TSG-RAN Meeting #8
Düsseldorf, Germany, 21 - 23 June 2000

TSGRP#8(00)0241

Title: **Agreed CRs to TS 25.423**

Source: **TSG-RAN WG3**

Agenda item: **5.3.3**

Tdoc_Num	Specification	CR_Num	Revision_Nu	CR_Subject	CR_Category	WG_Status	Cur_Ver_Num	New_Ver_Nu
R3-001116	25.423	086		Introduction of RLS in 25.423	C	agreed	3.1.0	3.2.0
R3-001126	25.423	088		RNSAP range bounds in ASN.1 description: FDD	F	agreed	3.1.0	3.2.0
R3-001131	25.423	070	1	Introduction of RTT measurement	B	agreed	3.1.0	3.2.0
R3-001133	25.423	069	1	Measurement filtering parameters	F	agreed	3.1.0	3.2.0
R3-001137	25.423	075	1	Add "NULL" for only one component to choose in	F	agreed	3.1.0	3.2.0
R3-001139	25.423	076	1	Change INTEGER to ENUMERATED for IB SG	F	agreed	3.1.0	3.2.0
R3-001142	25.423	072	1	Alignment of Transaction ID IE with NBAP	F	agreed	3.1.0	3.2.0
R3-001193	25.423	092		RNSAP range bounds, TDD parts	F	agreed	3.1.0	3.2.0
R3-001198	25.423	082	1	Modification to TFS definition [RNSAP]	F	agreed	3.1.0	3.2.0
R3-001205	25.423	079	1	DCH information response in RL Reconfiguration	F	agreed	3.1.0	3.2.0
R3-001210	25.423	077	2	Clarification on the Combining Control field	F	agreed	3.1.0	3.2.0
R3-001219	25.423	095		Handling of closed loop timing mode over RNSAP	F	agreed	3.1.0	3.2.0

R3-001256	25.423	096		Out-of Sync RNSAP	B	agreed	3.1.0	3.2.0
R3-001257	25.423	078	2	Correction to the limited power increase parameter	F	agreed	3.1.0	3.2.0
R3-001269	25.423	107		Clarification that basic Per is used	F	agreed	3.1.0	3.2.0
R3-001273	25.423	111		Handling of presence field	F	agreed	3.1.0	3.2.0
R3-001276	25.423	112		Basic protocol robustness	C	agreed	3.1.0	3.2.0
R3-001282	25.423	114		Addition of DL TPC step sizes	F	agreed	3.1.0	3.2.0
R3-001284	25.423	115		Correction of reference handling and some other	D	agreed	3.1.0	3.2.0
R3-001296	25.423	118		Selection of secondary S-CCPCH in RNSAP	F	agreed	3.1.0	3.2.0

3GPP TSG RAN WG3 Meeting #12
Seoul, South-Korea, 10th April – 13th April 2000

***Document* R3-001133**
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.

25.423	CR	069 R1	Current Version:	3.1.0.

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

For submission to:	TSG RAN#8	for approval	X	strategic		*(for SMG use only)*
list expected approval meeting # here ↑		for information		non-strategic		

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

Source: R-WG3 **Date:** April 2000

Subject: Measurement filtering parameters

Work item:

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

F	Correction	X
A	Corresponds to a correction in an earlier release	
B	Addition of feature	
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: This CR updates the filter coefficients for the layer 3 filtering model in line with Tdoc R3-001021.

Clauses affected: 8.3.11, 9.2.1.28, 9.3.4

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:

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

8.3.11 Measurement Initiation

[Editor's note: According to TSGR#5 (99)564, the following measurements shall also be considered:
* Time of Arrival
* Frequency Offset
* Round Trip Time
* RX Timing Deviation

Whether these measurements shall be dedicated or common measurements have so far not been considered by TSG RAN WG3 and are thus not incorporated.]

8.3.11.1 General

This procedure is used by an SRNS to request the initiation of measurements in a DRNS.

This procedure shall use the signalling bearer connection for the relevant UE context.

The Measurement Initiation procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

8.3.11.2 Successful Operation

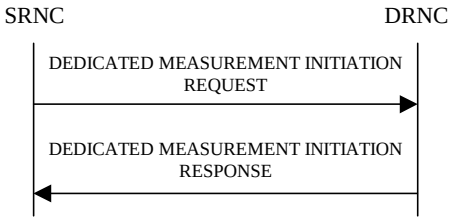

Figure 1: Measurement Initiation procedure, Successful Operation

The procedure is initiated with a DEDICATED MEASUREMENT INITIATION REQUEST message sent from the SRNC to the DRNC.

Upon reception, the DRNC shall initiate the requested measurement according to the parameters given in the request. Unless specified below, the meaning of the parameters are given in other specifications.

If the *Dedicated Measurement Object* IE is set to "RL", the measurement reports shall give the measurement result for each of the indicated Radio Links.

[FDD - If the *Dedicated Measurement Object* IE is set to "RLS", the measurement reports shall give the measurement result for each of the indicated Radio Link Sets.]

If the *Dedicated Measurement Object* IE is set to "ALL RL", the measurement reports shall give the measurement result for each of the current and future Radio Links within the UE Context.

[FDD - If the *Dedicated Measurement Object* IE is set to "ALL RLS", the measurement reports shall give the measurement result for each of the existing and future Radio Link Sets within the UE Context.]

The *Report Characteristics* IE indicates how the reporting of the measurement shall be performed.

If the *Report Characteristics* IE is set to 'On-Demand', the DRNS shall report the measurement result immediately.

If the *Report Characteristics* IE is set to 'Periodic', the DRNS shall periodically initiate a Measurement Report procedure for this measurement, with the requested report periodicity.

If the *Report Characteristics* IE is set to 'Event A', the DRNS shall initiate a Measurement Reporting procedure when the measured entity rises above the requested threshold and stays there for the requested hysteresis time. If no hysteresis time is given, the DRNC shall use the value zero for the hysteresis time.

