TSG-RAN Meeting #7 ***RP-000117***
Madrid, Spain, 13 - 15 March 2000

Title: Last Outstanding CR for CPCH in Release 99

Source: **Golden Bridge Technology, Samsung, LGIC, BellSouth, SK Telecom, Southwest Bell, Hyundai, OKI, Seiko-Epson and BOPS**

Agenda Item: 6.4.1

Document for: Discussion and Approval

Introduction

At the last RAN meeting, several features were identified to be high priority items for Release 99 which were to be completed after RAN#6 and before RAN#7 meetings. CPCH is one of these features. Approximately 36 CRs have been treated and agreed in RAN1, RAN2, RAN3 and RAN4 since the last RAN meeting. There is only one last CR for CPCH in Release 99 which has not yet been treated and approved in RAN3. This contribution provides the last CR needed to complete the CPCH work for Release 99.

Discussion

During the January and February RAN3 meetings, RAN3 has treated over 12 CRs affecting 8 of the 9 specifications which require changes for CPCH. The final required CPCH CR (CR25433-068) was presented at the the last RAN3 meeting. Unfortunately RAN3 did not have sufficient time to complete the discussion on CR25433-068. During the brief discussion that did take place, the only concerns that had been raised questioning this CR had to do with the list of CPCH parameters included in Node B resource allocation messages. This list of CPCH parameters have been defined in RAN1 and RAN2 and have been included by approved CRs into the appropriate RAN1 and RAN2 specifications. RAN3's TS25433, NBAP Signaling Specification, is affected because these parameters, defined elsewhere, require transport on the Iub interface specified in RAN3. Since the list of parameters have only been recently agreed by RAN1 and RAN2, RAN3 had no opportunity to review the particular CPCH parameters requiring transport in NBAP signaling messages. During the long RAN3 discussions of prior versions of this CR, some editorial and terminology corrections were proposed by Erricsson, Nokia and Motorola, and some simplifications were requested. These requested changes have been incorporated here. Since the close of the RAN3 meeting, GBT and Samsung have reviewed the approved CRs in RAN1 and RAN2 and have drafted the attached contribution to correctly capture all the CPCH parameters in CR25433-068r3.

No other technical issues were raised in the RAN3 discussion.

The many companies who have worked diligently to implement CPCH CRs for Release 99 in all four RAN working groups support the need for this last CPCH CR. Golden Bridge Technology, Samsung, LGIC, BellSouth, SK Telecom, Southwest Bell, Hyundai, OKI, Seiko-Epson and BOPS are all joint contributors and support the motion to discuss and approve this last CPCH CR for Release 99 at this time.

Proposal

The following changes described in the attached CR25433-068r3 should be incorporated into the latest version of TS25.433, NBAP Signaling Specification.

3GPP TSG RAN Meeting #7
Madrid, SP, 13-15 March, 2000

Document RP-000117
e.g. for 3GPP use the format TP-99xxx
or for SMG, use the format P-99-xxx

CHANGE REQUEST

Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.

25.433	CR	068r3	Current Version:	3.0.0

GSM (AA.BB) or 3G (AA.BBB) specification number ↑ *↑ CR number as allocated by MCC support team*

For submission to: *List expected approval meeting # here ↑*

for approval	X
for information	

strategic	
non-strategic	

(for SMG use only)

Form: CR cover sheet, version 2 for 3GPP and SMG *The latest version of this form is available from: ftp://ftp.3gpp.org/Information/CR-Form-v2.doc*

Proposed change affects: *(at least one should be marked with an X)* (U)SIM [ ] ME [ ] UTRAN / Radio [X] Core Network [ ]

Source: Golden Bridge Technology, Samsung, LGIC, BellSouth, SK Telecom, Southwest Bell, Hyundai, OKI, Seiko-Epson and BOPS

Date: 00.03.13

Subject: NBAP Signaling support for CPCH

Work item:

Category: *(only one category Shall be marked with an X)*

F	Correction	
A	Corresponds to a correction in an earlier release	
B	Addition of feature	X
C	Functional modification of feature	
D	Editorial modification	

Release:

Phase 2	
Release 96	
Release 97	
Release 98	
Release 99	X
Release 00	

Reason for change: Signaling support for CPCH.

Clauses affected: 8.2.1, 8.2.2, 8.2.3, 8.2.7, 9.1.2, 9.1.3, 9.1.5, 9.1.16, 9.1.17, 9.1.18, 9.1.20, 9.1.31, 9.2.1, 9.2.2

Other specs Affected:

Other 3G core specifications	[ ]	→ List of CRs:
Other GSM core specifications	[ ]	→ List of CRs:
MS test specifications	[ ]	→ List of CRs:
BSS test specifications	[ ]	→ List of CRs:
O&M specifications	[ ]	→ List of CRs:

Other comments:

help.doc

←------- double-click here for help and instructions on how to create a CR.

8.2 NBAP Common Procedures

8.2.1 Common Transport Channel Setup

8.2.1.1 General

This procedure is used for establishing the necessary resources in Node B, regarding Secondary CCPCH, PICH, PRACH, PCPCH(FDD), AICH(FDD), AP_AICH(FDD), CD/CA-ICH(FDD), FACH, PCH, RACH and CPCH(FDD).

Successful Operation

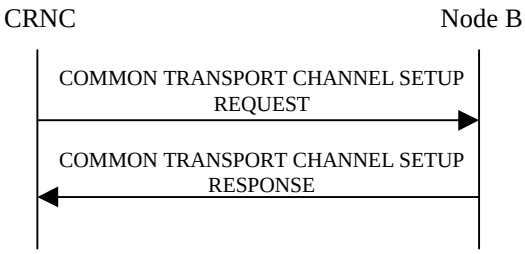

Figure 1: Common Transport Channel Setup procedure, successful case

The procedure is initiated with a COMMON TRANSPORT CHANNEL SETUP REQUEST message sent from the CRNC to the Node B.
One message can configure only one of the following combinations:

- [FDD-one Secondary CCPCH, and FACHes, PCH and PICH related to that Secondary CCPCH], or
- [TDD- Secondary CCPCHes and FACHes, PCHes with the corresponding PICH related to that group of Secondary CCPCHes], or
- one PRACH, and one RACH and one AICH(FDD) related to that PRACH at the time.
- [FDD- PCPCHes, one CPCH, one AP_AICH and one CD/CA-ICH related to that group of PCPCHes at the time]

[FDD – Secondary CCPCH]: When the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains a Secondary CCPCH, Node B shall configure and activate it according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message. [FDD- The handling of the optional *STTD* IE is FFS.

[TDD – Secondary CCPCHes]: When the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains a Secondary CCPCHes, Node B shall configure and activate it according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.

[TDD- FACHs and PCHs may be mapped onto a CCTrCH which may consist of several Secondary CCPCHes]

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains one or several FACHes, Node B shall configure and activate them according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.

If the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains a PCH and a PICH, Node B shall configure and activate them according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message. [FDD- The handling of the optional *STTD* IE for PICH is FFS.]

PRACH: When the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains a PRACH, Node B shall configure and activate it according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.

FDD- The handling of the optional *STTD* IE for AICH (FDD) is FFS.]

[FDD – PCPCHes]: When the COMMON TRANSPORT CHANNEL SETUP REQUEST message contains PCPCHes, Node B shall configure and activate it according to the COMMON TRANSPORT CHANNEL SETUP REQUEST message.

The handling of the optional *STTD* IE for AP-AICH and CD/CA-ICH is FFS.

After a successful procedure, the defined common transport channels and the common physical channels have adopted the operational state Enabled in Node B and the common transport channels exist on the Uu interface. Node B shall store the new value of *Configuration Generation ID* IE and it shall respond with the COMMON TRANSPORT CHANNEL SETUP RESPONSE message with the transport layer information for the configured common transport channels.

8.2.2 Common Transport Channel Reconfigure

8.2.2.1 General

This procedure is used for reconfiguring common transport channels and/or common physical channels, while they still might be in operation.

8.2.2.2 Successful Operation

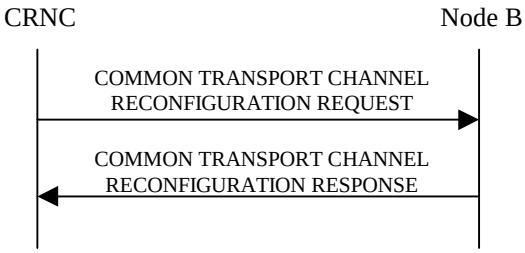

Figure 3: Common Transport Channel Reconfiguration, successful case

The procedure is initiated with a COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message sent from the CRNC to the Node B.

[TDD S-CCPCH]: If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *S-CCPCH Power* IE, the Node B shall reconfigure the power that the indicated S-CCPCH shall use.

FACH: When one or several FACHes are present Node B reconfigures the indicated FACHes.

[FDD] If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *Max FACH Power* IE, the Node B shall reconfigure the maximum power that the FACH may use.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *ToAWS* IE, the Node B shall reconfigure the time of arrival window startpoint that the FACH shall use.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *ToAWE* IE, the Node B shall reconfigure the time of arrival window endpoint that the FACH shall use.

PCH: When one PCH [TDD or several PCHs] is present Node B reconfigures the indicated PCH[TDD PCHs].

[FDD If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *PCH Power* IE, the Node B shall reconfigure the power that the PCH shall use.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *ToAWS* IE, the Node B shall reconfigure the time of arrival window startpoint that the PCH shall use.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *ToAWE* IE, the Node B shall reconfigure the time of arrival window endpoint that the PCH shall use.

PICH: When a PICH is present Node B reconfigures the indicated PICH.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *PICH Power* IE, the Node B shall reconfigure the power that the PICH shall use.

[FDD- PRACH]: When a PRACH is present Node B reconfigures the indicated PRACH.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the Allowed Preamble Signatures Information, the Node B shall reconfigure the preamble signatures that the PRACH shall use.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the Allowed Slot Format Information, the Node B shall reconfigure the slot formats that the PRACH shall use.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the Allowed Sub Channel Information, the Node B shall reconfigure the sub channel numbers that the PRACH shall use.

[FDD- AICH]: When a AICH is present Node B reconfigures the indicated AICH.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *AICH Power* IE, the Node B shall reconfigure the power that the AICH shall use.

[FDD- CPCH]: When a CPCH is present Node B reconfigures the indicated CPCH.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes Initial DL transmission Power Information, the Node B shall reconfigure the Initial DL transmission Power for the CPCH.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes Maximum DL Power Information, the Node B shall apply this value to the new configuration and never transmit with a higher power on any DL PCPCHes once the new configuration is being used.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes Minimum DL Power Information, the Node B shall apply this value to the new configuration and never transmit with a lower power on any DL PCPCHes once the new configuration is being used.

[FDD- AP-AICH]: When a AP-AICH is present Node B reconfigures the indicated AP-AICH.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *AP-AICH Power* IE, the Node B shall reconfigure the power that the AP-AICH shall use.

[FDD-CD/CA-ICH]: When a CD/CA-ICH is present Node B reconfigures the indicated CD/CA-ICH.

If the COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST message includes the *CD/CA-AICH Power* IE, the Node B shall reconfigure the power that the CD/CA-AICH shall use.

After a successful procedure, the channels have adopted the new configuration in Node B. Node B shall store the new value of *Configuration Generation ID* IE, and the Node B shall respond with the COMMON TRANSPORT CHANNEL RECONFIGURATION RESPONSE message.

8.2.3 Common Transport Channel Delete

8.2.3.1 General

This procedure is used for deleting common physical channels and common transport channels setup by the Common Transport Channel Setup procedure in a cell.

8.2.3.2 Successful Operation

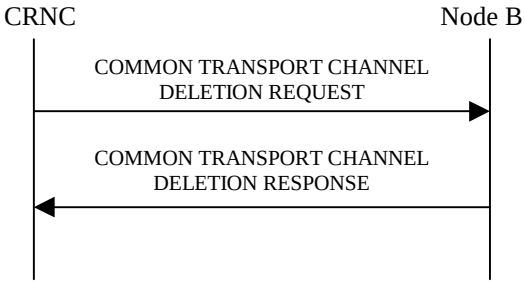

Figure 5: Common Transport Channel Deletion procedure, successful case

The procedure is initiated with a COMMON TRANSPORT CHANNEL DELETION REQUEST message sent from the CRNC to the Node B.

Secondary CCPCH: When the COMMON TRANSPORT CHANNEL DELETION REQUEST message contains a Secondary CCPCH, Node B shall delete the indicated channel and the FACHes and PCH supported by that Secondary CCPCH. If there is a PCH that is deleted, the PICH associated with that PCH shall also be deleted.

PRACH: When the COMMON TRANSPORT CHANNEL DELETION REQUEST message contains a PRACH, Node B shall delete the indicated channel and the RACH supported by the PRACH. [FDD- The AICH associated with the PCH shall also be deleted.]

[TDD- If the requested common physical channel is a part of a CCTrCH, all common transport channels and all common physical channels associated with this CCTrCH shall be deleted.]

[FDD – PCPCHes]: When the COMMON TRANSPORT CHANNEL DELETION REQUEST message contains one of PCPCHes for a CPCH, Node B shall delete all PCPCHes associated with the indicated channel and the CPCH supported by the PCPCHes. The AP-AICH and CD/CA-ICH associated with the PCH shall also be deleted.]

After a successful procedure, the channels are deleted in Node B. Node B shall store the new value of the *Configuration Generation ID* IE, and respond with the COMMON TRANSPORT CHANNEL DELETION RESPONSE message.

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8.2.7 Audit

8.2.7.1 General

This procedure is executed by the CRNC to perform an audit of the configuration and status of the logical resources in the Node B. Additionally, the audit may cause the CRNC and Node B to re-sync to the logical resources known by the CRNC and to the status information from the Node B.

8.2.7.2 Successful Operation

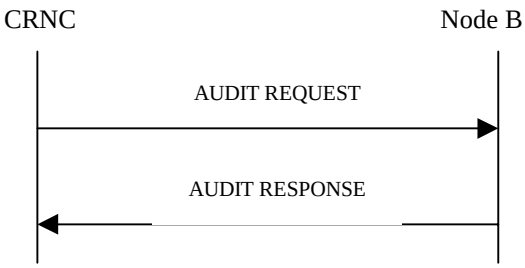

Figure 10: Audit procedure, Successful case

The procedure is initiated with an AUDIT REQUEST message sent from the CRNC to the Node B. The configuration returned by the NodeB in the AUDIT RESPONSE shall be the configuration existing upon reception of the AUDIT REQUEST. Upon reception by the Node B, with each pair of *C-ID* IE *Configuration Generation ID* IE that is present in the message, the Node B compares the stored Configuration Generation ID for the corresponding cell.
For each cell where the *Configuration Generation ID* IE value does not match the stored Configuration Generation ID value, the Node B shall not take any action.
For each cell where the *Configuration Generation ID* IE value matches the stored Configuration Generation ID value, the Node B shall include the *Cell Information* IE group for that cell in the AUDIT RESPONSE message.
The following condition applies to the Primary SCH *Information* IE group, Secondary SCH *Information* IE group, Primary CCPCH *Information* IE group, Secondary CCPCH *Information* IE group, Primary CPICH *Information* IE group, Secondary CPICH *Information* IE group, *BCH Information* IE group, *PCH Information* IE group, *PICH Information* IE group, *FACH Information* IE group, *CPCH Information* IE group, *RACH Information* IE group, *AICH Information* IE group, *AP-AICH Information* IE group and *CD/CA-ICH Information* IE group. The Node B shall include the IE group within the *Cell Information* IE group, if that resource is present in the Node B for that cell.
The Node B shall include in the AUDIT RESPONSE message a *Communication Control Port Information* IE group for each communication control port present in the Node B
The Node B shall include in the AUDIT RESPONSE message a *Local Cell Information* IE group for each local cell present in the Node B. The Node B shall include the *Number Of Channel Elements* IE if the value is known by the Node B. The Node B shall include the *Maximum DL Power Capability* IE if the value is known by the Node B.
For each cell existing in the Node B but not indicated in the AUDIT REQUEST message, the associated cell configuration information shall be removed from the Node B including any related common physical channels and common transport channels. For each cell not existing in the Node B but indicated in the AUDIT REQUEST message, the Node B shall not take any action.
Upon reception by the CRNC of the AUDIT RESPONSE message, the CRNC compares the received list of C-ID with the expected list of C-IDs.
For each missing cell, a configuration error has occurred and recovery actions should be taken by the CRNC.

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9.1.2 COMMON TRANSPORT CHANNEL SETUP REQUEST

9.1.2.1 FDD Message

Information Element	Presence	Range	IE type and reference	Semantics description
Message Discriminator	M			
Message Type	M			
Transaction ID	M			
C-ID	M			
Configuration Generation ID	M			
CHOICE *common physical channel to be configured*				
Secondary CCPCH				
Secondary CCPCH		*1*		
Common Physical Channel ID	M			
FDD S-CCPCH Offset	M			Corresponds to 25.211: $_{S\text{-}CCPCH,k}$
DL Scrambling Code	M			
FDD DL Channelisation Code Number	M			
TFCS	M			For the DL.
Secondary CCPCH Slot Format	M			
Pilot Bits Used Indicator	M			
Multiplexing Position	M			
STTD Indicator	M			
FACH Parameters	C-choiceCh	*0..<maxnoofFACHs>*		
Common transport channel ID	M			
Transport Format Set	M			For the DL.
ToAWS	M			
ToAWE	M			
Max FACH Power	M		DL Power	Maximum allowed power on the FACH.
PCH Parameters	C-choiceCh	*0..1*		
Common Transport Channel ID	M			
Transport Format Set	M			For the DL.
ToAWS	M			
ToAWE	M			
PCH Power	M		DL Power	
PICH Parameters		*1*		
Common Physical Channel ID	M			
DL Scrambling Code	M			
FDD DL Channelisation Code Number	M			
PICH Power	M		DL Power	Power to be used on the PICH.
PICH Mode	M			Number of PI per frame
STTD Indicator	M			
PRACH				
PRACH		*1*		
Common Physical Channel ID	M			

Scrambling Code Word Number	M			
TFCS	M			For the UL.
Preamble Signatures	M			
Allowed Slot Format Information		*1..<maxSF>*		
RACH Slot Format	M			
RACH Sub Channel Numbers	M			
Puncture Limit	M			For the UL
RACH Parameters		*1*		
Common Transport Channel ID	M			
Transport Format Set	M			For the UL.
AICH Parameters		*1*		
Common Physical Channel ID	M			
DL Scrambling Code	M			
AICH Transmission Timing	M			
FDD DL Channelisation Code Number	M			
AICH Power	M		DL Power	
STTD Indicator	M			
PCPCHes				
PCPCHes		*1*		
AP Preamble Scrambling Code	M		AP Preamble Scrambling Code	
CD Preamble Scrambling Code	M		CD Preamble Scrambling Code	
CD Sub Channel Numbers	C-CDSig		CD Sub Channel Numbers	
CD Signatures	O		Preamble Signatures	
Puncture Limit	M		UL Puncture Limit	For the UL
CPCH UL DPCCH Slot Format	M		UL DPCCH Slot Format	For UL CPCH message control part
PC Preamble Slot Format	M		PC Preamble Slot Format	
CPCH DL DPCCH Slot Format	M		CPCH DL DPCCH Slot Format	For DL CPCH message contol part
Initial DL transmission Power	M		DL Power	
Maximum DL Power	M		DL Power	
Minimum DL Power	M		DL Power	
PO1	M		Power Offset	Power offset for the TFCI bits
PO2	M		Power Offset	Power offset for the TPC bits
PO3	M		Power Offset	Power offset for the pilot bits

N_Start_Message	M		N_Start_Message	
Channel Assignment Indication	M		Channel Assignment Indication	
CPCH Parameters		*1*		
Common Transport Channel ID	M		Common Transport Channel ID	
Transport Format Set	M		Transport Format Set	For the UL.
PCPCH Channel Info		*1..<maxnoofPCPCHs>*		
Common Physical Channel ID	M		Common Physical Channel ID	
UL Scrambling Code	M		UL Scrambling Code	For UL PCPCH
DL Scrambling Code	O		DL Scrambling Code	For DL CPCH message part
DL Channelisation Code	M		FDD DL Channelisation Code Number	For DL CPCH message part
PCP Length	M		PCP Length	
UCSM Info	C-NCA			
Min UL Channelisation Code Length	M		Min UL Channelisation Code Length	
NF_max	M		NF_max	
Channel Request Parameters		*0..<maxAPSigNum>*		
AP Preamble Signature	M		Preamble Signatures	
AP Sub Channel Number	O		AP Sub Channel Number	
VCAM Mapping Info	C-CA	*1..<maxnoofLen>*		Refer to TS 25.331
Min UL Channelisation Code Length	M		Min UL Channelisation Code Length	
NF_max	M		NF_max	
Max Number of PCPCHes	M		Max Number of PCPCHes	
SF Request Parameters		*1..<maxAPSigNum>*		
AP Preamble Signature	M		Preamble Signatures	
AP Sub Channel Number	O		AP Sub Channel Number	
AP-AICH Parameters		*1*		
Common Physical Channel ID	M		Common Physical	

			Channel ID	
DL Scrambling Code	M		DL Scrambling Code	
FDD DL Channelisation Code Number	M		FDD DL Channelisation Code Number	
AP-AICH Power	M		DL Power	
STTD Indicator	O		STTD Indicator	
CD/CA-ICH Parameters		*1*		
Common Physical Channel ID	M		Common Physical Channel ID	
DL Scrambling Code	M		DL Scrambling Code	
FDD DL Channelisation Code Number	M		FDD DL Channelisation Code Number	
CD/CA-ICH Power	M		DL Power	
STTD Indicator	O		STTD Indicator	

Condition	Explanation
ChoiceCh	One of the channels FACH or PCH or both must be present.
CDSig	The IE may be present if the CD Signatures is present.
CA	The IE must be present if the Channel Assignment Indication is set to 'Active'.
NCA	The IE must be present if the Channel Assignment Indication is set to 'Inactive'.

Range bound	Explanation
MaxnoofFACHs	Maximum number of FACHs that can be defined on a Secondary CCPCH.
MaxnoofPCPCHs	Maximum number of PCPCHs for a CPCH set
MaxnoofLen	Maximum number of Min UL Channelisation Code Lengths
MaxSF	Maximum number of SF for a PRACH
MaxAPSigNum	Maximum number of AP Signatures.

