PRESENCE mandatory }
}

P-CCPCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ P-CCPCH-InformationIE-AuditRsp }}

P-CCPCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-P-CCPCH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information  PRESENCE mandatory }
}

BCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ BCH-InformationIE-AuditRsp }}

BCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-BCH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information  PRESENCE mandatory }
}

S-CCPCH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxSCCPCHCell)) OF ProtocolIE-Single-Container {{ S-CCPCH-InformationItemIE-AuditRsp }}

S-CCPCH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-S-CCPCH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information  PRESENCE mandatory }
}

PCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ PCH-InformationIE-AuditRsp }}

PCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-PCH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information  PRESENCE mandatory }
}

PICH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ PICH-InformationIE-AuditRsp }}

PICH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-PICH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information  PRESENCE mandatory }
}

FACH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxFACHCell)) OF ProtocolIE-Single-Container {{ FACH-InformationItemIE-AuditRsp }}

FACH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-FACH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information  PRESENCE mandatory }
}

PRACH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ PRACH-InformationItemIE-AuditRsp }}

PRACH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-PRACH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information  PRESENCE mandatory }
}

RACH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxRACHCell)) OF ProtocolIE-Single-Container {{ RACH-InformationItemIE-AuditRsp }}

RACH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-RACH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information  PRESENCE mandatory }
}

```



```

}

AICH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ AICH-InformationItemIE-AuditRsp }}

AICH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-AICH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

PCPCH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxPCPCHCell)) OF ProtocolIE-Single-Container {{ PCPCH-InformationItemIE-AuditRsp }}

PCPCH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-PCPCH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE optional }
}

CPCH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ CPCH-InformationItemIE-AuditRsp }}

CPCH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-CPCH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information          PRESENCE optional }
}

AP-AICH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ AP-AICH-InformationItemIE-AuditRsp }}

AP-AICH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-AP-AICH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

CDCA-ICH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ CDCA-ICH-InformationItemIE-AuditRsp }}

CDCA-ICH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-CDCA-ICH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

SCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ SCH-InformationIE-AuditRsp }}

SCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-SCH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

CCP-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxCCPinNodeB)) OF ProtocolIE-Single-Container {{ CCP-InformationItemIE-AuditRsp }}

CCP-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-CCP-InformationItem-AuditRsp  CRITICALITY ignore  TYPE CCP-InformationItem-AuditRsp  PRESENCE mandatory }
}

CCP-InformationItem-AuditRsp ::= SEQUENCE {
  communicationControlPortID  CommunicationControlPortID,
  resourceOperationalState    ResourceOperationalState,
  availabilityStatus          AvailabilityStatus,
  iE-Extensions               ProtocolExtensionContainer  {{ CCP-InformationItem-AuditRsp-ExtIEs }}  OPTIONAL,
  ...
}

CCP-InformationItem-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```

```

}
...
}
FPACH-LCR-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxFPACHCell)) OF ProtocolIE-Single-Container {{ FPACH-LCR-InformationItemIE-AuditRsp }}

FPACH-LCR-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-FPACH-LCR-Information-AuditRsp  CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information      PRESENCE mandatory }
}

DwPCH-LCR-InformationList-AuditRsp ::= ProtocolIE-Single-Container {{ DwPCH-LCR-InformationIE-AuditRsp }}

DwPCH-LCR-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-DwPCH-LCR-Information-AuditRsp  CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information      PRESENCE mandatory }
}

Local-Cell-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-InformationItemIE-AuditRsp }}

Local-Cell-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-Local-Cell-InformationItem-AuditRsp  CRITICALITY ignore TYPE Local-Cell-InformationItem-AuditRsp PRESENCE mandatory }
}

Local-Cell-InformationItem-AuditRsp ::= SEQUENCE {
  local-Cell-ID                Local-Cell-ID,
  dl-or-global-capacityCredit  DL-or-Global-CapacityCredit,
  ul-capacityCredit            UL-CapacityCredit          OPTIONAL,
  commonChannelsCapacityConsumptionLaw  CommonChannelsCapacityConsumptionLaw,
  dedicatedChannelsCapacityConsumptionLaw  DedicatedChannelsCapacityConsumptionLaw,
  maximumDL-PowerCapability  MaximumDL-PowerCapability  OPTIONAL,
  minSpreadingFactor         MinSpreadingFactor        OPTIONAL,
  minimumDL-PowerCapability  MinimumDL-PowerCapability  OPTIONAL,
  local-Cell-Group-ID        Local-Cell-ID                OPTIONAL,
  iE-Extensions              ProtocolExtensionContainer  {{ Local-Cell-InformationItem-AuditRsp-ExtIEs}}  OPTIONAL,
  ...
}

Local-Cell-InformationItem-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-ReferenceClockAvailability  CRITICALITY ignore EXTENSION ReferenceClockAvailability PRESENCE optional }|
  { ID id-Power-Local-Cell-Group-ID   CRITICALITY ignore EXTENSION Local-Cell-ID PRESENCE optional },
  ...
}

Local-Cell-Group-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-Group-InformationItemIE-AuditRsp }}

Local-Cell-Group-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-Local-Cell-Group-InformationItem-AuditRsp  CRITICALITY ignore TYPE Local-Cell-Group-InformationItem-AuditRsp PRESENCE mandatory }
}

Local-Cell-Group-InformationItem-AuditRsp ::= SEQUENCE {

```

```

local-Cell-Group-ID          Local-Cell-ID,
dl-or-global-capacityCredit  DL-or-Global-CapacityCredit,
ul-capacityCredit            UL-CapacityCredit            OPTIONAL,
commonChannelsCapacityConsumptionLaw  CommonChannelsCapacityConsumptionLaw,
dedicatedChannelsCapacityConsumptionLaw  DedicatedChannelsCapacityConsumptionLaw,
iE-Extensions                ProtocolExtensionContainer  {{ Local-Cell-Group-InformationItem-AuditRsp-ExtIEs}}  OPTIONAL,
...
}

Local-Cell-Group-InformationItem-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

Power-Local-Cell-Group-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Power-Local-Cell-Group-InformationItemIE-AuditRsp }}

Power-Local-Cell-Group-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID      id-Power-Local-Cell-Group-InformationItem-AuditRsp          CRITICALITY  ignore          TYPE  Power-Local-Cell-Group-InformationItem-
  AuditRsp      PRESENCE      mandatory}
}

Power-Local-Cell-Group-InformationItem-AuditRsp ::= SEQUENCE {
  power-Local-Cell-Group-ID          Local-Cell-ID,
  maximumDL-PowerCapability          MaximumDL-PowerCapability,
  iE-Extensions                      ProtocolExtensionContainer  {{ Power-Local-Cell-Group-InformationItem-AuditRsp-ExtIEs}}  OPTIONAL,
  ...
}

Power-Local-Cell-Group-InformationItem-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

-- *****
--
-- AUDIT FAILURE
--
-- *****

AuditFailure ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container  {{AuditFailure-IEs}},
  protocolExtensions  ProtocolExtensionContainer  {{AuditFailure-Extensions}}  OPTIONAL,
  ...
}

AuditFailure-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-Cause          CRITICALITY  ignore          TYPE  Cause          PRESENCE mandatory
  }|
  { ID      id-CriticalityDiagnostics          CRITICALITY  ignore          TYPE  CriticalityDiagnostics          PRESENCE optional },
  ...
}

AuditFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
...
}

```

```

}

-- *****
--
-- COMMON MEASUREMENT INITIATION REQUEST
--
-- *****

CommonMeasurementInitiationRequest ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{CommonMeasurementInitiationRequest-IEs}},
    protocolExtensions   ProtocolExtensionContainer  {{CommonMeasurementInitiationRequest-Extensions}}    OPTIONAL,
    ...
}

CommonMeasurementInitiationRequest-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-MeasurementID          CRITICALITY reject          TYPE    MeasurementID          PRESENCE
      mandatory }|
    { ID    id-CommonMeasurementObjectType-CM-Rqst  CRITICALITY reject          TYPE    CommonMeasurementObjectType-CM-Rqst  PRESENCE
      mandatory }|
    -- This IE represents both the Common Measurement Object Type IE and the choice based on the Common Measurement Object Type
    -- as described in the tabular message format in subclause 9.1.
    { ID    id-CommonMeasurementType  CRITICALITY reject          TYPE    CommonMeasurementType          PRESENCE mandatory
      }|
    { ID    id-MeasurementFilterCoefficient  CRITICALITY reject          TYPE    MeasurementFilterCoefficient      PRESENCE
      optional }|
    { ID    id-ReportCharacteristics  CRITICALITY reject          TYPE    ReportCharacteristics          PRESENCE mandatory
      }|
    { ID    id-SFNReportingIndicator  CRITICALITY reject          TYPE    FNReportingIndicator          PRESENCE mandatory
      }|
    { ID    id-SFN                    CRITICALITY reject          TYPE    SFN                          PRESENCE optional
      },
    ...
}

CommonMeasurementInitiationRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ....
    {ID id-CommonMeasurementAccuracy          CRITICALITY reject          EXTENSION CommonMeasurementAccuracy          PRESENCE optional}
}

CommonMeasurementObjectType-CM-Rqst ::= CHOICE {
    cell          Cell-CM-Rqst,
    rACH          RACH-CM-Rqst,
    cPCH          CPCH-CM-Rqst,
    ...
}

Cell-CM-Rqst ::= SEQUENCE {
    c-ID          C-ID,
    timeSlot     TimeSlot    OPTIONAL,    -- For 3.84Mcps TDD only
    iE-Extensions ProtocolExtensionContainer  { { CellItem-CM-Rqst-ExtIEs} }    OPTIONAL,
    ...
}

```

```

CellItem-CM-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-TimeSlotLCR-CM-Rqst      CRITICALITY reject      EXTENSION TimeSlotLCR      PRESENCE optional      }| -- For 1.28Mcps TDD only
  { ID id-NeighbouringCellMeasurementInformation  CRITICALITY ignore      EXTENSION NeighbouringCellMeasurementInformation  PRESENCE optional},
  ...
}

RACH-CM-Rqst ::= SEQUENCE {
  c-ID                C-ID,
  commonTransportChannelID  CommonTransportChannelID,
  iE-Extensions       ProtocolExtensionContainer  { { RACHItem-CM-Rqst-ExtIEs } }      OPTIONAL,
  ...
}

RACHItem-CM-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

CPCH-CM-Rqst ::= SEQUENCE {
  c-ID                C-ID,
  commonTransportChannelID  CommonTransportChannelID,
  spreadingfactor      MinUL-ChannelisationCodeLength      OPTIONAL,
  iE-Extensions       ProtocolExtensionContainer  { { CPCHItem-CM-Rqst-ExtIEs } }      OPTIONAL,
  ...
}

CPCHItem-CM-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- COMMON MEASUREMENT INITIATION RESPONSE
--
-- *****

CommonMeasurementInitiationResponse ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container  {{CommonMeasurementInitiationResponse-IEs}},
  protocolExtensions  ProtocolExtensionContainer  {{CommonMeasurementInitiationResponse-Extensions}}      OPTIONAL,
  ...
}

CommonMeasurementInitiationResponse-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-MeasurementID      CRITICALITY ignore      TYPE MeasurementID      PRESENCE mandatory }|
  { ID id-CommonMeasurementObjectType-CM-Rsp      CRITICALITY ignore      TYPE CommonMeasurementObjectType-CM-Rsp      PRESENCE optional }|
  { ID id-SFN                CRITICALITY ignore      TYPE SFN                PRESENCE optional }|
  { ID id-CriticalityDiagnostics      CRITICALITY ignore      TYPE CriticalityDiagnostics      PRESENCE optional },
  ...
}

```

```

CommonMeasurementInitiationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...,
    {ID id-CommonMeasurementAccuracy          CRITICALITY ignore          EXTENSION CommonMeasurementAccuracy          PRESENCE optional}
}

CommonMeasurementObjectType-CM-Rsp ::= CHOICE {
    cell                Cell-CM-Rsp,
    rACH                RACH-CM-Rsp,
    cPCH                CPCH-CM-Rsp,
    ...
}

Cell-CM-Rsp ::= SEQUENCE {
    commonMeasurementValue          CommonMeasurementValue,
    iE-Extensions                  ProtocolExtensionContainer  { { CellItem-CM-Rsp-ExtIEs} }          OPTIONAL,
    ...
}

CellItem-CM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RACH-CM-Rsp ::= SEQUENCE {
    commonMeasurementValue          CommonMeasurementValue,
    iE-Extensions                  ProtocolExtensionContainer  { { RACHItem-CM-Rsp-ExtIEs} }          OPTIONAL,
    ...
}

RACHItem-CM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CPCH-CM-Rsp ::= SEQUENCE {
    commonMeasurementValue          CommonMeasurementValue,
    iE-Extensions                  ProtocolExtensionContainer  { { CPCHItem-CM-Rsp-ExtIEs} }          OPTIONAL,
    ...
}

CPCHItem-CM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- COMMON MEASUREMENT INITIATION FAILURE
--
-- *****

CommonMeasurementInitiationFailure ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{CommonMeasurementInitiationFailure-IEs}},
    protocolExtensions  ProtocolExtensionContainer  {{CommonMeasurementInitiationFailure-Extensions}}          OPTIONAL,
    ...
}

```

```

CommonMeasurementInitiationFailure-IEs NBAP-PROTOCOL-IES ::= {
  { ID    id-MeasurementID          CRITICALITY ignore          TYPE    MeasurementID          PRESENCE mandatory }|
  { ID    id-Cause                  CRITICALITY ignore          TYPE    Cause                  PRESENCE mandatory }|
  { ID    id-CriticalityDiagnostics  CRITICALITY ignore          TYPE    CriticalityDiagnostics    PRESENCE optional },
  ...
}

CommonMeasurementInitiationFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- COMMON MEASUREMENT REPORT
--
-- *****

CommonMeasurementReport ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container    {{CommonMeasurementReport-IEs}},
  protocolExtensions  ProtocolExtensionContainer {{CommonMeasurementReport-Extensions}}    OPTIONAL,
  ...
}

CommonMeasurementReport-IEs NBAP-PROTOCOL-IES ::= {
  { ID    id-MeasurementID          CRITICALITY ignore          TYPE    MeasurementID          PRESENCE
    mandatory }|
  { ID    id-CommonMeasurementObjectType-CM-Rprt  CRITICALITY ignore          TYPE    CommonMeasurementObjectType-CM-Rprt  PRESENCE mandatory
    }|
  { ID    id-SFN                    CRITICALITY ignore          TYPE    SFN                            PRESENCE
    optional },
  ...
}

CommonMeasurementReport-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

CommonMeasurementObjectType-CM-Rprt ::= CHOICE {
  cell          Cell-CM-Rprt,
  rACH          RACH-CM-Rprt,
  cPCH          CPCH-CM-Rprt,
  ...
}

Cell-CM-Rprt ::= SEQUENCE {
  commonMeasurementValueInformation  CommonMeasurementValueInformation,
  iE-Extensions                      ProtocolExtensionContainer    {{ CellItem-CM-Rprt-ExtIEs }}    OPTIONAL,
  ...
}

CellItem-CM-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```

```

}
...
}

RACH-CM-Rprt ::= SEQUENCE {
    commonMeasurementValueInformation    CommonMeasurementValueInformation,
    iE-Extensions                        ProtocolExtensionContainer {{ RACHItem-CM-Rprt-ExtIEs }}
    ...
}

RACHItem-CM-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CPCH-CM-Rprt ::= SEQUENCE {
    commonMeasurementValueInformation    CommonMeasurementValueInformation,
    iE-Extensions                        ProtocolExtensionContainer {{ CPCHItem-CM-Rprt-ExtIEs }}
    ...
}

CPCHItem-CM-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- COMMON MEASUREMENT TERMINATION REQUEST
--
-- *****

CommonMeasurementTerminationRequest ::= SEQUENCE {
    protocolIEs                ProtocolIE-Container    {{CommonMeasurementTerminationRequest-IEs}},
    protocolExtensions          ProtocolExtensionContainer {{CommonMeasurementTerminationRequest-Extensions}}
    ...
}

CommonMeasurementTerminationRequest-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-MeasurementID          CRITICALITY    ignore          TYPE    MeasurementID          PRESENCE mandatory},
    ...
}

CommonMeasurementTerminationRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- COMMON MEASUREMENT FAILURE INDICATION
--
-- *****

CommonMeasurementFailureIndication ::= SEQUENCE {
    protocolIEs                ProtocolIE-Container    {{CommonMeasurementFailureIndication-IEs}},

```



```

    protocolExtensions          ProtocolExtensionContainer  {{CommonMeasurementFailureIndication-Extensions}}
    ...
}

CommonMeasurementFailureIndication-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-MeasurementID          CRITICALITY ignore          TYPE      MeasurementID          PRESENCE mandatory }|
  { ID      id-Cause                  CRITICALITY ignore          TYPE      Cause                    PRESENCE mandatory }|
  ...
}

CommonMeasurementFailureIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- CELL SETUP REQUEST FDD
--
-- *****

CellSetupRequestFDD ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container  {{CellSetupRequestFDD-IEs}},
  protocolExtensions   ProtocolExtensionContainer  {{CellSetupRequestFDD-Extensions}}
  ...
}

CellSetupRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-Local-Cell-ID          CRITICALITY reject          TYPE      Local-Cell-ID          PRESENCE mandatory }|
  { ID      id-C-ID                  CRITICALITY reject          TYPE      C-ID                    PRESENCE mandatory }|
  { ID      id-ConfigurationGenerationID  CRITICALITY reject          TYPE      ConfigurationGenerationID  PRESENCE mandatory }|
  { ID      id-T-Cell                CRITICALITY reject          TYPE      T-Cell                  PRESENCE mandatory }|
  { ID      id-UARFCNforNu            CRITICALITY reject          TYPE      UARFCN                  PRESENCE mandatory }|
  { ID      id-UARFCNforNd            CRITICALITY reject          TYPE      UARFCN                  PRESENCE mandatory }|
  { ID      id-MaximumTransmissionPower  CRITICALITY reject          TYPE      MaximumTransmissionPower  PRESENCE mandatory }|
  { ID      id-Closed-Loop-Timing-Adjustment-Mode  CRITICALITY reject          TYPE      ClosedloopTimingadjustmentmode  PRESENCE optional }|
  { ID      id-PrimaryScramblingCode    CRITICALITY reject          TYPE      PrimaryScramblingCode      PRESENCE mandatory }|
  { ID      id-Synchronisation-Configuration-Cell-SetupRqst  CRITICALITY reject          TYPE      Synchronisation-Configuration-Cell-SetupRqst  PRESENCE mandatory }|
  { ID      id-DL-TPC-Pattern01Count    CRITICALITY reject          TYPE      DL-TPC-Pattern01Count      PRESENCE mandatory }|
  { ID      id-PrimarySCH-Information-Cell-SetupRqstFDD  CRITICALITY reject          TYPE      PrimarySCH-Information-Cell-SetupRqstFDD  PRESENCE mandatory }|
  { ID      id-SecondarySCH-Information-Cell-SetupRqstFDD  CRITICALITY reject          TYPE      SecondarySCH-Information-Cell-SetupRqstFDD  PRESENCE mandatory }|
}

```

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```

    { ID id-PrimaryCPICH-Information-Cell-SetupRqstFDD          CRITICALITY reject
Cell-SetupRqstFDD PRESENCE mandatory }|
    { ID id-SecondaryCPICH-InformationList-Cell-SetupRqstFDD  CRITICALITY reject
InformationList-Cell-SetupRqstFDD PRESENCE optional }|
    { ID id-PrimaryCCPCH-Information-Cell-SetupRqstFDD        CRITICALITY reject
Cell-SetupRqstFDD PRESENCE mandatory }|
    { ID id-Limited-power-increase-information-Cell-SetupRqstFDD CRITICALITY reject
information-Cell-SetupRqstFDD PRESENCE mandatory },
    ...
}

CellSetupRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-IPDLParameter-Information-Cell-SetupRqstFDD          CRITICALITY reject EXTENSION IPDLParameter-Information-
Cell-SetupRqstFDD PRESENCE optional }|
    {ID id-PDSCH-Information-Cell-SetupRqstFDD                 CRITICALITY reject EXTENSION PDSCH-Information-Cell-
SetupRqstFDD PRESENCE optional },
    ...
}

Synchronisation-Configuration-Cell-SetupRqst ::= SEQUENCE {
    n-INSYNC-IND          N-INSYNC-IND,
    n-OUTSYNC-IND         N-OUTSYNC-IND,
    t-RLFFAILURE          T-RLFFAILURE,
    iE-Extensions         ProtocolExtensionContainer { { Synchronisation-Configuration-Cell-SetupRqst-ExtIEs } } OPTIONAL,
    ...
}

Synchronisation-Configuration-Cell-SetupRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PrimarySCH-Information-Cell-SetupRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID CommonPhysicalChannelID,
    primarySCH-Power         DL-Power,
    tSTD-Indicator           TSTD-Indicator,
    iE-Extensions            ProtocolExtensionContainer { { PrimarySCH-Information-Cell-SetupRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

PrimarySCH-Information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

SecondarySCH-Information-Cell-SetupRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID CommonPhysicalChannelID,
    secondarySCH-Power      DL-Power,
    tSTD-Indicator          TSTD-Indicator,
    iE-Extensions           ProtocolExtensionContainer { { SecondarySCH-Information-Cell-SetupRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

SecondarySCH-Information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

}

PrimaryCPICH-Information-Cell-SetupRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID      CommonPhysicalChannelID,
    primaryCPICH-Power           PrimaryCPICH-Power,
    transmitDiversityIndicator   TransmitDiversityIndicator,
    iE-Extensions                ProtocolExtensionContainer { { PrimaryCPICH-Information-Cell-SetupRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

PrimaryCPICH-Information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

SecondaryCPICH-InformationList-Cell-SetupRqstFDD ::= SEQUENCE (SIZE (1..maxSCPICHCell)) OF ProtocolIE-Single-Container{{ SecondaryCPICH-
InformationItemIE-Cell-SetupRqstFDD }}

SecondaryCPICH-InformationItemIE-Cell-SetupRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID      id-SecondaryCPICH-InformationItem-Cell-SetupRqstFDD      CRITICALITY      reject      TYPE      SecondaryCPICH-
InformationItem-Cell-SetupRqstFDD      PRESENCE      mandatory}
}

SecondaryCPICH-InformationItem-Cell-SetupRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID      CommonPhysicalChannelID,
    dl-ScramblingCode            DL-ScramblingCode,
    fDD-DL-ChannelisationCodeNumber FDD-DL-ChannelisationCodeNumber,
    secondaryCPICH-Power         DL-Power,
    transmitDiversityIndicator   TransmitDiversityIndicator,
    iE-Extensions                ProtocolExtensionContainer { { SecondaryCPICH-InformationItem-Cell-SetupRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

SecondaryCPICH-InformationItem-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PrimaryCCPCH-Information-Cell-SetupRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID      CommonPhysicalChannelID,
    bCH-information              BCH-Information-Cell-SetupRqstFDD,
    sTTD-Indicator               STTD-Indicator,
    iE-Extensions                ProtocolExtensionContainer { { PrimaryCCPCH-Information-Cell-SetupRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

PrimaryCCPCH-Information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

BCH-Information-Cell-SetupRqstFDD ::= SEQUENCE {
    commonTransportChannelID     CommonTransportChannelID,
    bCH-Power                    DL-Power,
    iE-Extensions                ProtocolExtensionContainer { { BCH-Information-Cell-SetupRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

```

```

}

BCH-Information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Limited-power-increase-information-Cell-SetupRqstFDD ::= SEQUENCE {
    powerRaiseLimit                PowerRaiseLimit,
    dlPowerAveragingWindowSize     DLPowerAveragingWindowSize,
    iE-Extensions                  ProtocolExtensionContainer { { Limited-power-increase-information-Cell-SetupRqstFDD-ExtIEs} }
    OPTIONAL,
    ...
}

Limited-power-increase-information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

IPDLParameter-Information-Cell-SetupRqstFDD ::= SEQUENCE {
    iPDL-FDD-Parameters            IPDL-FDD-Parameters,
    iPDL-Indicator                 IPDL-Indicator,
    iE-Extensions                  ProtocolExtensionContainer { { IPDLParameter-Information-Cell-SetupRqstFDD-ExtIEs} }    OPTIONAL,
    ...
}

IPDLParameter-Information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PDSCH-Information-Cell-SetupRqstFDD ::= SEQUENCE {
    maximum-PDSCH-Power           Maximum-PDSCH-Power,
    iE-Extensions                 ProtocolExtensionContainer { { PDSCH-Information-Cell-SetupRqstFDD-ExtIEs} }    OPTIONAL,
    ...
}

PDSCH-Information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- CELL SETUP REQUEST TDD
--
-- *****

CellSetupRequestTDD ::= SEQUENCE {
    protocolIEs                    ProtocolIE-Container    {{CellSetupRequestTDD-IEs}},
    protocolExtensions             ProtocolExtensionContainer {{CellSetupRequestTDD-Extensions}}    OPTIONAL,
    ...
}

CellSetupRequestTDD-IEs NBAP-PROTOCOL-IES ::= {

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    { ID id-Local-Cell-ID CRITICALITY reject TYPE Local-Cell-ID
      PRESENCE mandatory }|
    { ID id-C-ID CRITICALITY reject TYPE C-ID
      PRESENCE mandatory }|
    { ID id-ConfigurationGenerationID CRITICALITY reject TYPE ConfigurationGenerationID
      PRESENCE mandatory }|
    { ID id-UARFCNforNt CRITICALITY reject TYPE UARFCN
      PRESENCE mandatory }|
    { ID id-CellParameterID CRITICALITY reject TYPE CellParameterID
      PRESENCE mandatory }|
    { ID id-MaximumTransmissionPower CRITICALITY reject TYPE MaximumTransmissionPower
      PRESENCE mandatory }|
    { ID id-TransmissionDiversityApplied CRITICALITY reject TYPE TransmissionDiversityApplied
      PRESENCE mandatory }|
    { ID id-SyncCase CRITICALITY reject TYPE SyncCase
      PRESENCE mandatory }|
    { ID id-Synchronisation-Configuration-Cell-SetupRqst CRITICALITY reject TYPE Synchronisation-Configuration-
Cell-SetupRqst PRESENCE mandatory }|
    { ID id-DPCHConstant CRITICALITY reject TYPE ConstantValue
      PRESENCE mandatory }|
    { ID id-PUSCHConstant CRITICALITY reject TYPE ConstantValue
      PRESENCE mandatory }|
    { ID id-PRACHConstant CRITICALITY reject TYPE ConstantValue
      PRESENCE mandatory }|
    { ID id-TimingAdvanceApplied CRITICALITY reject TYPE TimingAdvanceApplied
      PRESENCE mandatory }|
    { ID id-SCH-Information-Cell-SetupRqstTDD CRITICALITY reject TYPE SCH-Information-Cell-SetupRqstTDD
      PRESENCE optional }| -- Mandatory for 3.84Mcps TDD only
    { ID id-PCCPCH-Information-Cell-SetupRqstTDD CRITICALITY reject TYPE PCCPCH-Information-Cell-
SetupRqstTDD PRESENCE optional }| -- Mandatory for 3.84Mcps TDD only
    { ID id-TimeSlotConfigurationList-Cell-SetupRqstTDD CRITICALITY reject TYPE TimeSlotConfigurationList-Cell-
SetupRqstTDD PRESENCE optional }, -- Mandatory for 3.84Mcps TDD only
    ...
}

CellSetupRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-TimeSlotConfigurationList-LCR-Cell-SetupRqstTDD CRITICALITY reject EXTENSION TimeSlotConfigurationList-LCR-
Cell-SetupRqstTDD PRESENCE optional }| -- Mandatory for 1.28Mcps TDD only
  { ID id-PCCPCH-LCR-Information-Cell-SetupRqstTDD CRITICALITY reject EXTENSION PCCPCH-LCR-Information-Cell-
SetupRqstTDD PRESENCE optional }| -- Mandatory for 1.28Mcps TDD only
  { ID id-DwPCH-LCR-Information-Cell-SetupRqstTDD CRITICALITY reject EXTENSION DwPCH-LCR-Information-Cell-
SetupRqstTDD PRESENCE optional }| -- Mandatory for 1.28Mcps TDD only
  { ID id-ReferenceSFNoffset CRITICALITY ignore EXTENSION ReferenceSFNoffset PRESENCE optional }|
  { ID id-IPDLParameter-Information-Cell-SetupRqstTDD CRITICALITY reject EXTENSION IPDLParameter-Information-
Cell-SetupRqstTDD PRESENCE optional }| -- For 3.84Mcps TDD only
  { ID id-IPDLParameter-Information-LCR-Cell-SetupRqstTDD CRITICALITY reject EXTENSION IPDLParameter-
Information-LCR-Cell-SetupRqstTDD PRESENCE optional }, -- For 1.28Mcps TDD only
  ...
}

SCH-Information-Cell-SetupRqstTDD ::= SEQUENCE {
  commonPhysicalChannelID CommonPhysicalChannelID,

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```

syncCaseIndicator          SyncCaseIndicator-Cell-SetupRqstTDD-PSCH,
sCH-Power                  DL-Power,
tSTD-Indicator              TSTD-Indicator,
iE-Extensions              ProtocolExtensionContainer { { SCH-Information-Cell-SetupRqstTDD-ExtIEs } } OPTIONAL,
...
}

SCH-Information-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

SyncCaseIndicator-Cell-SetupRqstTDD-PSCH ::= ProtocolIE-Single-Container {{ SyncCaseIndicatorIE-Cell-SetupRqstTDD-PSCH }}

SyncCaseIndicatorIE-Cell-SetupRqstTDD-PSCH NBAP-PROTOCOL-IES ::= {
  { ID id-SyncCaseIndicatorItem-Cell-SetupRqstTDD-PSCH CRITICALITY reject TYPE SyncCaseIndicatorItem-Cell-SetupRqstTDD-PSCH PRESENCE
mandatory }
}

SyncCaseIndicatorItem-Cell-SetupRqstTDD-PSCH ::= CHOICE {
  case1                      Case1-Cell-SetupRqstTDD,
  case2                      Case2-Cell-SetupRqstTDD,
  ...
}

Case1-Cell-SetupRqstTDD ::= SEQUENCE {
  timeSlot                   TimeSlot,
  iE-Extensions              ProtocolExtensionContainer { { Case1Item-Cell-SetupRqstTDD-ExtIEs } } OPTIONAL,
  ...
}

Case1Item-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

Case2-Cell-SetupRqstTDD ::= SEQUENCE {
  sCH-TimeSlot               SCH-TimeSlot,
  iE-Extensions              ProtocolExtensionContainer { { Case2Item-Cell-SetupRqstTDD-ExtIEs } } OPTIONAL,
  ...
}

Case2Item-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

PCCPCH-Information-Cell-SetupRqstTDD ::= SEQUENCE {
  commonPhysicalChannelID    CommonPhysicalChannelID,
  tdd-PhysicalChannelOffset  TDD-PhysicalChannelOffset,
  repetitionPeriod            RepetitionPeriod,
  repetitionLength           RepetitionLength,
  pCCPCH-Power               PCCPCH-Power,
  sCTD-Indicator              SCTD-Indicator,
  iE-Extensions              ProtocolExtensionContainer { { PCCPCH-Information-Cell-SetupRqstTDD-ExtIEs } } OPTIONAL,
}

```

```

}
...
}
PCCPCH-Information-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
TimeSlotConfigurationList-Cell-SetupRqstTDD ::= SEQUENCE (SIZE (1..15)) OF TimeSlotConfigurationItem-Cell-SetupRqstTDD
TimeSlotConfigurationItem-Cell-SetupRqstTDD ::= SEQUENCE {
timeSlot TimeSlot,
timeSlotStatus TimeSlotStatus,
timeSlotDirection TimeSlotDirection,
iE-Extensions ProtocolExtensionContainer { { TimeSlotConfigurationItem-Cell-SetupRqstTDD-ExtIEs} } OPTIONAL,
...
}
TimeSlotConfigurationItem-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
TimeSlotConfigurationList-LCR-Cell-SetupRqstTDD ::= SEQUENCE (SIZE (1..7)) OF TimeSlotConfigurationItem-LCR-Cell-SetupRqstTDD
TimeSlotConfigurationItem-LCR-Cell-SetupRqstTDD ::= SEQUENCE {
timeSlotLCR TimeSlotLCR,
timeSlotStatus TimeSlotStatus,
timeSlotDirection TimeSlotDirection,
iE-Extensions ProtocolExtensionContainer { { TimeSlotConfigurationItem-LCR-Cell-SetupRqstTDD-ExtIEs} } OPTIONAL,
...
}
TimeSlotConfigurationItem-LCR-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
PCCPCH-LCR-Information-Cell-SetupRqstTDD ::= SEQUENCE {
commonPhysicalChannelId CommonPhysicalChannelID,
tdd-PhysicalChannelOffset TDD-PhysicalChannelOffset,
repetitionPeriod RepetitionPeriod,
repetitionLength RepetitionLength,
pCCPCH-Power PCCPCH-Power,
sCTD-Indicator SCTD-Indicator,
tSTD-Indicator TSTD-Indicator,
iE-Extensions ProtocolExtensionContainer { { PCCPCH-LCR-Information-Cell-SetupRqstTDD-ExtIEs} } OPTIONAL,
...
}
PCCPCH-LCR-Information-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
DwPCH-LCR-Information-Cell-SetupRqstTDD ::= SEQUENCE {
commonPhysicalChannelId CommonPhysicalChannelID,

```

```

tSTD-Indicator          TSTD-Indicator,
sYNCD1CodeId           SYNCD1CodeId,
dwPCH-Power           DwPCH-Power,
iE-Extensions         ProtocolExtensionContainer { { DwPCH-LCR-Information-Cell-SetupRqstTDD-ExtIEs} }   OPTIONAL,
...
}

DwPCH-LCR-Information-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

IPDLParameter-Information-Cell-SetupRqstTDD ::= SEQUENCE {
iPDL-TDD-Parameters      IPDL-TDD-Parameters,
iPDL-Indicator           IPDL-Indicator,
iE-Extensions           ProtocolExtensionContainer { { IPDLParameter-Information-Cell-SetupRqstTDD-ExtIEs} }   OPTIONAL,
...
}

IPDLParameter-Information-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

IPDLParameter-Information-LCR-Cell-SetupRqstTDD ::= SEQUENCE {
iPDL-TDD-Parameters-LCR  IPDL-TDD-Parameters-LCR,
iPDL-Indicator           IPDL-Indicator,
iE-Extensions           ProtocolExtensionContainer { { IPDLParameter-Information-LCR-Cell-SetupRqstTDD-ExtIEs} }   OPTIONAL,
...
}

IPDLParameter-Information-LCR-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

-- *****
--
-- CELL SETUP RESPONSE
--
-- *****

CellSetupResponse ::= SEQUENCE {
protocolIEs              ProtocolIE-Container   {{CellSetupResponse-IEs}},
protocolExtensions      ProtocolExtensionContainer {{CellSetupResponse-Extensions}}   OPTIONAL,
...
}

CellSetupResponse-IEs NBAP-PROTOCOL-IES ::= {
{ ID    id-CriticalityDiagnostics    CRITICALITY    ignore          TYPE    CriticalityDiagnostics    PRESENCE optional},
...
}

CellSetupResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
...
}

```



```

-- *****
--
-- CELL SETUP FAILURE
--
-- *****

CellSetupFailure ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{CellSetupFailure-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{CellSetupFailure-Extensions}}    OPTIONAL,
    ...
}

CellSetupFailure-IEs NBAP-PROTOCOL-IES ::= {
    { ID   id-Cause          CRITICALITY  ignore          TYPE   Cause          PRESENCE mandatory }|
    { ID   id-CriticalityDiagnostics  CRITICALITY  ignore          TYPE   CriticalityDiagnostics  PRESENCE optional },
    ...
}

CellSetupFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- CELL RECONFIGURATION REQUEST FDD
--
-- *****

CellReconfigurationRequestFDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{CellReconfigurationRequestFDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{CellReconfigurationRequestFDD-Extensions}}    OPTIONAL,
    ...
}

CellReconfigurationRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID   id-C-ID          CRITICALITY  reject          TYPE   C-ID          PRESENCE mandatory }|
    { ID   id-ConfigurationGenerationID  CRITICALITY  reject          TYPE   ConfigurationGenerationID  PRESENCE mandatory }|
    { ID   id-MaximumTransmissionPower  CRITICALITY  reject          TYPE   MaximumTransmissionPower  PRESENCE optional }|
    { ID   id-Synchronisation-Configuration-Cell-ReconfRqst  CRITICALITY  reject          TYPE   Synchronisation-Configuration-Cell-ReconfRqst  PRESENCE optional }|
    { ID   id-PrimarySCH-Information-Cell-ReconfRqstFDD  CRITICALITY  reject          TYPE   PrimarySCH-Information-Cell-ReconfRqstFDD  PRESENCE optional }|
    { ID   id-SecondarySCH-Information-Cell-ReconfRqstFDD  CRITICALITY  reject          TYPE   SecondarySCH-Information-Cell-ReconfRqstFDD  PRESENCE optional }|
    { ID   id-PrimaryCPICH-Information-Cell-ReconfRqstFDD  CRITICALITY  reject          TYPE   PrimaryCPICH-Information-Cell-ReconfRqstFDD  PRESENCE optional }|
    { ID   id-SecondaryCPICH-InformationList-Cell-ReconfRqstFDD  CRITICALITY  reject          TYPE   SecondaryCPICH-InformationList-Cell-ReconfRqstFDD  PRESENCE optional }|
}

```

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```

{ ID id-PrimaryCCPCH-Information-Cell-ReconfRqstFDD
ReconfRqstFDD PRESENCE optional }, CRITICALITY reject TYPE PrimaryCCPCH-Information-Cell-
...
}

CellReconfigurationRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
{ID id-IPDLParameter-Information-Cell-ReconfRqstFDD CRITICALITY reject EXTENSION IPDLParameter-Information-
Cell-ReconfRqstFDD PRESENCE optional }|
{ID id-PDSCH-Information-Cell-ReconfRqstFDD CRITICALITY reject EXTENSION PDSCH-Information-Cell-
ReconfRqstFDD PRESENCE optional },
...
}

Synchronisation-Configuration-Cell-ReconfRqst ::= SEQUENCE {
n-INSYNC-IND N-INSYNC-IND,
n-OUTSYNC-IND N-OUTSYNC-IND,
t-RLFFAILURE T-RLFFAILURE,
iE-Extensions ProtocolExtensionContainer { { Synchronisation-Configuration-Cell-ReconfRqst-ExtIEs} } OPTIONAL,
...
}

Synchronisation-Configuration-Cell-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

PrimarySCH-Information-Cell-ReconfRqstFDD ::= SEQUENCE {
commonPhysicalChannelID CommonPhysicalChannelID,
primarySCH-Power DL-Power,
iE-Extensions ProtocolExtensionContainer { { PrimarySCH-Information-Cell-ReconfRqstFDD-ExtIEs} } OPTIONAL,
...
}

PrimarySCH-Information-Cell-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

SecondarySCH-Information-Cell-ReconfRqstFDD ::= SEQUENCE {
commonPhysicalChannelID CommonPhysicalChannelID,
secondarySCH-Power DL-Power,
iE-Extensions ProtocolExtensionContainer { { SecondarySCH-Information-Cell-ReconfRqstFDD-ExtIEs} } OPTIONAL,
...
}

SecondarySCH-Information-Cell-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

PrimaryCPICH-Information-Cell-ReconfRqstFDD ::= SEQUENCE {
commonPhysicalChannelID CommonPhysicalChannelID,
primaryCPICH-Power PrimaryCPICH-Power,
iE-Extensions ProtocolExtensionContainer { { PrimaryCPICH-Information-Cell-ReconfRqstFDD-ExtIEs} } OPTIONAL,
...
}

```

```

PrimaryCPICH-Information-Cell-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

SecondaryCPICH-InformationList-Cell-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxSCPICHCell)) OF ProtocolIE-Single-Container{{ SecondaryCPICH-
InformationItemIE-Cell-ReconfRqstFDD }}

SecondaryCPICH-InformationItemIE-Cell-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
  { ID id-SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD CRITICALITY reject TYPE SecondaryCPICH-
InformationItem-Cell-ReconfRqstFDD PRESENCE mandatory}
}

SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD ::= SEQUENCE {
  commonPhysicalChannelID CommonPhysicalChannelID,
  secondaryCPICH-Power DL-Power,
  iE-Extensions ProtocolExtensionContainer { { SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD-ExtIEs } }
  OPTIONAL,
  ...
}

SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

PrimaryCCPCH-Information-Cell-ReconfRqstFDD ::= SEQUENCE {
  bCH-information BCH-information-Cell-ReconfRqstFDD,
  iE-Extensions ProtocolExtensionContainer { { PrimaryCCPCH-Information-Cell-ReconfRqstFDD-ExtIEs } } OPTIONAL,
  ...
}

PrimaryCCPCH-Information-Cell-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

BCH-information-Cell-ReconfRqstFDD ::= SEQUENCE {
  commonTransportChannelID CommonTransportChannelID,
  bCH-Power DL-Power,
  iE-Extensions ProtocolExtensionContainer { { BCH-information-Cell-ReconfRqstFDD-ExtIEs } } OPTIONAL,
  ...
}

BCH-information-Cell-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

IPDLParameter-Information-Cell-ReconfRqstFDD ::= SEQUENCE {
  iPDL-FDD-Parameters IPDL-FDD-Parameters OPTIONAL,
  iPDL-Indicator IPDL-Indicator,
  iE-Extensions ProtocolExtensionContainer { { IPDLParameter-Information-Cell-ReconfRqstFDD-ExtIEs } } OPTIONAL,
  ...
}

```

```

IPDLParameter-Information-Cell-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PDSCH-Information-Cell-ReconfRqstFDD ::= SEQUENCE {
    maximumPDSCH-Power      Maximum-PDSCH-Power,
    iE-Extensions           ProtocolExtensionContainer { { PDSCH-Information-Cell-ReconfRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

PDSCH-Information-Cell-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- CELL RECONFIGURATION REQUEST TDD
--
-- *****

CellReconfigurationRequestTDD ::= SEQUENCE {
    protocolIEs           ProtocolIE-Container   {{CellReconfigurationRequestTDD-IEs}},
    protocolExtensions    ProtocolExtensionContainer {{CellReconfigurationRequestTDD-Extensions}} OPTIONAL,
    ...
}

CellReconfigurationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-C-ID                CRITICALITY    reject    TYPE        C-ID
      PRESENCE    mandatory    }|
    { ID    id-ConfigurationGenerationID    CRITICALITY    reject    TYPE        ConfigurationGenerationID
      PRESENCE    mandatory    }|
    { ID    id-Synchronisation-Configuration-Cell-ReconfRqst    CRITICALITY    reject    TYPE        Synchronisation-Configuration-
Cell-ReconfRqst PRESENCE    optional    }|
    { ID    id-TimingAdvanceApplied    CRITICALITY    reject    TYPE        TimingAdvanceApplied
      PRESENCE    optional    }| -- For 3.84Mcps TDD only
    { ID    id-SCH-Information-Cell-ReconfRqstTDD    CRITICALITY    reject    TYPE        SCH-Information-Cell-
ReconfRqstTDD PRESENCE    optional    }| -- For 3.84Mcps TDD only
    { ID    id-PCCPCH-Information-Cell-ReconfRqstTDD    CRITICALITY    reject    TYPE        PCCPCH-Information-Cell-
ReconfRqstTDD PRESENCE    optional    }|
    { ID    id-MaximumTransmissionPower    CRITICALITY    reject    TYPE        MaximumTransmissionPower
      PRESENCE    optional    }|
    { ID    id-DPCHConstant            CRITICALITY    reject    TYPE        ConstantValue
      PRESENCE    optional    }|
    { ID    id-PUSCHConstant            CRITICALITY    reject    TYPE        ConstantValue
      PRESENCE    optional    }|
    { ID    id-PRACHConstant            CRITICALITY    reject    TYPE        ConstantValue
      PRESENCE    optional    }|
    { ID    id-TimeSlotConfigurationList-Cell-ReconfRqstTDD    CRITICALITY    reject    TYPE        TimeSlotConfigurationList-Cell-
ReconfRqstTDD PRESENCE    optional    }, -- For 3.84Mcps TDD only
    ...
}

CellReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {

```

```

    { ID id-TimeSlotConfigurationList-LCR-Cell-ReconfRqstTDD CRITICALITY reject EXTENSION TimeSlotConfigurationList-LCR-
Cell-ReconfRqstTDD PRESENCE optional} | -- Mandatory for 1.28Mcps TDD only
    { ID id-DwPCH-LCR-Information-Cell-ReconfRqstTDD CRITICALITY reject EXTENSION DwPCH-LCR-Information-Cell-
ReconfRqstTDD PRESENCE optional} | -- Mandatory for 1.28Mcps TDD only
    { ID id-IPDLParameter-Information-Cell-ReconfRqstTDD CRITICALITY reject EXTENSION IPDLParameter-Information-
Cell-ReconfRqstTDD PRESENCE optional} | -- For 3.84Mcps TDD only
    { ID id-IPDLParameter-Information-LCR-Cell-ReconfRqstTDD CRITICALITY reject EXTENSION IPDLParameter-
Information-LCR-Cell-ReconfRqstTDD PRESENCE optional }, -- For 1.28Mcps TDD only
    ...
}

SCH-Information-Cell-ReconfRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID CommonPhysicalChannelID,
    sCH-Power DL-Power,
    iE-Extensions ProtocolExtensionContainer { { PSCH-Information-Cell-ReconfRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

PSCH-Information-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PCCPCH-Information-Cell-ReconfRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID CommonPhysicalChannelID,
    pCCPCH-Power DL-Power,
    iE-Extensions ProtocolExtensionContainer { { PCCPCH-Information-Cell-ReconfRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

PCCPCH-Information-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TimeSlotConfigurationList-Cell-ReconfRqstTDD ::= SEQUENCE (SIZE (1..15)) OF TimeSlotConfigurationItem-Cell-ReconfRqstTDD

TimeSlotConfigurationItem-Cell-ReconfRqstTDD ::= SEQUENCE {
    timeSlot TimeSlot,
    timeSlotStatus TimeSlotStatus,
    timeSlotDirection TimeSlotDirection,
    iE-Extensions ProtocolExtensionContainer { { TimeSlotConfigurationItem-Cell-ReconfRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

TimeSlotConfigurationItem-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TimeSlotConfigurationList-LCR-Cell-ReconfRqstTDD ::= SEQUENCE (SIZE (1..7)) OF TimeSlotConfigurationItem-LCR-Cell-ReconfRqstTDD

TimeSlotConfigurationItem-LCR-Cell-ReconfRqstTDD ::= SEQUENCE {
    timeSlotLCR TimeSlotLCR,
    timeSlotStatus TimeSlotStatus,
    timeSlotDirection TimeSlotDirection,
}

```

```

    iE-Extensions          ProtocolExtensionContainer { { TimeSlotConfigurationItem-LCR-Cell-ReconfRqstTDD-ExtIEs } } OPTIONAL,
  }
}

TimeSlotConfigurationItem-LCR-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DwPCH-LCR-Information-Cell-ReconfRqstTDD ::= SEQUENCE {
  commonPhysicalChannelId      CommonPhysicalChannelID,
  dwPCH-Power                  DwPCH-Power,
  iE-Extensions                ProtocolExtensionContainer { { DwPCH-LCR-Information-Cell-ReconfRqstTDD-ExtIEs } } OPTIONAL,
  ...
}

DwPCH-LCR-Information-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

IPDLParameter-Information-Cell-ReconfRqstTDD ::= SEQUENCE {
  iPDL-TDD-Parameters          IPDL-TDD-Parameters OPTIONAL,
  iPDL-Indicator               IPDL-Indicator,
  iE-Extensions                ProtocolExtensionContainer { { IPDLParameter-Information-Cell-ReconfRqstTDD-ExtIEs } } OPTIONAL,
  ...
}

IPDLParameter-Information-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

IPDLParameter-Information-LCR-Cell-ReconfRqstTDD ::= SEQUENCE {
  iPDL-TDD-Parameters-LCR      IPDL-TDD-Parameters-LCR OPTIONAL,
  iPDL-Indicator               IPDL-Indicator,
  iE-Extensions                ProtocolExtensionContainer { { IPDLParameter-Information-LCR-Cell-ReconfRqstTDD-ExtIEs } } OPTIONAL,
  ...
}

IPDLParameter-Information-LCR-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- CELL RECONFIGURATION RESPONSE
--
-- *****

CellReconfigurationResponse ::= SEQUENCE {
  protocolIEs                  ProtocolIE-Container  {{CellReconfigurationResponse-IEs}},
  protocolExtensions           ProtocolExtensionContainer  {{CellReconfigurationResponse-Extensions}} OPTIONAL,
  ...
}

```

```

CellReconfigurationResponse-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-CriticalityDiagnostics      CRITICALITY      ignore      TYPE      CriticalityDiagnostics      PRESENCE optional},
  ...
}

CellReconfigurationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- CELL RECONFIGURATION FAILURE
--
-- *****

CellReconfigurationFailure ::= SEQUENCE {
  protocolIEs      ProtocolIE-Container      {{CellReconfigurationFailure-IEs}},
  protocolExtensions      ProtocolExtensionContainer      {{CellReconfigurationFailure-Extensions}}      OPTIONAL,
  ...
}

CellReconfigurationFailure-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-Cause      CRITICALITY      ignore      TYPE      Cause      PRESENCE      mandatory
  }|
  { ID      id-CriticalityDiagnostics      CRITICALITY      ignore      TYPE      CriticalityDiagnostics      PRESENCE optional },
  ...
}

CellReconfigurationFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- CELL DELETION REQUEST
--
-- *****

CellDeletionRequest ::= SEQUENCE {
  protocolIEs      ProtocolIE-Container      {{CellDeletionRequest-IEs}},
  protocolExtensions      ProtocolExtensionContainer      {{CellDeletionRequest-Extensions}}      OPTIONAL,
  ...
}

CellDeletionRequest-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-C-ID      CRITICALITY      reject      TYPE      C-ID      PRESENCE      mandatory},
  ...
}

CellDeletionRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

-- *****
--
-- CELL DELETION RESPONSE
--
-- *****

CellDeletionResponse ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CellDeletionResponse-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CellDeletionResponse-Extensions}}    OPTIONAL,
    ...
}

CellDeletionResponse-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-CriticalityDiagnostics          CRITICALITY      ignore          TYPE      CriticalityDiagnostics          PRESENCE optional},
    ...
}

CellDeletionResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- RESOURCE STATUS INDICATION
--
-- *****

ResourceStatusIndication ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{ResourceStatusIndication-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{ResourceStatusIndication-Extensions}}    OPTIONAL,
    ...
}

ResourceStatusIndication-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-IndicationType-ResourceStatusInd          CRITICALITY      ignore          TYPE      IndicationType-ResourceStatusInd          PRESENCE
      mandatory    }|
    -- This IE represents both the Indication Type IE and the choice based on the indication type as described in the tabular message format in
    subclause 9.1.
    { ID      id-Cause          CRITICALITY      ignore          TYPE      Cause          PRESENCE
      optional    },
    ...
}

ResourceStatusIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

IndicationType-ResourceStatusInd ::= CHOICE {
    no-Failure          No-Failure-ResourceStatusInd,
    serviceImpacting    ServiceImpacting-ResourceStatusInd,
    ...
}

```



```

No-Failure-ResourceStatusInd ::= SEQUENCE {
    local-Cell-InformationList      Local-Cell-InformationList-ResourceStatusInd,
    local-Cell-Group-InformationList Local-Cell-Group-InformationList-ResourceStatusInd OPTIONAL,
    iE-Extensions                   ProtocolExtensionContainer { { No-FailureItem-ResourceStatusInd-ExtIEs} } OPTIONAL,
    ...
}

No-FailureItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-Power-Local-Cell-Group-InformationList-ResourceStatusInd CRITICALITY ignore EXTENSION Power-Local-
Cell-Group-InformationList-ResourceStatusInd PRESENCE optional },
    ...
}

Local-Cell-InformationList-ResourceStatusInd ::= SEQUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-
InformationItemIE-ResourceStatusInd }}

Local-Cell-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    { ID id-Local-Cell-InformationItem-ResourceStatusInd CRITICALITY ignore TYPE Local-Cell-InformationItem-ResourceStatusInd PRESENCE
mandatory }
}

Local-Cell-InformationItem-ResourceStatusInd ::= SEQUENCE {
    local-CellID                      Local-Cell-ID,
    addorDeleteIndicator              AddorDeleteIndicator,
    dl-or-global-capacityCredit       DL-or-Global-CapacityCredit OPTIONAL,
    -- This IE shall be present if AddorDeleteIndicator IE is set to "add"
    ul-capacityCredit                 UL-CapacityCredit OPTIONAL,
    commonChannelsCapacityConsumptionLaw CommonChannelsCapacityConsumptionLaw OPTIONAL,
    -- This IE shall be present if AddorDeleteIndicator IE is set to "add"
    dedicatedChannelsCapacityConsumptionLaw DedicatedChannelsCapacityConsumptionLaw OPTIONAL,
    -- This IE shall be present if AddorDeleteIndicator IE is set to "add"
    maximumDL-PowerCapability         MaximumDL-PowerCapability OPTIONAL,
    -- This IE shall be present if AddorDeleteIndicator IE is set to "add"
    minSpreadingFactor               MinSpreadingFactor OPTIONAL,
    -- This IE shall be present if AddorDeleteIndicator IE is set to "add"
    minimumDL-PowerCapability         MinimumDL-PowerCapability OPTIONAL,
    -- This IE shall be present if AddorDeleteIndicator IE is set to "add"
    local-Cell-Group-ID              Local-Cell-ID OPTIONAL,
    iE-Extensions                   ProtocolExtensionContainer { { Local-Cell-InformationItem-ResourceStatusInd-ExtIEs} } OPTIONAL,
    ...
}

Local-Cell-InformationItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-FPACH-LCR-InformationList-ResourceStatusInd CRITICALITY ignore EXTENSION FPACH-LCR-InformationList-ResourceStatusInd
PRESENCE optional }| -- for 1.28Mcps TDD only
    { ID id-DwPCH-LCR-Information-ResourceStatusInd CRITICALITY ignore EXTENSION DwPCH-LCR-Information-ResourceStatusInd PRESENCE optional
}| -- for 1.28Mcps TDD only
    { ID id-ReferenceClockAvailability CRITICALITY ignore EXTENSION ReferenceClockAvailability PRESENCE optional }|
    -- This IE shall be present if AddorDeleteIndicator IE is set to "add" and the Local Cell is related to a TDD cell
    { ID id-Power-Local-Cell-Group-ID CRITICALITY ignore EXTENSION Local-Cell-ID PRESENCE optional },
    ...
}

```

```

Local-Cell-Group-InformationList-ResourceStatusInd ::= SEQUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-Group-
InformationItemIE-ResourceStatusInd }}

Local-Cell-Group-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-Local-Cell-Group-InformationItem-ResourceStatusInd CRITICALITY ignore TYPE Local-Cell-Group-InformationItem-ResourceStatusInd
  PRESENCE mandatory }
}

Local-Cell-Group-InformationItem-ResourceStatusInd ::= SEQUENCE {
  local-Cell-Group-ID Local-Cell-ID,
  dl-or-global-capacityCredit DL-or-Global-CapacityCredit,
  ul-capacityCredit UL-CapacityCredit OPTIONAL,
  commonChannelsCapacityConsumptionLaw CommonChannelsCapacityConsumptionLaw,
  dedicatedChannelsCapacityConsumptionLaw DedicatedChannelsCapacityConsumptionLaw,
  iE-Extensions ProtocolExtensionContainer { { Local-Cell-Group-InformationItem-ResourceStatusInd-ExtIEs} } OPTIONAL,
  ...
}

Local-Cell-Group-InformationItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

Power-Local-Cell-Group-InformationList-ResourceStatusInd ::= SEQUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Power-Local-
Cell-Group-InformationItemIE-ResourceStatusInd }}

Power-Local-Cell-Group-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-Power-Local-Cell-Group-InformationItem-ResourceStatusInd CRITICALITY ignore TYPE Power-Local-Cell-Group-InformationItem-
ResourceStatusInd PRESENCE mandatory }
}

Power-Local-Cell-Group-InformationItem-ResourceStatusInd ::= SEQUENCE {
  power-Local-Cell-Group-ID Local-Cell-ID,
  maximumDL-PowerCapability MaximumDL-PowerCapability,
  iE-Extensions ProtocolExtensionContainer { { Power-Local-Cell-Group-InformationItem-ResourceStatusInd-ExtIEs} }
  OPTIONAL,
  ...
}

Power-Local-Cell-Group-InformationItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

ServiceImpacting-ResourceStatusInd ::= SEQUENCE {
  local-Cell-InformationList Local-Cell-InformationList2-ResourceStatusInd OPTIONAL,
  local-Cell-Group-InformationList Local-Cell-Group-InformationList2-ResourceStatusInd OPTIONAL,
  cCP-InformationList CCP-InformationList-ResourceStatusInd OPTIONAL,
  cell-InformationList Cell-InformationList-ResourceStatusInd OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { { ServiceImpactingItem-ResourceStatusInd-ExtIEs} } OPTIONAL,
  ...
}

ServiceImpactingItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```

```

    { ID id-Power-Local-Cell-Group-InformationList2-ResourceStatusInd
Cell-Group-InformationList2-ResourceStatusInd PRESENCE optional }, CRITICALITY ignore EXTENSION Power-Local-
    ...
}

Local-Cell-InformationList2-ResourceStatusInd ::= SEQUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-
InformationItemIE2-ResourceStatusInd }}

Local-Cell-InformationItemIE2-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    { ID id-Local-Cell-InformationItem2-ResourceStatusInd CRITICALITY ignore TYPE Local-Cell-InformationItem2-ResourceStatusInd PRESENCE
mandatory }
}

Local-Cell-InformationItem2-ResourceStatusInd ::= SEQUENCE {
    local-Cell-ID Local-Cell-ID,
    dl-or-global-capacityCredit DL-or-Global-CapacityCredit OPTIONAL,
    ul-capacityCredit UL-CapacityCredit OPTIONAL,
    commonChannelsCapacityConsumptionLaw CommonChannelsCapacityConsumptionLaw OPTIONAL,
    dedicatedChannelsCapacityConsumptionLaw DedicatedChannelsCapacityConsumptionLaw OPTIONAL,
    maximum-DL-PowerCapability MaximumDL-PowerCapability OPTIONAL,
    minSpreadingFactor MinSpreadingFactor OPTIONAL,
    minimumDL-PowerCapability MinimumDL-PowerCapability OPTIONAL,
    iE-Extensions ProtocolExtensionContainer { { Local-Cell-InformationItem2-ResourceStatusInd-ExtIEs } } OPTIONAL,
    ...
}

Local-Cell-InformationItem2-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-ReferenceClockAvailability CRITICALITY ignore EXTENSION ReferenceClockAvailability PRESENCE optional }|
    { ID id-Power-Local-Cell-Group-ID CRITICALITY ignore EXTENSION Local-Cell-ID PRESENCE optional },
    ...
}

Local-Cell-Group-InformationList2-ResourceStatusInd ::= SEQUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-Group-
InformationItemIE2-ResourceStatusInd }}

Local-Cell-Group-InformationItemIE2-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    { ID id-Local-Cell-Group-InformationItem2-ResourceStatusInd CRITICALITY ignore TYPE Local-Cell-Group-InformationItem2-ResourceStatusInd
PRESENCE mandatory }
}

Local-Cell-Group-InformationItem2-ResourceStatusInd ::= SEQUENCE {
    local-Cell-Group-ID Local-Cell-ID,
    dl-or-global-capacityCredit DL-or-Global-CapacityCredit OPTIONAL,
    ul-capacityCredit UL-CapacityCredit OPTIONAL,
    commonChannelsCapacityConsumptionLaw CommonChannelsCapacityConsumptionLaw OPTIONAL,
    dedicatedChannelsCapacityConsumptionLaw DedicatedChannelsCapacityConsumptionLaw OPTIONAL,
    iE-Extensions ProtocolExtensionContainer { { Local-Cell-Group-InformationItem2-ResourceStatusInd-ExtIEs } } OPTIONAL,
    ...
}

Local-Cell-Group-InformationItem2-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```
Power-Local-Cell-Group-InformationList2-ResourceStatusInd ::= SEQUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Power-Local-Cell-Group-InformationItemIE2-ResourceStatusInd }}
```

```
Power-Local-Cell-Group-InformationItemIE2-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-Power-Local-Cell-Group-InformationItem2-ResourceStatusInd CRITICALITY ignore TYPE Power-Local-Cell-Group-InformationItem2-ResourceStatusInd PRESENCE mandatory }
}
```

```
Power-Local-Cell-Group-InformationItem2-ResourceStatusInd ::= SEQUENCE {
  power-Local-Cell-Group-ID Local-Cell-ID,
  maximumDL-PowerCapability MaximumDL-PowerCapability,
  iE-Extensions ProtocolExtensionContainer { { Power-Local-Cell-Group-InformationItem2-ResourceStatusInd-ExtIEs} }
  OPTIONAL,
  ...
}
```

```
Power-Local-Cell-Group-InformationItem2-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

```
CCP-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxCCPinNodeB)) OF ProtocolIE-Single-Container {{ CCP-InformationItemIE-ResourceStatusInd }}
```

```
CCP-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-CCP-InformationItem-ResourceStatusInd CRITICALITY ignore TYPE CCP-InformationItem-ResourceStatusInd PRESENCE mandatory }
}
```

```
CCP-InformationItem-ResourceStatusInd ::= SEQUENCE {
  communicationControlPortID CommunicationControlPortID,
  resourceOperationalState ResourceOperationalState,
  availabilityStatus AvailabilityStatus,
  iE-Extensions ProtocolExtensionContainer { { CCP-InformationItem-ResourceStatusInd-ExtIEs} } OPTIONAL,
  ...
}
```

```
CCP-InformationItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

```
Cell-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxCellinNodeB)) OF ProtocolIE-Single-Container {{ Cell-InformationItemIE-ResourceStatusInd }}
```

```
Cell-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-Cell-InformationItem-ResourceStatusInd CRITICALITY ignore TYPE Cell-InformationItem-ResourceStatusInd PRESENCE mandatory }
}
```

```
Cell-InformationItem-ResourceStatusInd ::= SEQUENCE {
  c-ID C-ID,
  resourceOperationalState ResourceOperationalState OPTIONAL,
  availabilityStatus AvailabilityStatus OPTIONAL,
  primary-SCH-Information P-SCH-Information-ResourceStatusInd OPTIONAL, --FDD only
  secondary-SCH-Information S-SCH-Information-ResourceStatusInd OPTIONAL, --FDD only
}
```

primary-CPICH-Information	P-CPICH-Information-ResourceStatusInd	OPTIONAL, --FDD only
secondary-CPICH-Information	S-CPICH-InformationList-ResourceStatusInd	OPTIONAL, --FDD only
primary-CCPCH-Information	P-CCPCH-Information-ResourceStatusInd	OPTIONAL,
bCH-Information	BCH-Information-ResourceStatusInd	OPTIONAL,
secondary-CCPCH-InformationList	S-CCPCH-InformationList-ResourceStatusInd	OPTIONAL,
pCH-Information	PCH-Information-ResourceStatusInd	OPTIONAL,
pICH-Information	PICH-Information-ResourceStatusInd	OPTIONAL,
fACH-InformationList	FACH-InformationList-ResourceStatusInd	OPTIONAL,
pRACH-InformationList	PRACH-InformationList-ResourceStatusInd	OPTIONAL,
rACH-InformationList	RACH-InformationList-ResourceStatusInd	OPTIONAL,
aICH-InformationList	AICH-InformationList-ResourceStatusInd	OPTIONAL, --FDD only
pCPCH-InformationList	PCPCH-InformationList-ResourceStatusInd	OPTIONAL, --FDD only
cPCH-InformationList	CPCH-InformationList-ResourceStatusInd	OPTIONAL, --FDD only
ap-AICH-InformationList	AP-AICH-InformationList-ResourceStatusInd	OPTIONAL, --FDD only
CDCA-ICH-InformationList	CDCA-ICH-InformationList-ResourceStatusInd	OPTIONAL, --FDD only
SCH-Information	SCH-Information-ResourceStatusInd	OPTIONAL, --3.84Mcps TDD only
iE-Extensions	ProtocolExtensionContainer { { Cell-InformationItem-ResourceStatusInd-ExtIEs } }	OPTIONAL,
...		