If the *Report Characteristics* IE is set to 'Event B', the DRNS shall initiate a Measurement Reporting procedure when the measured entity falls below the requested threshold and stays there for the requested hysteresis time. If no hysteresis time is given, the DRNC shall use the value zero for the hysteresis time.

If the *Report Characteristics* IE is set to 'Event C', the DRNS shall initiate a Measurement Reporting procedure when the measured entity rises more than the requested threshold within the requested time.

If the *Report Characteristics* IE is set to 'Event D', the DRNS shall initiate a Measurement Reporting procedure when the measured entity falls more than the requested threshold within the requested time.

If the *Report Characteristics* IE is set to 'Event E', the DRNS shall initiate a Measurement Reporting procedure when the measured entity rises above the 'Measurement Threshold 1' and stays there for the 'Measurement Hysteresis Time' (Report A). The DRNS shall also initiate a Measurement Reporting procedure when the measured entity falls below the 'Measurement Threshold 2' and stays there for the 'Measurement Hysteresis Time' (Report B). If the *Report Periodicity* IE is provided, the DRNS shall initiate Measurement Reporting procedures periodically, with the requested frequency, between Report A and Report B. If 'Measurement Threshold 2' is not present, the DRNS shall use 'Measurement Threshold 1' instead. If no 'Measurement Hysteresis Time' is provided, the DRNC shall use the value zero as hysteresis times for both Report A and Report B.

If the *Report Characteristics* IE is set to 'Event F', the DRNS shall initiate a Measurement Reporting procedure when the measured entity falls below the 'Measurement Threshold 1' and stays there for the 'Measurement Hysteresis Time' (Report A). The DRNS shall also initiate a Measurement Reporting procedure when the measured entity rises above the 'Measurement Threshold 2' and stays there for the 'Measurement Hysteresis Time' (Report B). If the *Report Periodicity* IE is provided, the DRNS shall initiate Measurement Reporting procedures periodically, with the requested frequency, between Report A and Report B. If 'Measurement Threshold 2' is not present, the DRNS shall use 'Measurement Threshold 1' instead. If no 'Measurement Hysteresis Time' is provided, the DRNC shall use the value zero as hysteresis times for both Report A and Report B.

If at the start of the measurement, the reporting criteria are fulfilled for any of Event A, Event B, Event E or Event F, the DRNS shall initiate a Measurement Reporting procedure immediately, and then continue with the measurements as specified in the DEDICATED MEASUREMENT INITIATION REQUEST message.

The *Measurement Filter Coefficient* IE indicates how filtering of the measurement values shall be performed before measurement event evaluation and reporting.

The averaging shall be performed according to the following formula.

$$F_n = (1-a) \cdot F_{n-1} + a \cdot M_n$$

The variables in the formula are defined as follows:

F_n is the updated filtered measurement result

F_{n-1} is the old filtered measurement result

M_n is the latest received measurement result from physical layer measurements

a = $1/2^{(k/2)}$ ~~one divided by~~ , where k is the parameter received in the *Measurement Filter Coefficient* IE. If the *Measurement Filter Coefficient* IE is not present, a shall be set to 1 (no filtering)

In order to initialize the averaging filter, F_0 is set to M_1 when the first measurement result from the physical layer measurement is received.

If the DRNS was able to initiate the measurement requested by the SRNS it shall respond with the DEDICATED MEASUREMENT INITIATION RESPONSE message. The message shall include the same Measurement Id that was used in the measurement request.

Only in the case when the *Report Characteristics* IE is set to "On-Demand", the DEDICATED MEASUREMENT INITIATION RESPONSE message shall contain the measurement result. In this case also the *Dedicated Measurement Object* IE shall be included if it was included in the request message.

9.2.1.28 Measurement Filter Coefficient

The Measurement Filter Coefficient determines the amount of filtering to be applied for measurements.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Measurement Filter Coefficient	M		~~INTEGER (1..256)~~ENUMERATED(0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 13, 15, 17, 19)	

```
-- M

MaxNrOfUL-DPCHs             ::= INTEGER (1..6)

MAC-c-SDU-Length            ::= INTEGER (1..5000)

MaximumAllowedULTxPower     ::= INTEGER (-50..33)

MeasurementFilterCoefficient ::= INTEGER (1..256)ENUMERATED(k0, k1, k2, k3, k4, k5, k6, k7, k8,
k9, k11, k13, k15, k17, k19)
-- Measurement Filter Coefficient to be used for measurement

MeasurementID               ::= INTEGER (0..1048575)

MultipleURAsIndicator ::= ENUMERATED {
    multiple-URAs-exist,
    single-URA-exists
}

ScaledMaxAdjustmentPeriod           ::= INTEGER(1..50)
-- MaxAdjustmentPeriod (slots) = 10 * ScaledMaxAdjustmentPeriod

ScaledMaxAdjustmentStep         ::= INTEGER(1..10)
-- MaxAdjustmentStep (dB) = ScaledMaxAdjustmentStep / 10

MeasurementChangeTime       ::= INTEGER (1..6000)
-- The MeasurementChangeTime  gives the MeasurementChangeTime
-- in number of 10 ms periods.
-- E.g. Value 6000 means 60000ms(1min)
-- Unis is ms, Step is 10 ms

MeasurementHysteresisTime       ::= INTEGER (1..6000)
-- The MeasurementHysteresisTime  gives the
-- MeasurementHysteresisTime in number of 10 ms periods.
-- E.g. Value 6000 means 60000ms(1min)
-- Unit is ms, Step is 10ms

MeasurementIncreaseDecreaseThreshold        ::= CHOICE {
    sir                             SIR-Value-IncrDecrThres,
    sir-error                       SIR-Error-Value-IncrDecrThres,
    transmitted-code-power          Transmitted-Code-Power-Value-IncrDecrThres,
    rscp                            RSCP-Value-IncrDecrThres,
    ...
}

MeasurementThreshold            ::= CHOICE {
    sir                             SIR-Value,
    sir-error                       SIR-Error-Value,
    transmitted-code-power          Transmitted-Code-Power-Value,
    rscp                            RSCP-Value,
    ...
}

MidambleShift               ::= INTEGER (0..15)

MinUL-ChannelisationCodeLength      ::= ENUMERATED {
    v4,
    v8,
    v16,
    v32,
    v64,
    v128,
    v256
}

MultiplexingPosition ::= ENUMERATED {
    fixed,
    flexible
}
```

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Seoul, South-Korea, 10th April – 13th April 2000

Document R3-001131

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

CHANGE REQUEST

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25.423	CR	070 R1	Current Version:	3.1.0

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

For submission to:	R3#8	For approval	X	strategic		(for SMG use only)
list expected approval meeting # here ↑		for information		non-strategic		

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: R-WG3 **Date:** April 2000

Subject: Introduction of Round Trip Time measurement

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: So far, R3 has only very limited support for Positioning. This CR proposes to introduce the Round Trip Time measurement as a dedicated measurement on RNSAP.