9.1.3 COMMON TRANSPORT CHANNEL SETUP RESPONSE

Information Element	Presence	Range	IE type and reference	Semantics description
Message Discriminator	M			
Message Type	M			
Transaction ID	M			
CHOICE *common transport channel configured*				
FACH				
FACH Parameters	C-choiceCh	*0..<maxnoofFACHs>*		
Common Transport Channel ID	M			
Binding ID	M			
Transport layer address	M			
PCH				
PCH Parameters	C-choiceCh	*0..1*		
Common transport channel ID	M			
Binding ID	M			
Transport layer address	M			
RACH				
RACH parameters		*1*		
Common transport channel ID	M			
Binding ID	M			
Transport layer address	M			
CPCH				
CPCH parameters		*1*		
Common transport channel ID	M		Common transport channel ID	
Binding ID	M		Binding ID	
Transport layer address	M		Transport layer address	
Criticality Diagnostics	O			

Condition	Explanation
ChoiceCh	One of the channels FACH or PCH or both must be present.

Range bound	Explanation
MaxnoofFACHs	Maximum number of FACHs that can be defined on a Secondary CCPCH[FDD] / a group of Secondary CCPCHs [TDD].

9.1.5 COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST

9.1.5.1 FDD Message

Information Element	Presence	Range	IE type and reference	Semantics description
Message Discriminator	M			
Message Type	M			
Transaction ID	M			
C-ID	M			
Configuration Generation ID	M			
FACH parameters		*0..<maxFACHCell>*		
Common Transport Channel ID	M			
Max FACH Power	O		DL Power	Maximum allowed power on the FACH.
ToAWS	O			
ToAWE	O			
PCH Parameters		*0..1*		
Common Transport Channel ID	M			
PCH Power	O		DL Power	Power to be used on the PCH.
ToAWS	O			
ToAWE	O			
PICH Parameters		*0..1*		
Common Physical Channel ID	M			
PICH Power	M		DL Power	Power to be used on the PICH.
PRACH Parameters		*0..<maxnoofPRACHs>*		
Common Physical Channel ID	M			
Preamble Signatures	M			
Allowed Slot Format Information		*0..<maxSF>*		
Slot Format	M			
RACH Sub Channel Numbers	O			
AICH Parameters		*0..<maxnoofPRACHs>*		
Common Physical Channel ID	M			
AICH Power	M		DL Power	Power to be used on the AICH.
CPCH Parameters		*0..<maxnoofCPCHs>*		
Common Transport Channel ID	M		Common Transport Channel ID	
Initial DL transmission Power	O		DL Power	
Maximum DL Power	O		DL Power	
Minimum DL Power	O		DL Power	
AP-AICH Parameters		*0..<maxnoofCPCHs>*		
Common Physical Channel ID	M		Common Physical Channel ID	
AP-AICH Power	M		DL Power	
CD/CA-ICH Parameters		*0..<maxnoofCP*		

		CHs>		
Common Physical Channel ID	M		Common Physical Channel ID	
CD/CA-ICH Power	M		DL Power	

Range bound	Explanation
MaxFACHCell	Maximum number of FACHs that can be defined in a Cell
MaxnoofCPCHs	Maximum number of CPCHes that can be defined in a Cell
MaxnoofPRACHs	Maximum number of PRACHs and AICHe that can be defined in a Cell
MaxSF	Maximum number of SF for a PRACH

9.1.16 AUDIT RESPONSE

Information Element	Presence	Range	IE type and reference	Semantics description
Message Discriminator	M			
Message Type	M			
Transaction ID	M			
Cell Information		*0.. <maxUCIDinNodeB>*		
C-ID	M			
Resource Operational State	M			
Availability Status	M			
Maximum DL Power Capability	FFS			
Minimum Spreading Factor	FFS			

Primary SCH Information		*0..1*		
Common Physical Channel ID	M			
Resource Operational State	M			
Availability Status	M			
Secondary SCH Information		*0..1*		
Common Physical Channel ID	M			
Resource Operational State	M			
Availability Status	M			
Primary CPICH Information		*0..1*		
Common Physical Channel ID	M			
Resource Operational State	M			
Availability Status	M			
Secondary CPICH Information		*0..<maxSCPICHCell>*		
Common Physical Channel ID	M			
Resource Operational State	M			
Availability Status	M			
Primary CCPCH Information		*0..1*		
Common Physical Channel ID	M			
Resource Operational State	M			
Availability Status	M			
BCH Information		*0..1*		
Common Transport Channel ID	M			
Resource Operational State	M			
Availability Status	M			
Secondary CCPCH Information		*0..<maxSCCPCHCell>*		
Common Physical Channel ID	M			
Resource Operational State	M			
Availability Status	M			
PCH Information		*0..<maxPCHCell >*		
Common Transport Channel ID	M			
Resource Operational State	M			
Availability Status	M			
PICH Information		*0..1*		
Common Physical Channel ID	M			
Resource Operational State	M			
Availability Status	M			
FACH Information		*0..<maxFACHCell>*		
Common Transport Channel ID	M			
Resource Operational	M			

State				
Availability Status	M			
PRACH Information		*0..<maxPRACHCell>*		
Common Physical Channel ID	M			
Resource Operational State	M			
Availability Status	M			
RACH Information		*0..<maxRACHCell>*		
Common Transport Channel ID	M			
Resource Operational State	M			
Availability Status	M			
AICH Information		*0..<maxRACHCell>*		
Common Physical Channel ID	M			
Resource Operational State	M			
Availability Status	M			
PCPCH Information		*0..<maxPCPCHCell>*		
Common Physical Channel ID	M		Common Physical Channel ID	
Resource Operational State	M		Resource Operational State	
Availability Status	M		Availability Status	
CPCH Information		*0..<maxCPCHCell>*		
Common Transport Channel ID	M		Common Transport Channel ID	
Resource Operational State	M		Resource Operational State	
Availability Status	M		Availability Status	
AP-AICH Information		*0..<maxCPCHCell>*		
Common Physical Channel ID	M		Common Physical Channel ID	
Resource Operational State	M		Resource Operational State	
Availability Status	M		Availability Status	
CD/CA-ICH Information		*0..<maxCPCHCell>*		
Common Physical Channel ID	M		Common Physical Channel ID	
Resource Operational State	M		Resource Operational	

			State	
Availability Status	M		Availability Status	
SCH Information		0..1		
Common Transport Channel ID	M			
Resource Operational State	M			
Availability Status	M			
PSCH Information		0..1		
Common Physical Channel ID	M			
Resource Operational State	M			
Availability Status	M			
Communication Control Port Information		*0.. <maxCCPinNodeB>*		
Communication Control Port ID	M			
Resource Operational State	M			
Availability Status	M			
Local Cell Information		*0.. <maxLocalCellinNodeB>*		
Local Cell ID	M			
Number of Channel Elements	O			
Maximum DL Power Capability	O			
Criticality diagnostics	O			

Range bound	Explanation
MaxCellinNodeB	Maximum number of Cell that can be configured in Node B
MaxCCPinNodeB	Maximum number of communication control ports that can exist in the Node B
MaxCPCHCell	Maximum number of CPCHes that can be defined in a Cell
MaxLocalCellinNodeB	Maximum number of Local Cells that can exist in the Node B
MaxSCPICHCell	Maximum number of Secondary CPICH that can be defined in a Cell.
MaxSCCPCHCell	Maximum number of Secondary CCPCH that can be defined in a Cell.
MaxFACHCell	Maximum number of FACHes that can be defined in a Cell
MaxRACHCell	Maximum number of RACHes that can be defined in a Cell
MaxPCHCell	Maximum number of PCHes that can be defined in a Cell
MaxPCPCHCell	Maximum number of PCPCHes that can be defined in a Cell
MaxPICHCell	Maximum number of PICHes that can be defined in a Cell

9.1.17 COMMON MEASUREMENT INITIATION REQUEST

Information Element	Presence	Range	IE Type and Reference	Semantics Description
Message Discriminator	M			
Message Type	M			
Transaction Id	M			
Measurement Id	M			
Common Measurement Object Type	M			
CHOICE Common *Measurement Object Type*				
"Cell"				
C-ID	M			
Time Slot	O			TDD only
"RACH"				
C-ID	M			
“CPCH”				FDD only
C-ID	M		C-ID	
Common transport channel ID	M			
Common Measurement Type	M			
Measurement Characteristics	M			
Report Characteristics	M			

9.1.18 COMMON MEASUREMENT INITIATION RESPONSE

Information Element	Presence	Range	IE Type and Reference	Semantics Description
Message Discriminator	M			
Message Type	M			
Transaction Id	M			
Measurement Id	M			
CHOICE Common *Measurement Object Type*				
"Cell"				
Common Measurement value	M			
"RACH"				
Common Measurement Value	M			
“CPCH”				FDD only
Common Measurement Value	M		Common Measurement Value	
SFN	O			Common Measurement Time Reference
Criticality Diagnostics	O			

9.1.19 COMMON MEASUREMENT INITIATION FAILURE

Information Element	Presence	Range	IE Type and Reference	Semantics Description
Message Discriminator	M			
Message Type	M			
Transaction Id	M			
Measurement Id	M			
Cause	M			
Criticality diagnostics	O			

9.1.20 COMMON MEASUREMENT REPORT

Information Element	Presence	Range	IE Type and Reference	Semantics Description
Message Discriminator	M			
Message Type	M			
Transaction Id	M			
Measurement Id	M			
CHOICE Common *Measurement Object Type*				
"Cell"				
Common Measurement value	M			
"RACH"				
Common Measurement Value	M			
“CPCH”				FDD only
Common Measurement Value	M		Common Measurement Value	
SFN	O			Common Measurement Time Reference

9.1.31 RESOURCE STATUS INDICATION

Information Element	Presence	Range	IE type and reference	Semantics description
Message Discriminator	M			
Message Type	M			
Transaction ID	M			
Indication Type	M			
CHOICE Indication Type				
"No Failure"				
Local Cell Information		*1.. <max LocalCellinNodeB >*		
Local Cell ID	M			
Add/Delete Indicator	M			
Number of Channel Elements	M			
Maximum DL Power Capability	M			
"Service Impacting"				
Local Cell Information		*0.. <maxLocalCellinNodeB>*		
Local Cell ID	M			
Number of Channel Elements	O			
Maximum DL Power Capability	O			
Communication Control Port Information		*0.. <maxCCPinNodeB>*		
Communication Control Port ID	M			
Resource Operational State	M			
Availability Status	M			
Cell Information		*0.. <maxCellinNodeB>*		
C-ID	M			
Resource Operational State	M			
Availability Status	M			
Maximum DL Power Capability	FFS			
Minimum Spreading Factor	FFS			
Primary SCH Information		*0..1*		
Common Physical Channel ID	M			
Resource Operational State	M			
Availability Status	M			
Secondary SCH Information		*0..1*		
Common Physical Channel ID	M			
Resource Operational State	M			

Availability Status	M			
Primary CPICH Information		*0..1*		
Common Physical Channel ID	M			
Resource Operational State	M			
Availability Status	M			
Secondary CPICH Information		*0..<maxSCPICHCell>*		
Common Physical Channel ID	M			
Resource Operational State	M			
Availability Status	M			
Primary CCPCH Information		*0..1*		
Common Physical Channel ID	M			
Resource Operational State	M			
Availability Status	M			
BCH Information		*0.. 1*		
Common Transport Channel ID	M			
Resource Operational State	M			
Availability Status	M			
Secondary CCPCH Information		*0..<maxSCCPCHCell>*		
Common Physical Channel ID	M			
Resource Operational State	M			
Availability Status	M			
PCH Information		*0..<maxPCHCell>*		
Common Transport Channel ID	M			
Resource Operational State	M			
Availability Status	M			
PICH Information		*0..1*		
Common Physical Channel ID	M			
Resource Operational State	M			
Availability Status	M			
FACH Information		*0.. <maxFACHCell>*		
Common Transport Channel ID	M			
Resource Operational State	M			
Availability Status	M			
PRACH Information		*0..<maxPRACHCell>*		
Common Physical Channel ID	M			

Resource Operational State	M			
Availability Status	M			
RACH Information		*0.. <maxPRACHCell>*		
Common Transport Channel ID	M			
Resource Operational State	M			
Availability Status	M			
AICH Information		*0.. <maxPRACHCell>*		
Common Physical Channel ID	M			
Resource Operational State	M			
Availability Status	M			
PCPCH Information		*0..<maxPCPCHCell>*		
Common Physical Channel ID	M		Common Physical Channel ID	
Resource Operational State	M		Resource Operational State	
Availability Status	M		Availability Status	
CPCH Information		*0.. <maxCPCHCell>*		
Common Transport Channel ID	M		Common Transport Channel ID	
Resource Operational State	M		Resource Operational State	
Availability Status	M		Availability Status	
AP-AICH Information		*0.. <maxCPCHCell>*		
Common Physical Channel ID	M		Common Physical Channel ID	
Resource Operational State	M		Resource Operational State	
Availability Status	M		Availability Status	
CD/CA-ICH Information		*0.. <maxCPCHCell>*		
Common Physical Channel ID	M		Common Physical Channel ID	
Resource Operational State	M		Resource Operational State	
Availability Status	M		Availability Status	
SCH Information		0..1		
Common Transport Channel ID	M			
Resource Operational	M			

State				
Availability Status	M			
PSCH Information		0..1		
Common Physical Channel ID	M			
Resource Operational State	M			
Availability Status	M			
Cause	O			

Range bound	Explanation
MaxLocalCellinNodeB	Maximum number of Local Cells that can exist in the Node B
MaxCellinNodeB	Maximum number of C ID that can be configured in Node B
MaxCPCHCell	Maximum number of CPCHes that can be defined in a Cell
MaxSCPICHCell	Maximum number of Secondary CPICH that can be defined in a Cell.
MaxSCCPCHCell	Maximum number of Secondary CCPCH that can be defined in a Cell.
MaxFACHCell	Maximum number of FACHes that can be defined in a Cell
MaxPCHCell	Maximum number of PCHes that can be defined in a Cell
MaxPCPCHCell	Maximum number of PCPCHes that can be defined in a Cell
MaxPRACHCell	Maximum number of PRACHes and AICHes that can be defined in a Cell
MaxCCPinNodeB	Maximum number of communication control ports that can exist in the Node B

9.2 Information Element Functional Definition and Contents

9.2.1 Common parameters

9.2.1.9 Common Measurement Object Type

The Common Measurement Object type indicates the type of object that the measurement is to be performed on.

Information Element / Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common Measurement Object Type			ENUMERATED (CELL, RACH, CPCH…)	

9.2.1.10 Common Measurement Type

The Common Measurement Type identifies which measurement that shall be performed.

Information Element / Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common Measurement Type			ENUMERATED (RSSI, Transmitted Carrier Power, Acknowledged RA tries, Timeslot ISCP)	

9.2.1.11 Common Measurement Value

The Common Measurement Value shall be the most recent value for this measurement, for which the reporting criteria were met.

Information Element / Group Name	Presence	Range	IE Type and Reference	Semantics Description
Transmitted Carrier Power Value	O		Enumerated(-35 .. 15), step 0.1 dB	
RSSI Value	O		Enumerated(-30..-100) step 0.1	
Acknowledged RA tries Value	O		TBD	The number of L1 acknowledged random access tries per transmission time interval on the PCCPCH.
Timeslot ISCP (TDD only)	O		TBD	

<Editors Note: Some adjustment of the ranges for these measurements might be needed as they await a decision on range for this measurement in TSG RAN WG1>

9.2.2 FDD specific parameters

9.2.2.1 AICH Transmission Timing

Information Element/Group Name	Presence	Range	IE type and reference	Semantics description
AICH Transmission Timing			ENUMERATED (0, 1)	According to 25.331 chapter 10.2.6.17.

9.2.2.x AP Preamble Scrambling Code

Information Element/Group Name	Presence	Range	IE type and reference	Semantics description
AP Preamble Scrambling Code	M		INTEGER (0..255)	Described in TS 25.213

9.2.2.x AP Preamble Sub Channel Number

Information Element/Group Name	Presence	Range	IE type and reference	Semantics description
AP Preamble Sub Channel Number	M		ENUMERATED (0, 1, 2,..11)	Described in TS 25.214

9.2.2.x CD Preamble Scrambling Code

Information Element/Group Name	Presence	Range	IE type and reference	Semantics description
CD Preamble Scrambling Code	M		INTEGER (0..2^{24}-1)	Described in TS 25.213

9.2.2.x CD Sub Channel Numbers

Information Element/Group Name	Presence	Range	IE type and reference	Semantics description
CD Sub Channel Numbers	M		BIT STRING (12)	Bit 0=Sub Channel Number 0 Bit 1=Sub Channel Number 1 … Bit 11=Sub Channel Number 11 [25.214]

9.2.2.x Channel Assingment Indication

The Channel Assingment Indication indicates if Channel Assingment is Active or Inactive.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Channel Assingment Indication	M		ENUMERATED (Active, Inactive)	

9.2.2.2 Chip Offset

The Chip Offset is defined as the radio timing offset inside a radio frame. The Chip offset is used as offset for the DL DPCH relative to the Primary CPICH timing.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Chip Offset			INTEGER (0..38399)	Chips

9.2.2.3 Compressed mode method

Defines the method for generating the downlink compressed mode gap, as described in 25.212.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Compressed Mode Method			ENUMERATED (None, Puncturing, SF/2, gating)	None = restore the normal mode

9.2.2.x CPCH DL DPCCH Slot Format

Indicates the slot format used in CPCH message control part in DL, accordingly to 25.211

IE/Group Name	Presence	Range	IE type and reference	Semantics description
CPCH DL DPCCH slot format	M		INTEGER (0,1)	

9.2.2.x CPCH Set ID

The CPCH Set ID is a temporary ID for CPCH Set assigned to a cell.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
CPCH Set ID	M		INTEGER (0…255)	

9.2.2.4 D-Field Length

Defines the D Field size of the UL DPCCH slot.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
D Field Length			ENUMERATED (1, 2)	

9.2.2.5 Diversity Control Field

The Diversity Control Field indicates if the current RL may, must or must not be combined with the already existing RLs.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Diversity Control Field			ENUMERATED(May, Must, Must not)	

9.2.2.6 Diversity Indication

The Diversity Indication indicates if the RL has been or has not been combined with another RL.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Diversity Indication			ENUMERATED (Combined, not combined)	

9.2.2.7 Diversity mode

Define the diversity mode to be applied.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Diversity Mode			ENUMERATED(None, STTD, Closed loop mode 1, Closed loop mode2)	

9.2.2.8 DL DPCH Slot Format

Indicates the slot format used in DPCH in DL, accordingly to 25.211.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
DL DPCH slot format			INTEGER (0..16)	

9.2.2.9 DL frame type

This parameter defines if frame structure type 'A' or 'B' shall be used in downlink compressed mode. This is defined in TS 25.212

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Downlink Frame Type			ENUMERATED (TypeA, TypeB)	

9.2.2.10 DL Scrambling Code

DL scrambling code to be used by the RL. One cell may have multiple DL scrambling codes available.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
DL Scrambling Code			INTEGER (0..15)	0= Primary scrambling code of the cell 1…15= Secondary scrambling code

9.2.2.11 Multiplexing Position

Multiplexing Position specifies whether fixed or flexible positions of transport channels shall be used in the physical channel.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Multiplexing Position			ENUMERATED(Fixed, Flexible)	

9.2.2.12 FDD DL Channelisation Code Number

The DL Channelisation Code Number indicates the DL Channelisation Code number for a specific DL physical channel.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
FDD DL ChannalisationCode Number			INTEGER(0.. 255)	The maximum value is equal to the DL spreading factor –1

9.2.2.13 FDD S-CCPCH Offset

The Secondary CCPCH offset is defined as the time offset towards the Primary CCPCH in the cell. The offset is a multiple of 256 chips.

Information Element/Group Name	Presence	Range	IE type and reference	Semantics description
FDD S-CCPCH Offset			INTEGER(0.. 149)	0: 0 chip 1: 256 chip 2: 512 chip .. 149: 38144 chip [TS 25.211]

9.2.2.14 Gap Period

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Gap Period			INTEGER(0. .255)	Frames

9.2.2.15 Gap Position Mode

The gap position can be fixed or adjustable, as defined in TS 25.212.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Gap Position Mode			ENUMERATED (Fixed, Flexible)	

9.2.2.16 Maximum Number of UL DPDCHs

This parameter is an UE Radio Access Capability parameter which is needed in rate matching algorithm.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Max Number of UL DPDCHs			INTEGER (1..6)	

9.2.2.x Max Number of PCPCHes

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Max Number of PCPCHes	M		ENUMERATED(1..64)	

9.2.2.17 Minimum UL Channelisation Code Length

Minimum UL channelisation code length (spreading factor) of a DPDCH which is supported by UE. Needed by rate matching algorithm.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Min UL Channelisation Code length			ENUMERATED(4,8,16, 32,64,128, 256)	

9.2.2.x NF_max

The NF_max is defined as maximum number of Frame in a PCPCH message data part.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
NF_max	M		INTEGER (1..64)	

9.2.2.x N_Start_Message

The N_Start_Message is defined as number of Frames for start message of DL DPDCHes for PCPCHes in a CPCH set.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
N_Start_Message	M		INTEGER (1..8)	

9.2.2.18 Pattern Duration (PD)

IE/Group Name	Presence	Range	IE type and reference	Semantics description
PD			INTEGER(0. .2047, …)	Frames

9.2.2.x PCP Length

Indicates CPCH power control preamble length.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
PCP Length	M		ENUMERATED(0,8)	

9.2.2.x PC Preamble Slot Format

Indicates the slot format used in CPCH power control preamble part in UL, accordingly to 25.211

IE/Group Name	Presence	Range	IE type and reference	Semantics description
PC Preamble Slot Format	M		INTEGER (0..1)	

9.2.2.19 PICH Mode

The number of paging indicators (PIs) in a PICH frame.

Information Element/Group Name	Presence	Range	IE type and reference	Semantics description
PICH Mode			Enumerated(18, 36, 72, 144)	Number of PI per frame

9.2.2.20 Pilot Bits Used Indicator

Information Element/Group Name	Presence	Range	IE type and reference	Semantics description
Pilot Bits Used Indicator			ENUMERATED(Pilot Bits Used, Pilot Bits not Used)	

9.2.2.21 Power Control Mode

Power Control Mode specifies the uplink power mode applied during recovery period after each transmission gap in compressed mode. PCM can take 2 values (0 or 1). The different power control modes are described in TS 25.214.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Power Control Mode			ENUMERATED (0, 1,..)	