}
Cell-InformationItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
P-SCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ P-SCH-InformationIE-ResourceStatusInd }}
P-SCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
{ ID id-P-SCH-Information CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information PRESENCE mandatory }
}
S-SCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ S-SCH-InformationIE-ResourceStatusInd }}
S-SCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
{ ID id-S-SCH-Information CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information PRESENCE mandatory }
}
P-CPICH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ P-CPICH-InformationIE-ResourceStatusInd }}
P-CPICH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
{ ID id-P-CPICH-Information CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information PRESENCE mandatory }
}
S-CPICH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxSCPICHCell)) OF ProtocolIE-Single-Container {{ S-CPICH-InformationItemIE-ResourceStatusInd }}
S-CPICH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
{ ID id-S-CPICH-Information CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information PRESENCE mandatory }
}
P-CCPCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ P-CCPCH-InformationIE-ResourceStatusInd }}
P-CCPCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
{ ID id-P-CCPCH-Information CRITICALITY ignore TYPE Common-PhysicalChannel-Status-Information PRESENCE mandatory }
}

```

}

BCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ BCH-InformationIE-ResourceStatusInd }}

BCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-BCH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information  PRESENCE mandatory }
}

S-CCPCH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxSCCPCHCell)) OF ProtocolIE-Single-Container {{ S-CCPCH-InformationItemIE-ResourceStatusInd }}

S-CCPCH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-S-CCPCH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information  PRESENCE mandatory }
}

PCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ PCH-InformationIE-ResourceStatusInd }}

PCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-PCH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information  PRESENCE mandatory }
}

PICH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ PICH-InformationIE-ResourceStatusInd }}

PICH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-PICH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information  PRESENCE mandatory }
}

FACH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxFACHCell)) OF ProtocolIE-Single-Container {{ FACH-InformationItemIE-ResourceStatusInd }}

FACH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-FACH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information  PRESENCE mandatory }
}

PRACH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ PRACH-InformationItemIE-ResourceStatusInd }}

PRACH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-PRACH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information  PRESENCE mandatory }
}

RACH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ RACH-InformationItemIE-ResourceStatusInd }}

RACH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-RACH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information  PRESENCE mandatory }
}

AICH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ AICH-InformationItemIE-ResourceStatusInd }}

AICH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-AICH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information  PRESENCE mandatory }
}

```

```

}

PCPCH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxPCPCHCell)) OF ProtocolIE-Single-Container {{ PCPCH-InformationItemIE-ResourceStatusInd }}

PCPCH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    { ID id-PCPCH-Information    CRITICALITY ignore    TYPE Common-PhysicalChannel-Status-Information                PRESENCE optional }
}

CPCH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ CPCH-InformationItemIE-ResourceStatusInd }}

CPCH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    { ID id-CPCH-Information    CRITICALITY ignore    TYPE Common-TransportChannel-Status-Information                PRESENCE optional }
}

AP-AICH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ AP-AICH-InformationItemIE-ResourceStatusInd }}

AP-AICH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    { ID id-AP-AICH-Information    CRITICALITY ignore    TYPE Common-PhysicalChannel-Status-Information                PRESENCE optional }
}

CDCA-ICH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ CDCA-ICH-InformationItemIE-ResourceStatusInd }}

CDCA-ICH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    { ID id-CDCA-ICH-Information    CRITICALITY ignore    TYPE Common-PhysicalChannel-Status-Information                PRESENCE optional }
}

SCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ SCH-InformationIE-ResourceStatusInd }}

SCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    { ID id-SCH-Information    CRITICALITY ignore    TYPE Common-PhysicalChannel-Status-Information                PRESENCE mandatory }
}

FPACH-LCR-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (0..maxFPACHCell)) OF ProtocolIE-Single-Container {{ FPACH-LCR-InformationItemIE-ResourceStatusInd }}

FPACH-LCR-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    { ID id-FPACH-LCR-Information    CRITICALITY ignore    TYPE Common-PhysicalChannel-Status-Information                PRESENCE mandatory }
}

DwPCH-LCR-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ DwPCH-LCR-InformationIE-ResourceStatusInd }}

DwPCH-LCR-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    { ID id-DwPCH-LCR-Information    CRITICALITY ignore    TYPE Common-PhysicalChannel-Status-Information                PRESENCE mandatory }
}

-- *****
--
-- SYSTEM INFORMATION UPDATE REQUEST
--

```

```

-- *****
SystemInformationUpdateRequest ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{SystemInformationUpdateRequest-IEs}},
    protocolExtensions  ProtocolExtensionContainer  {{SystemInformationUpdateRequest-Extensions}}
    ...
}

SystemInformationUpdateRequest-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-C-ID          CRITICALITY reject      TYPE      C-ID
      PRESENCE mandatory }|
    { ID      id-BCCH-ModificationTime  CRITICALITY reject      TYPE      BCCH-ModificationTime          PRESENCE optional
      }|
    { ID      id-MIB-SB-SIB-InformationList-SystemInfoUpdateRqst  CRITICALITY reject      TYPE      MIB-SB-SIB-InformationList-
SystemInfoUpdateRqst          PRESENCE mandatory },
    ...
}

SystemInformationUpdateRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

MIB-SB-SIB-InformationList-SystemInfoUpdateRqst ::= SEQUENCE (SIZE (1..maxIB)) OF MIB-SB-SIB-InformationItem-SystemInfoUpdateRqst

MIB-SB-SIB-InformationItem-SystemInfoUpdateRqst ::= SEQUENCE {
    iB-Type          IB-Type,
    iB-OC-ID         IB-OC-ID,
    deletionIndicator DeletionIndicator-SystemInfoUpdate,
    iE-Extensions   ProtocolExtensionContainer { { MIB-SB-SIB-InformationItem-SystemInfoUpdateRqst-ExtIEs } }
    ...
}

MIB-SB-SIB-InformationItem-SystemInfoUpdateRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DeletionIndicator-SystemInfoUpdate ::= CHOICE {
    no-Deletion      No-Deletion-SystemInfoUpdate,
    yes-Deletion     NULL
}

No-Deletion-SystemInfoUpdate ::= SEQUENCE {
    sIB-Originator   SIB-Originator          OPTIONAL,
    -- This IE shall be present if the IB-Type IE is set to "SIB"
    iB-SG-REP        IB-SG-REP          OPTIONAL,
    segmentInformationList SegmentInformationList-SystemInfoUpdate,
    iE-Extensions   ProtocolExtensionContainer { { No-DeletionItem-SystemInfoUpdate-ExtIEs } }
    ...
}

No-DeletionItem-SystemInfoUpdate-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```



```

}

SegmentInformationList-SystemInfoUpdate ::= ProtocolIE-Single-Container {{ SegmentInformationListIEs-SystemInfoUpdate }}

SegmentInformationListIEs-SystemInfoUpdate NBAP-PROTOCOL-IES ::= {
  { ID id-SegmentInformationListIE-SystemInfoUpdate   CRITICALITY reject   TYPE SegmentInformationListIE-SystemInfoUpdate   PRESENCE mandatory }
}

SegmentInformationListIE-SystemInfoUpdate ::= SEQUENCE (SIZE (1..maxIBSEG)) OF SegmentInformationItem-SystemInfoUpdate

SegmentInformationItem-SystemInfoUpdate ::= SEQUENCE {
  iB-SG-POS                IB-SG-POS                OPTIONAL,
  segment-Type             Segment-Type            OPTIONAL,
  -- This IE shall be present if the SIB Originator IE is set to "CRNC" or the IB-Type IE is set to "MIB", "SB1" or "SB2"
  iB-SG-DATA               IB-SG-DATA             OPTIONAL,
  -- This IE shall be present if the SIB Originator IE is set to "CRNC" or the IB-Type IE is set to "MIB", "SB1" or "SB2"
  iE-Extensions            ProtocolExtensionContainer { { SegmentInformationItem-SystemInfoUpdate-ExtIEs} } OPTIONAL,
  ...
}

SegmentInformationItem-SystemInfoUpdate-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- SYSTEM INFORMATION UPDATE RESPONSE
--
-- *****

SystemInformationUpdateResponse ::= SEQUENCE {
  protocolIEs              ProtocolIE-Container    {{SystemInformationUpdateResponse-IEs}},
  protocolExtensions       ProtocolExtensionContainer {{SystemInformationUpdateResponse-Extensions}}      OPTIONAL,
  ...
}

SystemInformationUpdateResponse-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-CriticalityDiagnostics   CRITICALITY ignore   TYPE CriticalityDiagnostics   PRESENCE optional},
  ...
}

SystemInformationUpdateResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- SYSTEM INFORMATION UPDATE FAILURE
--
-- *****

SystemInformationUpdateFailure ::= SEQUENCE {
  protocolIEs              ProtocolIE-Container    {{SystemInformationUpdateFailure-IEs}},

```

```

    protocolExtensions      ProtocolExtensionContainer  {{SystemInformationUpdateFailure-Extensions}}
    ...
}

SystemInformationUpdateFailure-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-Cause          CRITICALITY  ignore      TYPE      Cause          PRESENCE mandatory
  }|
  { ID      id-CriticalityDiagnostics  CRITICALITY  ignore      TYPE      CriticalityDiagnostics  PRESENCE optional },
  ...
}

SystemInformationUpdateFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- RADIO LINK SETUP REQUEST FDD
--
-- *****

RadioLinkSetupRequestFDD ::= SEQUENCE {
  protocolIEs      ProtocolIE-Container  {{RadioLinkSetupRequestFDD-IEs}},
  protocolExtensions      ProtocolExtensionContainer  {{RadioLinkSetupRequestFDD-Extensions}}
  ...
}

RadioLinkSetupRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-CRNC-CommunicationContextID          CRITICALITY reject      TYPE      CRNC-CommunicationContextID
  PRESENCE mandatory }|
  { ID      id-UL-DPCH-Information-RL-SetupRqstFDD  CRITICALITY reject      TYPE      UL-DPCH-Information-RL-
SetupRqstFDD  PRESENCE mandatory }|
  { ID      id-DL-DPCH-Information-RL-SetupRqstFDD  CRITICALITY reject      TYPE      DL-DPCH-Information-RL-
SetupRqstFDD  PRESENCE mandatory }|
  { ID      id-DCH-FDD-Information          CRITICALITY reject      TYPE      DCH-FDD-Information          PRESENCE mandatory }|
  { ID      id-DSCH-FDD-Information          CRITICALITY reject      TYPE      DSCH-FDD-Information          PRESENCE optional }|
  { ID      id-TFCI2-Bearer-Information-RL-SetupRqstFDD  CRITICALITY ignore      TYPE      TFCI2-Bearer-Information-RL-
SetupRqstFDD  PRESENCE optional }|
  { ID      id-RL-InformationList-RL-SetupRqstFDD  CRITICALITY notify      TYPE      RL-InformationList-RL-
SetupRqstFDD  PRESENCE mandatory }|
  { ID      id-Transmission-Gap-Pattern-Sequence-Information  CRITICALITY reject      TYPE      Transmission-Gap-Pattern-Sequence-Information
PRESENCE optional }|
  { ID      id-Active-Pattern-Sequence-Information  CRITICALITY reject      TYPE      Active-Pattern-Sequence-Information  PRESENCE
optional },
  ...
}

RadioLinkSetupRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  { ID      id-DSCH-FDD-Common-Information          CRITICALITY ignore      EXTENSION  DSCH-FDD-Common-Information          PRESENCE optional
  }|
  { ID      id-DL-PowerBalancing-Information          CRITICALITY ignore      EXTENSION  DL-PowerBalancing-Information          PRESENCE optional}|
  { ID      id-HSDSCH-FDD-Information          CRITICALITY reject      EXTENSION  HSDSCH-FDD-Information          PRESENCE optional }|
  { ID      id-HSDSCH-RNTI          CRITICALITY reject      EXTENSION  HSDSCH-RNTI          PRESENCE optional }|
}

```

```

    { ID id-HSPDSCH-RL-ID          CRITICALITY reject  EXTENSION RL-ID          PRESENCE conditional },
    ...
}

UL-DPCH-Information-RL-SetupRqstFDD ::= SEQUENCE {
    ul-ScramblingCode              UL-ScramblingCode,
    minUL-ChannelisationCodeLength MinUL-ChannelisationCodeLength,
    maxNrOfUL-DPDCHs              MaxNrOfUL-DPDCHs          OPTIONAL,
    -- This IE shall be present if Min UL Channelisation Code length IE is set to 4 --
    ul-PunctureLimit              PunctureLimit,
    tFCS                          TFCS,
    ul-DPCCH-SlotFormat           UL-DPCCH-SlotFormat,
    ul-SIR-Target                 UL-SIR,
    diversityMode                 DiversityMode,
    sSDT-CellID-Length            SSDT-CellID-Length     OPTIONAL,
    s-FieldLength                 S-FieldLength        OPTIONAL,
    iE-Extensions                 ProtocolExtensionContainer { { UL-DPCH-Information-RL-SetupRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

UL-DPCH-Information-RL-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-DPC-Mode          CRITICALITY reject  EXTENSION  DPC-Mode  PRESENCE optional },
    ...
}

DL-DPCH-Information-RL-SetupRqstFDD ::= SEQUENCE {
    tFCS                          TFCS,
    dl-DPCH-SlotFormat           DL-DPCH-SlotFormat,
    tFCI-SignallingMode         TFCI-SignallingMode,
    tFCI-Presence                TFCI-Presence     OPTIONAL,
    -- this IE shall be present if the DL DPCH slot format IE is set to any of the values from 12 to 16 --
    multiplexingPosition         MultiplexingPosition,
    pDSCH-RL-ID                 RL-ID             OPTIONAL,
    -- This IE shall be present if the DSCH Information IE is present --
    pDSCH-CodeMapping           PDSCH-CodeMapping OPTIONAL,
    -- This IE shall be present if the DSCH Information IE is present --
    powerOffsetInformation       PowerOffsetInformation-RL-SetupRqstFDD,
    fdd-TPC-DownlinkStepSize     FDD-TPC-DownlinkStepSize,
    limitedPowerIncrease         LimitedPowerIncrease,
    innerLoopDLPCStatus         InnerLoopDLPCStatus,
    iE-Extensions                 ProtocolExtensionContainer { { DL-DPCH-Information-RL-SetupRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

DL-DPCH-Information-RL-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PowerOffsetInformation-RL-SetupRqstFDD ::= SEQUENCE {
    p01-ForTFCI-Bits            PowerOffset,
    p02-ForTPC-Bits             PowerOffset,
    p03-ForPilotBits            PowerOffset,
    iE-Extensions                 ProtocolExtensionContainer { { PowerOffsetInformation-RL-SetupRqstFDD-ExtIEs } } OPTIONAL,
}

```

```

}
...
}
PowerOffsetInformation-RL-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
TFCI2-Bearer-Information-RL-SetupRqstFDD ::= SEQUENCE {
toAWS ToAWS,
toAWE ToAWE,
iE-Extensions ProtocolExtensionContainer { { TFCI2-Bearer-Information-RL-SetupRqstFDD-ExtIEs } } OPTIONAL,
...
}
TFCI2-Bearer-Information-RL-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
RL-InformationList-RL-SetupRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF
ProtocolIE-Single-Container{{ RL-InformationItemIE-RL-SetupRqstFDD }}
RL-InformationItemIE-RL-SetupRqstFDD NBAP-PROTOCOL-IES ::= {
{ ID id-RL-InformationItem-RL-SetupRqstFDD CRITICALITY notify TYPE RL-InformationItem-RL-
SetupRqstFDD PRESENCE mandatory}
}
RL-InformationItem-RL-SetupRqstFDD ::= SEQUENCE {
rL-ID RL-ID,
c-ID C-ID,
firstRLS-indicator FirstRLS-Indicator,
frameOffset FrameOffset,
chipOffset ChipOffset,
propagationDelay PropagationDelay OPTIONAL,
diversityControlField DiversityControlField OPTIONAL,
-- This IE shall be present if the RL is not the first one in the RL Information IE
dl-CodeInformation FDD-DL-CodeInformation,
initialDL-transmissionPower DL-Power,
maximumDL-power DL-Power,
minimumDL-power DL-Power,
sSDT-Cell-Identity SSDT-Cell-Identity OPTIONAL,
transmitDiversityIndicator TransmitDiversityIndicator OPTIONAL,
-- This IE shall be present if Diversity Mode IE in UL DPCH Information group is not set to "none"
iE-Extensions ProtocolExtensionContainer { { RL-InformationItem-RL-SetupRqstFDD-ExtIEs } } OPTIONAL,
...
}
RL-InformationItem-RL-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
{ ID id-SSDT-CellIDforEDSCHPC CRITICALITY ignore EXTENSION SSDT-Cell-Identity PRESENCE conditional }|
-- This IE shall be present if Enhanced DSCH PC IE is present in the DSCH Common Information IE.
{ ID id-RL-Specific-DCH-Info CRITICALITY ignore EXTENSION RL-Specific-DCH-Info PRESENCE optional }|
{ ID id-DelayedActivation CRITICALITY reject EXTENSION DelayedActivation PRESENCE optional },
...
}

```

```
-- *****
--
-- RADIO LINK SETUP REQUEST TDD
--
-- *****
```

```
RadioLinkSetupRequestTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkSetupRequestTDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{RadioLinkSetupRequestTDD-Extensions}}    OPTIONAL,
    ...
}

RadioLinkSetupRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CRNC-CommunicationContextID          CRITICALITY reject          TYPE          CRNC-CommunicationContextID
      PRESENCE mandatory }|
    { ID id-UL-CCTrCH-InformationList-RL-SetupRqstTDD CRITICALITY notify          TYPE          UL-CCTrCH-InformationList-RL-
      SetupRqstTDD PRESENCE optional }|
    { ID id-DL-CCTrCH-InformationList-RL-SetupRqstTDD CRITICALITY notify          TYPE          DL-CCTrCH-InformationList-RL-
      SetupRqstTDD PRESENCE optional }|
    { ID id-DCH-TDD-Information          CRITICALITY reject          TYPE          DCH-TDD-Information          PRESENCE optional }|
    { ID id-DSCH-TDD-Information          CRITICALITY reject          TYPE          DSCH-TDD-Information          PRESENCE optional }|
    { ID id-USCH-Information          CRITICALITY reject          TYPE          USCH-Information          PRESENCE optional }|
    { ID id-RL-Information-RL-SetupRqstTDD CRITICALITY reject          TYPE          RL-Information-RL-SetupRqstTDD
      PRESENCE mandatory },
    ...
}

RadioLinkSetupRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-HSDSCH-TDD-Information          CRITICALITY reject          EXTENSION HSDSCH-TDD-Information          PRESENCE optional }|
    { ID id-HSDSCH-RNTI          CRITICALITY reject          EXTENSION HSDSCH-RNTI          PRESENCE optional }|
    { ID id-HSPDSCH-RL-ID          CRITICALITY reject          EXTENSION RL-ID          PRESENCE conditional },
    ...
}

UL-CCTrCH-InformationList-RL-SetupRqstTDD ::= SEQUENCE (SIZE(1..maxNrOfCCTrCHs)) OF
    ProtocolIE-Single-Container{{ UL-CCTrCH-InformationItemIE-RL-SetupRqstTDD }}

UL-CCTrCH-InformationItemIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD CRITICALITY notify          TYPE          UL-CCTrCH-InformationItem-RL-
      SetupRqstTDD PRESENCE mandatory}
}

UL-CCTrCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
    cCTrCH-ID          CCTrCH-ID,
    tFCS              TFCS,
    tFCI-Coding       tFCI-Coding,
    punctureLimit     PunctureLimit,
    uL-DPCH-Information UL-DPCH-Information-RL-SetupRqstTDD    OPTIONAL,    -- For 3.84Mcps TDD only
    iE-Extensions     ProtocolExtensionContainer { { UL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs} }    OPTIONAL,
    ...
}
```

```

UL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-UL-DPCH-LCR-Information-RL-SetupRqstTDD CRITICALITY notify      EXTENSION  UL-DPCH-LCR-Information-RL-SetupRqstTDD  PRESENCE optional
  } | -- For 1.28Mcps TDD only
  { ID id-UL-SIRTarget      CRITICALITY reject      EXTENSION      UL-SIR      PRESENCE optional      },
  -- This IE shall be mandatory for 1.28Mcps TDD, not applicable for 3.84Mcps TDD.
  ...
}

UL-DPCH-Information-RL-SetupRqstTDD ::= ProtocolIE-Single-Container{{ UL-DPCH-InformationIE-RL-SetupRqstTDD }}

UL-DPCH-InformationIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-UL-DPCH-InformationList-RL-SetupRqstTDD      CRITICALITY notify  TYPE UL-DPCH-InformationItem-RL-SetupRqstTDD      PRESENCE mandatory  }
}

UL-DPCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
  repetitionPeriod      RepetitionPeriod,
  repetitionLength      RepetitionLength,
  tdd-DPCHOffset      TDD-DPCHOffset,
  uL-Timeslot-Information      UL-Timeslot-Information,
  iE-Extensions      ProtocolExtensionContainer { { UL-DPCH-InformationItem-RL-SetupRqstTDD-ExtIEs } }  OPTIONAL,
  ...
}

UL-DPCH-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

UL-DPCH-LCR-Information-RL-SetupRqstTDD ::= ProtocolIE-Single-Container{{ UL-DPCH-LCR-InformationIE-RL-SetupRqstTDD }}

UL-DPCH-LCR-InformationIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-UL-DPCH-LCR-InformationList-RL-SetupRqstTDD      CRITICALITY notify  TYPE UL-DPCH-LCR-InformationItem-RL-SetupRqstTDD      PRESENCE
optional  }
}

UL-DPCH-LCR-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
  repetitionPeriod      RepetitionPeriod,
  repetitionLength      RepetitionLength,
  tdd-DPCHOffset      TDD-DPCHOffset,
  uL-TimeslotLCR-Information      UL-TimeslotLCR-Information,
  iE-Extensions      ProtocolExtensionContainer { { UL-DPCH-LCR-InformationItem-RL-SetupRqstTDD-ExtIEs } }  OPTIONAL,
  ...
}

UL-DPCH-LCR-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-CCTrCH-InformationList-RL-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container{{ DL-CCTrCH-InformationItemIE-RL-SetupRqstTDD }}

DL-CCTrCH-InformationItemIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD      CRITICALITY      notify      TYPE DL-CCTrCH-InformationItem-RL-SetupRqstTDD      PRESENCE      mandatory}
}

```

```

}

DL-CCTrCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
    cCTrCH-ID          CCTrCH-ID,
    tFCS              TFCS,
    tFCI-Coding       TFCI-Coding,
    punctureLimit     PunctureLimit,
    tdd-TPC-DownlinkStepSize TDD-TPC-DownlinkStepSize,
    cCTrCH-TPCList    CCTrCH-TPCList-RL-SetupRqstTDD OPTIONAL,
    dl-DPCH-Information DL-DPCH-Information-RL-SetupRqstTDD OPTIONAL, -- For 3.84Mcps TDD only
    iE-Extensions     ProtocolExtensionContainer { { DL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

DL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-DPCH-LCR-Information-RL-SetupRqstTDD CRITICALITY notify EXTENSION DL-DPCH-LCR-Information-RL-SetupRqstTDD PRESENCE optional
    } | -- For 1.28Mcps TDD only
    { ID id-CCTrCH-Initial-DL-Power-RL-SetupRqstTDD CRITICALITY ignore EXTENSION DL-Power PRESENCE optional },
    ...
}

CCTrCH-TPCList-RL-SetupRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF CCTrCH-TPCItem-RL-SetupRqstTDD

CCTrCH-TPCItem-RL-SetupRqstTDD ::= SEQUENCE {
    cCTrCH-ID          CCTrCH-ID,
    iE-Extensions     ProtocolExtensionContainer { { CCTrCH-TPCItem-RL-SetupRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

CCTrCH-TPCItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-Information-RL-SetupRqstTDD ::= ProtocolIE-Single-Container{{ DL-DPCH-InformationIE-RL-SetupRqstTDD }}

DL-DPCH-InformationIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationList-RL-SetupRqstTDD CRITICALITY notify TYPE DL-DPCH-InformationItem-RL-SetupRqstTDD PRESENCE mandatory }
}

DL-DPCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
    repetitionPeriod      RepetitionPeriod,
    repetitionLength      RepetitionLength,
    tdd-DPCHOffset        TDD-DPCHOffset,
    dl-Timeslot-Information DL-Timeslot-Information,
    iE-Extensions         ProtocolExtensionContainer { { DL-DPCH-InformationItem-RL-SetupRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

DL-DPCH-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-LCR-Information-RL-SetupRqstTDD ::= ProtocolIE-Single-Container{{ DL-DPCH-LCR-InformationIE-RL-SetupRqstTDD }}

```

```

DL-DPCH-LCR-InformationIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-DL-DPCH-LCR-InformationList-RL-SetupRqstTDD    CRITICALITY notify    TYPE DL-DPCH-LCR-InformationItem-RL-SetupRqstTDD    PRESENCE
  mandatory      }
}

DL-DPCH-LCR-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
  repetitionPeriod      RepetitionPeriod,
  repetitionLength      RepetitionLength,
  tdd-DPCHOffset        TDD-DPCHOffset,
  dL-TimeslotLCR-Information  DL-TimeslotLCR-Information,
  tstdIndicator          TSTD-Indicator,
  iE-Extensions          ProtocolExtensionContainer { { DL-DPCH-LCR-InformationItem-RL-SetupRqstTDD-ExtIEs } }    OPTIONAL,
  ...
}

DL-DPCH-LCR-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

RL-Information-RL-SetupRqstTDD ::= SEQUENCE {
  rL-ID                  RL-ID,
  c-ID                   C-ID,
  frameOffset            FrameOffset,
  specialBurstScheduling SpecialBurstScheduling,
  initialDL-transmissionPower  DL-Power,
  maximumDL-power        DL-Power,
  minimumDL-power        DL-Power,
  dL-TimeSlotISCPInfo    DL-TimeSlotISCPInfo OPTIONAL, -- For 3.84Mcps TDD only
  iE-Extensions          ProtocolExtensionContainer { { RL-Information-RL-SetupRqstTDD-ExtIEs } }    OPTIONAL,
  ...
}

RL-Information-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-TimeslotISCP-LCR-InfoList-RL-SetupRqstTDD    CRITICALITY reject    EXTENSION TimeslotISCP-LCR-InfoList-RL-SetupRqstTDD    PRESENCE
  optional      }| -- For 1.28Mcps TDD only
  { ID id-RL-Specific-DCH-Info    CRITICALITY ignore    EXTENSION RL-Specific-DCH-Info    PRESENCE    optional }|
  { ID id-DelayedActivation    CRITICALITY reject    EXTENSION DelayedActivation    PRESENCE    optional },
  ...
}

TimeslotISCP-LCR-InfoList-RL-SetupRqstTDD ::= SEQUENCE {
  dL-TimeslotISCP-LCR-Info  DL-TimeslotISCPInfoLCR,
  iE-Extensions            ProtocolExtensionContainer { {TimeslotISCP-LCR-InfoItem-RL-SetupRqstTDD-ExtIEs } }    OPTIONAL,
  ...
}

TimeslotISCP-LCR-InfoItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--

```



```

-- RADIO LINK SETUP RESPONSE FDD
--
-- *****
RadioLinkSetupResponseFDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{RadioLinkSetupResponseFDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer  {{RadioLinkSetupResponseFDD-Extensions}}
    ...
}

RadioLinkSetupResponseFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-CRNC-CommunicationContextID          CRITICALITY ignore          TYPE          CRNC-CommunicationContextID
      PRESENCE mandatory }|
    { ID    id-NodeB-CommunicationContextID        CRITICALITY ignore          TYPE          NodeB-CommunicationContextID
      PRESENCE mandatory }|
    { ID    id-CommunicationControlPortID         CRITICALITY ignore          TYPE          CommunicationControlPortID
      PRESENCE mandatory }|
    { ID    id-RL-InformationResponseList-RL-SetupRspFDD CRITICALITY ignore          TYPE          RL-InformationResponseList-RL-
SetupRspFDD PRESENCE mandatory }|
    { ID    id-TFCI2-BearerInformationResponse    CRITICALITY ignore          TYPE          TFCI2-BearerInformationResponse PRESENCE optional }|
    { ID    id-CriticalityDiagnostics             CRITICALITY ignore          TYPE          CriticalityDiagnostics
      PRESENCE optional },
    ...
}

RadioLinkSetupResponseFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-InformationResponseList-RL-SetupRspFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container{{ RL-InformationResponseItemIE-RL-
SetupRspFDD }}

RL-InformationResponseItemIE-RL-SetupRspFDD NBAP-PROTOCOL-IES ::= {
    { ID    id-RL-InformationResponseItem-RL-SetupRspFDD          CRITICALITY ignore          TYPE          RL-InformationResponseItem-RL-
SetupRspFDD PRESENCE mandatory}
}

RL-InformationResponseItem-RL-SetupRspFDD ::= SEQUENCE {
    rL-ID                    RL-ID,
    rL-Set-ID                RL-Set-ID,
    received-total-wide-band-power          Received-total-wide-band-power-Value,
    diversityIndication          DiversityIndication-RL-SetupRspFDD,
    -- This IE represents both the Diversity Indication IE and the choice based on the diversity indication as described in
    -- the tabular message format in subclause 9.1.
    dSCH-InformationResponseList          DSCH-InformationResponseList-RL-SetupRspFDD          OPTIONAL,
    sSDT-SupportIndicator                SSdT-SupportIndicator,
    iE-Extensions                        ProtocolExtensionContainer { { RL-InformationResponseItem-RL-SetupRspFDD-ExtIEs} }          OPTIONAL,
    ...
}

RL-InformationResponseItem-RL-SetupRspFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-PowerBalancing-ActivationIndicator CRITICALITY ignore          EXTENSION          DL-PowerBalancing-ActivationIndicator PRESENCE
optional}|
}

```

```

    { ID id-HSDSCH-FDD-Information-Response    CRITICALITY ignore    EXTENSION HSDSCH-FDD-Information-Response    PRESENCE optional },
    ...
}

DiversityIndication-RL-SetupRspFDD ::= CHOICE {
    combining                                Combining-RL-SetupRspFDD,
    nonCombiningOrFirstRL                   NonCombiningOrFirstRL-RL-SetupRspFDD
}

Combining-RL-SetupRspFDD ::= SEQUENCE {
    rL-ID                                    RL-ID,
    iE-Extensions                            ProtocolExtensionContainer { { Combining-RL-SetupRspFDD-ExtIEs } }    OPTIONAL,
    ...
}

Combining-RL-SetupRspFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

NonCombiningOrFirstRL-RL-SetupRspFDD ::= SEQUENCE {
    dCH-InformationResponse                  DCH-InformationResponse,
    iE-Extensions                            ProtocolExtensionContainer { { NonCombiningOrFirstRLItem-RL-SetupRspFDD-ExtIEs } }    OPTIONAL,
    ...
}

NonCombiningOrFirstRLItem-RL-SetupRspFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DSCH-InformationResponseList-RL-SetupRspFDD ::= ProtocolIE-Single-Container { { DSCH-InformationResponseListIEs-RL-SetupRspFDD } }

DSCH-InformationResponseListIEs-RL-SetupRspFDD NBAP-PROTOCOL-IES ::= {
    { ID id-DSCH-InformationResponse    CRITICALITY ignore    TYPE DSCH-InformationResponse    PRESENCE mandatory }
}

-- *****
--
-- RADIO LINK SETUP RESPONSE TDD
--
-- *****

RadioLinkSetupResponseTDD ::= SEQUENCE {
    protocolIEs                            ProtocolIE-Container    {{RadioLinkSetupResponseTDD-IEs}},
    protocolExtensions                      ProtocolExtensionContainer    {{RadioLinkSetupResponseTDD-Extensions}}    OPTIONAL,
    ...
}

RadioLinkSetupResponseTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-CRNC-CommunicationContextID    CRITICALITY    ignore    TYPE    CRNC-CommunicationContextID
      PRESENCE    mandatory    }|
    { ID    id-NodeB-CommunicationContextID    CRITICALITY    ignore    TYPE    NodeB-CommunicationContextID
      PRESENCE    mandatory    }|
}

```

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```

    { ID id-CommunicationControlPortID
      PRESENCE mandatory }|
    { ID id-RL-InformationResponse-RL-SetupRspTDD
      PRESENCE optional }| -- Mandatory for 3.84Mcps TDD only
    { ID id-CriticalityDiagnostics
      PRESENCE optional },
    ...
  }

RadioLinkSetupResponseTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-RL-InformationResponse-LCR-RL-SetupRspTDD
    PRESENCE optional }, -- Mandatory for 1.28Mcps TDD only
  ...
}

RL-InformationResponse-RL-SetupRspTDD ::= SEQUENCE {
  rL-ID RL-ID,
  uL-TimeSlot-ISCP-Info UL-TimeSlot-ISCP-Info,
  ul-PhysCH-SF-Variation UL-PhysCH-SF-Variation,
  dCH-InformationResponseList DCH-InformationResponseList-RL-SetupRspTDD OPTIONAL,
  dSCH-InformationResponseList DSCH-InformationResponseList-RL-SetupRspTDD OPTIONAL,
  uSCH-InformationResponseList USCH-InformationResponseList-RL-SetupRspTDD OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { { RL-InformationResponseList-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
  ...
}

RL-InformationResponseList-RL-SetupRspTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-HSDSCH-TDD-Information-Response
    CRITICALITY ignore EXTENSION HSDSCH-TDD-Information-Response PRESENCE optional },
  ...
}

DCH-InformationResponseList-RL-SetupRspTDD ::= ProtocolIE-Single-Container{{ DCH-InformationResponseListIEs-RL-SetupRspTDD }}

DCH-InformationResponseListIEs-RL-SetupRspTDD NBAP-PROTOCOL-IES ::= {
  { ID id-DCH-InformationResponse CRITICALITY ignore TYPE DCH-InformationResponse PRESENCE mandatory}
}

DSCH-InformationResponseList-RL-SetupRspTDD ::= ProtocolIE-Single-Container {{ DSCH-InformationResponseListIEs-RL-SetupRspTDD }}

DSCH-InformationResponseListIEs-RL-SetupRspTDD NBAP-PROTOCOL-IES ::= {
  { ID id-DSCH-InformationResponse CRITICALITY ignore TYPE DSCH-InformationResponse PRESENCE mandatory }
}

USCH-InformationResponseList-RL-SetupRspTDD ::= ProtocolIE-Single-Container {{ USCH-InformationResponseListIEs-RL-SetupRspTDD }}

USCH-InformationResponseListIEs-RL-SetupRspTDD NBAP-PROTOCOL-IES ::= {
  { ID id-USCH-InformationResponse CRITICALITY ignore TYPE USCH-InformationResponse PRESENCE mandatory }
}

RL-InformationResponse-LCR-RL-SetupRspTDD ::= SEQUENCE {
  rL-ID RL-ID,
  uL-TimeSlot-ISCP-LCR-Info UL-TimeSlot-ISCP-LCR-Info,
  ul-PhysCH-SF-Variation UL-PhysCH-SF-Variation,

```

```

dCH-InformationResponseList      DCH-InformationResponseList-RL-SetupRspTDD      OPTIONAL,
dSCH-InformationResponseList      DSCH-InformationResponseList-RL-SetupRspTDD      OPTIONAL,
uSCH-InformationResponseList      USCH-InformationResponseList-RL-SetupRspTDD      OPTIONAL,
iE-Extensions                     ProtocolExtensionContainer { { RL-InformationResponseList-LCR-RL-SetupRspTDD-ExtIEs } }
OPTIONAL,
...
}

RL-InformationResponseList-LCR-RL-SetupRspTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-HSDSCH-TDD-Information-Response-LCR          CRITICALITY ignore          EXTENSION HSDSCH-TDD-Information-Response    PRESENCE optional },
  ...
}

-- *****
--
-- RADIO LINK SETUP FAILURE FDD
--
-- *****

RadioLinkSetupFailureFDD ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container    {{RadioLinkSetupFailureFDD-IEs}},
  protocolExtensions  ProtocolExtensionContainer {{RadioLinkSetupFailureFDD-Extensions}}
  ...
}

RadioLinkSetupFailureFDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-CRNC-CommunicationContextID          PRESENCE mandatory    CRITICALITY ignore          TYPE CRNC-
CommunicationContextID
  { ID id-NodeB-CommunicationContextID        PRESENCE conditional  CRITICALITY ignore          TYPE NodeB-
CommunicationContextID
  -- This IE shall be present if at least one of the radio links has been successfully set up
  { ID id-CommunicationControlPortID          PRESENCE optional     CRITICALITY ignore          TYPE
CommunicationControlPortID
  { ID id-CauseLevel-RL-SetupFailureFDD       PRESENCE mandatory   CRITICALITY ignore          TYPE CauseLevel-RL-
SetupFailureFDD
  { ID id-CriticalityDiagnostics              PRESENCE optional     CRITICALITY ignore          TYPE
CriticalityDiagnostics
  ...
}

RadioLinkSetupFailureFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

CauseLevel-RL-SetupFailureFDD ::= CHOICE {
  generalCause          GeneralCauseList-RL-SetupFailureFDD,
  rLSpecificCause       RLSpecificCauseList-RL-SetupFailureFDD,
  ...
}

GeneralCauseList-RL-SetupFailureFDD ::= SEQUENCE {
  cause                 Cause,
  iE-Extensions         ProtocolExtensionContainer { { GeneralCauseItem-RL-SetupFailureFDD-ExtIEs } }
  ...
}

```

```

}
...
}
GeneralCauseItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
RLSpecificCauseList-RL-SetupFailureFDD ::= SEQUENCE {
  unsuccessful-RL-InformationRespList-RL-SetupFailureFDD      Unsuccessful-RL-InformationRespList-RL-SetupFailureFDD,
  successful-RL-InformationRespList-RL-SetupFailureFDD        Successful-RL-InformationRespList-RL-SetupFailureFDD OPTIONAL,
  iE-Extensions                                                ProtocolExtensionContainer { { RLSpecificCauseItem-RL-SetupFailureFDD-ExtIEs } } OPTIONAL,
...
}
RLSpecificCauseItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
Unsuccessful-RL-InformationRespList-RL-SetupFailureFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ Unsuccessful-RL-
InformationRespItemIE-RL-SetupFailureFDD }}
Unsuccessful-RL-InformationRespItemIE-RL-SetupFailureFDD NBAP-PROTOCOL-IES ::= {
  { ID      id-Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD      CRITICALITY      ignore      TYPE      Unsuccessful-RL-
InformationRespItem-RL-SetupFailureFDD      PRESENCE      mandatory}
}
Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD ::= SEQUENCE {
  rL-ID          RL-ID,
  cause          Cause,
  iE-Extensions ProtocolExtensionContainer { { Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD-ExtIEs } }
  OPTIONAL,
  ...
}
Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
Successful-RL-InformationRespList-RL-SetupFailureFDD ::= SEQUENCE (SIZE (1.. maxNrOfRLs)) OF ProtocolIE-Single-Container {{ Successful-RL-
InformationRespItemIE-RL-SetupFailureFDD }}
Successful-RL-InformationRespItemIE-RL-SetupFailureFDD NBAP-PROTOCOL-IES ::= {
  { ID      id-Successful-RL-InformationRespItem-RL-SetupFailureFDD      CRITICALITY      ignore      TYPE      Successful-RL-
InformationRespItem-RL-SetupFailureFDD      PRESENCE      mandatory}
}
Successful-RL-InformationRespItem-RL-SetupFailureFDD ::= SEQUENCE {
  rL-ID          RL-ID,
  rL-Set-ID      RL-Set-ID,
  received-total-wide-band-power      Received-total-wide-band-power-Value,
  diversityIndication      DiversityIndication-RL-SetupFailureFDD,
  -- This IE represents both the Diversity Indication IE and the choice based on the diversity indication as described in
  -- the tabular message format in subclause 9.1.
}

```

```

    dSCH-InformationResponseList          DSCH-InformationRespList-RL-SetupFailureFDD    OPTIONAL,
    tFCI2-BearerInformationResponse       TFCI2-BearerInformationResponse          OPTIONAL,
    sSDT-SupportIndicator                 SSDT-SupportIndicator,
    iE-Extensions                         ProtocolExtensionContainer { { Successful-RL-InformationRespItem-RL-SetupFailureFDD-ExtIEs} }
    OPTIONAL,
    ...
}

Successful-RL-InformationRespItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-DL-PowerBalancing-ActivationIndicator    CRITICALITY ignore      EXTENSION      DL-PowerBalancing-ActivationIndicator    PRESENCE
optional}|
  { ID id-HSDSCH-FDD-Information-Response        CRITICALITY ignore      EXTENSION      HSDSCH-FDD-Information-Response        PRESENCE optional },
  ...
}

DiversityIndication-RL-SetupFailureFDD ::= CHOICE {
  combining                               Combining-RL-SetupFailureFDD,
  nonCombiningOrFirstRL                  NonCombiningOrFirstRL-RL-SetupFailureFDD
}

Combining-RL-SetupFailureFDD ::= SEQUENCE {
  rL-ID                                   RL-ID,
  iE-Extensions                           ProtocolExtensionContainer { { CombiningItem-RL-SetupFailureFDD-ExtIEs} }    OPTIONAL,
  ...
}

CombiningItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

NonCombiningOrFirstRL-RL-SetupFailureFDD ::= SEQUENCE {
  dCH-InformationResponse                 DCH-InformationResponse,
  iE-Extensions                           ProtocolExtensionContainer { { NonCombiningOrFirstRLItem-RL-SetupFailureFDD-ExtIEs} }
  OPTIONAL,
  ...
}

NonCombiningOrFirstRLItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DSCH-InformationRespList-RL-SetupFailureFDD ::= ProtocolIE-Single-Container {{ DSCH-InformationRespListIEs-RL-SetupFailureFDD }}

DSCH-InformationRespListIEs-RL-SetupFailureFDD NBAP-PROTOCOL-IES ::= {
  { ID id-DSCH-InformationResponse    CRITICALITY ignore    TYPE DSCH-InformationResponse    PRESENCE mandatory }
}

-- *****
--
-- RADIO LINK SETUP FAILURE TDD
--
-- *****

```

```

RadioLinkSetupFailureTDD ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container  {{RadioLinkSetupFailureTDD-IEs}},
  protocolExtensions  ProtocolExtensionContainer {{RadioLinkSetupFailureTDD-Extensions}}
  ...
}

RadioLinkSetupFailureTDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-CRNC-CommunicationContextID          CRITICALITY ignore      TYPE          CRNC-CommunicationContextID
    PRESENCE mandatory }|
  { ID id-CauseLevel-RL-SetupFailureTDD        CRITICALITY ignore      TYPE CauseLevel-RL-
  SetupFailureTDD PRESENCE mandatory }|
  { ID id-CriticalityDiagnostics              CRITICALITY ignore      TYPE          CriticalityDiagnostics
    PRESENCE optional } ,
  ...
}

RadioLinkSetupFailureTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

CauseLevel-RL-SetupFailureTDD ::= CHOICE {
  generalCause          GeneralCauseList-RL-SetupFailureTDD,
  rLSpecificCause      RLSpecificCauseList-RL-SetupFailureTDD,
  ...
}

GeneralCauseList-RL-SetupFailureTDD ::= SEQUENCE {
  cause                  Cause,
  iE-Extensions         ProtocolExtensionContainer { { GeneralCauseItem-RL-SetupFailureTDD-ExtIEs } }
  ...
}

GeneralCauseItem-RL-SetupFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

RLSpecificCauseList-RL-SetupFailureTDD ::= SEQUENCE {
  unsuccessful-RL-InformationRespItem-RL-SetupFailureTDD Unsuccessful-RL-InformationRespItem-RL-SetupFailureTDD,
  iE-Extensions         ProtocolExtensionContainer { { RLSpecificCauseItem-RL-SetupFailureTDD-ExtIEs } }
  OPTIONAL,
  ...
}

RLSpecificCauseItem-RL-SetupFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

Unsuccessful-RL-InformationRespItem-RL-SetupFailureTDD ::= ProtocolIE-Single-Container { {Unsuccessful-RL-InformationRespItemIE-RL-
SetupFailureTDD} }

Unsuccessful-RL-InformationRespItemIE-RL-SetupFailureTDD NBAP-PROTOCOL-IES ::= {
  { ID id-Unsuccessful-RL-InformationResp-RL-SetupFailureTDD CRITICALITY ignore      TYPE          Unsuccessful-RL-InformationResp-
  RL-SetupFailureTDD PRESENCE mandatory }
}

```

```

}

Unsuccessful-RL-InformationResp-RL-SetupFailureTDD ::= SEQUENCE {
    rL-ID                               RL-ID,
    cause                               Cause,
    iE-Extensions                       ProtocolExtensionContainer { { Unsuccessful-RL-InformationResp-RL-SetupFailureTDD-ExtIEs} }
    OPTIONAL,
    ...
}

Unsuccessful-RL-InformationResp-RL-SetupFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- RADIO LINK ADDITION REQUEST FDD
--
-- *****

RadioLinkAdditionRequestFDD ::= SEQUENCE {
    protocolIEs                       ProtocolIE-Container   {{RadioLinkAdditionRequestFDD-IEs}},
    protocolExtensions                 ProtocolExtensionContainer {{RadioLinkAdditionRequestFDD-Extensions}}
    OPTIONAL,
    ...
}

RadioLinkAdditionRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-NodeB-CommunicationContextID          CRITICALITY reject          TYPE NodeB-CommunicationContextID          PRESENCE
      mandatory } |
    { ID id-Compressed-Mode-Deactivation-Flag     CRITICALITY reject          TYPE Compressed-Mode-Deactivation-Flag     PRESENCE optional } |
    { ID id-RL-InformationList-RL-AdditionRqstFDD CRITICALITY notify         TYPE                                         RL-InformationList-RL-
      AdditionRqstFDD          PRESENCE mandatory },
    ...
}

RadioLinkAdditionRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-InformationList-RL-AdditionRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-RL-
AdditionRqstFDD}}

RL-InformationItemIE-RL-AdditionRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationItem-RL-AdditionRqstFDD CRITICALITY notify         TYPE                                         RL-InformationItem-RL-
      AdditionRqstFDD          PRESENCE mandatory }
}

RL-InformationItem-RL-AdditionRqstFDD ::= SEQUENCE {
    rL-ID                               RL-ID,
    c-ID                               C-ID,
    frameOffset                         FrameOffset,
    chipOffset                           ChipOffset,
    diversityControlField                DiversityControlField,
}

```



```

    dl-CodeInformation          FDD-DL-CodeInformation,
    initialDL-TransmissionPower DL-Power          OPTIONAL,
    maximumDL-Power            DL-Power          OPTIONAL,
    minimumDL-Power            DL-Power          OPTIONAL,
    sSDT-CellIdentity           SSDT-Cell-Identity OPTIONAL,
    transmitDiversityIndicator TransmitDiversityIndicator OPTIONAL,
    iE-Extensions               ProtocolExtensionContainer { { RL-InformationItem-RL-AdditionRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

RL-InformationItem-RL-AdditionRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-DLReferencePower    CRITICALITY ignore    EXTENSION DL-Power          PRESENCE optional }|
  { ID id-RL-Specific-DCH-Info CRITICALITY ignore    EXTENSION RL-Specific-DCH-Info PRESENCE optional }|
  { ID id-DelayedActivation    CRITICALITY reject    EXTENSION DelayedActivation PRESENCE optional },
  ...
}

-- *****
--
-- RADIO LINK ADDITION REQUEST TDD
--
-- *****

RadioLinkAdditionRequestTDD ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container  {{RadioLinkAdditionRequestTDD-IEs}},
  protocolExtensions   ProtocolExtensionContainer {{RadioLinkAdditionRequestTDD-Extensions}}
  ...
}

RadioLinkAdditionRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-NodeB-CommunicationContextID PRESENCE mandatory }|
  { ID id-UL-CCTrCH-InformationList-RL-AdditionRqstTDD PRESENCE optional }|
  { ID id-DL-CCTrCH-InformationList-RL-AdditionRqstTDD PRESENCE optional }|
  { ID id-RL-Information-RL-AdditionRqstTDD PRESENCE mandatory },
  ...
}

RadioLinkAdditionRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

UL-CCTrCH-InformationList-RL-AdditionRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationItem-RL-AdditionRqstTDD

UL-CCTrCH-InformationItem-RL-AdditionRqstTDD ::= SEQUENCE {
  cCCTrCH-ID          CCTrCH-ID,
  uL-DPCH-Information UL-DPCH-InformationList-RL-AdditionRqstTDD OPTIONAL,
  iE-Extensions       ProtocolExtensionContainer { { UL-CCTrCH-InformationItem-RL-AdditionRqstTDD-ExtIEs } } OPTIONAL,
  ...
}

```

```

UL-CCTrCH-InformationItem-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD CRITICALITY notify EXTENSION UL-DPCH-
  InformationItem-LCR-RL-AdditionRqstTDD PRESENCE optional }, -- For 1.28cps TDD only
  ...7
  { ID id-UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD CRITICALITY notify EXTENSION UL-DPCH-
  InformationItem-LCR-RL-AdditionRqstTDD PRESENCE optional } -- For 1.28cps TDD only
}

UL-DPCH-InformationList-RL-AdditionRqstTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-InformationItemIE-RL-AdditionRqstTDD }}

UL-DPCH-InformationItemIE-RL-AdditionRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-UL-DPCH-InformationItem-RL-AdditionRqstTDD CRITICALITY notify TYPE UL-DPCH-InformationItem-RL-
  AdditionRqstTDD PRESENCE optional} -- For 3.84Mcps TDD only
}

UL-DPCH-InformationItem-RL-AdditionRqstTDD ::= SEQUENCE {
  repetitionPeriod RepetitionPeriod,
  repetitionLength RepetitionLength,
  tdd-DPCHOffset TDD-DPCHOffset,
  uL-Timeslot-Information UL-Timeslot-Information,
  iE-Extensions ProtocolExtensionContainer { { UL-DPCH-InformationItem-RL-AdditionRqstTDD-ExtIEs } } OPTIONAL,
  ...
}

UL-DPCH-InformationItem-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-CCTrCH-InformationList-RL-AdditionRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationItem-RL-AdditionRqstTDD

DL-CCTrCH-InformationItem-RL-AdditionRqstTDD ::= SEQUENCE {
  cCTrCH-ID CCTrCH-ID,
  dL-DPCH-Information DL-DPCH-InformationList-RL-AdditionRqstTDD OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { { DL-CCTrCH-InformationItem-RL-AdditionRqstTDD-ExtIEs } } OPTIONAL,
  ...
}

DL-CCTrCH-InformationItem-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD CRITICALITY notify EXTENSION DL-DPCH-
  InformationItem-LCR-RL-AdditionRqstTDD PRESENCE optional } | -- For 1.28Mcps TDD only
  { ID id-CCTrCH-Initial-DL-Power-RL-AdditionRqstTDD CRITICALITY ignore EXTENSION DL-Power PRESENCE optional },
  ...
}

DL-DPCH-InformationList-RL-AdditionRqstTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-InformationItemIE-RL-AdditionRqstTDD }}

DL-DPCH-InformationItemIE-RL-AdditionRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-DL-DPCH-InformationItem-RL-AdditionRqstTDD CRITICALITY notify TYPE DL-DPCH-InformationItem-RL-
  AdditionRqstTDD PRESENCE mandatory} -- For 3.84Mcps TDD only
}

DL-DPCH-InformationItem-RL-AdditionRqstTDD ::= SEQUENCE {

```

```

    repetitionPeriod      RepetitionPeriod,
    repetitionLength      RepetitionLength,
    tdd-DPCHOffset        TDD-DPCHOffset,
    dl-Timeslot-Information DL-Timeslot-Information,
    iE-Extensions          ProtocolExtensionContainer { { DL-DPCH-InformationItem-RL-AdditionRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

DL-DPCH-InformationItem-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-Information-RL-AdditionRqstTDD ::= SEQUENCE {
    rL-ID                  RL-ID,
    c-ID                   C-ID,
    frameOffset            FrameOffset,
    diversityControlField  DiversityControlField,
    initial-DL-Transmission-Power DL-Power OPTIONAL,
    maximumDL-Power        DL-Power OPTIONAL,
    minimumDL-Power        DL-Power OPTIONAL,
    dl-TimeSlotISCPInfo    DL-TimeSlotISCPInfo OPTIONAL, -- For 3.84Mcps TDD only
    iE-Extensions          ProtocolExtensionContainer { { RL-information-RL-AdditionRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

RL-information-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-TimeSlotISCP-InformationList-LCR-RL-AdditionRqstTDD CRITICALITY notify EXTENSION TIMESLOTISCP-
InformationList-LCR-RL-AdditionRqstTDD PRESENCE optional }| -- For 1.28Mcps TDD only
    { ID id-RL-Specific-DCH-Info CRITICALITY ignore EXTENSION RL-Specific-DCH-Info PRESENCE optional }|
    { ID id-DelayedActivation CRITICALITY reject EXTENSION DelayedActivation PRESENCE optional },
    ...
}

UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD ::= SEQUENCE {
    repetitionPeriod      RepetitionPeriod,
    repetitionLength      RepetitionLength,
    tdd-DPCHOffset        TDD-DPCHOffset,
    uL-TimeSlotLCR-Information UL-TimeSlotLCR-Information,
    iE-Extensions          ProtocolExtensionContainer { { UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD ::= SEQUENCE {
    repetitionPeriod      RepetitionPeriod,
    repetitionLength      RepetitionLength,
    tdd-DPCHOffset        TDD-DPCHOffset,
    dl-TimeslotLCR-Information DL-TimeslotLCR-Information,
    iE-Extensions          ProtocolExtensionContainer { { DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

```

```

}

DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TIMESLOTISCP-InformationList-LCR-RL-AdditionRqstTDD ::= SEQUENCE {
    dL-TimeslotISCP-LCR-Info      DL-TimeslotISCPInfoLCR,
    iE-Extensions                ProtocolExtensionContainer { {TimeslotISCPInfoList-LCR-RL-AdditionRqstTDD-ExtIEs} }    OPTIONAL,
    ...
}

TimeslotISCPInfoList-LCR-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- RADIO LINK ADDITION RESPONSE FDD
--
-- *****

RadioLinkAdditionResponseFDD ::= SEQUENCE {
    protocolIEs                ProtocolIE-Container    {{RadioLinkAdditionResponseFDD-IEs}},
    protocolExtensions        ProtocolExtensionContainer {{RadioLinkAdditionResponseFDD-Extensions}}    OPTIONAL,
    ...
}

RadioLinkAdditionResponseFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-CRNC-CommunicationContextID          PRESENCE    mandatory    CRITICALITY    ignore    TYPE    CRNC-
CommunicationContextID
    { ID      id-RL-InformationResponseList-RL-AdditionRspFDD    PRESENCE    mandatory    CRITICALITY    ignore    TYPE    RL-
InformationResponseList-RL-AdditionRspFDD
    { ID      id-CriticalityDiagnostics                PRESENCE    optional    CRITICALITY    ignore    TYPE    CriticalityDiagnostics
    ...
}

RadioLinkAdditionResponseFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-InformationResponseList-RL-AdditionRspFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF ProtocolIE-Single-Container {{ RL-InformationResponseItemIE-
RL-AdditionRspFDD }}

RL-InformationResponseItemIE-RL-AdditionRspFDD NBAP-PROTOCOL-IES ::= {
    { ID      id-RL-InformationResponseItem-RL-AdditionRspFDD    PRESENCE    mandatory    CRITICALITY    ignore    TYPE    RL-InformationResponseItem-
RL-AdditionRspFDD
}

RL-InformationResponseItem-RL-AdditionRspFDD ::= SEQUENCE {
    rL-ID                RL-ID,
    rL-Set-ID            RL-Set-ID,

```

```

received-total-wide-band-power          Received-total-wide-band-power-Value,
diversityIndication                     DiversityIndication-RL-AdditionRspFDD,
-- This IE represents both the Diversity Indication IE and the choice based on the diversity indication as described in
-- the tabular message format in subclause 9.1.
sSDT-SupportIndicator                   SSDT-SupportIndicator,
iE-Extensions                           ProtocolExtensionContainer { { RL-InformationResponseItem-RL-AdditionRspFDD-ExtIEs} }
OPTIONAL,
...
}

RL-InformationResponseItem-RL-AdditionRspFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-DL-PowerBalancing-ActivationIndicator CRITICALITY ignore EXTENSION DL-PowerBalancing-ActivationIndicator PRESENCE
optional},
  ...
}

DiversityIndication-RL-AdditionRspFDD ::= CHOICE {
  combining                               Combining-RL-AdditionRspFDD,
  non-combining                           Non-Combining-RL-AdditionRspFDD
}

Combining-RL-AdditionRspFDD ::= SEQUENCE {
  rL-ID                                   RL-ID,
  iE-Extensions                           ProtocolExtensionContainer { { CombiningItem-RL-AdditionRspFDD-ExtIEs} } OPTIONAL,
  ...
}

CombiningItem-RL-AdditionRspFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

Non-Combining-RL-AdditionRspFDD ::= SEQUENCE {
  dCH-InformationResponse                 DCH-InformationResponse,
  iE-Extensions                           ProtocolExtensionContainer { { Non-CombiningItem-RL-AdditionRspFDD-ExtIEs} } OPTIONAL,
  ...
}

Non-CombiningItem-RL-AdditionRspFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- RADIO LINK ADDITION RESPONSE TDD
--
-- *****

RadioLinkAdditionResponseTDD ::= SEQUENCE {
  protocolIEs                             ProtocolIE-Container {{RadioLinkAdditionResponseTDD-IEs}},
  protocolExtensions                       ProtocolExtensionContainer {{RadioLinkAdditionResponseTDD-Extensions}} OPTIONAL,
  ...
}

```

```

RadioLinkAdditionResponseTDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-CRNC-CommunicationContextID          CRITICALITY ignore      TYPE          CRNC-CommunicationContextID
    PRESENCE mandatory }|
  { ID id-RL-InformationResponse-RL-AdditionRspTDD  CRITICALITY ignore      TYPE          RL-InformationResponse-RL-
  AdditionRspTDD PRESENCE optional }| -- Mandatory for 3.84Mcps TDD only
  { ID id-CriticalityDiagnostics                  CRITICALITY ignore      TYPE          CriticalityDiagnostics
    PRESENCE optional },
  ...
}

RadioLinkAdditionResponseTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-RL-InformationResponse-LCR-RL-AdditionRspTDD  CRITICALITY ignore      EXTENSION      RL-InformationResponse-LCR-RL-
  AdditionRspTDD PRESENCE optional }, --Mandatory for 1.28Mcps TDD only
  ...
}

RL-InformationResponse-RL-AdditionRspTDD ::= SEQUENCE {
  rL-ID          RL-ID,
  uL-TimeSlot-Info  UL-TimeSlot-Info,
  ul-PhysCH-SF-Variation  UL-PhysCH-SF-Variation,
  dCH-Information  DCH-Information-RL-AdditionRspTDD          OPTIONAL,
  dsCH-InformationResponseList  DSCH-InformationResponseList-RL-AdditionRspTDD          OPTIONAL,
  usCH-InformationResponseList  USCH-InformationResponseList-RL-AdditionRspTDD          OPTIONAL,
  iE-Extensions          ProtocolExtensionContainer { { RL-InformationResponse-RL-AdditionRspTDD-ExtIEs} }          OPTIONAL,
  ...
}

RL-InformationResponse-RL-AdditionRspTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DCH-Information-RL-AdditionRspTDD ::= SEQUENCE {
  diversityIndication          DiversityIndication-RL-AdditionRspTDD,
  -- This IE represents both the Diversity Indication IE and the choice based on the diversity indication as described in
  -- the tabular message format in subclause 9.1.
  iE-Extensions          ProtocolExtensionContainer { { DCH-Information-RL-AdditionRspTDD-ExtIEs} }          OPTIONAL,
  ...
}

DCH-Information-RL-AdditionRspTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DiversityIndication-RL-AdditionRspTDD ::= CHOICE {
  combining          Combining-RL-AdditionRspTDD,
  non-Combining      Non-Combining-RL-AdditionRspTDD
}

Combining-RL-AdditionRspTDD ::= SEQUENCE {
  rL-ID          RL-ID,
  iE-Extensions          ProtocolExtensionContainer { { CombiningItem-RL-AdditionRspTDD-ExtIEs} }          OPTIONAL,
  ...
}

```

```

CombiningItem-RL-AdditionRspTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

Non-Combining-RL-AdditionRspTDD ::= SEQUENCE {
  dCH-InformationResponse          DCH-InformationResponse,
  iE-Extensions                    ProtocolExtensionContainer { { Non-CombiningItem-RL-AdditionRspTDD-ExtIEs } }    OPTIONAL,
  ...
}

Non-CombiningItem-RL-AdditionRspTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DSCH-InformationResponseList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container {{ DSCH-InformationResponseListIEs-RL-AdditionRspTDD }}

DSCH-InformationResponseListIEs-RL-AdditionRspTDD NBAP-PROTOCOL-IES ::= {
  { ID id-DSCH-InformationResponse  CRITICALITY ignore  TYPE DSCH-InformationResponse          PRESENCE mandatory }
}

USCH-InformationResponseList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container {{ USCH-InformationResponseListIEs-RL-AdditionRspTDD }}

USCH-InformationResponseListIEs-RL-AdditionRspTDD NBAP-PROTOCOL-IES ::= {
  { ID id-USCH-InformationResponse  CRITICALITY ignore  TYPE USCH-InformationResponse          PRESENCE mandatory }
}

RL-InformationResponse-LCR-RL-AdditionRspTDD ::= SEQUENCE {
  rL-ID                            RL-ID,
  uL-TimeSlot-ISCP-InfoLCR          UL-TimeSlot-ISCP-Info,
  uL-PhysCH-SF-Variation            UL-PhysCH-SF-Variation,
  dCH-Information                   DCH-Information-RL-AdditionRspTDD          OPTIONAL,
  dSCH-InformationResponseList      DSCH-InformationResponseList-RL-AdditionRspTDD          OPTIONAL,
  uSCH-InformationResponseList      USCH-InformationResponseList-RL-AdditionRspTDD          OPTIONAL,
  iE-Extensions                    ProtocolExtensionContainer { { RL-InformationResponse-LCR-RL-AdditionRspTDD-ExtIEs } }    OPTIONAL,
  ...
}

RL-InformationResponse-LCR-RL-AdditionRspTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- RADIO LINK ADDITION FAILURE FDD
--
-- *****

RadioLinkAdditionFailureFDD ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container  {{RadioLinkAdditionFailureFDD-IEs}},
  protocolExtensions  ProtocolExtensionContainer  {{RadioLinkAdditionFailureFDD-Extensions}}    OPTIONAL,
  ...
}

```

```

RadioLinkAdditionFailureFDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-CRNC-CommunicationContextID CRITICALITY ignore TYPE CRNC-CommunicationContextID PRESENCE mandatory } |
  { ID id-CauseLevel-RL-AdditionFailureFDD CRITICALITY ignore TYPE CauseLevel-RL-AdditionFailureFDD PRESENCE mandatory } |
  { ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional }
  },
  ...
}

RadioLinkAdditionFailureFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

CauseLevel-RL-AdditionFailureFDD ::= CHOICE {
  generalCause GeneralCauseList-RL-AdditionFailureFDD,
  rLSpecificCause RLSpecificCauseList-RL-AdditionFailureFDD,
  ...
}

GeneralCauseList-RL-AdditionFailureFDD ::= SEQUENCE {
  cause Cause,
  iE-Extensions ProtocolExtensionContainer { { GeneralCauseItem-RL-AdditionFailureFDD-ExtIEs } } OPTIONAL,
  ...
}

GeneralCauseItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

RLSpecificCauseList-RL-AdditionFailureFDD ::= SEQUENCE {
  unsuccessful-RL-InformationRespList-RL-AdditionFailureFDD Unsuccessful-RL-InformationRespList-RL-AdditionFailureFDD,
  successful-RL-InformationRespList-RL-AdditionFailureFDD Successful-RL-InformationRespList-RL-AdditionFailureFDD OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { { RLSpecificCauseItem-RL-AdditionFailureFDD-ExtIEs } } OPTIONAL,
  ...
}

RLSpecificCauseItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

Unsuccessful-RL-InformationRespList-RL-AdditionFailureFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF ProtocolIE-Single-Container { { Unsuccessful-RL-InformationRespItemIE-RL-AdditionFailureFDD } }

Unsuccessful-RL-InformationRespItemIE-RL-AdditionFailureFDD NBAP-PROTOCOL-IES ::= {
  { ID id-Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD CRITICALITY ignore TYPE Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD PRESENCE mandatory }
}

Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD ::= SEQUENCE {
  rL-ID RL-ID,
  cause Cause,
  iE-Extensions ProtocolExtensionContainer { { Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD-ExtIEs } } OPTIONAL,
  ...
}

```



```

}
...
}
Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
Successful-RL-InformationRespList-RL-AdditionFailureFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-2)) OF ProtocolIE-Single-Container {{ Successful-RL-
InformationRespItemIE-RL-AdditionFailureFDD }}
Successful-RL-InformationRespItemIE-RL-AdditionFailureFDD NBAP-PROTOCOL-IES ::= {
{ ID id-Successful-RL-InformationRespItem-RL-AdditionFailureFDD CRITICALITY ignore TYPE Successful-RL-
InformationRespItem-RL-AdditionFailureFDD PRESENCE mandatory}
}
Successful-RL-InformationRespItem-RL-AdditionFailureFDD ::= SEQUENCE {
rL-ID RL-ID,
rL-Set-ID RL-Set-ID,
received-total-wide-band-power Received-total-wide-band-power-Value,
diversityIndication DiversityIndication-RL-AdditionFailureFDD,
-- This IE represents both the Diversity Indication IE and the choice based on the diversity indication as described in
-- the tabular message format in subclause 9.1.
sSDT-SupportIndicator SSDT-SupportIndicator,
iE-Extensions ProtocolExtensionContainer { { Successful-RL-InformationRespItem-RL-AdditionFailureFDD-ExtIEs} }
OPTIONAL,
...
}
Successful-RL-InformationRespItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
{ ID id-DL-PowerBalancing-ActivationIndicator CRITICALITY ignore EXTENSION DL-PowerBalancing-ActivationIndicator PRESENCE
optional},
...
}
DiversityIndication-RL-AdditionFailureFDD ::= CHOICE {
combining Combining-RL-AdditionFailureFDD,
non-Combining Non-Combining-RL-AdditionFailureFDD
}
Combining-RL-AdditionFailureFDD ::= SEQUENCE {
rL-ID RL-ID,
iE-Extensions ProtocolExtensionContainer { { CombiningItem-RL-AdditionFailureFDD-ExtIEs} } OPTIONAL,
...
}
CombiningItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
Non-Combining-RL-AdditionFailureFDD ::= SEQUENCE {
dCH-InformationResponse DCH-InformationResponse,
iE-Extensions ProtocolExtensionContainer { { Non-CombiningItem-RL-AdditionFailureFDD-ExtIEs} } OPTIONAL,
...
}

```

```

}

Non-CombiningItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- RADIO LINK ADDITION FAILURE TDD
--
-- *****

RadioLinkAdditionFailureTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkAdditionFailureTDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{RadioLinkAdditionFailureTDD-Extensions}}    OPTIONAL,
    ...
}

RadioLinkAdditionFailureTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-CRNC-CommunicationContextID    CRITICALITY    ignore    TYPE    CRNC-CommunicationContextID
    PRESENCE    mandatory    }|
    { ID    id-CauseLevel-RL-AdditionFailureTDD    CRITICALITY    ignore    TYPE    CauseLevel-RL-AdditionFailureTDD
    PRESENCE    mandatory    }|
    { ID    id-CriticalityDiagnostics        CRITICALITY    ignore    TYPE    CriticalityDiagnostics
    PRESENCE    optional    },
    ...
}

RadioLinkAdditionFailureTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CauseLevel-RL-AdditionFailureTDD ::= CHOICE {
    generalCause          GeneralCauseList-RL-AdditionFailureTDD,
    rLSpecificCause      RLSpecificCauseList-RL-AdditionFailureTDD,
    ...
}

GeneralCauseList-RL-AdditionFailureTDD ::= SEQUENCE {
    cause                Cause,
    iE-Extensions        ProtocolExtensionContainer { { GeneralCauseItem-RL-AdditionFailureTDD-ExtIEs } }    OPTIONAL,
    ...
}

GeneralCauseItem-RL-AdditionFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RLSpecificCauseList-RL-AdditionFailureTDD ::= SEQUENCE {
    unsuccessful-RL-InformationRespItem-RL-AdditionFailureTDD    Unsuccessful-RL-InformationRespItem-RL-AdditionFailureTDD,
    iE-Extensions        ProtocolExtensionContainer { { RLSpecificCauseItem-RL-AdditionFailureTDD-ExtIEs } }
    OPTIONAL,
    ...
}

```

```

}

RLSpecificCauseItem-RL-AdditionFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Unsuccessful-RL-InformationRespItem-RL-AdditionFailureTDD ::= ProtocolIE-Single-Container { {Unsuccessful-RL-InformationRespItemIE-RL-
AdditionFailureTDD} }

Unsuccessful-RL-InformationRespItemIE-RL-AdditionFailureTDD NBAP-PROTOCOL-IES ::= {
    { ID id-Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD    CRITICALITY ignore    TYPE Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD
    PRESENCE mandatory }
}

Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD ::= SEQUENCE {
    rL-ID                    RL-ID,
    cause                    Cause,
    iE-Extensions           ProtocolExtensionContainer { { Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD-ExtIEs } }
    OPTIONAL,
    ...
}

Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- RADIO LINK RECONFIGURATION PREPARE FDD
--
-- *****

RadioLinkReconfigurationPrepareFDD ::= SEQUENCE {
    protocolIEs           ProtocolIE-Container    {{RadioLinkReconfigurationPrepareFDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{RadioLinkReconfigurationPrepareFDD-Extensions}}    OPTIONAL,
    ...
}

RadioLinkReconfigurationPrepareFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-NodeB-CommunicationContextID    CRITICALITY reject    TYPE NodeB-CommunicationContextID
    PRESENCE mandatory } |
    { ID id-UL-DPCH-Information-RL-ReconfPrepFDD    CRITICALITY reject    TYPE UL-DPCH-Information-RL-
    ReconfPrepFDD    PRESENCE optional } |
    { ID id-DL-DPCH-Information-RL-ReconfPrepFDD    CRITICALITY reject    TYPE DL-DPCH-Information-RL-
    ReconfPrepFDD    PRESENCE optional } |
    { ID id-FDD-DCHs-to-Modify    CRITICALITY reject    TYPE FDD-DCHs-to-Modify    PRESENCE optional } |
    { ID id-DCHs-to-Add-FDD    CRITICALITY reject    TYPE DCH-FDD-Information    PRESENCE optional } |
    { ID id-DCH-DeleteList-RL-ReconfPrepFDD    CRITICALITY reject    TYPE DCH-DeleteList-RL-ReconfPrepFDD
    PRESENCE optional } |
    { ID id-DSCH-ModifyList-RL-ReconfPrepFDD    CRITICALITY reject    TYPE DSCH-ModifyList-RL-ReconfPrepFDD
    PRESENCE optional } |
    { ID id-DSCHs-to-Add-FDD    CRITICALITY reject    TYPE DSCH-FDD-Information    PRESENCE optional } |