Definition of measurement range granularity are taken from 25.215, v.3.2.0.

Clauses affected: 9.2.1.16, 9.2.1.17, 9.2.1.67, 9.2.1.68, 9.3.4.

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.

9.2.1.16 Dedicated Measurement Type

The Dedicated Measurement Type identifies the type of measurement that shall be performed.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Dedicated Measurement Type			ENUMERATED (SIR, SIR Error, Transmitted Code Power, RSCP, Round Trip Time, …)	RSCP is used by TDD only, Round Trip Time is used by FDD only.

NOTE: For definitions of the measurement types refer to ref. [**Error! Bookmark not defined.**] and [14].

9.2.1.17 Dedicated Measurement Value

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

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Dedicated measurement Value				
>SIR value	C *MeasValue*		INTEGER(0. .63)	According to mapping in 25.215/25.225
>SIR error Value	C *MeasValue*		INTEGER(0. .125)	SIR_Error=SIR-SIR_target 0: < -31.0 dB 1: -31.0dB ≤ SIR_Error < 30.5dB 2: -30.5dB ≤ SIR_Error < 30.0dB … 62: -0.5dB ≤ SIR_Error < 0dB 63: 0dB ≤ SIR_Error < 0.5dB … 124: 30.5dB ≤ SIR_Error < 31dB 125: ≥ 31dB
>Transmitted Code Power Value	C *MeasValue*		INTEGER(0. .127)	According to mapping in 25.215/25.225
>RSCP	C *MeasValue*		INTEGER(0. .81)	According to mapping in 25.225 (TDD only)
>Round Trip Time	C *MeasValue*		INTEGER(0. .8191)	According to mapping in 25.215 (FDD only)

Condition	Explanation
MeasValue	Only one measurement value can be present at the same time.

9.2.1.67 Measurement Threshold

The Measurement Threshold defines which threshold that shall trigger Event A, B, E or F.

Information Element / Group Name	Presence	Range	IE Type and Reference	Semantics Description
SIR	*C – Threshold*		INTEGER(0. .63)	According to mapping in 25.215/25.225
SIR Error	*C – Threshold*		INTEGER(0. .125)	SIR_Error=SIR-SIR_target 0: < -31.0 dB 1: -31.0dB ≤ SIR_Error < 30.5dB 2: -30.5dB ≤ SIR_Error < 30.0dB … 62: -0.5dB ≤ SIR_Error < 0dB 63: 0dB ≤ SIR_Error < 0.5dB … 124: 30.5dB ≤ SIR_Error < 31dB 125: ≥ 31dB
Transmitted Code Power	*C – Threshold*		INTEGER(0. .127)	According to mapping in 25.215/25.225
RSCP	*C – Threshold*		INTEGER(0. .81)	According to mapping in 25.225 (TDD only)
Round Trip Time	*C – Threshold*		INTEGER(0. .8191)	According to mapping in 25.215 (FDD only)

Condition	Explanation
Threshold	Only one measurement threshold can be present at the same time.

9.2.1.68 Measurement Increase/Decrease Threshold

The Measurement Increase/Decrease Threshold defines the threshold that shall trigger Event C or D.

Information Element / Group Name	Presence	Range	IE Type and Reference	Semantics Description
SIR	*C – Threshold*		INTEGER(0. .62)	0: 0 dB 1: 0.5 dB 2: 1 dB … 62: 31dB
SIR Error	*C – Threshold*		INTEGER(0. .124)	0: 0 dB 1: 0.5 dB 2: 1 dB … 124: 62 dB
Transmitted Code Power	*C – Threshold*		INTEGER(0. .112,...)	0: 0 dB 1: 0.5 dB 2: 1 dB … 112: 56 dB
RSCP	*C – Threshold*		INTEGER(0. .80)	0: 0 dB 1: 0.5 dB 2: 1 dB … 80: 40dB
Round Trip Time	*C – Threshold*		INTEGER(0. .8190)	0: 0 chips 1: 0.25 chips 2: 0.5 chips … 8190: 2047.5 chips