9.2.2.22 Power Offset

This IE defines a power offset respect the Downlink transmission power of a DPCH.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Power Offset			INTEGER (0…24)	Step 0.25 dB, range 0-6 dB

9.2.2.23 Power Resume Mode

Power Resume Mode selects the uplink power control method to calculate the initial transmit power after the gap. PRM can take two values (0 or 1) and is described in TS 25.214.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Power Resume Mode			ENUMERATED (0, 1,..)	Described in TS 25.214

9.2.2.24 Preamble Signatures

Information Element/Group Name	Presence	Range	IE type and reference	Semantics description
Preamble Signatures			BIT STRING (16)	Bit 0=P0 Bit 1=P1 .. Bit 15=P15 [25.213]

9.2.2.25 Primary Scrambling code

The Primary scrambling code to be used in the cell.

Information Element/Group Name	Presence	Range	IE type and reference	Semantics description
Primary Scrambling Code			Integer (0 .. 511)	

9.2.2.26 Primary CPICH Power

Primary CPICH power is the power that shall be used for transmitting the P-CPICH in a cell.

Information Element/Group Name	Presence	Range	IE type and reference	Semantics description
Primary CPICH power			Enumerated (-15, .., 40)	Unit dBm Granularity 0.1 dB

9.2.2.27 Propagation Delay

Propagation delay is the one-way propagation delay of the radio signal from the MS to the Node B.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Propagation Delay			INTEGER (0..255)	Chips. Step size is 3 chips. 0=0 chips, 1=3 chips, …

9.2.2.28 RACH Slot Format

Information Element/Group Name	Presence	Range	IE type and reference	Semantics description
RACH Slot Format			ENUMERATED(0..3)	See 25.211.

9.2.2.29 RACH sub Channel numbers

Information Element/Group Name	Presence	Range	IE type and reference	Semantics description
RACH Sub Channel Numbers			BIT STRING (15)	Bit 0=Sub Channel Number 0 Bit 1=Sub Channel Number 1 … Bit 14=Sub Channel Number 14

9.2.2.30 Scrambling code change

This parameter indicates whether the alternative scrambling code is used for compressed mode method 'SF/2'.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Scrambling Code Change			ENUMERATED (Change, No change)	

9.2.2.31 Scrambling Code Word Number

Information Element/Group Name	Presence	Range	IE type and reference	Semantics description
Scrambling Code Word Number			INTEGER (0..255)	

9.2.2.32 Secondary CCPCH Slot Format

Information Element/Group Name	Presence	Range	IE type and reference	Semantics description
Secondary CCPCH Slot Format			INTEGER(0..8)	

9.2.2.33 S-Field Length

The UE uses the S Field of the UL DPCCH slot to send the SSDT Cell ID to the network.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
S Field Length			ENUMERATED (1, 2)	

9.2.2.34 SSDT Cell Identity

The SSDT Cell ID is a temporary ID for SSDT assigned to a cell.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
SSDT Cell Identity			ENUMERATED (a, b.., h)	

9.2.2.35 SSDT Cell ID Length

The SSDT Cell ID Length parameter shows the length of the SSDT Cell ID.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Cell ID Length			ENUMERATED(Short, Medium, Long)	

9.2.2.36 SSDT Support Indicator

The SSDT Support Indicator indicates whether a RL supports SSDT or not.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
SSDT Support Indicator			ENUMERATED (SSDT Supported, SSDT not supported).	

9.2.2.37 SSDT Indication

The SSDT Indication indicates whether SSDT is in use by the UE or not.

Information Element/Group name	Presence	Range	IE type and reference	Semantics description
SSDT Indication			ENUMERATED(SSDT Active in the UE, SSDT not Active in the UE)	

9.2.2.38 STTD Indicator

Indicates if STTD shall be active or not.

Information Element/Group Name	Presence	Range	IE type and reference	Semantics description
STTD Indicator			ENUMERATED(active, inactive)	

9.2.2.39 T_Cell

Timing delay used for defining start of SCH, CPICH and the DL scrambling code(s) in a cell relative BFN. Resolution 256 chips.

Information Element/Group Name	Presence	Range	IE type and reference	Semantics description
T Cell			Enumerated (0 , 1, ..,9)	0: 0 chip 1: 256 chip

				.. 9: 2304 chip [TS 25.402]

9.2.2.40 TFCI signalling mode

This parameter indicates if the normal or split mode is used for the TFCI.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
TFCI signalling mode			ENUMERATED (Normal, Split)	

9.2.2.41 TGD

Transmission Gap Distance is the duration of transmission between two consecutive transmission gaps within a transmission gap period, expressed in number of frames. In case there is only one transmission gap in the transmission gap period, this parameter shall be set to zero.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
TGD			INTEGER(0..255)	Frames

9.2.2.42 TGL

Transmission Gap Length is the duration of no transmission, expressed in number of slots.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
TGL			INTEGER (3,4,7,10,14)	Slot

9.2.2.43 TPC DL step size

This parameter indicates step size for the DL power adjustment.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
TPC Downlink step size			ENUMERATED (0.5, 1)	

9.2.2.44 Transmit Diversity Indicator

Indicates if transmit diversity shall be active or not for primary and secondary CPICH.

Information Element/Group Name	Presence	Range	IE type and reference	Semantics description
Transmit Diversity Indicator			ENUMERATED(active, inactive)	

9.2.2.45 TSTD Indicator

Indicates if TSTD shall be active or not.

Information Element/Group Name	Presence	Range	IE type and reference	Semantics description
TSTD Indicator			ENUMERATED(active, inactive)	

9.2.2.46 UL/DL compressed mode selection:

This parameter specifies whether compressed mode is used in UL only, DL only or both UL and DL

IE/Group Name	Presence	Range	IE type and reference	Semantics description
UL/DL compressed mode selection			ENUMERATED (in UL only, DL only or both UL and DL)	

9.2.2.47 UL delta Eb/No

The delta in uplink Eb/No that shall be added to the Eb/No target used during compressed mode frames.

Information Element/Group Name	Presence	Range	IE type and reference	Semantics description
Uplink Delta Eb/No			Enumerated (-6..+10dB)	Step 0.1 dB.

9.2.2.48 UL delta Eb/No after

The delta in uplink Eb/No target that shall be added to the Eb/No target used one frame after the compressed mode frames.

Information Element/Group Name	Presence	Range	IE type and reference	Semantics description
Uplink Delta Eb/No after			Enumerated (-6..+10dB)	Step 0.1 dB.

9.2.2.49 UL DPCCH Slot Format

Indicates the slot format used in DPCCH in UL, accordingly to 25.211

IE/Group Name	Presence	Range	IE type and reference	Semantics description
UL DPCCH slot format			INTEGER (0..5)	

9.2.2.50 UL Eb/No Target

The UL Eb/No indicates a received UL Eb/No.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
UL Eb/No Target			INTEGER (0..255)	Resolution is 0.1 dB, range 0-25.5 dB.

9.2.2.x UL Puncture Limit

Puncture limit for Uplink common channels.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
UL Puncture Limit	M		INTEGER (0…100)	

9.2.2.51 UL Scrambling Code

The UL Scrambling Code is the scrambling code used by UE. Every UE has its specific UL Scrambling Code.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
UL scrambling code				
UL scrambling code number	M		INTEGER (0.. 2^{24}-1)	
UL scrambling code length	M		ENUMERATED(Short, Long)	

9.3.3 NBAP PDU Content Definitions

```
-- **************************************************************
--
-- PDU definitions for NBAP.
--
-- **************************************************************

NBAP-PDU-Contents -- { object identifier to be allocated }--
DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

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

IMPORTS
    AICH-InformationList,
    AICH-Parameters,
    AICH-Power,
    AICH-TransmissionTiming,
    AddOrDeleteIndicator,
    AP-Preamble-Scrambling-Code,
    AP-Preamble-Signaure,
    AP-Preamble-Sub-Channel-Number,
    Available-CD-Signatures
    AvailabilityStatus,
    BindingID,
    BlockingPriorityIndicator,
    BurstType,
    CCTrCH-ID,
    CDPreambleScramblingCode,
    CDSubChannelNumbers,
    CFN,
    CN-CSDomainIdentifier,
    CN-PSDomainIdentifier,
    CPCH-DL-DPCCH-slot-format,
    CPCH-Set-ID,
    CRNC-CommunicationContextID,
    Capacity-Info
    Cause,
    CellParameter,
    Cell-Parameter,
    Channel-Assignment-Indication,
    ChipOffset,
    CommonMeasurementObjectType,
    CommonMeasurementType,
    CommonPhysicalChannelID,
    CommonPhysicalChannelType,
    CommonTransportChannelID,
    CommonTransportChannelType,
    CommunicationControlPortID,
    CommunicationControlPortInformationList,
    CompressesModeMethod,
    ConfigurationGenerationID,
    DCH-CombinationIndication,
    DCH-Delete-RL-ReconfReqTDDItem,
    DCH-ID,
    DCH-InformationResponse-RL-setupResFDD,
    DCH-Modify-RL-ReconfPrepTDDItem,
    DL-CCTrCH-ID,
    DL-CodeInformation,
    DL-DPCH-InformationItem-RL-ReconfReqFDD,
```

DL-DPCH-SlotFormat,
DL-FrameType,
DL-Power,
DL-ReferencePower,
DL-ReferencePowerInformationItem,
DL-ScramblingCode,
DPCH-ID,
DPCH-Offset,
DSCH-ID,
DSCH-InformationResponse-RL-setupResFDD,
DSCH-ModifyList-RL-ReconfResp,
DSCH-SetupList-RL-ReconfResp,
DSCH-TransportFormatSet,
DTX-InsertionPoint,
DTX-InsertionPosition,
D-FieldLength,
DedicatedMeasurementType,
DedicatedMeasurementValue,
DeltaTPC,
DiversityControlField,
DiversityMode,
FACH-Power,
FDD-DL-ChannelisationCodeNumber,
FDD-SCCPCH-Offset,
FrameHandlingPriority,
FrameOffset,
FrequencyofAPattempt,
GapStartingSlotNumber,
LocalCellID,
LocalCellInformationList,
LocalCell-ID,
Local-CellID,
MIB-SG-POS,
MIB-SG-REP,
MaxFACH-Power,
MaxNrOfUL-DPDCHs,
MaxNumberofPCPCHes,
MaxNumberOfUL-DPDCHs,
MaximumDLPowerCapability,
MaximumDL-PowerCapability,
MaximumTransmissionPower,
MaximumUL-EbN0,
Maximum-DL-PowerCapability,
MeasuredCellInfo,
MeasurementCharacteristics,
MeasurementID,
MeasurementType,
MessagePartScramblingCode,
MidambleShift,
Midambleshift,
MinUL-ChannelisationCodeLength,
MinimumSpreadingFactor,
MinimumUL-EbN0,
NodeB-CommunicationContextID,
NF_max,
N_Start_Message,
NumberOfChannelElements,
Offset,
Occupancy,
PCCPCH-Power,
PCCPCH-TimeSloti,
PCH-Power,
PCP-Length,
PC-Premble-Slot-Format,
PICH-Information,
PICH-Power,
PSCH-Power,
PSCHandPCCPCH-Allocation,
PSCHandPCCPCH-TimeSlotK,
PUSCH,
PagingIndicatorLength,
PatternDuration,
PayloadCRC-PresenceIndicator,
PilotBitsUsedIndicator,
PowerControlMode,
PowerOffset,
PowerResumeMode,
PreambleScramblingCode,
PreambleSignatures,
PrimaryCPICH-Power,

```
    PrimarySCH-Power,
    PrimaryScramblingCode,
    Primary-ScramblingCode,
    PropagationDelay,
    PunctureLimit,
    RACH-SlotFormat,
    RACH-SubChannelNumbers,
    RLC-Mode,
    RL-ID,
    RL-Information,
    RL-InformationItem,
    RL-InformationItem-RL-SetupReqTDD,
    RL-InformationList-DMeasureRequest,
    RL-ReconfigurationFailure-RL-ReconfFailItem,
    RadioLinkInformation-RL-ReconfReqTDD,
    RepetitionLength,
    RepetitionPeriod,
    ReportCharacteristics,
    ResourceOperationState,
    ResourceOperationalState,
    SAI,
    SFN,
    SIB-SG-POS,
    SIB-SG-REP,
    SSDT-CellIdentity,
    SSDT-CellIdentityLength,
    SSDT-Cell-IDLength,
    SSDT-Indication,
    SSDT-SupportIndicator,
    STTD-Indicator,
    S-CCPCH-Offset,
    S-CCPCH-Power,
    S-FieldLength,
    ScramblingCode,
    ScramblingCodeChange,
    SecondaryCCPCH-SlotFormat,
    SecondaryCPICH-Power,
    SecondarySCH-Power,
    ShutdownTimer,
    SynchronisationMethod,
    TDDChipOffset,
    TDD-ChannelisationCode,
    TFCI-Presence,
    TFCI-SignallingMode,
    TFCS,
    TSTD-Indicator,
    T-Cell,
    TimeSlot,
    TimeSlotDirection,
    TimeSlotStatus,
    ToAWE,
    ToAWS,
    TransmissionGapDistance,
    TransmissionGapPeriod,
    TransmitGapLength,
    TransmitGapPositionMode,
    TransportFormatCombinationSet,
    TransportFormatSet,
    TransportLayerAddress,
    UARFCN,
    C-ID,
    UL-CCTrCHInformation,
    UL-CCTrCH-ID,
    UL-DPCCH-SlotFormat,
    UL-FP-Mode,
    UL-InterferenceLevel,
    UL-PunctureLimit,
    UL-ScramblingCode,
    UplinkEbNo
FROM NBAP-IEs

    ProtocolExtensionContainer{},
    PrivateExtensionContainer{},
    ProtocolIE-Container{},
    ProtocolIE-ContainerList{},
    NBAP-PROTOCOL-IES,
    NBAP-PROTOCOL-EXTENSION,
    NBAP-PRIVATE-EXTENSION
FROM NBAP-Containers
```

id-AICH-Information-ResourceStatIndItem,
id-AICH-ParametersList,
id-AICH-ParametersListItem,
id-AP-AICH-InformationItem-Audit-Res,
id-AP-AICH-Information-ResourceStatIndItem,
id-AllowedSlotFormatInformationListItem-CTCHreconf-Req-FDD,
id-AllowedSlotFormatInformationListItem-CTCHsetup-Req-FDD,
id-BlockingPriorityIndicator,
id-CCTrCH-ParametersList,
id-CCTrCH-ParametersListItem,
id-CD/CA-ICH-InformationItem-Audit-Res,
id-CD/CA-ICH-Information-ResourceStatIndItem,
id-CFN,
id-CPCH-InformationItem-Audit-Res,
id-CPCH-Information-ResourceStatIndItem,
id-CRNC-CommunicationContextID,
id-CRNCommunicationContextID,
id-Cause,
id-Cell-Information-ResourceStatIndItem,
id-Cell-InformationItem,
id-Cell-InformationList,
id-Cell-Parameter,
id-Cell-ParametersItem,
id-Cell-ParametersList,
id-CellParameter,
id-ChannelRequestParametersList-CTCHsetup-Req-FDD,
id-CommonMeasurementObjectType,
id-CommonMeasurementType,
id-CommonPhysicalChannelID,
id-CommonPhysicalChannelType-CTCHsetup-Req-FDD,
id-CommonPhysicalChannelType-CTCHsetup-Response,
id-CommunicationControlPort-InformationItem,
id-CommunicationControlPortID,
id-CommunicationControlPortInformation-ResourceStatIndItem,
id-CommunicationControlPortInformationList,
id-CompressesModeMethod,
id-ConfigurationGenerationID,
id-DCH-Add-RL-ReconfPrepFDDItem,
id-DCH-Add-RL-ReconfPrepTDDItem,
id-DCH-Add-RL-ReconfReadyItem,
id-DCH-Add-RL-ReconfReqFDDItem,
id-DCH-Add-RL-ReconfReqTDDItem,
id-DCH-AddItem-RL-ReconfResp,
id-DCH-AddList-RL-ReconfPrepFDD,
id-DCH-AddList-RL-ReconfPrepTDD,
id-DCH-AddList-RL-ReconfReqFDD,
id-DCH-AddList-RL-ReconfReqTDD,
id-DCH-Delete-RL-ReconfPrepFDDItem,
id-DCH-Delete-RL-ReconfPrepTDDItem,
id-DCH-Delete-RL-ReconfReqFDDItem,
id-DCH-Delete-RL-ReconfReqTDDItem,
id-DCH-DeleteList-RL-ReconfPrepFDD,
id-DCH-DeleteList-RL-ReconfPrepTDD,
id-DCH-DeleteList-RL-ReconfReqFDD,
id-DCH-DeleteList-RL-ReconfReqTDD,
id-DCH-Information-RL-SetupReqFDDItem,
id-DCH-Information-RL-SetupReqTDDItem,
id-DCH-InformationList-RL-SetupReqFDD,
id-DCH-InformationList-RL-SetupReqTDD,
id-DCH-InformationResponse-RL-SetupFailFDDItem,
id-DCH-InformationResponse-RL-setupResTDDItem,
id-DCH-InformationResponseItem,
id-DCH-Modify-RL-ReconfPrepFDDItem,
id-DCH-Modify-RL-ReconfPrepTDDItem,
id-DCH-Modify-RL-ReconfReadyItem,
id-DCH-Modify-RL-ReconfReqFDDItem,
id-DCH-Modify-RL-ReconfReqTDDItem,
id-DCH-ModifyItem-RL-ReconfResp,
id-DCH-ModifyList-RL-ReconfPrepFDD,
id-DCH-ModifyList-RL-ReconfPrepTDD,
id-DCH-ModifyList-RL-ReconfReqFDD,
id-DCH-ModifyList-RL-ReconfReqTDD,
id-DL-CCTrCH-Information-RL-ReconfPrepTDDItem,
id-DL-CCTrCH-Information-RL-ReconfReqTDDItem,
id-DL-CCTrCH-Information-RL-SetupReqTDDItem,
id-DL-CCTrCH-InformationItem,
id-DL-CCTrCH-InformationList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationList-RL-ReconfReqTDD,
id-DL-CCTrCH-InformationList-RL-SetupReqTDD,
id-DL-CCTrCHInformationItem,