```

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    { ID id-DSCH-DeleteList-RL-ReconfPrepFDD          CRITICALITY reject          TYPE          DSCH-DeleteList-RL-ReconfPrepFDD
      PRESENCE optional } |
    { ID id-TFCI2-BearerSpecificInformation-RL-ReconfPrepFDD  CRITICALITY reject          TYPE          TFCI2-BearerSpecificInformation-
RL-ReconfPrepFDD
      PRESENCE optional } |
    { ID id-RL-InformationList-RL-ReconfPrepFDD          CRITICALITY reject          TYPE          RL-InformationList-RL-
ReconfPrepFDD          PRESENCE optional } |
    { ID id-Transmission-Gap-Pattern-Sequence-Information  CRITICALITY reject          TYPE          Transmission-Gap-Pattern-Sequence-Information
PRESENCE optional },
    ...
}

```

```

RadioLinkReconfigurationPrepareFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-DSCH-FDD-Common-Information          CRITICALITY ignore  EXTENSION DSCH-FDD-Common-Information          PRESENCE optional
  } |
  { ID id-SignallingBearerRequestIndicator      CRITICALITY reject  EXTENSION SignallingBearerRequestIndicator          PRESENCE optional } |
  { ID id-HSDSCH-Information-to-Modify          CRITICALITY reject  EXTENSION HSDSCH-Information-to-Modify          PRESENCE optional } |
  { ID id-HSDSCH-FDD-Information-to-Add        CRITICALITY reject  EXTENSION HSDSCH-FDD-Information          PRESENCE optional } |
  { ID id-HSDSCH-FDD-Information-to-Delete     CRITICALITY reject  EXTENSION HSDSCH-DeleteList-RL-ReconfPrepFDD    PRESENCE optional } |
  { ID id-HSDSCH-RNTI                          CRITICALITY reject  EXTENSION HSDSCH-RNTI          PRESENCE optional } |
  { ID id-HSPDSCH-RL-ID                        CRITICALITY reject  EXTENSION RL-ID          PRESENCE optional },
  ...
}

```

```

UL-DPCH-Information-RL-ReconfPrepFDD ::= SEQUENCE {
  ul-ScramblingCode          UL-ScramblingCode          OPTIONAL,
  ul-SIR-Target              UL-SIR          OPTIONAL,
  minUL-ChannelisationCodeLength  MinUL-ChannelisationCodeLength  OPTIONAL,
  maxNrOfUL-DPDCHs          MaxNrOfUL-DPDCHs          OPTIONAL,
  -- This IE shall be present if minUL-ChannelisationCodeLength Ie is set to 4
  ul-PunctureLimit          PunctureLimit          OPTIONAL,
  tFCS                      TFCS          OPTIONAL,
  ul-DPCCH-SlotFormat        UL-DPCCH-SlotFormat        OPTIONAL,
  diversityMode              DiversityMode          OPTIONAL,
  sSDT-CellIDLength          SSdT-CellID-Length          OPTIONAL,
  s-FieldLength              S-FieldLength          OPTIONAL,
  iE-Extensions              ProtocolExtensionContainer { { UL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs } }  OPTIONAL,
  ...
}

```

```

UL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

DL-DPCH-Information-RL-ReconfPrepFDD ::= SEQUENCE {
  tFCS                      TFCS          OPTIONAL,
  dl-DPCH-SlotFormat        DL-DPCH-SlotFormat        OPTIONAL,
  tFCI-SignallingMode        TFCI-SignallingMode        OPTIONAL,
  tFCI-Presence              TFCI-Presence          OPTIONAL,
  -- This IE shall be present if the DL DPCH Slot Format IE is set to any of the values from 12 to 16
  multiplexingPosition        MultiplexingPosition          OPTIONAL,
  pDSCH-CodeMapping          PDSCH-CodeMapping          OPTIONAL,
  pDSCH-RL-ID                RL-ID          OPTIONAL,

```

```

    limitedPowerIncrease
    iE-Extensions
    ...
}

DL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-DeleteList-RL-ReconfPrepFDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfPrepFDD

DCH-DeleteItem-RL-ReconfPrepFDD ::= SEQUENCE {
    dCH-ID
    iE-Extensions
    ...
}

DCH-DeleteItem-RL-ReconfPrepFDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DSCH-ModifyList-RL-ReconfPrepFDD ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF ProtocolIE-Single-Container {{DSCH-ModifyItemIE-RL-ReconfPrepFDD }}

DSCH-ModifyItemIE-RL-ReconfPrepFDD NBAP-PROTOCOL-IES ::= {
    { ID    id-DSCH-ModifyItem-RL-ReconfPrepFDD    CRITICALITY reject          TYPE    DSCH-ModifyItem-RL-ReconfPrepFDD    PRESENCE mandatory}
}

DSCH-ModifyItem-RL-ReconfPrepFDD ::= SEQUENCE {
    dSCH-ID
    dl-TransportFormatSet
    allocationRetentionPriority
    frameHandlingPriority
    toAWS
    toAWE
    transportBearerRequestIndicator
    iE-Extensions
    ...
}

DSCH-ModifyItem-RL-ReconfPrepFDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    { ID    id-bindingID
      CRITICALITY ignore          EXTENSION BindingID
      PRESENCE optional }|
    { ID    id-transportlayeraddress
      CRITICALITY ignore          EXTENSION TransportLayerAddress
      PRESENCE optional },
    ...
}

DSCH-DeleteList-RL-ReconfPrepFDD ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF ProtocolIE-Single-Container {{DSCH-DeleteItemIE-RL-ReconfPrepFDD }}

DSCH-DeleteItemIE-RL-ReconfPrepFDD NBAP-PROTOCOL-IES ::= {
    { ID    id-DSCH-DeleteItem-RL-ReconfPrepFDD    CRITICALITY reject          TYPE    DSCH-DeleteItem-RL-ReconfPrepFDD    PRESENCE mandatory}
}

DSCH-DeleteItem-RL-ReconfPrepFDD ::= SEQUENCE {
    dSCH-ID
    DSCH-ID,

```

```

    iE-Extensions          ProtocolExtensionContainer { { DSCH-DeleteItem-RL-ReconfPrepFDD-ExtIEs } }    OPTIONAL,
    ...
}

DSCH-DeleteItem-RL-ReconfPrepFDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TFCI2-BearerSpecificInformation-RL-ReconfPrepFDD ::= CHOICE {
    addOrModify          AddOrModify-TFCI2-RL-ReconfPrepFDD,
    delete              NULL
}

AddOrModify-TFCI2-RL-ReconfPrepFDD ::= SEQUENCE {
    toAWS                ToAWS,
    toAWE                ToAWE,
    iE-Extensions       ProtocolExtensionContainer { { AddOrModify-TFCI2-RL-ReconfPrepFDD-ExtIEs } }    OPTIONAL,
    ...
}

AddOrModify-TFCI2-RL-ReconfPrepFDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-TFCI2BearerRequestIndicator    CRITICALITY reject          EXTENSION TFCI2BearerRequestIndicator          PRESENCE optional },
    ...
}

RL-InformationList-RL-ReconfPrepFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { { RL-InformationItemIE-RL-ReconfPrepFDD } }

RL-InformationItemIE-RL-ReconfPrepFDD NBAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationItem-RL-ReconfPrepFDD          CRITICALITY reject          TYPE          RL-InformationItem-RL-
ReconfPrepFDD          PRESENCE mandatory}
}

RL-InformationItem-RL-ReconfPrepFDD ::= SEQUENCE {
    rL-ID                RL-ID,
    dl-CodeInformation   FDD-DL-CodeInformation          OPTIONAL,
    maxDL-Power         DL-Power          OPTIONAL,
    minDL-Power         DL-Power          OPTIONAL,
    sSDT-Indication     SSDT-Indication          OPTIONAL,
    sSDT-Cell-Identity  SSDT-Cell-Identity          OPTIONAL,
    -- The IE shall be present if the SSDT Indication IE is set to "SSDT Active in the UE"
    transmitDiversityIndicator  TransmitDiversityIndicator          OPTIONAL,
    -- This IE shall be present if Diversity Mode IE is present in UL DPCH Information IE and it is not set to "none"
    iE-Extensions       ProtocolExtensionContainer { { RL-InformationItem-RL-ReconfPrepFDD-ExtIEs } }    OPTIONAL,
    ...
}

RL-InformationItem-RL-ReconfPrepFDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-SSDT-CellIDforEDSCHPC CRITICALITY ignore EXTENSION SSDT-Cell-Identity          PRESENCE conditional }|
    -- This IE shall be present if Enhanced DSCH PC IE is present in the DSCH Common Information IE.
    { ID id-DLReferencePower      CRITICALITY ignore EXTENSION DL-Power          PRESENCE optional }|
    { ID id-RL-Specific-DCH-Info   CRITICALITY ignore EXTENSION RL-Specific-DCH-Info          PRESENCE optional }|
    { ID id-DL-DPCH-TimingAdjustment CRITICALITY reject EXTENSION DL-DPCH-TimingAdjustment PRESENCE optional },
    ...
}

```

```

}

HSDSCH-DeleteList-RL-ReconfPrepFDD ::= SEQUENCE (SIZE (1..maxNrOfMACdFlows)) OF HSDSCH-DeleteItem-RL-ReconfPrepFDD

HSDSCH-DeleteItem-RL-ReconfPrepFDD ::= SEQUENCE {
    hsDSCH-MACdFlow-ID          HSDSCH-MACdFlow-ID,
    iE-Extensions               ProtocolExtensionContainer { { HSDSCH-DeleteItem-RL-ReconfPrepFDD-ExtIEs } } OPTIONAL,
    ...
}

HSDSCH-DeleteItem-RL-ReconfPrepFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- RADIO LINK RECONFIGURATION PREPARE TDD
--
-- *****

RadioLinkReconfigurationPrepareTDD ::= SEQUENCE {
    protocolIEs                ProtocolIE-Container {{RadioLinkReconfigurationPrepareTDD-IEs}},
    protocolExtensions         ProtocolExtensionContainer {{RadioLinkReconfigurationPrepareTDD-Extensions}} OPTIONAL,
    ...
}

RadioLinkReconfigurationPrepareTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-NodeB-CommunicationContextID          CRITICALITY reject TYPE NodeB-CommunicationContextID
      PRESENCE mandatory } |
    { ID id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD CRITICALITY reject TYPE UL-CCTrCH-
      InformationAddList-RL-ReconfPrepTDD PRESENCE optional } |
    { ID id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD CRITICALITY reject TYPE UL-CCTrCH-
      InformationModifyList-RL-ReconfPrepTDD PRESENCE optional } |
    { ID id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD CRITICALITY reject TYPE UL-CCTrCH-
      InformationDeleteList-RL-ReconfPrepTDD PRESENCE optional } |
    { ID id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD CRITICALITY reject TYPE DL-CCTrCH-
      InformationAddList-RL-ReconfPrepTDD PRESENCE optional } |
    { ID id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD CRITICALITY reject TYPE DL-CCTrCH-
      InformationModifyList-RL-ReconfPrepTDD PRESENCE optional } |
    { ID id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD CRITICALITY reject TYPE DL-CCTrCH-
      InformationDeleteList-RL-ReconfPrepTDD PRESENCE optional } |
    { ID id-TDD-DCHs-to-Modify CRITICALITY reject TYPE TDD-DCHs-to-Modify PRESENCE optional
      } |
    { ID id-DCHs-to-Add-TDD CRITICALITY reject TYPE DCH-TDD-Information PRESENCE optional
      } |
    { ID id-DCH-DeleteList-RL-ReconfPrepTDD CRITICALITY reject TYPE DCH-DeleteList-RL-ReconfPrepTDD
      PRESENCE optional } |
    { ID id-DSCH-Information-ModifyList-RL-ReconfPrepTDD CRITICALITY reject TYPE DSCH-Information-ModifyList-RL-
      ReconfPrepTDD PRESENCE optional } |
    { ID id-DSCHs-to-Add-TDD CRITICALITY reject TYPE DSCH-TDD-Information PRESENCE optional } |
    { ID id-DSCH-Information-DeleteList-RL-ReconfPrepTDD CRITICALITY reject TYPE DSCH-Information-DeleteList-RL-
      ReconfPrepTDD PRESENCE optional } |
}

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```

    { ID id-USCH-Information-ModifyList-RL-ReconfPrepTDD
ReconfPrepTDD PRESENCE optional } |
    { ID id-USCH-Information-Add CRITICALITY reject TYPE USCH-Information
    { ID id-USCH-Information-DeleteList-RL-ReconfPrepTDD
ReconfPrepTDD PRESENCE optional } |
    { ID id-RL-Information-RL-ReconfPrepTDD
    PRESENCE optional },
    ...
}

RadioLinkReconfigurationPrepareTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-SignallingBearerRequestIndicator CRITICALITY reject EXTENSION SignallingBearerRequestIndicator PRESENCE optional } |
    { ID id-HSDSCH-Information-to-Modify CRITICALITY reject EXTENSION HSDSCH-Information-to-Modify PRESENCE optional } |
    { ID id-HSDSCH-TDD-Information-to-Add CRITICALITY reject EXTENSION HSDSCH-TDD-Information PRESENCE optional } |
    { ID id-HSDSCH-TDD-Information-to-Delete CRITICALITY reject EXTENSION HSDSCH-DeleteList-RL-ReconfPrepTDD PRESENCE optional } |
    { ID id-HSDSCH-RNTI CRITICALITY reject EXTENSION HSDSCH-RNTI PRESENCE optional } |
    { ID id-HSPDSCH-RL-ID CRITICALITY reject EXTENSION RL-ID PRESENCE optional },
    ...
}

UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD

UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCCTrCH-ID CCTrCH-ID,
    tFCS TFCS,
    tFCI-Coding TFCI-Coding,
    punctureLimit PunctureLimit,
    ul-DPCH-InformationList UL-DPCH-InformationAddList-RL-ReconfPrepTDD OPTIONAL,
    iE-Extensions ProtocolExtensionContainer { { UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
    ...
}

UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD CRITICALITY reject EXTENSION UL-DPCH-InformationAddList-RL-ReconfPrepTDD
    PRESENCE optional } | -- For 3.84Mcps TDD only
    { ID id-UL-SIRTarget CRITICALITY reject EXTENSION UL-SIR PRESENCE optional },
    -- This IE shall be mandatory for 1.28Mcps TDD, not applicable for 3.84Mcps TDD.
    ...
}

UL-DPCH-InformationAddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container { { UL-DPCH-InformationAddListIEs-RL-ReconfPrepTDD } }

UL-DPCH-InformationAddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD CRITICALITY reject TYPE UL-DPCH-InformationAddItem-RL-ReconfPrepTDD PRESENCE
    mandatory }
}

UL-DPCH-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod RepetitionPeriod,
    repetitionLength RepetitionLength,
    tdd-DPCHOffset TDD-DPCHOffset,
    uL-Timeslot-Information UL-Timeslot-Information,
    iE-Extensions ProtocolExtensionContainer { { UL-DPCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
}

```



```

}
...
}
UL-DPCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
...
}
UL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-LCR-InformationAddListIEs-RL-ReconfPrepTDD }}
UL-DPCH-LCR-InformationAddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
  { ID id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD  CRITICALITY reject          TYPE UL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD
  PRESENCE mandatory }    -- For 1.28Mcps TDD only
}
UL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
  repetitionPeriod          RepetitionPeriod,
  repetitionLength         RepetitionLength,
  tdd-DPCHoffset           TDD-DPCHoffset,
  uL-Timeslot-InformationLCR  UL-TimeslotLCR-Information,
  iE-Extensions            ProtocolExtensionContainer { { UL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD-ExtIEs } }    OPTIONAL,
  ...
}
UL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
...
}
UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD
UL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
  cCTrCH-ID                CCTrCH-ID,
  tFCS                     TFCS                                OPTIONAL,
  tFCI-Coding              TFCI-Coding                        OPTIONAL,
  punctureLimit            PunctureLimit                      OPTIONAL,
  ul-DPCH-InformationAddList  UL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD    OPTIONAL,
  ul-DPCH-InformationModifyList  UL-DPCH-InformationModify-ModifyList-RL-ReconfPrepTDD    OPTIONAL,
  ul-DPCH-InformationDeleteList  UL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD    OPTIONAL,
  iE-Extensions            ProtocolExtensionContainer { { UL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs } }
  OPTIONAL,
  ...
}
UL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-UL-DPCH-LCR-InformationModify-AddList  CRITICALITY reject          EXTENSION  UL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD
  PRESENCE optional }|    -- For 1.28Mcps TDD only
  { ID id-UL-SIRTarget      CRITICALITY reject          EXTENSION  UL-SIR          PRESENCE optional          },
  -- This IE shall be applicable for 1.28Mcps TDD only.
  ...
}
UL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD }}
UL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {

```

```

    { ID id-UL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD    CRITICALITY reject      TYPE UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD
      PRESENCE mandatory }
  }

UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD ::= SEQUENCE {
  repetitionPeriod          RepetitionPeriod,
  repetitionLength          RepetitionLength,
  tdd-DPCHOffset           TDD-DPCHOffset,
  uL-Timeslot-Information  UL-Timeslot-Information,
  iE-Extensions            ProtocolExtensionContainer { { UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs } }
  OPTIONAL,
  ...
}

UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

UL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-LCR-InformationModify-AddListIEs-RL-
ReconfPrepTDD }}

UL-DPCH-LCR-InformationModify-AddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
  { ID id-UL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD    CRITICALITY reject      TYPE UL-DPCH-LCR-InformationModify-AddItem-RL-
ReconfPrepTDD      PRESENCE mandatory }
}

UL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD ::= SEQUENCE {
  repetitionPeriod          RepetitionPeriod,
  repetitionLength          RepetitionLength,
  tdd-DPCHOffset           TDD-DPCHOffset,
  uL-Timeslot-InformationLCR  UL-TimeslotLCR-Information,
  iE-Extensions            ProtocolExtensionContainer { { UL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs } }
  OPTIONAL,
  ...
}

UL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

UL-DPCH-InformationModify-ModifyList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-InformationModify-ModifyListIEs-RL-ReconfPrepTDD }}

UL-DPCH-InformationModify-ModifyListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
  { ID id-UL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD    CRITICALITY reject      TYPE UL-DPCH-InformationModify-ModifyItem-RL-
ReconfPrepTDD      PRESENCE mandatory }
}

UL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
  repetitionPeriod          RepetitionPeriod    OPTIONAL,
  repetitionLength          RepetitionLength    OPTIONAL,
  tdd-DPCHOffset           TDD-DPCHOffset      OPTIONAL,
  uL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD      UL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD    OPTIONAL,
  ...
}

```

```

    iE-Extensions
    OPTIONAL,
    ...
}

UL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-UL-TimeslotLCR-Information-RL-ReconfPrepTDD CRITICALITY reject EXTENSION UL-TimeslotLCR-InformationModify-ModifyList-RL-
ReconfPrepTDD PRESENCE optional }, -- For 1.28Mcps TDD only
    ...
}

UL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfULTSS)) OF UL-Timeslot-InformationModify-ModifyItem-RL-
ReconfPrepTDD -- For 3.84Mcps TDD only

UL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    timeSlot TimeSlot,
    midambleShiftAndBurstType MidambleShiftAndBurstType OPTIONAL,
    tFCI-Presence TFCI-Presence OPTIONAL,
    uL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD UL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD OPTIONAL,
    iE-Extensions ProtocolExtensionContainer { { UL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs } }
    OPTIONAL,
    ...
}

UL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD

UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dpch-ID DPCH-ID,
    tdd-ChannelisationCode TDD-ChannelisationCode OPTIONAL,
    iE-Extensions ProtocolExtensionContainer { { UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs } }
    OPTIONAL,
    ...
}

UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-TimeslotLCR-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfULTSLCRs)) OF UL-Timeslot-LCR-InformationModify-
ModifyItem-RL-ReconfPrepTDD -- For 1.28Mcps TDD only
UL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    timeSlotLCR TimeSlotLCR,
    midambleShiftLCR MidambleShiftLCR OPTIONAL,
    tFCI-Presence TFCI-Presence OPTIONAL,
    uL-Code-InformationModify-ModifyList-RL-ReconfPrepTDDLcr UL-Code-InformationModify-ModifyList-RL-ReconfPrepTDDLcr OPTIONAL,
    iE-Extensions ProtocolExtensionContainer { { UL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs } }
    OPTIONAL,
    ...
}

```

```

UL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Code-InformationModify-ModifyList-RL-ReconfPrepTDDLRCR ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF UL-Code-InformationModify-ModifyItem-RL-
ReconfPrepTDD

UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDDLRCR ::= SEQUENCE {
    dPCH-ID                DPCH-ID,
    tdd-ChannelisationCodeLCR    TDD-ChannelisationCodeLCR    OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { { UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDDLRCR-ExtIEs } }
    OPTIONAL,
    ...
}

UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDDLRCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-InformationModify-DeleteListIEs-RL-ReconfPrepTDD }}

UL-DPCH-InformationModify-DeleteListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD    CRITICALITY reject        TYPE UL-DPCH-InformationModify-DeleteListIE-RL-
ReconfPrepTDD        PRESENCE mandatory }
}

UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF UL-DPCH-InformationModify-DeleteItem-RL-
ReconfPrepTDD

UL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dPCH-ID                DPCH-ID,
    iE-Extensions            ProtocolExtensionContainer { { UL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD-ExtIEs } }
    OPTIONAL,
    ...
}

UL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD

UL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCTrCH-ID                CCTrCH-ID,
    iE-Extensions            ProtocolExtensionContainer { { UL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIEs } }
    OPTIONAL,
    ...
}

UL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD

```
DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
  cCTrCH-ID          CCTrCH-ID,
  tFCS              TFCS,
  tFCI-Coding       TFCI-Coding,
  punctureLimit     PunctureLimit,
  cCTrCH-TPCList    CCTrCH-TPCAddList-RL-ReconfPrepTDD          OPTIONAL,
  dl-DPCH-InformationList DL-DPCH-InformationAddList-RL-ReconfPrepTDD  OPTIONAL,
  iE-Extensions     ProtocolExtensionContainer { { DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs } }
  OPTIONAL,
  ...
}
```

```
DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-DL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD  CRITICALITY reject      EXTENSION          DL-DPCH-LCR-
InformationAddList-RL-ReconfPrepTDD  PRESENCE optional } | -- For 1.28Mcps TDD only
  { ID id-CCTrCH-Initial-DL-Power-RL-ReconfPrepTDD        CRITICALITY ignore      EXTENSION DL-Power          PRESENCE optional },
  ...
}
```

CCTrCH-TPCAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF CCTrCH-TPCAddItem-RL-ReconfPrepTDD -- For 3.84Mcps TDD only

```
CCTrCH-TPCAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
  cCTrCH-ID          CCTrCH-ID,
  iE-Extensions     ProtocolExtensionContainer { { CCTrCH-TPCAddItem-RL-ReconfPrepTDD-ExtIEs } }    OPTIONAL,
  ...
}
```

```
CCTrCH-TPCAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

DL-DPCH-InformationAddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container { { DL-DPCH-InformationAddListIEs-RL-ReconfPrepTDD } }

```
DL-DPCH-InformationAddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
  { ID id-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD  CRITICALITY reject      TYPE DL-DPCH-InformationAddItem-RL-ReconfPrepTDD  PRESENCE
mandatory }
}
```

```
DL-DPCH-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
  repetitionPeriod      RepetitionPeriod,
  repetitionLength      RepetitionLength,
  tdd-DPCHOffset        TDD-DPCHOffset,
  dl-Timeslot-Information DL-Timeslot-Information,
  iE-Extensions         ProtocolExtensionContainer { { DL-DPCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs } }    OPTIONAL,
  ...
}
```

```
DL-DPCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

```

DL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container { { DL-DPCH-LCR-InformationAddListIEs-RL-ReconfPrepTDD } }

DL-DPCH-LCR-InformationAddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
  { ID id-DL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD   CRITICALITY reject           TYPE DL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD
    PRESENCE mandatory } -- For 1.28Mcps TDD only
}

DL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD ::= SEQUENCE {
  repetitionPeriod          RepetitionPeriod,
  repetitionLength          RepetitionLength,
  tdd-DPCHOffset            TDD-DPCHOffset,
  dl-Timeslot-InformationLCR DL-TimeslotLCR-Information,
  iE-Extensions             ProtocolExtensionContainer { { DL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
  ...
}

DL-DPCH-LCR-InformationAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD

DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
  cCTrCH-ID                CCTrCH-ID,
  tFCS                      TFCS OPTIONAL,
  tFCI-Coding               TFCI-Coding OPTIONAL,
  punctureLimit             PunctureLimit OPTIONAL,
  cCTrCH-TPCList            CCTrCH-TPCModifyList-RL-ReconfPrepTDD OPTIONAL,
  dl-DPCH-InformationAddList DL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD OPTIONAL,
  dl-DPCH-InformationModifyList DL-DPCH-InformationModify-ModifyList-RL-ReconfPrepTDD OPTIONAL,
  dl-DPCH-InformationDeleteList DL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD OPTIONAL,
  iE-Extensions             ProtocolExtensionContainer { { DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs } }
  OPTIONAL,
  ...
}

DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
  { ID id-DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD CRITICALITY reject           EXTENSION           DL-DPCH-LCR-InformationModify-
  AddList-RL-ReconfPrepTDD PRESENCE optional }
}

CCTrCH-TPCModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF CCTrCH-TPCModifyItem-RL-ReconfPrepTDD

CCTrCH-TPCModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
  cCTrCH-ID                CCTrCH-ID,
  iE-Extensions             ProtocolExtensionContainer { { CCTrCH-TPCModifyItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
  ...
}

CCTrCH-TPCModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

}

DL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD }} --
For 3.84Mcps TDD only

DL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
  { ID id-DL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD  CRITICALITY reject          TYPE DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD
  PRESENCE mandatory } -- For 1.28Mcps TDD only
}

DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD ::= SEQUENCE {
  repetitionPeriod          RepetitionPeriod,
  repetitionLength          RepetitionLength,
  tdd-DPCHOffset            TDD-DPCHOffset,
  dL-Timeslot-Information   DL-Timeslot-Information,
  iE-Extensions             ProtocolExtensionContainer { { DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
  ...
}

DL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-LCR-InformationModify-AddListIEs-RL-
ReconfPrepTDD }}

DL-DPCH-LCR-InformationModify-AddListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
  { ID id-DL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD  CRITICALITY reject          TYPE DL-DPCH-LCR-InformationModify-AddItem-RL-
ReconfPrepTDD          PRESENCE mandatory }
}

DL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD ::= SEQUENCE {
  repetitionPeriod          RepetitionPeriod,
  repetitionLength          RepetitionLength,
  tdd-DPCHOffset            TDD-DPCHOffset,
  dL-Timeslot-InformationLCR DL-TimeslotLCR-Information,
  iE-Extensions             ProtocolExtensionContainer { { DL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs } }
  OPTIONAL,
  ...
}

DL-DPCH-LCR-InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-DPCH-InformationModify-ModifyList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ DL-DPCH-InformationModify-ModifyListIEs-RL-ReconfPrepTDD }}

DL-DPCH-InformationModify-ModifyListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
  { ID id-DL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD  CRITICALITY reject          TYPE DL-DPCH-InformationModify-ModifyItem-RL-
ReconfPrepTDD          PRESENCE mandatory }
}

DL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {

```

```

repetitionPeriod                RepetitionPeriod                OPTIONAL,
repetitionLength                RepetitionLength                OPTIONAL,
tdd-DPCHoffset                  TDD-DPCHoffset                  OPTIONAL,
DL-Timeslot-InformationAddModify-ModifyList-RL-ReconfPrepTDD  DL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD  OPTIONAL,
iE-Extensions                    ProtocolExtensionContainer { { DL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
OPTIONAL,
...
}

DL-DPCH-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD  CRITICALITY reject  EXTENSION  DL-Timeslot-
LCR-InformationModify-ModifyList-RL-ReconfPrepTDD  PRESENCE optional },
  ...
}

DL-Timeslot-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDLTSS)) OF DL-Timeslot-InformationModify-ModifyItem-RL-
ReconfPrepTDD

DL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
  timeSlot                TimeSlot,
  midambleShiftAndBurstType  MidambleShiftAndBurstType  OPTIONAL,
  tFCI-Presence            TFCI-Presence  OPTIONAL,
  DL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD  DL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD  OPTIONAL,
  iE-Extensions            ProtocolExtensionContainer { { DL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
OPTIONAL,
  ...
}

DL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (0..maxNrOfDPCHs)) OF DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD

DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
  dPCH-ID                DPCH-ID,
  tdd-ChannelisationCode  TDD-ChannelisationCode  OPTIONAL,
  iE-Extensions            ProtocolExtensionContainer { { DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }
OPTIONAL,
  ...
}

DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDLTSLCRs)) OF DL-Timeslot-InformationModify-ModifyItem-
RL-ReconfPrepTDD

DL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
  timeSlotLCR                TimeSlotLCR,
  midambleShiftLCR            MidambleShiftLCR  OPTIONAL,
  tFCI-Presence                TFCI-Presence  OPTIONAL,
  DL-Code-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD  DL-Code-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD  OPTIONAL,

```



```

    iE-Extensions
    OPTIONAL,
    ...
}

DL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
DL-Code-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (0..maxNrOfDPCHs)) OF DL-Code-InformationModify-ModifyItem-RL-
ReconfPrepTDD

DL-Code-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dPCH-ID
    tdd-ChannelisationCodeLCR
    iE-Extensions
    OPTIONAL,
    ...
    DPCH-ID,
    TDD-ChannelisationCodeLCR
    ProtocolExtensionContainer { { DL-Code-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs } }
}

DL-Code-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-InformationModify-DeleteList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container { { DL-DPCH-InformationModify-DeleteListIEs-RL-ReconfPrepTDD } }

DL-DPCH-InformationModify-DeleteListIEs-RL-ReconfPrepTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD CRITICALITY reject TYPE DL-DPCH-InformationModify-DeleteListIE-RL-
ReconfPrepTDD PRESENCE mandatory }
}

DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF DL-DPCH-InformationModify-DeleteItem-RL-
ReconfPrepTDD

DL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dPCH-ID
    iE-Extensions
    OPTIONAL,
    ...
    DPCH-ID,
    ProtocolExtensionContainer { { DL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD-ExtIEs } }
}

DL-DPCH-InformationModify-DeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD

DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCTrCH-ID
    iE-Extensions
    OPTIONAL,
    ...
    CCTrCH-ID,
    ProtocolExtensionContainer { { DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIEs } }
}

```

```

DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfPrepTDD

DCH-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dCH-ID                DCH-ID,
    iE-Extensions        ProtocolExtensionContainer { { DCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs} }    OPTIONAL,
    ...
}

DCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DSCH-Information-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-Information-ModifyItem-RL-ReconfPrepTDD

DSCH-Information-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dSCH-ID                DSCH-ID,
    cCTrCH-ID              CCTrCH-ID                OPTIONAL,
    transportFormatSet     TransportFormatSet       OPTIONAL,
    allocationRetentionPriority  AllocationRetentionPriority  OPTIONAL,
    frameHandlingPriority   FrameHandlingPriority   OPTIONAL,
    toAWS                   ToAWS                    OPTIONAL,
    toAWE                    ToAWE                     OPTIONAL,
    transportBearerRequestIndicator  TransportBearerRequestIndicator,
    iE-Extensions        ProtocolExtensionContainer { { DSCH-Information-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }    OPTIONAL,
    ...
}

DSCH-Information-ModifyItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-bindingID          CRITICALITY ignore     EXTENSION  BindingID          PRESENCE          optional }|
    { ID id-transportlayeraddress  CRITICALITY ignore     EXTENSION  TransportLayerAddress  PRESENCE          optional },
    ...
}

DSCH-Information-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-Information-DeleteItem-RL-ReconfPrepTDD

DSCH-Information-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dSCH-ID                DSCH-ID,
    iE-Extensions        ProtocolExtensionContainer { { DSCH-Information-DeleteItem-RL-ReconfPrepTDD-ExtIEs} }    OPTIONAL,
    ...
}

DSCH-Information-DeleteItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

USCH-Information-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfUSCHs)) OF USCH-Information-ModifyItem-RL-ReconfPrepTDD

USCH-Information-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    uSCH-ID                USCH-ID,

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transportFormatSet          TransportFormatSet          OPTIONAL,
allocationRetentionPriority AllocationRetentionPriority OPTIONAL,
cCTrCH-ID                   CCTrCH-ID                   OPTIONAL,
transportBearerRequestIndicator TransportBearerRequestIndicator,
iE-Extensions               ProtocolExtensionContainer { { USCH-Information-ModifyItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
...
}

USCH-Information-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-bindingID          CRITICALITY ignore      EXTENSION BindingID      PRESENCE optional }|
  { ID id-transportlayeraddress CRITICALITY ignore      EXTENSION TransportLayerAddress PRESENCE optional },
  ...
}

USCH-Information-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfUSCHs)) OF USCH-Information-DeleteItem-RL-ReconfPrepTDD

USCH-Information-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
  uSCH-ID                    USCH-ID,
  iE-Extensions              ProtocolExtensionContainer { { USCH-Information-DeleteItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
  ...
}

USCH-Information-DeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

RL-Information-RL-ReconfPrepTDD ::= SEQUENCE {
  rL-ID                      RL-ID,
  maxDL-Power                DL-Power                    OPTIONAL,
  minDL-Power                DL-Power                    OPTIONAL,
  iE-Extensions              ProtocolExtensionContainer { { RL-Information-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
  ...
}

RL-Information-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-InitDL-Power      CRITICALITY ignore      EXTENSION DL-Power      PRESENCE optional }|
  { ID id-RL-Specific-DCH-Info CRITICALITY ignore      EXTENSION RL-Specific-DCH-Info PRESENCE optional },
  ...
}

HSDSCH-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfMACdFlows)) OF HSDSCH-DeleteItem-RL-ReconfPrepTDD

HSDSCH-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
  hsDSCH-MACdFlow-ID        HSDSCH-MACdFlow-ID,
  iE-Extensions              ProtocolExtensionContainer { { HSDSCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
  ...
}

HSDSCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

-- *****
--
-- RADIO LINK RECONFIGURATION READY
--
-- *****

RadioLinkReconfigurationReady ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkReconfigurationReady-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{RadioLinkReconfigurationReady-Extensions}}      OPTIONAL,
    ...
}

RadioLinkReconfigurationReady-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CRNC-CommunicationContextID          CRITICALITY ignore TYPE CRNC-CommunicationContextID
      PRESENCE mandatory } |
    { ID id-RL-InformationResponseList-RL-ReconfReady CRITICALITY ignore TYPE RL-InformationResponseList-RL-
ReconfReady PRESENCE optional } |
    { ID id-CriticalityDiagnostics              CRITICALITY ignore TYPE CriticalityDiagnostics
      PRESENCE optional },
    ...
}

RadioLinkReconfigurationReady-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-TargetCommunicationControlPortID CRITICALITY ignore EXTENSION CommunicationControlPortID PRESENCE optional },
    ...
}

RL-InformationResponseList-RL-ReconfReady ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationResponseItemIE-RL-
ReconfReady}}

RL-InformationResponseItemIE-RL-ReconfReady NBAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationResponseItem-RL-ReconfReady CRITICALITY ignore TYPE RL-InformationResponseItem-
RL-ReconfReady PRESENCE mandatory }
}

RL-InformationResponseItem-RL-ReconfReady ::= SEQUENCE {
    rL-ID RL-ID,
    dCH-InformationResponseList-RL-ReconfReady DCH-InformationResponseList-RL-ReconfReady OPTIONAL,
    dSCH-InformationResponseList-RL-ReconfReady DSCH-InformationResponseList-RL-ReconfReady OPTIONAL,
    uSCH-InformationResponseList-RL-ReconfReady USCH-InformationResponseList-RL-ReconfReady OPTIONAL,
    tFCI2-BearerInformationResponse TFCI2-BearerInformationResponse OPTIONAL, --FDD only
    iE-Extensions ProtocolExtensionContainer { { RL-InformationResponseItem-RL-ReconfReady-ExtIEs} } OPTIONAL,
    ...
}

RL-InformationResponseItem-RL-ReconfReady-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-PowerBalancing-UpdatedIndicator CRITICALITY ignore EXTENSION DL-PowerBalancing-UpdatedIndicator PRESENCE optional } |
    { ID id-HSDSCH-FDD-Information-Response CRITICALITY ignore EXTENSION HSDSCH-FDD-Information-Response PRESENCE optional } |
    { ID id-HSDSCH-TDD-Information-Response CRITICALITY ignore EXTENSION HSDSCH-TDD-Information-Response PRESENCE optional },
    ...
}

DCH-InformationResponseList-RL-ReconfReady ::= ProtocolIE-Single-Container {{ DCH-InformationResponseListIEs-RL-ReconfReady }}

```

```

DCH-InformationResponseListIEs-RL-ReconfReady NBAP-PROTOCOL-IES ::= {
  { ID id-DCH-InformationResponse  CRITICALITY ignore  TYPE DCH-InformationResponse  PRESENCE mandatory }
}

DSCH-InformationResponseList-RL-ReconfReady ::= ProtocolIE-Single-Container {{ DSCH-InformationResponseListIEs-RL-ReconfReady }}

DSCH-InformationResponseListIEs-RL-ReconfReady NBAP-PROTOCOL-IES ::= {
  { ID id-DSCH-InformationResponse  CRITICALITY ignore  TYPE DSCH-InformationResponse  PRESENCE mandatory }
}

USCH-InformationResponseList-RL-ReconfReady ::= ProtocolIE-Single-Container {{ USCH-InformationResponseListIEs-RL-ReconfReady }}

USCH-InformationResponseListIEs-RL-ReconfReady NBAP-PROTOCOL-IES ::= {
  { ID id-USCH-InformationResponse  CRITICALITY ignore  TYPE USCH-InformationResponse  PRESENCE mandatory }
}

-- *****
--
-- RADIO LINK RECONFIGURATION FAILURE
--
-- *****

RadioLinkReconfigurationFailure ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container  {{RadioLinkReconfigurationFailure-IEs}},
  protocolExtensions  ProtocolExtensionContainer  {{RadioLinkReconfigurationFailure-Extensions}}          OPTIONAL,
  ...
}

RadioLinkReconfigurationFailure-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-CRNC-CommunicationContextID  CRITICALITY ignore  TYPE CRNC-CommunicationContextID
    PRESENCE mandatory } |
  { ID id-CauseLevel-RL-ReconfFailure  CRITICALITY ignore  TYPE CauseLevel-RL-ReconfFailure  PRESENCE mandatory } |
  { ID id-CriticalityDiagnostics  CRITICALITY ignore  TYPE CriticalityDiagnostics
    PRESENCE optional },
  ...
}

RadioLinkReconfigurationFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

CauseLevel-RL-ReconfFailure ::= CHOICE {
  generalCause          GeneralCauseList-RL-ReconfFailure,
  rLSpecificCause      RLSpecificCauseList-RL-ReconfFailure,
  ...
}

GeneralCauseList-RL-ReconfFailure ::= SEQUENCE {
  cause                  Cause,
  iE-Extensions          ProtocolExtensionContainer { { GeneralCauseItem-RL-ReconfFailure-ExtIEs } }          OPTIONAL,
  ...
}

```

```

GeneralCauseItem-RL-ReconfFailure-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

RLSpecificCauseList-RL-ReconfFailure ::= SEQUENCE {
  rL-ReconfigurationFailureList-RL-ReconfFailure  RL-ReconfigurationFailureList-RL-ReconfFailure  OPTIONAL,
  iE-Extensions  ProtocolExtensionContainer { { RLSpecificCauseItem-RL-ReconfFailure-ExtIEs } }  OPTIONAL,
  ...
}

RLSpecificCauseItem-RL-ReconfFailure-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

RL-ReconfigurationFailureList-RL-ReconfFailure ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-
ReconfigurationFailureItemIE-RL-ReconfFailure}}

RL-ReconfigurationFailureItemIE-RL-ReconfFailure  NBAP-PROTOCOL-IES ::= {
  { ID  id-RL-ReconfigurationFailureItem-RL-ReconfFailure  CRITICALITY  ignore  TYPE  RL-
ReconfigurationFailureItem-RL-ReconfFailure  PRESENCE  mandatory}
}

RL-ReconfigurationFailureItem-RL-ReconfFailure ::= SEQUENCE {
  rL-ID  RL-ID,
  cause  Cause,
  iE-Extensions  ProtocolExtensionContainer { { RL-ReconfigurationFailureItem-RL-ReconfFailure-ExtIEs } }
  OPTIONAL,
  ...
}

RL-ReconfigurationFailureItem-RL-ReconfFailure-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- RADIO LINK RECONFIGURATION COMMIT
--
-- *****

RadioLinkReconfigurationCommit ::= SEQUENCE {
  protocolIEs  ProtocolIE-Container  {{RadioLinkReconfigurationCommit-IEs}},
  protocolExtensions  ProtocolExtensionContainer  {{RadioLinkReconfigurationCommit-Extensions}}  OPTIONAL,
  ...
}

RadioLinkReconfigurationCommit-IEs  NBAP-PROTOCOL-IES ::= {
  { ID  id-NodeB-CommunicationContextID  CRITICALITY  ignore  TYPE  NodeB-CommunicationContextID  PRESENCE  mandatory } |
  { ID  id-CFN  CRITICALITY  ignore  TYPE  CFN  PRESENCE } |
  mandatory } |
  { ID  id-Active-Pattern-Sequence-Information  CRITICALITY  ignore  TYPE  Active-Pattern-Sequence-Information  PRESENCE  optional },
  ...
}

```

```

}

RadioLinkReconfigurationCommit-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- RADIO LINK RECONFIGURATION CANCEL
--
-- *****

RadioLinkReconfigurationCancel ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkReconfigurationCancel-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{RadioLinkReconfigurationCancel-Extensions}}    OPTIONAL,
    ...
}

RadioLinkReconfigurationCancel-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-NodeB-CommunicationContextID      CRITICALITY    ignore    TYPE    NodeB-CommunicationContextID      PRESENCE mandatory },
    ...
}

RadioLinkReconfigurationCancel-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- RADIO LINK RECONFIGURATION REQUEST FDD
--
-- *****

RadioLinkReconfigurationRequestFDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkReconfigurationRequestFDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{RadioLinkReconfigurationRequestFDD-Extensions}}    OPTIONAL,
    ...
}

RadioLinkReconfigurationRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-NodeB-CommunicationContextID      CRITICALITY    reject    TYPE    NodeB-CommunicationContextID      PRESENCE
    mandatory } |
    { ID    id-UL-DPCH-Information-RL-ReconfRqstFDD    CRITICALITY    reject    TYPE    UL-DPCH-Information-RL-ReconfRqstFDD      PRESENCE
    optional } |
    { ID    id-DL-DPCH-Information-RL-ReconfRqstFDD    CRITICALITY    reject    TYPE    DL-DPCH-Information-RL-ReconfRqstFDD      PRESENCE
    optional } |
    { ID    id-FDD-DCHs-to-Modify                    CRITICALITY    reject    TYPE    FDD-DCHs-to-Modify                    PRESENCE optional } |
    { ID    id-DCHs-to-Add-FDD                        CRITICALITY    reject    TYPE    DCH-FDD-Information                    PRESENCE optional } |
    { ID    id-DCH-DeleteList-RL-ReconfRqstFDD        CRITICALITY    reject    TYPE    DCH-DeleteList-RL-ReconfRqstFDD        PRESENCE
    optional } |
    { ID    id-RL-InformationList-RL-ReconfRqstFDD    CRITICALITY    reject    TYPE    RL-InformationList-RL-ReconfRqstFDD      PRESENCE
    optional } |
}

```

```

    { ID id-Transmission-Gap-Pattern-Sequence-Information CRITICALITY reject TYPE Transmission-Gap-Pattern-Sequence-Information
  PRESENCE optional },
  ...
}

RadioLinkReconfigurationRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-SignallingBearerRequestIndicator CRITICALITY reject EXTENSION SignallingBearerRequestIndicator PRESENCE optional },
  ...
}

UL-DPCH-Information-RL-ReconfRqstFDD ::= SEQUENCE {
  ul-TFCS TFCS OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { { UL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs } } OPTIONAL,
  ...
}

UL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-DPCH-Information-RL-ReconfRqstFDD ::= SEQUENCE {
  dl-TFCS TFCS OPTIONAL,
  tFCI-SignallingMode TFCI-SignallingMode OPTIONAL,
  limitedPowerIncrease LimitedPowerIncrease OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { { DL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs } } OPTIONAL,
  ...
}

DL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DCH-DeleteList-RL-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfRqstFDD

DCH-DeleteItem-RL-ReconfRqstFDD ::= SEQUENCE {
  dCH-ID DCH-ID,
  iE-Extensions ProtocolExtensionContainer { { DCH-DeleteItem-RL-ReconfRqstFDD-ExtIEs } } OPTIONAL,
  ...
}

DCH-DeleteItem-RL-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

RL-InformationList-RL-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { { RL-InformationItemIE-RL-ReconfRqstFDD } }

RL-InformationItemIE-RL-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
  { ID id-RL-InformationItem-RL-ReconfRqstFDD CRITICALITY reject TYPE RL-InformationItem-RL-
  ReconfRqstFDD PRESENCE mandatory}
}

```



```

RL-InformationItem-RL-ReconfRqstFDD ::= SEQUENCE {
    rL-ID                               RL-ID,
    maxDL-Power                         DL-Power           OPTIONAL,
    minDL-Power                         DL-Power           OPTIONAL,
    dl-CodeInformation                  FDD-DL-CodeInformation OPTIONAL,
-- The IE shall be present if the Transmission Gap Pattern Sequence Information IE is included and the indicated Downlink Compressed Mode method for
at least one of the included Transmission Gap Pattern Sequence is set to "SF/2".
    iE-Extensions                      ProtocolExtensionContainer { { RL-InformationItem-RL-ReconfRqstFDD-ExtIEs} } OPTIONAL,
    ...
}

RL-InformationItem-RL-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DLReferencePower            CRITICALITY ignore EXTENSION DL-Power PRESENCE optional } |
    { ID id-RL-Specific-DCH-Info        CRITICALITY ignore EXTENSION RL-Specific-DCH-Info PRESENCE optional },
    ...
}

-- *****
--
-- RADIO LINK RECONFIGURATION REQUEST TDD
--
-- *****

RadioLinkReconfigurationRequestTDD ::= SEQUENCE {
    protocolIEs                        ProtocolIE-Container  {{RadioLinkReconfigurationRequestTDD-IEs}},
    protocolExtensions                  ProtocolExtensionContainer {{RadioLinkReconfigurationRequestTDD-Extensions}} OPTIONAL,
    ...
}

RadioLinkReconfigurationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-NodeB-CommunicationContextID PRESENCE mandatory } | CRITICALITY reject TYPE NodeB-
CommunicationContextID
    { ID id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD PRESENCE optional } | CRITICALITY notify TYPE UL-CCTrCH-
InformationModifyList-RL-ReconfRqstTDD
    { ID id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD PRESENCE optional } | CRITICALITY notify TYPE UL-CCTrCH-
InformationDeleteList-RL-ReconfRqstTDD
    { ID id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD PRESENCE optional } | CRITICALITY notify TYPE DL-CCTrCH-
InformationModifyList-RL-ReconfRqstTDD
    { ID id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD PRESENCE optional } | CRITICALITY notify TYPE DL-CCTrCH-
InformationDeleteList-RL-ReconfRqstTDD
    { ID id-TDD-DCHs-to-Modify          CRITICALITY reject TYPE TDD-DCHs-to-Modify PRESENCE optional } |
    { ID id-DCHs-to-Add-TDD             CRITICALITY reject TYPE DCH-TDD-Information PRESENCE optional } |
    PRESENCE optional } |
    { ID id-DCH-DeleteList-RL-ReconfRqstTDD CRITICALITY reject TYPE DCH-DeleteList-RL-
ReconfRqstTDD PRESENCE optional } |
    { ID id-RL-Information-RL-ReconfRqstTDD CRITICALITY ignore TYPE RL-Information-RL-ReconfRqstTDD
    PRESENCE optional },
    ...
}

RadioLinkReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-SignallingBearerRequestIndicator CRITICALITY reject EXTENSION SignallingBearerRequestIndicator PRESENCE optional },
    ...
}

```

```

}

UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ UL-CCTrCH-
InformationModifyItemIE-RL-ReconfRqstTDD}}

UL-CCTrCH-InformationModifyItemIE-RL-ReconfRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID      id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD      CRITICALITY      notify      TYPE      UL-CCTrCH-
InformationModifyItem-RL-ReconfRqstTDD      PRESENCE      mandatory}
}

UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD ::= SEQUENCE {
  cCTrCH-ID          CCTrCH-ID,
  tFCS              TFCS          OPTIONAL,
  punctureLimit     PunctureLimit OPTIONAL,
  iE-Extensions     ProtocolExtensionContainer { { UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs} }
  OPTIONAL,
  ...
}

UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ UL-CCTrCH-
InformationDeleteItemIE-RL-ReconfRqstTDD}}

UL-CCTrCH-InformationDeleteItemIE-RL-ReconfRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID      id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD      CRITICALITY      notify      TYPE      UL-CCTrCH-
InformationDeleteItem-RL-ReconfRqstTDD      PRESENCE      mandatory}
}

UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD ::= SEQUENCE {
  cCTrCH-ID          CCTrCH-ID,
  iE-Extensions     ProtocolExtensionContainer { { UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD-ExtIEs} }
  OPTIONAL,
  ...
}

UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ DL-CCTrCH-
InformationModifyItemIE-RL-ReconfRqstTDD}}

DL-CCTrCH-InformationModifyItemIE-RL-ReconfRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID      id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD      CRITICALITY      notify      TYPE      DL-CCTrCH-
InformationModifyItem-RL-ReconfRqstTDD      PRESENCE      mandatory}
}

DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD ::= SEQUENCE {
  cCTrCH-ID          CCTrCH-ID,
  tFCS              TFCS          OPTIONAL,

```

```

    punctureLimit
    iE-Extensions
    OPTIONAL,
    ...
}

DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ DL-CCTrCH-
InformationDeleteItemIE-RL-ReconfRqstTDD}}

DL-CCTrCH-InformationDeleteItemIE-RL-ReconfRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD          CRITICALITY    notify                                TYPE DL-CCTrCH-
InformationDeleteItem-RL-ReconfRqstTDD          PRESENCE    mandatory}
}

DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD ::= SEQUENCE {
    cCTrCH-ID                                CCTrCH-ID,
    iE-Extensions                            ProtocolExtensionContainer { { DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD-ExtIEs} }
    OPTIONAL,
    ...
}

DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-DeleteList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfRqstTDD

DCH-DeleteItem-RL-ReconfRqstTDD ::= SEQUENCE {
    dCH-ID                                DCH-ID,
    iE-Extensions                            ProtocolExtensionContainer { { DCH-DeleteItem-RL-ReconfRqstTDD-ExtIEs} }          OPTIONAL,
    ...
}

DCH-DeleteItem-RL-ReconfRqstTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-Information-RL-ReconfRqstTDD ::= SEQUENCE {
    rL-ID                                RL-ID,
    maxDL-Power                            DL-Power          OPTIONAL,
    minDL-Power                            DL-Power          OPTIONAL,
    iE-Extensions                            ProtocolExtensionContainer { { RL-InformationItem-RL-ReconfRqstTDD-ExtIEs} }          OPTIONAL,
    ...
}

RL-InformationItem-RL-ReconfRqstTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-RL-Specific-DCH-Info          CRITICALITY ignore          EXTENSION    RL-Specific-DCH-Info          PRESENCE    optional },
    ...
}

```

```

-- *****
--
-- RADIO LINK RECONFIGURATION RESPONSE
--
-- *****

RadioLinkReconfigurationResponse ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkReconfigurationResponse-IEs}},
    protocolExtensions   ProtocolExtensionContainer  {{RadioLinkReconfigurationResponse-Extensions}}    OPTIONAL,
    ...
}

RadioLinkReconfigurationResponse-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CRNC-CommunicationContextID          CRITICALITY ignore          TYPE CRNC-CommunicationContextID          PRESENCE
    mandatory } |
    { ID id-RL-InformationResponseList-RL-ReconfRsp  CRITICALITY ignore          TYPE RL-InformationResponseList-RL-ReconfRsp          PRESENCE
    optional } |
    { ID id-CriticalityDiagnostics                CRITICALITY ignore          TYPE CriticalityDiagnostics                PRESENCE
    optional },
    ...
}

RadioLinkReconfigurationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-TargetCommunicationControlPortID      CRITICALITY ignore          EXTENSION CommunicationControlPortID          PRESENCE optional },
    ...
}

RL-InformationResponseList-RL-ReconfRsp ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{RL-InformationResponseItemIE-RL-ReconfRsp}}

RL-InformationResponseItemIE-RL-ReconfRsp NBAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationResponseItem-RL-ReconfRsp          CRITICALITY ignore          TYPE          RL-InformationResponseItem-RL-ReconfRsp          PRESENCE mandatory }
}

RL-InformationResponseItem-RL-ReconfRsp ::= SEQUENCE {
    rL-ID          RL-ID,
    dCH-InformationResponseList-RL-ReconfRsp          DCH-InformationResponseList-RL-ReconfRsp          OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { RL-InformationResponseItem-RL-ReconfRsp-ExtIEs } }          OPTIONAL,
    ...
}

RL-InformationResponseItem-RL-ReconfRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-PowerBalancing-UpdatedIndicator          CRITICALITY ignore          EXTENSION          DL-PowerBalancing-UpdatedIndicator          PRESENCE optional },
    ...
}

DCH-InformationResponseList-RL-ReconfRsp ::= ProtocolIE-Single-Container {{ DCH-InformationResponseListIEs-RL-ReconfRsp }}

DCH-InformationResponseListIEs-RL-ReconfRsp NBAP-PROTOCOL-IES ::= {

```

```

    { ID id-DCH-InformationResponse  CRITICALITY ignore  TYPE DCH-InformationResponse  PRESENCE mandatory }
}

-- *****
--
-- RADIO LINK DELETION REQUEST
--
-- *****

RadioLinkDeletionRequest ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{RadioLinkDeletionRequest-IEs}},
    protocolExtensions  ProtocolExtensionContainer  {{RadioLinkDeletionRequest-Extensions}}  OPTIONAL,
    ...
}

RadioLinkDeletionRequest-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-NodeB-CommunicationContextID  PRESENCE mandatory } |
    { ID id-CRNC-CommunicationContextID  PRESENCE mandatory } |
    { ID id-RL-informationList-RL-DeletionRqst  PRESENCE mandatory } ,
    ...
}

RadioLinkDeletionRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-informationList-RL-DeletionRqst ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{RL-informationItemIE-RL-DeletionRqst}}

RL-informationItemIE-RL-DeletionRqst NBAP-PROTOCOL-IES ::= {
    { ID id-RL-informationItem-RL-DeletionRqst  PRESENCE mandatory }
}

RL-informationItem-RL-DeletionRqst ::= SEQUENCE {
    rL-ID  RL-ID,
    iE-Extensions  ProtocolExtensionContainer { { RL-informationItem-RL-DeletionRqst-ExtIEs } }  OPTIONAL,
    ...
}

RL-informationItem-RL-DeletionRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- RADIO LINK DELETION RESPONSE
--
-- *****

```

```

RadioLinkDeletionResponse ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{RadioLinkDeletionResponse-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{RadioLinkDeletionResponse-Extensions}}
    ...
}

RadioLinkDeletionResponse-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CRNC-CommunicationContextID          CRITICALITY ignore          TYPE CRNC-CommunicationContextID          PRESENCE mandatory
    } |
    { ID id-CriticalityDiagnostics              CRITICALITY ignore          TYPE CriticalityDiagnostics              PRESENCE optional },
    ...
}

RadioLinkDeletionResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- DL POWER CONTROL REQUEST FDD
--
-- *****

DL-PowerControlRequest ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{DL-PowerControlRequest-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{DL-PowerControlRequest-Extensions}}
    ...
}

DL-PowerControlRequest-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-NodeB-CommunicationContextID          CRITICALITY ignore          TYPE NodeB-CommunicationContextID          PRESENCE mandatory } |
    { ID id-PowerAdjustmentType                  CRITICALITY ignore          TYPE PowerAdjustmentType                  PRESENCE mandatory } |
    { ID id-DLReferencePower                    CRITICALITY ignore          TYPE DL-Power                             PRESENCE conditional } |
    -- This IE shall be present if the Adjustment Type IE is set to 'Common'
    { ID id-InnerLoopDLPCStatus                  CRITICALITY ignore          TYPE InnerLoopDLPCStatus                  PRESENCE optional } |
    { ID id-DLReferencePowerList-DL-PC-Rqst      CRITICALITY ignore          TYPE DL-ReferencePowerInformationList-DL-PC-Rqst PRESENCE conditional } |
    -- This IE shall be present if the Adjustment Type IE is set to 'Individual'
    { ID id-MaxAdjustmentStep                    CRITICALITY ignore          TYPE MaxAdjustmentStep                    PRESENCE conditional } |
    -- This IE shall be present if the Adjustment Type IE is set to 'Common' or 'Individual'
    { ID id-AdjustmentPeriod                    CRITICALITY ignore          TYPE AdjustmentPeriod                    PRESENCE conditional } |
    -- This IE shall be present if the Adjustment Type IE is set to 'Common' or 'Individual'
    { ID id-AdjustmentRatio                      CRITICALITY ignore          TYPE ScaledAdjustmentRatio                PRESENCE conditional },
    -- This IE shall be present if the Adjustment Type IE is set to 'Common' or 'Individual'
    ...
}

DL-PowerControlRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-ReferencePowerInformationList-DL-PC-Rqst ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{DL-ReferencePowerInformationItemIE-DL-PC-Rqst }}

```

```

DL-ReferencePowerInformationItemDL-PC-Rqst NBAP-PROTOCOL-IES ::= {
  { ID id-DL-ReferencePowerInformationItemDL-PC-Rqst      CRITICALITY ignore      TYPE      DL-ReferencePowerInformationItemDL-PC-Rqst
  PRESENCE      mandatory
  }
}

DL-ReferencePowerInformationItemDL-PC-Rqst ::= SEQUENCE {
  rL-ID              RL-ID,
  dl-ReferencePower  DL-Power,
  iE-Extensions      ProtocolExtensionContainer { { DL-ReferencePowerInformationItemDL-PC-Rqst-ExtIEs } }      OPTIONAL,
  ...
}

DL-ReferencePowerInformationItemDL-PC-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- DL POWER TIMESLOT CONTROL REQUEST TDD
--
-- *****

DL-PowerTimeslotControlRequest ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container   {{DL-PowerTimeslotControlRequest-IEs}},
  protocolExtensions  ProtocolExtensionContainer {{DL-PowerTimeslotControlRequest-Extensions}}      OPTIONAL,
  ...
}

DL-PowerTimeslotControlRequest-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-NodeB-CommunicationContextID      CRITICALITY ignore      TYPE      NodeB-CommunicationContextID      PRESENCE mandatory
  } |
  { ID id-TimeslotISCPInfo      CRITICALITY ignore      TYPE      DL-TimeslotISCPInfo      PRESENCE optional }, -- Mandatory for 3.84Mcps TDD
  only
  ...
}

DL-PowerTimeslotControlRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-TimeslotISCPInfoList-LCR-DL-PC-RqstTDD      CRITICALITY ignore      EXTENSION      TimeslotISCPInfoList-LCR-DL-PC-RqstTDD      PRESENCE
  optional } |
  { ID id-PrimCCPCH-RSCP-DL-PC-RqstTDD      CRITICALITY ignore      EXTENSION      PrimaryCCPCH-RSCP      PRESENCE optional },
  ...
}

TimeslotISCPInfoList-LCR-DL-PC-RqstTDD ::= SEQUENCE {
  dl-TimeslotISCP-LCR-Info      DL-TimeslotISCPInfoLCR,      -- Mandatory for 1.28Mcps TDD only
  iE-Extensions      ProtocolExtensionContainer { {TimeslotISCPInfoItem-LCR-DL-PC-RqstTDD-ExtIEs} }      OPTIONAL,
  ...
}

TimeslotISCPInfoItem-LCR-DL-PC-RqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```

```

}
...
}
-- *****
--
-- DEDICATED MEASUREMENT INITIATION REQUEST
--
-- *****

DedicatedMeasurementInitiationRequest ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{DedicatedMeasurementInitiationRequest-IEs}},
    protocolExtensions   ProtocolExtensionContainer  {{DedicatedMeasurementInitiationRequest-Extensions}}    OPTIONAL,
    ...
}

DedicatedMeasurementInitiationRequest-IEs NBAP-PROTOCOL-IES ::= {
    { ID   id-NodeB-CommunicationContextID          CRITICALITY   reject        TYPE        NodeB-CommunicationContextID          PRESENCE
      mandatory } |
    { ID   id-MeasurementID                          CRITICALITY   reject        TYPE        MeasurementID                          PRESENCE
      mandatory } |
    { ID   id-DedicatedMeasurementObjectType-DM-Rqst  CRITICALITY   reject        TYPE        DedicatedMeasurementObjectType-DM-Rqst  PRESENCE
      mandatory } |
    -- This IE represents both the Dedicated Measurement Object Type IE and the choice based on the Dedicated Measurement Object Type
    -- as described in the tabular message format in subclause 9.1.
    { ID   id-DedicatedMeasurementType              CRITICALITY   reject        TYPE        DedicatedMeasurementType              PRESENCE
      mandatory } |
    { ID   id-MeasurementFilterCoefficient          CRITICALITY   reject        TYPE        MeasurementFilterCoefficient          PRESENCE
      optional  } |
    { ID   id-ReportCharacteristics                 CRITICALITY   reject        TYPE        ReportCharacteristics                 PRESENCE
      mandatory } |
    { ID   id-CFNReportingIndicator                 CRITICALITY   reject        TYPE        CFNReportingIndicator                 PRESENCE
      mandatory } |
    { ID   id-CFN                                   CRITICALITY   reject        TYPE        CFN                                   PRESENCE
      optional  } ,
    ...
}

DedicatedMeasurementInitiationRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DedicatedMeasurementObjectType-DM-Rqst ::= CHOICE {
    rL                RL-DM-Rqst,
    rLS               RL-Set-DM-Rqst,
    all-RL            AllRL-DM-Rqst,
    all-RLS           AllRL-Set-DM-Rqst,
    ...
}

RL-DM-Rqst ::= SEQUENCE {
    rL-InformationList          RL-InformationList-DM-Rqst,
    iE-Extensions               ProtocolExtensionContainer { { RLItem-DM-Rqst-ExtIEs } }    OPTIONAL,
    ...
}

```



```

}

RLItem-DM-Rqst-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-InformationList-DM-Rqst ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-DM-Rqst }}

RL-InformationItemIE-DM-Rqst NBAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationItem-DM-Rqst  CRITICALITY reject TYPE RL-InformationItem-DM-Rqst      PRESENCE mandatory }
}

RL-InformationItem-DM-Rqst ::= SEQUENCE {
    rL-ID                               RL-ID,
    dPCH-ID                             DPCH-ID                                OPTIONAL,
    iE-Extensions                       ProtocolExtensionContainer { { RL-InformationItem-DM-Rqst-ExtIEs } }  OPTIONAL,
    ...
}

RL-InformationItem-DM-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-PUSCH-Info-DM-Rqst          CRITICALITY reject          EXTENSION  PUSCH-Info-DM-Rqst          PRESENCE optional},
    -- TDD only
    ...
}

PUSCH-Info-DM-Rqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHs)) OF PUSCH-ID

RL-Set-DM-Rqst ::= SEQUENCE {
    rL-Set-InformationList-DM-Rqst      RL-Set-InformationList-DM-Rqst,
    iE-Extensions                       ProtocolExtensionContainer { { RL-SetItem-DM-Rqst-ExtIEs } }  OPTIONAL,
    ...
}

RL-SetItem-DM-Rqst-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-Set-InformationList-DM-Rqst          ::= SEQUENCE (SIZE(1..maxNrOfRLSets)) OF RL-Set-InformationItem-DM-Rqst

RL-Set-InformationItem-DM-Rqst ::= SEQUENCE {
    rL-Set-ID                           RL-Set-ID,
    iE-Extensions                       ProtocolExtensionContainer { { RL-Set-InformationItem-DM-Rqst-ExtIEs } }  OPTIONAL,
    ...
}

RL-Set-InformationItem-DM-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

AllRL-DM-Rqst ::= NULL

AllRL-Set-DM-Rqst ::= NULL

```

```

-- *****
--
-- DEDICATED MEASUREMENT INITIATION RESPONSE
--
-- *****

DedicatedMeasurementInitiationResponse ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{DedicatedMeasurementInitiationResponse-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{DedicatedMeasurementInitiationResponse-Extensions}}    OPTIONAL,
    ...
}

DedicatedMeasurementInitiationResponse-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CRNC-CommunicationContextID          CRITICALITY ignore TYPE CRNC-CommunicationContextID PRESENCE
    mandatory } |
    { ID id-MeasurementID                        CRITICALITY ignore TYPE MeasurementID PRESENCE
    mandatory } |
    { ID id-DedicatedMeasurementObjectType-DM-Rsp CRITICALITY ignore TYPE DedicatedMeasurementObjectType-DM-Rsp PRESENCE
    optional } |
    { ID id-CriticalityDiagnostics              CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE
    optional },
    ...
}

DedicatedMeasurementInitiationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DedicatedMeasurementObjectType-DM-Rsp ::= CHOICE {
    rL          RL-DM-Rsp,
    rLS         RL-Set-DM-Rsp,
    all-RL      RL-DM-Rsp,
    all-RLS     RL-Set-DM-Rsp,
    ...
}

RL-DM-Rsp ::= SEQUENCE {
    rL-InformationList-DM-Rsp      RL-InformationList-DM-Rsp,
    iE-Extensions                  ProtocolExtensionContainer { { RLItem-DM-Rsp-ExtIEs } }    OPTIONAL,
    ...
}

RLItem-DM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-InformationList-DM-Rsp ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-DM-Rsp }}

RL-InformationItemIE-DM-Rsp NBAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationItem-DM-Rsp CRITICALITY ignore TYPE RL-InformationItem-DM-Rsp PRESENCE mandatory }
}

```

```

RL-InformationItem-DM-Rsp ::= SEQUENCE {
    rL-ID                RL-ID,
    dPCH-ID              DPCH-ID          OPTIONAL,
    dedicatedMeasurementValue DedicatedMeasurementValue,
    cFN                  CFN              OPTIONAL,
    iE-Extensions        ProtocolExtensionContainer { { RL-InformationItem-DM-Rsp-ExtIEs } } OPTIONAL,
    ...
}

RL-InformationItem-DM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-PUSCH-Info-DM-Rsp      CRITICALITY reject          EXTENSION   PUSCH-Info-DM-Rsp      PRESENCE optional},
    -- TDD only
    ...
}

PUSCH-Info-DM-Rsp ::= SEQUENCE (SIZE (0..maxNrOfPUSCHs)) OF PUSCH-ID

RL-Set-DM-Rsp ::= SEQUENCE {
    rL-Set-InformationList-DM-Rsp  RL-Set-InformationList-DM-Rsp,
    iE-Extensions                  ProtocolExtensionContainer { { RL-SetItem-DM-Rsp-ExtIEs } } OPTIONAL,
    ...
}

RL-SetItem-DM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-Set-InformationList-DM-Rsp ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container {{ RL-Set-InformationItemIE-DM-Rsp }}

RL-Set-InformationItemIE-DM-Rsp NBAP-PROTOCOL-IES ::= {
    { ID id-RL-Set-InformationItem-DM-Rsp      CRITICALITY ignore          TYPE          RL-Set-InformationItem-DM-Rsp      PRESENCE mandatory}
}

RL-Set-InformationItem-DM-Rsp ::= SEQUENCE {
    rL-Set-ID                RL-Set-ID,
    dedicatedMeasurementValue DedicatedMeasurementValue,
    cFN                      CFN              OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { { RL-Set-InformationItem-DM-Rsp-ExtIEs } } OPTIONAL,
    ...
}