Condition	Explanation
Threshold	Only one measurement threshold can be present at the same time.

```
-- D

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

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

DedicatedMeasurementObjectType ::= ENUMERATED {
    rl,
    rls,
    all-rl,
    all-rls,
    ...
}

DedicatedMeasurementType ::= ENUMERATED {
    sir,
    sir-error,
    transmitted-code-power,
    rSCP,
    round-trip-time,
    ...
}

DedicatedMeasurementValue ::= CHOICE {
    sIR-Value           SIR-Value,
    sIR-ErrorValue          SIR-Error-Value,
    transmittedCodePowerValue   Transmitted-Code-Power-Value,
    rSCP                RSCP-Value, -- TDD only
    roundTripTime       Round-Trip-Time-Value,  -- FDD only
    ...
}

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

DiversityMode               ::= ENUMERATED {
    none,
    sTTD,
    closedLoopMode1,
    closedLoopMode2
}

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

DL-SIRTarget                ::= UL-SIR

DL-Power                ::= INTEGER (-350..150)
-- Value = DL-Power / 10
-- Unit dB, Range –35dB .. +15dB, Step +0.1dB

D-RNTI                  ::= INTEGER (0..1048575)

D-RNTI-ReleaseIndication ::= ENUMERATED {
    release-D-RNTI,
    not-release-D-RNTI
}

DL-ScramblingCode           ::= INTEGER (0..15)

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

DPCH-ID                 ::= INTEGER (0..239)

DPCHConstantValue ::= INTEGER (-32..31)
-- Unit dBm, Step 1dBm

DRACControl     ::= ENUMERATED {
    requested,
    not-requested
}
```

```
DRXCycleLengthCoefficient               ::= INTEGER (2..12)

D-FieldLength               ::= ENUMERATED {
    v1,
    v2
}
```

```
-- M

MaxNrOfUL-DPCHs             ::= INTEGER (1..6)

MAC-c-SDU-Length            ::= INTEGER (1..5000)

MaximumAllowedULTxPower     ::= INTEGER (-50..33)

MeasurementFilterCoefficient ::= INTEGER (1..256)
-- Measurement Filter Coefficient to be used for measurement

MeasurementID               ::= INTEGER (0..1048575)

MultipleURAsIndicator ::= ENUMERATED {
    multiple-URAs-exist,
    single-URA-exists
}

ScaledMaxAdjustmentPeriod           ::= INTEGER(1..50)
-- MaxAdjustmentPeriod (slots) = 10 * ScaledMaxAdjustmentPeriod

ScaledMaxAdjustmentStep         ::= INTEGER(1..10)
-- MaxAdjustmentStep (dB) = ScaledMaxAdjustmentStep / 10

MeasurementChangeTime       ::= INTEGER (1..6000)
-- The MeasurementChangeTime  gives the MeasurementChangeTime
-- in number of 10 ms periods.
-- E.g. Value 6000 means 60000ms(1min)
-- Unis is ms, Step is 10 ms

MeasurementHysteresisTime       ::= INTEGER (1..6000)
-- The MeasurementHysteresisTime  gives the
-- MeasurementHysteresisTime in number of 10 ms periods.
-- E.g. Value 6000 means 60000ms(1min)
-- Unit is ms, Step is 10ms

MeasurementIncreaseDecreaseThreshold        ::= CHOICE {
    sir                             SIR-Value-IncrDecrThres,
    sir-error                       SIR-Error-Value-IncrDecrThres,
    transmitted-code-power          Transmitted-Code-Power-Value-IncrDecrThres,
    rscp                            RSCP-Value-IncrDecrThres,
    round-trip-time                 Round-Trip-Time-IncrDecrThres,
    ...
}

MeasurementThreshold            ::= CHOICE {
    sir                             SIR-Value,
    sir-error                       SIR-Error-Value,
    transmitted-code-power          Transmitted-Code-Power-Value,
    rscp                            RSCP-Value,
    round-trip-time                 Round-Trip-Time-Value,
    ...
}

MidambleShift               ::= INTEGER (0..15)

MinUL-ChannelisationCodeLength      ::= ENUMERATED {
    v4,
    v8,
    v16,
    v32,
    v64,
    v128,
    v256
}

MultiplexingPosition ::= ENUMERATED {
    fixed,
    flexible

}
```

```
-- R

RAC                 ::= OCTET STRING (SIZE(1))

RANAP-RelocationInformation     ::= BIT STRING

RateMatchingAttribute           ::= INTEGER (1..maxRateMatching)

RefTFCNumber ::= INTEGER (0..15)

RepetitionLength            ::= INTEGER (1..63)

RepetitionPeriod ::= ENUMERATED {
    v1,
    v2,
    v4,
    v8,
    v16,
    v32,
    v64
}

RepetitionNumber ::= INTEGER (0..255)

ReportCharacteristics ::= CHOICE {
    onDemand            NULL,
    periodic            Periodic,
    eventA              EventA,
    eventB              EventB,
    eventC              EventC,
    eventD              EventD,
    eventE              EventE,
    eventF              EventF,
    ...
}

ReportPeriodicity ::= CHOICE {
    ten-msec                INTEGER (1..6000),
-- The Report Periodicity gives the reporting periodicity in number of 10 ms periods.
-- E.g. value 6000 means 60000ms (i.e. 1min)
-- Unit ms, Step 10ms
    min             INTEGER (1..60)
-- Unit min, Step 1min
}

LimitedPowerIncrease ::= ENUMERATED {
    used,
    not-used
}

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

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

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

Round-Trip-Time-IncrDecrThres ::= INTEGER(0..8190)

Round-Trip-Time-Value ::= INTEGER(0..8191)
-- According to mapping in 25.215

RSCP-Value ::= INTEGER (0..81)
-- According to mapping in 25.225

RSCP-Value-IncrDecrThres ::= INTEGER (0..80)
```

3GPP TSG-RAN Working Group Meeting #12
Seoul, Korea, 10th-13th April 2000

R3-001142
e.g. for 3GPP use the format TP-99xxx
or for SMG, use the format P-99-xxx

CHANGE REQUEST

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25.423	CR	072 R1	Current Version:	3.1.0.

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

For submission to:	TSG-RAN #8	for approval	X	strategic		(for SMG use only)
list expected approval meeting # here ↑		for information		non-strategic		

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: R-WG3 **Date:** April 4, 2000

Subject: Alignment of *Transaction ID* IE with NBAP.

Work item:

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

F	Correction	X	**Release:**	Phase 2	
A	Corresponds to a correction in an earlier release			Release 96	
B	Addition of feature			Release 97	
C	Functional modification of feature			Release 98	
D	Editorial modification			Release 99	X
				Release 00	

Reason for change:

At R3#10 in Gothenburg, Sweden, a CR (tdoc 226) on NBAP was approved which defined the Transaction ID to be a choice of short (7 bits) or long (15 bits) Transaction ID in order to allow for a big number (> 255) of parallel common procedures while still providing the flexibility of saving one octet for dedicated procedures by using the short Transaction ID.

This CR proposes to align the RNSAP Transaction ID with the NBAP definition.

Clauses affected: 9.2.1.49, 9.3.5

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.