id-DL-CCTrCHInformationList,
id-DL-CodeInformation,
id-DL-CodeInformation-RL-ReconfPrepFDDItem,
id-DL-CodeInformation-RL-SetupReqFDDItem,
id-DL-DPCH-Information-RL-ReconfPrepFDD,
id-DL-DPCH-Information-RL-ReconfPrepTDDItem,
id-DL-DPCH-Information-RL-SetupReqTDDItem,
id-DL-DPCH-InformationItem,
id-DL-DPCH-InformationItem-RL-ReconfReqFDD,
id-DL-DPCH-InformationItem-RL-SetupReqFDD,
id-DL-FrameType,
id-DL-ReferencePowerInformationItem,
id-DSCH-AddItem-RL-ReconfPrepFDD,
id-DSCH-AddItem-RL-ReconfReqFDD,
id-DSCH-DeleteItem-RL-ReconfPrepFDD,
id-DSCH-DeleteItem-RL-ReconfReqFDD,
id-DSCH-ID,
id-DSCH-Information-RL-SetupReqFDDItem,
id-DSCH-InformationList-RL-SetupReqFDD,
id-DSCH-InformationResponse-RL-SetupFailFDDItem,
id-DSCH-InformationResponse-RL-setupResFDDItem,
id-DSCH-ModifyItem-RL-ReconfPrepFDD,
id-DSCH-ModifyItem-RL-ReconfReqFDD,
id-DedicatedMeasurementObjectType,
id-DedicatedMeasurementType,
id-FACH-Information-ResourceStatIndItem,
id-FACH-InformationItem,
id-FACH-ListItem,
id-FACH-ParametersList-CTCHreconf-Req-FDD,
id-FACH-ParametersList-CTCHreconf-Req-TTD,
id-FACH-ParametersListItem-CTCHreconf-Req-FDD,
id-FACH-ParametersListItem-CTCHreconf-Req-TTD,
id-FACH-ParametersListItem-CTCHsetup-Req-FDD,
id-FACH-ParametersListItem-CTCHsetup-Response,
id-GapStartingSlotNumber,
id-IndicationType,
id-Local-Cell-Information-ResourceStatIndItem,
id-Local-CellInformation-ResourceStatIndItem,
id-LocalCell-ID,
id-LocalCell-InformationItem,
id-LocalCellInformationList,
id-MIB-SegmentInformationItem,
id-MIB-SegmentInformationList,
id-MaximumTransmissionPower,
id-MeasuredCellInfo,
id-MeasurementCharacteristics,
id-MeasurementID,
id-MeasurementType,
id-NeighbouringFDD-Cell-InformationItem,
id-NeighbouringTDD-Cell-InformationItem,
id-NodeB-CommunicationContextID,
id-PCCPCH-Information,
id-PCH-Information-ResourceStatIndItem,
id-PCH-InformationItem,
id-PCH-ListItem,
id-PCH-Parameters-CTCHreconf-Req-FDD,
id-PCH-ParametersList,
id-PCH-ParametersListItem,
id-PCPCH-InformationItem-Audit-Res
id-PCPCH-Information-ResourceStatIndItem,
id-PCPCHChannelInfoList-CTCHsetup-Req-FDD,
id-PCPCH-ParametersList-CTCHreconf-Req-FDD,
id-PICH-Parameters-CTCHreconf-Req-FDD,
id-PRACH-ParametersList,
id-PRACH-ParametersListItem,
id-PSCH-Information,
id-PSCHandPCCPCH-Information,
id-PUSCH-ListItem,
id-PatternDuration,
id-PowerControlMode,
id-PowerResumeMode,
id-PrimaryCCPCH-Information,
id-PrimaryCPICH-Information,
id-PrimarySCH-Information,
id-PrimaryScramblingCode,
id-ProcedureScopeType,
id-RACH-Information-ResourceStatIndItem,
id-RACH-InformationItem,
id-RL-ID,
id-RL-Information,

```
id-RL-Information-DMeasureReportItem,
id-RL-Information-DMeasureRequestItem,
id-RL-Information-DMeasureResponseItem,
id-RL-Information-RL-ReconfPrepFDDItem,
id-RL-Information-RL-SetupReqFDDItem,
id-RL-InformationItem,
id-RL-InformationItem-RL-SetupReqTDD,
id-RL-InformationList,
id-RL-InformationList-RL-ReconfReqFDD,
id-RL-InformationList-RL-SetupReqFDD,
id-RL-InformationResponse-RL-setupResFDDItem,
id-RL-InformationResponseItem-RL-ReconfResp,
id-RL-InformationResponseList-RL-ReconfReady,
id-RL-InformationResponseList-RL-ReconfReadyItem,
id-RL-InformationResponseList-RL-ReconfResp,
id-RL-InformationResponseList-RL-setupResFDD,
id-RL-InformationResponseList-RL-setupResTDD,
id-RL-ReconfigurationFailure-RL-ReconfFailItem,
id-RL-ReconfigurationFailureList-RL-ReconfFail,
id-RL-ResponseInformation,
id-RL-ResponseInformationItem,
id-RL-ResponseInformationList,
id-RL-informationItem,
id-RL-informationList,
id-RadioLinkInformation-RL-ReconfPrepFDDItem,
id-RadioLinkInformation-RL-ReconfPrepTDD,
id-RadioLinkInformation-RL-ReconfReqTDD,
id-RadioLinkInformationList-RL-ReconfPrepFDD,
id-ReportCharacteristics,
id-SFN,
id-SFRequestParametersList-CTCHsetup-Req-FDD,
id-SIB-SegmentInformationItem,
id-SIB-SegmentInformationList,
id-ScramblingCodeChange,
id-Secondary-CCPCHListItem,
id-SecondaryCPICH-Information,
id-SecondarySCH-Information,
id-ShutdownTimer,
id-Successful-RL-InformationResponse-RL-SetupFailFDDItem,
id-Successful-RL-InformationResponseItem,
id-Successful-RL-InformationResponseList,
id-Successful-RL-InformationResponseList-RL-SetupFailFDD,
id-SynchronisationMethod,
id-T-Cell,
id-TDDChipOffset,
id-TimeSlotConfigurationItem,
id-TimeSlotConfigurationList,
id-TransmissionGapDistance,
id-TransmissionGapPeriod,
id-TransmitGapLength,
id-TransmitGapPositionMode,
id-UARFCN,
id-C-ID,
id-UL-CCTrCH-Information-RL-ReconfPrepTDDItem,
id-UL-CCTrCH-Information-RL-ReconfReqTDDItem,
id-UL-CCTrCH-Information-RL-SetupReqTDDItem,
id-UL-CCTrCH-InformationItemIE,
id-UL-CCTrCH-InformationList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationList-RL-ReconfReqTDD,
id-UL-CCTrCH-InformationList-RL-SetupReqTDD,
id-UL-CCTrCHInformation,
id-UL-CCTrCHInformationList,
id-UL-DPCH-Information-RL-ReconfPrepFDD,
id-UL-DPCH-Information-RL-ReconfPrepTDDItem,
id-UL-DPCH-Information-RL-SetupReqTDDItem,
id-UL-DPCH-InformationItem-RL-ReconfReqFDD,
id-UL-DPCH-InformationItem-RL-SetupReqFDD,
id-UL-DPCH-InformationItemIE,
id-USCH-Information-ResourceStatIndItem,
id-USCH-InformationItem,
id-USCH-ListItem-CTCHsetup-Req-TDD,
id-USCMInfoList-CTCHsetup-Req-FDD,
id-Unsuccessful-RL-InformationResponse,
id-Unsuccessful-RL-InformationResponse-RL-SetupFailFDDItem,
id-Unsuccessful-RL-InformationResponseItem,
id-Unsuccessful-RL-InformationResponseItem-RL-SetupFailTDD,
id-Unsuccessful-RL-InformationResponseList,
id-Unsuccessful-RL-InformationResponseList-RL-SetupFailFDD,
id-VCAMMappingInfoList-CTCHsetup-Req-FDD,
```

```
    maxAICHCell,
    maxCCPinNodeB,
    maxCellinNodeB,
    maxCPCHSetCell,
    maxFACHCell,
    maxnoofLen,
    maxLocalCellinNodeB,
    maxMIBSEG,
    maxPCHCell,
    maxPCHinNodeB,
    maxPCPCHCell,
    maxRACHCell,
    maxSF,
    maxSIBSEG,
    maxSigNum,
    maxUCIDinNodeB,
    maxUSCHCell,
    maxnoCCTrCHs,
    maxnoofCCTrCHs,
    maxnoofDCHs,
    maxnoofDLCodes,
    maxnoofDPCHs,
    maxnoofDSCHs,
    maxnoofFACHCell,
    maxnoofFACHs,
    maxnoofFDDNeighbours,
    maxnoofPCHs,
    maxnoofPCPCHs,
    maxnoofPRACHs,
    maxnoofPUSHs,
    maxnoofRL-1,
    maxnoofRL-2,
    maxnoofRLs,
    maxnoofSCCPCHs,
    maxnoofTDDNeighbours,
    maxnoofUSCHs
FROM NBAP-Constants;

-- **************************************************************
--
-- COMMON TRANSPORT CHANNEL SETUP REQUEST FDD
--
-- **************************************************************

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

CommonTransportChannelSetupRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-C-ID                    CRITICALITY ignore  TYPE C-ID                   PRESENCE
mandatory   }|
    { ID id-ConfigurationGenerationID       CRITICALITY ignore  TYPE ConfigurationGenerationID
        PRESENCE mandatory  }|
    { ID id-CommonPhysicalChannelType-CTCHsetup-Req-FDD  CRITICALITY ignore TYPE
CommonPhysicalChannelType-CTCHsetup-Req-FDD      PRESENCE mandatory
},
    ...
}

CommonTransportChannelSetupRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}


CommonPhysicalChannelType-CTCHsetup-Req-FDD ::= ENUMERATED {
    secondary-CCPCH-parameters-CTCHsetup-Req-FDD                                    Secondary-CCPCH-
parameters-CTCHsetup-Req-FDD,
     pRACH-parameters-CTCHsetup-Req-FDD                                             PRACH-parameters-
CTCHsetup-Req-FDD
     pCPCHes-parameters-CTCHsetup-Req-FDD                                           PCPCHes-
parameters-CTCHsetup-Req-FDD

}

Secondary-CCPCH-parameters-CTCHsetup-Req-FDD ::= SEQUENCE {
    commonPhysicalChannelID         CommonPhysicalChannelID,
```

```
    fdd-SCCPCH-Offset           FDD-SCCPCH-Offset,
    dl-ScramblingCode           DL-ScramblingCode,
    fdd-DL-ChannelisationCodeNumber     FDD-DL-ChannelisationCodeNumber,
    tFCS                    TFCS,
    secondaryCCPCH-SlotFormat       SecondaryCCPCH-SlotFormat,
    pilotBitsUsedIndicator          PilotBitsUsedIndicator,
    multiPlexingPosition            MultiPlexngPosition,
    sTTD-Indicator              STTD-Indicator,
commonTransportChannelType                                  CommonTransportChannelType-CTCHsetup-
Req-FDD

}

CommonTransportChannelType-CTCHsetup-Req-FDD ::= ENUMERATED {
    fACH-ParametersList     FACH-ParametersList-CTCHsetup-Req-FDD,
    pCH-Parameters          PCH-Parameters-CTCHsetup-Req-FDD,
    bothCH-Parameters       BothCH-Parameters-CTCHsetup-Req-FDD
}

BothCH-Parameters-CTCHsetup-Req-FDD ::= SEQUENCE {
    fACH-ParametersList     FACH-ParametersList-CTCHsetup-Req-FDD,
    pCH-Parameters          PCH-Parameters-CTCHsetup-Req-FDD
}

FACH-ParametersList-CTCHsetup-Req-FDD ::= SEQUENCE (SIZE (1..maxnoofFACHs)) OF
    ProtocolIE-Container {{ FACH-ParametersListItemIE-CTCHsetup-Req-FDD }}

FACH-ParametersListItemIE-CTCHsetup-Req-FDD NBAP-PROTOCOL-IES ::= {
    { ID id-FACH-ParametersListItem-CTCHsetup-Req-FDD   CRITICALITY ignore  TYPE FACH-
ParametersListItem-CTCHsetup-Req-FDD    PRESENCE mandatory },
    ...
}

FACH-ParametersListItem-CTCHsetup-Req-FDD ::= SEQUENCE {
    commonTransportChannelID    CommonTransportChannelID,
    transportFormatSet      TransportFormatSet,
    toAWS               ToAWS,
    toAWE               ToAWE,
    maxFACH-Power           DL-Power
}

PCH-Parameters-CTCHsetup-Req-FDD ::= SEQUENCE {
    commonTransportChannelID    CommonTransportChannelID,
    transportFormatSet      TransportFormatSet,
    toAWS               ToAWS,
    toAWE               ToAWE,
pCH-Power           DL-Power,
    pICH-Parameters         PICH-Parameters-CTCHsetup-Req-FDD
}

PICH-Parameters-CTCHsetup-Req-FDD ::= SEQUENCE {
    cmmonPhysicalChannelID          CommonPhysicalChannelID,
    dl-ScramblingCode           DL-ScramblingCode,
    fdd-dl-ChannelisationCodeNumber     FDD-DL-ChannelisationCodeNumber,
    pICH-Power              DL-Power,
    pICH-Mode               PICH-Mode,
    sTTD-Indicator              STTD-Indicator
}

PRACH-parameters-CTCHsetup-Req-FDD ::= SEQUENCE {
    commonPhysicalChannelID         CommonPhysicalChannelID,
    tFCS                    TFCS,
    preambleSignatures          PreambleSignatures,
    scramblingCodeWord          ScramblingCodeWord
allowedSlotFormatInformationList                                AllowedSlotFormatInformationList-
CTCHsetup-Req-FDD,
    rACH-SubChannelNumbers          RACH-SubChannelNumbers,
    ul-punctureLimit            PunctureLimit,
    rACH-Parameters                                             RACH-Parameters-CTCHsetup-
Req-FDD,
    aICH-Parameters                                             AICH-Parameters-CTCHsetup-
Req-FDD
}

AllowedSlotFormatInformationList-CTCHsetup-Req-FDD ::= SEQUENCE (SIZE (1..maxSF)) OF
    ProtocolIE-Container {{AllowedSlotFormatInformationItemIE-CTCHsetup-Req-FDD}}

AllowedSlotFormatInformationItemIE-CTCHsetup-Req-FDD NBAP-PROTOCOL-IES ::= {
    { ID id-AllowedSlotFormatInformationItem-CTCHsetup-Req-FDD
```

```
    CRITICALITY ignore                          TYPE    AllowedSlotFormatInformationItem-
CTCHsetup-Req-FDD       PRESENCE    mandatory },
    ...
}

AllowedSlotFormatInformationItem-CTCHsetup-Req-FDD ::= SEQUENCE {
    rACHSlotFormat              RACH-SlotFormat
}

RACH-Parameters ::= SEQUENCE {
    commonTransportChannelID        CommonTransportChannelID,
    transportFormatSet          TransportFormatSet
 }

AICH-Parameters ::= SEQUENCE {
    commonPhysicalChannelID         CommonPhysicalChannelID,
    dl-ScramblingCode           DL-ScramblingCode,
    aICH-TransmissionTiming         AICH-TransmissionTiming,
    fDD-DL-ChannelisationCodeNumber     FDD-DL-ChannelisationCodeNumber,
    aICH-Power              DL-Power,
    sTTD-Indicator              STTD-Indicator
}
PCPCHes-parameters-CTCHsetup-Req-FDD ::= SEQUENCE {
    aP-Preamble-Scrambling-Code     AP-Preamble-Scrambling-Code
    cD-Preamble-Scrambling-Code     CD-Preamble-Scrambling-Code
    sub-Channel-numbers             Sub-Channel-numbers
    available-CD-Signatures         Available-CD-Signatures
    puncture-Limit                  Puncture-Limit
    uL-DPCCH-Slot-Format            UL-DPCCH-Slot-Format
    pC-Preamble-Slot-Format         PC-Preamble-Slot-Format
    cPCH-DL-DPCCH-Slot-Format       CPCH-DL-DPCCH-Slot-Format
     uL-Eb/No-Target                    UL-Eb/No-Target
     initialDLtransmissonPower      InitialDLtransmissionPower
     maximumDLPower                 MaximumDLPower
     minimumDLPower                 MinimumDLPower
     pO1                                PO1
    p02                             P02
    p03                             P03
    deltaTPC                        DeltaTPC
    n_Start_Message                 N_Start_Message
    channel-Assignment-Indication   Channel-Assignment-Indication

cPCHParametersList                  CPCHParametersList-CTCHsetup-Req-FDD,
pCPCHChannelInfoList                PCPCHChannelInfoList-CTCHsetup-Req-FDD,
vCAMMappingInfoList                 VCAMMappingInfoList-CTCHsetup-Req-FDD,
aPAICHParametersList                APAICHParametersList-CTCHsetup-Req-FDD,
cD/CA-ICHParametersList             CD/CA-ICHParametersList-CTCHsetup-Req-FDD
}

CPCHParametersList-CTCHsetup-Req-FDD -CTCHsetup-Req-FDD ::= SEQUENCE {
    common-Transport-Channel-ID     Common-Transport-Channel-ID,
    transport-Format-Set    Transport-Format-Set
}

PCPCHChannelInfoList-CTCHsetup-Req-FDD ::= SEQUENCE (SIZE (1..maxnoofPCPCHs)) OF    ProtocolIE-
Container {{ PCPCHChannelInfoList-CTCHsetup-Req-FDD}}

PCPCHChannelInfoList-CTCHsetup-Req-FDD NBAP-PROTOCOL-IES ::= {
    { ID id- PCPCHChannelInfoList-CTCHsetup-Req-FDD
    CRITICALITY ignore      TYPE    PCPCHChannelInfoList-CTCHsetup-Req-FDD      PRESENCE
    mandatory },
    ...
}

PCPCHChannelInfoList-CTCHsetup-Req-FDD -CTCHsetup-Req-FDD ::= SEQUENCE {
    common-Physical-Channel-ID      Common-Physical-Channel-ID
    uL-Scrambling-Code              UL-Scrambling-Code
    dL-Scrambling-Code              DL-Scrambling-Code
    dL-Channelisation-Code          DL-Channelisation-Code
    pCP-Length                      PCP-Length
    uCSMInfoList                    UCSMInfoList-CTCHsetup-Req-FDD
}

USCMInfoList-CTCHsetup-Req-FDD -CTCHsetup-Req-FDD ::= SEQUENCE {
    min-UL-Channelisation-Code-Length       Min-UL-Channelisation-Code-Length
    nF_max                                  NF_max
    channelRequestParametersList            ChannelRequestParametersList-CTCHsetup-Req-FDD
}
```

```
ChannelRequestParametersList-CTCHsetup-Req-FDD ::= SEQUENCE (SIZE (1..maxAPSigNum)) OF
    ProtocolIE-Container {{ ChannelRequestParametersList-CTCHsetup-Req-FDD}}

ChannelRequestParametersList-CTCHsetup-Req-FDD NBAP-PROTOCOL-IES ::= {
    { ID id- ChannelRequestParametersList-CTCHsetup-Req-FDD
    CRITICALITY ignore      TYPE    ChannelRequestParametersList-CTCHsetup-Req-FDD      PRESENCE
    Optional },
    ...
}

ChannelRequestParametersList ::= SEQUENCE {
    aP-Preamble-Signature   AP-Preamble-Signature
    aP-Sub-Channel-Number   AP-Sub-Channel-Number
}

VCAMMappingInfoList-CTCHsetup-Req-FDD ::= SEQUENCE (SIZE (1..maxnoofLen)) OF    ProtocolIE-
Container {{ VCAMMappingInfoList-CTCHsetup-Req-FDD}}

VCAMMappingInfoList-CTCHsetup-Req-FDD NBAP-PROTOCOL-IES ::= {
    { ID id- VCAMMappingInfoList-CTCHsetup-Req-FDD
    CRITICALITY ignore      TYPE    VCAMMappingInfoList-CTCHsetup-Req-FDD       PRESENCE
    mandatory },
    ...
}

VCAMMappingInfoList ::= SEQUENCE {
    min-UL-Channelisation-Code-Length   Min-UL-Channelisation-Code-Length
    nF_max                              NF_max
    max-Number-of-PCPCHes               Max-Number-of-PCPCHes
    sFRequestParameterList              sFRequestParameterList-CTCHsetup-Req-FDD

}
SFRequestParametersList-CTCHsetup-Req-FDD NBAP-PROTOCOL-IES ::= {
    { ID id- SFRequestParametersList-CTCHsetup-Req-FDD
    CRITICALITY ignore      TYPE    ChannelRequestParametersList-CTCHsetup-Req-FDD      PRESENCE
    Mandatory },
    ...
}

SFRequestParametersList ::= SEQUENCE {
    aP-Preamble-Signature   AP-Preamble-Signature
    aP-Sub-Channel-Number   AP-Sub-Channel-Number
}

AP-AICHParametersList ::= SEQUENCE {
    common-physical-Channel-ID          Common-physical-Channel-ID
    dL-Scrambling-Code                  DL-Scrambling-Code
    fDD-DL-Channelisation-Code-Number   FDD-DL-Channelisation-Code-Number
    aP-AICH-Power                       AP-AICH-Power
    sTTD-Indicator                      STTD-Indicator
}

CD/CA-ICHParametersList ::= SEQUENCE {
    common-physical-Channel-ID          Common-physical-Channel-ID
    dL-Scrambling-Code                  DL-Scrambling-Code
    fDD-DL-Channelisation-Code-Number   FDD-DL-Channelisation-Code-Number
    cD/CA-ICH-Power                     CD/CA-ICH-Power
    sTTD-Indicator                      STTD-Indicator
}

-- **************************************************************
--
-- COMMON TRANSPORT CHANNEL SETUP REQUEST TDD
--
-- **************************************************************

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

    ...
}

CommonTransportChannelSetupRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-C-ID                    CRITICALITY ignore      TYPE C-ID               PRESENCE
mandatory   }|
    { ID id-ConfigurationGenerationID       CRITICALITY ignore      TYPE
ConfigurationGenerationID       PRESENCE mandatory  }|
```

```
    { ID id-CommonPhysicalChannelType-CTCHsetupReqTDD   CRITICALITY      ignore     TYPE
    CommonPhysicalChannelType-CTCHsetupReqTDD       PRESENCE    mandatory
}|
{ ID id-CommontranportChannelType-CTCHsetupReqTDD   CRITICALITY      ignore     TYPE
    CommontransportChannelType-CTCHsetupReqTDD      PRESENCE    mandatory
},
    ...
}

CommonTransportChannelSetupRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CommonPhysicalChannelType-CTCHsetupReqTDD ::= ENUMERATED {
    secondary-CCPCH-parameters-CTCHsetupReqTDD                              Secondary-CCPCH-
parameters-CTCHsetupReqTDD,
pRACH-parameters-CTCHsetupReqTDD                                    PRACH-parameters-CTCHsetupReqTDD
}

Secondary-CCPCH-parameters-CTCHsetupReqTDD ::= SEQUENCE {
    cCTrCH-ID           CCtrCH-ID,
    tFCS                TFCS,
    secondaryCCPCH          SecondaryCCPCHList-CTCHsetupReqTDD,
}

SecondaryCCPCHList-CTCHsetupReqTDD ::= SEQUENCE (SIZE (1..maxnoofSCCPCHs)) OF
    ProtocolIE-Container {{ SecondaryCCPCHList-CTCHsetupReqTDDItemIE }}

SecondaryCCPCHList-CTCHsetupReqTDDItemIE NBAP-PROTOCOL-IES ::= {
    { ID id-SecondaryCCPCHList-CTCHsetupReqTDDItem  CRITICALITY ignore  TYPE SecondaryCCPCHList-
CTCHsetupReqTDDItem PRESENCE    mandatory
},
    ...
}

SecondaryCCPCHList-CTCHsetupReqTDDItem ::= SEQUENCE {
    commonPhysicalChannelID     CommonPhysicalChannelID,
    tdd-ChannelisationCode      TDD-ChannelisationCode,
    timeslot            TimeSlot,
    burstType           BurstType,
    midambleShift           MidambleShift,
    tdd-PhysicalChannelOffset   TDD-PhysicalChannelOffset,
repetitionPeriod        RepetitionPeriod,
    repetitionLength        RepetitionLength,
    s-CCPCH-Power           DL-Power,
    tSTD-Indicator          TSTD-Indicator
}

PRACH-parameters-CTCHsetupReqTDD ::= SEQUENCE {
    commonPhysicalChannelID     CommonPhysicalChannelID,
    timeslot            TimeSlot,
    tdd-ChannelisationCode      TDD-ChannelisationCode,
    burstType           BurstType,
    maxPRACH-MidambleShift      MaxPRACH-MidambleShift  OPTIONAL,
    pRACH-Midamble          PRACH-Midamble,
    commonTransportChannelType                                      CommonTransportChannelType-
CTCHsetupReqTDD,
    rACH                RACH-CTCHsetupReqTDD
}

CommonTransportChannelType-CTCHsetupReqTDD ::= ENUMERATED {
    fACH-ParametersList     FACH-ParametersList-CTCHsetupReqTDD,
    pCH-Parameters          PCH-Parameters-CTCHsetupReqTDD,
    bothCH-Parameters       BothCH-Parameters-CTCHsetupReqTDD
}

BothCH-Parameters-CTCHsetupReqTDD ::= SEQUENCE {
    fACH-ParametersList     FACH-ParametersList-CTCHsetupReqFDD,
    pCH-Parameters          PCH-Parameters-CTCHsetupReqFDD
}

FACH-ParametersList-CTCHsetupReqFDD ::= SEQUENCE (SIZE (1..maxnoofFACHs)) OF
    ProtocolIE-Container {{FACH-ParametersLit-CTCHsetupReqFDD ItemIE }}

FACH-ParametersList-CTCHsetupReqFDDItemIE NBAP-PROTOCOL-IES ::= {
    { ID id-FACH-ParametersList-CTCHsetupReqFDDItem CRITICALITY ignore  TYPE FACH-ParametersList-
CTCHsetupReqFDDItem PRESENCE mandatory  },
    ...
}
```

```
FACH-ParametersList-CTCHsetupReqFDDItem ::= SEQUENCE {
    commonTransportChannelID    CommonTransportChannelID,
    dl-TransportFormatSet       DL-TransportFormatSet,
    toAWS               ToAWS,
    toAWE               ToAWE
}

PCH-ParametersList-CTCHsetupReqFDD ::= SEQUENCE (SIZE (1..maxnoofPCHs)) OF
    ProtocolIE-Container {{PCH-ParametersLit-CTCHsetupReqFDD ItemIE }}

PCH-ParametersList-CTCHsetupReqFDDItemIE NBAP-PROTOCOL-IES ::= {
    { ID id-PCH-ParametersList-CTCHsetupReqFDDItem  CRITICALITY ignore  TYPE PCH-ParametersList-
CTCHsetupReqFDDItem PRESENCE mandatory  },
    ...
}

PCH-ParametersList-CTCHsetupReqFDDItem ::= SEQUENCE {
    commonTransportChannelID    CommonTransportChannelID,
    dl-TransportFormatSet       DL-TransportFormatSet,
    toAWS               ToAWS,
    toAWE               ToAWE,
    pICH-Parameters         PICH-Parameters-CTCHsetupReqTDD
}

PICH-Parameters-CTCHsetup-Req-TDD ::= SEQUENCE {
    CommonPhysicalChannelID     CommonPhysicalChannelID,
    tdd-ChannelisationCode      TDD-ChannelisationCode,
    timeSlot            TimeSlot,
    pICH-Power          PICH-Power,
    burstType           BurstType       OPTIONAL,
    midambleshift           Midambleshift,
    tdd-PhysicalChannelOffset   TDD-PhysicalChannelOffset,
    repetitionPeriod        RepetitionPeriod,
    repetitionLength        RepetitionLength,
    pagingIndicatorLength       PagingIndicatorLength,
    pICH-Power          DL-Power
    ...
}

RACH-CTCHsetupReqTDD ::= SEQUENCE {
    commontransportChannelID    CommontransportChannelID
}

-- **************************************************************
--
-- COMMON TRANSPORT CHANNEL SETUP RESPONSE
--
-- **************************************************************

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

CommonTransportChannelSetupResponse-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CommonPhysicalChannelType-CTCHsetup-Resp    CRITICALITY      ignore     TYPE
    CommonPhysicalChannelType-CTCHsetup-Resp    PRESENCE    mandatory
}|
{ ID id-CriticalityDiagnostic           CRITICALITY ignore      TYPE CriticalityDiagnostic
    PRESENCE optional   },
    -- At least either or Cause IE or Criticality Diagnostic IE shall be present--

    ...
}

CommonTransportChannelSetupResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}


CommonTransportChannelType-CTCHsetup-Resp ::= ENUMERATED {
    fACH-ParametersList     FACH-ParametersList-CTCHsetup-Resp,
    pCH-Parameters          PCH-Parameters-CTCHsetup-Resp,
    bothCH-Parameters       BothCH-Parameters-CTCHsetup-Resp
}

BothCH-Parameters-CTCHsetup-resp ::= SEQUENCE {
```

```
    fACH-ParametersList     FACH-ParametersList-CTCHsetup-Resp,
    pCH-Parameters          PCH-Parameters-CTCHsetupResp
}

FACH-ParametersList-CTCHsetup-Resp ::= SEQUENCE (SIZE (1..maxnoofFACHs)) OF
    ProtocolIE-Container {{FACH-ParametersList-CTCHsetup-RespItemIE}}

FACH-ParametersList-CTCHsetup-RespItemIE NBAP-PROTOCOL-IES ::= {
    { ID id-FACH-ParametersList-CTCHsetup-RespItem  CRITICALITY ignore  TYPE FACH-ParametersList-
CTCHsetup-RespItem  PRESENCE mandatory   },
    ...
}

FACH-ParametersList-CTCHsetup-RespItem ::= SEQUENCE {
    commonTransportChannelID        CommonTransportChannelID,
    transportLayerAddress           TransportLayerAddress,
bindingID               BindingID
}

PCH-Parameters-CTCHsetup-Resp ::= SEQUENCE {
    commonTransportChannelID        CommonTransportChannelID,
    transportLayerAddress           TransportLayerAddress,
bindingID               BindingID
}

PRACH-Parameters-CTCHsetup-Resp ::= SEQUENCE {
    commonTransportChannelID        CommonTransportChannelID,
    transportLayerAddress           TransportLayerAddress,
bindingID               BindingID
}
CPCH-Parameters-CTCHsetup-Resp ::= SEQUENCE {
    commonTransportChannelID        CommonTransportChannelID,
    transportLayerAddress           TransportLayerAddress,
    bindingID               BindingID
}

-- **************************************************************
--
-- 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-CriticalityDiagnostic           CRITICALITY ignore      TYPE CriticalityDiagnostic
    PRESENCE optional
    }|
{ ID id-CriticalityDiagnostic           CRITICALITY ignore      TYPE CriticalityDiagnostic
    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-ConfigurationGenerationID       CRITICALITY ignore  TYPE ConfigurationGenerationID
        PRESENCE mandatory  }|
    { ID id-FACH-ParametersList-CTCHreconf-Req-FDD  CRITICALITY ignore  TYPE FACH-ParametersList-
CTCHreconf-Req-FDD  PRESENCE optional   }|
    { ID id-PCH-Parameters-CTCHreconf-Req-FDD   CRITICALITY ignore  TYPE PCH-Parameters-
CTCHreconf-Req-FDD      PRESENCE optional   }|
    { ID id-PICH-Parameters-CTCHreconf-Req-FDD  CRITICALITY ignore  TYPE PICH-Parameters-
CTCHreconf-Req-FDD      PRESENCE optional   }|
    { ID id-PRACH-ParametersList-CTCHreconf-Req-FDD         CRITICALITY ignore  TYPE     PRACH-
ParametersList-CTCHreconf-Req-FDD   PRESENCE optional
}|
{ ID id-AllowedSlotFormatInformationList-CTCHreconf-Req-FDD
CRITICALITY ignor                           TYPE    AllowedSlotFormatInformationList-CTCHreconf-
Req-FDD     PRESENCE    optional
}|
    { ID id-AICH-ParametersList-CTCHreconf-Req-FDD  CRITICALITY ignore  TYPE    AICH-
ParametersList-CTCHreconf-Req-FDD   PRESENCE optional   },
    { ID id-CPCH-ParametersList-CTCHreconf-Req-FDD  CRITICALITY ignore  TYPE    CPCH-
ParametersList-CTCHreconf-Req-FDD   PRESENCE optional   },

    ...
}

CommonTransportChannelReconfigurationRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}


FACH-ParametersList-CTCHreconf-Req-FDD ::= SEQUENCE (SIZE (1..maxFACHCell)) OF
    ProtocolIE-Container {{FACH-ParametersListItemIE-CTCHreconf-Req-FDD}}

FACH-ParametersListItemIE-CTCHreconf-Req-FDD NBAP-PROTOCOL-IES ::= {
    { ID id-FACH-ParametersListItem-CTCHreconf-Req-FDD          CRITICALITY ignore
            TYPE    FACH-ParametersListItem-CTCHreconf-Req-FDD          PRESENCE    mandatory
    },
    ...
}

FACH-ParametersListItem-CTCHreconf-Req-FDD ::= SEQUENCE {
    commonTransportChannelID    CommonTransportChannelID,
    maxFACH-Power           DL-Power        OPTIONAL,
    toAWS               ToAWS           OPTIONAL,
    toAWE               ToAWE           OPTIONAL
}

PCH-Parameters-CTCHreconf-Req-FDD ::= SEQUENCE {
    commonTransportChannelID    CommonTransportChannelID,
    pCH-Power           DL-Power        OPTIONAL,
    toAWS               ToAWS           OPTIONAL,
    toAWE               ToAWE           OPTIONAL
}

PICH-Parameters-CTCHreconf-Req-FDD ::= SEQUENCE {
    commonTransportChannelID    CommonTransportChannelID,
    pICH-Power          DL-Power
}

PRACH-ParametersList-CTCHreconf-Req-FDD ::= SEQUENCE (SIZE (1..maxnoofPRACHs)) OF
    ProtocolIE-Container {{PRACH-ParametersListItemIE-CTCHreconf-Req-FDD}}

PRACH-ParametersListItemIE-CTCHreconf-Req-FDD NBAP-PROTOCOL-IES ::= {
    { ID id-PRACH-ParametersListItem-CTCHreconf-Req-FDD     CRITICALITY ignore
        TYPE    PRACH-ParametersListItem-CTCHreconf-Req-FDD         PRESENCE    optional },
    ...
}

PRACH-ParametersListItem-CTCHreconf-Req-FDD ::= SEQUENCE {
    commonTransportChannelID    CommonTransportChannelID,
    preambleSignatures      PreambleSignatures,
}

AllowedSlotFormatInformationList-CTCHreconf-Req-FDD ::= SEQUENCE (SIZE (1..maxSF)) OF
    ProtocolIE-Container {{ AllowedSlotFormatInformationListItemIE-CTCHreconf-Req-FDD }}

AllowedSlotFormatInformationListItemIE-CTCHreconf-Req-FDD NBAP-PROTOCOL-IES ::= {
    { ID id-AllowedSlotFormatInformationListItem-CTCHreconf-Req-FDD
    CRITICALITY     ignore                          TYPE    AllowedSlotFormatInformationListItem-
CTCHreconf-Req-FDD      PRESENCE    mandatory },
```

```
    ...
}

AllowedSlotFormatInformationListItem-CTCHreconf-Req-FDD ::= SEQUENCE {
    slotFormat          SlotFormat
    rACH-SubChannelNumbers      RACH-SubChannelNumbers      OPTIONAL
}

AICH-ParametersList-CTCHreconf-Req-FDD ::= SEQUENCE (SIZE (1..maxnoofPRACHs)) OF
    ProtocolIE-Container {{ AICH-ParametersListItemIE-CTCHreconf-Req-FDD }}

AICH-ParametersListItemIE-CTCHreconf-Req-FDD NBAP-PROTOCOL-IES ::= {
    { ID id-AICH-ParametersListItem-CTCHreconf-Req-FDD          CRITICALITY ignore
            TYPE    AICH-ParametersListItem-CTCHreconf-Req-FDD          PRESENCE    mandatory },
    ...
}

AICH-ParametersListItem-CTCHreconf-Req-FDD ::= SEQUENCE {
    commonTransportChannelID    CommonTransportChannelID,
    aICH-Power          DL-Power
}
CPCH-parameters-CTCHsetup-Req-FDD ::= SEQUENCE {
    uL-Eb/No-Target                 UL-Eb/No-Target
     initialDLtransmissonPower      InitialDLtransmissionPower
     maximumDLPower                 MaximumDLPower
     minimumDLPower                 MinimumDLPower
}

-- **************************************************************
--
-- 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 ignore  TYPE C-ID                   PRESENCE
mandatory   }|
    { ID id-ConfigurationGenerationID       CRITICALITY ignore  TYPE ConfigurationGenerationID
        PRESENCE mandatory  }|
    { ID id-CommonPhysicalChannelType-CTCHreconfReqTDD  CRITICALITY      ignore     TYPE
    CommonPhysicalChannelType-CTCHreconfReqTDD      PRESENCE    mandatory
}|
    { ID id-FACH-ParametersList-CTCHreconfReqTTD    CRITICALITY ignore  TYPE FACH-ParametersList-
CTCHreconfReqTTD    PRESENCE optional   }|
    { ID id-PCH-ParametersList-CTCHreconfReqTTD CRITICALITY ignore  TYPE    PCH-ParametersList-
CTCHreconfReqTTD    PRESENCE optional   },
    ...
}

CommonTransportChannelReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}


CommonPhysicalChannelType-CTCHreconfReqTDD ::= ENUMERATED {
    secondaryCCPCH          SecondaryCCPCH–CTCHreconfReqTDD
}

SecondaryCCPCH–CTCHreconfReqTDD::= SEQUENCE {
    cCTrCH-ID           CCTrCH-ID,
    secondaryCCPCHList      SecondaryCCPCHList–CTCHreconfReqTDD
}

SecondaryCCPCHList–CTCHreconfReqTDD ::= SEQUENCE (SIZE (1..maxnoofSCCPCHs)) OF
    ProtocolIE-Container {{ SecondaryCCPCHList–CTCHreconfReqTDDItemIE}}

SecondaryCCPCHList–CTCHreconfReqTDDItemIE NBAP-PROTOCOL-IES ::= {
    { ID id-SecondaryCCPCHList–CTCHreconfReqTDDItem  CRITICALITY ignore TYPE SecondaryCCPCHList–
CTCHreconfReqTDDItem     PRESENCE mandatory  },
    ...
}
```

```
SecondaryCCPCHList—CTCHreconfReqTDDItem ::= SEQUENCE {
    commonPhysicalChannelID         CommonPhysicalChannelID,
    pICH-Power              PICH-Power
}

FACH-ParametersList-CTCHreconfReqTTD ::= SEQUENCE (SIZE (1..maxFACHCell)) OF
    ProtocolIE-Container {{ FACH-ParametersListItemIE-CTCHreconfReqTTD }}

FACH-ParametersListItemIE-CTCHreconfReqTTD NBAP-PROTOCOL-IES ::= {
    { ID id-FACH-ParametersListItem-CTCHreconfReqTTD  CRITICALITY ignore    TYPE FACH-
ParametersListItem-CTCHreconfReqTTD PRESENCE mandatory   },
    ...
}

FACH-ParametersListItem-CTCHreconf-Req-TTD ::= SEQUENCE {
    commonTransportChannelID    CommonTransportChannelID,
    toAWS               ToAWS           OPTIONAL,
    toAWE               ToAWE           OPTIONAL
}

PCH-ParametersList-CTCHreconfReqTTD ::= SEQUENCE (SIZE (1..maxnoofPCHs)) OF
    ProtocolIE-Container {{ PCH-ParametersListItemIE-CTCHreconfReqTTD }}

PCH-ParametersListItemIE-CTCHreconfReqTTD NBAP-PROTOCOL-IES ::= {
    { ID id-PCH-ParametersListItem-CTCHreconfReqTTD CRITICALITY ignore  TYPE PCH-
ParametersListItem-CTCHreconfReqTTD PRESENCE optional   },
    ...
}

PCH-ParametersListItem-CTCHreconfReqTTD ::= SEQUENCE {
    commonTransportChannelID    CommonTransportChannelID,
    toAWS               ToAWS           OPTIONAL,
    toAWE               ToAWE           OPTIONAL
}

-- **************************************************************
--
-- COMMON TRANSPORT CHANNEL RECONFIGURATION RESPONSE
--
-- **************************************************************

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

CommonTransportChannelReconfigurationResponse-IEs NBAP-PROTOCOL-IES ::= {
{ ID id-CriticalityDiagnostic           CRITICALITY ignore      TYPE CriticalityDiagnostic
    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-CriticalityDiagnostic           CRITICALITY ignore      TYPE CriticalityDiagnostic
    PRESENCE optional
```

```
    }|
{ ID id-CriticalityDiagnostic           CRITICALITY ignore      TYPE CriticalityDiagnostic
    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 ignore  TYPE C-ID                   PRESENCE
mandatory   }|
    { ID id-CommonPhysicalChannelID         CRITICALITY ignore  TYPE CommonPhysicalChannelID
        PRESENCE mandatory  }|
    { ID id-ConfigurationGenerationID       CRITICALITY ignore  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-CriticalityDiagnostic           CRITICALITY ignore      TYPE CriticalityDiagnostic
    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 ignore  TYPE C-ID                    PRESENCE
mandatory   }|
    { ID id-BlockingPriorityIndicator       CRITICALITY ignore  TYPE BlockingPriorityIndicator
        PRESENCE mandatory  }|
    { ID id-ShutdownTimer              CRITICALITY ignore  TYPE ShutdownTimer
    PRESENCE conditional
    },
    -- The information element is present when 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-CriticalityDiagnostic           CRITICALITY ignore      TYPE CriticalityDiagnostic
    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-CriticalityDiagnostic           CRITICALITY ignore      TYPE CriticalityDiagnostic
    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-Cell-ParametersList-Audit-Req   CRITICALITY     ignore      TYPE Cell-ParametersList-
Audit-Req   PRESENCE    optional    },
    ...
}

AuditRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}


Cell-ParametersList-Audit-Req ::= SEQUENCE (SIZE (1..maxCellinNodeB)) OF
    ProtocolIE-Container {{Cell-ParametersItemIE-Audit-Req}}


Cell-ParametersItemIE NBAP-PROTOCOL-IES ::= {
    { ID id-Cell-ParametersItem-Audit-Req       CRITICALITY ignore  TYPE Cell-ParametersItem-
Audit-Req   PRESENCE    mandatory       },
    ...
}

Cell-ParametersItem-Audit-Req ::= SEQUENCE {
    c-ID                C-ID,
    configurationGenerationID   ConfigurationGenerationID
}

-- **************************************************************
--
-- AUDIT RESPONSE
--
-- **************************************************************
```