RL-Set-InformationItem-DM-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- DEDICATED MEASUREMENT INITIATION FAILURE
--
-- *****

DedicatedMeasurementInitiationFailure ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{DedicatedMeasurementInitiationFailure-IEs}},

```

```

    protocolExtensions      ProtocolExtensionContainer  {{DedicatedMeasurementInitiationFailure-Extensions}}
    ...
}

DedicatedMeasurementInitiationFailure-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-CRNC-CommunicationContextID      CRITICALITY  ignore      TYPE      CRNC-CommunicationContextID      PRESENCE mandatory } |
  { ID      id-MeasurementID                    CRITICALITY  ignore      TYPE      MeasurementID                      PRESENCE mandatory }
  } |
  { ID      id-Cause                            CRITICALITY  ignore      TYPE      Cause                              PRESENCE
  mandatory } |
  { ID      id-CriticalityDiagnostics           CRITICALITY  ignore      TYPE      CriticalityDiagnostics             PRESENCE optional },
  ...
}

DedicatedMeasurementInitiationFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- DEDICATED MEASUREMENT REPORT
--
-- *****

DedicatedMeasurementReport ::= SEQUENCE {
  protocolIEs      ProtocolIE-Container  {{DedicatedMeasurementReport-IEs}},
  protocolExtensions  ProtocolExtensionContainer  {{DedicatedMeasurementReport-Extensions}}
  ...
}

DedicatedMeasurementReport-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-CRNC-CommunicationContextID      CRITICALITY  ignore      TYPE      CRNC-CommunicationContextID
  PRESENCE  mandatory } |
  { ID      id-MeasurementID                    CRITICALITY  ignore      TYPE      MeasurementID
  PRESENCE  mandatory } |
  { ID      id-DedicatedMeasurementObjectType-DM-Rprt  CRITICALITY  ignore      TYPE      DedicatedMeasurementObjectType-
DM-Rprt  PRESENCE  mandatory } ,
  ...
}

DedicatedMeasurementReport-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DedicatedMeasurementObjectType-DM-Rprt ::= CHOICE {
  rL              RL-DM-Rprt,
  rLS             RL-Set-DM-Rprt,
  all-RL          RL-DM-Rprt,
  all-RLS        RL-Set-DM-Rprt,
  ...
}

RL-DM-Rprt ::= SEQUENCE {

```

```

    rL-InformationList-DM-Rprt      RL-InformationList-DM-Rprt,
    iE-Extensions                   ProtocolExtensionContainer { { RLIItem-DM-Rprt-ExtIEs } }
    ...
}

RLItem-DM-Rprt-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-InformationList-DM-Rprt ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-DM-Rprt }}

RL-InformationItemIE-DM-Rprt NBAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationItem-DM-Rprt  CRITICALITY ignore TYPE RL-InformationItem-DM-Rprt      PRESENCE mandatory }
}

RL-InformationItem-DM-Rprt ::= SEQUENCE {
    rL-ID                RL-ID,
    dPCH-ID              DPCH-ID  OPTIONAL,
    dedicatedMeasurementValueInformation  DedicatedMeasurementValueInformation,
    iE-Extensions       ProtocolExtensionContainer { { RL-InformationItem-DM-Rprt-ExtIEs } }
    ...
}

RL-InformationItem-DM-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-PUSCH-Info-DM-Rprt  CRITICALITY reject          EXTENSION  PUSCH-Info-DM-Rprt      PRESENCE optional},
    -- TDD only
    ...
}

PUSCH-Info-DM-Rprt ::= SEQUENCE (SIZE (0..maxNrOfPUSCHs)) OF PUSCH-ID

RL-Set-DM-Rprt ::= SEQUENCE {
    rL-Set-InformationList-DM-Rprt      RL-Set-InformationList-DM-Rprt,
    iE-Extensions                       ProtocolExtensionContainer { { RL-SetItem-DM-Rprt-ExtIEs } }
    ...
}

RL-SetItem-DM-Rprt-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-Set-InformationList-DM-Rprt ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container {{ RL-Set-InformationItemIE-DM-Rprt }}

RL-Set-InformationItemIE-DM-Rprt NBAP-PROTOCOL-IES ::= {
    { ID id-RL-Set-InformationItem-DM-Rprt  CRITICALITY ignore TYPE RL-Set-InformationItem-DM-Rprt      PRESENCE mandatory }
}

RL-Set-InformationItem-DM-Rprt ::= SEQUENCE {
    rL-Set-ID                RL-Set-ID,
    dedicatedMeasurementValueInformation  DedicatedMeasurementValueInformation,
    iE-Extensions           ProtocolExtensionContainer { { RL-Set-InformationItem-DM-Rprt-ExtIEs } } OPTIONAL,
    ...
}

```

```

RL-Set-InformationItem-DM-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- DEDICATED MEASUREMENT TERMINATION REQUEST
--
-- *****

DedicatedMeasurementTerminationRequest ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{DedicatedMeasurementTerminationRequest-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{DedicatedMeasurementTerminationRequest-Extensions}}    OPTIONAL,
    ...
}

DedicatedMeasurementTerminationRequest-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-NodeB-CommunicationContextID    CRITICALITY    ignore    TYPE    NodeB-CommunicationContextID    PRESENCE mandatory } |
    { ID    id-MeasurementID                    CRITICALITY    ignore    TYPE    MeasurementID                    PRESENCE mandatory
    },
    ...
}

DedicatedMeasurementTerminationRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- DEDICATED MEASUREMENT FAILURE INDICATION
--
-- *****

DedicatedMeasurementFailureIndication ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{DedicatedMeasurementFailureIndication-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{DedicatedMeasurementFailureIndication-Extensions}}    OPTIONAL,
    ...
}

DedicatedMeasurementFailureIndication-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-CRNC-CommunicationContextID    CRITICALITY    ignore    TYPE    CRNC-CommunicationContextID    PRESENCE mandatory } |
    { ID    id-MeasurementID                    CRITICALITY    ignore    TYPE    MeasurementID                    PRESENCE mandatory
    } |
    { ID    id-Cause                            CRITICALITY    ignore    TYPE    Cause                            PRESENCE mandatory
    },
    ...
}

DedicatedMeasurementFailureIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

-- *****
--
-- RADIO LINK FAILURE INDICATION
--
-- *****

RadioLinkFailureIndication ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{RadioLinkFailureIndication-IEs}},
    protocolExtensions  ProtocolExtensionContainer  {{RadioLinkFailureIndication-Extensions}}    OPTIONAL,
    ...
}

RadioLinkFailureIndication-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-CRNC-CommunicationContextID          CRITICALITY    ignore          TYPE    CRNC-CommunicationContextID          PRESENCE
      mandatory } |
    { ID    id-Reporting-Object-RL-FailureInd      CRITICALITY    ignore          TYPE    Reporting-Object-RL-FailureInd          PRESENCE mandatory
      },
    ...
}

RadioLinkFailureIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Reporting-Object-RL-FailureInd ::= CHOICE {
    rL                RL-RL-FailureInd,
    rL-Set            RL-Set-RL-FailureInd, --FDD only
    ...,
    cCTrCH            CCTrCH-RL-FailureInd --TDD only
}

RL-RL-FailureInd ::= SEQUENCE {
    rL-InformationList-RL-FailureInd          RL-InformationList-RL-FailureInd,
    iE-Extensions                            ProtocolExtensionContainer { { RLItem-RL-FailureInd-ExtIEs } }    OPTIONAL,
    ...
}

RLItem-RL-FailureInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-InformationList-RL-FailureInd ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-RL-FailureInd}}

RL-InformationItemIE-RL-FailureInd NBAP-PROTOCOL-IES ::= {
    { ID    id-RL-InformationItem-RL-FailureInd          CRITICALITY    ignore          TYPE    RL-InformationItem-RL-FailureInd          PRESENCE
      mandatory}
}

RL-InformationItem-RL-FailureInd ::= SEQUENCE {
    rL-ID                RL-ID,
    cause                Cause,
    iE-Extensions        ProtocolExtensionContainer { { RL-InformationItem-RL-FailureInd-ExtIEs } }    OPTIONAL,
    ...
}

```

```

}

RL-InformationItem-RL-FailureInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

RL-Set-RL-FailureInd ::= SEQUENCE {
  rL-Set-InformationList-RL-FailureInd      RL-Set-InformationList-RL-FailureInd,
  iE-Extensions                             ProtocolExtensionContainer { { RL-SetItem-RL-FailureInd-ExtIEs } } OPTIONAL,
  ...
}

RL-SetItem-RL-FailureInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

RL-Set-InformationList-RL-FailureInd ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container {{ RL-Set-InformationItemIE-RL-
FailureInd }}

RL-Set-InformationItemIE-RL-FailureInd NBAP-PROTOCOL-IES ::= {
  { ID id-RL-Set-InformationItem-RL-FailureInd      CRITICALITY ignore          TYPE RL-Set-InformationItem-RL-FailureInd      PRESENCE mandatory }
}

RL-Set-InformationItem-RL-FailureInd ::= SEQUENCE {
  rL-Set-ID          RL-Set-ID,
  cause              Cause,
  iE-Extensions      ProtocolExtensionContainer { { RL-Set-InformationItem-RL-FailureInd-ExtIEs } } OPTIONAL,
  ...
}

RL-Set-InformationItem-RL-FailureInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

CCTrCH-RL-FailureInd ::= SEQUENCE {
  rL-ID          RL-ID,
  cCTrCH-InformationList-RL-FailureInd      CCTrCH-InformationList-RL-FailureInd,
  iE-Extensions                             ProtocolExtensionContainer { { CCTrCHItem-RL-FailureInd-ExtIEs } } OPTIONAL,
  ...
}

CCTrCHItem-RL-FailureInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

CCTrCH-InformationList-RL-FailureInd ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ CCTrCH-InformationItemIE-RL-
FailureInd}}

CCTrCH-InformationItemIE-RL-FailureInd NBAP-PROTOCOL-IES ::= {
  { ID id-CCTrCH-InformationItem-RL-FailureInd      CRITICALITY ignore          TYPE CCTrCH-InformationItem-RL-
FailureInd      PRESENCE mandatory}
}

```



```

CCTrCH-InformationItem-RL-FailureInd ::= SEQUENCE {
    cCTrCH-ID          CCTrCH-ID,
    cause              Cause,
    iE-Extensions      ProtocolExtensionContainer { { CCTrCH-InformationItem-RL-FailureInd-ExtIEs } } OPTIONAL,
    ...
}

CCTrCH-InformationItem-RL-FailureInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- RADIO LINK PREEMPTION REQUIRED INDICATION
--
-- *****

RadioLinkPreemptionRequiredIndication ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container      {{RadioLinkPreemptionRequiredIndication-IEs}},
    protocolExtensions    ProtocolExtensionContainer {{RadioLinkPreemptionRequiredIndication-Extensions}} OPTIONAL,
    ...
}

RadioLinkPreemptionRequiredIndication-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CRNC-CommunicationContextID          CRITICALITY ignore          TYPE CRNC-CommunicationContextID
      PRESENCE mandatory } |
    { ID id-RL-InformationList-RL-PreemptRequiredInd CRITICALITY ignore TYPE RL-InformationList-RL-PreemptRequiredInd PRESENCE optional },
    ...
}

RadioLinkPreemptionRequiredIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-InformationList-RL-PreemptRequiredInd ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-InformationItemIE-RL-PreemptRequiredInd}}

RL-InformationItemIE-RL-PreemptRequiredInd NBAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationItem-RL-PreemptRequiredInd CRITICALITY ignore TYPE RL-InformationItem-RL-PreemptRequiredInd PRESENCE mandatory },
    ...
}

RL-InformationItem-RL-PreemptRequiredInd ::= SEQUENCE {
    rL-ID          RL-ID,
    iE-Extensions  ProtocolExtensionContainer { {RL-InformationItem-RL-PreemptRequiredInd-ExtIEs} } OPTIONAL,
    ...
}

RL-InformationItem-RL-PreemptRequiredInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

-- *****
--
-- RADIO LINK RESTORE INDICATION
--
-- *****

RadioLinkRestoreIndication ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{RadioLinkRestoreIndication-IEs}},
    protocolExtensions  ProtocolExtensionContainer  {{RadioLinkRestoreIndication-Extensions}}      OPTIONAL,
    ...
}

RadioLinkRestoreIndication-IEs NBAP-PROTOCOL-IES ::= {
    { ID   id-CRNC-CommunicationContextID          CRITICALITY   ignore          TYPE   CRNC-CommunicationContextID          PRESENCE
      mandatory } |
    { ID   id-Reporting-Object-RL-RestoreInd       CRITICALITY   ignore          TYPE   Reporting-Object-RL-RestoreInd          PRESENCE mandatory
    },
    ...
}

RadioLinkRestoreIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Reporting-Object-RL-RestoreInd ::= CHOICE {
    rL                      RL-RL-RestoreInd,
    rL-Set                  RL-Set-RL-RestoreInd, --FDD only
    ...,
    cCTrCH                  CCTrCH-RL-RestoreInd --TDD only
}

RL-RL-RestoreInd ::= SEQUENCE {
    rL-InformationList-RL-RestoreInd          RL-InformationList-RL-RestoreInd,
    iE-Extensions                            ProtocolExtensionContainer { { RLItem-RL-RestoreInd-ExtIEs } }      OPTIONAL,
    ...
}

RLItem-RL-RestoreInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-InformationList-RL-RestoreInd ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{RL-InformationItemIE-RL-RestoreInd}}

RL-InformationItemIE-RL-RestoreInd NBAP-PROTOCOL-IES ::= {
    { ID   id-RL-InformationItem-RL-RestoreInd          CRITICALITY   ignore          TYPE   RL-InformationItem-RL-RestoreInd          PRESENCE
      mandatory}
}

RL-InformationItem-RL-RestoreInd ::= SEQUENCE {
    rL-ID                      RL-ID,
    iE-Extensions              ProtocolExtensionContainer { { RL-InformationItem-RL-RestoreInd-ExtIEs } }      OPTIONAL,
    ...
}

```

```

RL-InformationItem-RL-RestoreInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-Set-RL-RestoreInd ::= SEQUENCE {
    rL-Set-InformationList-RL-RestoreInd    RL-Set-InformationList-RL-RestoreInd,
    iE-Extensions                          ProtocolExtensionContainer { { RL-SetItem-RL-RestoreInd-ExtIEs } }    OPTIONAL,
    ...
}

RL-SetItem-RL-RestoreInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-Set-InformationList-RL-RestoreInd ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container {{ RL-Set-InformationItemIE-RL-RestoreInd }}

RL-Set-InformationItemIE-RL-RestoreInd NBAP-PROTOCOL-IES ::= {
    { ID id-RL-Set-InformationItem-RL-RestoreInd    CRITICALITY ignore          TYPE RL-Set-InformationItem-RL-RestoreInd PRESENCE mandatory }
}

RL-Set-InformationItem-RL-RestoreInd ::= SEQUENCE {
    rL-Set-ID                RL-Set-ID,
    iE-Extensions            ProtocolExtensionContainer { { RL-Set-InformationItem-RL-RestoreInd-ExtIEs} } OPTIONAL,
    ...
}

RL-Set-InformationItem-RL-RestoreInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CCTrCH-RL-RestoreInd ::= SEQUENCE {
    rL-ID                    RL-ID,
    cCTrCH-InformationList-RL-RestoreInd    CCTrCH-InformationList-RL-RestoreInd,
    iE-Extensions            ProtocolExtensionContainer { { CCTrCHItem-RL-RestoreInd-ExtIEs } }    OPTIONAL,
    ...
}

CCTrCHItem-RL-RestoreInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CCTrCH-InformationList-RL-RestoreInd ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ CCTrCH-InformationItemIE-RL-RestoreInd}}

CCTrCH-InformationItemIE-RL-RestoreInd NBAP-PROTOCOL-IES ::= {
    { ID id-CCTrCH-InformationItem-RL-RestoreInd    CRITICALITY ignore          TYPE CCTrCH-InformationItem-RL-RestoreInd PRESENCE mandatory}
}

CCTrCH-InformationItem-RL-RestoreInd ::= SEQUENCE {
    cCTrCH-ID                CCTrCH-ID,

```

```

    iE-Extensions          ProtocolExtensionContainer { { CcTrCH-InformationItem-RL-RestoreInd-ExtIEs } }    OPTIONAL,
  }
}

CcTrCH-InformationItem-RL-RestoreInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- COMPRESSED MODE COMMAND FDD
--
-- *****

CompressedModeCommand ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container    {{CompressedModeCommand-IEs}},
  protocolExtensions  ProtocolExtensionContainer {{CompressedModeCommand-Extensions}}    OPTIONAL,
  ...
}

CompressedModeCommand-IEs NBAP-PROTOCOL-IES ::= {
  { ID    id-NodeB-CommunicationContextID    CRITICALITY    ignore    TYPE    NodeB-CommunicationContextID    PRESENCE
    mandatory } |
  { ID    id-Active-Pattern-Sequence-Information    CRITICALITY    ignore    TYPE    Active-Pattern-Sequence-Information    PRESENCE
    mandatory },
  ...
}

CompressedModeCommand-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- ERROR INDICATION
--
-- *****

ErrorIndication ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container    {{ErrorIndication-IEs}},
  protocolExtensions  ProtocolExtensionContainer {{ErrorIndication-Extensions}}    OPTIONAL,
  ...
}

```

```

ErrorIndication-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-CRNC-CommunicationContextID      CRITICALITY ignore      TYPE CRNC-CommunicationContextID PRESENCE optional } |
  { ID id-NodeB-CommunicationContextID     CRITICALITY ignore      TYPE NodeB-CommunicationContextID PRESENCE optional } |
  { ID id-Cause                             CRITICALITY ignore      TYPE Cause PRESENCE }
  optional } |
  { ID id-CriticalityDiagnostics           CRITICALITY ignore      TYPE CriticalityDiagnostics PRESENCE optional },
  ...
}

ErrorIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- PRIVATE MESSAGE
--
-- *****

PrivateMessage ::= SEQUENCE {
  privateIEs PrivateIE-Container {{PrivateMessage-IEs}},
  ...
}

PrivateMessage-IEs NBAP-PRIVATE-IES ::= {
  ...
}

-- *****
--
-- PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST FDD
--
-- *****

PhysicalSharedChannelReconfigurationRequestFDD ::= SEQUENCE {
  protocolIEs ProtocolIE-Container {{PhysicalSharedChannelReconfigurationRequestFDD-IEs}},
  protocolExtensions ProtocolExtensionContainer {{PhysicalSharedChannelReconfigurationRequestFDD-Extensions}} OPTIONAL,
  ...
}

PhysicalSharedChannelReconfigurationRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-C-ID                                CRITICALITY reject      TYPE C-ID PRESENCE }
  mandatory } |
  { ID id-SFN                                CRITICALITY reject      TYPE SFN PRESENCE }
  optional } |
  { ID id-HS-PDSCH-HS-SCCH-MaxPower-PSCH-ReconfRqst CRITICALITY reject      TYPE MaximumTransmissionPower PRESENCE }
  optional } |
  { ID id-HS-PDSCH-HS-SCCH-ScramblingCode-PSCH-ReconfRqst CRITICALITY reject      TYPE DL-ScramblingCode PRESENCE }
  optional } |
  { ID id-HS-PDSCH-FDD-Code-Information-PSCH-ReconfRqst CRITICALITY reject      TYPE HS-PDSCH-FDD-Code-Information PRESENCE }
  optional } |
  { ID id-HS-SCCH-FDD-Code-Information-PSCH-ReconfRqst CRITICALITY reject      TYPE HS-SCCH-FDD-Code-Information PRESENCE }
  optional },

```

```

}
...
PhysicalSharedChannelReconfigurationRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST TDD
--
-- *****

PhysicalSharedChannelReconfigurationRequestTDD ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container  {{PhysicalSharedChannelReconfigurationRequestTDD-IEs}},
  protocolExtensions  ProtocolExtensionContainer {{PhysicalSharedChannelReconfigurationRequestTDD-Extensions}}  OPTIONAL,
  ...
}

PhysicalSharedChannelReconfigurationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-C-ID          CRITICALITY reject          TYPE C-ID
  PRESENCE mandatory  } |
  { ID id-SFN          CRITICALITY reject          TYPE SFN
  PRESENCE optional  } |
  { ID id-PDSCHSets-AddList-PSCH-ReconfRqst  CRITICALITY reject          TYPE PDSCHSets-AddList-PSCH-ReconfRqst  PRESENCE
  optional  } |
  { ID id-PDSCHSets-ModifyList-PSCH-ReconfRqst  CRITICALITY reject          TYPE PDSCHSets-ModifyList-PSCH-ReconfRqst  PRESENCE
  optional  } |
  { ID id-PDSCHSets-DeleteList-PSCH-ReconfRqst  CRITICALITY reject          TYPE PDSCHSets-DeleteList-PSCH-ReconfRqst  PRESENCE
  optional  } |
  { ID id-PUSCHSets-AddList-PSCH-ReconfRqst  CRITICALITY reject          TYPE PUSCHSets-AddList-PSCH-ReconfRqst  PRESENCE
  optional  } |
  { ID id-PUSCHSets-ModifyList-PSCH-ReconfRqst  CRITICALITY reject          TYPE PUSCHSets-ModifyList-PSCH-ReconfRqst  PRESENCE
  optional  } |
  { ID id-PUSCHSets-DeleteList-PSCH-ReconfRqst  CRITICALITY reject          TYPE PUSCHSets-DeleteList-PSCH-ReconfRqst  PRESENCE
  optional  },
  ...
}

PhysicalSharedChannelReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-HS-PDSCH-TDD-Information-PSCH-ReconfRqst  CRITICALITY reject          EXTENSION HS-PDSCH-TDD-Information-PSCH-ReconfRqst
  PRESENCE optional  } |
  { ID id-Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRqst  CRITICALITY reject          EXTENSION Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRqst
  PRESENCE optional  } |
  { ID id-Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRqst  CRITICALITY reject          EXTENSION Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRqst
  PRESENCE optional  } |
  { ID id-Delete-From-HS-SCCH-Resource-Pool-PSCH-ReconfRqst  CRITICALITY reject          EXTENSION Delete-From-HS-SCCH-Resource-Pool-PSCH-
  ReconfRqst  PRESENCE optional  },
  ...
}

PDSCHSets-AddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHSets)) OF PDSCHSets-AddItem-PSCH-ReconfRqst

```

```

PDSCHSets-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
    pDSCHSet-ID                PDSCHSet-ID,
    pDSCH-InformationList      PDSCH-Information-AddList-PSCH-ReconfRqst OPTIONAL,
    iE-Extensions              ProtocolExtensionContainer { {PDSCHSets-AddItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

PDSCHSets-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-PDSCH-AddInformation-LCR-PSCH-ReconfRqst CRITICALITY reject EXTENSION PDSCH-AddInformation-LCR-PSCH-ReconfRqst PRESENCE
    optional},
    ...
}

PDSCH-Information-AddList-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PDSCH-Information-AddListIEs-PSCH-ReconfRqst }} -- Mandatory for
3.84Mcps TDD only

PDSCH-Information-AddListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    {ID id-PDSCH-Information-AddListIE-PSCH-ReconfRqst CRITICALITY reject TYPE PDSCH-Information-AddItem-PSCH-ReconfRqst PRESENCE
    mandatory}
}

PDSCH-Information-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod           RepetitionPeriod,
    repetitionLength           RepetitionLength,
    tdd-PhysicalChannelOffset  TDD-PhysicalChannelOffset,
    dl-Timeslot-InformationAddList-PSCH-ReconfRqst DL-Timeslot-InformationAddList-PSCH-ReconfRqst,
    iE-Extensions              ProtocolExtensionContainer { {PDSCH-Information-AddItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

PDSCH-Information-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-Timeslot-InformationAddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfDLTSs)) OF DL-Timeslot-InformationAddItem-PSCH-ReconfRqst

DL-Timeslot-InformationAddItem-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlot                   TimeSlot,
    midambleShiftAndBurstType  MidambleShiftAndBurstType,
    tFCI-Presence               TFCI-Presence,
    dl-Code-InformationAddList-PSCH-ReconfRqst DL-Code-InformationAddList-PSCH-ReconfRqst,
    iE-Extensions              ProtocolExtensionContainer { { DL-Timeslot-InformationAddItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

DL-Timeslot-InformationAddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-Code-InformationAddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF DL-Code-InformationAddItem-PSCH-ReconfRqst

DL-Code-InformationAddItem-PSCH-ReconfRqst ::= SEQUENCE {
    pDSCH-ID                   PDSCH-ID,

```

```

    tdd-ChannelisationCode          TDD-ChannelisationCode,
    iE-Extensions                    ProtocolExtensionContainer { { DL-Code-InformationAddItem-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
    ...
}

DL-Code-InformationAddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PDSCH-AddInformation-LCR-PSCH-ReconfRqst ::= ProtocolIE-Single-Container { { PDSCH-AddInformation-LCR-AddListIEs-PSCH-ReconfRqst } } -- Mandatory
for 1.28Mcps TDD only

PDSCH-AddInformation-LCR-AddListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    {ID id-PDSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst CRITICALITY reject TYPE PDSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst
    PRESENCE optional}
}

PDSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod                RepetitionPeriod,
    repetitionLength                 RepetitionLength,
    tdd-PhysicalChannelOffset        TDD-PhysicalChannelOffset,
    dl-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst DL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst,
    iE-Extensions                    ProtocolExtensionContainer { { PDSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
    ...
}

PDSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1.. maxNrOfDLTSLCRs)) OF DL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst

DL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlotLCR                     TimeSlotLCR,
    midambleShiftLCR                 MidambleShiftLCR,
    tFCI-Presence                     TFCI-Presence,
    dl-Code-InformationAddList-LCR-PSCH-ReconfRqst DL-Code-InformationAddList-LCR-PSCH-ReconfRqst,
    iE-Extensions                    ProtocolExtensionContainer { { DL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
    ...
}

DL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-Code-InformationAddList-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF DL-Code-InformationAddItem-LCR-PSCH-ReconfRqst

DL-Code-InformationAddItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
    pDSCH-ID                         PDSCH-ID,
    tdd-ChannelisationCodeLCR         TDD-ChannelisationCodeLCR,
    iE-Extensions                    ProtocolExtensionContainer { { DL-Code-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
    ...
}

```



```

DL-Code-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

PDSCHSets-ModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHSets)) OF PDSCHSets-ModifyItem-PSCH-ReconfRqst

PDSCHSets-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
  pDSCHSet-ID PDSCHSet-ID,
  pDSCH-InformationList PDSCH-Information-ModifyList-PSCH-ReconfRqst,
  iE-Extensions ProtocolExtensionContainer { {PDSCHSets-ModifyItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
  ...
}

PDSCHSets-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  {ID id-PDSCH-ModifyInformation-LCR-PSCH-ReconfRqst CRITICALITY reject EXTENSION PDSCH-ModifyInformation-LCR-PSCH-ReconfRqst
  PRESENCE optional}, -- Mandatory for 1.28Mcps TDD only
  ...
}

PDSCH-Information-ModifyList-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PDSCH-Information-ModifyListIEs-PSCH-ReconfRqst }}

PDSCH-Information-ModifyListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
  {ID id-PDSCH-Information-ModifyListIE-PSCH-ReconfRqst CRITICALITY reject TYPE PDSCH-Information-ModifyItem-PSCH-ReconfRqst
  PRESENCE optional} -- Mandatory for 3.84Mcps TDD only
}

PDSCH-Information-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
  repetitionPeriod RepetitionPeriod OPTIONAL,
  repetitionLength RepetitionLength OPTIONAL,
  tdd-PhysicalChannelOffset TDD-PhysicalChannelOffset OPTIONAL,
  dL-Timeslot-InformationModifyList-PSCH-ReconfRqst DL-Timeslot-InformationModifyList-PSCH-ReconfRqst OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { {PDSCH-Information-ModifyItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
  ...
}

PDSCH-Information-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-Timeslot-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1.. maxNrOfDLTSs)) OF DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst

DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
  timeSlot TimeSlot,
  midambleShiftAndBurstType MidambleShiftAndBurstType OPTIONAL,
  tFCI-Presence TFCI-Presence OPTIONAL,
  dL-Code-InformationModifyList-PSCH-ReconfRqst DL-Code-InformationModifyList-PSCH-ReconfRqst OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { { DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
  ...
}

DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

}

DL-Code-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHs)) OF DL-Code-InformationModifyItem-PSCH-ReconfRqst

DL-Code-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    pDSCH-ID                PDSCH-ID,
    tdd-ChannelisationCode  TDD-ChannelisationCode,
    iE-Extensions           ProtocolExtensionContainer { { DL-Code-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

DL-Code-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PDSCH-ModifyInformation-LCR-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    {ID id-PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst          CRITICALITY reject          TYPE          PDSCH-ModifyInformation-LCR-
ModifyItem-PSCH-ReconfRqst          PRESENCE          mandatory}
}

PDSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod                RepetitionPeriod                OPTIONAL,
    repetitionLength                 RepetitionLength                 OPTIONAL,
    tdd-PhysicalChannelOffset         TDD-PhysicalChannelOffset         OPTIONAL,
    dl-Timeslot-LCR-InformationModifyList-PSCH-ReconfRqst          DL-Timeslot-LCR-InformationModifyList-PSCH-ReconfRqst          OPTIONAL,
    iE-Extensions                    ProtocolExtensionContainer { {PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst-ExtIEs} }
OPTIONAL,
    ...
}

PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-Timeslot-LCR-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1.. maxNrOfDLTSLCRs)) OF DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst

DL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlotLCR                TimeSlotLCR,
    midambleShiftLCR           MidambleShiftLCR OPTIONAL,
    tFCI-Presence               TFCI-Presence OPTIONAL,
    dl-Code-LCR-InformationModifyList-PSCH-ReconfRqst          DL-Code-LCR-InformationModifyList-PSCH-ReconfRqst          OPTIONAL,
    iE-Extensions              ProtocolExtensionContainer { { DL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }
OPTIONAL,
    ...
}

DL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-Code-LCR-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHs)) OF DL-Code-InformationModifyItem-PSCH-ReconfRqst

DL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {

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    pDSCH-ID                PDSCH-ID,
    tdd-ChannelisationCodeLCR TDD-ChannelisationCodeLCR,
    iE-Extensions            ProtocolExtensionContainer { { DL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

DL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PDSCHSets-DeleteList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHSets)) OF PDSCHSets-DeleteItem-PSCH-ReconfRqst

PDSCHSets-DeleteItem-PSCH-ReconfRqst ::= SEQUENCE {
    pDSCHSet-ID                PDSCHSet-ID,
    iE-Extensions            ProtocolExtensionContainer { {PDSCHSets-DeleteItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

PDSCHSets-DeleteItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PUSCHSets-AddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHSets)) OF PUSCHSets-AddItem-PSCH-ReconfRqst

PUSCHSets-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
    pUSCHSet-ID                PUSCHSet-ID,
    pUSCH-InformationList      PUSCH-InformationAddList-PSCH-ReconfRqst OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { {PUSCHSets-AddItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

PUSCHSets-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-PUSCH-AddInformation-LCR-PSCH-ReconfRqst CRITICALITY reject EXTENSION PUSCH-AddInformation-LCR-PSCH-ReconfRqst PRESENCE
    optional}, -- Mandatory for 1.28Mcps TDD only
    ...
}

PUSCH-Information-AddList-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PUSCH-Information-AddListIEs-PSCH-ReconfRqst }} -- Mandatory for
3.84Mcps TDD only

PUSCH-Information-AddListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    {ID id-PUSCH-Information-AddListIE-PSCH-ReconfRqst CRITICALITY reject TYPE PUSCH-Information-AddItem-PSCH-ReconfRqst PRESENCE
    mandatory}
}

PUSCH-Information-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod            RepetitionPeriod,
    repetitionLength            RepetitionLength,
    tdd-PhysicalChannelOffset    TDD-PhysicalChannelOffset,
    uL-Timeslot-InformationAddList-PSCH-ReconfRqst UL-Timeslot-InformationAddList-PSCH-ReconfRqst,
    iE-Extensions            ProtocolExtensionContainer { {PUSCH-Information-AddItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

```

```

PUSCH-Information-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Timeslot-InformationAddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Timeslot-InformationAddItem-PSCH-ReconfRqst

UL-Timeslot-InformationAddItem-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlot                TimeSlot,
    midambleShiftAndBurstType MidambleShiftAndBurstType,
    tFCI-Presence            TFCI-Presence,
    uL-Code-InformationAddList-PSCH-ReconfRqst UL-Code-InformationAddList-PSCH-ReconfRqst,
    iE-Extensions            ProtocolExtensionContainer { { UL-Timeslot-InformationAddItem-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
    ...
}

UL-Timeslot-InformationAddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Code-InformationAddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHs)) OF UL-Code-InformationAddItem-PSCH-ReconfRqst

UL-Code-InformationAddItem-PSCH-ReconfRqst ::= SEQUENCE {
    pUSCH-ID                PUSCH-ID,
    tdd-ChannelisationCode  TDD-ChannelisationCode,
    iE-Extensions            ProtocolExtensionContainer { { UL-Code-InformationAddItem-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
    ...
}

UL-Code-InformationAddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PUSCH-AddInformation-LCR-PSCH-ReconfRqst ::= ProtocolIE-Single-Container { { PUSCH-AddInformation-LCR-AddListIEs-PSCH-ReconfRqst } }

PUSCH-AddInformation-LCR-AddListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    {ID id-PUSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst CRITICALITY reject TYPE PUSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst
    PRESENCE optional}
}

PUSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod        RepetitionPeriod,
    repetitionLength        RepetitionLength,
    tdd-PhysicalChannelOffset TDD-PhysicalChannelOffset,
    uL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst UL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst,
    iE-Extensions            ProtocolExtensionContainer { {PUSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

PUSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

UL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfDLTSLCRs)) OF UL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst

UL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlotLCR                TimeSlotLCR,
    midambleShiftLCR           MidambleShiftLCR,
    tFCI-Presence               TFCI-Presence,
    uL-Code-InformationAddList-LCR-PSCH-ReconfRqst  UL-Code-InformationAddList-LCR-PSCH-ReconfRqst,
    iE-Extensions               ProtocolExtensionContainer { { UL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs} }    OPTIONAL,
    ...
}

UL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Code-InformationAddList-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Code-InformationAddItem-LCR-PSCH-ReconfRqst

UL-Code-InformationAddItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
    pUSCH-ID                    PUSCH-ID,
    tdd-ChannelisationCodeLCR   TDD-ChannelisationCodeLCR,
    iE-Extensions               ProtocolExtensionContainer { { UL-Code-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs} }    OPTIONAL,
    ...
}

UL-Code-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PUSCHSets-ModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHSets)) OF PUSCHSets-ModifyItem-PSCH-ReconfRqst

PUSCHSets-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    pUSCHSet-ID                 PUSCHSet-ID,
    pUSCH-InformationList       PUSCH-Information-ModifyList-PSCH-ReconfRqst    OPTIONAL,
    iE-Extensions               ProtocolExtensionContainer { {PUSCHSets-ModifyItem-PSCH-ReconfRqst-ExtIEs} }    OPTIONAL,
    ...
}

PUSCHSets-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-PUSCH-ModifyInformation-LCR-PSCH-ReconfRqst CRITICALITY reject    EXTENSION    PUSCH-ModifyInformation-LCR-PSCH-ReconfRqst
    PRESENCE    optional}, -- For 1.28Mcps TDD only
    ...
}

PUSCH-Information-ModifyList-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PUSCH-Information-ModifyListIEs-PSCH-ReconfRqst }} -- For 3.84Mcps
TDD only

PUSCH-Information-ModifyListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    {ID id-PUSCH-Information-ModifyListIE-PSCH-ReconfRqst CRITICALITY reject    TYPE    PUSCH-Information-ModifyItem-PSCH-ReconfRqst
    PRESENCE    mandatory}
}

PUSCH-Information-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod            RepetitionPeriod    OPTIONAL,

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repetitionLength                RepetitionLength                OPTIONAL,
tdd-PhysicalChannelOffset        TDD-PhysicalChannelOffset    OPTIONAL,
uL-Timeslot-InformationModifyList-PSCH-ReconfRqst    UL-Timeslot-InformationModifyList-PSCH-ReconfRqst    OPTIONAL,
iE-Extensions                    ProtocolExtensionContainer { {PUSCH-Information-ModifyItem-PSCH-ReconfRqst-ExtIEs} }    OPTIONAL,
    ...
}

PUSCH-Information-ModifyItem-PSCH-ReconfRqst-ExtIEs    NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Timeslot-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst

UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlot                TimeSlot,
    midambleShiftAndBurstType    MidambleShiftAndBurstType    OPTIONAL,
    tFCI-Presence            TFCI-Presence    OPTIONAL,
    uL-Code-InformationModifyList-PSCH-ReconfRqst    UL-Code-InformationModifyList-PSCH-ReconfRqst    OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { { UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }    OPTIONAL,
    ...
}

UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst-ExtIEs    NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Code-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHs)) OF UL-Code-InformationModifyItem-PSCH-ReconfRqst

UL-Code-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    pUSCH-ID                PUSCH-ID,
    tdd-ChannelisationCode    TDD-ChannelisationCode,
    iE-Extensions            ProtocolExtensionContainer { { UL-Code-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }    OPTIONAL,
    ...
}

UL-Code-InformationModifyItem-PSCH-ReconfRqst-ExtIEs    NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PUSCH-ModifyInformation-LCR-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PUSCH-ModifyInformation-LCR-ModifyListIEs-PSCH-ReconfRqst }}

PUSCH-ModifyInformation-LCR-ModifyListIEs-PSCH-ReconfRqst    NBAP-PROTOCOL-IES ::= {
    {ID id-PUSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst    CRITICALITY reject    TYPE    PUSCH-ModifyInformation-LCR-
ModifyItem-PSCH-ReconfRqst    PRESENCE    optional}
}

PUSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod        RepetitionPeriod    OPTIONAL,
    repetitionLength        RepetitionLength    OPTIONAL,
    tdd-PhysicalChannelOffset    TDD-PhysicalChannelOffset    OPTIONAL,
    uL-Timeslot-InformationModifyList-LCR-PSCH-ReconfRqst    UL-Timeslot-LCR-InformationModifyList-PSCH-ReconfRqst    OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { {PUSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRqst-ExtIEs} }
OPTIONAL,

```

```

    }
    ...
}

PUSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Timeslot-LCR-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfULTSLCRs)) OF UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst

UL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlotLCR                TimeSlotLCR,
    midambleShiftLCR           MidambleShiftLCR    OPTIONAL,
    tFCI-Presence               TFCI-Presence      OPTIONAL,
    uL-Code-InformationModifyList-PSCH-ReconfRqst UL-Code-InformationModifyList-PSCH-ReconfRqst    OPTIONAL,
    iE-Extensions               ProtocolExtensionContainer { { UL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs } }
    OPTIONAL,
    ...
}

UL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Code-LCR-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHs)) OF UL-Code-InformationModifyItem-PSCH-ReconfRqst

UL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    pUSCH-ID                    PUSCH-ID,
    tdd-ChannelisationCodeLCR    TDD-ChannelisationCodeLCR,
    iE-Extensions               ProtocolExtensionContainer { { UL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs } }    OPTIONAL,
    ...
}

UL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PUSCHSets-DeleteList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHSets)) OF PUSCHSets-DeleteItem-PSCH-ReconfRqst

PUSCHSets-DeleteItem-PSCH-ReconfRqst ::= SEQUENCE {
    pUSCHSet-ID                 PUSCHSet-ID,
    iE-Extensions               ProtocolExtensionContainer { { PUSCHSets-DeleteItem-PSCH-ReconfRqst-ExtIEs } }    OPTIONAL,
    ...
}

PUSCHSets-DeleteItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HS-PDSCH-TDD-Information-PSCH-ReconfRqst ::= SEQUENCE {
    dL-HS-PDSCH-Timeslot-Information-PSCH-ReconfRqst DL-HS-PDSCH-Timeslot-Information-PSCH-ReconfRqst    OPTIONAL,
    dL-HS-PDSCH-Timeslot-Information-LCR-PSCH-ReconfRqst DL-HS-PDSCH-Timeslot-Information-LCR-PSCH-ReconfRqst    OPTIONAL,
    iE-Extensions               ProtocolExtensionContainer { { HS-PDSCH-TDD-Information-PSCH-ReconfRqst-ExtIEs } }    OPTIONAL,
    ...
}

```

```

}

HS-PDSCH-TDD-Information-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-HS-PDSCH-Timeslot-Information-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfDLTSS)) OF DL-HS-PDSCH-Timeslot-InformationItem-PSCH-ReconfRqst

DL-HS-PDSCH-Timeslot-InformationItem-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlot                TimeSlot,
    midambleShiftAndBurstType MidambleShiftAndBurstType,
    iE-Extensions           ProtocolExtensionContainer { { DL-HS-PDSCH-Timeslot-InformationItem-PSCH-ReconfRqst-ExtIEs} }
    OPTIONAL,
    ...
}

DL-HS-PDSCH-Timeslot-InformationItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-HS-PDSCH-Timeslot-Information-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfDLTSLCRs)) OF DL-HS-PDSCH-Timeslot-InformationItem-LCR-PSCH-ReconfRqst

DL-HS-PDSCH-Timeslot-InformationItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlot                TimeSlotLCR,
    midambleShiftAndBurstType MidambleShiftLCR,
    iE-Extensions           ProtocolExtensionContainer { { DL-HS-PDSCH-Timeslot-InformationItem-LCR-PSCH-ReconfRqst-ExtIEs} }
    OPTIONAL,
    ...
}

DL-HS-PDSCH-Timeslot-InformationItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRqst ::= SEQUENCE {
    hS-SCCH-Information-PSCH-ReconfRqst HS-SCCH-Information-PSCH-ReconfRqst OPTIONAL,
    hS-SCCH-Information-LCR-PSCH-ReconfRqst HS-SCCH-Information-PSCH-ReconfRqst OPTIONAL,
    iE-Extensions           ProtocolExtensionContainer { { Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HS-SCCH-Information-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHs)) OF HS-SCCH-InformationItem-PSCH-ReconfRqst

HS-SCCH-InformationItem-PSCH-ReconfRqst ::= SEQUENCE {
    hS-SCCH-ID              HS-SCCH-ID,
    timeSlot                TimeSlot,
    midambleShiftAndBurstType MidambleShiftAndBurstType,
    tdd-ChannelisationCode  TDD-ChannelisationCode,
}

```



```

    hS-SCCH-MaxPower          DL-Power,
    hS-SICH-Information       HS-SICH-Information-PSCH-ReconfRqst,
    iE-Extensions            ProtocolExtensionContainer { { HS-SCCH-InformationItem-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

HS-SCCH-InformationItem-PSCH-ReconfRqst-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HS-SICH-Information-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlot                TimeSlot,
    midambleShiftAndBurstType  MidambleShiftAndBurstType,
    tdd-ChannelisationCode    TDD-ChannelisationCode,
    iE-Extensions            ProtocolExtensionContainer { { HS-SICH-Information-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

HS-SICH-Information-PSCH-ReconfRqst-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HS-SCCH-Information-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHs)) OF HS-SCCH-InformationItem-LCR-PSCH-ReconfRqst

HS-SCCH-InformationItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
    hS-SCCH-ID              HS-SCCH-ID,
    timeSlotLCR              TimeSlotLCR,
    midambleShiftLCR         MidambleShiftLCR,
    tdd-ChannelisationCode    TDD-ChannelisationCodeLCR,
    hS-SCCH-MaxPower         DL-Power,
    hS-SICH-Information-LCR   HS-SICH-Information-LCR-PSCH-ReconfRqst,
    iE-Extensions            ProtocolExtensionContainer { { HS-SCCH-InformationItem-LCR-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

HS-SCCH-InformationItem-LCR-PSCH-ReconfRqst-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HS-SICH-Information-LCR-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlotLCR              TimeSlotLCR,
    midambleShiftLCR         MidambleShiftLCR,
    tdd-ChannelisationCodeLCR  TDD-ChannelisationCodeLCR,
    iE-Extensions            ProtocolExtensionContainer { { HS-SICH-Information-LCR-PSCH-ReconfRqst-ExtIEs} } OPTIONAL,
    ...
}

HS-SICH-Information-LCR-PSCH-ReconfRqst-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRqst ::= SEQUENCE {
    hS-SCCH-InformationModify-PSCH-ReconfRqst  HS-SCCH-InformationModify-PSCH-ReconfRqst  OPTIONAL,

```

```

    hS-SCCH-InformationModify-LCR-PSCH-ReconfRqst  HS-SCCH-InformationModify-PSCH-ReconfRqst  OPTIONAL,
    iE-Extensions                                ProtocolExtensionContainer { { Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRqst-ExtIEs } }
    OPTIONAL,
    ...
}

Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRqst-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HS-SCCH-InformationModify-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHs)) OF HS-SCCH-InformationModifyItem-PSCH-ReconfRqst

HS-SCCH-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    hS-SCCH-ID                HS-SCCH-ID,
    timeSlot                  TimeSlot  OPTIONAL,
    midambleShiftAndBurstType MidambleShiftAndBurstType  OPTIONAL,
    tdd-ChannelisationCode    TDD-ChannelisationCode  OPTIONAL,
    hS-SCCH-MaxPower          DL-Power  OPTIONAL,
    hS-SICH-Information        HS-SICH-Information-PSCH-ReconfRqst  OPTIONAL,
    iE-Extensions             ProtocolExtensionContainer { { HS-SCCH-InformationModifyItem-PSCH-ReconfRqst-ExtIEs } }  OPTIONAL,
    ...
}

HS-SCCH-InformationModifyItem-PSCH-ReconfRqst-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HS-SICH-InformationModify-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlot                  TimeSlot  OPTIONAL,
    midambleShiftAndBurstType MidambleShiftAndBurstType  OPTIONAL,
    tdd-ChannelisationCode    TDD-ChannelisationCode  OPTIONAL,
    iE-Extensions             ProtocolExtensionContainer { { HS-SICH-InformationModify-PSCH-ReconfRqst-ExtIEs } }  OPTIONAL,
    ...
}

HS-SICH-InformationModify-PSCH-ReconfRqst-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HS-SCCH-InformationModify-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHs)) OF HS-SCCH-InformationModifyItem-LCR-PSCH-ReconfRqst

HS-SCCH-InformationModifyItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
    hS-SCCH-ID                HS-SCCH-ID,
    timeSlotLCR               TimeSlotLCR  OPTIONAL,
    midambleShiftLCR          MidambleShiftLCR  OPTIONAL,
    tdd-ChannelisationCode    TDD-ChannelisationCodeLCR  OPTIONAL,
    hS-SCCH-MaxPower          DL-Power  OPTIONAL,
    hS-SICH-Information-LCR   HS-SICH-Information-LCR-PSCH-ReconfRqst  OPTIONAL,
    iE-Extensions             ProtocolExtensionContainer { { HS-SCCH-InformationModifyItem-LCR-PSCH-ReconfRqst-ExtIEs } }  OPTIONAL,
    ...
}

HS-SCCH-InformationModifyItem-LCR-PSCH-ReconfRqst-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {

```

```

}
...
}
HS-SICH-InformationModify-LCR-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlotLCR                TimeSlotLCR        OPTIONAL,
    midambleShiftLCR           MidambleShiftLCR   OPTIONAL,
    tdd-ChannelisationCodeLCR  TDD-ChannelisationCodeLCR OPTIONAL,
    iE-Extensions              ProtocolExtensionContainer { { HS-SICH-InformationModify-LCR-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
    ...
}
HS-SICH-InformationModify-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
Delete-From-HS-SCCH-Resource-Pool-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHs)) OF Delete-From-HS-SCCH-Resource-PoolItem-PSCH-ReconfRqst
Delete-From-HS-SCCH-Resource-PoolItem-PSCH-ReconfRqst ::= SEQUENCE {
    hS-SCCH-ID                HS-SCCH-ID,
    iE-Extensions              ProtocolExtensionContainer { { Delete-From-HS-SCCH-Resource-PoolItem-PSCH-ReconfRqst-ExtIEs } } OPTIONAL,
    ...
}
Delete-From-HS-SCCH-Resource-PoolItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
-- *****
--
-- PHYSICAL SHARED CHANNEL RECONFIGURATION RESPONSE-TDD
--
-- *****

PhysicalSharedChannelReconfigurationResponseTDD ::= SEQUENCE {
    protocolIEs                ProtocolIE-Container {{PhysicalSharedChannelReconfigurationResponseTDD-IEs}},
    protocolExtensions         ProtocolExtensionContainer {{PhysicalSharedChannelReconfigurationResponseTDD-Extensions}} OPTIONAL,
    ...
}
PhysicalSharedChannelReconfigurationResponseTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-CriticalityDiagnostics    CRITICALITY    ignore    TYPE    CriticalityDiagnostics    PRESENCE optional },
    ...
}
PhysicalSharedChannelReconfigurationResponseTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
-- *****
--
-- PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE-TDD

```

```

--
-- *****
PhysicalSharedChannelReconfigurationFailureTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{PhysicalSharedChannelReconfigurationFailureTDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{PhysicalSharedChannelReconfigurationFailureTDD-Extensions}}
    ...
}

PhysicalSharedChannelReconfigurationFailureTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID   id-CauseLevel-PSCH-ReconfFailureTDD   CRITICALITY ignore  TYPE CauseLevel-PSCH-ReconfFailureTDD   PRESENCE mandatory }|
    { ID   id-CriticalityDiagnostics             CRITICALITY ignore      TYPE CriticalityDiagnostics PRESENCE optional },
    ...
}

PhysicalSharedChannelReconfigurationFailureTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CauseLevel-PSCH-ReconfFailureTDD ::= CHOICE {
    generalCause          GeneralCauseList-PSCH-ReconfFailureTDD,
    setSpecificCause      SetSpecificCauseList-PSCH-ReconfFailureTDD,
    ...
}

GeneralCauseList-PSCH-ReconfFailureTDD ::= SEQUENCE {
    cause                Cause,
    iE-Extensions        ProtocolExtensionContainer { { GeneralCauseItem-PSCH-ReconfFailureTDD-ExtIEs } }
    ...
}

GeneralCauseItem-PSCH-ReconfFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

SetSpecificCauseList-PSCH-ReconfFailureTDD ::= SEQUENCE {
    unsuccessful-PDSCHSetList-PSCH-ReconfFailureTDD Unsuccessful-PDSCHSetList-PSCH-ReconfFailureTDD   OPTIONAL,
    unsuccessful-PUSCHSetList-PSCH-ReconfFailureTDD Unsuccessful-PUSCHSetList-PSCH-ReconfFailureTDD   OPTIONAL,
    iE-Extensions        ProtocolExtensionContainer { { SetSpecificCauseItem-PSCH-ReconfFailureTDD-ExtIEs } }   OPTIONAL,
    ...
}

SetSpecificCauseItem-PSCH-ReconfFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Unsuccessful-PDSCHSetList-PSCH-ReconfFailureTDD ::= SEQUENCE (SIZE (0.. maxNrOfPDSCHSets)) OF ProtocolIE-Single-Container {{ Unsuccessful-
PDSCHSetItemIE-PSCH-ReconfFailureTDD }}

Unsuccessful-PDSCHSetItemIE-PSCH-ReconfFailureTDD NBAP-PROTOCOL-IES ::= {
    { ID   id-Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD CRITICALITY ignore  TYPE Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDDPRESENCE
mandatory}
}

```

```

Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD ::= SEQUENCE {
    pDSCHSet-ID          PDSCHSet-ID,
    cause                Cause,
    iE-Extensions       ProtocolExtensionContainer { {Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD-ExtIEs} } OPTIONAL,
    ...
}

Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Unsuccessful-PUSCHSetList-PSCH-ReconfFailureTDD ::= SEQUENCE (SIZE (0.. maxNrOfPUSCHSets)) OF ProtocolIE-Single-Container {{ Unsuccessful-
PUSCHSetItemIE-PSCH-ReconfFailureTDD }}

Unsuccessful-PUSCHSetItemIE-PSCH-ReconfFailureTDD NBAP-PROTOCOL-IES ::= {
    { ID id-Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD CRITICALITY ignore TYPE Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDDPRESENCE
mandatory}
}

Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD ::= SEQUENCE {
    pUSCHSet-ID          PUSCHSet-ID,
    cause                Cause,
    iE-Extensions       ProtocolExtensionContainer { {Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD-ExtIEs} } OPTIONAL,
    ...
}

Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- RESET REQUEST
--
-- *****

ResetRequest ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container {{ResetRequest-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{ResetRequest-Extensions}} OPTIONAL,
    ...
}

ResetRequest-IEs NBAP-PROTOCOL-IES ::= {
    {ID id-ResetIndicator CRITICALITY ignore TYPE ResetIndicator PRESENCE mandatory},
    ...
}

```

```

ResetRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

ResetIndicator ::= CHOICE {
    communicationContext      CommunicationContextList-Reset,
    communicationControlPort  CommunicationControlPortList-Reset,
    nodeB                      NULL,
    ...
}

CommunicationContextList-Reset ::= SEQUENCE {
    communicationContextInfoList-Reset      CommunicationContextInfoList-Reset,
    iE-Extensions                          ProtocolExtensionContainer { {CommunicationContextItem-Reset-ExtIEs} } OPTIONAL,
    ...
}

CommunicationContextItem-Reset-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CommunicationContextInfoList-Reset ::= SEQUENCE (SIZE (1.. maxCommunicationContext)) OF ProtocolIE-Single-Container
{{ CommunicationContextInfoItemIE-Reset }}

CommunicationContextInfoItemIE-Reset NBAP-PROTOCOL-IES ::= {
    {ID id-CommunicationContextInfoItem-Reset      CRITICALITY reject      TYPE CommunicationContextInfoItem-Reset      PRESENCE mandatory}
}

CommunicationContextInfoItem-Reset ::= SEQUENCE {
    communicationContextType-Reset      CommunicationContextType-Reset,
    iE-Extensions                      ProtocolExtensionContainer { { CommunicationContextInfoItem-Reset-ExtIEs} } OPTIONAL,
    ...
}

CommunicationContextInfoItem-Reset-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CommunicationContextType-Reset ::= CHOICE {

```

```

    cRNC-CommunicationContextID      CRNC-CommunicationContextID,
    nodeB-CommunicationContextID     NodeB-CommunicationContextID,
    ...
}

CommunicationControlPortList-Reset ::= SEQUENCE {
    communicationControlPortInfoList-Reset      CommunicationControlPortInfoList-Reset,
    iE-Extensions                               ProtocolExtensionContainer { {CommunicationControlPortItem-Reset-ExtIEs} } OPTIONAL,
    ...
}

CommunicationControlPortItem-Reset-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CommunicationControlPortInfoList-Reset ::= SEQUENCE (SIZE (1.. maxCCPinNodeB)) OF ProtocolIE-Single-Container {{CommunicationControlPortInfoItemIE-Reset }}

CommunicationControlPortInfoItemIE-Reset NBAP-PROTOCOL-IES ::= {
    {ID id-CommunicationControlPortInfoItem-Reset      CRITICALITY reject      TYPE CommunicationControlPortInfoItem-Reset      PRESENCE mandatory}
}

CommunicationControlPortInfoItem-Reset ::= SEQUENCE {
    communicationControlPortID      CommunicationControlPortID,
    iE-Extensions                   ProtocolExtensionContainer { {CommunicationControlPortInfoItem-Reset-ExtIEs} } OPTIONAL,
    ...
}

CommunicationControlPortInfoItem-Reset-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- RESET RESPONSE
--
-- *****

ResetResponse ::= SEQUENCE {
    protocolIEs      ProtocolIE-Container      {{ResetResponse-IEs}},

```

```

    protocolExtensions      ProtocolExtensionContainer  {{ResetResponse-Extensions}}          OPTIONAL,
    ...
}

ResetResponse-IEs NBAP-PROTOCOL-IES ::= {
  {ID id-CriticalityDiagnostics      CRITICALITY      ignore      TYPE      CriticalityDiagnostics      PRESENCE optional},
  ...
}

ResetResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- INFORMATION EXCHANGE INITIATION REQUEST
--
-- *****

InformationExchangeInitiationRequest ::= SEQUENCE {
  protocolIEs      ProtocolIE-Container  {{InformationExchangeInitiationRequest-IEs}},
  protocolExtensions      ProtocolExtensionContainer  {{InformationExchangeInitiationRequest-Extensions}}          OPTIONAL,
  ...
}

InformationExchangeInitiationRequest-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-InformationExchangeID      CRITICALITY reject      TYPE      InformationExchangeID
    PRESENCE      mandatory  }|
  { ID      id-InformationExchangeObjectType-InfEx-Rqst      CRITICALITY reject      TYPE      InformationExchangeObjectType-
InfEx-Rqst      PRESENCE      mandatory  }|
  -- This IE represents both the Information Exchange Object Type IE and the choice based on the Information Exchange Object Type
  -- as described in the tabular message format in subclause 9.1.
  { ID      id-InformationType      CRITICALITY reject      TYPE      InformationType      PRESENCE mandatory
  }|
  { ID      id-InformationReportCharacteristics      CRITICALITY reject      TYPE      InformationReportCharacteristics
    PRESENCE      mandatory},
  ...
}

InformationExchangeInitiationRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

InformationExchangeObjectType-InfEx-Rqst ::= CHOICE {
  cell      Cell-InfEx-Rqst,
  ...
}

Cell-InfEx-Rqst ::= SEQUENCE {
  c-ID      C-ID,
  iE-Extensions      ProtocolExtensionContainer  { { CellItem-InfEx-Rqst-ExtIEs } }          OPTIONAL,
  ...
}

```



```

CellItem-InfEx-Rqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- INFORMATION EXCHANGE INITIATION RESPONSE
--
-- *****

InformationExchangeInitiationResponse ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{InformationExchangeInitiationResponse-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{InformationExchangeInitiationResponse-Extensions}}    OPTIONAL,
    ...
}

InformationExchangeInitiationResponse-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-InformationExchangeID          CRITICALITY ignore          TYPE          InformationExchangeID
      PRESENCE mandatory }|
    { ID      id-InformationExchangeObjectType-InfEx-Rsp    CRITICALITY ignore          TYPE          InformationExchangeObjectType-InfEx-Rsp    PRESENCE
      optional }|
    { ID      id-CriticalityDiagnostics          CRITICALITY ignore          TYPE          CriticalityDiagnostics          PRESENCE optional },
    ...
}

InformationExchangeInitiationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

InformationExchangeObjectType-InfEx-Rsp ::= CHOICE {
    cell                Cell-InfEx-Rsp,
    ...
}

Cell-InfEx-Rsp ::= SEQUENCE {
    requestedDataValue  RequestedDataValue,
    iE-Extensions      ProtocolExtensionContainer { { CellItem-InfEx-Rsp-ExtIEs } }    OPTIONAL,
    ...
}

CellItem-InfEx-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- INFORMATION EXCHANGE INITIATION FAILURE
--
-- *****

InformationExchangeInitiationFailure ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{InformationExchangeInitiationFailure-IEs}},

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```

    protocolExtensions      ProtocolExtensionContainer  {{InformationExchangeInitiationFailure-Extensions}}
    ...
}

InformationExchangeInitiationFailure-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-InformationExchangeID          CRITICALITY ignore          TYPE      InformationExchangeID          PRESENCE mandatory }|
  { ID      id-Cause                          CRITICALITY ignore          TYPE      Cause                          PRESENCE mandatory }|
  { ID      id-CriticalityDiagnostics          CRITICALITY ignore          TYPE      CriticalityDiagnostics          PRESENCE optional },
  ...
}

InformationExchangeInitiationFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- INFORMATION REPORT
--
-- *****

InformationReport ::= SEQUENCE {
  protocolIEs      ProtocolIE-Container  {{InformationReport-IEs}},
  protocolExtensions      ProtocolExtensionContainer  {{InformationReport-Extensions}}
  ...
}

InformationReport-IEs NBAP-PROTOCOL-IES ::= {
  { ID      id-InformationExchangeID          CRITICALITY ignore          TYPE      InformationExchangeID          PRESENCE mandatory }|
  { ID      id-InformationExchangeObjectType-InfEx-Rprt  CRITICALITY ignore          TYPE      InformationExchangeObjectType-InfEx-Rprt  PRESENCE mandatory },
  ...
}

InformationReport-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

InformationExchangeObjectType-InfEx-Rprt ::= CHOICE {
  cell      Cell-Inf-Rprt,
  ...
}

Cell-Inf-Rprt ::= SEQUENCE {
  requestedDataValueInformation      RequestedDataValueInformation,
  iE-Extensions      ProtocolExtensionContainer  {{ CellItem-Inf-Rprt-ExtIEs }}
  ...
}

CellItem-Inf-Rprt-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

}

-- *****
--
-- INFORMATION EXCHANGE TERMINATION REQUEST
--
-- *****

InformationExchangeTerminationRequest ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{InformationExchangeTerminationRequest-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{InformationExchangeTerminationRequest-Extensions}}    OPTIONAL,
    ...
}

InformationExchangeTerminationRequest-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-InformationExchangeID          CRITICALITY ignore          TYPE    InformationExchangeID          PRESENCE mandatory },
    ...
}

InformationExchangeTerminationRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- INFORMATION EXCHANGE FAILURE INDICATION
--
-- *****

InformationExchangeFailureIndication ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{InformationExchangeFailureIndication-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{InformationExchangeFailureIndication-Extensions}}    OPTIONAL,
    ...
}

InformationExchangeFailureIndication-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-InformationExchangeID          CRITICALITY ignore          TYPE    InformationExchangeID          PRESENCE mandatory }|
    { ID    id-Cause                          CRITICALITY ignore          TYPE    Cause                          PRESENCE mandatory },
    ...
}

InformationExchangeFailureIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- CELL SYNCHRONISATION INITIATION REQUEST TDD
--
-- *****

CellSynchronisationInitiationRequestTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CellSynchronisationInitiationRequestTDD-IEs}},

```

```

    protocolExtensions      ProtocolExtensionContainer  {{CellSynchronisationInitiationRequestTDD-Extensions}}
    ...
}

CellSynchronisationInitiationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  { ID   id-SYNCDlCodeId-TransInitLCR-CellSyncInitiationRqstTDD   CRITICALITY   reject           EXTENSION   SYNCDlCodeId-
  TransInitLCR-CellSyncInitiationRqstTDD   PRESENCE   optional   }| -- 1.28Mcps TDD only
  { ID   id-SYNCDlCodeId-MeasureInitLCR-CellSyncInitiationRqstTDD   CRITICALITY   reject           EXTENSION   SYNCDlCodeId-
  MeasureInitLCR-CellSyncInitiationRqstTDD   PRESENCE   optional   }, -- 1.28Mcps TDD only
  ...
}

CellSynchronisationInitiationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID   id-C-ID   CRITICALITY   reject   TYPE   C-ID   PRESENCE mandatory }|
  { ID   id-cellSyncBurstRepetitionPeriod   CRITICALITY   reject   TYPE   CellSyncBurstRepetitionPeriod   PRESENCE mandatory }|
  { ID   id-timeslotInfo-CellSyncInitiationRqstTDD   CRITICALITY   reject   TYPE   TimeslotInfo-CellSyncInitiationRqstTDD   PRESENCE
  optional   }| -- Mandatory for 3.84Mcps TDD only
  { ID   id-CellSyncBurstTransInit-CellSyncInitiationRqstTDD   CRITICALITY   reject   TYPE   CellSyncBurstTransInit-
  CellSyncInitiationRqstTDD   PRESENCE   optional   }| -- 3.84Mcps TDD only
  { ID   id-CellSyncBurstMeasureInit-CellSyncInitiationRqstTDD   CRITICALITY   reject   TYPE   CellSyncBurstMeasureInit-
  CellSyncInitiationRqstTDD   PRESENCE   optional   }, -- 3.84Mcps TDD only
  ...
}

CellSyncBurstTransInit-CellSyncInitiationRqstTDD ::= SEQUENCE {
  csbTransmissionID      CSBTransmissionID,
  sfn                     SFN,
  cellSyncBurstCode      CellSyncBurstCode,
  cellSyncBurstCodeShift CellSyncBurstCodeShift,
  initialDLTransPower    DL-Power,
  iE-Extensions          ProtocolExtensionContainer { { CellSyncBurstTransInit-CellSyncInitiationRqstTDD-ExtIEs } } OPTIONAL,
  ...
}

CellSyncBurstTransInit-CellSyncInitiationRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

TimeslotInfo-CellSyncInitiationRqstTDD ::= SEQUENCE (SIZE (1..15)) OF TimeSlot

CellSyncBurstMeasureInit-CellSyncInitiationRqstTDD ::= SEQUENCE {
  csbMeasurementID      CSBMeasurementID,
  cellSyncBurstCode      CellSyncBurstCode,
  cellSyncBurstCodeShift CellSyncBurstCodeShift,
  synchronisationReportType SynchronisationReportType,
  sfn                     SFN OPTIONAL,
  synchronisationReportCharacteristics SynchronisationReportCharacteristics,
  iE-Extensions          ProtocolExtensionContainer { { CellSyncBurstMeasureInit-CellSyncInitiationRqstTDD-ExtIEs } } OPTIONAL,
  ...
}

CellSyncBurstMeasureInit-CellSyncInitiationRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

}

SYNCd1CodeId-TransInitLCR-CellSyncInitiationRqstTDD ::= SEQUENCE {
    cSBTransmissionID          CSBTransmissionID,
    sfn                        SFN,
    uARFCN                     UARFCN,
    sYNCd1CodeId              SYNCd1CodeId,
    DwPCH-Power                DwPCH-Power,
    iE-Extensions              ProtocolExtensionContainer { { SYNCd1CodeId-TransInitLCR-CellSyncInitiationRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

SYNCd1CodeId-TransInitLCR-CellSyncInitiationRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

SYNCd1CodeId-MeasureInitLCR-CellSyncInitiationRqstTDD ::= SEQUENCE {
    cSBMeasurementID          CSBMeasurementID,
    sfn                        SFN OPTIONAL,
    uARFCN                     UARFCN,
    sYNCd1CodeId              SYNCd1CodeId,
    synchronisationReportType SynchronisationReportType,
    synchronisationReportCharacteristics SynchronisationReportCharacteristics,
    iE-Extensions              ProtocolExtensionContainer { { SYNCd1CodeId-MeasureInitLCR-CellSyncInitiationRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

SYNCd1CodeId-MeasureInitLCR-CellSyncInitiationRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- CELL SYNCHRONISATION INITIATION RESPONSE TDD
--
-- *****

CellSynchronisationInitiationResponseTDD ::= SEQUENCE {
    protocolIEs                ProtocolIE-Container {{CellSynchronisationInitiationResponseTDD-IEs}},
    protocolExtensions          ProtocolExtensionContainer {{CellSynchronisationInitiationResponseTDD-Extensions}} OPTIONAL,
    ...
}

CellSynchronisationInitiationResponseTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CellSynchronisationInitiationResponseTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-CriticalityDiagnostics          CRITICALITY      ignore      TYPE      CriticalityDiagnostics          PRESENCE
      optional },
    ...
}

```

```

-- *****
--
-- CELL SYNCHRONISATION INITIATION FAILURE TDD
--
-- *****

CellSynchronisationInitiationFailureTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{CellSynchronisationInitiationFailureTDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer  {{CellSynchronisationInitiationFailureTDD-Extensions}}    OPTIONAL,
    ...
}

CellSynchronisationInitiationFailureTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CellSynchronisationInitiationFailureTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-Cause          CRITICALITY    ignore    TYPE    Cause          PRESENCE mandatory }
    }|
    { ID    id-CriticalityDiagnostics    CRITICALITY    ignore    TYPE    CriticalityDiagnostics    PRESENCE optional },
    ...
}