9.2.1.49 Transaction ID

The Transaction ID is used to associate all the messages belonging to the same ~~pending~~ procedure ~~of the same RNSAP procedure type (e.g. Radio Link Addition), i.e. the Request , Response , Confirm type of messages have the same Transaction ID. The messages belonging to different pending procedures have different Transaction IDs.~~ Messages belonging to the same procedure shall use the same Transaction ID.

The Transaction ID is determined by the initiating peer of a procedure.

For procedures addressed to a specific UE context, the Transaction ID shall uniquely identify a procedure among all ongoing parallel procedures for the same UE using the same procedure code, and initiated by the same protocol peer.

For procedures not addressed to a specific UE context, the Transaction ID shall uniquely identify a procedure among all ongoing parallel procedures using the same procedure code, and initiated by the same protocol peer.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Transaction ID			CHOICE INTEGER (0..127) or INTEGER (0..32767) ~~INTEGER (0..255)~~	~~Since the scope is not clear, the range of this parameter is to be considered a working assumption~~

9.3.5 Common Definitions

```
-- **************************************************************
--
-- Common definitions
--
-- **************************************************************

RNSAP-CommonDataTypes -- { object identifier to be allocated }--
DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

Criticality     ::= ENUMERATED { reject, ignore, notify }

Presence        ::= ENUMERATED { optional, conditional, mandatory }

PrivateIE-ID    ::= CHOICE {
    local               INTEGER (0..65535),
    global              OBJECT IDENTIFIER
}

ProcedureCode       ::= INTEGER (0..255)

ProcedureID ::= SEQUENCE {
    procedureCode           ProcedureCode,
    ddMode              ENUMERATED { tdd, fdd, common }
}

ProtocolExtensionID ::= INTEGER (0..65535)

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

TransactionID       ::= INTEGER (0..65535) CHOICE {
    ShortTransActionId  INTEGER (0..127),
    LongTransActionId   INTEGER (0..32767)
}

TriggeringMessage   ::= ENUMERATED { initiating-message, successful-outcome, unsuccessfull-outcome,
outcome }

END
```

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CHANGE REQUEST

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25.423	CR	075r1	Current Version:	3.1.0

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

For submission to: TSG-RAN#8 *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: R-WG3 **Date:** 10 April

Subject: Add "NULL" for only one component to choose in ASN.1 CHOICE type.

Work item:

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

F	Correction	[X]	**Release:**	Phase 2	[ ]
A	Corresponds to a correction in an earlier release	[ ]		Release 96	[ ]
B	Addition of feature	[ ]		Release 97	[ ]
C	Functional modification of feature	[ ]		Release 98	[ ]
D	Editorial modification	[ ]		Release 99	[X]
				Release 00	[ ]

Reason for change: In the ASN.1, the definition of Transport Format Set contains CHOICE type. But the number of components of this CHOICE is only one (TDD only). This means that this component related to TDD mode is always encoded even if the TDD mode is not chosen. This CR proposes to add the NULL component to the CHOICE type so that no data is encoded when FDD mode is chosen.

Clauses affected: 9.3.4

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.

9.3.4 Information Element Definitions

-- partly omitted --

```
TransportFormatSet ::= SEQUENCE {
    dynamicParts            TransportFormatSet-DynamicPartList,
    semi-staticPart         TransportFormatSet-Semi-staticPart,
    iE-Extensions           ProtocolExtensionContainer { {TransportFormatSet-ExtIEs} } OPTIONAL,
    ...
}

TransportFormatSet-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

TransportFormatSet-DynamicPartList ::= SEQUENCE (SIZE (1..maxNrOfTFs)) OF
    SEQUENCE {
        nrOfTransportBlocks     NrOfTransportBlocks,
        transportBlockSize      TransportBlockSize      OPTIONAL
        -- This IE is only present if nrOfTransportBlocks is greater than 0 --,
        mode                TransportFormatSet-ModeDP,
        iE-Extensions           ProtocolExtensionContainer { {TransportFormatSet-DynamicPartList-
ExtIEs} } OPTIONAL,
        ...
    }

TransportFormatSet-DynamicPartList-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

TransportFormatSet-ModeDP ::= CHOICE {
    tdd                 TransmissionTimeIntervalList,
    -- This IE is mandatory if not defined as semistatic parameter, otherwise it is absent --
    notApplicable           NULL,
    ...
}

TransmissionTimeIntervalList ::= SEQUENCE (SIZE (1..maxTTI-Count)) OF
    SEQUENCE {
        transmissionTimeInterval    TransmissionTimeInterval,
        iE-Extensions           ProtocolExtensionContainer { {TransmissionTimeIntervalList-ExtIEs} }
OPTIONAL,
        ...
    }

TransmissionTimeIntervalList-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Transmitted-Code-Power-Value ::= INTEGER (0..127)
-- According to mapping in 25.215/25.225

Transmitted-Code-Power-Value-IncrDecrThres ::= INTEGER (0..112,...)

TransportFormatSet-Semi-staticPart ::= SEQUENCE {
    transmissionTime        TransmissionTimeInterval,
    channelCoding           ChannelCodingType,
    codingRate          CodingRate              OPTIONAL
    -- This IE is only present if channelCoding is 'convolutional' or 'turbo' --,
    rateMatcingAttribute        RateMatchingAttribute,
    cRC-Size            CRC-Size,
    mode                TransportFormatSet-ModeSSP,
    iE-Extensions           ProtocolExtensionContainer { {TransportFormatSet-Semi-staticPart-ExtIEs}
} OPTIONAL,
    ...
}

TransportFormatSet-Semi-staticPart-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

TransportFormatSet-ModeSSP ::= CHOICE {
    tdd             SecondInterleavingMode,
    notApplicable           NULL,
    ...
}
```

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CHANGE REQUEST

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25.423	CR	076r1	Current Version:	3.1.0

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

For submission to: TSG-RAN#8 *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: R-WG3 **Date:** 10 April

Subject: Change INTEGER to ENUMERATED for IB SG REP IE and TGL IE

Work item:

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

F	Correction	[X]
A	Corresponds to a correction in an earlier release	[ ]
B	Addition of feature	[ ]
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: In the tabular and the ASN.1, the definition of IB SG REP IE and TGL IE are changed from INTEGER type to ENUMERATED type in order to reduce the bit length when encoding.