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

AuditResponse-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-Cell-InformationList-Audit-Res      CRITICALITY ignore  TYPE Cell-InformationList-
Audit-Res       PRESENCE optional   }|
    { ID id-CommunicationControlPort-InformationList-Audit-Res          CRITICALITY ignore
                    TYPE CommunicationControlPort-InformationList-Audit-Res         PRESENCE
    optional
}|
    { ID id-Cell-InformationList-Audit-Res  CRITICALITY ignore  TYPE Cell-InformationList-Audit-
Res PRESENCE optional   }|
{ ID id-CriticalityDiagnostic           CRITICALITY ignore      TYPE CriticalityDiagnostic
    PRESENCE optional
    },

    ...
}

AuditResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}


Cell-InformationList-Audit-Res ::= SEQUENCE (SIZE (1..maxUCIDinNodeB)) OF
    ProtocolIE-Container {{Cell-InformationItemIE-Audit-Res }}

Cell-InformationItemIE-Audit-Res NBAP-PROTOCOL-IES ::= {
    { ID id-Cell-InformationItem-Audit-Res      CRITICALITY ignore  TYPE Cell-InformationItem-
Audit-Res       PRESENCE    optional        },
    ...
}

Cell-InformationItem-Audit-Res ::= SEQUENCE {
    c-ID                C-ID,
    resourceOperationState      ResourceOperationState,
    availabilityStatus      AvailabilityStatus,
    maximumDLPowerCapability    MaximumDLPowerCapability,
    -- to do
    minimumSpreadingFactor      MinimumSpreadingFactor,
    -- to do
    primary-SCH-Information     P-SCH-Information-Audit-Res OPTIONAL,
    secondary-SCH-Information   S-SCH-Information-Audit-Res OPTIONAL,
    primary-CPICH-Information   P-CPICH-Information-Audit-Res   OPTIONAL,
    secondary-CPICH-Information S-CPICH-Information-Audit-Res   OPTIONAL,
    primary-CCPCH-Information   P-CCPCH-Information-Audit-Res   OPTIONAL,
    bCH-Information         BCH-Information-Audit-Res   OPTIONAL,
    secondary-CCPCH-Information S-CCPCH-Information-Audit-Res   OPTIONAL,
    pCH-InformationList     PCH-InformationList-Audit-Res   OPTIONAL,
    pICH-Information        PICH-Information-Audit-Res  OPTIONAL,
    fACH-InformationList        FACH-InformationList-Audit-Res  OPTIONAL,
    pRACH-InformationList       PRACH-InformationList-Audit-Res OPTIONAL,
    rACH-InformationList        RACH-InformationList-Audit-Res  OPTIONAL,
    aICH-InformationList        AICH-InformationList-Audit-Res  OPTIONAL,
    pCPCH-InformationList       PCPCH-InformationList-Audit-Res     OPTIONAL,
    cPCH-InformationList        CPCH-InformationList-Audit-Res      OPTIONAL,
    aP-AICH-InformationList     AP-AICH-InformationList-Audit-Res   OPTIONAL,
    cD/CA-ICH-InformationList   CD/CA-ICH-InformationList-Audit-Res OPTIONAL,
    sCH-InformationList     SCH-InformationList-Audit-Res       OPTIONAL,
    pSCH-InformationList        PSCH-InformationList-Audit-Res      OPTIONAL,
    communicationControlPortInformation CommunicationControlPortInformation-Audit-Res
    OPTIONAL,
    local-CellInformation       Local-CellInformation-Audit-Res     OPTIONAL
}

P-SCH-Information-Audit-Res ::= SEQUENCE {
    commonTransportChannelID    CommonTransportChannelID,
    resourceOperationState      ResourceOperationState,
    availabilityStatus      AvailabilityStatus
}

S-SCH-Information-Audit-Res ::= SEQUENCE {
    commonPhysicalChannelID     CommonPhysicalChannelID,
    resourceOperationState      ResourceOperationState,
    availabilityStatus      AvailabilityStatus
```

```
}

P-CPICH-Information-Audit-Res ::= SEQUENCE {
    commonPhysicalChannelID     CommonPhysicalChannelID,
    resourceOperationState      ResourceOperationState,
    availabilityStatus      AvailabilityStatus
}

S-CPICH-InformationList-Audit-Res ::= SEQUENCE (SIZE (1..maxSCPICHCell)) OF
    ProtocolIE-Container {{S-CPICH-InformationItemIE-Audit-Res }}

S-CPICH-InformationItemIE-Audit-Res NBAP-PROTOCOL-IES ::= {
    { ID id-S-CPICH-InformationItem-Audit-Res       CRITICALITY ignore  TYPE S-CPICH-
InformationItem-Audit-Res   PRESENCE    mandatory
},
    ...
}

S-CPICH-InformationItem-Audit-Res ::= SEQUENCE {
    commonTransportChannelID    CommonTransportChannelID,
    resourceOperationState      ResourceOperationState,
    availabilityStatus      AvailabilityStatus
}

P-CCPCH-Information-Audit-Res ::= SEQUENCE {
    commonPhysicalChannelID     CommonPhysicalChannelID,
    resourceOperationState      ResourceOperationState,
    availabilityStatus      AvailabilityStatus
}

BCH-Information-Audit-Res ::= SEQUENCE {
    commonTransportChannelID    CommonTransportChannelID,
    resourceOperationState      ResourceOperationState,
    availabilityStatus      AvailabilityStatus
}

S-CCPCH-InformationList-Audit-Res ::= SEQUENCE (SIZE (1..maxSCCPCHCell)) OF
    ProtocolIE-Container {{S-CCPCH-InformationItemIE-Audit-Res }}