-- *****
--
-- CELL SYNCHRONISATION RECONFIGURATION REQUEST TDD
--
-- *****

CellSynchronisationReconfigurationRequestTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{CellSynchronisationReconfigurationRequestTDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer  {{CellSynchronisationReconfigurationRequestTDD-Extensions}}    OPTIONAL,
    ...
}

CellSynchronisationReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID    id-NSubCyclesPerCyclePeriod-CellSyncReconfRqstTDD    CRITICALITY    reject    EXTENSION    NSubCyclesPerCyclePeriod
    PRESENCE    optional    }| -- 1.28Mcps TDD only
    { ID    id-SYNCD1CodeIdTransReconfInfoLCR-CellSyncReconfRqstTDD    CRITICALITY    reject    EXTENSION
    SYNCD1CodeIdTransReconfInfoLCR-CellSyncReconfRqstTDD    PRESENCE    optional    }| -- 1.28Mcps TDD only
    { ID    id-SYNCD1CodeIdMeasReconfigurationLCR-CellSyncReconfRqstTDD    CRITICALITY    reject    EXTENSION
    SYNCD1CodeIdMeasReconfigurationLCR-CellSyncReconfRqstTDD    PRESENCE    optional    }, -- 1.28Mcps TDD only
    ...
}

CellSynchronisationReconfigurationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-C-ID          CRITICALITY    reject    TYPE    C-ID          PRESENCE    mandatory }
    }|
    { ID    id-TimeSlot      CRITICALITY    reject    TYPE    TimeSlot      PRESENCE    mandatory }|
    -- 1.28Mcps TDD - There is no Time Slot indication needed, the CRNC should indicate Time Slot 0 and the Node B shall ignore it
    { ID    id-NCyclesPerSFNperiod    CRITICALITY    reject    TYPE    NCyclesPerSFNperiod    PRESENCE    mandatory }|
    { ID    id-NRepetitionsPerCyclePeriod    CRITICALITY    reject    TYPE    NRepetitionsPerCyclePeriod    PRESENCE    mandatory }|
}

```

```

{ ID id-CellSyncBurstTransReconfInfo-CellSyncReconfRqstTDD CRITICALITY reject TYPE
CellSyncBurstTransReconfInfo-CellSyncReconfRqstTDD PRESENCE optional }| -- 3.84Mcps TDD only
{ ID id-CellSyncBurstMeasReconfiguration-CellSyncReconfRqstTDD CRITICALITY reject TYPE
CellSyncBurstMeasReconfiguration-CellSyncReconfRqstTDD PRESENCE optional }, -- 3.84Mcps TDD only
...
}

CellSyncBurstTransReconfInfo-CellSyncReconfRqstTDD ::= SEQUENCE (SIZE (1.. maxNrOfCellSyncBursts)) OF CellSyncBurstTransInfoItem-
CellSyncReconfRqstTDD

CellSyncBurstTransInfoItem-CellSyncReconfRqstTDD ::= SEQUENCE {
  cSBTransmissionID CSBTransmissionID,
  syncFrameNumberToTransmit SyncFrameNumber,
  cellSyncBurstCode CellSyncBurstCode OPTIONAL,
  cellSyncBurstCodeShift CellSyncBurstCodeShift OPTIONAL,
  dlTransPower DL-Power OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { { CellSyncBurstTransInfoItem-CellSyncReconfRqstTDD-ExtIEs } }
  OPTIONAL,
  ...
}

CellSyncBurstTransInfoItem-CellSyncReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

CellSyncBurstMeasReconfiguration-CellSyncReconfRqstTDD ::= ProtocolIE-Single-Container {{ CellSyncBurstMeasInfo-CellSyncReconfRqstTDD }}

CellSyncBurstMeasInfo-CellSyncReconfRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-CellSyncBurstMeasInfoList-CellSyncReconfRqstTDD CRITICALITY reject TYPE CellSyncBurstMeasInfoList-CellSyncReconfRqstTDD PRESENCE
  mandatory }|
  { ID id-SynchronisationReportType CRITICALITY reject TYPE SynchronisationReportType PRESENCE
  optional }|
  { ID id-SynchronisationReportCharacteristics CRITICALITY reject TYPE SynchronisationReportCharacteristics PRESENCE optional },
  ...
}

CellSyncBurstMeasInfoList-CellSyncReconfRqstTDD ::= SEQUENCE (SIZE (1.. maxNrOfCellSyncBursts)) OF CellSyncBurstMeasInfoItem-CellSyncReconfRqstTDD

CellSyncBurstMeasInfoItem-CellSyncReconfRqstTDD ::= SEQUENCE {
  syncFrameNrToReceive SyncFrameNumber,
  syncBurstInfo CellSyncBurstInfoList-CellSyncReconfRqstTDD,
  ...
}

CellSyncBurstInfoList-CellSyncReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfReceptsPerSyncFrame)) OF CellSyncBurstInfoItem-CellSyncReconfRqstTDD

CellSyncBurstInfoItem-CellSyncReconfRqstTDD ::= SEQUENCE {
  cSBMeasurementID CSBMeasurementID,
  cellSyncBurstCode CellSyncBurstCode,
  cellSyncBurstCodeShift CellSyncBurstCodeShift,
  iE-Extensions ProtocolExtensionContainer { { CellSyncBurstMeasInfo-CellSyncReconfRqstTDD-ExtIEs } } OPTIONAL,
  ...
}

```

```

CellSyncBurstMeasInfo-CellSyncReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

SYNCD1CodeIdTransReconfInfoLCR-CellSyncReconfRqstTDD ::= SEQUENCE f(SIZE f(1..maxNrOfSyncFramesLCR)) OF SYNCD1CodeIdTransReconfItemLCR-
CellSyncReconfRqstTDD

SYNCD1CodeIdTransReconfItemLCR-CellSyncReconfRqstTDD ::= SEQUENCE {
  cSBTransmissionID          CSBTransmissionID,
  syncFrameNumberforTransmit SyncFrameNumber,
  uARFCN                     UARFCN,
  sYNCD1CodeId               SYNCD1CodeId OPTIONAL,
  DwPCH-Power                DwPCH-Power OPTIONAL,
  iE-Extensions              ProtocolExtensionContainer { { SYNCD1CodeIdTransReconfInfoLCR-CellSyncReconfRqstTDD-ExtIEs } }
  OPTIONAL,
  ...
}

SYNCD1CodeIdTransReconfInfoLCR-CellSyncReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

SYNCD1CodeIdMeasReconfigurationLCR-CellSyncReconfRqstTDD ::= ProtocolIE-Single-Container {{ SYNCD1CodeIdMeasInfoLCR-CellSyncReconfRqstTDD }}

SYNCD1CodeIdMeasInfoLCR-CellSyncReconfRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-SYNCD1CodeIdMeasInfoList-CellSyncReconfRqstTDD CRITICALITY reject TYPEEXTENSION SYNCD1CodeIdMeasInfoList-CellSyncReconfRqstTDD
  PRESENCE mandatory }|
  { ID id-SynchronisationReportType CRITICALITY reject TYPEEXTENSION SynchronisationReportType PRESENCE
  optional }|
  { ID id-SynchronisationReportCharacteristics CRITICALITY reject TYPEEXTENSION SynchronisationReportCharacteristics PRESENCE
  optional },
  ...
}

SYNCD1CodeIdMeasInfoList-CellSyncReconfRqstTDD ::= SEQUENCE (SIZE (1.. maxNrOfSyncDLCodesLCR)) OF SYNCD1CodeIdMeasInfoItem-CellSyncReconfRqstTDD

SYNCD1CodeIdMeasInfoItem-CellSyncReconfRqstTDD ::= SEQUENCE {
  syncFrameNrToReceive      SyncFrameNumber,
  sYNCD1CodeIdInfoLCR       SYNCD1CodeIdInfoListLCR-CellSyncReconfRqstTDD,
  iE-Extensions             ProtocolExtensionContainer { { SYNCD1CodeIdMeasInfoItem-CellSyncReconfRqstTDD-ExtIEs } } OPTIONAL,
  ...
}

SYNCD1CodeIdMeasInfoItem-CellSyncReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

SYNCD1CodeIdInfoListLCR-CellSyncReconfRqstTDD ::= SEQUENCE (SIZE (1.. maxNrOfRReceptionsperSyncFrameLCR)) OF SYNCD1CodeIdInfoItemLCR-
CellSyncReconfRqstTDD->

SYNCD1CodeIdInfoItemLCR-CellSyncReconfRqstTDD ::= SEQUENCE {
  cSBMeasurementID          CSBMeasurementID,

```



```

    SYNCd1CodeId          SYNCd1CodeId,
    uARFCN                UARFCN,
    propagationDelayCompensation TimingAdjustmentValue    OPTIONAL,
    IE-Extensions        ProtocolExtensionContainer { { SYNCd1CodeIdInfoLCR-CellSyncReconfRqstTDD-ExtIEs } }    OPTIONAL,
    ...
}

SYNCd1CodeIdInfoLCR-CellSyncReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- CELL SYNCHRONISATION RECONFIGURATION RESPONSE TDD
--
-- *****

CellSynchronisationReconfigurationResponseTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CellSynchronisationReconfigurationResponseTDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{CellSynchronisationReconfigurationResponseTDD-Extensions}}    OPTIONAL,
    ...
}

CellSynchronisationReconfigurationResponseTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CellSynchronisationReconfigurationResponseTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-CriticalityDiagnostics          CRITICALITY    ignore          TYPE    CriticalityDiagnostics          PRESENCE optional },
    ...
}

-- *****
--
-- CELL SYNCHRONISATION RECONFIGURATION FAILURE TDD
--
-- *****

CellSynchronisationReconfigurationFailureTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CellSynchronisationReconfigurationFailureTDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer {{CellSynchronisationReconfigurationFailureTDD-Extensions}}    OPTIONAL,
    ...
}

CellSynchronisationReconfigurationFailureTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CellSynchronisationReconfigurationFailureTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-Cause          CRITICALITY    ignore          TYPE    Cause          PRESENCE mandatory
    }|
    { ID    id-CriticalityDiagnostics          CRITICALITY    ignore          TYPE    CriticalityDiagnostics          PRESENCE optional },
    ...
}

```

```

}

-- *****
--
-- CELL SYNCHRONISATION ADJUSTMENT REQUEST TDD
--
-- *****

CellSynchronisationAdjustmentRequestTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CellSynchronisationAdjustmentRequestTDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CellSynchronisationAdjustmentRequestTDD-Extensions}}    OPTIONAL,
    ...
}

CellSynchronisationAdjustmentRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CellSynchronisationAdjustmentRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CellAdjustmentInfo-SyncAdjustmntRqstTDD CRITICALITY ignore TYPE CellAdjustmentInfo-SyncAdjustmentRqstTDD PRESENCE mandatory },
    ...
}

CellAdjustmentInfo-SyncAdjustmentRqstTDD ::= SEQUENCE (SIZE (1..maxCellInNodeB)) OF ProtocolIE-Single-Container {{ CellAdjustmentInfoItemIE-SyncAdjustmntRqstTDD }}

CellAdjustmentInfoItemIE-SyncAdjustmntRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-CellAdjustmentInfoItem-SyncAdjustmentRqstTDD CRITICALITY ignore TYPE CellAdjustmentInfoItem-SyncAdjustmentRqstTDD PRESENCE mandatory }
}

CellAdjustmentInfoItem-SyncAdjustmentRqstTDD ::= SEQUENCE {
    c-ID                  C-ID,
    frameAdjustmentValue FrameAdjustmentValue    OPTIONAL,
    timingAdjustmentValue TimingAdjustmentValue  OPTIONAL,
    dlTransPower          DL-Power                OPTIONAL, -- 3.84Mcps TDD only
    sfn                   SFN                    OPTIONAL,
    iE-Extensions        ProtocolExtensionContainer { { CellAdjustmentInfoItem-SyncAdjustmntRqstTDD-ExtIEs } }    OPTIONAL,
    ...
}

CellAdjustmentInfoItem-SyncAdjustmntRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DwPCH-Power CRITICALITY ignore EXTENSION DwPCH-Power PRESENCE optional }, -- 1.28Mcps TDD only
    ...
}

-- *****
--
-- CELL SYNCHRONISATION ADJUSTMENT RESPONSE TDD
--
-- *****

CellSynchronisationAdjustmentResponseTDD ::= SEQUENCE {

```

```

    protocolIEs          ProtocolIE-Container    {{CellSynchronisationAdjustmentResponseTDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CellSynchronisationAdjustmentResponseTDD-Extensions}}
    ...
}

CellSynchronisationAdjustmentResponseTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CellSynchronisationAdjustmentResponseTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-CriticalityDiagnostics          CRITICALITY ignore    TYPE    CriticalityDiagnostics          PRESENCE optional },
    ...
}

-- *****
--
-- CELL SYNCHRONISATION ADJUSTMENT FAILURE TDD
--
-- *****

CellSynchronisationAdjustmentFailureTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container    {{CellSynchronisationAdjustmentFailureTDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{CellSynchronisationAdjustmentFailureTDD-Extensions}}
    ...
}

CellSynchronisationAdjustmentFailureTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CellSynchronisationAdjustmentFailureTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-CauseLevel-SyncAdjustmntFailureTDD  CRITICALITY ignore    TYPE    CauseLevel-SyncAdjustmntFailureTDD  PRESENCE mandatory }|
    { ID    id-CriticalityDiagnostics             CRITICALITY ignore    TYPE    CriticalityDiagnostics             PRESENCE optional
    },
    ...
}

CauseLevel-SyncAdjustmntFailureTDD ::= CHOICE {
    generalCause          GeneralCauseList-SyncAdjustmntFailureTDD,
    cellSpecificCause     CellSpecificCauseList-SyncAdjustmntFailureTDD,
    ...
}

GeneralCauseList-SyncAdjustmntFailureTDD ::= SEQUENCE {
    cause                 Cause,
    iE-Extensions         ProtocolExtensionContainer { { GeneralCauseList-SyncAdjustmntFailureTDD-ExtIEs }
    ...
}

GeneralCauseList-SyncAdjustmntFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

CellSpecificCauseList-SyncAdjustmntFailureTDD ::= SEQUENCE {
    unsuccessful-cell-InformationRespList-SyncAdjustmntFailureTDD      Unsuccessful-cell-InformationRespList-SyncAdjustmntFailureTDD,
    iE-Extensions                                                       ProtocolExtensionContainer { { CellSpecificCauseList-SyncAdjustmntFailureTDD-ExtIEs} }
    ...
}

CellSpecificCauseList-SyncAdjustmntFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Unsuccessful-cell-InformationRespList-SyncAdjustmntFailureTDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container
{{ Unsuccessful-cell-InformationRespItemIE-SyncAdjustmntFailureTDD }}

Unsuccessful-cell-InformationRespItemIE-SyncAdjustmntFailureTDD NBAP-PROTOCOL-IES ::= {
    { ID      id-Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD      CRITICALITY ignore      TYPE Unsuccessful-
cell-InformationRespItem-SyncAdjustmntFailureTDD      PRESENCE      mandatory},
    ...
}

Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD ::= SEQUENCE {
    c-ID                               C-ID,
    cause                              Cause,
    iE-Extensions                      ProtocolExtensionContainer { { Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD-
ExtIEs} }      OPTIONAL,
    ...
}

Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- CELL SYNCHRONISATION TERMINATION REQUEST TDD
--
-- *****

CellSynchronisationTerminationRequestTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{CellSynchronisationTerminationRequestTDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer  {{CellSynchronisationTerminationRequestTDD-Extensions}}      OPTIONAL,
    ...
}

CellSynchronisationTerminationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CellSynchronisationTerminationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-C-ID          CRITICALITY ignore      TYPE C-ID          PRESENCE mandatory }|
    { ID      id-CSBTransmissionID  CRITICALITY ignore      TYPE CSBTransmissionID  PRESENCE optional }|
    { ID      id-CSBMeasurementID  CRITICALITY ignore      TYPE CSBMeasurementID  PRESENCE optional }|
    ...
}

```

```

-- *****
--
-- CELL SYNCHRONISATION FAILURE INDICATION TDD
--
-- *****

CellSynchronisationFailureIndicationTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{CellSynchronisationFailureIndicationTDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer  {{CellSynchronisationFailureIndicationTDD-Extensions}}  OPTIONAL,
    ...
}

CellSynchronisationFailureIndicationTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CellSynchronisationFailureIndicationTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-C-ID          CRITICALITY  ignore      TYPE      C-ID          PRESENCE mandatory } |
    { ID      id-CSBTransmissionID  CRITICALITY  ignore      TYPE      CSBTransmissionID  PRESENCE optional } |
    { ID      id-CSBMeasurementID  CRITICALITY  ignore      TYPE      CSBMeasurementID  PRESENCE optional } |
    { ID      id-Cause          CRITICALITY  ignore      TYPE      Cause          PRESENCE mandatory } |
    ...
}

-- *****
--
-- CELL SYNCHRONISATION REPORT TDD
--
-- *****

CellSynchronisationReportTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container  {{CellSynchronisationReportTDD-IEs}},
    protocolExtensions  ProtocolExtensionContainer  {{CellSynchronisationReportTDD-Extensions}}  OPTIONAL,
    ...
}

CellSynchronisationReportTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CellSynchronisationReportTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-CellSyncInfo-CellSyncReprtTDD  CRITICALITY  ignore      TYPE      CellSyncInfo-CellSyncReprtTDD  PRESENCE mandatory },
    ...
}

CellSyncInfo-CellSyncReprtTDD ::= SEQUENCE (SIZE (1..maxCellInNodeB)) OF ProtocolIE-Single-Container {{ CellSyncInfoItemIE-CellSyncReprtTDD }}

CellSyncInfoItemIE-CellSyncReprtTDD NBAP-PROTOCOL-IES ::= {
    { ID      id-C-ID          CRITICALITY  ignore      TYPE      C-ID          PRESENCE mandatory } |
    { ID      id-SyncReportType-CellSyncReprtTDD  CRITICALITY  ignore      TYPE      SyncReportType-CellSyncReprtTDD  PRESENCE optional },
}

```

```

}
...
}

SyncReportType-CellSyncReprtTDD ::= CHOICE {
    intStdPhSyncInfo-CellSyncReprtTDD      IntStdPhCellSyncInfo-CellSyncReprtTDD,
    lateEntrantCell                        NULL,
    frequencyAcquisition                   NULL,
    ...
}

IntStdPhCellSyncInfo-CellSyncReprtTDD ::= SEQUENCE {
    cellSyncBurstMeasuredInfo              CellSyncBurstMeasInfoList-CellSyncReprtTDD,
    iE-Extensions                          ProtocolExtensionContainer { { IntStdPhCellSyncInfoList-CellSyncReprtTDD-ExtIEs } } OPTIONAL,
    ...
}

IntStdPhCellSyncInfoList-CellSyncReprtTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-AccumulatedClockupdate-CellSyncReprtTDD      CRITICALITY ignore EXTENSION      TimingAdjustmentValue      PRESENCE optional } |
    { ID id-SyncDLCodeIdsMeasInfoList-CellSyncReprtTDD CRITICALITY ignore EXTENSION      SyncDLCodeIdsMeasInfoList-CellSyncReprtTDD PRESENCE
optional }, -- Mandatory for 1.28Mcps TDD only
    ...
}

CellSyncBurstMeasInfoList-CellSyncReprtTDD ::= SEQUENCE (SIZE (0.. maxNrOfCellSyncBursts)) OF CellSyncBurstMeasInfoItem-CellSyncReprtTDD --
Mandatory for 3.84Mcps TDD only

CellSyncBurstMeasInfoItem-CellSyncReprtTDD ::= SEQUENCE {
    sFN                                     SFN,
    cellSyncBurstInfo-CellSyncReprtTDD     SEQUENCE (SIZE (1..maxNrOfReceptsPerSyncFrame)) OF CellSyncBurstInfo-CellSyncReprtTDD,
    ...
}

CellSyncBurstInfo-CellSyncReprtTDD ::= CHOICE {
    cellSyncBurstAvailable                  CellSyncBurstAvailable-CellSyncReprtTDD,
    cellSyncBurstNotAvailable              NULL,
    ...
}

CellSyncBurstAvailable-CellSyncReprtTDD ::= SEQUENCE {
    cellSyncBurstTiming                    CellSyncBurstTiming,
    cellSyncBurstSIR                       CellSyncBurstSIR,
    ...
}

SyncDLCodeIdsMeasInfoList-CellSyncReprtTDD ::= SEQUENCE (SIZE (0..maxNrOfSyncFramesLCR)) OF SyncDLCodeIdsMeasInfoItem-CellSyncReprtTDD
-- Mandatory for 1.28Mcps TDD only

SyncDLCodeIdsMeasInfoItem-CellSyncReprtTDD ::= SEQUENCE {
    sFN                                     SFN,
    syncDLCodeIdInfo-CellSyncReprtTDD     SyncDLCodeIdInfo-CellSyncReprtTDDSEQUENCE (SIZE (1..maxNrOfReceptsPerSyncFrameLCR)) OF syncDLCodeIdInfo-
CellSyncReprtTDD,
    iE-Extensions                          ProtocolExtensionContainer { { SyncDLCodeIdsMeasInfoItem-CellSyncReprtTDD-ExtIEs } } OPTIONAL,
    ...
}

```

```

}

SyncDLCodeIdsMeasInfoItem-CellSyncReprtTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

SyncDLCodeIdInfo-CellSyncReprtTDD ::= SEQUENCE (SIZE (1..maxNrOfReceptionsperSyncFrameLCR)) OF SyncDLCodeIdItem-CellSyncReprtTDD

sSyncDLCodeIdItemInfo-CellSyncReprtTDD ::= CHOICE {
    syncDLCodeIdAvailable          SyncDLCodeIdAvailable-CellSyncReprtTDD,
    syncDLCodeIDNotAvailable       NULL,
    ...
}

SyncDLCodeIdAvailable-CellSyncReprtTDD ::= SEQUENCE {
    syncDLCodeIdTiming            CellSyncBurstTiming,
    syncDLCodeIdSIR               CellSyncBurstSIR,
    iE-Extensions                 ProtocolExtensionContainer { { SyncDLCodeIdAvailable-CellSyncReprtTDD-ExtIEs } }    OPTIONAL,
    ...
}

SyncDLCodeIdAvailable-CellSyncReprtTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- BEARER REARRANGEMENT INDICATION
--
-- *****

BearerRearrangementIndication ::= SEQUENCE {
    protocolIEs                ProtocolIE-Container    {{BearerRearrangementIndication-IEs}},
    protocolExtensions         ProtocolExtensionContainer {{BearerRearrangementIndication-Extensions}}    OPTIONAL,
    ...
}

BearerRearrangementIndication-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CRNC-CommunicationContextID
      PRESENCE mandatory } |
    { ID id-SignallingBearerRequestIndicator
      PRESENCE optional } |
    { ID id-DCH-RearrangeList-Bearer-RearrangeInd
      PRESENCE optional } |
    { ID id-DSCH-RearrangeList-Bearer-RearrangeInd
      PRESENCE optional } |
    { ID id-USCH-RearrangeList-Bearer-RearrangeInd
      PRESENCE optional } |
    { ID id-TFCI2BearerRequestIndicator
      PRESENCE optional },
    ...
}

```

```

BearerRearrangementIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-RearrangeList-Bearer-RearrangeInd ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-RearrangeItem-Bearer-RearrangeInd

DCH-RearrangeItem-Bearer-RearrangeInd ::= SEQUENCE {
    dCH-ID                                DCH-ID,
    iE-Extensions                          ProtocolExtensionContainer { { DCH-RearrangeItem-Bearer-RearrangeInd-ExtIEs} }    OPTIONAL,
    ...
}

DCH-RearrangeItem-Bearer-RearrangeInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DSCH-RearrangeList-Bearer-RearrangeInd ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-RearrangeItem-Bearer-RearrangeInd

DSCH-RearrangeItem-Bearer-RearrangeInd ::= SEQUENCE {
    dSCH-ID                                DSCH-ID,
    iE-Extensions                          ProtocolExtensionContainer { { DSCH-RearrangeItem-Bearer-RearrangeInd-ExtIEs} }    OPTIONAL,
    ...
}

DSCH-RearrangeItem-Bearer-RearrangeInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

USCH-RearrangeList-Bearer-RearrangeInd ::= SEQUENCE (SIZE (1..maxNrOfUSCHs)) OF USCH-RearrangeItem-Bearer-RearrangeInd

USCH-RearrangeItem-Bearer-RearrangeInd ::= SEQUENCE {
    uSCH-ID                                USCH-ID,
    iE-Extensions                          ProtocolExtensionContainer { { USCH-RearrangeItem-Bearer-RearrangeInd-ExtIEs} }    OPTIONAL,
    ...
}

USCH-RearrangeItem-Bearer-RearrangeInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- RADIO LINK ACTIVATION COMMAND FDD
--
-- *****

RadioLinkActivationCommandFDD ::= SEQUENCE {
    protocolIEs                            ProtocolIE-Container    {{RadioLinkActivationCommandFDD-IEs}},
    protocolExtensions                      ProtocolExtensionContainer {{RadioLinkActivationCommandFDD-Extensions}}    OPTIONAL,
    ...
}

RadioLinkActivationCommandFDD-IEs NBAP-PROTOCOL-IES ::= {

```



```

{ ID id-NodeB-CommunicationContextID          CRITICALITY reject  TYPE  NodeB-CommunicationContextID
  PRESENCE mandatory }|
{ ID id-DelayedActivationList-RL-ActivationCmdFDD  CRITICALITY reject  TYPE  DelayedActivationInformationList-RL-ActivationCmdFDD
  PRESENCE mandatory },
...
}

RadioLinkActivationCommandFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
...
}

DelayedActivationInformationList-RL-ActivationCmdFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {
  DelayedActivationInformation-RL-ActivationCmdFDD-IEs }

DelayedActivationInformation-RL-ActivationCmdFDD-IEs NBAP-PROTOCOL-IES ::= {
  ID id-DelayedActivationInformation-RL-ActivationCmdFDD  CRITICALITY reject  TYPE DelayedActivationInformation-RL-ActivationCmdFDD  PRESENCE
  optional }
}

DelayedActivationInformation-RL-ActivationCmdFDD ::= SEQUENCE {
  rL-ID          RL-ID,
  delayed-activation-update  DelayedActivationUpdate,
  iE-Extensions  ProtocolExtensionContainer { { DelayedActivationInformation-RL-ActivationCmdFDD-ExtIEs } } OPTIONAL,
  ...
}

DelayedActivationInformation-RL-ActivationCmdFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

-- *****
--
-- RADIO LINK ACTIVATION COMMAND TDD
--
-- *****

RadioLinkActivationCommandTDD ::= SEQUENCE {
  protocolIEs          ProtocolIE-Container  {{RadioLinkActivationCommandTDD-IEs}},
  protocolExtensions  ProtocolExtensionContainer  {{RadioLinkActivationCommandTDD-Extensions}}          OPTIONAL,
  ...
}

RadioLinkActivationCommandTDD-IEs NBAP-PROTOCOL-IES ::= {
  ID id-NodeB-CommunicationContextID          CRITICALITY reject  TYPE  NodeB-CommunicationContextID
  PRESENCE mandatory }|
  ID id-DelayedActivationList-RL-ActivationCmdTDD  CRITICALITY reject  TYPE  DelayedActivationInformationList-RL-ActivationCmdTDD
  PRESENCE mandatory },
  ...
}

RadioLinkActivationCommandTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {

```

```

}
...
}

DelayedActivationInformationList-RL-ActivationCmdTDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {
  { DelayedActivationInformation-RL-ActivationCmdTDD-IEs } }

DelayedActivationInformation-RL-ActivationCmdTDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-DelayedActivationInformation-RL-ActivationCmdTDD    CRITICALITY reject  TYPE DelayedActivationInformation-RL-ActivationCmdTDD  PRESENCE
optional      }
}

DelayedActivationInformation-RL-ActivationCmdTDD ::= SEQUENCE {
  rL-ID                RL-ID,
  delayed-activation-update  DelayedActivationUpdate,
  iE-Extensions        ProtocolExtensionContainer { { DelayedActivationInformation-RL-ActivationCmdTDD-ExtIEs } } OPTIONAL,
  ...
}

DelayedActivationInformation-RL-ActivationCmdTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

END

```

9.3.4 Information Elements Definitions

```

__*****
--
-- Information Element Definitions
--
__*****

NBAP-IEs {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
ums-t-Access (20) modules (3) nbap (2) version1 (1) nbap-IEs (2) }

DEFINITIONS AUTOMATIC TAGS ::=
BEGIN

IMPORTS
maxNrOfRLs,
maxNrOfTFCs,
maxNrOfErrors,
maxCTFC,
maxNrOfTFs,
maxTTI-count,
maxRateMatching,
maxCodeNrComp-1,
maxNrOfCellSyncBursts,
maxNrOfCodeGroups,

```

maxNrOfMeasNCell,
 maxNrOfMeasNCell-1,
 maxNrOfReceptsPerSyncFrame,
 maxNrOfTFCIGroups,
 maxNrOfTFCI1Combs,
 maxNrOfTFCI2Combs,
 maxNrOfTFCI2Combs-1,
 maxNrOfSF,
 maxTGPS,
 maxNrOfUSCHs,
 maxNrOfULTSs,
 maxNrOfULTSLCRs,
 maxNrOfDPCHs,
 maxNrOfDPCHLCRs,
 maxNrOfCodes,
 maxNrOfDSCHs,
 maxNrOfDLTSSs,
 maxNrOfDLTSLCRs,
 maxNrOfDCHs,
 maxNrOfLevels,
 maxNoGPSItems,
 maxNoSat,
 maxNrOfHSSCCHs,
 maxNrOfHSSCCHCodes,
 maxNrOfMACdFlows,
 maxNrOfMACdFlows-1,
 maxNrOfMACdPDUIndexes,
 maxNrOfMACdPDUIndexes-1,
 maxNrOfPriorityQueues,
 maxNrOfPriorityQueues-1,
 maxNrOfHARQProcesses,
maxNrOfSyncDLCodesLCR,
maxNrOfSyncFramesLCR,

id-MessageStructure,
 id-ReportCharacteristicsType-OnModification,
 id-Rx-Timing-Deviation-Value-LCR,
 id-SFNsFNMeasurementValueInformation,
 id-SFNsFNMeasurementThresholdInformation,
 id-TUTRANGPSMeasurementValueInformation,
 id-TUTRANGPSMeasurementThresholdInformation,
 id-TypeOfError,
 id-transportlayeraddress,
 id-bindingID,
id-Angle-Of-Arrival-Value-LCR,
id-SyncDLCodeIdThreInfoLCR,
id-neighbouringTDDCellMeasurementInformationLCR

FROM NBAP-Constants

Criticality,
 ProcedureID,
 ProtocolIE-ID,
 TransactionID,

```

TriggeringMessage
FROM NBAP-CommonDataTypes

    NBAP-PROTOCOL-IES,
    ProtocolExtensionContainer{ },
    ProtocolIE-Single-Container{ },
    NBAP-PROTOCOL-EXTENSION
FROM NBAP-Containers;

-- =====
-- A
-- =====

Acknowledged-PCPCH-access-preambles ::= INTEGER (0..15,...)

Acknowledged-PRACH-preambles-Value ::= INTEGER(0..240,...)
-- The number of L1 acknowledged random access tries per every 20 ms period.

AddorDeleteIndicator ::= ENUMERATED {
    add,
    delete
}

Active-Pattern-Sequence-Information ::= SEQUENCE {
    cmConfigurationChangeCFN                CFN,
    transmission-Gap-Pattern-Sequence-Status  Transmission-Gap-Pattern-Sequence-Status-List  OPTIONAL,
    iE-Extensions                            ProtocolExtensionContainer { {Active-Pattern-Sequence-Information-ExtIEs} } OPTIONAL,
    ...
}

Active-Pattern-Sequence-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Transmission-Gap-Pattern-Sequence-Status-List ::= SEQUENCE (SIZE (0..maxTGPS)) OF
    SEQUENCE {
        tGPSID          TGPSID,
        tGPRC           TGPRC,
        tGCFN           GCFN,
        iE-Extensions  ProtocolExtensionContainer { { Transmission-Gap-Pattern-Sequence-Status-List-ExtIEs } } OPTIONAL,
        ...
    }

Transmission-Gap-Pattern-Sequence-Status-List-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```
AICH-Power ::= INTEGER (-22..5)
-- Offset in dB.

AICH-TransmissionTiming ::= ENUMERATED {
    v0,
    v1
}

AllocationRetentionPriority ::= SEQUENCE {
    priorityLevel          PriorityLevel,
    pre-emptionCapability  Pre-emptionCapability,
    pre-emptionVulnerability Pre-emptionVulnerability,
    iE-Extensions         ProtocolExtensionContainer { {AllocationRetentionPriority-ExtIEs} } OPTIONAL,
    ...
}

AllocationRetentionPriority-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Angle-Of-Arrival-Value-LCR ::= SEQUENCE OF{
    aOA-LCR                AOA-LCR,
    aOA-LCR-Accuracy-Class AOA-LCR-Accuracy-Class,
    iE-Extensions         ProtocolExtensionContainer { {Angle-Of-Arrival-Value-LCR-ExtIEs} } OPTIONAL,
    ...
}

Angle-Of-Arrival-Value-LCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

AOA-LCR ::= INTEGER (0..719)
-- Angle Of Arrival for 1.28Mcps TDD

AOA-LCR-Accuracy-Class ::= ENUMERATED {a,b,c,d,e,f,g,h,...}

APPreambleSignature ::= INTEGER (0..15)

APSubChannelNumber ::= INTEGER (0..11)

AvailabilityStatus ::= ENUMERATED {
    empty,
    in-test,
    failed,
    power-off,
    off-line,
    off-duty,
    dependency,
    degraded,
    not-installed,
    log-full,
    ...
}
```

```
-- =====
-- B
-- =====

BCCH-ModificationTime ::= INTEGER (0..511)
-- Time = BCCH-ModificationTime * 8
-- Range 0 to 4088, step 8
-- All SFN values in which MIB may be mapped are allowed

BindingID ::= OCTET STRING (SIZE (1..4, ...))
--If the Binding ID includes a UDP port, the UDP port is included in octet 1 and 2.The first octet of
--the UDP port field is included in the first octet of the the Binding ID.

BetaCD ::= INTEGER (0..15)

BLER ::= INTEGER (-63..0)
-- Step 0.1 (Range -6.3..0). It is the Log10 of the BLER

BlockingPriorityIndicator ::= ENUMERATED {
    high,
    normal,
    low,
    ...
}
-- High priority: Block resource immediately.
-- Normal priority: Block resource when idle or upon timer expiry.
-- Low priority: Block resource when idle.

SCTD-Indicator ::= ENUMERATED {
    active,
    inactive
}

-- =====
-- C
-- =====

Cause ::= CHOICE {
    radioNetwork          CauseRadioNetwork,
    transport             CauseTransport,
    protocol              CauseProtocol,
    misc                  CauseMisc,
    ...
}

CauseMisc ::= ENUMERATED {
    control-processing-overload,
    hardware-failure,
    oam-intervention,
    not-enough-user-plane-processing-resources,
    unspecified,
    ...
}
```

```
}  
  
CauseProtocol ::= ENUMERATED {  
    transfer-syntax-error,  
    abstract-syntax-error-reject,  
    abstract-syntax-error-ignore-and-notify,  
    message-not-compatible-with-receiver-state,  
    semantic-error,  
    unspecified,  
    abstract-syntax-error-falsely-constructed-message,  
    ...  
}  
  
CauseRadioNetwork ::= ENUMERATED {  
    unknown-C-ID,  
    cell-not-available,  
    power-level-not-supported,  
    dl-radio-resources-not-available,  
    ul-radio-resources-not-available,  
    rl-already-ActivatedOrAllocated,  
    nodeB-Resources-unavailable,  
    measurement-not-supported-for-the-object,  
    combining-resources-not-available,  
    requested-configuration-not-supported,  
    synchronisation-failure,  
    priority-transport-channel-established,  
    sIB-Origination-in-Node-B-not-Supported,  
    requested-tx-diversity-mode-not-supported,  
    unspecified,  
    bCCH-scheduling-error,  
    measurement-temporarily-not-available,  
    invalid-CM-settings,  
    reconfiguration-CFN-not-elapsed,  
    number-of-DL-codes-not-supported,  
    s-cipch-not-supported,  
    combining-not-supported,  
    ul-sf-not-supported,  
    dl-SF-not-supported,  
    common-transport-channel-type-not-supported,  
    dedicated-transport-channel-type-not-supported,  
    downlink-shared-channel-type-not-supported,  
    uplink-shared-channel-type-not-supported,  
    cm-not-supported,  
    tx-diversity-no-longer-supported,  
    unknown-Local-Cell-ID,  
    ... ,  
    number-of-UL-codes-not-supported,  
    information-temporarily-not-available,  
    information-provision-not-supported-for-the-object,  
    cell-synchronisation-not-supported,  
    synchronisation-adjustment-not-supported,  
    dpc-mode-change-not-supported,  
    iPDL-already-activated,
```

```
    iPDL-not-supported,  
    iPDL-parameters-not-available,  
    frequency-acquisition-not-supported,  
    power-balancing-status-not-compatible,  
    requested-typeofbearer-re-arrangement-not-supported,  
    signalling-Bearer-Re-arrangement-not-supported,  
    bearer-Re-arrangement-needed,  
    delayed-activation-not-supported,  
    rl-timing-adjustment-not-supported  
}  
  
CauseTransport ::= ENUMERATED {  
    transport-resource-unavailable,  
    unspecified,  
    ...  
}  
  
CCTrCH-ID ::= INTEGER (0..15)  
  
CDSubChannelNumbers ::= BIT STRING {  
    subCh11(0),  
    subCh10(1),  
    subCh9(2),  
    subCh8(3),  
    subCh7(4),  
    subCh6(5),  
    subCh5(6),  
    subCh4(7),  
    subCh3(8),  
    subCh2(9),  
    subCh1(10),  
    subCh0(11)  
} (SIZE (12))  
  
CellParameterID ::= INTEGER (0..127,...)  
  
CellSyncBurstAvailabilityIndicator ::= ENUMERATED {  
    cellSyncBurstAvailable,  
    cellSyncBurstNotAvailable  
}  
  
CellSyncBurstCode ::= INTEGER(0..7, ...)  
  
CellSyncBurstCodeShift ::= INTEGER(0..7)  
  
CellSyncBurstRepetitionPeriod ::= INTEGER (0..4095)  
  
CellSyncBurstSIR ::= INTEGER (0..31)  
  
CellSyncBurstTiming ::= CHOICE {  
    initialPhase          INTEGER (0..1048575),  
    steadyStatePhase      INTEGER (0..255)  
}
```



```

CellSyncBurstTimingThreshold ::= INTEGER(0..254)

CFN ::= INTEGER (0..255)

Channel-Assignment-Indication ::= ENUMERATED {
    cA-Active,
    cA-Inactive
}

ChipOffset ::= INTEGER (0..38399)
-- Unit Chip

C-ID ::= INTEGER (0..65535)

Closedlooptimingadjustmentmode ::= ENUMERATED {
    adj-1-slot,
    adj-2-slot,
    ...
}

CommonChannelsCapacityConsumptionLaw ::= SEQUENCE (SIZE(1..maxNrOfSF)) OF
SEQUENCE {
    dl-Cost      INTEGER (0..65535),
    ul-Cost      INTEGER (0..65535),
    iE-Extensions ProtocolExtensionContainer { { CommonChannelsCapacityConsumptionLaw-ExtIEs } }
    ...
}

CommonChannelsCapacityConsumptionLaw-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CommonMeasurementAccuracy ::= CHOICE {
    tUTRANGPSMeasurementAccuracyClass    TUTRANGPSAccuracyClass,
    ...
}

CommonMeasurementType ::= ENUMERATED {
    received-total-wide-band-power,
    transmitted-carrier-power,
    acknowledged-prach-preambles,
    ul-timeslot-iscp,
    acknowledged-PCPCH-access-preambles,
    detected-PCPCH-access-preambles,
    ...,
    uTRAN-GPS-Timing-of-Cell-Frames-for-LCS,
    sFN-SFN-Observed-Time-Difference
}

CommonMeasurementValue ::= CHOICE {
    transmitted-carrier-power            Transmitted-Carrier-Power-Value,
    received-total-wide-band-power       Received-total-wide-band-power-Value,

```

```

    acknowledged-prach-preambles      Acknowledged-PRACH-preambles-Value,
    uL-TimeslotISCP                    UL-TimeslotISCP-Value,
    acknowledged-PCPCH-access-preambles Acknowledged-PCPCH-access-preambles,
    detected-PCPCH-access-preambles    Detected-PCPCH-access-preambles,
    . . . ,
    extension-CommonMeasurementValue    Extension-CommonMeasurementValue
}

Extension-CommonMeasurementValue ::= ProtocolIE-Single-Container {{ Extension-CommonMeasurementValueIE }}

Extension-CommonMeasurementValueIE NBAP-PROTOCOL-IES ::= {
  { ID id-TUTRANGPSMeasurementValueInformation CRITICALITY ignore TYPE TUTRANGPSMeasurementValueInformation PRESENCE mandatory } |
  { ID id-SFNFSNMeasurementValueInformation CRITICALITY ignore TYPE SFNFSNMeasurementValueInformation PRESENCE mandatory }
}

CommonMeasurementValueInformation ::= CHOICE {
  measurementAvailable      CommonMeasurementAvailable,
  measurementnotAvailable   CommonMeasurementnotAvailable
}

CommonMeasurementAvailable ::= SEQUENCE {
  commonmeasurementValue      CommonMeasurementValue,
  ie-Extensions                ProtocolExtensionContainer { { CommonMeasurementAvailableItem-ExtIEs } }      OPTIONAL,
  . . .
}

CommonMeasurementAvailableItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  . . .
}

CommonMeasurementnotAvailable ::= NULL

CommonPhysicalChannelID ::= INTEGER (0..255)

Common-PhysicalChannel-Status-Information ::= SEQUENCE {
  commonPhysicalChannelID      CommonPhysicalChannelID,
  resourceOperationalState      ResourceOperationalState,
  availabilityStatus            AvailabilityStatus,
  iE-Extensions                ProtocolExtensionContainer { { Common-PhysicalChannel-Status-Information-ExtIEs } }      OPTIONAL,
  . . .
}

Common-PhysicalChannel-Status-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  . . .
}

CommonTransportChannelID ::= INTEGER (0..255)

Common-TransportChannel-Status-Information ::= SEQUENCE {

```

```

    commonTransportChannelID      CommonTransportChannelID,
    resourceOperationalState      ResourceOperationalState,
    availabilityStatus            AvailabilityStatus,
    iE-Extensions                 ProtocolExtensionContainer { { Common-TransportChannel-Status-Information-ExtIEs } } OPTIONAL,
    ...
}

Common-TransportChannel-Status-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CommunicationControlPortID ::= INTEGER (0..65535)

Compressed-Mode-Deactivation-Flag ::= ENUMERATED {
    deactivate,
    maintain-Active
}
-- on=deactivate

ConfigurationGenerationID ::= INTEGER (0..255)
-- Value '0' means "No configuration"

ConstantValue ::= INTEGER (-10..10,...)
-- -10 dB - +10 dB
-- unit dB
-- step 1 dB

CPCH-Allowed-Total-Rate ::= ENUMERATED {
    v15,
    v30,
    v60,
    v120,
    v240,
    v480,
    v960,
    v1920,
    v2880,
    v3840,
    v4800,
    v5760,
    ...
}

CPCHScramblingCodeNumber ::= INTEGER (0..79)

CPCH-UL-DPCCH-SlotFormat ::= INTEGER (0..2,...)

CriticalityDiagnostics ::= SEQUENCE {
    procedureID          ProcedureID          OPTIONAL,
    triggeringMessage    TriggeringMessage    OPTIONAL,
    procedureCriticality Criticality          OPTIONAL,
}

```

```

transactionID          TransactionID          OPTIONAL,
iEsCriticalityDiagnostics CriticalityDiagnostics-IE-List OPTIONAL,
iE-Extensions          ProtocolExtensionContainer { {CriticalityDiagnostics-ExtIEs} } OPTIONAL,
...
}

CriticalityDiagnostics-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

CriticalityDiagnostics-IE-List ::= SEQUENCE (SIZE (1..maxNrOfErrors)) OF
SEQUENCE {
    iECriticality          Criticality,
    iE-ID                  ProtocolIE-ID,
    repetitionNumber       RepetitionNumber0          OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { {CriticalityDiagnostics-IE-List-ExtIEs} } OPTIONAL,
    ...
}

CriticalityDiagnostics-IE-List-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
{ ID id-MessageStructure    CRITICALITY ignore    EXTENSION MessageStructure    PRESENCE optional    }|
{ ID id-TypeOfError         CRITICALITY ignore    EXTENSION TypeOfError         PRESENCE mandatory   },
...
}

MessageStructure ::= SEQUENCE (SIZE (1..maxNrOfLevels)) OF
SEQUENCE {
    iE-ID                  ProtocolIE-ID,
    repetitionNumber       RepetitionNumber1          OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { {MessageStructure-ExtIEs} } OPTIONAL,
    ...
}

MessageStructure-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

CRNC-CommunicationContextID ::= INTEGER (0..1048575)

CSBMeasurementID ::= INTEGER (0..65535)

CSBTransmissionID ::= INTEGER (0..65535)

-- =====
-- D
-- =====

DATA-ID ::= INTEGER (0..3)

DCH-ID ::= INTEGER (0..255)

DCH-FDD-Information ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-FDD-InformationItem

```

```

DCH-FDD-InformationItem ::= SEQUENCE {
    payloadCRC-PresenceIndicator    PayloadCRC-PresenceIndicator,
    ul-FP-Mode                      UL-FP-Mode,
    toAWS                           ToAWS,
    toAWE                            ToAWE,
    dCH-SpecificInformationList     DCH-Specific-FDD-InformationList,
    iE-Extensions                   ProtocolExtensionContainer { { DCH-FDD-InformationItem-ExtIEs } } OPTIONAL,
    ...
}

DCH-FDD-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-Specific-FDD-InformationList ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-Specific-FDD-Item

DCH-Specific-FDD-Item ::= SEQUENCE {
    dCH-ID                          DCH-ID,
    ul-TransportFormatSet           TransportFormatSet,
    dl-TransportFormatSet           TransportFormatSet,
    allocationRetentionPriority     AllocationRetentionPriority,
    frameHandlingPriority           FrameHandlingPriority,
    qE-Selector                    QE-Selector,
    iE-Extensions                   ProtocolExtensionContainer { { DCH-Specific-FDD-Item-ExtIEs } } OPTIONAL,
    ...
}

DCH-Specific-FDD-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-InformationResponse ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-InformationResponseItem

DCH-InformationResponseItem ::= SEQUENCE {
    dCH-ID                          DCH-ID,
    bindingID                       BindingID OPTIONAL,
    transportLayerAddress            TransportLayerAddress OPTIONAL,
    iE-Extensions                   ProtocolExtensionContainer { { DCH-InformationResponseItem-ExtIEs } } OPTIONAL,
    ...
}

DCH-InformationResponseItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-TDD-Information ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-TDD-InformationItem

DCH-TDD-InformationItem ::= SEQUENCE {
    payloadCRC-PresenceIndicator    PayloadCRC-PresenceIndicator,
    ul-FP-Mode                      UL-FP-Mode,
    toAWS                           ToAWS,
    toAWE                            ToAWE,

```

```

    dCH-SpecificInformationList      DCH-Specific-TDD-InformationList,
    iE-Extensions                    ProtocolExtensionContainer { { DCH-TDD-InformationItem-ExtIEs } }
    ...
}

DCH-TDD-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-Specific-TDD-InformationList ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-Specific-TDD-Item

DCH-Specific-TDD-Item ::= SEQUENCE {
    dCH-ID                          DCH-ID,
    ul-CCTrCH-ID                    CCTrCH-ID,
    dl-CCTrCH-ID                    CCTrCH-ID,
    ul-TransportFormatSet           TransportFormatSet,
    dl-TransportFormatSet           TransportFormatSet,
    allocationRetentionPriority      AllocationRetentionPriority,
    frameHandlingPriority            FrameHandlingPriority,
    qE-Selector                      QE-Selector                                OPTIONAL,
    -- This IE shall be present if DCH is part of set of Coordinated DCHs
    iE-Extensions                    ProtocolExtensionContainer { { DCH-Specific-TDD-Item-ExtIEs } }
    ...
}

DCH-Specific-TDD-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

FDD-DCHs-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF FDD-DCHs-to-ModifyItem

FDD-DCHs-to-ModifyItem ::= SEQUENCE {
    ul-FP-Mode                      UL-FP-Mode            OPTIONAL,
    toAWS                           ToAWS              OPTIONAL,
    toAWE                            ToAWE              OPTIONAL,
    transportBearerRequestIndicator  TransportBearerRequestIndicator,
    dCH-SpecificInformationList      DCH-ModifySpecificInformation-FDD,
    iE-Extensions                    ProtocolExtensionContainer { { FDD-DCHs-to-ModifyItem-ExtIEs } }
    ...
}

FDD-DCHs-to-ModifyItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-ModifySpecificInformation-FDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-ModifySpecificItem-FDD

DCH-ModifySpecificItem-FDD ::= SEQUENCE {
    dCH-ID                          DCH-ID,
    ul-TransportFormatSet           TransportFormatSet    OPTIONAL,
    dl-TransportFormatSet           TransportFormatSet    OPTIONAL,
    allocationRetentionPriority      AllocationRetentionPriority OPTIONAL,
    frameHandlingPriority            FrameHandlingPriority  OPTIONAL,

```

```

    iE-Extensions          ProtocolExtensionContainer { { DCH-ModifySpecificItem-FDD-ExtIEs } }      OPTIONAL,
    ...
}

DCH-ModifySpecificItem-FDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TDD-DCHs-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-ModifyItem-TDD

DCH-ModifyItem-TDD ::= SEQUENCE {
    ul-FP-Mode              UL-FP-Mode          OPTIONAL,
    toAWS                   ToAWS           OPTIONAL,
    toAWE                   ToAWE           OPTIONAL,
    transportBearerRequestIndicator TransportBearerRequestIndicator,
    dCH-SpecificInformationList DCH-ModifySpecificInformation-TDD,
    iE-Extensions          ProtocolExtensionContainer { { TDD-DCHs-to-ModifyItem-ExtIEs } }      OPTIONAL,
    ...
}

TDD-DCHs-to-ModifyItem-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-ModifySpecificInformation-TDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-ModifySpecificItem-TDD

DCH-ModifySpecificItem-TDD ::= SEQUENCE {
    dCH-ID                  DCH-ID,
    ul-CCTrCH-ID           CCTrCH-ID          OPTIONAL,
    dl-CCTrCH-ID           CCTrCH-ID          OPTIONAL,
    ul-TransportFormatSet  TransportFormatSet OPTIONAL,
    dl-TransportFormatSet  TransportFormatSet OPTIONAL,
    allocationRetentionPriority AllocationRetentionPriority OPTIONAL,
    frameHandlingPriority  FrameHandlingPriority OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { DCH-ModifySpecificItem-TDD-ExtIEs } }      OPTIONAL,
    ...
}

DCH-ModifySpecificItem-TDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DedicatedChannelsCapacityConsumptionLaw ::= SEQUENCE ( SIZE(1..maxNrOfSF) ) OF
SEQUENCE {
    dl-Cost-1              INTEGER (0..65535),
    dl-Cost-2              INTEGER (0..65535),
    ul-Cost-1              INTEGER (0..65535),
    ul-Cost-2              INTEGER (0..65535),
    iE-Extensions          ProtocolExtensionContainer { { DedicatedChannelsCapacityConsumptionLaw-ExtIEs } }      OPTIONAL,
    ...
}

```

```

DedicatedChannelsCapacityConsumptionLaw-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DedicatedMeasurementType ::= ENUMERATED {
    sir,
    sir-error,
    transmitted-code-power,
    rscp,
    rx-timing-deviation,
    round-trip-time,
    ...,
    rx-timing-deviation-LCR,
    angle-Of-Arrival-LCR
}

DedicatedMeasurementValue ::= CHOICE {
    sir-Value                SIR-Value,
    sir-ErrorValue           SIR-Error-Value,
    transmittedCodePowerValue    Transmitted-Code-Power-Value,
    rSCP                      RSCP-Value,
    rxTimingDeviationValue      Rx-Timing-Deviation-Value,
    roundTripTime              Round-Trip-Time-Value,
    ...,
    extension-DedicatedMeasurementValue    Extension-DedicatedMeasurementValue
}

Extension-DedicatedMeasurementValue ::= ProtocolIE-Single-Container {{ Extension-DedicatedMeasurementValueIE }}

Extension-DedicatedMeasurementValueIE NBAP-PROTOCOL-IES ::= {
    { ID id-Rx-Timing-Deviation-Value-LCR    CRITICALITY reject    TYPE Rx-Timing-Deviation-Value-LCR    PRESENCE mandatory }|
    { ID id-Angle-Of-Arrival-Value-LCR    CRITICALITY reject    TYPEEXTENSION Angle-Of-Arrival-Value-LCR PRESENCE mandatory },
    ...
}

DedicatedMeasurementValueInformation ::= CHOICE {
    measurementAvailable        DedicatedMeasurementAvailable,
    measurementnotAvailable      DedicatedMeasurementnotAvailable
}

DedicatedMeasurementAvailable ::= SEQUENCE {
    dedicatedmeasurementValue    DedicatedMeasurementValue,
    cFN                          CFN                                OPTIONAL,
    ie-Extensions                ProtocolExtensionContainer { { DedicatedMeasurementAvailableItem-ExtIEs } }    OPTIONAL,
    ...
}

```



```

DedicatedMeasurementAvailableItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DedicatedMeasurementnotAvailable ::= NULL

DelayedActivation ::= CHOICE {
    cfn                CFN,
    separate-indication  NULL
}

DelayedActivationUpdate ::= CHOICE {
    activate          Activate-Info,
    deactivate        Deactivate-Info
}

Activate-Info ::= SEQUENCE {
    activation-type      Execution-Type,
    initial-dl-tx-power  DL-Power,
    firstRLS-Indicator   FirstRLS-Indicator                OPTIONAL, --FDD Only
    propagation-delay    PropagationDelay                OPTIONAL, --FDD Only
    iE-Extensions        ProtocolExtensionContainer { { Activate-Info-ExtIEs } }  OPTIONAL,
    ...
}

Activate-Info-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Deactivate-Info ::= SEQUENCE {
    deactivation-type    Execution-Type,
    iE-Extensions        ProtocolExtensionContainer { { Deactivate-Info-ExtIEs } }  OPTIONAL,
    ...
}

Deactivate-Info-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Execution-Type ::= CHOICE {
    synchronised    CFN,
    unsynchronised  NULL
}

Detected-PCPCH-access-preambles ::= INTEGER (0..240,...)

DeltaSIR                ::= INTEGER (0..30)
-- Unit dB, Step 0.1 dB, Range 0..3 dB.

```

```

DGPSCorrections ::= SEQUENCE {
    gpstow          GPSTOW,
    status-health   GPS-Status-Health,
    satelliteinfo   SAT-Info-DGPSCorrections,
    ie-Extensions   ProtocolExtensionContainer { { DGPSCorrections-ExtIEs } }    OPTIONAL,
    ...
}

DGPSCorrections-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DGPSThresholds ::= SEQUENCE {
    prcdeviation    PRCDeviation,
    ie-Extensions   ProtocolExtensionContainer { { DGPSThresholds-ExtIEs } }    OPTIONAL,
    ...
}

DGPSThresholds-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DiversityControlField ::= ENUMERATED {
    may,
    must,
    must-not,
    ...
}

DiversityMode ::= ENUMERATED {
    none,
    sTTD,
    closed-loop-model,
    closed-loop-mode2,
    ...
}

DL-DPCH-SlotFormat ::= INTEGER (0..16,...)

DL-DPCH-TimingAdjustment ::= ENUMERATED {
    timing-advance,
    timing-delay
}

DL-Timeslot-Information ::= SEQUENCE (SIZE (1.. maxNrOfDLTSs)) OF DL-Timeslot-InformationItem

DL-Timeslot-InformationItem ::= SEQUENCE {
    timeSlot          TimeSlot,
    midambleShiftAndBurstType MidambleShiftAndBurstType,
    tFCI-Presence     TFCI-Presence,
}

```

```

    dL-Code-Information          TDD-DL-Code-Information,
    iE-Extensions                ProtocolExtensionContainer { { DL-Timeslot-InformationItem-ExtIEs } } OPTIONAL,
    ...
}

```

```

DL-Timeslot-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

DL-TimeslotLCR-Information ::= SEQUENCE (SIZE (1.. maxNrOfDLTSLCRs)) OF DL-TimeslotLCR-InformationItem

```

```

DL-TimeslotLCR-InformationItem ::= SEQUENCE {
    timeSlotLCR                TimeSlotLCR,
    midambleShiftLCR           MidambleShiftLCR,
    tFCI-Presence              TFCI-Presence,
    dL-Code-LCR-Information    TDD-DL-Code-LCR-Information,
    iE-Extensions              ProtocolExtensionContainer { { DL-TimeslotLCR-InformationItem-ExtIEs } } OPTIONAL,
    ...
}

```

```

DL-TimeslotLCR-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

DL-FrameType ::= ENUMERATED {
    typeA,
    typeB,
    ...
}

```

```

DL-or-Global-CapacityCredit ::= INTEGER (0..65535)

```

```

DL-Power ::= INTEGER (-350..150)
-- DL-Power = power * 10
-- If Power <=-35 DL-Power shall be set to -350
-- if Power >=15 DL-Power shall be set to 150
-- Unit dB, Range -35dB .. +15dB, Step +0.1dB

```

```

DLPowerAveragingWindowSize ::= INTEGER (1..60)

```

```

DL-PowerBalancing-Information ::= SEQUENCE {
    powerAdjustmentType        PowerAdjustmentType,
    dLReferencePower           DL-Power OPTIONAL,
    -- This IE shall be present if Power Adjustment Type IE equals to 'Common'
    dLReferencePowerList-DL-PC-Rqst DL-ReferencePowerInformationList OPTIONAL,
    -- This IE shall be present if Power Adjustment Type IE equals to 'Individual'
    maxAdjustmentStep          MaxAdjustmentStep OPTIONAL,
    -- This IE shall be present if Power Adjustment Type IE equals to 'Common' or 'Individual'
    adjustmentPeriod           AdjustmentPeriod OPTIONAL,
    -- This IE shall be present if Power Adjustment Type IE equals to 'Common' or 'Individual'
    adjustmentRatio            ScaledAdjustmentRatio OPTIONAL,
    -- This IE shall be present if Power Adjustment Type IE equals to 'Common' or 'Individual'
    iE-Extensions              ProtocolExtensionContainer { { DL-PowerBalancing-Information-ExtIEs } } OPTIONAL,
}

```

```

}
...
}
DL-PowerBalancing-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
DL-ReferencePowerInformationList ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF DL-ReferencePowerInformationItem
DL-ReferencePowerInformationItem ::= SEQUENCE {
    rL-ID                RL-ID,
    dl-Reference-Power   DL-Power,
    iE-Extensions       ProtocolExtensionContainer { {DL-ReferencePowerInformationItem-ExtIEs} } OPTIONAL,
    ...
}
DL-ReferencePowerInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
DL-PowerBalancing-ActivationIndicator ::= ENUMERATED {
    dL-PowerBalancing-Activated
}
DL-PowerBalancing-UpdatedIndicator ::= ENUMERATED {
    dL-PowerBalancing-Updated
}
DL-ScramblingCode ::= INTEGER (0..15)
-- 0= Primary scrambling code of the cell, 1..15= Secondary scrambling code --
DL-TimeslotISCP ::= INTEGER (0..91)
DL-TimeslotISCPInfo ::= SEQUENCE (SIZE (1..maxNrOfDLTSs)) OF DL-TimeslotISCPInfoItem
DL-TimeslotISCPInfoItem ::= SEQUENCE {
    timeSlot            TimeSlot,
    dL-TimeslotISCP     DL-TimeslotISCP,
    iE-Extensions       ProtocolExtensionContainer { {DL-TimeslotISCPInfoItem-ExtIEs} } OPTIONAL,
    ...
}
DL-TimeslotISCPInfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
DL-TimeslotISCPInfoLCR ::= SEQUENCE (SIZE (1..maxNrOfDLTSLCRs)) OF DL-TimeslotISCPInfoItemLCR
DL-TimeslotISCPInfoItemLCR ::= SEQUENCE {
    timeSlotLCR        TimeSlotLCR,
    dL-TimeslotISCP    DL-TimeslotISCP,
    iE-Extensions       ProtocolExtensionContainer { {DL-TimeslotISCPInfoItemLCR-ExtIEs} } OPTIONAL,
    ...
}

```

```

    }
DL-TimeslotISCPInfoItemLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
DL-TPC-Pattern01Count ::= INTEGER (0..30,...)
Downlink-Compressed-Mode-Method ::= ENUMERATED {
    puncturing,
    sFdiv2,
    higher-layer-scheduling,
    ...
}
DPC-Mode ::= ENUMERATED {
    mode0,
    mode1,
    ...
}
DPCH-ID ::= INTEGER (0..239)
DSCH-ID ::= INTEGER (0..255)
DSCH-InformationResponse ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-InformationResponseItem
DSCH-InformationResponseItem ::= SEQUENCE {
    dSCH-ID                               DSCH-ID,
    bindingID                             BindingID                               OPTIONAL,
    transportLayerAddress                  TransportLayerAddress                 OPTIONAL,
    iE-Extensions                          ProtocolExtensionContainer { { DSCH-InformationResponseItem-ExtIEs } }   OPTIONAL,
    ...
}
DSCH-InformationResponseItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
DSCH-FDD-Common-Information ::= SEQUENCE {
    enhancedDSCHPCIndicator                EnhancedDSCHPCIndicator                OPTIONAL,
    enhancedDSCHPC                          EnhancedDSCHPC                          OPTIONAL,
    -- The IE shall be present if the Enhanced DSCH PC Indicator IE is set to "Enhanced DSCH PC Active in the UE".
    iE-Extensions                          ProtocolExtensionContainer { { DSCH-FDD-Common-Information-ExtIEs } }   OPTIONAL,
    ...
}
DSCH-FDD-Common-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

DSCH-FDD-Information ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-FDD-InformationItem

```
DSCH-FDD-InformationItem ::= SEQUENCE {
    dSCH-ID                DSCH-ID,
    transportFormatSet     TransportFormatSet,
    allocationRetentionPriority AllocationRetentionPriority,
    frameHandlingPriority  FrameHandlingPriority,
    toAWS                  ToAWS,
    toAWE                  ToAWE,
    iE-Extensions          ProtocolExtensionContainer { { DSCH-FDD-InformationItem-ExtIEs} } OPTIONAL,
    ...
}
```

```
DSCH-FDD-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-bindingID          CRITICALITY ignore     EXTENSION BindingID      PRESENCE optional }|
    { ID id-transportlayeraddress CRITICALITY ignore EXTENSION TransportLayerAddress PRESENCE optional },
    ...
}
```

DSCH-TDD-Information ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-TDD-InformationItem

```
DSCH-TDD-InformationItem ::= SEQUENCE {
    dSCH-ID                DSCH-ID,
    cCTrCH-ID             CCTrCH-ID,
    transportFormatSet     TransportFormatSet,
    allocationRetentionPriority AllocationRetentionPriority,
    frameHandlingPriority  FrameHandlingPriority,
    toAWS                  ToAWS,
    toAWE                  ToAWE,
    iE-Extensions          ProtocolExtensionContainer { { DSCH-TDD-InformationItem-ExtIEs} } OPTIONAL,
    ...
}
```

```
DSCH-TDD-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-bindingID          CRITICALITY ignore     EXTENSION BindingID      PRESENCE optional }|
    { ID id-transportlayeraddress CRITICALITY ignore EXTENSION TransportLayerAddress PRESENCE optional },
    ...
}
```

DwPCH-Power ::= ENUMERATED {minus10, minus9, minus8, minus7, minus6, minus5, minus4, minus3, minus2, minus1, zero, plus1, plus2, plus3, plus4, plus5, ...}

```
-- =====
-- E
-- =====
```

End-Of-Audit-Sequence-Indicator ::= INTEGER (-150..400,...)

```
-- DwPCH-power = power * 10
-- If power <= -15 DwPCH shall be set to -150
-- If power >= 40 DwPCH shall be set to 400
-- Unit dBm, Range -15dBm .. +40 dBm, Step +0.1dB
```

EnhancedDSCHPC ::= SEQUENCE {

```

    enhancedDSCHPCWnd    EnhancedDSCHPCWnd,
    enhancedDSCHPCCounter EnhancedDSCHPCCounter,
    enhancedDSCHPowerOffset EnhancedDSCHPowerOffset,
    ...
}

EnhancedDSCHPCCounter ::= INTEGER (1..50)

EnhancedDSCHPCIndicator ::= ENUMERATED {
    enhancedDSCHPCActiveInTheUE,
    enhancedDSCHPCNotActiveInTheUE
}

EnhancedDSCHPCWnd ::= INTEGER (1..10)

EnhancedDSCHPowerOffset ::= INTEGER (-15..0)

-- =====
-- F
-- =====

FDD-DL-ChannelisationCodeNumber ::= INTEGER(0.. 511)
-- According to the mapping in [9]. The maximum value is equal to the DL spreading factor -1--

FDD-DL-CodeInformation ::= SEQUENCE (SIZE (1..maxNrOfCodes)) OF FDD-DL-CodeInformationItem

FDD-DL-CodeInformationItem ::= SEQUENCE {
    dl-ScramblingCode          DL-ScramblingCode,
    fdd-DL-ChannelisationCodeNumber FDD-DL-ChannelisationCodeNumber,
    transmissionGapPatternSequenceCodeInformation TransmissionGapPatternSequenceCodeInformation OPTIONAL,
    iE-Extensions              ProtocolExtensionContainer { { FDD-DL-CodeInformationItem-ExtIEs} } OPTIONAL,
    ...
}

FDD-DL-CodeInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

FDD-S-CCPCH-Offset ::= INTEGER (0..149)
-- 0: 0 chip, 1: 256 chip, 2: 512 chip, .. ,149: 38144 chip [7] --

FDD-TPC-DownlinkStepSize ::= ENUMERATED {
    step-size0-5,
    step-size1,
    step-size1-5,
    step-size2,
    ...
}

FirstRLS-Indicator ::= ENUMERATED {
    first-RLS,

```

```

    not-first-RLS,
    ...
}

FNReportingIndicator ::= ENUMERATED {
    fN-reporting-required,
    fN-reporting-not-required
}

FrameHandlingPriority ::= INTEGER (0..15)
-- 0=lower priority, 15=higher priority --

FrameAdjustmentValue ::= INTEGER(0..4095)

FrameOffset ::= INTEGER (0..255)

FPACH-Power ::= INTEGER (-150..400,...) -- FPACH-power = power * 10
-- If power <= -15 FPACH shall be set to -150
-- If power >= 40 FPACH shall be set to 400
-- Unit dBm, Range -15dBm .. +40 dBm, Step +0.1dB

-- =====
-- G
-- =====

GapLength                ::= INTEGER (1..14)
-- Unit slot

GapDuration              ::= INTEGER (1..144,...)
-- Unit frame

GPS-Almanac ::= SEQUENCE {
    wna-alm          BIT STRING (SIZE (8)),
    sat-info-almanac    SAT-Info-Almanac,
    svGlobalHealth-alm BIT STRING (SIZE (364)) OPTIONAL,
    ie-Extensions      ProtocolExtensionContainer { { GPS-Almanac-ExtIEs} } OPTIONAL,
    ...
}

GPS-Almanac-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

GPS-Ionospheric-Model ::= SEQUENCE {
    alpha-zero-ionos    BIT STRING (SIZE (8)),
    alpha-one-ionos     BIT STRING (SIZE (8)),
    alpha-two-ionos     BIT STRING (SIZE (8)),
    alpha-three-ionos   BIT STRING (SIZE (8)),
    beta-zero-ionos     BIT STRING (SIZE (8)),