Clauses affected: 9.2.2.51, 9.2.2.33, 9.3.4

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.

9.2 Information Element Functional Definition and Contents

-- partly omitted --

9.2.2.51 IB_SG_REP

Repetition distance for an Information Block segment. The segment shall be transmitted when SFN mod IB_SG_REP = IB_SG_POS.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
IB SG REP			ENUMERATED~~INTEGER~~ (16, 32, 64, 128, 256, 512, 1024,2048)	Repetition period for the IB segment in frames

-- partly omitted --

9.2.2.33 Transmit Gap Length (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			ENUMERATED~~INTEGER~~ (3,4,7,10,14)	Slot

-- partly omitted --

9.3.4 Information Elements Definitions

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

-- partly omitted --

```
IB-SG-REP   ::= ~~INTEGER (16| 32| 64| 128| 256| 512| 1024| 2480)~~ENUMERATED {rep4, rep8, rep16, rep32,
rep64, rep128, rep256, rep512, rep1024, rep2048}
```

-- partly omitted --

```
TGL                 ::= ~~INTEGER (3| 4| 7| 10| 14)~~ENUMERATED {
    v3,
    v4,
    v7,
    v10,
    v14
}
```

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***Document* R3-001210**
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CHANGE REQUEST

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25.423	CR	077r2	Current Version:	3.1.0

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

For submission to:	RAN#8	for approval	X	strategic		(for SMG use only)
list expected approval meeting # here ↑		for information		non-strategic		

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: (U)SIM ☐ ME ☐ UTRAN / Radio X Core Network ☐
(at least one should be marked with an X)

Source: R-WG3 **Date:** April 2000

Subject: Clarification on the combining control field

Work item:

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

F	Correction	X	**Release:**	Phase 2	
A	Corresponds to a correction in an earlier release			Release 96	
B	Addition of feature			Release 97	
C	Functional modification of feature			Release 98	
D	Editorial modification			Release 99	X
				Release 00	

Reason for change:

The current specification or handling of the 'Combining Control Field' in RNSAP specification requires some clarification, since it is not in line with the contents of 25.420 v3.1.0, that reads

> *5.2.2 Control of Combining/Splitting Topology*
>
> *When requesting the addition of a new cell for a UE-UTRAN connection, the RNC of the SRNS (i.e. the SRNC) can explicitly request to the RNC of the DRNS (i.e. the DRNC) a new Iur data stream, in which case the combining and splitting function within the DRNS is not used for that cell. Otherwise, the DRNS takes the decision whether combining and splitting function is used inside the DRNS for that cell i.e. whether a new Iur data stream shall be added or not.*

The CR clarifies, in line with text above, that the 'must' value of the Combining control field' is a request for the combining in the DRNC that may or may not be fulfilled by the DRNC. In the second case, the DRNC shall be capable to return a failure message with an appropriate cause value. This is clearly stated in the unsuccessful operation of the RL Setup/Addition procedures..

Clauses affected: 8.3.1, 8.3.2, 9.2.1.5, 9.3.4

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:

8.3.1 Radio Link Setup

8.3.1.1 General

This procedure is used for establishing the necessary resources in the DRNS for one or more radio links.

The connection-oriented service of the signalling bearer shall be established in conjunction with this procedure.

8.3.1.2 Successful Operation

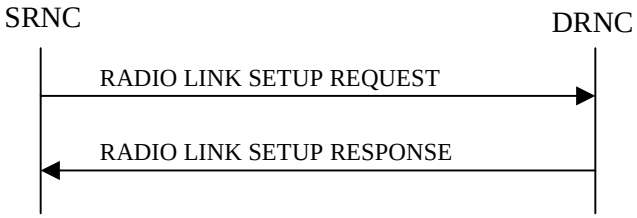

Figure 1: Radio Link Setup procedure: Successful Operation

When the SRNC makes an algorithmic decision to add the first cell or set of cells from a DRNS to the active set of a specific RRC connection, the RADIO LINK SETUP REQUEST message is sent to the corresponding DRNC to request setup of the radio link(s).

The message includes the S-RNTI associated to the UE, and, if the UE context is already present in the DRNC, the corresponding D-RNTI.

[FDD - The Diversity Control Field indicates for each RL except for the first RL whether the DRNS shall combine the RL with any of the other RLs or not on the Iur. If the *Diversity Control Field* IE is set to "May" (be combined with another RL), then the DRNS shall decide for any of the alternatives. If the *Diversity Control Field* IE is set to "Must", the DRNS shall combine the RL with one of the other RL. When an RL is to be combined the DRNS shall choose which RL(s) to combine it with.]

If the RADIO LINK SETUP REQUEST message includes the *Allowed Queuing Time* IE the DRNS may queue the request before providing a response to the SRNC.

[FDD - If the *Initial DL TX Power* IE and *Uplink SIR Target* IE are present in the message, the DRNS shall use the indicated DL TX Power and Uplink SIR Target as initial value.]

If the *Primary CPICH Ec/No* IE [FDD] or the *Primary CCPCH RSCP* IE [TDD] is present, the DRNC should use them when deciding the Initial DL TX Power.

If the RADIO LINK SETUP REQUEST message includes the *DCH Combination Indicator* IE for a DCH, the DRNS shall treat all DCHs with the same value of this IE as a set of co-ordinated DCHs.

[FDD - For DCHs with a unique or no "DCH Combination Ind" and the *QE-Selector* IE set to "selected DCH", the Transport channel BER from that DCH shall be the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [25.427]. If the QE-Selector is set to "non-selected DCH", the Physical channel BER shall be used for the QE in the UL data frames, ref. [25.427]].

[FDD - For DCHs with the same "DCH Combination Ind" the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected DCH" shall be used for the QE in the UL data frames, ref. [25.427]. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [25.427]. If all DCHs have *QE-Selector* IE set to "non-selected DCH" the Physical channel BER shall be used for the QE, ref. [25.427]].