S-CCPCH-InformationItemIE-Audit-Res NBAP-PROTOCOL-IES ::= {
    { ID id-S-CCPCH-InformationItem-Audit-Res       CRITICALITY ignore  TYPE S-CCPCH-
InformationItem-Audit-Res   PRESENCE    mandatory
},
    ...
}

S-CCPCH-InformationItem-Audit-Res ::= SEQUENCE {
    commonPhysicalChannelID     CommonPhysicalChannelID,
    resourceOperationState      ResourceOperationState,
    availabilityStatus      AvailabilityStatus
}

PCH-InformationList-Audit-Res ::= SEQUENCE (SIZE (1..maxPCHCell)) OF
    ProtocolIE-Container {{PCH-InformationItemIE-Audit-Res }}

PCH-InformationItemIE-Audit-Res NBAP-PROTOCOL-IES ::= {
    { ID id-PCH-InformationItem-Audit-Res       CRITICALITY ignore  TYPE PCH-InformationItem-
Audit-Res   PRESENCE    mandatory
},
    ...
}

PCH-InformationItem-Audit-Res ::= SEQUENCE {
    commonTransportChannelID    CommonTransportChannelID,
    resourceOperationState      ResourceOperationState,
    availabilityStatus      AvailabilityStatus
}

FACH-InformationList-Audit-Res ::= SEQUENCE (SIZE (1..maxFACHCell)) OF
    ProtocolIE-Container {{FACH-InformationItemIE-Audit-Res}}

FACH-InformationItemIE-Audit-Res NBAP-PROTOCOL-IES ::= {
    { ID id-FACH-InformationItem-Audit-Res      CRITICALITY ignore  TYPE FACH-InformationItem-
Audit-Res   PRESENCE    mandatory       },
    ...
}

FACH-InformationItem-Audit-Res ::= SEQUENCE {
    commonPhysicalChannelID     CommonPhysicalChannelID,
    resourceOperationState      ResourceOperationState,
```

```
    availabilityStatus      AvailabilityStatus
}

PRACH-InformationList-Audit-Res ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF
    ProtocolIE-Container {{PRACH-InformationItemIE-Audit-Res}}

PRACH-InformationItemIE-Audit-Res NBAP-PROTOCOL-IES ::= {
    { ID id-PRACH-InformationItem-Audit-Res     CRITICALITY ignore  TYPE PRACH-InformationItem-
Audit-Res   PRESENCE    mandatory       },
    ...
}

PRACH-InformationItem-Audit-Res ::= SEQUENCE {
    commonPhysicalChannelID     CommonPhysicalChannelID,
    resourceOperationState      ResourceOperationState,
    availabilityStatus      AvailabilityStatus
}

RACH-InformationList-Audit-Res ::= SEQUENCE (SIZE (1..maxRACHCell)) OF
    ProtocolIE-Container {{RACH-InformationItemIE-Audit-Res}}

RACH-InformationItemIE-Audit-Res NBAP-PROTOCOL-IES ::= {
    { ID id-RACH-InformationItem-Audit-Res      CRITICALITY ignore  TYPE RACH-InformationItem-
Audit-Res   PRESENCE    mandatory       },
    ...
}

RACH-InformationItem-Audit-Res ::= SEQUENCE {
    commonTransportChannelID    CommonTransportChannelID,
    resourceOperationState      ResourceOperationState,
    availabilityStatus      AvailabilityStatus
}

AICH-InformationList-Audit-Res ::= SEQUENCE (SIZE (1..maxRACHCell)) OF
    ProtocolIE-Container {{RACH-InformationItemIE-Audit-Res}}

AICH-InformationItemIE-Audit-Res NBAP-PROTOCOL-IES ::= {
    { ID id-RACH-InformationItem-Audit-Res      CRITICALITY ignore  TYPE RACH-InformationItem-
Audit-Res   PRESENCE    mandatory       },
    ...
}

AICH-InformationItem-Audit-Res ::= SEQUENCE {
    CommonPhysicalChannelID     CommonPhysicalChannelID,
    resourceOperationState      ResourceOperationState,
    availabilityStatus      AvailabilityStatus
}
PCPCH-InformationList-Audit-Res ::= SEQUENCE (SIZE (1..maxPCPCHCell)) OF
    ProtocolIE-Container {{PCPCH-InformationItemIE-Audit-Res }}

PCPCH-InformationItemIE-Audit-Res NBAP-PROTOCOL-IES ::= {
    { ID id-PCPCH-InformationItem-Audit-Res     CRITICALITY ignore  TYPE PCPCH-InformationItem-
Audit-Res   PRESENCE    mandatory
},
    ...
}

PCPCH-InformationItem-Audit-Res ::= SEQUENCE {
    commonPhysicalChannelID         CommonPhysicalChannelID,
    resourceOperationalState        ResourceOperationalState,
    availabilityStatus              AvailabilityStatus
}

CPCH-InformationList-Audit-Res ::= SEQUENCE (SIZE (1..maxCPCHSetCell)) OF
    ProtocolIE-Container {{CPCH-InformationItemIE-Audit-Res }}

CPCH-InformationItemIE-Audit-Res NBAP-PROTOCOL-IES ::= {
    { ID id-CPCH-InformationItem-Audit-Res      CRITICALITY ignore  TYPE CPCH-InformationItem-
Audit-Res   PRESENCE    mandatory
},
    ...
}

CPCH-InformationItem-Audit-Res ::= SEQUENCE {
    commonTransportChannelID        CommonTransportChannelID,
    resourceOperationalState        ResourceOperationalState,
    availabilityStatus              AvailabilityStatus
}

AP-AICH-InformationList-Audit-Res ::= SEQUENCE (SIZE (1..maxCPCHSetCell)) OF
```

```
    ProtocolIE-Container {{AP-AICH-InformationItemIE-Audit-Res }}

AP-CPICH-InformationItemIE-Audit-Res NBAP-PROTOCOL-IES ::= {
    { ID id-AP-AICH-InformationItem-Audit-Res       CRITICALITY ignore  TYPE AP-AICH-
InformationItem-Audit-Res   PRESENCE    mandatory
},
    ...
}

AP-AICH-InformationItem-Audit-Res ::= SEQUENCE {
    commonPhysicalChannelID     CommonPhysicalChannelID,
    resourceOperationState      ResourceOperationState,
    availabilityStatus          AvailabilityStatus
}

CD/CA-ICH-InformationList-Audit-Res ::= SEQUENCE (SIZE (1..maxCPCHSetCell)) OF
    ProtocolIE-Container {{CD/CA-ICH-InformationItemIE-Audit-Res }}

CD/CA-ICH-InformationItemIE-Audit-Res NBAP-PROTOCOL-IES ::= {
    { ID id-CD/CA-ICH-InformationItem-Audit-Res     CRITICALITY ignore  TYPE CD/CA-ICH-
InformationItem-Audit-Res   PRESENCE    mandatory
},
    ...
}

CD/CA-ICH-InformationItem-Audit-Res ::= SEQUENCE {
    commonPhysicalChannelID     CommonPhysicalChannelID,
    resourceOperationalState    ResourceOperationalState,
    availabilityStatus          AvailabilityStatus
}

SCH-InformationItem-Audit-Res ::= SEQUENCE {
    commonPhysicalChannelID     CommonPhysicalChannelID,
    resourceOperationState      ResourceOperationState,
    availabilityStatus      AvailabilityStatus
}

RACH-InformationItem-Audit-Res ::= SEQUENCE {
    commonPhysicalChannelID     CommonPhysicalChannelID,
    resourceOperationState      ResourceOperationState,
    availabilityStatus      AvailabilityStatus
}

CommunicationControlPort-InformationList-Audit-Res ::=SEQUENCE (SIZE (1..maxCCPinNodeB)) OF
    ProtocolIE-Container {{CommunicationControlPort-InformationItemIE }}

CommunicationControlPort-InformationItemIE-Audit-Res NBAP-PROTOCOL-IES ::= {
    {ID id-CommunicationControlPort-InformationItem-Audit-Res   CRITICALITY ignore
            TYPE    CommunicationControlPort-InformationItem-Audit-Res      PRESENCE    mandatory
    },
}

CommunicationControlPort-InformationItem-Audit-Res ::= SEQUENCE {
    communicationControlPortID  CommunicationControlPortID,
    resourceOperationalState    ResourceOperationalState,
    availabilityStatus      AvailabilityStatus
}

LocalCell-InformationList-Audit-Res ::=SEQUENCE (SIZE (1..maxLocalCellinNodeB)) OF
    ProtocolIE-Container {{LocalCell-InformationItemIE-Audit-Res}}

LocalCell-InformationItemIE-Audit-Res NBAP-PROTOCOL-IES ::= {
    { ID id-LocalCell-InformationItem-Audit-Res CRITICALITY ignore  TYPE LocalCell-
InformationItem-Audit-Res   PRESENCE mandatory  },
    ...
}

LocalCell-InformationItem-Audit-Res ::= SEQUENCE {
    localCellID             LocalCellID,
    numberOfChannelElements         NumberOfChannelElements     OPTIONAL,
    maximumDLPowerCapability        MaximumDLPowerCapability    OPTIONAL
}

-- **************************************************************
--
-- 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 ignore  TYPE MeasurementID
    PRESENCE mandatory  }|
    { ID id-CommonMeasurementObjectType-CMeasureInitReq CRITICALITY      ignore     TYPE
    CommonMeasurementObjectType-CMeasureInitReq     PRESENCE    mandatory
}|
    { ID id-CommonMeasurementType           CRITICALITY ignore      TYPE CommonMeasurementType
        PRESENCE mandatory  }|
    { ID id-MeasurementCharacteristics      CRITICALITY ignore  TYPE MeasurementCharacteristics
        PRESENCE mandatory  }|
    { ID id-ReportCharacteristics           CRITICALITY ignore  TYPE ReportCharacteristics
    PRESENCE mandatory  },
    ...
}

CommonMeasurementInitiationRequest-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}


CommonMeasurementObjectType-CMeasureInitReq ::= ENUMERATED {
    cell                Cell-CMeasureInitReq,
    rACH                RACH-CmeasureInitReq
    cPCH                CPCH-CmeasureInitReq
}

Cell-CMeasureInitReq ::= SEQUENCE {
    c-ID                C-ID,
    timeSlot            TimeSlot
}

RACH-CMeasureInitReq ::= SEQUENCE {
    c-ID                C-ID,
    commonTransportChannelID    CommonTransportChannelID
}
CPCH-CMeasureInitReq ::= SEQUENCE {
    c-ID                C-ID
}

-- **************************************************************
--
-- 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-Res     CRITICALITY ignore  TYPE
CommonMeasurementObjectType-Res     PRESENCE mandatory  }|
    { ID id-SFN                 CRITICALITY ignore  TYPE SFN                    PRESENCE optional
    }|
{ ID id-CriticalityDiagnostic           CRITICALITY ignore      TYPE CriticalityDiagnostic
    PRESENCE optional
    },
    ...
}

CommonMeasurementInitiationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}


 CommonMeasurementObjectType-Res ::= CHOICE {
```

```
    cell                    Cell-CommonMeasurement-Res,
    rACH                    RACH-CommonMeasurement-Res
    cPCH                    CPCH-CommonMeasurement-Res
 }

Cels-CommonMeasurement-Req ::= SEQUENCE {
    commonMeasurementValue          CommonMeasurementValue
 }

RACH-CommonMeasurement-Req ::= SEQUENCE {
    commonMeasurementValue          CommonMeasurementValue
 }
CPCH-CommonMeasurement-Req ::= SEQUENCE {
    commonMeasurementValue          CommonMeasurementValue
 }

-- **************************************************************
--
-- 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-CriticalityDiagnostic           CRITICALITY ignore      TYPE CriticalityDiagnostic
    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-Rep     CRITICALITY ignore  TYPE
CommonMeasurementObjectType-Rep     PRESENCE mandatory  }|
    { ID id-SFN                 CRITICALITY ignore  TYPE SFN                    PRESENCE optional
    },
    ...
}

CommonMeasurementReport-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}


CommonMeasurementObjectType-Rep ::= ENUMERATED {
    cell                    Cell-CommonMeasurement-Rep,
    rACH                    RACH-CommonMeasurement-Rep
    cPCH                    CPCH-CommonMeasurement-Rep
 }
```

```
Cell-CommonMeasurement-Rep ::= SEQUENCE {
    commonMeasurementValue          CommonMeasurementValue
 }

RACH-CommonMeasurement-Rep ::= SEQUENCE {
    commonMeasurementValue          CommonMeasurementValue
 }
CPCH-CommonMeasurement-Rep ::= SEQUENCE {
    commonMeasurementValue          CommonMeasurementValue
 }


-- **************************************************************
--
-- COMMON MEASUREMENT TERMINATION REQUEST
--
-- **************************************************************

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

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}}                   OPTIONAL,
    ...
}

CommonMeasurementFailureIndication-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-MeasurementID               CRITICALITY ignore  TYPE MeasurementID
    PRESENCE mandatory  }|
    { ID id-Cause                   CRITICALITY ignore  TYPE Cause                  PRESENCE
mandatory   }|
{ ID id-CriticalityDiagnostic           CRITICALITY ignore      TYPE CriticalityDiagnostic
    PRESENCE optional
    },
    ...
}

CommonMeasurementFailureIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}


-- **************************************************************
--
-- CELL SETUP REQUEST FDD
--
-- **************************************************************