```



```

beta-one-ionos          BIT STRING (SIZE (8)),
beta-two-ionos          BIT STRING (SIZE (8)),
beta-three-ionos       BIT STRING (SIZE (8)),
ie-Extensions          ProtocolExtensionContainer { { GPS-Ionospheric-Model-ExtIEs } } OPTIONAL,
...
}

GPS-Ionospheric-Model-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

GPS-Information ::= SEQUENCE (SIZE (0..maxNoGPSItems)) OF GPS-Information-Item
-- This IE shall be present if the Information Type Item IE indicates 'GPS Information'

GPS-Information-Item ::= ENUMERATED {
  gps-navigation-model-and-time-recovery,
  gps-ionospheric-model,
  gps-utc-model,
  gps-almanac,
  gps-rt-integrity,
  ...
}

GPS-RealTime-Integrity ::= CHOICE {
  bad-satellites          GPSBadSat-Info-RealTime-Integrity,
  no-bad-satellites      NULL
}

GPSBadSat-Info-RealTime-Integrity ::= SEQUENCE {
  sat-info                SATInfo-RealTime-Integrity,
  ie-Extensions          ProtocolExtensionContainer { { GPSBadSat-Info-RealTime-Integrity-ExtIEs } } OPTIONAL,
  ...
}

GPSBadSat-Info-RealTime-Integrity-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

GPS-NavandRecovery-Item ::= SEQUENCE (SIZE (1..maxNoSat)) OF GPS-NavandRecovery-Item

GPS-NavandRecovery-Item ::= SEQUENCE {
  tx-tow-nav              INTEGER (0..1048575),
  sat-id-nav              SAT-ID,
  tlm-message-nav        BIT STRING (SIZE (14)),
  tlm-revd-c-nav         BIT STRING (SIZE (2)),
  ho-word-nav             BIT STRING (SIZE (22)),

```

```

w-n-nav                BIT STRING (SIZE (10)),
ca-or-p-on-l2-nav     BIT STRING (SIZE (2)),
user-range-accuracy-index-nav  BIT STRING (SIZE (4)),
sv-health-nav         BIT STRING (SIZE (6)),
iodc-nav              BIT STRING (SIZE (10)),
l2-p-dataflag-nav     BIT STRING (SIZE (1)),
sfl1-reserved-nav     BIT STRING (SIZE (87)),
t-gd-nav              BIT STRING (SIZE (8)),
t-oc-nav              BIT STRING (SIZE (16)),
a-f-2-nav             BIT STRING (SIZE (8)),
a-f-1-nav             BIT STRING (SIZE (16)),
a-f-zero-nav         BIT STRING (SIZE (22)),
c-rs-nav              BIT STRING (SIZE (16)),
delta-n-nav           BIT STRING (SIZE (16)),
m-zero-nav            BIT STRING (SIZE (32)),
c-uc-nav              BIT STRING (SIZE (16)),
gps-e-nav             BIT STRING (SIZE (32)),
c-us-nav              BIT STRING (SIZE (16)),
a-sqrt-nav            BIT STRING (SIZE (32)),
t-oe-nav              BIT STRING (SIZE (16)),
fit-interval-flag-nav  BIT STRING (SIZE (1)),
aodo-nav              BIT STRING (SIZE (5)),
c-ic-nav              BIT STRING (SIZE (16)),
omega-zero-nav        BIT STRING (SIZE (32)),
c-is-nav              BIT STRING (SIZE (16)),
i-zero-nav            BIT STRING (SIZE (32)),
c-rc-nav              BIT STRING (SIZE (16)),
gps-omega-nav         BIT STRING (SIZE (32)),
omegadot-nav          BIT STRING (SIZE (24)),
idot-nav              BIT STRING (SIZE (14)),
spare-zero-fill       BIT STRING (SIZE (20)),
ie-Extensions         ProtocolExtensionContainer { { GPS-NavandRecovery-Item-ExtIEs } } OPTIONAL,
...
}

GPS-NavandRecovery-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

GPS-RX-POS ::= SEQUENCE {
  latitudeSign          ENUMERATED {north, south},
  latitude              INTEGER (0..8388607),
  longitude             INTEGER (-8388608..8388607),
  directionOfAltitude  ENUMERATED {height, depth},
  altitude              INTEGER (0..32767),
  iE-Extensions         ProtocolExtensionContainer { { GPS-RX-POS-ExtIEs } } OPTIONAL,
...
}

```

```

GPS-RX-POS-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

GPS-Status-Health ::= ENUMERATED {
    udre-scale-1dot0,
    udre-scale-0dot75,
    udre-scale-0dot5,
    udre-scale-0dot3,
    udre-scale-0dot1,
    no-data,
    invalid-data
}

GPSTOW ::= INTEGER (0..604799)

GPS-UTC-Model ::= SEQUENCE {
    a-one-utc          BIT STRING (SIZE (24)),
    a-zero-utc         BIT STRING (SIZE (32)),
    t-ot-utc           BIT STRING (SIZE (8)),
    delta-t-ls-utc     BIT STRING (SIZE (8)),
    w-n-t-utc          BIT STRING (SIZE (8)),
    w-n-lsf-utc        BIT STRING (SIZE (8)),
    dn-utc             BIT STRING (SIZE (8)),
    delta-t-lsf-utc    BIT STRING (SIZE (8)),
    ie-Extensions      ProtocolExtensionContainer { { GPS-UTC-Model-ExtIEs} }    OPTIONAL,
    ...
}

GPS-UTC-Model-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- =====
-- H
-- =====

HARQMemoryPartitioningFDD ::= SEQUENCE (SIZE (1..maxNrOfHARQProcesses)) OF HARQMemoryPartitioning-ItemFDD

HARQMemoryPartitioning-ItemFDD ::= SEQUENCE {
    process-Memory-Size    INTEGER (0..172800,...),
    ie-Extensions          ProtocolExtensionContainer { { HARQMemoryPartitioning-ItemFDD-ExtIEs} }    OPTIONAL,
    ...
}

HARQMemoryPartitioning-ItemFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HARQMemoryPartitioningTDD ::= SEQUENCE (SIZE (1..maxNrOfHARQProcesses)) OF HARQMemoryPartitioning-ItemTDD

```

```

HARQMemoryPartitioning-ItemTDD ::= SEQUENCE {
    process-Memory-Size          INTEGER (0..168960,...),
    iE-Extensions                ProtocolExtensionContainer { { HARQMemoryPartitioning-ItemTDD-ExtIEs } }
    ...
}

HARQMemoryPartitioning-ItemTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSDSCH-FDD-Information ::= SEQUENCE {
    hsDSCH-MACdFlow-Specific-Info  HSDSCH-MACdFlow-Specific-InfoList,
    ueCapability-Info              UE-Capability-InformationFDD,
    harqMemoryPartitioningFDD      HARQMemoryPartitioningFDD,
    measFeedbackOffset             INTEGER (0..79,...),
    iE-Extensions                  ProtocolExtensionContainer { { HSDSCH-FDD-Information-ExtIEs } }
    ...
}

HSDSCH-FDD-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSDSCH-TDD-Information ::= SEQUENCE {
    hsDSCH-MACdFlow-Specific-Info  HSDSCH-MACdFlow-Specific-InfoList,
    ueCapability-Info              UE-Capability-InformationTDD,
    harqMemoryPartitioningTDD      HARQMemoryPartitioningTDD,
    iE-Extensions                  ProtocolExtensionContainer { { HSDSCH-TDD-Information-ExtIEs } }
    ...
}

HSDSCH-TDD-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSDSCH-MACdFlow-Specific-InfoList ::= SEQUENCE (SIZE (1..maxNrOfMACdFlows)) OF HSDSCH-MACdFlow-Specific-InfoItem

HSDSCH-MACdFlow-Specific-InfoItem ::= SEQUENCE {
    hsDSCH-MACdFlow-ID             HSDSCH-MACdFlow-ID,
    bler                           BLER,
    allocationRetentionPriority     AllocationRetentionPriority,
    priorityQueueInfo              PriorityQueue-InfoList,
    iE-Extensions                  ProtocolExtensionContainer { { HSDSCH-MACdFlow-Specific-InfoItem-ExtIEs } }
    ...
}

HSDSCH-MACdFlow-Specific-InfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSDSCH-Information-to-Modify ::= SEQUENCE {
    hsDSCH-MACdFlow-Specific-Info-to-Modify  HSDSCH-MACdFlow-Specific-InfoList-to-Modify
}

```

```

measFeedbackRepCycleK1          ENUMERATED { measurement-Feedback-Reporting-Cycle-K1, measurement-Feedback-Reporting-Cycle-K2 }
OPTIONAL,
-- only for FDD
iE-Extensions                    ProtocolExtensionContainer { { HSDSCH-FDD-Information-to-Modify-ExtIEs } }    OPTIONAL,
...
}

HSDSCH-FDD-Information-to-Modify-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

HSDSCH-MACdFlow-Specific-InfoList-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfMACdFlows)) OF HSDSCH-MACdFlow-Specific-InfoItem-to-Modify

HSDSCH-MACdFlow-Specific-InfoItem-to-Modify ::= SEQUENCE {
  hsDSCH-MACdFlow-ID              HSDSCH-MACdFlow-ID,
  bler                             BLER                                OPTIONAL,
  allocationRetentionPriority       AllocationRetentionPriority         OPTIONAL,
  priorityQueueInfoToModify        PriorityQueue-InfoList-to-Modify  OPTIONAL,
  iE-Extensions                    ProtocolExtensionContainer { { HSDSCH-MACdFlow-Specific-InfoItem-to-Modify-ExtIEs } }  OPTIONAL,
  ...
}

HSDSCH-MACdFlow-Specific-InfoItem-to-Modify-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

HSDSCH-FDD-Information-Response ::= SEQUENCE {
  hsDSCH-MACdFlow-Specific-InformationResp  HSDSCH-MACdFlow-Specific-InformationResp,
  hsSCCH-Specific-Information-ResponseFDD   HSSCCH-Specific-InformationRespListFDD,
  measFeedback-CycleK1                     Measurement-Feedback-Reporting-Cycle,
  measFeedback-CycleK2                     Measurement-Feedback-Reporting-Cycle,

  iE-Extensions                            ProtocolExtensionContainer { { HSDSCH-FDD-Information-Response-ExtIEs } }  OPTIONAL,
  ...
}

HSDSCH-FDD-Information-Response-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

HSDSCH-TDD-Information-Response ::= SEQUENCE {
  hsDSCH-MACdFlow-Specific-InformationResp  HSDSCH-MACdFlow-Specific-InformationResp,
  hsSCCH-Specific-Information-ResponseTDD   HSSCCH-Specific-InformationRespListTDD                                OPTIONAL,
  hsSCCH-Specific-Information-ResponseTDDLRCR HSSCCH-Specific-InformationRespListTDDLRCR                            OPTIONAL,
  iE-Extensions                            ProtocolExtensionContainer { { HSDSCH-TDD-Information-Response-ExtIEs } }  OPTIONAL,
  ...
}

HSDSCH-TDD-Information-Response-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

HSDSCH-MACdFlow-Specific-InformationResp ::= SEQUENCE (SIZE (1..maxNrOfMACdFlows)) OF HSDSCH-MACdFlow-Specific-InformationResp-Item

```

```

HSDSCH-MACdFlow-Specific-InformationResp-Item ::= SEQUENCE {
    hsDSCHMacdFlow-Id          HSDSCH-MACdFlow-ID,
    bindingID                  BindingID                OPTIONAL,
    transportLayerAddress      TransportLayerAddress    OPTIONAL,
    iE-Extensions              ProtocolExtensionContainer { { HSDSCH-MACdFlow-Specific-InformationRespItem-ExtIEs } }
    OPTIONAL,
    ...
}

HSDSCH-MACdFlow-Specific-InformationRespItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSSCCH-Specific-InformationRespListFDD ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHCodes)) OF HSSCCH-Codes

HSSCCH-Codes ::= SEQUENCE {
    codeNumber                INTEGER (1..127),
    iE-Extensions            ProtocolExtensionContainer { { HSSCCH-Specific-InformationRespItemFDD-ExtIEs } }    OPTIONAL,
    ...
}

HSSCCH-Specific-InformationRespItemFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSSCCH-Specific-InformationRespListTDD ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHCodes)) OF HSSCCH-Specific-InformationRespItemTDD

HSSCCH-Specific-InformationRespItemTDD ::= SEQUENCE {
    timeslot                  TimeSlot,
    midambleShiftAndBurstType MidambleShiftAndBurstType,
    tDD-ChannelisationCode    TDD-ChannelisationCode,
    hSSICH-Info              HSSICH-Info,
    iE-Extensions            ProtocolExtensionContainer { { HSSCCH-Specific-InformationRespItemTDD-ExtIEs } }    OPTIONAL,
    ...
}

HSSCCH-Specific-InformationRespItemTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSSCCH-Specific-InformationRespListTDDLRCR ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHCodes)) OF HSSCCH-Specific-InformationRespItemTDDLRCR

HSSCCH-Specific-InformationRespItemTDDLRCR ::= SEQUENCE {
    timeslotLCR              TimeSlotLCR,
    midambleShiftLCR        MidambleShiftLCR,
    tDD-ChannelisationCodeLCR TDD-ChannelisationCodeLCR,
    hSSICH-InfoLCR          HSSICH-InfoLCR,
    iE-Extensions            ProtocolExtensionContainer { { HSSCCH-Specific-InformationRespItemTDDLRCR-ExtIEs } }    OPTIONAL,
    ...
}

HSSCCH-Specific-InformationRespItemTDDLRCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```

```

}
...
}
HSSICH-Info ::= SEQUENCE {
    timeslot                               TimeSlot,
    midambleShiftAndBurstType             MidambleShiftAndBurstType,
    tDD-ChannelisationCode                 TDD-ChannelisationCode,
    iE-Extensions                           ProtocolExtensionContainer { { HSSICH-Info-ExtIEs } } OPTIONAL,
    ...
}
HSSICH-Info-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
HSSICH-InfoLCR ::= SEQUENCE {
    timeslotLCR                             TimeSlotLCR,
    midambleShiftLCR                         MidambleShiftLCR,
    tDD-ChannelisationCodeLCR                 TDD-ChannelisationCodeLCR,
    iE-Extensions                             ProtocolExtensionContainer { { HSSICH-Info-LCR-ExtIEs } } OPTIONAL,
    ...
}
HSSICH-Info-LCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
HSDSCH-MACdFlow-ID ::= INTEGER (0..maxNrOfMACdFlows-1)
HSDSCH-RNTI ::= INTEGER (0..65535)
HS-PDSCH-FDD-Code-Information ::= SEQUENCE {
    number-of-HS-PDSCH-codes                 INTEGER (0..maxCodeNrComp-1),
    hS-PDSCH-Start-code-number               HS-PDSCH-Start-code-number OPTIONAL,
    -- Only included when number of HS-DSCH codes > 0
    ...
}
HS-PDSCH-Start-code-number ::= INTEGER (0..maxCodeNrComp-1)
HS-SCCH-ID ::= INTEGER (0..31)
HS-SCCH-FDD-Code-Information ::= SEQUENCE {
    hS-SCCH-FDD-Code-List                   HS-SCCH-FDD-Code-List OPTIONAL,
    ...
}
HS-SCCH-FDD-Code-List ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHs)) OF HS-SCCH-FDD-Code-Information-Item
HS-SCCH-FDD-Code-Information-Item ::= INTEGER (0..maxCodeNrComp-1)
-- =====
-- I

```

```
-- =====
```

```
IB-OC-ID ::= INTEGER (1..16)
```

```
IB-SG-DATA ::= BIT STRING
```

```
-- Contains SIB data fixed" or "SIB data variable" in segment as encoded in ref.[18].
```

```
IB-SG-POS ::= INTEGER (0..4094)
```

```
-- Only even positions allowed
```

```
IB-SG-REP ::= ENUMERATED {rep4, rep8, rep16, rep32, rep64, rep128, rep256, rep512, rep1024, rep2048, rep4096}
```

```
IB-Type ::= ENUMERATED {
```

```
  mIB,  
  sB1,  
  sB2,  
  sIB1,  
  sIB2,  
  sIB3,  
  sIB4,  
  sIB5,  
  sIB6,  
  sIB7,  
  sIB8,  
  sIB9,  
  sIB10,  
  sIB11,  
  sIB12,  
  sIB13,  
  sIB13dot1,  
  sIB13dot2,  
  sIB13dot3,  
  sIB13dot4,  
  sIB14,  
  sIB15,  
  sIB15dot1,  
  sIB15dot2,  
  sIB15dot3,  
  sIB16,  
  ...  
  sIB17,  
  sIB15dot4,  
  sIB18
```

```
}
```

```
IndicationType ::= ENUMERATED {
```

```
  noFailure,  
  serviceImpacting,  
  ...
```

```
}
```

```
InformationReportCharacteristics ::= CHOICE {
```

```
  onDemand  
  NULL,
```



```

    periodic          InformationReportCharacteristicsType-ReportPeriodicity,
    onModification   InformationReportCharacteristicsType-OnModification,
    ...
}

InformationReportCharacteristicsType-ReportPeriodicity ::= CHOICE {
    min          ReportPeriodicity-Scaledmin,
    hours       ReportPeriodicity-Scaledhour,
    ...
}

InformationReportCharacteristicsType-OnModification ::= SEQUENCE {
    information-thresholds InformationThresholds OPTIONAL,
    ie-Extensions         ProtocolExtensionContainer { { InformationReportCharacteristicsType-OnModification-ExtIEs } } OPTIONAL,
    ...
}

InformationReportCharacteristicsType-OnModification-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

InformationThresholds ::= CHOICE {
    dgps          DGPSThresholds,
    ...
}

InformationExchangeID ::= INTEGER (0..1048575)

InformationType ::= SEQUENCE {
    information-Type-Item Information-Type-Item,
    gPSInformation        GPS-Information OPTIONAL,
    iE-Extensions        ProtocolExtensionContainer { { Information-Type-ExtIEs } } OPTIONAL,
    ...
}

Information-Type-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Information-Type-Item ::= ENUMERATED {
    gpsinformation,
    dgpscorrections,
    gpsrxpos,
    ...
}

InnerLoopDLPCStatus ::= ENUMERATED {
    active,

```

```

    inactive
  }

IPDL-Indicator ::= ENUMERATED {
    active,
    inactive
}

IPDL-FDD-Parameters ::= SEQUENCE {
    iP-SpacingFDD          ENUMERATED{sp5,sp7,sp10,sp15,sp20,sp30,sp40,sp50,...},
    iP-Length              ENUMERATED{len5, len10},
    seed                  INTEGER(1..63),
    burstModeParams       BurstModeParams OPTIONAL,
    iE-Extensions         ProtocolExtensionContainer { { IPDLFDDParameter-ExtIEs } } OPTIONAL,
    ...
}

IPDLFDDParameter-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

IPDL-TDD-Parameters ::= SEQUENCE {
    iP-SpacingTDD          ENUMERATED{sp30,sp40,sp50,sp70,sp100,...},
    iP-Start               INTEGER(0..4095),
    iP-Slot                INTEGER(0..14),
    iP-PCCPCH              ENUMERATED{switchOff-1-Frame,switchOff-2-Frames},
    burstModeParams       BurstModeParams OPTIONAL,
    iE-Extensions         ProtocolExtensionContainer { { IPDLTDDParameter-ExtIEs } } OPTIONAL,
    ...
}

IPDL-TDD-Parameters-LCR ::= SEQUENCE {
    iP-SpacingTDD          ENUMERATED{sp30,sp40,sp50,sp70,sp100,...},
    iP-Start               INTEGER(0..4095),
    iP-Sub                  ENUMERATED{first,second,both},
    burstModeParams       BurstModeParams OPTIONAL,
    iE-Extensions         ProtocolExtensionContainer { { IPDLTDDParameterLCR-ExtIEs } } OPTIONAL,
    ...
}

BurstModeParams ::= SEQUENCE {
    burstStart             INTEGER(0..15),
    burstLenth             INTEGER(10..25),
    burstFreq              INTEGER(1..16),
    ...
}

IPDLTDDParameter-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

IPDLTDDParameterLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- =====
-- J
-- =====

-- =====
-- K
-- =====

-- =====
-- L
-- =====

Local-Cell-ID ::= INTEGER (0..268435455)

-- =====
-- M
-- =====

MACdPDU-Size ::= INTEGER (1..5000,...)

MACdPDU-Size-Indexlist ::= SEQUENCE (SIZE (1..maxNrOfMACdPDUIndexes)) OF MACdPDU-Size-IndexItem

MACdPDU-Size-IndexItem ::= SEQUENCE {
    sID                INTEGER (0..7),
    macdPDU-Size       MACdPDU-Size,
    iE-Extensions      ProtocolExtensionContainer { { MACdPDU-Size-IndexItem-ExtIEs } } OPTIONAL,
    ...
}

MACdPDU-Size-IndexItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

MACdPDU-Size-Indexlist-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfMACdPDUIndexes)) OF MACdPDU-Size-IndexItem-to-Modify

MACdPDU-Size-IndexItem-to-Modify ::= SEQUENCE {
    sID                INTEGER (0..7),
    macdPDU-Size       MACdPDU-Size OPTIONAL,
    iE-Extensions      ProtocolExtensionContainer { { MACdPDU-Size-IndexItem-to-Modify-ExtIEs } } OPTIONAL,
    ...
}

MACdPDU-Size-IndexItem-to-Modify-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Measurement-Feedback-Reporting-Cycle ::= ENUMERATED {
    v0,

```

```

    v1,
    v5,
    v10,
    v20,
    v40,
    v80,
    ...
}

MaximumDL-PowerCapability ::= INTEGER(0..500)
-- Unit dBm, Range 0dBm .. 50dBm, Step +0.1dB

Maximum-PDSCH-Power ::= SEQUENCE {
    maximum-PDSCH-Power-SF4      DL-Power      OPTIONAL,
    maximum-PDSCH-Power-SF8      DL-Power      OPTIONAL,
    maximum-PDSCH-Power-SF16     DL-Power      OPTIONAL,
    maximum-PDSCH-Power-SF32     DL-Power      OPTIONAL,
    maximum-PDSCH-Power-SF64     DL-Power      OPTIONAL,
    maximum-PDSCH-Power-SF128    DL-Power      OPTIONAL,
    maximum-PDSCH-Power-SF256    DL-Power      OPTIONAL,
    iE-Extensions                 ProtocolExtensionContainer { { Maximum-PDSCH-Power-ExtIEs } } OPTIONAL,
    ...
}

Maximum-PDSCH-Power-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

MaximumTransmissionPower ::= INTEGER(0..500)
-- Unit dBm, Range 0dBm .. 50dBm, Step +0.1dB

MaxNrOfUL-DPDCHs ::= INTEGER (1..6)

Max-Number-of-PCPCHes ::= INTEGER (1..64,...)

MaxPRACH-MidambleShifts ::= ENUMERATED {
    shift4,
    shift8,
    ...
}

MeasurementFilterCoefficient ::= ENUMERATED {k0, k1, k2, k3, k4, k5, k6, k7, k8, k9, k11, k13, k15, k17, k19,...}
-- Measurement Filter Coefficient to be used for measurement

MeasurementID ::= INTEGER (0..1048575)

MidambleConfigurationBurstType1And3 ::= ENUMERATED {v4, v8, v16}

MidambleConfigurationBurstType2 ::= ENUMERATED {v3, v6}

MidambleShiftAndBurstType ::= CHOICE {
    type1 SEQUENCE {
        midambleConfigurationBurstType1And3 MidambleConfigurationBurstType1And3,

```

```

midambleAllocationMode CHOICE {
    defaultMidamble      NULL,
    commonMidamble       NULL,
    ueSpecificMidamble   MidambleShiftLong,
    ...
},
...
},
type2 SEQUENCE {
    midambleConfigurationBurstType2 MidambleConfigurationBurstType2,
    midambleAllocationMode CHOICE {
        defaultMidamble      NULL,
        commonMidamble       NULL,
        ueSpecificMidamble   MidambleShiftShort,
        ...
    },
    ...
},
type3 SEQUENCE {
    midambleConfigurationBurstType1And3 MidambleConfigurationBurstType1And3,
    midambleAllocationMode CHOICE {
        defaultMidamble      NULL,
        ueSpecificMidamble   MidambleShiftLong,
        ...
    },
    ...
},
...
}

MidambleShiftLong ::= INTEGER (0..15)

MidambleShiftShort ::= INTEGER (0..5)

MidambleShiftLCR ::= SEQUENCE {
    midambleAllocationMode MidambleAllocationMode,
    midambleShift           MidambleShiftLong OPTIONAL,
    iE-Extensions           ProtocolExtensionContainer { {MidambleShiftLCR-ExtIEs} } OPTIONAL,
    ...
}

MidambleAllocationMode ::= ENUMERATED {
    defaultMidamble,
    commonMidamble,
    ueSpecificMidamble,
    ...
}

MidambleShiftLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

MinimumDL-PowerCapability ::= INTEGER(0..800)

```

```
-- Unit dBm, Range -30dBm .. 50dBm, Step +0.1dB
```

```
MinSpreadingFactor ::= ENUMERATED {  
    v4,  
    v8,  
    v16,  
    v32,  
    v64,  
    v128,  
    v256,  
    v512  
}
```

```
Modulation ::= ENUMERATED {  
    qPSK,  
    eightPSK,  
    ...  
}
```

```
MinUL-ChannelisationCodeLength ::= ENUMERATED {  
    v4,  
    v8,  
    v16,  
    v32,  
    v64,  
    v128,  
    v256,  
    ...  
}
```

```
MultiplexingPosition ::= ENUMERATED {  
    fixed,  
    flexible  
}
```

```
-- =====  
-- N  
-- =====
```

```
NCyclesPerSFNperiod ::= ENUMERATED {  
    v1,  
    v2,  
    v4,  
    v8,  
    ...,  
    v16,  
    v32,  
    v64  
}
```

```
NEOT ::= INTEGER (0..8)
```

```
NFmax ::= INTEGER (1..64,...)
```

```

NRepetitionsPerCyclePeriod ::= INTEGER (2..10)

N-INSYNC-IND ::= INTEGER (1..256)

N-OUTSYNC-IND ::= INTEGER (1..256)

NeighbouringCellMeasurementInformation ::= SEQUENCE (SIZE (1..maxNrOfMeasNCell)) OF
    CHOICE {
        neighbouringFDDCellMeasurementInformation      NeighbouringFDDCellMeasurementInformation, -- FDD only
        neighbouringTDDCellMeasurementInformation      NeighbouringTDDCellMeasurementInformation, -- 3.84Mcps TDD only
        ...,
        extension-neighbouringCellMeasurementInformation      Extension-neighbouringCellMeasurementInformation
    }

Extension-neighbouringCellMeasurementInformation ::= ProtocolIE-Single-Container {{ Extension-neighbouringCellMeasurementInformationIE }}

Extension-neighbouringCellMeasurementInformationIE NBAP-PROTOCOL-IES ::= {
    { ID id-neighbouringTDDCellMeasurementInformationLCR      CRITICALITY reject TYPEEXTENSION NeighbouringTDDCellMeasurementInformationLCR PRESENCE
    mandatory },
    ...
}

NeighbouringFDDCellMeasurementInformation ::= SEQUENCE {
    uC-Id                UC-Id,
    uARFCN                UARFCN,
    primaryScramblingCode PrimaryScramblingCode,
    iE-Extensions        ProtocolExtensionContainer { { NeighbouringFDDCellMeasurementInformationItem-ExtIEs } } OPTIONAL,
    ...
}

NeighbouringFDDCellMeasurementInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

NeighbouringTDDCellMeasurementInformation ::= SEQUENCE {
    uC-Id                UC-Id,
    uARFCN                UARFCN,
    cellParameterID      CellParameterID,
    timeSlot              TimeSlot                OPTIONAL,
    midambleShiftAndBurstType MidambleShiftAndBurstType    OPTIONAL,
    iE-Extensions        ProtocolExtensionContainer { { NeighbouringTDDCellMeasurementInformationItem-ExtIEs } } OPTIONAL,
    ...
}

NeighbouringTDDCellMeasurementInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

NeighbouringTDDCellMeasurementInformationLCR ::= SEQUENCE {
    uC-Id                UC-Id,

```

```

    uARFCN                UARFCN,
    cellParameterID       CellParameterID,
    timeSlotLCR           TimeSlotLCR           OPTIONAL,
    midambleShiftLCR     MidambleShiftLCR     OPTIONAL,
    iE-Extensions        ProtocolExtensionContainer { { NeighbouringTDDCellMeasurementInformationLCRItem-ExtIEs} } OPTIONAL,
    ...
}

NeighbouringTDDCellMeasurementInformationLCRItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

NodeB-CommunicationContextID ::= INTEGER (0..1048575)

NStartMessage ::= INTEGER (1..8)

NSubCyclesPerCyclePeriod ::= INTEGER (1..16,...)

-- =====
-- 0
-- =====

-- =====
-- P
-- =====

PagingIndicatorLength ::= ENUMERATED {
    v2,
    v4,
    v8,
    ...
}

PayloadCRC-PresenceIndicator ::= ENUMERATED {
    CRC-Included,
    CRC-NotIncluded,
    ...
}

PCCPCH-Power ::= INTEGER (-150..400,...)
-- PCCPCH-power = power * 10
-- If power <= -15 PCCPCH shall be set to -150
-- If power >= 40 PCCPCH shall be set to 400
-- Unit dBm, Range -15dBm .. +40 dBm, Step +0.1dB

PCP-Length ::= ENUMERATED{
    v0,
    v8
}

PDSCH-CodeMapping ::= SEQUENCE {
    dl-ScramblingCode          DL-ScramblingCode,

```



```

    signallingMethod CHOICE {
        code-Range PDSCH-CodeMapping-PDSCH-CodeMappingInformationList,
        tFCI-Range PDSCH-CodeMapping-DSCH-MappingInformationList,
        explicit PDSCH-CodeMapping-PDSCH-CodeInformationList,
        ...
        replace PDSCH-CodeMapping-ReplacedPDSCH-CodeInformationList
    },
    iE-Extensions ProtocolExtensionContainer { { PDSCH-CodeMapping-ExtIEs } } OPTIONAL,
    ...
}

PDSCH-CodeMapping-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PDSCH-CodeMapping-CodeNumberComp ::= INTEGER (0..maxCodeNrComp-1)

PDSCH-CodeMapping-SpreadingFactor ::= ENUMERATED {
    v4,
    v8,
    v16,
    v32,
    v64,
    v128,
    v256,
    ...
}

PDSCH-CodeMapping-PDSCH-CodeMappingInformationList ::= SEQUENCE (SIZE (1..maxNrOfCodeGroups)) OF
SEQUENCE {
    spreadingFactor PDSCH-CodeMapping-SpreadingFactor,
    multi-CodeInfo PDSCH-Multi-CodeInfo,
    start-CodeNumber PDSCH-CodeMapping-CodeNumberComp,
    stop-CodeNumber PDSCH-CodeMapping-CodeNumberComp,
    iE-Extensions ProtocolExtensionContainer { { PDSCH-CodeMapping-PDSCH-CodeMappingInformationList-ExtIEs } } OPTIONAL,
    ...
}

PDSCH-CodeMapping-PDSCH-CodeMappingInformationList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PDSCH-CodeMapping-DSCH-MappingInformationList ::= SEQUENCE (SIZE (1..maxNrOfTFCIGroups)) OF
SEQUENCE {
    maxTFCI-field2-Value PDSCH-CodeMapping-MaxTFCI-Field2-Value,
    spreadingFactor PDSCH-CodeMapping-SpreadingFactor,
    multi-CodeInfo PDSCH-Multi-CodeInfo,
    codeNumber PDSCH-CodeMapping-CodeNumberComp,
    iE-Extensions ProtocolExtensionContainer { { PDSCH-CodeMapping-DSCH-MappingInformationList-ExtIEs } } OPTIONAL,
    ...
}

PDSCH-CodeMapping-DSCH-MappingInformationList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```

```

}
...
}

PDSCH-CodeMapping-MaxTFCI-Field2-Value ::= INTEGER (1..1023)

PDSCH-CodeMapping-PDSCH-CodeInformationList ::= SEQUENCE (SIZE (1..maxNrOfTFCI2Combs)) OF
SEQUENCE {
    spreadingFactor          PDSCH-CodeMapping-SpreadingFactor,
    multi-CodeInfo          PDSCH-Multi-CodeInfo,
    codeNumber              PDSCH-CodeMapping-CodeNumberComp,
    iE-Extensions          ProtocolExtensionContainer { { PDSCH-CodeMapping-PDSCH-CodeInformationList-ExtIEs } } OPTIONAL,
    ...
}

PDSCH-CodeMapping-PDSCH-CodeInformationList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

PDSCH-CodeMapping-ReplacedPDSCH-CodeInformationList ::= SEQUENCE (SIZE (1..maxNrOfTFCI2Combs)) OF
SEQUENCE {
    tfci-Field2            TFCS-MaxTFCI-field2-Value,
    spreadingFactor        PDSCH-CodeMapping-SpreadingFactor,
    multi-CodeInfo        PDSCH-Multi-CodeInfo,
    codeNumber            PDSCH-CodeMapping-CodeNumberComp,
    iE-Extensions        ProtocolExtensionContainer { { PDSCH-CodeMapping-ReplacedPDSCH-CodeInformationList-ExtIEs } } OPTIONAL,
    ...
}

PDSCH-CodeMapping-ReplacedPDSCH-CodeInformationList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

PDSCH-Multi-CodeInfo ::= INTEGER (1..16)

PDSCH-ID ::= INTEGER (0..255)

PDSCHSet-ID ::= INTEGER (0..255)

PICH-Mode ::= ENUMERATED {
    v18,
    v36,
    v72,
    v144,
    ...
}

PICH-Power ::= INTEGER (-10..5)
-- Unit dB, Range -10dB .. +5dB, Step +1dB

PowerAdjustmentType ::= ENUMERATED {
    none,
    common,
    individual
}

```

```
}

PowerOffset ::= INTEGER (0..24)
-- PowerOffset = offset * 0.25
-- Unit dB, Range 0dB .. +6dB, Step +0.25dB

PowerRaiseLimit ::= INTEGER (0..10)

PRACH-Midamble ::= ENUMERATED {
    inverted,
    direct,
    ...
}

PRC ::= INTEGER (-2047..2047)
--pseudo range correction; scaling factor 0.32 meters

PRCDeviation ::= ENUMERATED {
    one,
    two,
    five,
    ten,
    ...
}

PreambleSignatures ::= BIT STRING {
    signature15(0),
    signature14(1),
    signature13(2),
    signature12(3),
    signature11(4),
    signature10(5),
    signature9(6),
    signature8(7),
    signature7(8),
    signature6(9),
    signature5(10),
    signature4(11),
    signature3(12),
    signature2(13),
    signature1(14),
    signature0(15)
} (SIZE (16))

PreambleThreshold ::= INTEGER (0..72)
-- 0= -36.0dB, 1= -35.5dB, ... , 72= 0.0dB

PredictedSFNSFNDeviationLimit ::= INTEGER (1..256)
-- Unit chip, Step 1/16 chip, Range 1/16..16 chip

PredictedTUTRANGPSDeviationLimit ::= INTEGER (1..256)
-- Unit chip, Step 1/16 chip, Range 1/16..16 chip
```

```

Pre-emptionCapability ::= ENUMERATED {
    shall-not-trigger-pre-emption,
    may-trigger-pre-emption
}

Pre-emptionVulnerability ::= ENUMERATED {
    not-pre-emptable,
    pre-emptable
}

PrimaryCPICH-Power ::= INTEGER(-100..500)
-- step 0.1 (Range -10.0..50.0) Unit is dBm

PrimaryScramblingCode ::= INTEGER (0..511)

PriorityLevel          ::= INTEGER (0..15)
-- 0 = spare, 1 = highest priority, ...14 = lowest priority and 15 = no priority

PriorityQueue-Id ::= INTEGER (0..maxNrOfPriorityQueues-1)

PriorityQueue-InfoList ::= SEQUENCE (SIZE (1..maxNrOfPriorityQueues)) OF PriorityQueue-InfoItem

PriorityQueue-InfoItem ::= SEQUENCE {
    priorityQueueId          PriorityQueue-Id,
    schedulingPriorityIndicator SchedulingPriorityIndicator,
    macdPDU-Size-Index      MACdPDU-Size-Indexlist,
    iE-Extensions           ProtocolExtensionContainer { { PriorityQueue-InfoItem-ExtIEs } } OPTIONAL,
    ...
}

PriorityQueue-InfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PriorityQueue-InfoList-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfPriorityQueues)) OF PriorityQueue-InfoItem-to-Modify

PriorityQueue-InfoItem-to-Modify ::= SEQUENCE {
    priorityQueueId          PriorityQueue-ID,
    schedulingPriorityIndicator SchedulingPriorityIndicator OPTIONAL,
    macdPDU-Size-Index-to-Modify MACdPDU-Size-Indexlist-to-Modify OPTIONAL,
    iE-Extensions           ProtocolExtensionContainer { { PriorityQueue-InfoItem-to-Modify-ExtIEs } } OPTIONAL,
    ...
}

PriorityQueue-InfoItem-to-Modify-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PrimaryCCPCH-RSCP ::= INTEGER (0..91)

PropagationDelay ::= INTEGER (0..255)
-- Unit: chips, step size 3 chips
-- example: 0 = 0chip, 1 = 3chips

```

```

SCH-TimeSlot ::= INTEGER (0..6)

PunctureLimit ::= INTEGER (0..15)
-- 0: 40%; 1: 44%; ... 14: 96%; 15: 100%

PUSCH-ID ::= INTEGER (0..255)

PUSCHSet-ID ::= INTEGER (0..255)

-- =====
-- Q
-- =====

QE-Selector ::= ENUMERATED {
    selected,
    non-selected
}

-- =====
-- R
-- =====

RACH-SlotFormat ::= ENUMERATED {
    v0,
    v1,
    v2,
    v3,
    ...
}

RACH-SubChannelNumbers ::= BIT STRING {
    subCh11(0),
    subCh10(1),
    subCh9(2),
    subCh8(3),
    subCh7(4),
    subCh6(5),
    subCh5(6),
    subCh4(7),
    subCh3(8),
    subCh2(9),
    subCh1(10),
    subCh0(11)
} (SIZE (12))

RL-Specific-DCH-Info ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF RL-Specific-DCH-Info-Item

RL-Specific-DCH-Info-Item ::= SEQUENCE {
    dCH-id                DCH-ID,
    bindingID             BindingID                                OPTIONAL,
    transportlayeraddress TransportLayerAddress                  OPTIONAL,
    iE-Extensions         ProtocolExtensionContainer { { RL-Specific-DCH-Info-Item-ExtIEs } } OPTIONAL,

```

```

}
...
}
RL-Specific-DCH-Info-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
Range-Correction-Rate ::= INTEGER (-127..127)
-- scaling factor 0.032 m/s
ReferenceClockAvailability ::= ENUMERATED {
    available,
    notAvailable
}
ReferenceSFNoffset ::= INTEGER (0..255)
RepetitionLength ::= INTEGER (1..63)
RepetitionPeriod ::= ENUMERATED {
    v1,
    v2,
    v4,
    v8,
    v16,
    v32,
    v64,
    ...
}
RepetitionNumber0 ::= INTEGER (0..255)
RepetitionNumber1 ::= INTEGER (1..256)
RefTFCNumber ::= INTEGER (0..3)
ReportCharacteristics ::= CHOICE {
    onDemand          NULL,
    periodic          ReportCharacteristicsType-ReportPeriodicity,
    event-a           ReportCharacteristicsType-EventA,
    event-b           ReportCharacteristicsType-EventB,
    event-c           ReportCharacteristicsType-EventC,
    event-d           ReportCharacteristicsType-EventD,
    event-e           ReportCharacteristicsType-EventE,
    event-f           ReportCharacteristicsType-EventF,
    ...,
    extension-ReportCharacteristics  Extension-ReportCharacteristics
}
Extension-ReportCharacteristics ::= ProtocolIE-Single-Container {{ Extension-ReportCharacteristicsIE }}
Extension-ReportCharacteristicsIE NBAP-PROTOCOL-IES ::= {
    { ID id-ReportCharacteristicsType-OnModification  CRITICALITY reject  TYPE ReportCharacteristicsType-OnModification  PRESENCE mandatory }

```

```

}

ReportCharacteristicsType-EventA ::= SEQUENCE {
    measurementThreshold      ReportCharacteristicsType-MeasurementThreshold,
    measurementHysteresisTime ReportCharacteristicsType-ScaledMeasurementHysteresisTime OPTIONAL,
    iE-Extensions             ProtocolExtensionContainer { { ReportCharacteristicsType-EventA-ExtIEs } } OPTIONAL,
    ...
}

ReportCharacteristicsType-EventA-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

ReportCharacteristicsType-EventB ::= SEQUENCE {
    measurementThreshold      ReportCharacteristicsType-MeasurementThreshold,
    measurementHysteresisTime ReportCharacteristicsType-ScaledMeasurementHysteresisTime OPTIONAL,
    iE-Extensions             ProtocolExtensionContainer { { ReportCharacteristicsType-EventB-ExtIEs } } OPTIONAL,
    ...
}

ReportCharacteristicsType-EventB-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

ReportCharacteristicsType-EventC ::= SEQUENCE {
    measurementIncreaseThreshold ReportCharacteristicsType-MeasurementIncreaseDecreaseThreshold,
    measurementChangeTime       ReportCharacteristicsType-ScaledMeasurementChangeTime,
    iE-Extensions                ProtocolExtensionContainer { { ReportCharacteristicsType-EventC-ExtIEs } } OPTIONAL,
    ...
}

ReportCharacteristicsType-EventC-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

ReportCharacteristicsType-EventD ::= SEQUENCE {
    measurementDecreaseThreshold ReportCharacteristicsType-MeasurementIncreaseDecreaseThreshold,
    measurementChangeTime       ReportCharacteristicsType-ScaledMeasurementChangeTime,
    iE-Extensions                ProtocolExtensionContainer { { ReportCharacteristicsType-EventD-ExtIEs } } OPTIONAL,
    ...
}

ReportCharacteristicsType-EventD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

ReportCharacteristicsType-EventE ::= SEQUENCE {
    measurementThreshold1      ReportCharacteristicsType-MeasurementThreshold,
    measurementThreshold2      ReportCharacteristicsType-MeasurementThreshold OPTIONAL,
    measurementHysteresisTime  ReportCharacteristicsType-ScaledMeasurementHysteresisTime OPTIONAL,
    reportPeriodicity           ReportCharacteristicsType-ReportPeriodicity OPTIONAL,
    iE-Extensions              ProtocolExtensionContainer { { ReportCharacteristicsType-EventE-ExtIEs } } OPTIONAL,
    ...
}

```

```

}

ReportCharacteristicsType-EventE-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

ReportCharacteristicsType-EventF ::= SEQUENCE {
  measurementThreshold1      ReportCharacteristicsType-MeasurementThreshold,
  measurementThreshold2      ReportCharacteristicsType-MeasurementThreshold      OPTIONAL,
  measurementHysteresisTime  ReportCharacteristicsType-ScaledMeasurementHysteresisTime  OPTIONAL,
  reportPeriodicity          ReportCharacteristicsType-ReportPeriodicity      OPTIONAL,
  iE-Extensions              ProtocolExtensionContainer { { ReportCharacteristicsType-EventF-ExtIEs } }  OPTIONAL,
  ...
}

ReportCharacteristicsType-EventF-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

ReportCharacteristicsType-OnModification ::= SEQUENCE {
  measurementThreshold      ReportCharacteristicsType-MeasurementThreshold,
  iE-Extensions              ProtocolExtensionContainer { { ReportCharacteristicsType-OnModification-ExtIEs } }  OPTIONAL,
  ...
}

ReportCharacteristicsType-OnModification-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

ReportCharacteristicsType-MeasurementIncreaseDecreaseThreshold ::= CHOICE {
  received-total-wide-band-power      Received-total-wide-band-power-Value-IncrDecrThres,
  transmitted-carrier-power            Transmitted-Carrier-Power-Value,
  acknowledged-prach-preambles        Acknowledged-PRACH-preambles-Value,
  uL-TimeslotISCP                      UL-TimeslotISCP-Value-IncrDecrThres,
  sir                                   SIR-Value-IncrDecrThres,
  sir-error                             SIR-Error-Value-IncrDecrThres,
  transmitted-code-power               Transmitted-Code-Power-Value-IncrDecrThres,
  rscp                                  RSCP-Value-IncrDecrThres,
  round-trip-time                      Round-Trip-Time-IncrDecrThres,
  acknowledged-PCPCH-access-preambles Acknowledged-PCPCH-access-preambles,
  detected-PCPCH-access-preambles      Detected-PCPCH-access-preambles,
  ...
}

ReportCharacteristicsType-MeasurementThreshold ::= CHOICE {
  received-total-wide-band-power      Received-total-wide-band-power-Value,
  transmitted-carrier-power            Transmitted-Carrier-Power-Value,
  acknowledged-prach-preambles        Acknowledged-PRACH-preambles-Value,
  uL-TimeslotISCP                      UL-TimeslotISCP-Value,
  sir                                   SIR-Value,
  sir-error                             SIR-Error-Value,
  transmitted-code-power               Transmitted-Code-Power-Value,
  rscp                                  RSCP-Value,

```



```

    rx-timing-deviation          Rx-Timing-Deviation-Value,
    round-trip-time              Round-Trip-Time-Value,
    acknowledged-PCPCH-access-preambles  Acknowledged-PCPCH-access-preambles,
    detected-PCPCH-access-preambles      Detected-PCPCH-access-preambles,
    . . .
    extension-ReportCharacteristicsType-MeasurementThreshold      Extension-ReportCharacteristicsType-MeasurementThreshold
}

Extension-ReportCharacteristicsType-MeasurementThreshold ::= ProtocolIE-Single-Container {{ Extension-ReportCharacteristicsType-
MeasurementThresholdIE }}

Extension-ReportCharacteristicsType-MeasurementThresholdIE NBAP-PROTOCOL-IES ::= {
  { ID id-TUTRANGPSMeasurementThresholdInformation  CRITICALITY reject  TYPE TUTRANGPSMeasurementThresholdInformation  PRESENCE mandatory }|
  { ID id-SFNFSNMeasurementThresholdInformation  CRITICALITY reject  TYPE SFNFSNMeasurementThresholdInformation  PRESENCE mandatory }
}

ReportCharacteristicsType-ScaledMeasurementChangeTime ::= CHOICE {
  msec          MeasurementChangeTime-Scaledmsec,
  . . .
}

MeasurementChangeTime-Scaledmsec ::= INTEGER (1..6000,...)
-- MeasurementChangeTime-Scaledmsec = Time * 10
-- Unit ms, Range 10ms .. 60000ms(1min), Step 10ms

ReportCharacteristicsType-ScaledMeasurementHysteresisTime ::= CHOICE {
  msec          MeasurementHysteresisTime-Scaledmsec,
  . . .
}

MeasurementHysteresisTime-Scaledmsec ::= INTEGER (1..6000,...)
-- MeasurementHysteresisTime-Scaledmsec = Time * 10
-- Unit ms, Range 10ms .. 60000ms(1min), Step 10ms

ReportCharacteristicsType-ReportPeriodicity ::= CHOICE {
  msec          ReportPeriodicity-Scaledmsec,
  min          ReportPeriodicity-Scaledmin,
  . . .
}

ReportPeriodicity-Scaledmsec ::= INTEGER (1..6000,...)
-- ReportPeriodicity-msec = ReportPeriodicity * 10
-- Unit ms, Range 10ms .. 60000ms(1min), Step 10ms

ReportPeriodicity-Scaledmin ::= INTEGER (1..60,...)
-- Unit min, Range 1min .. 60min(hour), Step 1min

ReportPeriodicity-Scaledhour ::= INTEGER (1..24,...)
-- Unit hour, Range 1hour .. 24hours(day), Step 1hour

ResourceOperationalState ::= ENUMERATED {
  enabled,
  disabled
}

```

```

}

CommonTransportChannel-InformationResponse ::= SEQUENCE {
    commonTransportChannelID      CommonTransportChannelID,
    bindingID                      BindingID OPTIONAL,
    transportLayerAddress          TransportLayerAddress OPTIONAL,
    ie-Extensions                  ProtocolExtensionContainer { { CommonTransportChannel-InformationResponse-ExtIEs} } OPTIONAL,
    ...
}

CommonTransportChannel-InformationResponse-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

LimitedPowerIncrease ::= ENUMERATED {
    used,
    not-used
}

RL-ID ::= INTEGER (0..31)

RL-Set-ID ::= INTEGER (0..31)

Round-Trip-Time-IncrDecrThres ::= INTEGER(0..32766)

RNC-ID ::= INTEGER (0..4095)

Round-Trip-Time-Value ::= INTEGER(0..32767)
-- According to mapping in [22]

RSCP-Value ::= INTEGER (0..127)
-- According to mapping in [23]

RSCP-Value-IncrDecrThres ::= INTEGER (0..126)

Received-total-wide-band-power-Value ::= INTEGER(0..621)
-- According to mapping in [22]/[23]

Received-total-wide-band-power-Value-IncrDecrThres ::= INTEGER (0..620)

RequestedDataValueInformation ::= CHOICE {
    informationAvailable      InformationAvailable,
    informationnotAvailable    InformationnotAvailable
}

InformationAvailable ::= SEQUENCE {
    requesteddataValue      RequestedDataValue,
    ie-Extensions          ProtocolExtensionContainer { { InformationAvailableItem-ExtIEs} } OPTIONAL,
    ...
}

```

```

InformationAvailableItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

InformationnotAvailable ::= NULL

RequestedDataValue ::= SEQUENCE {
    dgps-corrections      DGPSCorrections  OPTIONAL,
    gps-navandrecovery    GPS-NavigationModel-and-TimeRecovery  OPTIONAL,
    gps-ionos-model       GPS-Ionospheric-Model  OPTIONAL,
    gps-utc-model         GPS-UTC-Model  OPTIONAL,
    gps-almanac           GPS-Almanac  OPTIONAL,
    gps-rt-integrity      GPS-RealTime-Integrity  OPTIONAL,
    gpsrxpos              GPS-RX-POS  OPTIONAL,
    ...
}

Rx-Timing-Deviation-Value ::= INTEGER (0..8191)

Rx-Timing-Deviation-Value-LCR ::= INTEGER (0..255)

-- =====
-- S
-- =====

AdjustmentPeriod          ::= INTEGER(1..256)
-- Unit Frame

SAT-ID ::= INTEGER (0..63)

SAT-Info-Almanac ::= SEQUENCE (SIZE (1..maxNoSat)) OF SAT-Info-Almanac-Item

SAT-Info-Almanac-Item ::= SEQUENCE {
    data-id          DATA-ID,
    sat-id           SAT-ID,
    gps-e-alm        BIT STRING (SIZE (16)),
    gps-toa-alm      BIT STRING (SIZE (8)),
    gps-delta-I-alm  BIT STRING (SIZE (16)),
    omegadot-alm     BIT STRING (SIZE (16)),
    svhealth-alm     BIT STRING (SIZE (8)),
    gps-a-sqrt-alm   BIT STRING (SIZE (24)),
    omegazero-alm    BIT STRING (SIZE (24)),
    m-zero-alm       BIT STRING (SIZE (24)),
    gps-omega-alm    BIT STRING (SIZE (24)),
    gps-af-zero-alm  BIT STRING (SIZE (11)),
    gps-af-one-alm   BIT STRING (SIZE (11)),
    ie-Extensions    ProtocolExtensionContainer { { SAT-Info-Almanac-Item-ExtIEs } } OPTIONAL,
    ...
}

```

```

SAT-Info-Almanac-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

SAT-Info-DGPSCorrections ::= SEQUENCE (SIZE (1..maxNoSat)) OF SAT-Info-DGPSCorrections-Item

SAT-Info-DGPSCorrections-Item ::= SEQUENCE {
    sat-id                SAT-ID,
    iode-dgps             BIT STRING (SIZE (8)),
    udre                  UDRE,
    prc                   PRC,
    range-correction-rate Range-Correction-Rate,
    ie-Extensions        ProtocolExtensionContainer { { SAT-Info-DGPSCorrections-Item-ExtIEs} } OPTIONAL,
    ...
}

SAT-Info-DGPSCorrections-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

SATInfo-RealTime-Integrity ::= SEQUENCE (SIZE (1..maxNoSat)) OF SAT-Info-RealTime-Integrity-Item

SAT-Info-RealTime-Integrity-Item ::= SEQUENCE {
    bad-sat-id           SAT-ID,
    ie-Extensions        ProtocolExtensionContainer { { SAT-Info-RealTime-Integrity-Item-ExtIEs} } OPTIONAL,
    ...
}

SAT-Info-RealTime-Integrity-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

ScaledAdjustmentRatio ::= INTEGER(0..100)
-- AdjustmentRatio = ScaledAdjustmentRatio / 100

MaxAdjustmentStep ::= INTEGER(1..10)
-- Unit Slot

SchedulingPriorityIndicator ::= INTEGER (0..15) -- lowest (0), highest (15)

SID ::= INTEGER (0..maxNrOfMACdPDUIndexes-1)

ScramblingCodeNumber ::= INTEGER (0..15)

SecondaryCCPCH-SlotFormat ::= INTEGER(0..17,...)

Segment-Type ::= ENUMERATED {
    first-segment,
    first-segment-short,
    subsequent-segment,
}

```

```

    last-segment,
    last-segment-short,
    complete-SIB,
    complete-SIB-short,
    ...
}

S-FieldLength ::= ENUMERATED {
    v1,
    v2,
    ...
}

SFN ::= INTEGER (0..4095)

SFNSFN-FDD ::= INTEGER (0..614399)

SFNSFN-TDD ::= INTEGER (0..40961)

SFNSFNChangeLimit ::= INTEGER (1..256)
-- Unit chip, Step 1/16 chip, Range 1/16..16 chip

SFNSFNDriftRate ::= INTEGER (-100..100)
-- Unit chip/s, Step 1/256 chip/s, Range -100/256..+100/256 chip/s

SFNSFNDriftRateQuality ::= INTEGER (0..100)
-- Unit chip/s, Step 1/256 chip/s, Range 0..100/256 chip/s

SFNSFNMeasurementThresholdInformation ::= SEQUENCE {
    sFNSFNChangeLimit          SFNSFNChangeLimit          OPTIONAL,
    predictedSFNSFNDeviationLimit PredictedSFNSFNDeviationLimit OPTIONAL,
    iE-Extensions              ProtocolExtensionContainer { { SFNSFNMeasurementThresholdInformation-ExtIEs} } OPTIONAL,
    ...
}

SFNSFNMeasurementThresholdInformation-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

SFNSFNMeasurementValueInformation ::= SEQUENCE {
    successfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformation SEQUENCE (SIZE(1..maxNrOfMeasNCell)) OF
    SEQUENCE {
        uC-Id          UC-Id,
        sFNSFNValue    SFNSFNValue,
        sFNSFNQuality  SFNSFNQuality          OPTIONAL,
        sFNSFNDriftRate SFNSFNDriftRate,
        sFNSFNDriftRateQuality SFNSFNDriftRateQuality,
        sFNSFNTimeStampInformation SFNSFNTimeStampInformation,
        iE-Extensions  ProtocolExtensionContainer { { SuccessfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-
ExtIEs} }
        OPTIONAL,
        ...
    }
}

```

```

    },
    unsuccessfulNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformation SEQUENCE (SIZE(0..maxNrOfMeasNCell-1)) OF
      SEQUENCE {
        uC-Id UC-Id,
        iE-Extensions ProtocolExtensionContainer { { UnsuccessfulNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-
ExtIEs} } OPTIONAL,
        ...
      },
    iE-Extensions ProtocolExtensionContainer { { SFNSFNMeasurementValueInformationItem-ExtIEs} } OPTIONAL,
    ...
  }

SFNSFNMeasurementValueInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

SuccessfulNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

UnsuccessfulNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

SFNSFNQuality ::= INTEGER (0..255)
-- Unit chip, Step 1/16 chip, Range 0.. 255/16 chip

ShutdownTimer ::= INTEGER (1..3600)
-- Unit sec

SIB-Originator ::= ENUMERATED {
  nodeB,
  cRNC,
  ...
}

SIR-Error-Value ::= INTEGER (0..125)

SFNSFNTimeStampInformation ::= CHOICE {
  sfNSFNTimeStamp-FDD SFN,
  sfNSFNTimeStamp-TDD SFNSFNTimeStamp-TDD,
  ...}

SFNSFNTimeStamp-TDD ::= SEQUENCE {
  sfN SFN,
  timeSlot TimeSlot,
  iE-Extensions ProtocolExtensionContainer { { SFNSFNTimeStamp-ExtIEs} } OPTIONAL,
  ...

```

```
}

SFNSFNTimeStamp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

SFNSFNValue ::= CHOICE {
    sFNSFN-FDD      SFNSFN-FDD,
    sFNSFN-TDD     SFNSFN-TDD,
    ...
}

SIR-Error-Value-IncrDecrThres ::= INTEGER (0..124)

SIR-Value ::= INTEGER (0..63)
-- According to mapping in [22]/[23]

SIR-Value-IncrDecrThres ::= INTEGER (0..62)

SignallingBearerRequestIndicator ::= ENUMERATED {bearerRequested}

SpecialBurstScheduling ::= INTEGER (1..256)

SSDT-Cell-Identity ::= ENUMERATED {a, b, c, d, e, f, g, h}

SSDT-CellID-Length ::= ENUMERATED {
    short,
    medium,
    long
}

SSDT-Indication ::= ENUMERATED {
    ssdt-active-in-the-UE,
    ssdt-not-active-in-the-UE
}

Start-Of-Audit-Sequence-Indicator ::= ENUMERATED {
    start-of-audit-sequence,
    not-start-of-audit-sequence
}

STTD-Indicator ::= ENUMERATED {
    active,
    inactive,
    ...
}

SSDT-SupportIndicator ::= ENUMERATED {
    sSDT-Supported,
    sSDT-not-supported
}
```

```

}

SyncCase ::= INTEGER (1..2,...)

SYNCDLCodeId ::= INTEGER (1..32,...)

SyncFrameNumber ::= INTEGER (1..10)

SynchronisationReportCharacteristics ::= SEQUENCE {
    synchronisationReportCharacteristicsType SynchronisationReportCharacteristicsType,
    synchronisationReportCharactThreExc SynchronisationReportCharactThreExc OPTIONAL,
    -- This IE shall be included if the synchronisationReportCharacteristicsType IE is set to "thresholdExceeding".
    iE-Extensions ProtocolExtensionContainer { { SynchronisationReportCharacteristics-ExtIEs } } OPTIONAL,
    ...
}

SynchronisationReportCharacteristics-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    +{ ID id-SyncDLCodeIdThreInfoLCR CRITICALITY ignore EXTENSION SyncDLCodeIdThreInfoLCR PRESENCE optional }+,
    ...
}

SynchronisationReportCharactThreExc ::= SEQUENCE (SIZE (1..maxNrOfCellSyncBursts)) OF SynchronisationReportCharactThreInfoItem -- Mandatory for
3.84Mcps TDD only

SynchronisationReportCharactThreInfoItem ::= SEQUENCE {
    syncFrameNumber SyncFrameNumber,
    cellSyncBurstInformation SEQUENCE (SIZE (1.. maxNrOfReceptsPerSyncFrame)) OF SynchronisationReportCharactCellSyncBurstInfoItem,
    iE-Extensions ProtocolExtensionContainer { { SynchronisationReportCharactThreInfoItem-ExtIEs } } OPTIONAL,
    ...
}

SynchronisationReportCharactThreInfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

SynchronisationReportCharactCellSyncBurstInfoItem ::= SEQUENCE {
    cellSyncBurstCode CellSyncBurstCode,
    cellSyncBurstCodeShift CellSyncBurstCodeShift,
    cellSyncBurstTiming CellSyncBurstTiming OPTIONAL,
    cellSyncBurstTimingThreshold CellSyncBurstTimingThreshold OPTIONAL,
    iE-Extensions ProtocolExtensionContainer { { SynchronisationReportCharactCellSyncBurstInfoItem-ExtIEs } } OPTIONAL,
    ...
}

SynchronisationReportCharactCellSyncBurstInfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

SyncDLCodeIdThreInfoLCR ::= SEQUENCE (SIZE (0..maxNrOfSyncFramesLCR)) OF SyncDLCodeIdThreInfoList --Mandatory for 1.28Mcps TDD only

SyncDLCodeIdThreInfoList ::= SEQUENCE {
    syncFrameNoToReceive SyncFrameNumber,
    syncDLCodeIdInfoLCR SyncDLCodeInfoListLCR,
}

```



```

    iE-Extensions          ProtocolExtensionContainer { { SyncDLCodeIdThreInfoList-ExtIEs } }    OPTIONAL,
    ...
}

SyncDLCodeIdThreInfoList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

SyncDLCodeInfoListLCR ::= SEQUENCE (SIZE (1..maxNbrOfSyncDLCodesLCR)) OF SyncDLCodeInfoItemLCR

SyncDLCodeInfoItemLCR ::= SEQUENCE {
    syncDLCodeId            SYNCDLCodeId,
    syncDLCodeIdArrivTime   CellSyncBurstTiming          OPTIONAL,
    syncDLCodeIdTimingThre CellSyncBurstTimingThreshold OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { SyncDLCodeInfoItem-LCR-ExtIEs } }    OPTIONAL,
    ...
}

SyncDLCodeInfoItem-LCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

SynchronisationReportCharacteristicsType ::= ENUMERATED {
    frameRelated,
    sFNperiodRelated,
    cycleLengthRelated,
    thresholdExceeding,
    frequencyAcquisitionCompleted,
    ...
}

SynchronisationReportType ::= ENUMERATED {
    initialPhase,
    steadyStatePhase,
    lateEntrantCell,
    frequencyAcquisition,
    ...
}

-- =====
-- T
-- =====

T-Cell ::= ENUMERATED {
    v0,
    v1,
    v2,
    v3,
    v4,
    v5,
    v6,
    v7,
    v8,

```

```

    v9
  }

T-RLFFAILURE ::= INTEGER (0..255)
-- Unit seconds, Range 0s .. 25.5s, Step 0.1s

TDD-ChannelisationCode ::= ENUMERATED {
  chCode1div1,
  chCode2div1,
  chCode2div2,
  chCode4div1,
  chCode4div2,
  chCode4div3,
  chCode4div4,
  chCode8div1,
  chCode8div2,
  chCode8div3,
  chCode8div4,
  chCode8div5,
  chCode8div6,
  chCode8div7,
  chCode8div8,
  chCode16div1,
  chCode16div2,
  chCode16div3,
  chCode16div4,
  chCode16div5,
  chCode16div6,
  chCode16div7,
  chCode16div8,
  chCode16div9,
  chCode16div10,
  chCode16div11,
  chCode16div12,
  chCode16div13,
  chCode16div14,
  chCode16div15,
  chCode16div16,
  ...
}

TDD-ChannelisationCodeLCR ::= SEQUENCE {
  tDD-ChannelisationCode      TDD-ChannelisationCode,
  modulation                  Modulation, -- Modulation options for 1.28Mcps TDD in contrast to 3.84Mcps TDD
  ...
}

TDD-DL-Code-Information ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF TDD-DL-Code-InformationItem

TDD-DL-Code-InformationItem ::= SEQUENCE {
  dPCH-ID                    DPCH-ID,
  tdd-ChannelisationCode      TDD-ChannelisationCode,
  iE-Extensions               ProtocolExtensionContainer { { TDD-DL-Code-InformationItem-ExtIEs} } OPTIONAL,

```

```

}
...
}
TDD-DL-Code-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
TDD-DL-Code-LCR-Information ::= SEQUENCE (SIZE (1..maxNrOfDPCHLCRs)) OF TDD-DL-Code-LCR-InformationItem
TDD-DL-Code-LCR-InformationItem ::= SEQUENCE {
    dPCH-ID                DPCH-ID,
    tdd-ChannelisationCodeLCR    TDD-ChannelisationCodeLCR,
    iE-Extensions            ProtocolExtensionContainer { { TDD-DL-Code-LCR-InformationItem-ExtIEs } }    OPTIONAL,
    ...
}
TDD-DL-Code-LCR-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}
TDD-DPCHoffset ::= CHOICE {
    initialOffset    INTEGER (0..255),
    noinitialOffset    INTEGER (0..63)
}
TDD-PhysicalChannelOffset ::= INTEGER (0..63)
TDD-TPC-DownlinkStepSize ::= ENUMERATED {
    step-size1,
    step-size2,
    step-size3,
    ...
}
TransportFormatCombination-Beta ::= CHOICE {
    signalledGainFactors    SEQUENCE {
        gainFactor        CHOICE {
            fdd            SEQUENCE {
                betaC        BetaCD,
                betaD        BetaCD,
                iE-Extensions    ProtocolExtensionContainer { { GainFactorFDD-ExtIEs } }    OPTIONAL,
                ...
            },
            tdd            BetaCD,
            ...
        },
        refTFCNumber        RefTFCNumber    OPTIONAL,
        iE-Extensions        ProtocolExtensionContainer { { SignalledGainFactors-ExtIEs } }    OPTIONAL,
        ...
    },
    computedGainFactors        RefTFCNumber,
    ...
}

```

```

GainFactorFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

SignalledGainFactors-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

TDD-UL-Code-Information ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF TDD-UL-Code-InformationItem

TDD-UL-Code-InformationItem ::= SEQUENCE {
  dpch-ID                DPCH-ID,
  tdd-ChannelisationCode TDD-ChannelisationCode,
  iE-Extensions          ProtocolExtensionContainer { { TDD-UL-Code-InformationItem-ExtIEs } } OPTIONAL,
  ...
}

TDD-UL-Code-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

TDD-UL-Code-LCR-Information ::= SEQUENCE (SIZE (1..maxNrOfDPCHLCRs)) OF TDD-UL-Code-LCR-InformationItem

TDD-UL-Code-LCR-InformationItem ::= SEQUENCE {
  dpch-ID                DPCH-ID,
  tdd-ChannelisationCodeLCR TDD-ChannelisationCodeLCR,
  iE-Extensions          ProtocolExtensionContainer { { TDD-UL-Code-LCR-InformationItem-ExtIEs } } OPTIONAL,
  ...
}

TDD-UL-Code-LCR-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

TFCI-Coding ::= ENUMERATED {
  v4,
  v8,
  v16,
  v32,
  ...
}

TFCI-Presence ::= ENUMERATED {
  present,
  not-present
}

TFCI-SignallingMode ::= SEQUENCE {
  tFCI-SignallingOption TFCI-SignallingMode-TFCI-SignallingOption,
  splitType             TFCI-SignallingMode-SplitType OPTIONAL,
  -- This IE shall be present if the TFCI signalling option is split --
  lengthOfTFCI2        TFCI-SignallingMode-LengthOfTFCI2 OPTIONAL,
}

```

```

    iE-Extensions          ProtocolExtensionContainer { { TFCI-SignallingMode-ExtIEs} }
    ...
}

TFCI-SignallingMode-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TFCI-SignallingMode-LengthOfTFCI2 ::= INTEGER (1..10)

TFCI-SignallingMode-SplitType ::= ENUMERATED {
    hard,
    logical
}

TFCI-SignallingMode-TFCI-SignallingOption ::= ENUMERATED {
    normal,
    split
}

TFCI2-BearerInformationResponse ::= SEQUENCE {
    bindingID                BindingID,
    transportLayerAddress    TransportLayerAddress,
    iE-Extensions            ProtocolExtensionContainer { { TFCI2-BearerInformationResponse-ExtIEs} } OPTIONAL,
    ...
}

TFCI2-BearerInformationResponse-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TFCI2BearerRequestIndicator ::= ENUMERATED {newBearerRequested}

TGD                ::= INTEGER (0|15..269)
-- 0 = Undefined, only one transmission gap in the transmission gap pattern sequence

TGPRC                ::= INTEGER (0..511)
-- 0 = infinity

TGPSID                ::= INTEGER (1.. maxTGPS)

TGSN                ::= INTEGER (0..14)

TimeSlot ::= INTEGER (0..14)

TimeSlotDirection ::= ENUMERATED {
    ul,
    dl,
    ...
}

```

```
}

TimeSlotLCR ::= INTEGER (0..6)

TimeSlotStatus ::= ENUMERATED {
    active,
    not-active,
    ...
}

TimingAdjustmentValue ::= CHOICE {
    initialPhase      INTEGER (0..255),
    steadyStatePhase  INTEGER (0..1048575)
}

TimingAdvanceApplied ::= ENUMERATED {
    yes,
    no
}
-- For 1.28Mcps TDD TimingAdvanceApplied = No

ToAWE ::= INTEGER (0..2559)
-- Unit ms

ToAWS ::= INTEGER (0..1279)
-- Unit ms

Transmission-Gap-Pattern-Sequence-Information ::= SEQUENCE (SIZE (1..maxTGPS)) OF
SEQUENCE {
    tGPSID          TGPSID,
    tGSN            TGSN,
    tGL1            GapLength,
    tGL2            GapLength  OPTIONAL,
    tGD             TGD,
    tGPL1           GapDuration,
    tGPL2           GapDuration OPTIONAL,
    uL-DL-mode      UL-DL-mode,
    downlink-Compressed-Mode-Method  Downlink-Compressed-Mode-Method  OPTIONAL,
    -- This IE shall be present if the UL/DL mode IE is set to "DL only" or "UL/DL"
    uplink-Compressed-Mode-Method    Uplink-Compressed-Mode-Method    OPTIONAL,
    -- This IE shall be present if the UL/DL mode IE is set to "UL only" or "UL/DL"
    dL-FrameType    DL-FrameType,
    delta-SIR1      DeltaSIR,
    delta-SIR-after1  DeltaSIR,
    delta-SIR2      DeltaSIR  OPTIONAL,
    delta-SIR-after2  DeltaSIR  OPTIONAL,
}
```

```

        iE-Extensions          ProtocolExtensionContainer { {Transmission-Gap-Pattern-Sequence-Information-ExtIEs} } OPTIONAL,
        ...
    }

Transmission-Gap-Pattern-Sequence-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TransmissionGapPatternSequenceCodeInformation ::= ENUMERATED{
    code-change,
    nocode-change
}

Transmitted-Carrier-Power-Value ::= INTEGER(0..100)
-- According to mapping in [4]/[5]

Transmitted-Code-Power-Value ::= INTEGER (0..127)
-- According to mapping in [4]/[5]

Transmitted-Code-Power-Value-IncrDecrThres ::= INTEGER (0..112,...)

TransmissionDiversityApplied ::= BOOLEAN
-- true: applied, false: not applied

TransmitDiversityIndicator ::= ENUMERATED {
    active,
    inactive
}

TFCS ::= SEQUENCE {
    tFCSvalues
        no-Split-in-TFCI          CHOICE {
        split-in-TFCI             TFCS-TFCSList,
        transportFormatCombination-DCH TFCS-DCHList,
        signallingMethod          CHOICE {
        tFCI-Range                TFCS-MapingOnDSCHList,
        explicit                   TFCS-DSCHList,
        ...
        },
        iE-Extensions          ProtocolExtensionContainer { { Split-in-TFCI-ExtIEs } } OPTIONAL,
        ...
    },
    ...
},
iE-Extensions          ProtocolExtensionContainer { { TFCS-ExtIEs } } OPTIONAL,
...
}

Split-in-TFCI-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```

```

}
...
TFCS-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

TFCS-TFCSList ::= SEQUENCE (SIZE (1..maxNrOfTFCS)) OF
SEQUENCE {
    cTFC                TFCS-CTFC,
    tFC-Beta            TransportFormatCombination-Beta    OPTIONAL,
    iE-Extensions      ProtocolExtensionContainer { { TFCS-TFCSList-ExtIEs } }    OPTIONAL,
    ...
}

TFCS-TFCSList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

TFCS-CTFC ::= CHOICE {
    ctfc2bit                INTEGER (0..3),
    ctfc4bit                INTEGER (0..15),
    ctfc6bit                INTEGER (0..63),
    ctfc8bit                INTEGER (0..255),
    ctfc12bit              INTEGER (0..4095),
    ctfc16bit              INTEGER (0..65535),
    ctfcmaxbit             INTEGER (0..maxCTFC)
}

TFCS-DCHList ::= SEQUENCE (SIZE (1..maxNrOfTFCICombs)) OF
SEQUENCE {
    cTFC                TFCS-CTFC,
    iE-Extensions      ProtocolExtensionContainer { { TFCS-DCHList-ExtIEs } }    OPTIONAL,
    ...
}

TFCS-DCHList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

TFCS-MappingOnDSCHList ::= SEQUENCE (SIZE (1..maxNrOfTFCIGroups)) OF
SEQUENCE {
    maxTFCI-field2-Value    TFCS-MaxTFCI-field2-Value,
    cTFC-DSCH              TFCS-CTFC,
    iE-Extensions          ProtocolExtensionContainer { { TFCS-MappingOnDSCHList-ExtIEs } }    OPTIONAL,
    ...
}

TFCS-MappingOnDSCHList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

TFCS-MaxTFCI-field2-Value ::= INTEGER (1..maxNrOfTFCI2Combs-1)

```



```

TFCS-DSCHList ::= SEQUENCE (SIZE (1..maxNrOfTFCI2Combs)) OF
  SEQUENCE {
    cTFC-DSCH          TFC-CTFC,
    iE-Extensions      ProtocolExtensionContainer { { TFCS-DSCHList-ExtIEs } } OPTIONAL,
    ...
  }

TFCS-DSCHList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

TransportBearerRequestIndicator ::= ENUMERATED {
  bearerRequested,
  bearerNotRequested,
  ...
}

TransportFormatSet ::= SEQUENCE {
  dynamicParts          TransportFormatSet-DynamicPartList,
  semi-staticPart      TransportFormatSet-Semi-staticPart,
  iE-Extensions        ProtocolExtensionContainer { { TransportFormatSet-ExtIEs } } OPTIONAL,
  ...
}

TransportFormatSet-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

TransportFormatSet-DynamicPartList ::= SEQUENCE (SIZE (1..maxNrOfTFs)) OF
  SEQUENCE {
    nrOfTransportBlocks      TransportFormatSet-NrOfTransportBlocks,
    transportBlockSize       TransportFormatSet-TransportBlockSize OPTIONAL,
    -- This IE shall be present if the Number of Transport Blocks IE is set to a value greater than 0
    mode                     TransportFormatSet-ModeDP,
    iE-Extensions            ProtocolExtensionContainer { { TransportFormatSet-DynamicPartList-ExtIEs } } OPTIONAL,
    ...
  }

TransportFormatSet-DynamicPartList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

TDD-TransportFormatSet-ModeDP ::= SEQUENCE {
  transmissionTimeIntervalInformation      TransmissionTimeIntervalInformation OPTIONAL,
  -- This IE shall be present if the Transmission Time Interval IE in the Semi-static Transport Format Information IE is set to "dynamic"
  iE-Extensions                            ProtocolExtensionContainer { {TDD-TransportFormatSet-ModeDP-ExtIEs} } OPTIONAL,
  ...
}

TDD-TransportFormatSet-ModeDP-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

TransmissionTimeIntervalInformation ::= SEQUENCE (SIZE (1..maxTTI-count)) OF
  SEQUENCE {
    transmissionTimeInterval      TransportFormatSet-TransmissionTimeIntervalDynamic,
    iE-Extensions                 ProtocolExtensionContainer { { TransmissionTimeIntervalInformation-ExtIEs} }   OPTIONAL,
    ...
  }

TransmissionTimeIntervalInformation-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

TransportFormatSet-Semi-staticPart ::= SEQUENCE {
  transmissionTimeInterval      TransportFormatSet-TransmissionTimeIntervalSemiStatic,
  channelCoding                 TransportFormatSet-ChannelCodingType,
  codingRate                    TransportFormatSet-CodingRate                       OPTIONAL,
  -- This IE shall be present if the Type of channel coding IE is set to 'convolutional' or 'turbo'
  rateMatchingAttribute         TransportFormatSet-RateMatchingAttribute,
  CRC-Size                      TransportFormatSet-CRC-Size,
  mode                          TransportFormatSet-ModeSSP,
  iE-Extensions                 ProtocolExtensionContainer { { TransportFormatSet-Semi-staticPart-ExtIEs} }   OPTIONAL,
  ...
}

TransportFormatSet-Semi-staticPart-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

TransportFormatSet-ChannelCodingType ::= ENUMERATED {
  no-codingTDD,
  convolutional-coding,
  turbo-coding,
  ...
}

TransportFormatSet-CodingRate ::= ENUMERATED {
  half,
  third,
  ...
}

TransportFormatSet-CRC-Size ::= ENUMERATED {
  v0,
  v8,
  v12,
  v16,
  v24,
  ...
}

TransportFormatSet-ModeDP ::= CHOICE {
  tdd                          TDD-TransportFormatSet-ModeDP,
  notApplicable                 NULL,
}

```

```
    ...
}

TransportFormatSet-ModeSSP ::= CHOICE {
    tdd          TransportFormatSet-SecondInterleavingMode,
    notApplicable      NULL,
    ...
}

TransportFormatSet-NrOfTransportBlocks ::= INTEGER (0..512)

TransportFormatSet-RateMatchingAttribute ::= INTEGER (1..maxRateMatching)

TransportFormatSet-SecondInterleavingMode ::= ENUMERATED {
    frame-related,
    timeSlot-related,
    ...
}

TransportFormatSet-TransmissionTimeIntervalDynamic ::= ENUMERATED {
    msec-10,
    msec-20,
    msec-40,
    msec-80,
    ...
}

TransportFormatSet-TransmissionTimeIntervalSemiStatic ::= ENUMERATED {
    msec-10,
    msec-20,
    msec-40,
    msec-80,
    dynamic,
    ... ,
    msec-5
}

TransportFormatSet-TransportBlockSize ::= INTEGER (0..5000)

TransportLayerAddress ::= BIT STRING (SIZE (1..160, ...))