The *Allocation/Retention Priority* IE defines the priority level that should be used by the DRNS to prioritise the allocation and the retention of the resources used by the DCH. The *Frame Handling Priority* IE defines the priority level that should be used by the DRNS to prioritise the discard/delay of the data frames of the DCH.

The DRNS shall use the included *UL DCH FP Mode* IE for a DCH as the new DCH FP Mode in the Uplink of the user plane for this DCH.

The DRNS shall use the included *ToAWS* IE for a DCH as the new Time of Arrival Window Start Point in the user plane for this DCH.

The DRNS shall use the included *ToAWE* IE for a DCH as the new Time of Arrival Window End Point in the user plane for this DCH.

[FDD - If the RADIO LINK SETUP REQUEST message includes the *SSDT Cell Identity* IE, the DRNS may activate SSDT using the *SSDT Cell Identity* IE and *SSDT Cell Identity Length* IE.]

At the reception of the RADIO LINK SETUP REQUEST message, DRNS allocates requested type of channelisation codes and other physical channel resources for each RL and assigns a binding identifier and a transport layer address for each DCH or set of co-ordinated DCHs. This information shall be sent to the SRNS in the message RADIO LINK SETUP RESPONSE when all the RLs have been successfully setup.

[FDD - If the *Initial DL TX Power* and the *Uplink SIR Target* IEs are not present in the RADIO LINK SETUP REQUEST message, then DRNC shall include the suggested initial Uplink and Downlink SIR Targets in the RADIO LINK SETUP RESPONSE message.]

[FDD – For each RL not having a common generation of the TPC commands in the DL with another RL, the DRNS shall assign the *RL Set ID* IE included in the RADIO LINK SETUP RESPONSE message a value that uniquely identifies the RL Set within the UE context.]

[FDD – For all RLs having a common generation of the TPC commands in the DL with another RL, the DRNS shall assign the *RL Set ID* IE included in the RADIO LINK SETUP RESPONSE message the same value. This value shall uniquely identify the RL Set within the UE context.]

[FDD - In the case of combining one or more RLs the DRNC shall indicate in the RADIO LINK SETUP RESPONSE message with the Diversity Indication that the RL is combined with another RL. In this case the Reference RL ID shall be included to indicate with which RL the combination is performed. The Reference RL ID shall be included for all but one of the combined RLs, for which the *Transport Layer Address* IE and the *Binding ID* IE shall be included.]

[FDD - In the case of not combining an RL with another RL, the DRNC shall indicate in the RADIO LINK SETUP RESPONSE message with the *Diversity Indication* IE that no combining is performed. In this case the DRNC shall include both the *Transport Layer Address* IE and the *Binding ID* IE for the transport bearer to be established for each DCH of the RL in the RADIO LINK SETUP RESPONSE message.]

[TDD - The DRNC shall always include in the RADIO LINK SETUP RESPONSE message both the *Transport Layer Address* IE and the *Binding ID* IE for the transport bearer to be established for each DCH of the RL.]

In case of a set of coordinated DCHs requiring a new transport bearer on Iur the *Binding Identifier* IE and the *Transport Layer Address* IE shall be included only for one of the DCH in the set of co-ordinated DCHs.

[FDD - Irrespective of SSDT activation, the DRNS shall include in the RADIO LINK SETUP RESPONSE message an indication concerning the capability to support SSDT on this RL. Only if the RADIO LINK SETUP REQUEST message requested SSDT activation and the RADIO LINK SETUP RESPONSE message indicates that the SSDT capability is supported for this RL, SSDT is activated in the DRNS.]

The DRNS shall also provide the SRNC with the UTRAN Cell Identifier (UC-Id), the Frequency Number, the [FDD-Primary Scrambling Code], the [TDD-Cell Parameter ID, the Sync Case, the PSCH Time Slot information] of the neighbouring cells to the cell(s) where the radio link(s) are added. In addition, if the information is available, the DRNC shall also provide the [FDD-CPICH Power level]/[TDD-PCCPCH Power level, DPCH Constant Value] and Frame Offset of the neighbouring cell.

If a neighbouring cell is controlled by another RNC, the DRNC shall report also the node identifications (i.e. RNC, CN domain nodes) of the RNC controlling the neighbouring cell. [FDD – If the information is available, the DRNC shall include the *Tx diversity indicator* and Tx diversity capability (i.e. *STTD Support Indicator*, *Closed Loop mode1 Support Indicator*, and *Closed Loop mode2 Support Indicator*) in Neighbouring FDD Cell Information].

If there was no UE context for this UE in the DRNS before the RADIO LINK SETUP REQUEST message was received the DRNC shall include the node identifications of the CN Domain nodes that the RNC is connected to (using LAC and RAC of the current cell), and the D-RNTI in the RADIO LINK SETUP RESPONSE message.

[FDD - If the *DRAC Control* IE is set to "requested" in the RADIO LINK SETUP REQUEST message for at least one DCH and if the DRNC supports the DRAC, the DRNC shall indicate in the RADIO LINK SETUP RESPONSE message the *Secondary CCPCH Info IE* to be received on FACH, for each added Radio Link. If the DRNC does not support DRAC, it shall not provide these IEs in the RADIO LINK SETUP RESPONSE message.]

After sending of the RADIO LINK SETUP RESPONSE message the DRNS shall continuously attempt to obtain UL synchronisation and start reception on the new RL. The DRNS shall start transmission on the new RL after synchronisation is achieved in the DL user plane as specified in ref. [3].