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

```
CellSetupRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-LocalCell-ID                CRITICALITY ignore  TYPE LocalCell-ID
    PRESENCE mandatory  }|
    { ID id-C-ID                    CRITICALITY ignore  TYPE C-ID                   PRESENCE
mandatory   }|
    { ID id-ConfigurationGenerationID       CRITICALITY ignore  TYPE ConfigurationGenerationID
        PRESENCE mandatory  }|
    { ID id-T-Cell                  CRITICALITY ignore  TYPE T-Cell                 PRESENCE
mandatory   }|
    { ID id-UARFCN                  CRITICALITY ignore  TYPE UARFCN                 PRESENCE
mandatory   }|
    { ID id-MaximumTransmissionPower        CRITICALITY ignore  TYPE MaximumTransmissionPower
        PRESENCE mandatory  }|
    { ID id-PrimaryScramblingCode           CRITICALITY ignore  TYPE PrimaryScramblingCode
    PRESENCE mandatory  }|
    { ID id-PrimarySCH-Information-Cellsetup-Req    CRITICALITY ignore  TYPE PrimarySCH-
Information-Cellsetup-Req   PRESENCE mandatory  }|
    { ID id-SecondarySCH-Information-Cellsetup-Req  CRITICALITY ignore  TYPE SecondarySCH-
Information-Cellsetup-Req   PRESENCE mandatory  }|
    { ID id-PrimaryCPICH-Information-Cellsetup-Req  CRITICALITY ignore  TYPE PrimaryCPICH-
Information-Cellsetup-Req   PRESENCE mandatory  }|
    { ID id-SecondaryCPICH-Information-Cellsetup-Req        CRITICALITY ignore
        TYPE    SecondaryCPICH-Information-Cellsetup-Req            PRESENCE optional
}|
    { ID id-PrimaryCCPCH-Information-Cellsetup-Req  CRITICALITY ignore  TYPE PrimaryCCPCH-
Information-Cellsetup-Req   PRESENCE mandatory  },
    ...
}

CellSetupRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}


PrimarySCH-Information-Cellsetup-Req ::= SEQUENCE {
    commonPhysicalChannelID     CommonPhysicalChannelID,
    primarySCH-Power        DL-Power,
    tSTD-Indicator          TSTD-Indicator
}

SecondarySCH-Information-Cellsetup-Req ::= SEQUENCE {
    commonPhysicalChannelID     CommonPhysicalChannelID,
    secondarySCH-Power      DL-Power,
    transmitDiversityIndication TransmitDiversityIndication
}

PrimaryCPICH-Information-Cellsetup-Req ::= SEQUENCE {
    commonPhysicalChannelID     CommonPhysicalChannelID,
    primaryCPICH-Power      DL-Power,
    sTTD-Indicator          STTD-Indicator
}

SecondaryCPICH-Information-Cellsetup-Req ::= SEQUENCE {
    commonPhysicalChannelID     CommonPhysicalChannelID,
    dl-ScramblingCode       DL-ScramblingCode,
    secondaryCPICH-Power        DL-Power,
    transmitDiversityIndication TransmitDiversityIndication
}

PrimaryCCPCH-Information-Cellsetup-Req ::= SEQUENCE {
    commonPhysicalChannelID     CommonPhysicalChannelID,
    bCH-information-Cellsetup-Req   BCH-Information-PrimCCPCH-Cellsetup-Req,
    sTTD-Indicator          STTD-Indicator
}

BCH-Information-PrimCCPCH-Cellsetup-Req ::= SEQUENCE {
    commonTransportChannelID    CommonTransportChannelID,
    bCH-Power           DL-Power
 }

-- **************************************************************
--
-- CELL SETUP REQUEST TDD
--
-- **************************************************************

CellSetupRequestTDD ::= SEQUENCE {
    protocolIEs                     ProtocolIE-Container       {{CellSetupRequestTDD-IEs}},
```

```
    protocolExtensions              ProtocolExtensionContainer {{CellSetupRequestTDD-Extensions}}
OPTIONAL,
    ...
}

CellSetupRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-LocalCell-ID                CRITICALITY ignore  TYPE LocalCell-ID
    PRESENCE mandatory  }|
    { ID id-C-ID                    CRITICALITY ignore  TYPE C-ID                   PRESENCE
mandatory   }|
    { ID id-ConfigurationGenerationID       CRITICALITY ignore  TYPE ConfigurationGenerationID
        PRESENCE mandatory  }|
    { ID id-UARFCN                  CRITICALITY ignore  TYPE UARFCN                 PRESENCE
mandatory   }|
    { ID id-Cell-Parameter-ID           CRITICALITY ignore  TYPE Cell-Parameter-ID
    PRESENCE mandatory  }|
    { ID id-MaximumTransmissionPower        CRITICALITY ignore  TYPE MaximumTransmissionPower
        PRESENCE optional   }|
    { ID id-TransmissionDiversityApplied        CRITICALITY ignore  TYPE
TransmissionDiversityApplied        PRESENCE mandatory  }|
    { ID id-SyncCase                CRITICALITY ignore  TYPE TransmissionDiversityApplied
    PRESENCE mandatory  }|
    { ID id-PSCH-Information-CellsetupReqTDD    CRITICALITY ignore  TYPE PSCH-Information-
CellsetupReqTDD     PRESENCE mandatory  }|
    { ID id-PCCPCH-Information-CellsetupReqTDD  CRITICALITY ignore  TYPE PCCPCH-Information-
CellsetupReqTDD     PRESENCE mandatory  }|
{ ID id-TimeSlotConfigurationList-CellsetupReqTDD   CRITICALITY  ignore     TYPE
    TimeSlotConfigurationList-CellsetupReqTDD
PRESENCE    mandatory
},
    ...
}

CellSetupRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}


PSCH-Information-CellsetupReqTDD ::= SEQUENCE {
    commonPhysicalChannelID     CommonPhysicalChannelID,
    syncCaseIndicator       SyncCaseIndicator-CellsetupReqTDD,
    pSCH-Power          DL-Power,
    tSTD-Indicator          TSTD-Indicator
}

SyncCaseIndicator-CellsetupReqTDD ::= ENUMURATED {
    case1               Case1-CellsetupReqTDD,
    case2andCcase3          Case2andCase3-CellsetupReqTDD
}

Case1-CellsetupReqTDD ::= SEQUNCE {
    timeSlot            TimeSlot
}

Case2andCase3-CellsetupReqTDD ::= SEQUNCE {
    PSCH-TimeSlot           PSCH-TimeSlot
}

PCCPCH-Information-CellsetupReqTDD ::= SEQUENCE {
    syncCaseIndicator       SyncCaseIndicator-CellsetupReqTDD2,
    repetitionPeriod        RepetitionPeriod,
    repetitionLength        RepetitionLength,
    pCCPCH-Power            DL-Power,
    tSTD-Indicator          TSTD-Indicator
}

SyncCaseIndicator-CellsetupReqTDD2 ::= ENUMERATED {
    case3               Case3-CellsetupReqTDD
}

Case3-CellsetupReqTDD ::= SEQUENCE {
    timeSlot            TimeSlot
}

TimeSlotConfigurationList-CellsetupReqTDD ::= SEQUENCE (SIZE (1..15)) OF
    ProtocolIE-Container{{TimeSlotConfigurationList-CellsetupReqTDD ItemIE }}

TimeSlotConfigurationList-CellsetupReqTDDItemIE NBAP-PROTOCOL-IES ::= {
```

```
    { ID id-TimeSlotConfigurationList-CellsetupReqTDDItem       CRITICALITY ignore
            TYPE        TimeSlotConfigurationList-CellsetupReqTDDItem           PRESENCE
    mandatory
},
    ...
}

TimeSlotConfigurationList-CellsetupReqTDDItem ::= SEQUENCE {
    timeSlot            TimeSlot,
    timeSlotStatus          TimeSlotStatus,
    timeSlotDirection       TimeSlotDirection
}

-- **************************************************************
--
-- CELL SETUP RESPONSE
--
-- **************************************************************

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

CellSetupResponse-IEs NBAP-PROTOCOL-IES ::= {
{ ID id-CriticalityDiagnostic           CRITICALITY ignore      TYPE CriticalityDiagnostic
    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-CriticalityDiagnostic           CRITICALITY ignore      TYPE CriticalityDiagnostic
    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 ignore  TYPE C-ID               PRESENCE
mandatory   }|
    { ID id-ConfigurationGenerationID       CRITICALITY ignore  TYPE ConfigurationGenerationID
        PRESENCE mandatory  }|
    { ID id-MaximumTransmissionPower        CRITICALITY ignore  TYPE MaximumTransmissionPower
        PRESENCE optional   }|
    { ID id-PrimarySCH-Information-Cellreconf-Req   CRITICALITY ignore  TYPE PrimarySCH-
Information-Cellreconf-Req  PRESENCE optional   }|
    { ID id-SecondarySCH-Information-Cellreconf-Req CRITICALITY ignore  TYPE SecondarySCH-
Information-Cellreconf-Req  PRESENCE optional   }|
    { ID id-PrimaryCPICH-Information-Cellreconf-Req CRITICALITY ignore  TYPE PrimaryCPICH-
Information-Cellreconf-Req  PRESENCE optional   }|
    { ID id-SecondaryCPICH-Information-Cellreconf-Req       CRITICALITY ignore
        TYPE    SecondaryCPICH-Information-Cellreconf-Req           PRESENCE optional
}|
    { ID id-PrimaryCCPCH-Information-Cellreconf-Req CRITICALITY ignore  TYPE PrimaryCCPCH-
Information-Cellreconf-Req  PRESENCE optional   },
    ...
}

CellReconfigurationRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}


PrimarySCH-Information-Cellreconf-Req ::= SEQUENCE {
    commonPhysicalChannelID         CommonPhysicalChannelID,
    primarySCH-Power            DL-Power
 }

SecondarySCH-Information-Cellreconf-Req ::= SEQUENCE {
    commonPhysicalChannelID         CommonPhysicalChannelID,
    secondarySCH-Power          DL-Power
 }

PrimaryCPICH-Information-Cellreconf-Req ::= SEQUENCE {
    commonPhysicalChannelID         CommonPhysicalChannelID,
    primaryCPICH-Power          DL-Power
 }

SecondaryCPICH-Information-Cellreconf-Req ::= SEQUENCE {
    commonPhysicalChannelID         CommonPhysicalChannelID,    secondaryCPICH-Power
    DL-Power
 }

 PrimaryCCPCH-Information-Cellreconf-Req ::= SEQUENCE {
    bCH-information             BCH-information-Cellreconf-Req
 }

BCH-Information-Cellreconf-Req ::= SEQUENCE {
    commonTransportChannelID        CommonTransportChannelID,
    bCH-Power               DL-Power
 }

-- **********************************************************
--
-- CELL RECONFIGURATION REQUEST TDD
--
-- **********************************************************

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

CellReconfigurationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-LocalCell-ID                CRITICALITY ignore  TYPE LocalCell-ID
    PRESENCE mandatory  }|
    { ID id-C-ID                    CRITICALITY ignore  TYPE C-ID                   PRESENCE
mandatory   }|
    { ID id-ConfigurationGeneration-ID      CRITICALITY ignore  TYPE ConfigurationGeneration-ID
        PRESENCE optional   }|
    { ID id-MaximumTransmissionPower        CRITICALITY ignore  TYPE MaximumTransmissionPower
        PRESENCE optional   }|
    { ID id-PSCH-Information-CellReconfReq      CRITICALITY ignore  TYPE PSCH-Information-
CellReconfReq       PRESENCE optional   }|
```

```
    { ID id-PCCPCH-Information-CellReconfReq    CRITICALITY ignore  TYPE PCCPCH-Information-
CellReconfReq       PRESENCE optional   }|
    { ID id-TimeSlotConfigurationList-CellReconfReq CRITICALITY ignore  TYPE
TimeSlotConfigurationList-CellReconfReq PRESENCE mandatory  },
    ...
}

CellReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}


PSCH-Information-CellReconfReq ::= SEQUENCE {
    commonPhysicalChannelID     CommonPhysicalChannelID,
    pSCH-Power          PSCH-Power
}

PCCPCH-Information-CellReconfReq ::= SEQUENCE {
    commonPhysicalChannelID     CommonPhysicalChannelID,
    pCCPCH-Power            PCCPCH-Power
}

TimeSlotConfigurationList-CellReconfReq ::= SEQUENCE (SIZE (1..15)) OF
    ProtocolIE-Container {{TimeSlotConfiguration-CellReconfReqItemIE }}

 TimeSlotConfiguration-CellReconfReqItemIE NBAP-PROTOCOL-IES ::= {
    { I D id-TimeSlotConfiguration-CellReconfReqItem    CRITICALITY      ignore     TYPE
    TimeSlotConfiguration-CellReconfReqItem         PRESENCE    mandatory
},
    ...
 }

TimeSlotConfiguration-CellReconfReqItem ::= SEQUENCE {
    timeSlot                TimeSlot,
    timeSlotStatus              TimeSlotStatus,
    timeSlotDirection           TimeSlotDirection
 }

-- **************************************************************
--
-- CELL RECONFIGURATION RESPONSE
--
-- **************************************************************

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

CellReconfigurationResponse-IEs NBAP-PROTOCOL-IES ::= {
{ ID id-CriticalityDiagnostic           CRITICALITY ignore      TYPE CriticalityDiagnostic
    PRESENCE optional
    },
    ...
}

CellReconfigurationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}


-- **************************************************************
--
-- CELL RECONFIGURATION FAILURE
--
-- **************************************************************

CellReconfigurationFailure ::= SEQUENCE {
    protocolIEs                     ProtocolIE-Container       {{CellReconfigurationFailure-
IEs}},
    protocolExtensions              ProtocolExtensionContainer {{CellReconfigurationFailure-
Extensions}}                  OPTIONAL,
    privateExtensions               PrivateExtensionContainer  {{CellReconfigurationFailure-
PrivateExtensions}}           OPTIONAL,
    ...
}
```

```
CellReconfigurationFailure-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-Cause                   CRITICALITY ignore  TYPE Cause                  PRESENCE
mandatory   }|
{ ID id-CriticalityDiagnostic           CRITICALITY ignore      TYPE CriticalityDiagnostic
    PRESENCE optional
    },
    ...
}

CellReconfigurationFailure-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}


-- **************************************************************
--
-- CELL DELETION REQUEST
--
-- **************************************************************

CellDeletionRequest ::= SEQUENCE {
    protocolIEs                     ProtocolIE-Container       {{CellDeletionRequest-IEs}},
    protocolExtensions              ProtocolExtensionContainer {{CellDeletionRequest-Extensions}}
OPTIONAL,
    privateExtensions               PrivateExtensionContainer  {{CellDeletionRequest-
PrivateExtensions}}           OPTIONAL,
    ...
}

CellDeletionRequest-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-C-ID                    CRITICALITY ignore  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-CriticalityDiagnostic           CRITICALITY ignore      TYPE CriticalityDiagnostic
    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              CRITICALITY ignore  TYPE IndicationType
    PRESENCE mandatory  }|
    { ID id-Cause                   CRITICALITY ignore  TYPE Cause                  PRESENCE
mandatory   },
    ...
}

ResourceStatusIndication-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}


IndicationType ::= ENUMERATED {
    no-Failure              No-Failure,
    serviceImpacting            ServiceImpacting
}

No-Failure ::= SEQUENCE {
    local-CellInformationList-ResourceStatInd                               Local-
CellInformationList-ResourceStatInd
}

Local-CellInformationList-ResourceStatInd ::= SEQUENCE(SIZE (1..maxLocalCellinNodeB)) OF
    ProtocolIE-Container {{Local-CellInformation-ResourceStatIndItemIE}}

Local-CellInformation-ResourceStatIndItemIE NBAP-PROTOCOL-IES ::= {
    { ID id-Local-CellInformation-ResourceStatIndItem   CRITICALITY ignore  TYPE Local-
CellInformation-ResourceStatIndItem PRESENCE mandatory  },
    ...
}

Local-CellInformation-ResourceStatIndItem ::= SEQUENCE {
    local-CellID            Local-CellID,
    addOrDeleteIndicator        AddOrDeleteIndicator,
    numberOfChannelElements     NumberOfChannelElements,
maximum-DL-PowerCapability  Maximum-DL-PowerCapability
}

ServiceImpacting ::= SEQUENCE {
    local-Cell-InformationList-ResourceStatInd                      Local-Cell-InformationList-
ResourceStatInd OPTIONAL,
    communicationControlPortInformationList-ResourceStatInd
    CommunicationControlPortInformationList-ResourceStatInd OPTIONAL,
    cell-InformationList-ResourceStatInd                                Cell-InformationList-
ResourceStatInd OPTIONAL,
    primary-SCH-Information     P-SCH-Information-Audit-Res OPTIONAL,
    secondary-SCH-Information   S-SCH-Information-Audit-Res OPTIONAL,
    primary-CPICH-Information   P-CPICH-Information-Audit-Res   OPTIONAL,
    secondary-CPICH-Information S-CPICH-Information-Audit-Res   OPTIONAL,
    primary-CCPCH-Information   P-CCPCH-Information-Audit-Res   OPTIONAL,
bCH-InformationItem-ResourceStatInd                             BCH-InformationItem-
ResourceStatInd     OPTIONAL,
    secondary-CCPCH-Information S-CCPCH-Information-Audit-Res   OPTIONAL,
pCH-InformationList-ResourceStatInd                             PCH-InformationList-
ResourceStatInd     OPTIONAL,
pICH-InformationItem-ResourceStatInd                                PICH-InformationItem-
ResourceStatInd OPTIONAL,
fACH-InformationList-ResourceStatInd                                FACH-InformationList-
ResourceStatInd     OPTIONAL,
    pRACH-InformationList       PRACH-InformationList-Audit-Res OPTIONAL,
rACH-InformationList-ResourceStatInd                                RACH-InformationList-
ResourceStatInd     OPTIONAL,
aICH-InformationList-ResourceStatInd                                AICH-InformationList-
ResourceStatInd     OPTIONAL,
pCPCH-InformationList-ResourceStatInd                               PCPCH-InformationList-
ResourceStatInd     OPTIONAL,
CPCH-InformationList-ResourceStatInd                                CPCH-InformationList-
ResourceStatInd     OPTIONAL,
aP-AICH-InformationList-ResourceStatInd                             AP-AICH-InformationList-
ResourceStatInd     OPTIONAL,
cD/CA-ICH-InformationList-ResourceStatInd                           CD/CA-ICH-InformationList-
ResourceStatInd     OPTIONAL,
sCH-InformationList-ResourceStatInd                             SCH-InformationList-
ResourceStatInd     OPTIONAL,
    pSCH-InformationList        PSCH-InformationList-Audit-Res      OPTIONAL,
}

Local-Cell-InformationList-ResourceStatInd ::= SEQUENCE (SIZE (1..maxLocalCellinNodeB)) OF
    ProtocolIE-Container {{Local-Cell-Information-ResourceStatIndItemIE }}
```

```
Local-Cell-Information-ResourceStatIndItemIE NBAP-PROTOCOL-IES ::= {
    { ID id-Local-Cell-Information-ResourceStatIndItem  CRITICALITY ignore  TYPE Local-Cell-
Information-ResourceStatIndItem PRESENCE mandatory  },
    ...
}

Local-Cell-Information-ResourceStatIndItem ::= SEQUENCE {
    local-CellID            Local-CellID,
    numberOfChannelElements     NumberOfChannelElements     OPTIONAL,
maximum-DL-PowerCapability  Maximum-DL-PowerCapability      OPTIONAL
}

CommunicationControlPortInformationList-ResourceStatInd ::= SEQUENCE (SIZE (1..maxCCPinNodeB)) OF
    ProtocolIE-Container {{CommunicationControlPortInformation-ResourceStatIndItemIE }}

CommunicationControlPortInformation-ResourceStatIndItemIE NBAP-PROTOCOL-IES ::= {
    { ID id-CommunicationControlPortInformation-ResourceStatIndItem
    CRITICALITY ignore                              TYPE    CommunicationControlPortInformation-
ResourceStatIndItem
    PRESENCE mandatory  },
    ...
}

CommunicationControlPortInformation-ResourceStatIndItem ::= SEQUENCE {
    communicationControlPortID      CommunicationControlPortID,
    resourceOperationalState        ResourceOperationalState,
    availabilityStatus          AvailabilityStatus
}

Cell-InformationList-ResourceStatInd ::= SEQUENCE (SIZE (1..maxCellinNodeB)) OF
    ProtocolIE-Container {{Cell-Information-ResourceStatIndItemIE }}

Cell-Information-ResourceStatIndItemIE NBAP-PROTOCOL-IES ::= {
    { ID id-Cell-Information-ResourceStatIndItem    CRITICALITY ignore  TYPE Cell-Information-
ResourceStatIndItem PRESENCE mandatory},
    ...
}

Cell-Information-ResourceStatIndItem ::= SEQUENCE {
    c-ID                C-ID,
    resourceOperationalState    ResourceOperationalState,
    availabilityStatus      AvailabilityStatus,
maximumDL-PowerCapability   MaximumDL-PowerCapability,
minimumSpreadingFactor      MinimumSpreadingFactor
}

P-SCH-Information-ResourceStatInd ::= SEQUENCE {
    commonTransportChannelID    CommonTransportChannelID,
    resourceOperationState      ResourceOperationState,
    availabilityStatus      AvailabilityStatus
}

S-SCH-Information-ResourceStatInd ::= SEQUENCE {
    commonPhysicalChannelID     CommonPhysicalChannelID,
    resourceOperationState      ResourceOperationState,
    availabilityStatus      AvailabilityStatus
}

P-CPICH-Information-ResourceStatInd ::= SEQUENCE {
    commonPhysicalChannelID     CommonPhysicalChannelID,
    resourceOperationState      ResourceOperationState,
    availabilityStatus      AvailabilityStatus
}

S-CPICH-InformationList-ResourceStatInd ::= SEQUENCE (SIZE (1..maxSCPICHCell)) OF
    ProtocolIE-Container {{S-CPICH-InformationItemIE-ResourceStatInd }}

S-CPICH-InformationItemIE-ResourceStatInd NBAP-PROTOCOL-IES ::= {
    { ID id-S-CPICH-InformationItem-ResourceStatInd     CRITICALITY ignore  TYPE S-CPICH-
InformationItem-ResourceStatInd PRESENCE    mandatory
},
    ...
}

S-CPICH-InformationItem-ResourceStatInd ::= SEQUENCE {
    commonTransportChannelID    CommonTransportChannelID,
    resourceOperationState      ResourceOperationState,
    availabilityStatus      AvailabilityStatus
}
```

```
P-CCPCH-Information-ResourceStatInd ::= SEQUENCE {
    commonPhysicalChannelID     CommonPhysicalChannelID,
    resourceOperationState      ResourceOperationState,
    availabilityStatus      AvailabilityStatus
}

BCH-InformationItem-ResourceStatInd ::= SEQUENCE {
    commonTransportChannelID        CommonTransportChannelID,
    resourceOperationalState        ResourceOperationalState,
    availabilityStatus          AvailabilityStatus
}

PCH-InformationList-ResourceStatInd ::= SEQUENCE (SIZE (1..maxPCHinNodeB)) OF
    ProtocolIE-Container {{PCH-Information-ResourceStatIndItemIE }}

PCH-Information-ResourceStatIndItemIE NBAP-PROTOCOL-IES ::= {
    { ID id-PCH-Information-ResourceStatIndItem CRITICALITY ignore  TYPE PCH-Information-
ResourceStatIndItem PRESENCE mandatory},
    ...
}

PCH-Information-ResourceStatIndItem ::= SEQUENCE {
    commonTransportChannelID        CommonTransportChannelID,
    resourceOperationalState        ResourceOperationalState,
    availabilityStatus          AvailabilityStatus
}

PICH-InformationItem-ResourceStatInd ::= SEQUENCE {
    commonPhysicalChannelID         CommonPhysicalChannelID,
    resourceOperationalState        ResourceOperationalState,
    availabilityStatus          AvailabilityStatus
}

FACH-InformationList-ResourceStatInd ::= SEQUENCE (SIZE (1..maxFACHCell)) OF
    ProtocolIE-Container {{FACH-Information-ResourceStatIndItemIE }}

FACH-Information-ResourceStatIndItemIE NBAP-PROTOCOL-IES ::= {
    { ID id-FACH-Information-ResourceStatIndItem    CRITICALITY ignore  TYPE FACH-Information-
ResourceStatIndItem PRESENCE mandatory},
    ...
}

FACH-Information-ResourceStatIndItem ::= SEQUENCE {
    commonTransportChannelID        CommonTransportChannelID,
    resourceOperationalState        ResourceOperationalState,
    availabilityStatus          AvailabilityStatus
}

PRACH-InformationList-ResourceStatInd ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF
    ProtocolIE-Container {{PRACH-InformationItemIE-ResourceStatInd}}

PRACH-InformationItemIE-ResourceStatInd NBAP-PROTOCOL-IES ::= {
    { ID id-PRACH-InformationItem-ResourceStatInd       CRITICALITY ignore  TYPE PRACH-
InformationItem-ResourceStatInd PRESENCE    mandatory       },
    ...
}

PRACH-InformationItem-ResourceStatInd ::= SEQUENCE {
    commonPhysicalChannelID     CommonPhysicalChannelID,
    resourceOperationState      ResourceOperationState,
    availabilityStatus      AvailabilityStatus
}

RACH-InformationList-ResourceStatInd ::= SEQUENCE (SIZE (1..maxRACHCell)) OF
    ProtocolIE-Container {{RACH-Information-ResourceStatIndItemIE }}

RACH-Information-ResourceStatIndItemIE NBAP-PROTOCOL-IES ::= {
    { ID id-RACH-Information-ResourceStatIndItem    CRITICALITY ignore  TYPE RACH-Information-
ResourceStatIndItem PRESENCE mandatory},
    ...
}

RACH-Information-ResourceStatIndItem ::= SEQUENCE {
    commonTransportChannelID        CommonTransportChannelID,
    resourceOperationalState        ResourceOperationalState,
    availabilityStatus          AvailabilityStatus
}

AICH-InformationList-ResourceStatInd ::= SEQUENCE (SIZE (1..maxAICHCell)) OF
    ProtocolIE-Container {{AICH-Information-ResourceStatIndItemIE }}
```

```
AICH-Information-ResourceStatIndItemIE NBAP-PROTOCOL-IES ::= {
    { ID id-AICH-Information-ResourceStatIndItem    CRITICALITY ignore  TYPE AICH-Information-
ResourceStatIndItem     PRESENCE mandatory},
    ...
}

AICH-Information-ResourceStatIndItem ::= SEQUENCE {
    commonPhysicalChannelID         CommonPhysicalChannelID,
    resourceOperationalState        ResourceOperationalState,
    availabilityStatus          AvailabilityStatus
}

PCPCH-InformationList-ResourceStatInd ::= SEQUENCE (SIZE (1..maxPCPCHCell)) OF
    ProtocolIE-Container {{PCPCH-Information-ResourceStatIndItemIE }}

PCPCH-Information-ResourceStatIndItemIE NBAP-PROTOCOL-IES ::= {
    { ID id-CPCH-Information-ResourceStatIndItem    CRITICALITY ignore  TYPE PCPCH-Information-
ResourceStatIndItem     PRESENCE mandatory},
    ...
}

PCPCH-Information-ResourceStatIndItem ::= SEQUENCE {
    commonPhysicalChannelID         CommonPhysicalChannelID,
    resourceOperationalState        ResourceOperationalState,
    availabilityStatus          AvailabilityStatus
}


CPCH-InformationList-ResourceStatInd ::= SEQUENCE (SIZE (1..maxCPCHSetCell)) OF
    ProtocolIE-Container {{CPCH-Information-ResourceStatIndItemIE }}

CPCH-Information-ResourceStatIndItemIE NBAP-PROTOCOL-IES ::= {
    { ID id-CPCH-Information-ResourceStatIndItem    CRITICALITY ignore  TYPE CPCH-Information-
ResourceStatIndItem     PRESENCE mandatory},
    ...
}

CPCH-Information-ResourceStatIndItem ::= SEQUENCE {
    commonTransportChannelID        CommonTransportChannelID,
    resourceOperationalState        ResourceOperationalState,
    availabilityStatus          AvailabilityStatus
}


AP-AICH-InformationList-ResourceStatInd ::= SEQUENCE (SIZE (1..maxCPCHSetCell)) OF
    ProtocolIE-Container {{AP-AICH-Information-ResourceStatIndItemIE }}

AP-AICH-Information-ResourceStatIndItemIE NBAP-PROTOCOL-IES ::= {
    { ID id-AP-AICH-Information-ResourceStatIndItem CRITICALITY ignore  TYPE AP-AICH-Information-
ResourceStatIndItem     PRESENCE mandatory},
    ...
}

AP-AICH-Information-ResourceStatIndItem ::= SEQUENCE {
    commonPhysicalChannelID         CommonPhysicalChannelID,
    resourceOperationalState        ResourceOperationalState,
    availabilityStatus          AvailabilityStatus
}


CD/CA-ICH-InformationList-ResourceStatInd ::= SEQUENCE (SIZE (1..maxCPCHSetCell)) OF
    ProtocolIE-Container {{CD/CA-ICH-Information-ResourceStatIndItemIE }}

CD/CA-ICH-Information-ResourceStatIndItemIE NBAP-PROTOCOL-IES ::= {
    { ID id-CD/CA-ICH-Information-ResourceStatIndItem   CRITICALITY ignore  TYPE CD/CA-ICH-
Information-ResourceStatIndItem     PRESENCE mandatory},
    ...
}

CD/CA-ICH-Information-ResourceStatIndItem ::= SEQUENCE {
    commonPhysicalChannelID         CommonPhysicalChannelID,
    resourceOperationalState        ResourceOperationalState,
    availabilityStatus          AvailabilityStatus
}


SCH-Information-ResourceStatInd ::= SEQUENCE {
    commonTransportChannelID        CommonTransportChannelID,
    resourceOperationalState        ResourceOperationalState,
```

```
    availabilityStatus          AvailabilityStatus
}

PSCH-Information-ResourceStatInd ::= SEQUENCE {
    commonPhysicalChannelID         CommonPhysicalChannelID,
    resourceOperationalState        ResourceOperationalState,
    availabilityStatus          AvailabilityStatus
}

--
```

9.3.4 NBAP Information Elements

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

NBAP-IEs
DEFINITIONS AUTOMATIC TAGS ::=
BEGIN

IMPORTS
        maxTFcount,
        maxnoofTFCs,
        maxCTF-1,
        maxRM,


FROM NBAP-Constants;

DTX-InsertionPoint ::= INTEGER
DedicatedMeasurementValue ::= INTEGER
DeltaTPC ::= INTEGER

------------------------------------------------
-- A
------------------------------------------------

-- to do
AcknowledgedRA-TriesValue ::= TBD

AddOrDeleteIndicator ::= ENUMERATED {
add,
delete
}

AICH-TransmissionTiming ::= ENUMERATED {
timing0,
timing1
}

AP-Preamble-Scrambling-Code ::= INTEGER ( 0 1 … 2^24-1)

AP-Preamble-Signature ::= ENUMERATED{
P0,
P1,
..
P15
}

AP-Preamble-Sub-Channel-Number ::= INTEGER (0 1 .. 11)

Available-CD-Signatures ::= BIT STRING (SIZE (16))

AvailabilityStatus ::= ENUMERATED {
empty,
in-test,
failed,
power-off,
off-line,
off-duty,
dependency,
degraded,
not-installed,
log-full,
...
}
```

```
--to do
AveragingDuration ::= TBD

--------------------------------------------
-- B
--------------------------------------------

BCCH-ModificationTime ::= INTEGER (0| 2| 4| .. | 4095)

BindingID ::= OCTET STRING (SIZE (4))

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.