TSTD-Indicator ::= ENUMERATED {
    active,
    inactive
}

TUTRANGPS ::= SEQUENCE {
    ms-part      INTEGER (0..16383),
    ls-part      INTEGER (0..4294967295)
}

TUTRANGPSChangeLimit ::= INTEGER (1..256)
-- Unit chip, Step 1/16 chip, Range 1/16..16 chip
```

```

TUTRANGPSDriftRate ::= INTEGER (-50..50)
-- Unit chip/s, Step 1/256 chip/s, Range -50/256..+50/256 chip/s

TUTRANGPSDriftRateQuality ::= INTEGER (0..50)
-- Unit chip/s, Step 1/256 chip/s, Range 0..50/256 chip/s

TUTRANGPSAccuracyClass ::= ENUMERATED {
    accuracy-class-A,
    accuracy-class-B,
    accuracy-class-C,
    ...
}

TUTRANGPSMeasurementThresholdInformation ::= SEQUENCE {
    tUTRANGPSChangeLimit          TUTRANGPSChangeLimit          OPTIONAL,
    predictedTUTRANGPSDeviationLimit    PredictedTUTRANGPSDeviationLimit    OPTIONAL,
    iE-Extensions                ProtocolExtensionContainer { { TUTRANGPSMeasurementThresholdInformation-ExtIEs} }    OPTIONAL,
    ...
}

TUTRANGPSMeasurementThresholdInformation-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TUTRANGPSMeasurementValueInformation ::= SEQUENCE {
    tUTRANGPS                    TUTRANGPS,
    tUTRANGPSQuality              TUTRANGPSQuality,
    tUTRANGPSDriftRate            TUTRANGPSDriftRate,
    tUTRANGPSDriftRateQuality     TUTRANGPSDriftRateQuality,
    iE-Extensions                ProtocolExtensionContainer { {TUTRANGPSMeasurementValueInformationItem-ExtIEs} }    OPTIONAL,
    ...
}

TUTRANGPSMeasurementValueInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TUTRANGPSQuality ::= INTEGER (0..255)
-- Unit chip, Step 1/16 chip, Range 0.. 255/16 chip

TypeOfError ::= ENUMERATED {
    not-understood,
    missing,
    ...
}

-- =====
-- U
-- =====

```

```

UARFCN ::= INTEGER (0..16383, ...)
-- corresponds to 1885.2MHz .. 2024.8MHz

UC-Id ::= SEQUENCE {
    rNC-ID          RNC-ID,
    c-ID            C-ID,
    iE-Extensions  ProtocolExtensionContainer { {UC-Id-ExtIEs} } OPTIONAL,
    ...
}
UC-Id-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UDRE ::= ENUMERATED {
    udre-minusequal-one-m,
    udre-betweenoneandfour-m,
    udre-betweenfourandeight-m,
    udre-greaterequaleight-m
}

UE-Capability-InformationFDD ::= SEQUENCE {
    hSDSCH-TrCH-Bits-Per-HSDSCH-TTI      ENUMERATED {v7300, v14600, v20456, v28800,...},
    hSDSCH-Multi-Code-Capability        ENUMERATED {v5, v10, v15,...},
    min-Inter-TTI-Interval              INTEGER (1..3,...),
    mAChs-Reordering-Buffer-Size        INTEGER (1..300,...),
    iE-Extensions                       ProtocolExtensionContainer { { UE-Capability-InformationFDD-ExtIEs } } OPTIONAL,
    ...
}
UE-Capability-InformationFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UE-Capability-InformationTDD ::= SEQUENCE {
    hSDSCHTrCHBitsPerTTI                ENUMERATED { v7040, v10228, v14080, ... },
    hSDSCH-Multi-Code-Capability        ENUMERATED {v8, v12, v16,...},
    mAChs-Reordering-Buffer-Size        INTEGER (1..300,...),
    iE-Extensions                       ProtocolExtensionContainer { { UE-Capability-InformationTDD-ExtIEs } } OPTIONAL,
    ...
}
UE-Capability-InformationTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-CapacityCredit ::= INTEGER (0..65535)

UL-DL-mode ::= ENUMERATED {
    ul-only,
    dl-only,
    both-ul-and-dl
}

```

```

}

Uplink-Compressed-Mode-Method ::= ENUMERATED {
    sFdiv2,
    higher-layer-scheduling,
    ...
}

UL-Timeslot-Information ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Timeslot-InformationItem

UL-Timeslot-InformationItem ::= SEQUENCE {
    timeSlot                TimeSlot,
    midambleShiftAndBurstType MidambleShiftAndBurstType,
    tFCI-Presence            TFCI-Presence,
    uL-Code-InformationList  TDD-UL-Code-Information,
    iE-Extensions            ProtocolExtensionContainer { { UL-Timeslot-InformationItem-ExtIEs } } OPTIONAL,
    ...
}

UL-Timeslot-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-TimeslotLCR-Information ::= SEQUENCE (SIZE (1..maxNrOfULTSLCRs)) OF UL-TimeslotLCR-InformationItem

UL-TimeslotLCR-InformationItem ::= SEQUENCE {
    timeSlotLCR                TimeSlotLCR,
    midambleShiftLCR            MidambleShiftLCR,
    tFCI-Presence                TFCI-Presence,
    uL-Code-InformationList      TDD-UL-Code-LCR-Information,
    iE-Extensions                ProtocolExtensionContainer { { UL-TimeslotLCR-InformationItem-ExtIEs } } OPTIONAL,
    ...
}

UL-TimeslotLCR-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-DPCCH-SlotFormat ::= INTEGER (0..5,...)

UL-SIR ::= INTEGER (-82..173)
-- According to mapping in [16]

UL-FP-Mode ::= ENUMERATED {
    normal,
    silent,
    ...
}

UL-PhysCH-SF-Variation ::= ENUMERATED {
    sf-variation-supported,

```

```

    sf-variation-not-supported
  }

UL-ScramblingCode ::= SEQUENCE {
    uL-ScramblingCodeNumber      UL-ScramblingCodeNumber,
    uL-ScramblingCodeLength      UL-ScramblingCodeLength,
    iE-Extensions                ProtocolExtensionContainer { { UL-ScramblingCode-ExtIEs } }
    ...
}

UL-ScramblingCode-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-ScramblingCodeNumber ::= INTEGER (0..16777215)

UL-ScramblingCodeLength ::= ENUMERATED {
    short,
    long
}

UL-TimeSlot-ISCP-Info ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-TimeSlot-ISCP-InfoItem

UL-TimeSlot-ISCP-InfoItem ::= SEQUENCE {
    timeSlot                    TimeSlot,
    iSCP                        UL-TimeslotISCP-Value,
    iE-Extensions                ProtocolExtensionContainer { { UL-TimeSlot-ISCP-InfoItem-ExtIEs } }
    ...
}

UL-TimeSlot-ISCP-InfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-TimeSlot-ISCP-LCR-Info ::= SEQUENCE (SIZE (1..maxNrOfULTSLCRs)) OF UL-TimeSlot-ISCP-LCR-InfoItem

UL-TimeSlot-ISCP-LCR-InfoItem ::= SEQUENCE {
    timeSlotLCR                TimeSlotLCR,
    iSCP                        UL-TimeslotISCP-Value,
    iE-Extensions                ProtocolExtensionContainer { { UL-TimeSlot-ISCP-LCR-InfoItem-ExtIEs } }
    ...
}

UL-TimeSlot-ISCP-LCR-InfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

USCH-Information ::= SEQUENCE (SIZE (1..maxNrOfUSCHs)) OF USCH-InformationItem

USCH-InformationItem ::= SEQUENCE {
    uSCH-ID                    USCH-ID,
    cCTrCH-ID                  cCTrCH-ID,
    transportFormatSet          TransportFormatSet,
}

```

```

allocationRetentionPriority      AllocationRetentionPriority,
iE-Extensions                    ProtocolExtensionContainer { { USCH-InformationItem-ExtIEs } }
...
}

USCH-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-bindingID              CRITICALITY ignore      EXTENSION BindingID          PRESENCE optional } |
  { ID id-transportlayeraddress  CRITICALITY ignore  EXTENSION TransportLayerAddress PRESENCE optional } ,
  ...
}

USCH-InformationResponse ::= SEQUENCE (SIZE (1..maxNrOfUSCHs)) OF USCH-InformationResponseItem

USCH-InformationResponseItem ::= SEQUENCE {
  uSCH-ID                        USCH-ID,
  bindingID                      BindingID          OPTIONAL,
  transportLayerAddress          TransportLayerAddress OPTIONAL,
  iE-Extensions                  ProtocolExtensionContainer { { USCH-InformationResponseItem-ExtIEs } } OPTIONAL,
  ...
}

USCH-InformationResponseItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

UL-TimeslotISCP-Value ::= INTEGER (0..127)
-- According to mapping in [23]

UL-TimeslotISCP-Value-IncrDecrThres ::= INTEGER (0..126)

USCH-ID ::= INTEGER (0..255)

-- =====
-- V
-- =====

-- =====
-- W
-- =====

-- =====
-- X
-- =====

-- =====
-- Y
-- =====

-- =====
-- Z
-- =====

END

```


9.3.5 Common Definitions

```

-- *****
--
-- Common definitions
--
-- *****

NBAP-CommonDataTypes {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
ums-Access (20) modules (3) nbap (2) version1 (1) nbap-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 }

MessageDiscriminator ::= ENUMERATED { common, dedicated }

Presence         ::= ENUMERATED { optional, conditional, mandatory }

PrivateIE-ID     ::= CHOICE {
    local          INTEGER (0..maxPrivateIEs),
    global         OBJECT IDENTIFIER
}

ProcedureCode    ::= INTEGER (0..255)

ProcedureID      ::= SEQUENCE {
    procedureCode  ProcedureCode,
    ddMode        ENUMERATED { tdd, fdd, common, ... }
}

```

```

ProtocolIE-ID      ::= INTEGER (0..maxProtocolIEs)

TransactionID      ::= CHOICE {
    shortTransActionId    INTEGER (0..127),
    longTransActionId     INTEGER (0..32767)
}

TriggeringMessage  ::= ENUMERATED { initiating-message, successful-outcome, unsuccessfull-outcome, outcome }

END

```

9.3.6 Constant Definitions

```

-- *****
--
-- Constant definitions
--
-- *****

NBAP-Constants {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-Constants (4)}

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

IMPORTS
    ProcedureCode,
    ProtocolIE-ID
FROM NBAP-CommonDataTypes;

-- *****
--
-- Elementary Procedures
--
-- *****

id-audit                               ProcedureCode ::= 0
id-auditRequired                       ProcedureCode ::= 1
id-blockResource                       ProcedureCode ::= 2
id-cellDeletion                        ProcedureCode ::= 3
id-cellReconfiguration                 ProcedureCode ::= 4
id-cellSetup                           ProcedureCode ::= 5
id-cellSynchronisationInitiation       ProcedureCode ::= 45
id-cellSynchronisationReconfiguration  ProcedureCode ::= 46
id-cellSynchronisationReporting        ProcedureCode ::= 47
id-cellSynchronisationTermination     ProcedureCode ::= 48
id-cellSynchronisationFailure          ProcedureCode ::= 49
id-commonMeasurementFailure            ProcedureCode ::= 6
id-commonMeasurementInitiation         ProcedureCode ::= 7

```

id-commonMeasurementReport	ProcedureCode ::= 8
id-commonMeasurementTermination	ProcedureCode ::= 9
id-commonTransportChannelDelete	ProcedureCode ::= 10
id-commonTransportChannelReconfigure	ProcedureCode ::= 11
id-commonTransportChannelSetup	ProcedureCode ::= 12
id-compressedModeCommand	ProcedureCode ::= 14
id-dedicatedMeasurementFailure	ProcedureCode ::= 16
id-dedicatedMeasurementInitiation	ProcedureCode ::= 17
id-dedicatedMeasurementReport	ProcedureCode ::= 18
id-dedicatedMeasurementTermination	ProcedureCode ::= 19
id-downlinkPowerControl	ProcedureCode ::= 20
id-downlinkPowerTimeslotControl	ProcedureCode ::= 38
id-errorIndicationForCommon	ProcedureCode ::= 35
id-errorIndicationForDedicated	ProcedureCode ::= 21
id-informationExchangeFailure	ProcedureCode ::= 40
id-informationExchangeInitiation	ProcedureCode ::= 41
id-informationExchangeTermination	ProcedureCode ::= 42
id-informationReporting	ProcedureCode ::= 43
id-BearerRearrangement	ProcedureCode ::= 50
id-physicalSharedChannelReconfiguration	ProcedureCode ::= 37
id-privateMessageForCommon	ProcedureCode ::= 36
id-privateMessageForDedicated	ProcedureCode ::= 22
id-radioLinkAddition	ProcedureCode ::= 23
id-radioLinkDeletion	ProcedureCode ::= 24
id-radioLinkFailure	ProcedureCode ::= 25
id-radioLinkPreemption	ProcedureCode ::= 39
id-radioLinkRestoration	ProcedureCode ::= 26
id-radioLinkSetup	ProcedureCode ::= 27
id-reset	ProcedureCode ::= 13
id-resourceStatusIndication	ProcedureCode ::= 28
id-cellSynchronisationAdjustment	ProcedureCode ::= 44
id-synchronisedRadioLinkReconfigurationCancellation	ProcedureCode ::= 29
id-synchronisedRadioLinkReconfigurationCommit	ProcedureCode ::= 30
id-synchronisedRadioLinkReconfigurationPreparation	ProcedureCode ::= 31
id-systemInformationUpdate	ProcedureCode ::= 32
id-unblockResource	ProcedureCode ::= 33
id-unSynchronisedRadioLinkReconfiguration	ProcedureCode ::= 34
id-radioLinkActivation	ProcedureCode ::= 51

-- *****

--

-- Lists

--

-- *****

maxNrOfCodes	INTEGER ::= 10
maxNrOfDLTSS	INTEGER ::= 15
maxNrOfDLTSLCRs	INTEGER ::= 6
maxNrOfErrors	INTEGER ::= 256
maxNrOfTFs	INTEGER ::= 32
maxNrOfTFCs	INTEGER ::= 1024
maxNrOfRLs	INTEGER ::= 16
maxNrOfRLs-1	INTEGER ::= 15 -- maxNrOfRLs - 1

```

maxNrOfRLs-2          INTEGER ::= 14 -- maxNrOfRLs - 2
maxNrOfRLSets         INTEGER ::= maxNrOfRLs
maxNrOfDPCHs          INTEGER ::= 240
maxNrOfDPCHLCRs       INTEGER ::= 240
maxNrOfSCCPCHs        INTEGER ::= 8
maxNrOfCPCHs          INTEGER ::= 16
maxNrOfPCPCHs         INTEGER ::= 64
maxNrOfDCHs           INTEGER ::= 128
maxNrOfDSCHs          INTEGER ::= 32
maxNrOfFACHs          INTEGER ::= 8
maxNrOfCCTrCHs       INTEGER ::= 16
maxNrOfPDSCHs         INTEGER ::= 256
maxNrOfPUSCHs         INTEGER ::= 256
maxNrOfPDSCHSets      INTEGER ::= 256
maxNrOfPRACHLCRs      INTEGER ::= 8
maxNrOfPUSCHSets      INTEGER ::= 256
maxNrOfSCCPCHLCRs     INTEGER ::= 8
maxNrOfULTSs          INTEGER ::= 15
maxNrOfULTSLCRs       INTEGER ::= 6
maxNrOfUSCHs          INTEGER ::= 32
maxAPSigNum           INTEGER ::= 16
maxNrOfSlotFormatsPRACH INTEGER ::= 8
maxCellinNodeB        INTEGER ::= 256
maxCCPinNodeB         INTEGER ::= 256
maxCPCHCell           INTEGER ::= maxNrOfCPCHs
maxCTFC               INTEGER ::= 16777215
maxLocalCellinNodeB   INTEGER ::= maxCellinNodeB
maxNoofLen            INTEGER ::= 7
maxFPACHCell          INTEGER ::= 8
maxRACHCell           INTEGER ::= maxPRACHCell
maxPRACHCell          INTEGER ::= 16
maxPCPCHCell          INTEGER ::= 64
maxSCCPCHCell         INTEGER ::= 32
maxSCPICHCell         INTEGER ::= 32
maxTTI-count          INTEGER ::= 4
maxIBSEG              INTEGER ::= 16
maxIB                 INTEGER ::= 64
maxFACHCell           INTEGER ::= 256 -- maxNrOfFACHs * maxSCCPCHCell
maxRateMatching       INTEGER ::= 256
maxCodeNrComp-1       INTEGER ::= 256
maxNrOfCellSyncBursts INTEGER ::= 10
maxNrOfCodeGroups     INTEGER ::= 256
maxNrOfReceptsPerSyncFrame INTEGER ::= 16
maxNrOfMeasNCell      INTEGER ::= 96
maxNrOfMeasNCell-1    INTEGER ::= 95 -- maxNrOfMeasNCell - 1
maxNrOfTFCIGroups     INTEGER ::= 256
maxNrOfTFCI1Combs     INTEGER ::= 512
maxNrOfTFCI2Combs     INTEGER ::= 1024
maxNrOfTFCI2Combs-1   INTEGER ::= 1023
maxNrOfSF              INTEGER ::= 8
maxTGPS               INTEGER ::= 6
maxCommunicationContext INTEGER ::= 1048575
maxNrOfLevels          INTEGER ::= 256

```

```

maxNoSat                INTEGER ::= 16
maxNoGPSItems           INTEGER ::= 8
maxNrOfHSSCCHs         INTEGER ::= 32
maxNrOfSyncFramesLCR   INTEGER ::= 512
maxNrOfReceptionsperSyncFrameLCR  INTEGER ::= 8
maxNrOfSyncDLCodesLCR  INTEGER ::= 32
maxNrOfHSSCCHCodes     INTEGER ::= 128
maxNrOfMACdFlows       INTEGER ::= 8
maxNrOfMACdFlows-1     INTEGER ::= 7    -- maxNrOfMACdFlows - 1
maxNrOfMACdPDUIndexes  INTEGER ::= 8
maxNrOfMACdPDUIndexes-1  INTEGER ::= 7    -- maxNoOfMACdPDUIndexes - 1
maxNrOfPriorityQueues   INTEGER ::= 8
maxNrOfPriorityQueues-1  INTEGER ::= 7    -- maxNoOfPriorityQueues - 1
maxNrOfHARQProcesses   INTEGER ::= 8

-- *****
--
-- IEs
--
-- *****

id-AICH-Information                ProtocolIE-ID ::= 0
id-AICH-InformationItem-ResourceStatusInd  ProtocolIE-ID ::= 1
id-BCH-Information                ProtocolIE-ID ::= 7
id-BCH-InformationItem-ResourceStatusInd  ProtocolIE-ID ::= 8
id-BCCH-ModificationTime          ProtocolIE-ID ::= 9
id-BlockingPriorityIndicator       ProtocolIE-ID ::= 10
id-Cause                          ProtocolIE-ID ::= 13
id-CCP-InformationItem-AuditRsp    ProtocolIE-ID ::= 14
id-CCP-InformationList-AuditRsp   ProtocolIE-ID ::= 15
id-CCP-InformationItem-ResourceStatusInd  ProtocolIE-ID ::= 16
id-Cell-InformationItem-AuditRsp   ProtocolIE-ID ::= 17
id-Cell-InformationItem-ResourceStatusInd  ProtocolIE-ID ::= 18
id-Cell-InformationList-AuditRsp   ProtocolIE-ID ::= 19
id-CellParameterID               ProtocolIE-ID ::= 23
id-CFN                           ProtocolIE-ID ::= 24
id-C-ID                          ProtocolIE-ID ::= 25
id-CommonMeasurementAccuracy      ProtocolIE-ID ::= 39
id-CommonMeasurementObjectType-CM-Rprt  ProtocolIE-ID ::= 31
id-CommonMeasurementObjectType-CM-Rqst  ProtocolIE-ID ::= 32
id-CommonMeasurementObjectType-CM-Rsp   ProtocolIE-ID ::= 33
id-CommonMeasurementType          ProtocolIE-ID ::= 34
id-CommonPhysicalChannelID        ProtocolIE-ID ::= 35
id-CommonPhysicalChannelType-CTCH-SetupRqstFDD  ProtocolIE-ID ::= 36
id-CommonPhysicalChannelType-CTCH-SetupRqstTDD  ProtocolIE-ID ::= 37
id-CommunicationControlPortID     ProtocolIE-ID ::= 40
id-ConfigurationGenerationID      ProtocolIE-ID ::= 43
id-CRNC-CommunicationContextID    ProtocolIE-ID ::= 44
id-CriticalityDiagnostics         ProtocolIE-ID ::= 45
id-DCHs-to-Add-FDD               ProtocolIE-ID ::= 48
id-DCH-AddList-RL-ReconfPrepTDD   ProtocolIE-ID ::= 49
id-DCHs-to-Add-TDD               ProtocolIE-ID ::= 50
id-DCH-DeleteList-RL-ReconfPrepFDD  ProtocolIE-ID ::= 52

```

id-DCH-DeleteList-RL-ReconfPrepTDD
 id-DCH-DeleteList-RL-ReconfRqstFDD
 id-DCH-DeleteList-RL-ReconfRqstTDD
 id-DCH-FDD-Information
 id-DCH-TDD-Information
 id-DCH-InformationResponse
 id-FDD-DCHs-to-Modify
 id-TDD-DCHs-to-Modify
 id-DCH-ModifyList-RL-ReconfRqstTDD
 id-DCH-RearrangeList-Bearer-RearrangeInd
 id-DedicatedMeasurementObjectType-DM-Rprt
 id-DedicatedMeasurementObjectType-DM-Rqst
 id-DedicatedMeasurementObjectType-DM-Rsp
 id-DedicatedMeasurementType
 id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD
 id-DL-CCTrCH-InformationList-RL-AdditionRqstTDD
 id-DL-CCTrCH-InformationList-RL-SetupRqstTDD
 id-DL-DPCH-InformationItem-RL-AdditionRqstTDD
 id-DL-DPCH-InformationList-RL-SetupRqstTDD
 id-DL-DPCH-Information-RL-ReconfPrepFDD
 id-DL-DPCH-Information-RL-ReconfRqstFDD
 id-DL-DPCH-Information-RL-SetupRqstFDD
 id-DL-DPCH-TimingAdjustment
 id-DL-ReferencePowerInformationItem-DL-PC-Rqst
 id-DLReferencePower
 id-DLReferencePowerList-DL-PC-Rqst
 id-DSCH-AddItem-RL-ReconfPrepFDD
 id-DSCHs-to-Add-FDD
 id-DSCH-DeleteItem-RL-ReconfPrepFDD
 id-DSCH-DeleteList-RL-ReconfPrepFDD
 id-DSCHs-to-Add-TDD
 id-DSCH-Information-DeleteList-RL-ReconfPrepTDD
 id-DSCH-Information-ModifyList-RL-ReconfPrepTDD
 id-DSCH-InformationResponse
 id-DSCH-FDD-Information
 id-DSCH-TDD-Information
 id-DSCH-ModifyItem-RL-ReconfPrepFDD
 id-DSCH-ModifyList-RL-ReconfPrepFDD
 id-DSCH-RearrangeList-Bearer-RearrangeInd
 id-End-Of-Audit-Sequence-Indicator
 id-FACH-Information
 id-FACH-InformationItem-ResourceStatusInd
 id-FACH-ParametersList-CTCH-ReconfRqstTDD
 id-FACH-ParametersListIE-CTCH-SetupRqstFDD
 id-FACH-ParametersListIE-CTCH-SetupRqstTDD
 id-IndicationType-ResourceStatusInd
 id-Local-Cell-ID
 id-Local-Cell-Group-InformationItem-AuditRsp
 id-Local-Cell-Group-InformationItem-ResourceStatusInd
 id-Local-Cell-Group-InformationItem2-ResourceStatusInd
 id-Local-Cell-Group-InformationList-AuditRsp
 id-Local-Cell-InformationItem-AuditRsp
 id-Local-Cell-InformationItem-ResourceStatusInd

ProtocolIE-ID ::= 53
 ProtocolIE-ID ::= 54
 ProtocolIE-ID ::= 55
 ProtocolIE-ID ::= 56
 ProtocolIE-ID ::= 57
 ProtocolIE-ID ::= 59
 ProtocolIE-ID ::= 62
 ProtocolIE-ID ::= 63
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 ProtocolIE-ID ::= 120
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 ProtocolIE-ID ::= 123
 ProtocolIE-ID ::= 124
 ProtocolIE-ID ::= 2
 ProtocolIE-ID ::= 3
 ProtocolIE-ID ::= 4
 ProtocolIE-ID ::= 5
 ProtocolIE-ID ::= 125
 ProtocolIE-ID ::= 126

id-Local-Cell-InformationItem2-ResourceStatusInd
 id-Local-Cell-InformationList-AuditRsp
 id-AdjustmentPeriod
 id-MaxAdjustmentStep
 id-MaximumTransmissionPower
 id-MeasurementFilterCoefficient
 id-MeasurementID
 id-MessageStructure
 id-MIB-SB-SIB-InformationList-SystemInfoUpdateRqst
 id-NodeB-CommunicationContextID
 id-NeighbouringCellMeasurementInformation
 id-P-CCPCH-Information
 id-P-CCPCH-InformationItem-ResourceStatusInd
 id-P-CPICH-Information
 id-P-CPICH-InformationItem-ResourceStatusInd
 id-P-SCH-Information
 id-PCCPCH-Information-Cell-ReconfRqstTDD
 id-PCCPCH-Information-Cell-SetupRqstTDD
 id-PCH-Parameters-CTCH-ReconfRqstTDD
 id-PCH-ParametersItem-CTCH-SetupRqstFDD
 id-PCH-ParametersItem-CTCH-SetupRqstTDD
 id-PCH-Information
 id-PDSCH-Information-AddListIE-PSCH-ReconfRqst
 id-PDSCH-Information-ModifyListIE-PSCH-ReconfRqst
 id-PDSCHSets-AddList-PSCH-ReconfRqst
 id-PDSCHSets-DeleteList-PSCH-ReconfRqst
 id-PDSCHSets-ModifyList-PSCH-ReconfRqst
 id-PICH-Information
 id-PICH-Parameters-CTCH-ReconfRqstTDD
 id-PowerAdjustmentType
 id-PRACH-Information
 id-PrimaryCCPCH-Information-Cell-ReconfRqstFDD
 id-PrimaryCCPCH-Information-Cell-SetupRqstFDD
 id-PrimaryCPICH-Information-Cell-ReconfRqstFDD
 id-PrimaryCPICH-Information-Cell-SetupRqstFDD
 id-PrimarySCH-Information-Cell-ReconfRqstFDD
 id-PrimarySCH-Information-Cell-SetupRqstFDD
 id-PrimaryScramblingCode
 id-SCH-Information-Cell-ReconfRqstTDD
 id-SCH-Information-Cell-SetupRqstTDD
 id-PUSCH-Information-AddListIE-PSCH-ReconfRqst
 id-PUSCH-Information-ModifyListIE-PSCH-ReconfRqst
 id-PUSCHSets-AddList-PSCH-ReconfRqst
 id-PUSCHSets-DeleteList-PSCH-ReconfRqst
 id-PUSCHSets-ModifyList-PSCH-ReconfRqst
 id-RACH-Information
 id-RACH-ParametersItem-CTCH-SetupRqstFDD
 id-RACH-ParameterItem-CTCH-SetupRqstTDD
 id-ReportCharacteristics
 id-Reporting-Object-RL-FailureInd
 id-Reporting-Object-RL-RestoreInd
 id-RL-InformationItem-DM-Rprt
 id-RL-InformationItem-DM-Rqst

ProtocolIE-ID ::= 127
 ProtocolIE-ID ::= 128
 ProtocolIE-ID ::= 129
 ProtocolIE-ID ::= 130
 ProtocolIE-ID ::= 131
 ProtocolIE-ID ::= 132
 ProtocolIE-ID ::= 133
 ProtocolIE-ID ::= 115
 ProtocolIE-ID ::= 134
 ProtocolIE-ID ::= 143
 ProtocolIE-ID ::= 455
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 ProtocolIE-ID ::= 200
 ProtocolIE-ID ::= 202
 ProtocolIE-ID ::= 203

id-RL-InformationItem-DM-Rsp
 id-RL-InformationItem-RL-AdditionRqstFDD
 id-RL-informationItem-RL-DeletionRqst
 id-RL-InformationItem-RL-FailureInd
 id-RL-InformationItem-RL-PreemptRequiredInd
 id-RL-InformationItem-RL-ReconfPrepFDD
 id-RL-InformationItem-RL-ReconfRqstFDD
 id-RL-InformationItem-RL-RestoreInd
 id-RL-InformationItem-RL-SetupRqstFDD
 id-RL-InformationList-RL-AdditionRqstFDD
 id-RL-informationList-RL-DeletionRqst
 id-RL-InformationList-RL-PreemptRequiredInd
 id-RL-InformationList-RL-ReconfPrepFDD
 id-RL-InformationList-RL-ReconfRqstFDD
 id-RL-InformationList-RL-SetupRqstFDD
 id-RL-InformationResponseItem-RL-AdditionRspFDD
 id-RL-InformationResponseItem-RL-ReconfReady
 id-RL-InformationResponseItem-RL-ReconfRsp
 id-RL-InformationResponseItem-RL-SetupRspFDD
 id-RL-InformationResponseList-RL-AdditionRspFDD
 id-RL-InformationResponseList-RL-ReconfReady
 id-RL-InformationResponseList-RL-ReconfRsp
 id-RL-InformationResponseList-RL-SetupRspFDD
 id-RL-InformationResponse-RL-AdditionRspTDD
 id-RL-InformationResponse-RL-SetupRspTDD
 id-RL-Information-RL-AdditionRqstTDD
 id-RL-Information-RL-ReconfRqstTDD
 id-RL-Information-RL-ReconfPrepTDD
 id-RL-Information-RL-SetupRqstTDD
 id-RL-ReconfigurationFailureItem-RL-ReconfFailure
 id-RL-Set-InformationItem-DM-Rprt
 id-RL-Set-InformationItem-DM-Rsp
 id-RL-Set-InformationItem-RL-FailureInd
 id-RL-Set-InformationItem-RL-RestoreInd
 id-S-CCPCH-Information
 id-S-CPICH-Information
 id-SCH-Information
 id-S-SCH-Information
 id-Secondary-CCPCHListIE-CTCH-ReconfRqstTDD
 id-Secondary-CCPCH-parameterListIE-CTCH-SetupRqstTDD
 id-Secondary-CCPCH-Parameters-CTCH-ReconfRqstTDD
 id-SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD
 id-SecondaryCPICH-InformationItem-Cell-SetupRqstFDD
 id-SecondaryCPICH-InformationList-Cell-ReconfRqstFDD
 id-SecondaryCPICH-InformationList-Cell-SetupRqstFDD
 id-SecondarySCH-Information-Cell-ReconfRqstFDD
 id-SecondarySCH-Information-Cell-SetupRqstFDD
 id-SegmentInformationListIE-SystemInfoUpdate
 id-SFN
 id-SignallingBearerRequestIndicator
 id-ShutdownTimer
 id-Start-Of-Audit-Sequence-Indicator
 id-Successful-RL-InformationRespItem-RL-AdditionFailureFDD

ProtocolIE-ID ::= 204
 ProtocolIE-ID ::= 205
 ProtocolIE-ID ::= 206
 ProtocolIE-ID ::= 207
 ProtocolIE-ID ::= 286
 ProtocolIE-ID ::= 208
 ProtocolIE-ID ::= 209
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 ProtocolIE-ID ::= 138
 ProtocolIE-ID ::= 269
 ProtocolIE-ID ::= 114
 ProtocolIE-ID ::= 270

id-Successful-RL-InformationRespItem-RL-SetupFailureFDD
 id-SyncCase
 id-SyncCaseIndicatorItem-Cell-SetupRqstTDD-PSCH
 id-T-Cell
 id-TargetCommunicationControlPortID
 id-TimeSlotConfigurationList-Cell-ReconfRqstTDD
 id-TimeSlotConfigurationList-Cell-SetupRqstTDD
 id-TransmissionDiversityApplied
 id-TypeOfError
 id-UARFCNforNt
 id-UARFCNforNd
 id-UARFCNforNu
 id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD
 id-UL-CCTrCH-InformationList-RL-AdditionRqstTDD
 id-UL-CCTrCH-InformationList-RL-SetupRqstTDD
 id-UL-DPCH-InformationItem-RL-AdditionRqstTDD
 id-UL-DPCH-InformationList-RL-SetupRqstTDD
 id-UL-DPCH-Information-RL-ReconfPrepFDD
 id-UL-DPCH-Information-RL-ReconfRqstFDD
 id-UL-DPCH-Information-RL-SetupRqstFDD
 id-Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD
 id-Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD
 id-Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD
 id-Unsuccessful-RL-InformationResp-RL-SetupFailureTDD
 id-USCH-Information-Add
 id-USCH-Information-DeleteList-RL-ReconfPrepTDD
 id-USCH-Information-ModifyList-RL-ReconfPrepTDD
 id-USCH-InformationResponse
 id-USCH-Information
 id-USCH-RearrangeList-Bearer-RearrangeInd
 id-Active-Pattern-Sequence-Information
 id-AICH-ParametersListIE-CTCH-ReconfRqstFDD
 id-AdjustmentRatio
 id-AP-AICH-Information
 id-AP-AICH-ParametersListIE-CTCH-ReconfRqstFDD
 id-FACH-ParametersListIE-CTCH-ReconfRqstFDD
 id-CauseLevel-PSCH-ReconfFailureFDD
 id-CauseLevel-RL-AdditionFailureFDD
 id-CauseLevel-RL-AdditionFailureTDD
 id-CauseLevel-RL-ReconfFailure
 id-CauseLevel-RL-SetupFailureFDD
 id-CauseLevel-RL-SetupFailureTDD
 id-CDCA-ICH-Information
 id-CDCA-ICH-ParametersListIE-CTCH-ReconfRqstFDD
 id-Closed-Loop-Timing-Adjustment-Mode
 id-CommonPhysicalChannelType-CTCH-ReconfRqstFDD
 id-Compressed-Mode-Deactivation-Flag
 id-CPCH-Information
 id-CPCH-Parameters-CTCH-SetupRsp
 id-CPCH-ParametersListIE-CTCH-ReconfRqstFDD
 id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD
 id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD
 id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD

ProtocolIE-ID ::= 271
 ProtocolIE-ID ::= 274
 ProtocolIE-ID ::= 275
 ProtocolIE-ID ::= 276
 ProtocolIE-ID ::= 139
 ProtocolIE-ID ::= 277
 ProtocolIE-ID ::= 278
 ProtocolIE-ID ::= 279
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 ProtocolIE-ID ::= 336
 ProtocolIE-ID ::= 342
 ProtocolIE-ID ::= 343
 ProtocolIE-ID ::= 346
 ProtocolIE-ID ::= 347
 ProtocolIE-ID ::= 348

id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD
 id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD
 id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD
 id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD
 id-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD
 id-DL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD
 id-DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD
 id-DL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD
 id-DL-TPC-Pattern01Count
 id-DPC-Mode
 id-DPCHConstant
 id-DSCH-FDD-Common-Information
 id-EnhancedDSCHPC
 id-EnhancedDSCHPCIndicator
 id-FACH-ParametersList-CTCH-SetupRsp
 id-Limited-power-increase-information-Cell-SetupRqstFDD
 id-PCH-Parameters-CTCH-SetupRsp
 id-PCH-ParametersItem-CTCH-ReconfRqstFDD
 id-PCPCH-Information
 id-PICH-ParametersItem-CTCH-ReconfRqstFDD
 id-PRACHConstant
 id-PRACH-ParametersListIE-CTCH-ReconfRqstFDD
 id-PUSCHConstant
 id-RACH-Parameters-CTCH-SetupRsp
 id-SSDT-CellIDforEDSCHPC
 id-Synchronisation-Configuration-Cell-ReconfRqst
 id-Synchronisation-Configuration-Cell-SetupRqst
 id-Transmission-Gap-Pattern-Sequence-Information
 id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD
 id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD
 id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD
 id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD
 id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD
 id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD
 id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD
 id-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD
 id-UL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD
 id-UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD
 id-UL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD
 id-Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD
 id-Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD
 id-CommunicationContextInfoItem-Reset
 id-CommunicationControlPortInfoItem-Reset
 id-ResetIndicator
 id-TFCl2-Bearer-Information-RL-SetupRqstFDD
 id-TFCl2-BearerSpecificInformation-RL-ReconfPrepFDD
 id-TFCl2-BearerInformationResponse
 id-TFCl2BearerRequestIndicator
 id-TimingAdvanceApplied
 id-CFNReportingIndicator
 id-SFNReportingIndicator
 id-InnerLoopDLPCStatus
 id-TimeslotISCPInfo

ProtocolIE-ID ::= 349
 ProtocolIE-ID ::= 350
 ProtocolIE-ID ::= 351
 ProtocolIE-ID ::= 352
 ProtocolIE-ID ::= 353
 ProtocolIE-ID ::= 355
 ProtocolIE-ID ::= 356
 ProtocolIE-ID ::= 357
 ProtocolIE-ID ::= 358
 ProtocolIE-ID ::= 450
 ProtocolIE-ID ::= 359
 ProtocolIE-ID ::= 94
 ProtocolIE-ID ::= 110
 ProtocolIE-ID ::= 111
 ProtocolIE-ID ::= 362
 ProtocolIE-ID ::= 369
 ProtocolIE-ID ::= 374
 ProtocolIE-ID ::= 375
 ProtocolIE-ID ::= 376
 ProtocolIE-ID ::= 380
 ProtocolIE-ID ::= 381
 ProtocolIE-ID ::= 383
 ProtocolIE-ID ::= 384
 ProtocolIE-ID ::= 385
 ProtocolIE-ID ::= 443
 ProtocolIE-ID ::= 393
 ProtocolIE-ID ::= 394
 ProtocolIE-ID ::= 395
 ProtocolIE-ID ::= 396
 ProtocolIE-ID ::= 397
 ProtocolIE-ID ::= 398
 ProtocolIE-ID ::= 399
 ProtocolIE-ID ::= 400
 ProtocolIE-ID ::= 401
 ProtocolIE-ID ::= 402
 ProtocolIE-ID ::= 403
 ProtocolIE-ID ::= 405
 ProtocolIE-ID ::= 406
 ProtocolIE-ID ::= 407
 ProtocolIE-ID ::= 408
 ProtocolIE-ID ::= 409
 ProtocolIE-ID ::= 412
 ProtocolIE-ID ::= 414
 ProtocolIE-ID ::= 416
 ProtocolIE-ID ::= 417
 ProtocolIE-ID ::= 418
 ProtocolIE-ID ::= 419
 ProtocolIE-ID ::= 142
 ProtocolIE-ID ::= 287
 ProtocolIE-ID ::= 6
 ProtocolIE-ID ::= 11
 ProtocolIE-ID ::= 12
 ProtocolIE-ID ::= 283

id-PICH-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 167
id-PRACH-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 20
id-CCTrCH-InformationItem-RL-FailureInd	ProtocolIE-ID ::= 46
id-CCTrCH-InformationItem-RL-RestoreInd	ProtocolIE-ID ::= 47
id-CauseLevel-SyncAdjustmntFailureTDD	ProtocolIE-ID ::= 420
id-CellAdjustmentInfo-SyncAdjustmntRqstTDD	ProtocolIE-ID ::= 421
id-CellAdjustmentInfoItem-SyncAdjustmentRqstTDD	ProtocolIE-ID ::= 494
id-CellSyncBurstInfoList-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 482
id-CellSyncBurstTransInit-CellSyncInitiationRqstTDD	ProtocolIE-ID ::= 422
id-CellSyncBurstMeasureInit-CellSyncInitiationRqstTDD	ProtocolIE-ID ::= 423
id-CellSyncBurstTransReconfiguration-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 424
id-CellSyncBurstMeasReconfiguration-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 425
id-CellSyncBurstTransInfoList-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 426
id-CellSyncBurstMeasInfoList-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 427
id-CellSyncBurstTransReconfInfo-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 428
id-CellSyncInfo-CellSyncReprtTDD	ProtocolIE-ID ::= 429
id-CSBTransmissionID	ProtocolIE-ID ::= 430
id-CSBMeasurementID	ProtocolIE-ID ::= 431
id-IntStdPhCellSyncInfoItem-CellSyncReprtTDD	ProtocolIE-ID ::= 432
id-NCyclesPerSFNperiod	ProtocolIE-ID ::= 433
id-NRepetitionsPerCyclePeriod	ProtocolIE-ID ::= 434
id-SyncFrameNumber	ProtocolIE-ID ::= 437
id-SynchronisationReportType	ProtocolIE-ID ::= 438
id-SynchronisationReportCharacteristics	ProtocolIE-ID ::= 439
id-Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD	ProtocolIE-ID ::= 440
id-LateEntranceCellSyncInfoItem-CellSyncReprtTDD	ProtocolIE-ID ::= 119
id-ReferenceClockAvailability	ProtocolIE-ID ::= 435
id-ReferenceSFNoffset	ProtocolIE-ID ::= 436
id-InformationExchangeID	ProtocolIE-ID ::= 444
id-InformationExchangeObjectType-InfEx-Rqst	ProtocolIE-ID ::= 445
id-InformationType	ProtocolIE-ID ::= 446
id-InformationReportCharacteristics	ProtocolIE-ID ::= 447
id-InformationExchangeObjectType-InfEx-Rsp	ProtocolIE-ID ::= 448
id-InformationExchangeObjectType-InfEx-Rprt	ProtocolIE-ID ::= 449
id-IPDLParameter-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 451
id-IPDLParameter-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 452
id-IPDLParameter-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 453
id-IPDLParameter-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 454
id-DL-DPCH-LCR-Information-RL-SetupRqstTDD	ProtocolIE-ID ::= 74
id-DL-DPCH-LCR-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 75
id-DwPCH-LCR-Information	ProtocolIE-ID ::= 78
id-DwPCH-LCR-Information-AuditRsp	ProtocolIE-ID ::= 80
id-DwPCH-LCR-InformationList-AuditRsp	ProtocolIE-ID ::= 90
id-DwPCH-LCR-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 97
id-DwPCH-LCR-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 99
id-DwPCH-LCR-Information-ResourceStatusInd	ProtocolIE-ID ::= 101
id-maxFACH-Power-LCR-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 154
id-maxFACH-Power-LCR-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 174
id-FPACH-LCR-Information	ProtocolIE-ID ::= 290
id-FPACH-LCR-Information-AuditRsp	ProtocolIE-ID ::= 292
id-FPACH-LCR-InformationList-AuditRsp	ProtocolIE-ID ::= 22
id-FPACH-LCR-InformationList-ResourceStatusInd	ProtocolIE-ID ::= 311
id-FPACH-LCR-Parameters-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 312

id-FPACH-LCR-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 313
id-FPACH-LCR-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 314
id-PCCPCH-LCR-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 456
id-PCH-Power-LCR-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 457
id-PCH-Power-LCR-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 458
id-PICH-LCR-Parameters-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 459
id-PICH-LCR-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 460
id-PRACH-LCR-ParametersList-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 461
id-PRACH-LCR-ParametersListIE-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 462
id-RL-InformationResponse-LCR-RL-SetupRspTDD	ProtocolIE-ID ::= 463
id-Secondary-CCPCH-LCR-parameterListIE-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 464
id-Secondary-CCPCH-LCR-parameterList-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 465
id-TimeSlot	ProtocolIE-ID ::= 495
id-TimeSlotConfigurationList-LCR-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 466
id-TimeSlotConfigurationList-LCR-Cell-SetupRqstTDD	ProtocolIE-ID ::= 467
id-TimeslotISCP-LCR-InfoList-RL-SetupRqstTDD	ProtocolIE-ID ::= 468
id-TimeSlotLCR-CM-Rqst	ProtocolIE-ID ::= 469
id-UL-DPCH-LCR-Information-RL-SetupRqstTDD	ProtocolIE-ID ::= 470
id-UL-DPCH-LCR-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 471
id-DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD	ProtocolIE-ID ::= 472
id-UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD	ProtocolIE-ID ::= 473
id-TimeslotISCP-InformationList-LCR-RL-AdditionRqstTDD	ProtocolIE-ID ::= 474
id-DL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 475
id-DL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 476
id-DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 477
id-DL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 478
id-DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 479
id-TimeslotISCPInfoList-LCR-DL-PC-RqstTDD	ProtocolIE-ID ::= 480
id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 481
id-UL-DPCH-LCR-InformationModify-AddList	ProtocolIE-ID ::= 483
id-UL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 484
id-UL-TimeslotLCR-Information-RL-ReconfPrepTDD	ProtocolIE-ID ::= 485
id-UL-SIRTarget	ProtocolIE-ID ::= 510
id-PDSCH-AddInformation-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 486
id-PDSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 487
id-PDSCH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 26
id-PDSCH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 27
id-PDSCH-ModifyInformation-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 488
id-PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 489
id-PUSCH-AddInformation-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 490
id-PUSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 491
id-PUSCH-ModifyInformation-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 492
id-PUSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 493
id-timeslotInfo-CellSyncInitiationRqstTDD	ProtocolIE-ID ::= 496
id-SyncReportType-CellSyncReprtTDD	ProtocolIE-ID ::= 497
id-Power-Local-Cell-Group-InformationItem-AuditRsp	ProtocolIE-ID ::= 498
id-Power-Local-Cell-Group-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 499
id-Power-Local-Cell-Group-InformationItem2-ResourceStatusInd	ProtocolIE-ID ::= 500
id-Power-Local-Cell-Group-InformationList-AuditRsp	ProtocolIE-ID ::= 501
id-Power-Local-Cell-Group-InformationList-ResourceStatusInd	ProtocolIE-ID ::= 502
id-Power-Local-Cell-Group-InformationList2-ResourceStatusInd	ProtocolIE-ID ::= 503
id-Power-Local-Cell-Group-ID	ProtocolIE-ID ::= 504
id-PUSCH-Info-DM-Rqst	ProtocolIE-ID ::= 505

id-PUSCH-Info-DM-Rsp	ProtocolIE-ID ::= 506
id-PUSCH-Info-DM-Rprt	ProtocolIE-ID ::= 507
id-InitDL-Power	ProtocolIE-ID ::= 509
id-cellSyncBurstRepetitionPeriod	ProtocolIE-ID ::= 511
id-ReportCharacteristicsType-OnModification	ProtocolIE-ID ::= 512
id-SFNFSFNMeasurementValueInformation	ProtocolIE-ID ::= 513
id-SFNFSFNMeasurementThresholdInformation	ProtocolIE-ID ::= 514
id-TUTRANGPSMeasurementValueInformation	ProtocolIE-ID ::= 515
id-TUTRANGPSMeasurementThresholdInformation	ProtocolIE-ID ::= 516
id-Rx-Timing-Deviation-Value-LCR	ProtocolIE-ID ::= 520
id-RL-InformationResponse-LCR-RL-AdditionRspTDD	ProtocolIE-ID ::= 51
id-DL-PowerBalancing-Information	ProtocolIE-ID ::= 28
id-DL-PowerBalancing-ActivationIndicator	ProtocolIE-ID ::= 29
id-DL-PowerBalancing-UpdatedIndicator	ProtocolIE-ID ::= 30
id-CCTrCH-Initial-DL-Power-RL-SetupRqstTDD	ProtocolIE-ID ::= 517
id-CCTrCH-Initial-DL-Power-RL-AdditionRqstTDD	ProtocolIE-ID ::= 518
id-CCTrCH-Initial-DL-Power-RL-ReconfPrepTDD	ProtocolIE-ID ::= 519
id-IPDLParameter-Information-LCR-Cell-SetupRqstTDD	ProtocolIE-ID ::= 41
id-IPDLParameter-Information-LCR-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 42
id-HS-PDSCH-HS-SCCH-MaxPower-PSCH-ReconfRqst	ProtocolIE-ID ::= 522
id-HS-PDSCH-HS-SCCH-ScramblingCode-PSCH-ReconfRqst	ProtocolIE-ID ::= 523
id-HS-PDSCH-FDD-Code-Information-PSCH-ReconfRqst	ProtocolIE-ID ::= 524
id-HS-SCCH-FDD-Code-Information-PSCH-ReconfRqst	ProtocolIE-ID ::= 525
id-HS-PDSCH-TDD-Information-PSCH-ReconfRqst	ProtocolIE-ID ::= 526
id-Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRqst	ProtocolIE-ID ::= 527
id-Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRqst	ProtocolIE-ID ::= 528
id-Delete-From-HS-SCCH-Resource-Pool-PSCH-ReconfRqst	ProtocolIE-ID ::= 529
id-bindingID	ProtocolIE-ID ::= 102xxx
id-RL-Specific-DCH-Info	ProtocolIE-ID ::= 103xxx
id-transportlayeraddress	ProtocolIE-ID ::= 104xxx
id-DelayedActivation	ProtocolIE-ID ::= 231
id-DelayedActivationList-RL-ActivationCmdFDD	ProtocolIE-ID ::= 232
id-DelayedActivationInformation-RL-ActivationCmdFDD	ProtocolIE-ID ::= 233
id-DelayedActivationList-RL-ActivationCmdTDD	ProtocolIE-ID ::= 234
id-DelayedActivationInformation-RL-ActivationCmdTDD	ProtocolIE-ID ::= 235
id-neighbouringTDDCellMeasurementInformationLCR	ProtocolIE-ID ::= 58
id-SYNCDlCodeId-TransInitLCR-CellSyncInitiationRqstTDD	ProtocolIE-ID ::= 543
id-SYNCDlCodeId-MeasureInitLCR-CellSyncInitiationRqstTDD	ProtocolIE-ID ::= 544
id-SYNCDlCodeIdTransReconfInfoLCR-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 545
id-SYNCDlCodeIdMeasReconfInformationLCR-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 546
id-SYNCDlCodeIdMeasInfoList-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 547
id-SyncDLCodeIdsMeasInfoList-CellSyncReprtTDD	ProtocolIE-ID ::= 548
id-SyncDLCodeIdThreInfoLCR	ProtocolIE-ID ::= 549
id-NSubCyclesPerCyclePeriod-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 550
id-DwPCH-Power	ProtocolIE-ID ::= 551
<u>id-AccumulatedClockupdate-CellSyncReprtTDD</u>	<u>ProtocolIE-ID ::= 552</u>
id-Angle-Of-Arrival-Value-LCR	ProtocolIE-ID ::= 521
id-HSDSCH-FDD-Information	ProtocolIE-ID ::= 530
id-HSDSCH-FDD-Information-Response	ProtocolIE-ID ::= 531
id-HSDSCH-FDD-Information-to-Add	ProtocolIE-ID ::= 532
id-HSDSCH-FDD-Information-to-Delete	ProtocolIE-ID ::= 533
id-HSDSCH-Information-to-Modify	ProtocolIE-ID ::= 534
id-HSDSCH-RNTI	ProtocolIE-ID ::= 535

```

id-HSDSCH-TDD-Information
id-HSDSCH-TDD-Information-Response
id-HSDSCH-TDD-Information-Response-LCR
id-HSDSCH-TDD-Information-to-Add
id-HSDSCH-TDD-Information-to-Delete
id-HSPDSCH-RL-ID
id-PrimCCPCH-RSCP-DL-PC-RqstTDD

```

```

ProtocolIE-ID ::= 536
ProtocolIE-ID ::= 537
ProtocolIE-ID ::= 538
ProtocolIE-ID ::= 539
ProtocolIE-ID ::= 540
ProtocolIE-ID ::= 541
ProtocolIE-ID ::= 542

```

END

9.3.7 Container Definitions

```

-- *****
--
-- Container definitions
--
-- *****

NBAP-Containers {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-Containers (5) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

-- *****
--
-- IE parameter types from other modules.
--
-- *****

IMPORTS
    maxProtocolExtensions,
    maxPrivateIEs,
    maxProtocolIEs,
    Criticality,
    Presence,
    PrivateIE-ID,
    ProtocolIE-ID
FROM NBAP-CommonDataTypes;

-- *****
--
-- Class Definition for Protocol IEs
--
-- *****

NBAP-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 IEs
--
-- *****

NBAP-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
--
-- *****

NBAP-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
--
-- *****

NBAP-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 {NBAP-PROTOCOL-IES : IEsSetParam} ::=
    SEQUENCE (SIZE (0..maxProtocolIEs)) OF
    ProtocolIE-Field {{IEsSetParam}}

ProtocolIE-Single-Container {NBAP-PROTOCOL-IES : IEsSetParam} ::=
    ProtocolIE-Field {{IEsSetParam}}

ProtocolIE-Field {NBAP-PROTOCOL-IES : IEsSetParam} ::= SEQUENCE {
    id      NBAP-PROTOCOL-IES.&id      ({{IEsSetParam}}),
    criticality  NBAP-PROTOCOL-IES.&criticality ({{IEsSetParam}}{@id}),
    value      NBAP-PROTOCOL-IES.&Value      ({{IEsSetParam}}{@id})
}

-- *****

-- Container for Protocol IE Pairs
--
-- *****

ProtocolIE-ContainerPair {NBAP-PROTOCOL-IES-PAIR : IEsSetParam} ::=
    SEQUENCE (SIZE (0..maxProtocolIEs)) OF
    ProtocolIE-FieldPair {{IEsSetParam}}

ProtocolIE-FieldPair {NBAP-PROTOCOL-IES-PAIR : IEsSetParam} ::= SEQUENCE {
    id      NBAP-PROTOCOL-IES-PAIR.&id      ({{IEsSetParam}}),
    firstCriticality  NBAP-PROTOCOL-IES-PAIR.&firstCriticality ({{IEsSetParam}}{@id}),
    firstValue      NBAP-PROTOCOL-IES-PAIR.&FirstValue ({{IEsSetParam}}{@id}),
    secondCriticality  NBAP-PROTOCOL-IES-PAIR.&secondCriticality ({{IEsSetParam}}{@id}),
    secondValue      NBAP-PROTOCOL-IES-PAIR.&SecondValue ({{IEsSetParam}}{@id})
}

```



```

}

-- *****
--
-- Container Lists for Protocol IE Containers
--
-- *****

ProtocolIE-ContainerList {INTEGER : lowerBound, INTEGER : upperBound, NBAP-PROTOCOL-IES : IEsSetParam} ::=
  SEQUENCE (SIZE (lowerBound..upperBound)) OF
    ProtocolIE-Container {{IEsSetParam}}

ProtocolIE-ContainerPairList {INTEGER : lowerBound, INTEGER : upperBound, NBAP-PROTOCOL-IES-PAIR : IEsSetParam} ::=
  SEQUENCE (SIZE (lowerBound..upperBound)) OF
    ProtocolIE-ContainerPair {{IEsSetParam}}

-- *****
--
-- Container for Protocol Extensions
--
-- *****

ProtocolExtensionContainer {NBAP-PROTOCOL-EXTENSION : ExtensionSetParam} ::=
  SEQUENCE (SIZE (1..maxProtocolExtensions)) OF
    ProtocolExtensionField {{ExtensionSetParam}}

ProtocolExtensionField {NBAP-PROTOCOL-EXTENSION : ExtensionSetParam} ::= SEQUENCE {
  id          NBAP-PROTOCOL-EXTENSION.&id  ({ExtensionSetParam}),
  criticality NBAP-PROTOCOL-EXTENSION.&criticality  ({ExtensionSetParam}@id),
  extensionValue NBAP-PROTOCOL-EXTENSION.&Extension  ({ExtensionSetParam}@id)
}

-- *****
--
-- Container for Private IEs
--
-- *****

PrivateIE-Container {NBAP-PRIVATE-IES : IEsSetParam} ::=
  SEQUENCE (SIZE (1..maxPrivateIEs)) OF
    PrivateIE-Field {{IEsSetParam}}

PrivateIE-Field {NBAP-PRIVATE-IES : IEsSetParam} ::= SEQUENCE {
  id          NBAP-PRIVATE-IES.&id
    ({IEsSetParam}),
  criticality NBAP-PRIVATE-IES.&criticality
    ({IEsSetParam}@id),
  value      NBAP-PRIVATE-IES.&Value
    ({IEsSetParam}@id)
}