BurstType ::= ENUMERATED {
type1,
type2
}

--------------------------------------------
-- C
--------------------------------------------
Capacity-Info ::= SEQUENCE {

    frequencyofAPattempt    FrequencyofAPattempt,
    occupancy               Occupancy,
    ...
}

Cause ::= ENUMERATED {
radioNetworkLayer       RadioNetworkLayerCause,
transportLayer          TransportLayerCause,
protocol            ProtocolCause,
misc                MiscellaneousCause
...
}

CCTrCH-ID ::= INTEGER (1..15)

CDPreambleScramblingCode ::= INTEGER (0..2^24-1)

CDSubChannelNumbers ::= BIT STRING (SIZE (12))


CellID-Length ::= ENUMERATED {
    short,
    medium,
    long
}

CFN ::= INTEGER (0..255)

Channel-Assignment-Indication ::= ENUMERATED {
    Active,
    Inactive
}
ChipOffset ::= INTEGER (0..38399)

C-ID ::= INTEGER (0..65535)

CodingRate ::= ENUMERATED {
rate1-2,
rate1-3
}

CommonMeasurementObjectType ::= ENUMERATED {
    cell,
    rach,
    cpch,
    ...
}

CommonMeasurementType ::= SEQUENCE  {
```

```
    rssi                    RSSI-Value,
    transmitted-carrier-power       TransmittedCarrierPowerValue,
    acknowledged-ra-tries           AcknowledgedRA-TriesValue,
    time-slot-iscp              TimeSlotISCP-Value,
    capacity-info               Capacity-info,
    ...
}

CommonPhysicalChannelID ::= INTEGER (0..255)

CommonTransportChannelID ::= INTEGER (0..255)

CommunicationControlPortID ::= INTEGER (0..65535)

CompressedModeMethod ::= ENUMERATED {
puncturing,
sF-2,
gating,
none
}

ConfigurationGenerationID ::= INTEGER (0..255)
CPCH-DL-DPCCH-slot-format ::= INTEGER (0..1)

CPCH-Set-ID ::= INTEGER (0..255)

CRC-Size ::= ENUMERATED {
size0,
size12,
size16,
size24
}


CRNC-CommunicationContextID ::= INTEGER (0..1048575)

CTFC ::= INTEGER (0..maxCTF-1)

--------------------------------------------
-- D
--------------------------------------------

DCH-CombinationInd ::= INTEGER (0..255)

DCH-ID ::= INTEGER (0..255)

DedicatedMeasurementObjectType1 ::= ENUMERATED {
    cell,
    rach,
    ...
}

DedicatedMeasurementObjectType2 ::= SEQUENCE {
sir-value       SIR-Value           OPTIONAL,
sir-error-value     SIR-ErrorValue          OPTIONAL,
transmitted-code-power  TransmittedCodePowerValue   OPTIONAL,
time-slot-iscp      TimeSlotISCP-Value      OPTIONAL,
...
}

DedicatedMeasurementObjectType3 ::= ENUMERATED {
    rl,
    all-rl,
    ...
}

-- Reference: 25.215 and 25.225
DedicatedMeasurementType ::= ENUMERATED {
    sir,
    sir-error,
    transmitted-code-power,
    timeslot-iscp,
    ...
}


D-FieldLength ::= ENUMERATED {
d-length1,
d-lngth2
}
```

```
DiversityControlField ::= ENUMERATED {
may,
must,
must-not
}

DiversityIndication ::= ENUMERATED {
combined,
not-combined
}

DiversityMode ::= ENUMERATED {
none,
sTTD,
closed-loop-mode1,
closed-loop-mode2
}

DL-DPCH-SlotFormat ::= INTEGER (0..16)

DL-FrameType ::= ENUMERATED {
typeA,
typeB
}

-- -35..15 is transformed into 0..50. 0.1 steps gives 0..500
-- Power0 indicates –35dB, Power1 indicates –34.9dB, …, Power500 indicates 15dB
DL-Power ::= ENUMERATED {
power0,
power1,
...
}

-- 0= Primary scrambling code of the cell, 1..15= Secondary scrambling code --
DL-ScramblingCode ::= INTEGER (0..15)

DPCH-ID ::= INTEGER (0..15)

DPCH-Offset ::= INTEGER (0..255)

DSCH-ID ::= INTEGER (0..255)

-- to do
-- the parameter need to be defined. It may correspond to the DL TFS defined for DCH
DSCH-TransportFormatSet ::= TBD

-- to do
-- the parameter need to be defined. It may correspond to the DL TFS defined for DCH
DSCH-TransportFormatCombinationSet ::= TBD

DTX-InsertionPosition ::= ENUMERATED {
fixed,
flexible
}

DynamicTransportFormatInformation ::= SEQUENCE (SIZE (1..maxTFcount)) OF
    SEQUENCE {
    numberOfTransportBlocks     NumberOfTransportBlocks,
    transportBlockSize      TransportBlockSize  OPTIONAL
    -- This IE is only present if  Number of Transport Blocks is greater than 0 --,
    mode-dynamicTFS         Mode-DynamicTFS
        ...
}

--------------------------------------------------
-- E
--------------------------------------------------

EventA ::= SEQUENCE {
    measurementThreshold        MeasurementThreshold,
    measurementHysteresisTime       MeasurementHysteresisTime   OPTIONAL
}

EventB ::= SEQUENCE {
    measurementThreshold        MeasurementThreshold,
    measurementHysteresisTime       MeasurementHysteresisTime   OPTIONAL
}

EventC ::= SEQUENCE {
```

```
    measurementIncreaseThreshold    MeasurementIncreaseThreshold,
    measurementChangeTime       MeasurementChangeTime
}

EventD ::= SEQUENCE {
    measurementDecreaseThreshold    MeasurementDecreaseThreshold,
    measurementChangeTime       MeasurementChangeTime
}

EventE ::= SEQUENCE {
    measurementThreshold1       MeasurementThreshold1,
    measurementThreshold2       MeasurementThreshold2   OPTIONAL,
    measurementHysteresisTime       MeasurementHysteresisTime       OPTIONAL,
    reportPeriodicity           ReportPeriodicity       OPTIONAL
}

EventF ::= SEQUENCE {
    measurementThreshold1       MeasurementThreshold1,
    measurementThreshold2       MeasurementThreshold2   OPTIONAL,
    measurementHysteresisTime       MeasurementHysteresisTime       OPTIONAL,
    reportPeriodicity           ReportPeriodicity       OPTIONAL
}

--------------------------------------------------
-- F
--------------------------------------------------

-- The maximum value is equal to the DL spreading factor •  --
FDD-DL-ChannalisationCodeNumber ::= INTEGER(0.. 255)


-- 0: 0 chip, 1: 256 chip, 2: 512 chip, .. ,149: 38144 chip [TS 25.211] --
FDD-S-CCPCH-Offset ::= INTEGER (0.. 149)

-- 0=lower priority, 15=higher priority --
FrameHandlingPriority ::= INTEGER (0..15)



--------------------------------------------------
-- G
--------------------------------------------------

GapPeriod ::= INTEGER(0..255)

Gap Position Mode ::= ENUMERATED {
fixed,
flexible
}

--------------------------------------------------
-- H
--------------------------------------------------

--------------------------------------------------
-- I
--------------------------------------------------

-- to do
IB-SG ::= BIT STRING

IB-SG-POS ::= INTEGER (0..4095)

IB-SG-REP ::= INTEGER {rep(16), rep(32), rep(64), rep(128), rep(256), rep(512), rep(1024),
rep(2048)}

IB-Type :: Enumerated {
MIB,
SIB1,
SIB2,
SIB12
}

IndicationType ::= ENUMERATED {
noFailure,
serviceImpacting,
cellControl,
...
}
```

```
-------------------------------------------------
-- J
-------------------------------------------------

-------------------------------------------------
-- L
-------------------------------------------------

LocalCell-ID ::= INTEGER (0..268435455)

-------------------------------------------------
-- M
-------------------------------------------------
-- dBm, granularity 1 dBm
-- dl-power0 indicates 0 dBm
MaximumDL-PowerCapability ::= ENUMERATED{
dl-power0,
dl-power1,
dl-power2,
...
}

-- Unit dBm, 0 to 50, Granularity  1 dB
MaximumTransmissionPower ::= ENUMERATED {
power0,
power1,
power2,
...
}
MaxNumberofPCPCHes ::= ENUMERATED {
PCPCH1.
PCPCH2,
...
PCPCH64
}
MaxNumberOfUL-DPDCHs ::= INTEGER (1..6)

MaxPRACH-MidambleShifts ::= ENUMERATED {
shift4,
shift8
}

-- 10ms to 1min, Step10ms
MeasurementChangeTime ::= ENUMERATED {
time10ms,
time20ms,
time30ms,
...
}


MeasurementCharacteristics ::= SEQUENCE {
    measurementFrequency        MeasurementFrequency,
    averagingDuration       AveragingDuration
}

-- to do
MeasurementDecreaseThreshold ::= TBD

-- to do
MeasurementFrequency ::= TBD

-- to do
MeasurementIncreaseThreshold ::= TBD

-- to do
-- 10ms to 1min, Step10ms --
MeasurementHysteresisTime ::= ENUMERATED {
time10ms,
timm20ms,
time30ms,
...
}

MeasurementID ::= INTEGER (0..1048575)

-- to do
MeasurementThreshold ::= TBD

-- to do
```

```
MeasurementThreshold1 ::= TBD

-- to do
MeasurementThreshold2 ::= TBD

MeasurementType ::= ENUMERATED {
sCH,
syncRACH-access
}

MessageDiscriminator ::= ENUMERATED {
common,
dedicated
}

MidambleShift ::= INTEGER (0..15)

MinimumSpreadingFactor ::= ENUMERATED {
sF4,
sF16,
sF32,
sF64,
sF128,
sF256,
sF512
}

MinUL-ChannelisationCodeLength ::= ENUMERATED {
code-length4,
code-length8,
code-length16,
code-length32,
code-length64,
code-length128,
code-length256
}

MiscellaneousCause ::= ENUMERATED {
control-processing-overload,
hardware-failure,
oam-intervention,
not-enough-user-plane-processing-resources,
unspecified
}

Mode-DynamicTFS ::= CHOICE {
    tdd-mode-dynamic    TransmissionTimeInterval-Dynamic,
    …
}

Mode-SemiStaticTFS ::=  CHOICE {
    tdd-mode-semistatic TransmissionTimeInterval-SemiStatic,
    …
}

--------------------------------------------------
-- N
--------------------------------------------------
NF_max ::= INTEGER (1..64)

N_Start_Message ::= INTEGER (1..8)

-- to do
NumberOfChannelElements ::= TBD

NodeB-CommunicationContextID ::= INTEGER (0..1048576)

NumberOfTransportBlocks ::= INTEGER (0..4095)

--------------------------------------------------
-- O
--------------------------------------------------
--------------------------------------------------
-- P
--------------------------------------------------

PagingIndicatorLength ::= ENUMERATED {
ind-length2,
ind-length4,
ind-length8
```

```
}

PayloadCRC-PresenceIndicator ::= ENUMERATED {
cRC-Included,
cRC-NotIncluded
}

PCP-Length ::= {
PCPLength0,
PCPLength1,
PCPLength2,
PCPLength3,
PCPLength4,
PCPLength5,
```

PCPLength6,

```
PCPLength7,
PCPLength8
}

PC-Preamble-Slot-Format ::= INTEGER (0 1)


PD ::= INTEGER(0..2047)

PICH-Mode ::= ENUMERATED {
noofPI18,
noofPI36,
noofPI72,
noofPI144
}

PilotBitsUsedIndicator ::= ENUMERATED {
pilot-bits-used,
pilot-bits-not-used
}

PowerControlMode ::= ENUMERATED {
pcm0,
pcm1,
...
}

-- Chips. Step size is 3 chips. 0=0 chips, 1=3 chips .. --
--** TODO. -15..40 is transformed to 0..55. 0.1 steps gives 0..550 **
PowerOffset ::= INTEGER (0..24)

PowerResumeMode ::= ENUMERATED {
prm0,
prm1,
...
}


PRACH-Midamble ::= ENUMERATED {
inverted,
direct
}

PreambleScramblingCode ::= INTEGER (0..4095)


-- Bit 0=P0, Bit 1=P1, .. ,Bit 15=P15 [25.213] --
PreambleSignatures ::= BIT STRING (SIZE (16))

-- Unit dBm, -15 to 40, Granularity 0.1 dB
-- cpich-power1 indicates • 5 dB
PrimaryCPICH-Power ::= ENUMERATED {
cpich-power1,
cpich-power2,
...
}

PrimaryScramblingCode ::= INTEGER (0..511)

PropagationDelay ::= INTEGER (0..255)

ProtocolCause ::= ENUMERATED
transaction-not-allowed,
transfer-syntax-error,
abstract-syntax-error -reject,
abstract-syntax-error-ignore-and-notify,
message-not-compatible-with-receiver-state,
semantic-error,
unspecified
}

-- PCCPCH Power unit dBm
-- PCCPCH Power step 0.1dBm
PCCPCH-power ::= INTEGER (-15..40)

PSCH-TimeSlot ::= INTEGER (0..6)

PSCH-Power ::= INTEGER (0..511)

PUSCH-Offset ::= INTEGER (0..255)
```

```
------------------------------------------------
-- R
------------------------------------------------

-- SF
RACH-SlotFormat ::= ENUMERATED {
format256,
format128,
format64,
format32
}

-- Bit 0=Sub Channel Number 0, Bit 1=Sub Channel Number 1, .., Bit 14=Sub Channel Number 14 --
RACH-SubChannelNumbers ::= BIT STRING (SIZE (15))

RadioNetworkLayerCause :: Enumerated {
unknown-C-ID,
cell-not-available,
power-level-not-supported,
ul-scramblingcode-already-in-use,
dl-radio-resources-not-available,
ul-radio-resources-not-available,
rl-Already-ActivatedorAllocated,
nodeB-Resources-Unavailable,
insufficient-physical-channel-resources,
measurement-not-supported-for-the-object,
macrodiversity-combining-not-possible,
reconfiguration-not-allowed,
requested-configuration-not-supported,
synchronization-failure,
unspecified
}

RateMatchingAttribute ::= INTEGER (1..maxRM)

RepetitionLength ::= ENUMERATED {
length1,
length2,
length4,
length8
}

ReportCharacteristicsType ::= CHOICE {
    onDemand            NULL,
    periodic            ReportPeriodicity,
    event-a             EventA,
    event-b             EventB,
    event-c             EventC,
    event-d             EventD,
    event-e             EventE,
    event-f             EventF
}

-- 10ms to 1min, step 10ms or
-- 1min to 1hour, step 1min
ReportPeriodicity ::= CHOICE {
    msec                INTEGER (1..1000),
    min             INTEGER (1..60)
}

ResourceOperationalState ::= ENUMERATED {
enabled,
disabled
}

RLC-Mode ::= ENUMERATED {
acknowledgedMode,
unacknowledgedMode,
transparentMode
}

RL-ID ::= INTEGER (0..31)

RNC-ID  ::= INTEGER (0..4095)

-- -30..-100 step 0.1
-- rssi1 indicates -30
RSSI-Value ::= ENUMERATED {
rssi1,
```

```
rssi2,
...
}
-----------------------------------------------
-- S
-------------------------------------------------

ScramblingCodeChange ::= ENUMERATED {
change,
no-change
}

Scrambling Code Word Number ::= INTEGER (0..255)

SecondaryCCPCH-SlotFormat ::= INTEGER(0..8)

SegmentType ::= ENUMERATED {
first,
subsequent,
last,
complete
}

SemiStaticTransportFormatInformation ::= SEQUENCE {
    transmissionTimeInterval        TransmissionTimeInterval,
    typeOfChannelCoding     TypeOfChannelCoding,
    codingRate          CodingRate      OPTIONAL
    --  This IE is only present if IE Type of channel coding is Convolutional or Turbo --,
    rateMatchingAttribute       RateMatchingAttribute,
    cRC-Size            CRC-Size,
    mode-semistatic         Mode-SemiStatic
}

S-FieldLength ::= ENUMERATED {
s-length1,
s-length2
}

SIB-DeletionIndicator ::= ENUMERATED {
noDeletion,
deletion
}

SIB-Originator ::= ENUMERATED {
nodeB,
cRNC
}

--** TODO. -10..10 is transformed to 0..10. 0.1 steps gives 0..200 **
-- sir-error-value1 indicates • 0 dB
SIR-ErrorValue ::= ENUMERATED {
sir-error-value1,
sir-error-value2,
...
}

--** TODO. -10..20 is transformed to 0..30. 0.1 steps gives 0..300 **
-- sir-value1 indicates • 0 dB
SIR-Value ::= ENUMERATED {
sir-value1,
sir-value2,
...
}

SSDT-CellIdentity ::= ENUMERATED {a, b, c, d, e, f, g, h}

SSDT-Indication ::= ENUMERATED {
    ssdtActiveInTheUE,
    ssdtNotActiveInTheUE
}

STTD-Indicator ::= ENUMERATED {
    active,
    inactive
}

SSDT-SupportIndicator ::= ENUMERATED {
sSDT-not-supported,
sSDT-Supported
}
```

```
ShutdownTimer ::= INTEGER (1..3600)

Sub-Channel-Numbers ::= BIT STRING ( SIZE(12) )

SynchronisationMethod ::= ENUMERATED {
external-reference,
locked-toMaster-cell,
one-time-synchronisation
}

-----------------------------------------------
-- T
-----------------------------------------------

T-Cell ::= ENUMERATED {
    chip-0,
    chip-256,
    chip-512,
    chip-768,
    chip-1024,
    chip-1280,
    chip-1536,
    chip-1892,
    chip-2048,
    chip-2304
}

TDD-ChannelisationCode ::= ENUMERATED {
channelisationCode1-1,
channelisationCode2-1,
channelisationCode2-2,
channelisationCode4-1,
channelisationCode4-2,
...
}

-- the ChipOffset is • 9200 to + 19199
TDD-ChipOffset ::= INTEGER (-19200..19199)

TransmissionTimeInterval-Dynamic ::= SEQUENCE (SIZE (1..maxTTIcount)) OF
    ENUMERATED {tti10, tti20, tti40, tti80}
}

TransmissionTimeInterval-SemiStatic ::= ENUMERATED {
frameRelated,
timeSlotRelated
}

TDD-S-CCPCH-Offset ::= INTEGER (0..63)

TFCI-Presence ::= ENUMERATED {
present,
not-present
}

TFCI-SignallingMode ::= ENUMERATED {
normal,
split
}

TFCS ::= SEQUENCE (SIZE (1..maxnoofTFCs)) OF
    SEQUENCE {
        cTFC            CTFC
}


TFS ::= SEQUENCE {
    dynamicTransportFormatInformation
    DynamicTransportFormatInformation,
    semiStaticTransportFormatInformation
    SemiStaticTransportFormatInformation
}



TGD :: = INTEGER (0..255)

TGL ::= INTEGER (3,4,7,10,14)
```

```
TimeSlot ::= INTEGER (0..14)

TimeSlotDirection ::= ENUMERATED {
    ul,
    dl
}

-- to do
TimeSlotISCP-Value ::= TBD

TimeSlotStatus ::= ENUMERATED {
    active,
    not-active
}

ToAWE ::= INTEGER (0..2559) -- msec. --

ToAWS ::= INTEGER (0..1279) -- msec. --

TPC-DownlinkStepSize ::= ENUMERATED {
step-size0-5,
step-size1
}

Transmit Diversity Indicator ::= ENUMERATED {
active,
Inactive
}

TransmissionTimeInterval ::= ENUMERATED {
time-interval10,
time-interval20,
time-interval40,
time-interval80
}           -- mec --

--** TODO. -35..15 is transformed to 0..50. 0.1 steps gives 0..500 **
-- carrier-power1 indicates • 5 dB
TransmittedCarrierPowerValue ::= ENUMERATED {
carrier-power1,
carrier-power2,
...
}

--** TODO. -35..15 is transformed to 0..50. 0.1 steps gives 0..500 **
-- code-power1 indicated • 5 dB
TransmittedCodePowerValue ::= ENUMERATED {
code-power1,
code-power2,
...
}

TransportBlockSize ::= INTEGER (1..5000)
-- bit --

TSTD-Indicator ::= ENUMERATED {
    active,
    inactive
}

TransportLayerAddress ::= OCTET STRING (SIZE (1..20, ...))

TransportLayerCause ::= ENUMERATED {
transport-link-failure,
transmission-port-not-available,
transport-resource-unavailable,
unspecified
}

TypeOfChannelCoding ::= ENUMERATED {
no-coding,
convolutional,
turbo
}

-----------------------------------------------
-- U
-----------------------------------------------

UARFCN ::= INTEGER (174 .. 474)
```

```
UL-DL-CompressedModeSelection ::= ENUMERATED {
ul-only,
dl-only,
both-UlandDL
}

UL-DPCH-SlotFormat ::= INTEGER (0..5)

UL-EbNo ::= INTEGER (0..255)
-- Resolution is 0.1 dB, range 0-25.5 dB --

UL-FP-Mode ::= ENUMERATED {
normal,
silent
}


-- unit dBm, step 0.1dBm
UL-InterferenceLevel ::= INTEGER (-128..60)

UL-PunctureLimit ::= INTEGER (0..100)

UL-ScramblingCode ::= SEQUENCE {
    uL-ScramblingCodeNumber     UL-ScramblingCodeNumber,
    uL-ScramblingCodeLength     UL-ScramblingCodeLength
}

-- 2^24
UL-ScramblingCodeLength ::= INTEGER (0..16777215)

UL-ScramblingCodeNumber ::= ENUMERATED {
short,
long
}

UplinkDeltaEb-No ::= ENUMERATED {
deltaEb-No-6dB,
...
}

UplinkDeltaEb-No-after ::= ENUMERATED {
deltaEb-No-after-6dB,
...
}

END
```