END

```


CHANGE REQUEST

⌘ **25.433 CR 659** ⌘ rev **-** ⌘ Current version: **5.0.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

Title: ⌘ Correction to Implementation of Rel-5 CRs

Source: ⌘ R-WG3

Work item code: ⌘ TEI

Date: ⌘ May 2002

Category: ⌘ **F**

Release: ⌘ REL-5

Use one of the following categories:

- F** (essential correction)
- A** (corresponds to a correction in an earlier release)
- B** (Addition of feature),
- C** (Functional modification of feature)
- D** (Editorial modification)

Detailed explanations of the above categories can be found in 3GPP TR 21.900.

Use one of the following releases:

- 2** (GSM Phase 2)
- R96** (Release 1996)
- R97** (Release 1997)
- R98** (Release 1998)
- R99** (Release 1999)
- REL-4** (Release 4)
- REL-5** (Release 5)

Reason for change: ⌘ There has been some mistakes in the implementation of:

- CR 583 (NBAP Signalling support for Flexible Hard Split – Rel-5 CR),
- CR 586 (Correction to UE position measurements quality and threshold information – Rel-4 CR),
- CR 589 (HSDPA Common Procedures Modifications – Rel-5),
- CR 603 (Introduction of RL Timing Adjustment support – Rel-5),
- CR 608 (Node B Synchronisation for 1.28 Mcps TDD – Rel-5).

Summary of change: ⌘ The last 3 sentences in the Abnormal Conditions of the Radio Link Setup procedure are moved to the Abnormal Conditions of the Unsynchronised Radio Link Reconfiguration procedure (as in CR 583).
The use of the *DL Transmission Power* IE is restricted to 3.84 Mcps TDD in the CELL SYNCHRONISATION ADJUSTMENT REQUEST message (as in CR 608).
The *DL DPCH Timing Adjustment* IE is moved to the section containing FDD-specific IEs and the reference in RADIO LINK RECONFIGURATION PREPARE message is updated (as in CR 603).
The *HS-SCCH ID* IE is moved to the section containing TDD-specific IEs and the reference in PHYSICAL SHARED CHANNEL RECONFIGURATION message is updated (as in CR 589).
The range of the *SFN-SFN Quality* IE from (0..256) to (0..255) (as in CR 586).

Impact Analysis:
Impact assessment towards the previous version of the specification (same release): this CR does not have an isolated impact on the previous version of the specification (same release).
This CR has an impact under the protocol and functional point of view. The impact cannot be considered isolated because the change affects several different system functions, namely HSDPA and Iub Bearer Re-arrangement.
There is no impact on the Rel-4 version of the specifications as the IEs on which the changes have been done do not exist in Rel-4 or the correction for IEs

		already existing in Rel-4 is merely an alignment on the Rel-4 specification.
Consequences if not approved:	⌘	If this CR is not approved, then the specification will remain unclear about the different affected features.
Clauses affected:	⌘	8.2.17.4, 8.3.5.4, 9.1.42.1, 9.1.62.2, 9.1.84, 9.2.1.26A, 9.2.1.53E, 9.2.2.10A (new), 9.2.2.18H, 9.2.3.5Ga (new)
Other specs affected:	⌘	<input checked="" type="checkbox"/> Other core specifications <input type="checkbox"/> Test specifications <input type="checkbox"/> O&M Specifications
Other comments:	⌘	

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at: http://www.3gpp.org/3G_Specs/CRs.htm. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <ftp://www.3gpp.org/specs/> For the latest version, look for the directory name with the latest date e.g. 2000-09 contains the specifications resulting from the September 2000 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

8.2.17 Radio Link Setup

8.2.17.1 General

This procedure is used for establishing the necessary resources for a new Node B Communication Context in the Node B.

[FDD – The RL Setup procedure is used to establish one or more radio links. The procedure establishes one or more DCHs on all radio links, and in addition, it can include the establishment of one or more DSCHs or an HS-DSCH on one radio link.]

[TDD – The RL Setup procedure is used for establish one radio link including one or more transport channels. The transport channels can be a mixture of DCHs, DSCHs, and USCHs, or DCHs and an HS-DSCH, including also combinations where one or more transport channel types are not present.]

8.2.17.2 Successful Operation

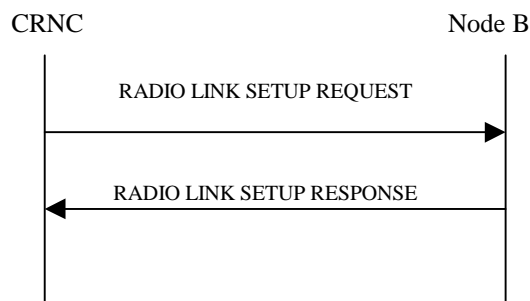


Figure 24: Radio Link Setup procedure, Successful Operation

The procedure is initiated with a RADIO LINK SETUP REQUEST message sent from the CRNC to Node B.

Upon reception of RADIO LINK SETUP REQUEST message, the Node B shall reserve necessary resources and configure the new Radio Link(s) according to the parameters given in the message.

The Node B shall prioritise resource allocation for the RL(s) to be established according to Annex A.

Transport Channels Handling:

DCH(s):

[TDD – If the *DCH Information* IE is present, the Node B shall configure the new DCH(s) according to the parameters given in the message.]

If the RADIO LINK SETUP REQUEST message includes a *DCH Information* IE with multiple *DCH Specific Info* IEs then, the Node B shall treat the DCHs in the *DCH Information* IE as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.

[FDD – For DCHs which do not belong to a set of co-ordinated DCHs with the *QE-Selector* IE set to "selected", the Transport channel BER from that DCH shall be the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [16]. If the *QE-Selector* is set to "non-selected", the Physical channel BER shall be used for the QE in the UL data frames, ref. [16].]

For a set of co-ordinated DCHs the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected" shall be used for the QE in the UL data frames, ref. [16]. [FDD - If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [16]. If all DCHs have *QE-Selector* IE set to "non-selected" the Physical channel BER shall be used for the QE, ref. [16].]

The Node B shall use the included *UL FP Mode* IE for a DCH or a set of co-ordinated DCHs to be added as the FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the configuration.

The Node B shall use the included *ToAWS* IE for a DCH or a set of co-ordinated DCHs to be added as the Time of Arrival Window Start Point in the user plane for the DCH or the set of co-ordinated DCHs in the configuration.

The Node B shall use the included *ToAWE* IE for a DCH or a set of co-ordinated DCHs to be added as the Time of Arrival Window End Point in the user plane for the DCH or the set of co-ordinated DCHs in the configuration.

The received *Frame Handling Priority* IE specified for each Transport Channel should be used when prioritising between different frames in the downlink on the radio interface in congestion situations within the Node B once the new RL(s) has been activated.

[FDD – The *Diversity Control Field* IE indicates for each RL (except the first RL in the message) whether the Node B shall combine the concerned RL or not. If the *Diversity Control Field* IE is set to "May", then Node B shall decide for either of the alternatives. If the *Diversity Control Field* IE is set to "Must", the Node B shall combine the RL with one of the other RL. Diversity combining is applied to Dedicated Transport Channels (DCH), i.e. it is not applied to the DSCHs. When a new RL is to be combined, the Node B shall choose which RL(s) to combine it with. If the *Diversity Control Field* IE is set to "Must not", the Node B shall not combine the RL with any other existing RL.]

[FDD – In the RADIO LINK SETUP RESPONSE message the Node B shall indicate with the *Diversity Indication* IE whether the RL is combined or not. In case of combining, only the *Reference RL ID* IE shall be included to indicate one of the existing RLs that the concerned RL is combined with. In case of not combining the Node B shall include in the RL SETUP RESPONSE the *Binding ID* IE and *Transport Layer Address* IE for the transport bearer to be established for each DCH of this RL.]

[TDD – The Node B shall include in the RADIO LINK SETUP RESPONSE the *Binding ID* IE and *Transport Layer Address* IE for the transport bearer to be established for each DCH of this RL.]

In case of coordinated DCH, the *Binding ID* IE and the *Transport Layer Address* IE shall be specified for only one of the coordinated DCHs.

DSCH(s):

If the *DSCH Information* IE is present, the Node B shall configure the new DSCH(s) according to the parameters given in the message.

[FDD – If the RADIO LINK SETUP REQUEST message includes the *TFCI2 Bearer Information* IE then the Node B shall support the establishment of a transport bearer on which the DSCH TFCI Signaling control frames shall be received. The Node B shall manage the time of arrival of these frames according to the values of *ToAWS* and *ToAWE* specified in the IE's. The *Binding ID* IE and *Transport Layer Address* IE for the new bearer to be set up for this purpose shall be returned in the RADIO LINK SETUP RESPONSE message.]

If the RADIO LINK SETUP REQUEST message includes the *Transport Layer Address* IE and *Binding ID* IE in the *DSCH Information* IE the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for the DSCH.

The Node B shall include in the RADIO LINK SETUP RESPONSE the *Binding ID* IE and *Transport Layer Address* IE for the transport bearer to be established for each DSCH of this RL.

[TDD – USCH(s):

[TDD – If the *USCH Information* IE is present, the Node B shall configure the new USCH(s) according to the parameters given in the message.]

[TDD - If the RADIO LINK SETUP REQUEST message includes the *Transport Layer Address* IE and *Binding ID* IE in the *USCH Information* IE the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for the USCH.]

[TDD – In case the *USCH Information IE* is present, the Node B shall include in the RADIO LINK SETUP RESPONSE the *Binding ID IE* and *Transport Layer Address IE* for the transport bearer to be established for each USCH of this RL.]

HS-DSCH(s):

If the *HS-DSCH Information IE* is present the Node B shall configure the new HS-DSCH resources according to the parameters given in the message.

[FDD – If the *HS-DSCH Information IE* and the *HS-PDSCH RL ID IE* are present, the Node B shall configure the new HS-DSCH resources in the radio link specified by the HS-PDSCH RL ID.]

In addition the Node B shall include in the RADIO LINK SETUP RESPONSE the *Binding ID IE* and *Transport Layer Address IE* for the transport bearers to be established for the HS-DSCH MAC-d flows of this RL.

If the *HS-DSCH-RNTI IE* is present, the Node B shall use the HS-DSCH RNTI value for HS-DSCH processing for the respective Node B Communication Context.

Physical Channels Handling:

[FDD – Compressed Mode]:

[FDD – If the RADIO LINK SETUP REQUEST message includes the *Transmission Gap Pattern Sequence Information IE*, the Node B shall store the information about the Transmission Gap Pattern Sequences to be used in the Compressed Mode Configuration. This Compressed Mode Configuration shall be valid in the Node B until the next Compressed Mode Configuration is configured in the Node B or Node B Communication Context is deleted.]

[FDD – If the *Downlink compressed mode method IE* in one or more Transmission Gap Pattern Sequence is set to 'SF/2' in the RADIO LINK SETUP REQUEST message, the Node B shall use or not the alternate scrambling code as indicated for each DL Channelisation Code in the *Transmission Gap Pattern Sequence Code Information IE*.]

[FDD – If the RADIO LINK SETUP REQUEST message includes the *Transmission Gap Pattern Sequence Information IE* and the *Active Pattern Sequence Information IE*, the Node B shall use the information to activate the indicated Transmission Gap Pattern Sequence(s) in the new RL. The received *CM Configuration Change CFN* refers to the latest passed CFN with that value. The Node B shall treat the received *TGCFN IEs* as follows:]

- [FDD - If any received *TGCFN IE* has the same value as the received *CM Configuration Change CFN IE*, the Node B shall consider the concerning Transmission Gap Pattern Sequence as activated at that CFN.]
- [FDD - If any received *TGCFN IE* does not have the same value as the received *CM Configuration Change CFN IE* but the first CFN after the CM Configuration Change CFN with a value equal to the *TGCFN IE* has already passed, the Node B shall consider the concerning Transmission Gap Pattern Sequence as activated at that CFN.]
- [FDD - For all other Transmission Gap Pattern Sequences included in the *Active Pattern Sequence Information IE*, the Node B shall activate each Transmission Gap Pattern Sequence at the first CFN after the CM Configuration Change CFN with a value equal to the *TGCFN IE* for the Transmission Gap Pattern Sequence.]

[FDD – DL Code Information]:

[FDD – When more than one DL DPDCH are assigned per RL, the segmented physical channel shall be mapped on to DL DPDCHs according to [8]. When p number of DL DPDCHs are assigned to each RL, the first pair of DL Scrambling Code and FDD DL Channelisation Code Number corresponds to "*PhCH number 1*", the second to "*PhCH number 2*", and so on until the p th to "*PhCH number p*".]

General:

[FDD – If the *Propagation Delay IE* is included, the Node B may use this information to speed up the detection of L1 synchronisation.]

[FDD – The *UL SIR Target* IE included in the message shall be used by the Node B as initial UL SIR target for the UL inner loop power control.]

[1.28Mcps TDD – The *UL SIR Target* IE included in the message shall be used by the Node B as initial UL SIR target for the UL inner loop power control according [19] and [21].]

[FDD – If the received *Limited Power Increase* IE is set to 'Used', the Node B shall, if supported, use Limited Power Increase according to ref. [10] subclause 5.2.1 for the inner loop DL power control.]

[FDD – If the *TFCI Signalling Mode* IE within the RADIO LINK SETUP message indicates that there shall be a hard split on the TFCI field but the *TFCI2 Bearer Information* IE is not included in the message then the Node B shall transmit the TFCI2 field with zero power.]

[FDD - If the *TFCI Signalling Mode* IE within the RADIO LINK SETUP message indicates that there shall be a hard split on the TFCI and the *TFCI2 Bearer Information* IE is included in the message then the Node B shall transmit the TFCI2 field with zero power until Synchronization is achieved on the TFCI2 transport bearer and the first valid DSCH TFCI Signalling control frame is received on this bearer (see ref.[24]).]

[FDD – If the RADIO LINK SETUP REQUEST message includes the *Length of TFCI2* IE, then the Node B shall apply the length of TFCI (field 2) indicated in the message.]

[FDD – If the RADIO LINK SETUP REQUEST message does not include the *Length of TFCI2* IE and the *Split type* IE is present with the value "Hard", then the Node B shall assume the length of the TFCI (field 2) is 5 bits.]

Radio Link Handling:

[FDD – Transmit Diversity]:

[FDD – When *Diversity Mode* IE is "*STTD*", "*Closedloop mode1*", or "*Closedloop mode2*", the Node B shall activate/deactivate the Transmit Diversity to each Radio Link in accordance with *Transmit Diversity Indication* IE]

DL Power Control:

[FDD – The Node B shall start any DL transmission using the initial DL power specified in the message on each DL DPCH of the RL until either UL synchronisation on the Uu is achieved for the RLS or Power Balancing is activated. No inner loop power control or balancing shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[10], subclause 5.2.1.2) and the power control procedure (see subclause 8.3.7), but shall always be kept within the maximum and minimum limit specified in the RADIO LINK SETUP REQUEST message. During compressed mode, the $P_{SIR}(k)$, as described in ref.[10] subclause 5.2.1.3, shall be added to the maximum DL power in slot k.]

[FDD - If the *DPC Mode* IE is present in the RADIO LINK SETUP REQUEST message, the Node B shall apply the DPC mode indicated in the message, and be prepared that the DPC mode may be changed during the life time of the RL. If the *DPC Mode* IE is not present in the RADIO LINK SETUP REQUEST message, DPC mode 0 shall be applied (see ref. [10]).]

[TDD – The Node B shall determine the initial CTrCH DL power for each CTrCH by the following rule: If the *CTrCH Initial DL transmission Power* IE is included for that CTrCH then the Node B shall use that power for the initial CTrCH DL power, otherwise the initial CTrCH DL power is the *Initial DL transmission Power* IE included in the *RL Information* IE. The Node B shall start any DL transmission on each CTrCH using the initial CTrCH DL power, as determined above, on each DL DPCH and on each Time Slot of the CTrCH until the UL synchronisation on the Uu is achieved for the CTrCH. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[22], subclause 4.2.3.3), but shall always be kept within the maximum and minimum limit specified in the RL SETUP REQUEST message.]

[TDD – If the [3.84Mcps TDD - *DL Time Slot ISCPInfo* IE] or [1.28Mcps TDD - *DL Timeslot ISCP LCR* IE] is present, the Node B shall use the indicated value when deciding the initial DL TX Power for each timeslot as specified in [21], i.e. it shall reduce the DL TX power in those downlink timeslots of the radio link where the interference is low, and increase the DL TX power in those timeslots where the interference is high, while keeping the total downlink power in the radio link unchanged].

[FDD – If the received *Inner Loop DL PC Status* IE is set to "Active", the Node B shall activate the inner loop DL power control for all RLS. If *Inner Loop DL PC Status* IE is set to "Inactive", the Node B shall deactivate the inner loop DL power control for all RLS according to ref. [10]]

[FDD – If the RADIO LINK SETUP REQUEST message includes the *DL Power Balancing Information* IE and the *Power Adjustment Type* IE is set to "Common" or "Individual", the Node B shall activate the power balancing, if activation of power balancing by the RADIO LINK SETUP REQUEST message is supported, according to subclause 8.3.7, using the *DL Power Balancing Information* IE. If the Node B starts the DL transmission and the activation of the power balancing at the same CFN, the initial power of the power balancing shall be set to the indicated DL TX power level (if received) or the decided DL TX power level on each DL channelisation code of a RL.]

[FDD – If activation of power balancing by the RADIO LINK SETUP REQUEST message is supported by the Node B, the Node B shall include the *DL Power Balancing Activation Indicator* IE in the *RL Information Response* IE in the RADIO LINK SETUP RESPONSE message.]

General:

If the RADIO LINK SETUP REQUEST message includes the *RL Specific DCH Information* IE, the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for the DCH or the set of co-ordinated DCHs.

[FDD – If the RADIO LINK SETUP REQUEST message includes the *SSDT Cell Identity* IE and the *S-Field Length* IE, the Node B shall activate SSDT, if supported, using the *SSDT Cell Identity* IE and *SSDT Cell Identity Length* IE.]

[FDD – Irrespective of SSDT activation, the Node B shall include in the RADIO LINK SETUP RESPONSE message an indication concerning the capability to support SSDT on this RL. Only if the RADIO LINK SETUP REQUEST message requested SSDT activation and the RADIO LINK SETUP RESPONSE message indicates that the SSDT capability is supported for this RL, SSDT is activated in the Node B.]

[FDD - If the RADIO LINK SETUP REQUEST message includes the *SSDT Cell Identity for EDSCHPC* IE, the Node B shall activate enhanced DSCH power control, if supported, using the *SSDT Cell Identity for EDSCHPC* IE and *SSDT Cell Identity Length* IE as well as *Enhanced DSCH PC* IE in accordance with ref. [10] subclause 5.2.2. If the RADIO LINK SETUP REQUEST message includes both *SSDT Cell Identity* IE and *SSDT Cell Identity for EDSCHPC* IE, then the Node B shall ignore the value in *SSDT Cell Identity for EDSCHPC* IE. If the enhanced DSCH power control is activated and the TFCI power control in DSCH hard split mode is supported, the primary/secondary status determination in the enhanced DSCH power control is also applied to the TFCI power control in DSCH hard split mode.]

[FDD – Radio Link Set Handling]:

[FDD – The *First RLS Indicator* IE indicates if the concerning RL shall be considered part of the first RLS established towards this UE. The *First RLS Indicator* IE shall be used by the Node B together with the value of the *DL TPC pattern 01 count* IE which the Node B has received in the Cell Setup procedure, to determine the initial TPC pattern in the DL of the concerning RL and all RLS which are part of the same RLS, as described in [10], section 5.1.2.2.1.2.]

[FDD – For each RL not having a common generation of the TPC commands in the DL with another RL, the Node B shall assign the *RL Set ID* IE included in the RADIO LINK SETUP RESPONSE message a value that uniquely identifies the RL Set within the Node B Communication context.]

[FDD – For all RLS having a common generation of the TPC commands in the DL with another RL, the Node B shall assign the *RL Set ID* IE included in the RADIO LINK SETUP RESPONSE message the same value. This value shall uniquely identify the RL Set within the Node B Communication context.]

[FDD – The UL out-of-sync algorithm defined in [10] shall for each of the established RL Set(s) use the maximum value of the parameters *N_OUTSYNC_IND* and *T_RLFAILURE*, and the minimum value of the parameters *N_INSYNC_IND*, that are configured in the cells supporting the radio links of the RL Set]

Response Message:

If the RLS are successfully established, the Node B shall start reception on the new RL(s) and respond with a RADIO LINK SETUP RESPONSE message.

After sending of the RADIO LINK SETUP RESPONSE message the Node B shall continuously attempt to obtain UL synchronisation on the Uu and start reception on the new RL.

For each RL for which the *Delayed Activation* IE is not included in the RADIO LINK SETUP REQUEST message the Node B shall:

- [FDD - start transmission on the new RL after synchronisation is achieved in the DL user plane as specified in [16].]
- [TDD - start transmission on the new RL immediately as specified in [16].]

For each RL for which the *Delayed Activation* IE is included in the RADIO LINK SETUP REQUEST message, the Node B shall:

- if the *Delayed Activation* IE indicates "Separate Indication":
 - not start any DL transmission for the concerning RL on the Uu interface;
- if the *Delayed Activation* IE indicates "CFN":
 - [FDD – start transmission on the new RL after synchronisation is achieved in the DL user plane as specified in [16], however never before the CFN indicated in the *Activation CFN* IE.]
 - [TDD – start transmission on the new RL at the CFN indicated in the *Activation CFN* IE as specified in [16].]

8.2.17.3 Unsuccessful Operation

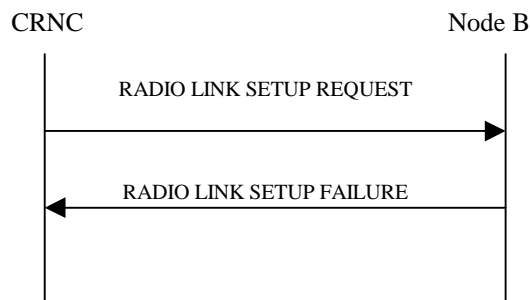


Figure 25: Radio Link Setup procedure: Unsuccessful Operation

If the establishment of at least one radio link is unsuccessful, the Node B shall respond with a RADIO LINK SETUP FAILURE message. The message contains the failure cause in the *Cause* IE.

[FDD – If some radio links were established successfully, the Node B shall indicate this in the RADIO LINK SETUP FAILURE message in the same way as in the RADIO LINK SETUP RESPONSE message.]

Typical cause values are as follows:

Radio Network Layer Cause

- Combining not supported
- Combining Resources not available
- Requested Tx Diversity Mode not supported
- Number of DL codes not supported
- Number of UL codes not supported
- UL SF not supported
- DL SF not supported
- Dedicated Transport Channel Type not supported

- Downlink Shared Channel Type not supported
- Uplink Shared Channel Type not supported
- CM not supported
- DPC mode change not supported
- Delayed Activation not supported

Transport Layer Cause

- Transport Resources Unavailable

Miscellaneous Cause

- O&M Intervention
- Control processing overload
- HW failure

8.2.17.4 Abnormal Conditions

[FDD – If the RADIO LINK SETUP REQUEST message contains the *Active Pattern Sequence Information IE*, but the *Transmission Gap Pattern Sequence Information IE* is not present, then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

If more than one DCH of a set of co-ordinated DCHs has the *QE-Selector IE* set to "selected" [TDD – or no DCH of a set of co-ordinated DCHs has the *QE-Selector IE* set to "selected"] the Node B shall regard the Radio Link Setup procedure as failed and shall respond with a RADIO LINK SETUP FAILURE message.

If the RADIO LINK SETUP REQUEST message includes a *DCH Information IE* with multiple *DCH Specific Info IEs*, and if the DCHs in the *DCH Information IE* do not have the same *Transmission Time Interval IE* in the *Semi-static Transport Format Information IE*, then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.

If the RADIO LINK SETUP REQUEST message includes the *Transport Layer Address IE* and the *Binding ID IE* in the *RL Specific DCH Information IE* included in the *RL Information IE* for a specific RL and the *Diversity Control Field IE* is set to "Must", the Node B shall regard the Radio Link Setup procedure as failed and respond with the RADIO LINK SETUP FAILURE message.

If the RADIO LINK SETUP REQUEST message contains the *Transport Layer Address IE* or the *Binding ID IE*, and not both are present for a transport bearer intended to be established, the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.

[FDD – If the RADIO LINK SETUP REQUEST message includes the *Length of TFCI2 IE* but the *TFCI signalling option IE* is set to "Normal", then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

[FDD – If the RADIO LINK SETUP REQUEST message does not include the *Length of TFCI2 IE* but the *Split type IE* is set to "Logical", then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

[FDD - If the RADIO LINK SETUP REQUEST message includes the *Split Type IE* set to the value "Hard" and the *Length of TFCI2 IE* set to the value "5", then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *Length of TFCI2 IE* but the *TFCI signalling option IE* is set to "Normal", then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message does not include the *Length of TFCI2 IE* but the *Split type IE* is set to "Logical", then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

~~[FDD—If the RADIO LINK RECONFIGURATION REQUEST message includes the *Split Type* IE set to the value "Hard" and the *Length of TFCI2* IE set to the value "5", then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]~~

8.3.5 Unsynchronised Radio Link Reconfiguration

8.3.5.1 General

The Unsynchronised Radio Link Reconfiguration procedure is used to reconfigure Radio Link(s) related to one UE-UTRAN connection within a Node B.

The Unsynchronised Radio Link Reconfiguration procedure is used when there is no need to synchronise the time of the switching from the old to the new configuration in one Node B used for a UE-UTRAN connection with any other Node B also used for the UE-UTRAN connection.

The Unsynchronised Radio Link Reconfiguration procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

8.3.5.2 Successful Operation

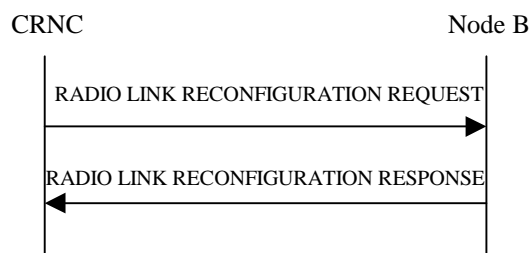


Figure 34: Unsynchronised Radio Link Reconfiguration Procedure, Successful Operation

The Unsynchronised Radio Link Reconfiguration procedure is initiated by the CRNC by sending the message RADIO LINK RECONFIGURATION REQUEST to the Node B. The message shall use the Communication Control Port assigned for this Node B Communication Context.

Upon reception, the Node B shall modify the configuration of the Radio Link(s) according to the parameters given in the message. Unless specified below, the meaning of parameters is specified in other specifications.

The Node B shall prioritise resource allocation for the RL(s) to be modified according to Annex A.

DCH Modification:

If the RADIO LINK RECONFIGURATION REQUEST message includes any *DCHs to Modify* IEs then the Node B shall treat them each as follows:

- If the *DCHs to Modify* IE includes on the *Frame Handling Priority* IE, the Node B should store this information for this DCH in the new configuration. The received Frame Handling Priority should be used when prioritising between different frames in the downlink on the radio interface in congestion situations within the Node B once the new configuration has been activated.
- If the *DCHs to Modify* IE includes the *Transport Format Set* IE for the UL, the Node B shall apply the new Transport Format Set in the Uplink of this DCH in the new configuration.
- If the *DCHs to Modify* IE includes the *Transport Format Set* IE for the DL, the Node B shall apply the new Transport Format Set in the Downlink of this DCH in the new configuration.
- If the *DCHs to Modify* IE includes multiple *DCH Specific Info* IEs then the Node B shall treat the DCHs in the *DCHs to Modify* IE as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.
- If the *DCHs to Modify* IE includes the *UL FP Mode* IE for a DCH or a set of co-ordinated DCHs, the Node B shall apply the new FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs to Modify* IE includes the *ToAWS* IE for a DCH or a set of co-ordinated DCHs, the Node B shall apply the new ToAWS in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.

- If the *DCHs to Modify* IE includes the *ToAWE* IE for a DCH or a set of co-ordinated DCHs, the Node B shall apply the new *ToAWE* in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- [TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *CCTrCH ID* IE for the DL of a DCH to be modified, the Node B shall apply the new *CCTrCH ID* in the Downlink of this DCH in the new configuration.]
- [TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *CCTrCH ID* IE for the UL of a DCH to be modified, the Node B shall apply the new *CCTrCH ID* in the Uplink of this DCH in the new configuration.]

DCH Addition:

If the RADIO LINK RECONFIGURATION REQUEST message includes any *DCH to Add* IEs, the Node B shall reserve necessary resources for the new configuration of the Radio Link(s) according to the parameters given in the message and include these DCHs in the new configuration. In particular:

- If a *DCHs to Add* IE includes multiple *DCH Specific Info* IEs for a DCH to be added, the Node B shall treat the DCHs in the *DCHs to Add* IE as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.
- [FDD - For DCHs which do not belong to a set of co-ordinated DCHs with the *QE-Selector* IE set to "selected", the Node B shall use the Transport channel BER from that DCH as the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH, the Physical channel BER shall be used for the QE [16]. If the *QE-Selector* is set to "non-selected", the Physical channel BER shall be used for the QE in the UL data frames, ref. [16].]
- For a set of co-ordinated DCHs, the Node B shall use the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected" as the QE in the UL data frames [16]. [FDD – If no Transport channel BER is available for the selected DCH, the Physical channel BER shall be used for the QE [16]. If all DCHs have *QE-Selector* IE set to "non-selected" the Physical channel BER shall be used for the QE [16].]
- The Node B should store the *Frame Handling Priority* IE received for a DCH to be added in the new configuration. The received *Frame Handling Priority* should be used when prioritising between different frames in the downlink on the radio interface in congestion situations within the Node B once the new configuration has been activated.
- The Node B shall use the included *UL FP Mode* IE for a DCH or a set of co-ordinated DCHs to be added as the new *FP Mode* in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- The Node B shall use the included *ToAWS* IE for a DCH or a set of co-ordinated DCHs to be added as the new *Time of Arrival Window Start Point* in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- The Node B shall use the included *ToAWE* IE for a DCH or a set of co-ordinated DCHs to be added as the new *Time of Arrival Window End Point* in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- [TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *CCTrCH ID* IE for the DL of a DCH to be modified, the Node B shall apply the new *CCTrCH ID* in the downlink of this DCH in the new configuration.]
- [TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *CCTrCH ID* IE for the UL of a DCH to be modified, the Node B shall apply the new *CCTrCH ID* in the Uplink of this DCH in the new configuration.]

DCH Deletion:

If the RADIO LINK RECONFIGURATION REQUEST message includes any DCH to be deleted from the Radio Link(s), the Node B shall not include this DCH in the new configuration.

If all of the DCHs belonging to a set of co-ordinated DCHs are requested to be deleted, the Node B shall not include this set of coordinated DCHs in the new configuration.

[FDD - Physical Channel Modification:]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes an *UL DPCH Information* IE, then the Node B shall apply the parameters to the new configuration as follows:]

- [FDD – If the *UL DPCH Information* IE includes the *TFCS* IE for the UL, the Node B shall apply the new TFCS in the Uplink of the new configuration.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes a *DL DPCH Information* IE, then the Node B shall apply the parameters to the new configuration as follows:]

- [FDD – If the *DL DPCH Information* IE includes on the *TFCS* IE for the DL, the Node B shall apply the new TFCS in the Downlink of the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *TFCI Signalling Mode* IE, the Node B shall use the use the information when building TFCIs in the new configuration.
 - [FDD – If the *Length of TFCI2* IE is included, then the Node B shall apply the length of TFCI (field 2) indicated in the message in the new configuration.]
 - [FDD – If the *Length of TFCI2* IE is not included and the *Split type* IE is present with the value "Hard", then the Node B shall assume the value of the TFCI (field 2) is 5 bits in the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *Limited Power Increase* IE and the IE is set to 'Used', the Node B shall, if supported, use Limited Power Increase according to ref. [10] subclause 5.2.1 for the inner loop DL power control in the new configuration.]
- [FDD – If the *DL DPCH Information* IE message includes the *Limited Power Increase* IE and the IE is set to 'Not Used', the Node B shall not use Limited Power Increase for the inner loop DL power control in the new configuration.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *Transmission Gap Pattern Sequence Information* IE the Node B shall store the new information about the Transmission Gap Pattern Sequences to be used in the new Compressed Mode Configuration. This new Compressed Mode Configuration shall be valid in the Node B until the next Compressed Mode Configuration is configured in the Node B or Node B Communication Context is deleted.]

[TDD – UL/DL CCTrCH Modification]

[TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes any *UL CCTrCH to modify* IE or *DL CCTrCH to modify* IE in the Radio Link(s), the Node B shall reserve necessary resources for the new configuration of the Radio Link(s) according to the parameters given in the message.]

[TDD – If the *UL/DL CCTrCH to modify* IE includes *TFCS* IE, and/or *Puncture Limit* IE the Node B shall apply these as the new values, otherwise the old values specified for this CCTrCH are still applicable.]

[TDD – UL/DL CCTrCH Deletion]

[TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes any *UL CCTrCH to delete* IE or *DL CCTrCH to delete* IE, the Node B shall not include this CCTrCH in the new configuration.]

DL Power Control:

- [FDD – If the *Radio Link Information* IE includes the *DL Reference Power* IE and the power balancing is active, the Node B shall update the reference power of the power balancing in the indicated RL(s), if updating of power balancing parameters by the RADIO LINK RECONFIGURATION REQUEST message is supported, using the *DL Reference Power* IE in the RADIO LINK RECONFIGURATION REQUEST message. The updated reference power shall be used from the next adjustment period.]

[FDD – If updating of power balancing parameters by the RADIO LINK RECONFIGURATION REQUEST message is supported by the Node B, the Node B shall include the *DL Power Balancing Updated Indicator* IE in the *RL Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

RL Information:

If the RADIO LINK RECONFIGURATION REQUEST message includes the *RL Information* IE, the Node B shall treat it as follows:

- If the *RL Information IE* includes the *Maximum DL Power IE*, the Node B shall apply this value to the new configuration and not transmit with a higher power on any Downlink DPCH of the Radio Link once the new configuration is being used. [FDD - During compressed mode, the $P_{STR}(k)$, as described in ref.[10] subclause 5.2.1.3, shall be added to the maximum DL power in slot k.]
- If the *RL Information IE* includes the *Minimum DL Power IE*, the Node B shall apply this value to the new configuration and never transmit with a lower power on any Downlink Channelisation Code of the Radio Link once the new configuration is being used.
- [FDD – If the *RL Information IE* contains the *Transmission Gap Pattern Sequence Code Information IE* in the *DL Code Information IE* for any of the allocated DL Channelisation Codes, the Node B shall apply the alternate scrambling code as indicated whenever the downlink compressed mode method SF/2 is active in the new configuration.]

Signalling Bearer Re-arrangement:

If the RADIO LINK RECONFIGURATION REQUEST message includes the *Signalling Bearer Request Indicator IE* the Node B shall, if supported, allocate a new Communication Control Port for the control of the Node B Communication Context and include the *Target Communication Control Port ID IE* in the RADIO LINK RECONFIGURATION RESPONSE message.

General

If the RADIO LINK RECONFIGURATION REQUEST message includes the *RL Specific DCH Information IE*, the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for any Transport Channel being added, or any Transport Channel being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator IE*.

If the requested modifications are allowed by the Node B, the Node B has successfully allocated the required resources, and changed to the new configuration it shall respond to the CRNC with the RADIO LINK RECONFIGURATION RESPONSE message.

In the RADIO LINK RECONFIGURATION RESPONSE message, the Node B shall include the *RL Information Response IE* for each affected Radio Link.

The Node B shall include in the RADIO LINK RECONFIGURATION RESPONSE message the *Transport Layer Address IE* and the *Binding ID IE* in the *DCH Information Response IE* for any Transport Channel being added, or any Transport Channel being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator IE*. The detailed frame protocol handling during transport bearer replacement is described in [16], section 5.10.1.

In case of a set of coordinated DCHs requiring a new transport bearer on Iub, the *Transport Layer Address IE* and the *Binding ID IE* in the *DCH Information Response IE* shall be included only for one of the DCH in the set of coordinated DCHs.

In case of a Radio Link being combined with another Radio Link within the Node B, *RL Information Response IE* shall be included only for one of the combined Radio Links. The *Transport Layer Address IE* and the *Binding ID IE* in the *DCH Information Response IE* shall be included only for one of the combined Radio Links.

In the case of signalling bearer re-arrangement, the new Communication Control Port shall be used once the Node B has sent the RADIO LINK RECONFIGURATION RESPONSE message via the old Communication Control Port.

8.3.5.3 Unsuccessful Operation

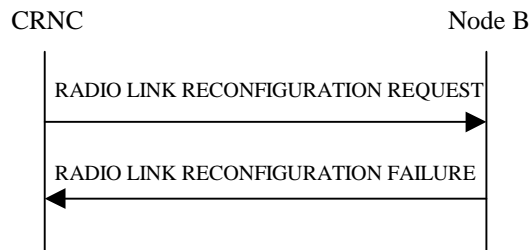


Figure 35: Unsynchronised Radio Link Reconfiguration procedure, Unsuccessful Operation

If the Node B cannot allocate the necessary resources for all the new DCHs of one set of coordinated, DCHs requested to be set-up it shall regard the Unsynchronised Radio Link Reconfiguration procedure as having failed.

If the requested Unsynchronised Radio Link Reconfiguration procedure fails for one or more Radio Link(s) the Node B shall send the RADIO LINK RECONFIGURATION FAILURE message to the CRNC, indicating the reason for failure.

Typical cause values are as follows:

Radio Network Layer Cause

- CM not supported

Transport Layer Cause

- Transport Resources Unavailable

Miscellaneous Cause

- O&M Intervention
- Control processing overload
- HW failure

8.3.5.4 Abnormal Conditions

If only a subset of all the DCHs belonging to a set of co-ordinated DCHs is requested to be deleted, the Node B shall regard the Unsynchronised Radio Link Reconfiguration procedure as having failed and shall send the RADIO LINK RECONFIGURATION FAILURE message to the CRNC.

[FDD – If the *RL Information* IE contains the *DL Code Information* IE and this IE includes *DL Scrambling Code* and *FDD DL Channelisation Code Number* IEs not matching the DL Channelisation code(s) already allocated to the Radio Link identified by *RL ID* IE, then the Node B shall consider the Unsynchronised Radio Link Reconfiguration procedure as having failed and it shall send the RADIO LINK RECONFIGURATION FAILURE message to the CRNC.

If more than one DCH of a set of co-ordinated DCHs has the *QE-Selector* IE set to "selected" [TDD – or no DCH of a set of co-ordinated DCHs has the *QE-Selector* IE set to "selected"] the Node B shall regard the Unsynchronised Radio Link Reconfiguration Preparation procedure as failed and shall respond with a RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION REQUEST message includes a *DCHs to Modify* IE or *DCHs to Add* IE with multiple *DCH Specific Info* IEs, and if the DCHs in the *DCHs to Modify* IE or *DCHs to Add* IE do not have the same *Transmission Time Interval* IE in the *Semi-static Transport Format Information* IE, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

[FDD - If the *RL Information* IE includes the *DL Reference Power* IEs, but the power balancing is not active in the indicated RL(s), the Node B shall regard the Unsynchronised Radio Link Reconfiguration procedure as having failed and the Node B shall respond the RADIO LINK RECONFIGURATION FAILURE message with the cause value "Power Balancing status not compatible".]

[FDD - If the power balancing is active with the Power Balancing Adjustment Type of the Node B Communication Context set to "Common" in the existing RL(s) but the *RL Information* IE includes more than one *DL Reference Power* IEs, the Node B shall regard the Unsynchronised Radio Link Reconfiguration procedure as having failed and the Node B shall respond the RADIO LINK RECONFIGURATION FAILURE message with the cause value "Power Balancing status not compatible".]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *Length Of TFCI2* IE but the *TFCI Signalling Option* IE is set to "Normal", then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message does not include the *Length Of TFCI2* IE but the *Split Type* IE is set to "Logical", then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *Split Type* IE set to the value "Hard" and the *Length Of TFCI2* IE set to the value "5", then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

If the RADIO LINK RECONFIGURATION REQUEST message contains the *Transport Layer Address* IE or the *Binding ID* IE when establishing a transport bearer for any Transport Channel being added, or any Transport Channel being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE., and not both are present for a transport bearer intended to be established, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

9.1.42 RADIO LINK RECONFIGURATION PREPARE

9.1.42.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantic Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Node B Communication Context ID	M		9.2.1.48	The reserved value "All NBCC" shall not be used.	YES	reject
Transaction ID	M		9.2.1.62		–	
UL DPCH Information		0..1			YES	reject
>UL Scrambling code	O		9.2.2.59		–	
>UL SIR Target	O		UL SIR 9.2.1.67A		–	
>Min UL Channelisation Code Length	O		9.2.2.22		–	
>Max Number of UL DPDCHs	C – CodeLen		9.2.2.21		–	
>Puncture Limit	O		9.2.1.50	For UL	–	
>TFCS	O		9.2.1.58		–	
>UL DPCCH Slot Format	O		9.2.2.57		–	
>Diversity mode	O		9.2.2.9		–	
>SSDT Cell Identity Length	O		9.2.2.45		–	
>S-Field Length	O		9.2.2.40		–	
DL DPCH Information		0..1			YES	reject
>TFCS	O		9.2.1.58		–	
>DL DPCH Slot Format	O		9.2.2.10		–	
>TFCI Signalling Mode	O		9.2.2.50		–	
>TFCI presence	C-Slot Format		9.2.1.57		–	
>Multiplexing Position	O		9.2.2.23		–	
>PDSCH code mapping	O		9.2.2.25		–	
>PDSCH RL ID	O		RL ID 9.2.1.53		–	
>Limited Power Increase	O		9.2.2.18A		–	
DCHs to Modify	O		DCHs FDD to Modify 9.2.2.4E		YES	reject
DCHs to Add	O		DCH FDD Information 9.2.2.4D		YES	reject
DCHs to Delete		0..<max noofDC Hs>			GLOBAL	reject
>DCH ID	M		9.2.1.20		–	
DSCH to modify		0..<max noofDS CHs>			YES	reject
>DSCH ID	M		9.2.1.27		–	
>Transport Format Set	O		9.2.1.59	For the DL.	–	
>Allocation/Retention Priority	O		9.2.1.1A		–	
>Frame Handling Priority	O		9.2.1.30		–	
>ToAWS	O		9.2.1.61		–	
>ToAWE	O		9.2.1.60		–	

>Transport Bearer Request Indicator	M		9.2.1.62A		–	
>Binding ID	O		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>Transport Layer Address	O		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
DSCH to add	O		DSCH FDD Information 9.2.2.13B		YES	reject
DSCH to Delete		0..<max noofDS CHs>			YES	reject
>DSCH ID	M		9.2.1.27		–	
TFCI2 bearer specific information		0..1			YES	reject
>CHOICE <i>TFCI2 bearer action</i>	M				–	
>>Add or modify					–	
>>>ToAWS	M		9.2.1.61		–	
>>>ToAWE	M		9.2.1.60		–	
>>> TFCI2 Bearer Request Indicator	O		9.2.1.56C		YES	reject
>>Delete			NULL		–	
RL Information		0..<max noofRLs >			EACH	reject
>RL ID	M		9.2.1.53		–	
>DL Code Information	O		FDD DL Code Information 9.2.2.14A		–	
>Maximum DL Power	O		DL Power 9.2.1.21	Maximum allowed power on DPCH	–	
>Minimum DL Power	O		DL Power 9.2.1.21	Minimum allowed power on DPCH	–	
>SSDT Indication	O		9.2.2.47		–	
>SSDT Cell Identity	C–SSDTIndON		9.2.2.44		–	
>Transmit Diversity Indicator	C – Diversity mode		9.2.2.53		–	
>SSDT Cell Identity for EDSCHPC	C-EDSCHPC		9.2.2.44A		YES	ignore
>DL Reference Power	O		DL Power 9.2.1.21	Power on DPCH	YES	ignore
> RL specific DCH Information	O		9.2.1.XXX		YES	ignore
>DL DPCH Timing Adjustment	O		9.2.1.26A2.10A	Required RL Timing Adjustment	YES	reject

Transmission Gap Pattern Sequence Information	O		9.2.2.53A		YES	reject
DSCH Common Information	O		DSCH FDD Common Information 9.2.2.13D		YES	ignore
Signalling Bearer Request Indicator	O		9.2.1.55A		YES	reject
HS-DSCH Information to modify	O		9.2.1.x5		YES	reject
HS-DSCH Information to Add	O		HS-DSCH FDD Information 9.2.2.18D		YES	reject
HS-DSCH Information to Delete		0..<Max NoOfMACdFlows>			GLOBAL	reject
> HS-DSCH MAC-D flow ID	M		9.2.1.31I		-	
HS-DSCH-RNTI	O		9.2.1.31J		YES	reject
HS-PDSCH RL ID	O		RL ID 9.2.1.53		YES	reject

Condition	Explanation
SSDTIndON	The IE shall be present if the <i>SSDT Indication</i> IE is set to "SSDT Active in the UE".
CodeLen	The IE shall be present if the <i>Min UL Channelisation Code Length</i> IE is equals to 4.
SlotFormat	The IE shall be present if the <i>DL DPCH Slot Format</i> IE is equal to any of the values from 12 to 16.
Diversity mode	The IE shall be present if <i>Diversity Mode</i> IE is present in the <i>UL DPCH Information</i> IE and is not set to "none".
EDSCHPC	The IE shall be present if <i>Enhanced DSCH PC</i> IE is present in the <i>DSCH Common Information</i> IE.

Range Bound	Explanation
<i>MaxnoofDCHs</i>	Maximum number of DCHs for a UE.
<i>MaxnoofDSCHs</i>	Maximum number of DSCHs for a UE.
<i>MaxnoofRLs</i>	Maximum number of RLs for a UE.
<i>MaxnoofMACdFlows</i>	Maximum number of MAC-d Flows

9.1.62 PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST

9.1.62.1 FDD Message

9.1.62.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantic Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		-	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		-	
C-ID	M		9.2.1.9		YES	reject
SFN	O		9.2.1.53A		YES	reject
PDSCH Sets to add		<i>0..<maxnoof PDSCHSets ></i>			GLOBAL	reject
>PDSCH Set ID	M		9.2.3.11		-	
>PDSCH to add Information		<i>0..1</i>		Mandatory for 3.84Mcps TDD	YES	reject
>>Repetition Period	M		9.2.3.16		-	
>>Repetition Length	M		9.2.3.15		-	
>>TDD Physical Channel Offset	M		9.2.3.20		-	
>>DL Timeslot Information		<i>1 .. <maxnoofDL ts></i>			-	
>>>Time Slot	M		9.2.3.23		-	
>>>Midamble Shift and Burst Type	M		9.2.3.7		-	
>>>TFCI Presence	M		9.2.1.57		-	
>>>DL Code Information		<i>1 .. <maxnoOfP DSCH></i>			-	
>>>>PDSCH ID	M		9.2.3.10		-	
>>>>TDD Channelisation Code	M		9.2.3.19		-	
>PDSCH to add Information LCR		<i>0..1</i>		Mandatory for 1.28Mcps TDD	YES	reject
>>Repetition Period	M		9.2.3.16		-	
>>Repetition Length	M		9.2.3.15		-	
>>TDD Physical Channel Offset	M		9.2.3.20		-	
>>DL Timeslot Information LCR		<i>1 .. <MaxnoofDL tsLCR></i>			GLOBAL	reject
>>>Time Slot LCR	M		9.2.3.24A		-	
>>>Midamble shift LCR	M		9.2.3.7A		-	
>>>TFCI Presence	M		9.2.1.57		-	
>>>DL Code Information LCR		<i>1 .. <maxnoOfP DSCH></i>			GLOBAL	reject
>>>>PDSCH ID	M		9.2.3.10		-	
>>>>TDD Channelisation Code LCR	M		9.2.3.19a		-	

PDSCH Sets to Modify		<i>0..<maxnoof PDSCHSets ></i>			GLOBAL	reject
>PDSCH Set ID	M		9.2.3.11		-	
>PDSCH to modify Information		<i>0..1</i>		Mandatory for 3.84Mcps TDD	YES	reject
>>Repetition Period	O		9.2.3.16		-	
>>Repetition Length	O		9.2.3.15		-	
>>TDD Physical Channel Offset	O		9.2.3.20		-	
>>DL Timeslot Information		<i>0 .. <maxnoofDLts></i>			-	
>>>Time Slot	M		9.2.3.23		-	
>>>Midamble Shift and Burst Type	O		9.2.3.7		-	
>>>TFCI Presence	O		9.2.1.57		-	
>>>DL Code Information		<i>0 .. <maxnoOfPDSCH></i>			-	
>>>>PDSCH ID	M		9.2.3.10		-	
>>>>TDD Channelisation Code	M		9.2.3.19		-	
>PDSCH to modify Information LCR		<i>0..1</i>		Mandatory for 1.28 Mcps TDD	YES	reject
>>Repetition Period	O		9.2.3.16		-	
>>Repetition Length	O		9.2.3.15		-	
>>TDD Physical Channel Offset	O		9.2.3.20		-	
>>DL Timeslot Information LCR		<i>0 .. <MaxnoofDLtsLCR></i>			GLOBAL	reject
>>>Time Slot LCR	M		9.2.3.24A		-	
>>>Midamble shift LCR	O		9.2.3.7A			
>>>TFCI Presence	O		9.2.1.57		-	
>>>DL Code Information LCR		<i>0 .. <maxnoOfPDSCHLCR></i>			GLOBAL	reject
>>>>PDSCH ID	M		9.2.3.10		-	
>>>>TDD Channelisation Code LCR	M		9.2.3.19a		-	
PDSCH Sets to Delete		<i>0..<maxnoof PDSCHSets ></i>			GLOBAL	reject
>PDSCH Set ID	M		9.2.3.11		-	
PUSCH Sets to add		<i>0..<maxnoof PUSCHSets ></i>			GLOBAL	reject
>PUSCH Set ID	M		9.2.3.13		-	
>PUSCH to add Information		<i>0..1</i>		Mandatory for 3.84Mcps TDD	YES	reject
>>Repetition Period	M		9.2.3.16		-	
>>Repetition Length	M		9.2.3.15		-	
>>TDD Physical Channel Offset	M		9.2.3.20		-	
>>UL Timeslot Information		<i>1 .. <maxnoofULts></i>			-	
>>>Time Slot	M		9.2.3.23		-	

>>>Midamble Shift and Burst Type	M		9.2.3.7		–	
>>>TFCI Presence	M		9.2.1.57		–	
>>>UL Code Information		1 .. <maxnoOfPUSCH>			–	
>>>>PUSCH ID	M		9.2.3.12		–	
>>>>TDD Channelisation Code	M		9.2.3.19		–	
>PUSCH to add Information LCR	O	1		For 1.28Mcps TDD only	YES	reject
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD Physical Channel Offset	M		9.2.3.20		–	
>>UL Timeslot Information LCR		1 .. <MaxnoofULtsLCR>			GLOBAL	reject
>>>Time Slot LCR	M		9.2.3.24A		–	
>>>Midamble shift LCR	M		9.2.3.7A			
>>>TFCI Presence	M		9.2.1.57		–	
>>>UL Code Information LCR		1 .. <maxnoOfPUSCHLCR>			GLOBAL	reject
>>>>PUSCH ID	M		9.2.3.12		–	
>>>>TDD Channelisation Code LCR	M		9.2.3.19a		–	
PUSCH Sets to Modify		0..<maxnoofPUSCHSets>			GLOBAL	reject
>PUSCH Set ID	M		9.2.3.13		-	
>PUSCH to modify Information		0..1		For 3.84Mcps TDD only	YES	reject
>>Repetition Period	O		9.2.3.16		–	
>>Repetition Length	O		9.2.3.15		–	
>>TDD Physical Channel Offset	O		9.2.3.20		–	
>>UL Timeslot Information		0 .. <maxnoofULts>			–	
>>>Time Slot	M		9.2.3.23		–	
>>>Midamble Shift and Burst Type	O		9.2.3.7		–	
>>>TFCI Presence	O		9.2.1.57		–	
>>>UL Code Information		0 .. <maxnoOfPDSCH>			–	
>>>>PUSCH ID	M		9.2.3.12		–	
>>>>TDD Channelisation Code	M		9.2.3.19		–	
>PUSCH to modify Information LCR		0..1		For 1.28Mcps TDD only	YES	reject
>>Repetition Period	O		9.2.3.16		–	
>>Repetition Length	O		9.2.3.15		–	
>>TDD Physical Channel Offset	O		9.2.3.20		–	
>>UL Timeslot Information LCR		0 .. <MaxnoofULtsLCR>		For 1.28Mcps TDD only	GLOBAL	reject

>>>Time Slot LCR	M		9.2.3.24A		–	
>>>Midamble shift LCR	O		9.2.3.7A			
>>>TFCI Presence	O		9.2.1.57		–	
>>>UL Code Information LCR		0 .. <maxnoOfPDSCHLCR>			GLOBAL	reject
>>>>PUSCH ID	M		9.2.3.12		–	
>>>>TDD Channelisation Code LCR	M		9.2.3.19a		–	
PUSCH Sets to Delete		0..<maxnoofPUSCHSets>			GLOBAL	reject
>PUSCH Set ID	M		9.2.3.13		-	
HS-PDSCH TDD Information		0..1			GLOBAL	reject
>DL Timeslot Information		0 .. <maxnoofDLts>		For 3.84Mcps TDD only	–	
>>Time Slot	M		9.2.3.23		–	
>>Midamble Shift and Burst Type	M		9.2.3.7		–	
>DL Timeslot Information LCR		0 .. <maxnoofDLtsLCR>		For 1.28Mcps TDD only	GLOBAL	reject
>>Time Slot LCR	M		9.2.3.24a		–	
>>Midamble shift LCR	M		9.2.3.7A		–	
Add to HS-SCCH Resource Pool		0..1			GLOBAL	reject

>HS-SCCH Information		<i>0 .. <maxnoofH SSCCH></i>		For 3.84Mcps TDD only	–	
>>HS-SCCH ID	M		9.2.3.18H5 Ga		–	
>>Time Slot	M		9.2.3.23		–	
>>Midamble Shift and Burst Type	M		9.2.3.7		–	
>>TDD Channelisation Code	M		9.2.3.19		–	
>>Maximum HS-SCCH Power	M		DL Power 9.2.1.21		–	
>>HS-SICH Information		<i>1</i>			–	
>>>Time Slot	M		9.2.3.23		–	
>>>Midamble Shift and Burst Type	M		9.2.3.7		–	
>>>TDD Channelisation Code	M		9.2.3.19		–	
>HS-SCCH Information LCR		<i>0 .. <maxnoofH SSCCH></i>		For 1.28Mcps TDD only	GLOBAL	reject
>>HS-SCCH ID	M		9.2.3.18H5 Ga		–	
>>Time Slot LCR	M		9.2.3.24a		–	
>>Midamble shift LCR	M		9.2.3.7A		–	
>>TDD Channelisation Code LCR	M		9.2.3.19a		–	
>>Maximum HS-SCCH Power	M		DL Power 9.2.1.21		–	
>>HS-SICH Information LCR		<i>1</i>			–	
>>>Time Slot LCR	M		9.2.3.24a		–	
>>>Midamble shift LCR	M		9.2.3.7A		–	
>>>TDD Channelisation Code LCR	M		9.2.3.19a		–	
Modify HS-SCCH Resource Pool		<i>0..1</i>			GLOBAL	reject

>HS-SCCH Information		<i>0 .. <maxnoofHSSCCH></i>		For 3.84Mcps TDD only	-	
>>HS-SCCH ID	M		9.2.3.18H5 Ga		-	
>>Time Slot	O		9.2.3.23		-	
>>Midamble Shift and Burst Type	O		9.2.3.7		-	
>>TDD Channelisation Code	O		9.2.3.19		-	
>>Maximum HS-SCCH Power	O		DL Power 9.2.1.21		-	
>>HS-SICH Information		<i>0..1</i>			-	
>>>Time Slot	O		9.2.3.23		-	
>>>Midamble Shift and Burst Type	O		9.2.3.7		-	
>>>TDD Channelisation Code	O		9.2.3.19		-	
>HS-SCCH Information LCR		<i>0 .. <maxnoofHSSCCH></i>		For 1.28Mcps TDD only	GLOBAL	reject
>>HS-SCCH ID	M		9.2.3.18H5 Ga		-	
>>Time Slot LCR	O		9.2.3.24a		-	
>>Midamble shift LCR	O		9.2.3.7A		-	
>>TDD Channelisation Code LCR	O		9.2.3.19a		-	
>>Maximum HS-SCCH Power	O		DL Power 9.2.1.21		-	
>>HS-SICH Information LCR		<i>0..1</i>			-	
>>>Time Slot LCR	O		9.2.3.24a		-	
>>Midamble shift LCR	O		9.2.3.7A		-	
>>>TDD Channelisation Code LCR	O		9.2.3.19a		-	
Delete from HS-SCCH Resource Pool		<i>0..<maxnoofHSSCCHs></i>			GLOBAL	reject
>HS-SCCH ID	M		9.2.3.18H5 Ga		-	

Range bound	Explanation
<i>Maxnoof PDSCH Sets</i>	Maximum number of PDSCH Sets in a cell.
<i>Maxnoof PDSCH</i>	Maximum number of PDSCH in a cell for 3.84Mcps TDD only.
MaxnoOfPDSCHLCR	Maximum number of PDSCH in a cell for 1.28Mcps TDD only.
<i>Maxnoof PUSCH Sets</i>	Maximum number of PUSCH Sets in a cell.
<i>Maxnoof PUSCH</i>	Maximum number of PUSCH in a cell for 3.84Mcps TDD.
Maxnoof PUSCHLCR	Maximum number of PUSCH in a cell for 1.28Mcps

	TDD.
<i>MaxnoofDLts</i>	Maximum number of Downlink time slots in a cell for 3.84Mcps TDD.
<i>MaxnoofULts</i>	Maximum number of Uplink time slots in a cell for 3.84Mcps TDD.
<i>MaxnoofULtsLCR</i>	Maximum number of Uplink time slots in a cell for 1.28Mcps TDD
<i>MaxnoofHSSCCHs</i>	Maximum number of HS-SCCHs in a Cell

9.1.84 CELL SYNCHRONISATION ADJUSTMENT REQUEST [TDD]

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	ignore
Transaction ID	M		9.2.1.62		–	
Cell Adjustment Information		1.. <maxCellinNodeB>			EACH	ignore
>C-ID	M		9.2.1.9		–	
>Frame Adjustment value	O		9.2.3.5C		–	
>Timing Adjustment value	O		9.2.3.22a		–	
>DL Transmission Power	O		9.2.1.21	3.84Mcps TDD only	–	
>SFN	O		9.2.1.53A		–	
>DwPCH Power	O		9.2.3.5B	1.28Mcps TDD only	YES	ignore

Range bound	Explanation
MaxCellinNodeB	Maximum number of Cells in a Node B

9.2.1.26A DL DPCH Timing Adjustment

The DL DPCH Timing Adjustment indicates that a timing adjustment of the related radio link is required. It also indicates whether the timing adjustment shall consist of a timing advance or a timing delay with respect to the SFN timing. The adjustment always consists of 256 chips.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
DL DPCH Timing Adjustment			ENUMERATED (timing advance, timing delay)	The size of the timing adjustment is 256 chips.

Void.

9.2.1.53E SFN-SFN Measurement Value Information

The SFN-SFN Measurement Value Information IE indicates the measurement result related to SFN-SFN Observed Time Difference measurements.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Successful Neighbouring cell SFN-SFN Observed Time Difference Measurement Information		1..<maxnoMeasN Cell>		
>UC-Id	M		9.2.1.65B	
>SFN-SFN Value	M		9.2.1.53F	
>SFN-SFN Quality	O		INTEGER(0..2565)	Indicates the standard deviation of the SFN-SFN otd (observed time difference) measurements in 1/16 chip.
>SFN-SFN Drift Rate	M		INTEGER(-100..+100)	Indicates the SFN-SFN drift rate in 1/256 chip per second. A positive value indicates that the Reference cell clock is running at a greater frequency than the measured neighbouring cell.
>SFN-SFN Drift Rate Quality	M		INTEGER(0..100)	Indicates the standard deviation of the SFN-SFN drift rate measurements in 1/256 chip per second.
>SFN-SFN Measurement Time Stamp	M		9.2.1.53D	
Unsuccessful Neighbouring cell SFN-SFN Observed Time Difference Measurement Information		0..<maxnoMeasN Cell-1>		
>UC-Id	M		9.2.1.65B	

Range bound	Explanation
<i>maxnoMeasNCell</i>	Maximum number of neighbouring cells that can be measured on.

9.2.2.10A DL DPCH Timing Adjustment

The DL DPCH Timing Adjustment indicates that a timing adjustment of the related radio link is required. It also indicates whether the timing adjustment shall consist of a timing advance or a timing delay with respect to the SFN timing. The adjustment always consists of 256 chips.

<u>IE/Group Name</u>	<u>Presence</u>	<u>Range</u>	<u>IE Type and Reference</u>	<u>Semantics Description</u>
<u>DL DPCH Timing Adjustment</u>			<u>ENUMERATED (timing advance. timing delay)</u>	<u>The size of the timing adjustment is 256 chips.</u>

9.2.2.18H HS-SCCH ID

The HS-SCCH ID identifies unambiguously a HS-SCCH and its paired HS-SICH within the set of HS-SCCHs.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
HS-SCCH ID			INTEGER (0..31)	

Void.

9.2.3.5Ga HS-SCCH ID

The HS-SCCH ID identifies unambiguously a HS-SCCH and its paired HS-SICH within the set of HS-SCCHs.

<u>IE/Group Name</u>	<u>Presence</u>	<u>Range</u>	<u>IE Type and Reference</u>	<u>Semantics Description</u>
HS SCCH ID			INTEGER (0..31)	

CHANGE REQUEST

⌘ **25.453 CR 017** ⌘ rev **2** ⌘ Current version: **5.3.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

Title:	⌘ Criticality Information Decoding Failure Handling		
Source:	⌘ R-WG3		
Work item code:	⌘ TEI	Date:	⌘ May, 2002
Category:	⌘ F	Release:	⌘ REL-5
	Use <u>one</u> of the following categories: F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900.		Use <u>one</u> of the following releases: 2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) REL-4 (Release 4) REL-5 (Release 5)

Reason for change:	⌘ Section 10.3.2 specifies that “when the criticality information cannot even be decoded in a not comprehended IE or IE group, the Error Indication procedure shall be initiated with an appropriate cause value”. As all decoding errors result in an Error Indication procedure being sent with a cause value of Transfer Syntax error as specified in section 10.2, this specification statement is not required and causes confusion.
Summary of change:	⌘ The above-mentioned specification statement in section 10.3.2 is removed.
	<u>Impact analysis</u> Impact assessment towards the previous version of the specification (same release): The CR has isolated impact with the previous version of the specification (same release). The impact can be considered isolated because the change affects one (or more) system function(s), namely the error handling function and has the possibility to affect existing implementations even though the change is functional and protocol compatible.
Consequences if not approved:	⌘ The specification statement seems to indicate that when the criticality information cannot be decoded, it needs to be handled in a different way from handling Transfer Syntax protocol error. If not approved, this ambiguity will persist.

Clauses affected:	⌘ 10.3.2	
Other specs	⌘ <input checked="" type="checkbox"/> Other core specifications	⌘ 25.413 R99 CR 412, 25.413 R4 CR 413, 25.413 R5 CR 437, 25.419 R99 CR 095, 25.419 R4 CR 096, 25.419 R5 CR 097, 25.423 R99 CR 590, 25.423 R4 CR 591, 25.423 R5 CR 599, 25.433 R99 CR 630, 25.433 R4 CR 631, 25.433 R5 CR 633
affected:	<input type="checkbox"/> Test specifications	None.

O&M Specifications

Other comments: ☞

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at: http://www.3gpp.org/3G_Specs/CRs.htm. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked ☞ contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <ftp://ftp.3gpp.org/specs/> For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

If an Abstract Syntax Error occurs, the receiver shall read the remaining message and shall then for each detected Abstract Syntax Error that belong to cases 1-3 act according to the Criticality Information and Presence Information for the IE/IE group due to which Abstract Syntax Error occurred in accordance with subclauses 10.3.4 and 10.3.5. The handling of cases 4 and 5 is specified in subclause 10.3.6.

10.3.2 Criticality Information

In the PCAP messages there is criticality information set for individual IEs and/or IE groups. This criticality information instructs the receiver how to act when receiving an IE or an IE group that is not comprehended, i.e. the entire item (IE or IE group) which is not (fully or partially) comprehended shall be treated in accordance with its own criticality information as specified in subclause 10.3.4.

In addition, the criticality information is used in case of the missing IE/IE group abstract syntax error (see subclause 10.3.5).

The receiving node shall take different actions depending on the value of the Criticality Information. The three possible values of the Criticality Information for an IE/IE group are:

- Reject IE.
- Ignore IE and Notify Sender.
- Ignore IE.

The following rules restrict when a receiving entity may consider an IE, an IE group, or an EP not comprehended (not implemented), and when action based on criticality information is applicable:

1. IE or IE group: When one new or modified IE or IE group is implemented for one EP from a standard version, then other new or modified IEs or IE groups specified for that EP in that standard version shall be considered comprehended by a receiving entity (some may still remain unsupported).

NOTE: This restriction is not applicable to a sending entity for constructing messages.

2. EP: The comprehension of different EPs within a standard version or between different standard versions is not mandated. Any EP that is not supported may be considered not comprehended, even if another EP from that standard version is comprehended, and action based on criticality shall be applied.

~~When the criticality information cannot even be decoded in a not comprehended IE or IE group, the Error Indication procedure shall be initiated with an appropriate cause value~~

10.3.3 Presence Information

For many IEs/IE groups which are optional according to the ASN.1 transfer syntax, PCAP specifies separately if the presence of these IEs/IE groups is optional or mandatory with respect to RNS application by means of the presence field of the concerning object of class PCAP-PROTOCOL-IES, PCAP-PROTOCOL-IES-PAIR, PCAP-PROTOCOL-EXTENSION or PCAP-PRIVATE-IES.

The presence field of the indicated classes supports three values:

1. Optional;
2. Conditional;
3. Mandatory.

If an IE/IE group is not included in a received message and the presence of the IE/IE group is mandatory or the presence is conditional and the condition is true according to the version of the specification used by the receiver, an abstract syntax error occurs due to a missing IE/IE group.

If an IE/IE group is included in a received message and the presence of the IE/IE group is conditional and the condition is false according to the version of the specification used by the receiver, an abstract syntax error occurs due to this erroneously present conditional IE/IE group.

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: ⌘ (U)SIM ME/UE Radio Access Network Core Network

Title:	⌘ Clarification for the usage of the cause value		
Source:	⌘ R-WG3		
Work item code:	⌘ TEI	Date:	⌘ 2002-May
Category:	⌘ F	Release:	⌘ REL-5
	Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:
	F (correction)		2 (GSM Phase 2)
	A (corresponds to a correction in an earlier release)		R96 (Release 1996)
	B (addition of feature),		R97 (Release 1997)
	C (functional modification of feature)		R98 (Release 1998)
	D (editorial modification)		R99 (Release 1999)
	Detailed explanations of the above categories can be found in 3GPP TR 21.900 .		REL-4 (Release 4)
			REL-5 (Release 5)

Reason for change: ⌘ The cause value, “Abstract Syntax Error (Ignore and Notify)”, should not be set to the Cause IE. Please see R3-020971.

In case of abstract syntax error occurs in the IE which has the criticality of Ignore and Notify, the procedure shall be continue as if that error IE is not present and report in the response message(for class 1), or in Errir Indication (for class 2) that the error IE has been ignored.

However, in the above case, if the receiver further detect an error e.g. sementic error which should terminate the procedure, it is not clear what cause value(either Abstract Syntax Error (Ignore and Notify) or Sementic Error) shall be set in the failure message(for class 1) or Error ndication (for class 2).

Summary of change: ⌘ Rev.1

Impact Analysis statement was corrected.

Rev.0

It was clarified that if an error that terminates a procedure occurs, the returned cause value shall reflect the error that caused the termination of the procedure even if one or more abstract syntax errors with criticality “ignore and notify” have earlier occurred within the same procedure.

Consequences if not approved: ⌘ If this CR is not approved, unsuitable cause value might be set to the Cause IE.

Impact Analysis:

Impact assessment towards the previous version of the specification (same release):

		CR098 on TS25.419v3.8.0
		CR099 on TS25.419v4.4.0
		CR100 on TS25.419v5.0.0
		CR654 on TS25.423v3.9.0
		CR655 on TS25.423v4.4.0
		CR656 on TS25.423v5.0.0
		CR684 on TS25.433v3.9.0
		CR685 on TS25.433v4.4.0
		CR686 on TS25.433v5.0.0
affected:	<input type="checkbox"/>	Test specifications
	<input type="checkbox"/>	O&M Specifications
Other comments:	⌘	

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- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

10.5 Exceptions

The error handling for all the cases described hereafter shall take precedence over any other error handling described in the other subclauses of clause 10.

- If any type of error (Transfer Syntax Error, Abstract Syntax Error or Logical Error) is detected in the ERROR INDICATION message, it shall not trigger the Error Indication procedure in the receiving Node but local error handling.
- In case a response message, failure message or Error Indication message needs to be returned, but the information necessary to determine the receiver of that message is missing, the procedure shall be considered as unsuccessfully terminated and local error handling shall be initiated.
- If an error that terminates a procedure occurs, the returned cause value shall reflect the error that caused the termination of the procedure even if one or more abstract syntax errors with criticality “ignore and notify” have earlier occurred within the same procedure.