[FDD – When *Diversity Mode* IE is "*STTD*", "*Closedloop mode1*", or "*Closedloop mode2*", the DRNC shall activate/deactivate the Transmit Diversity to each Radio Link in accordance with *Transmit Diversity Indication* IE]

8.3.1.3 Unsuccessful Operation

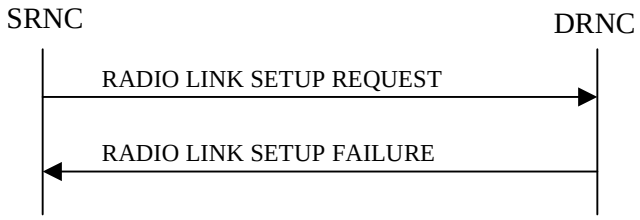

Figure 2: Radio Link Setup procedure: Unsuccessful Operation

In unsuccessful case (i.e. one or more RLs can not be setup) the RADIO LINK SETUP FAILURE message shall be sent to the SRNC, indicating the reason for failure. If some radio links were established successfully, the DRNC shall indicate this in the RADIO LINK SETUP FAILURE message in the same way as in the RADIO LINK SETUP RESPONSE message.

[FDD - If more than one DCH of a set of co-ordinated DCHs has the *QE-Selector* IE set to "selected DCH" the DRNS shall regard the Radio Link Setup procedure as failed and shall respond with a RADIO LINK SETUP FAILURE message].

[FDD - If the value of the *Diversity Control Field* IE of one RL is 'Must', but the DRNS cannot perform the requested combining, DRNC shall indicate this with the cause value ' Combining Resources not available' in the RADIO LINK SETUP FAILURE message].

Typical cause values are:

Radio Network Layer Causes:

- [FDD - UL Scrambling Code Already in Use];
- DL Radio Resources not Available;
- UL Radio Resources not Available;
- Unknown C-ID;
- [FDD - ~~Macrodiversity~~ Combining Resources not available~~Possible~~];
- Requested Configuration not Supported;
- Cell not Available;
- Power Level not Supported.

Transport Layer Causes:

- Transport Link Failure

Protocol Causes:

- Transaction not Allowed

Miscellaneous Causes:

- Control Processing Overload;
- HW Failure;
- Not enough User Plane Processing Resources.

8.3.1.4 Abnormal Conditions

If the DRNC receives either an S-RNTI or a D-RNTI which already has RL(s) established the DRNC shall send the RADIO LINK SETUP FAILURE message to the SRNC, indicating the reason for failure.

8.3.2 Radio Link Addition

8.3.2.1 General

This procedure is used for establishing the necessary resources in the DRNS for one or more additional RLs towards a UE when there is already at least one RL established to the concerning UE via this DRNS.

This procedure shall use the signalling bearer connection for the relevant UE context.

The Radio Link Addition procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

8.3.2.2 Successful Operation

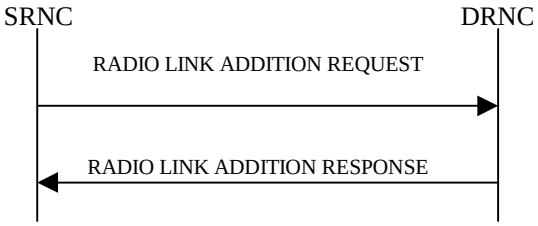

Figure 3: Radio Link Addition procedure: Successful Operation

The procedure is initiated with a RADIO LINK ADDITION REQUEST message sent from the SRNC to the DRNC.

Upon reception, the DRNS shall reserve the necessary resources and configure the new RL(s) according to the parameters given in the message. Unless specified below, the meaning of parameters is specified in other specifications.

The Diversity Control Field indicates for each RL whether the DRNS shall combine the new RL with existing RL(s) or not on the Iur. If the *Diversity Control Field* IE is set to "May" (be combined with another RL), then the DRNS shall decide for any of the alternatives. If the *Diversity Control Field* IE is set to "Must", the DRNS shall combine the RL with one of the other RL. When a new RL is to be combined the DRNS shall choose which RL(s) to combine it with.

If the *Primary CCPCH Ec/No* IE [FDD] or the *Primary CCPCH RSCP* IE [TDD] measured by the UE is included in the RADIO LINK ADDITION REQUEST message, the DRNS shall use this in the calculation of the Initial DL TX Power. If the *Primary CCPCH Ec/No* IE is not present, the DRNS sets the Initial DL TX Power accordingly to the power used by the existing RLs.

[FDD - The DRNS shall use the provided Uplink SIR Target value as the current target for the inner-loop power control.]

[FDD - If the RADIO LINK ADDITION REQUEST message contains an *SSDT Cell Identity* IE, SSDT may be activated for the concerned new RL, with the indicated SSDT Cell Identity used for that RL.]

The DRNS shall activate any feedback mode diversity according to the received settings.

If all requested RLs are successfully added, the DRNC shall respond with a RADIO LINK ADDITION RESPONSE message.

[FDD – For each RL not having a common generation of the TPC commands in the DL with another RL, the DRNS shall assign the *RL Set ID* IE included in the RADIO LINK ADDITION RESPONSE message a value that uniquely identifies the RL Set within the UE context.]

[FDD – For all RLs having a common generation of the TPC commands in the DL with another new or existing RL, the DRNS shall assign the *RL Set ID* IE included in the RADIO LINK ADDITION RESPONSE message the same value. This value shall uniquely identify the RL Set within the UE context.]

In the case of combining an RL with existing RL(s) the DRNC shall indicate in the RADIO LINK ADDITION RESPONSE message with the Diversity Indication that the RL is combined. In this case the Reference RL ID shall be included to indicate one of the existing RLs that the new RL is combined with.

In the case of not combining an RL with existing RL(s), the DRNC shall indicate in the RADIO LINK ADDITION RESPONSE message with the Diversity Indication that no combining is done. In this case the DRNC shall include both the Transport Layer Address and the binding ID for the transport bearer to be established for each DCH of the RL in the RADIO LINK ADDITION RESPONSE message.

In case of coordinated DCH, the binding ID and the transport address shall be included for only one of the co-ordinated DCHs.

[FDD - Irrespective of SSDT activation, the DRNS shall include in the RADIO LINK ADDITION RESPONSE message an indication concerning the capability to support SSDT on this RL. Only if the RADIO LINK ADDITION REQUEST message requested SSDT activation and the RADIO LINK ADDITION RESPONSE message indicates that the SSDT capability is supported for this RL, SSDT is activated in the DRNS.]

For any cell neighbouring of a cell in which a RL was added, the DRNC shall provide in the RADIO LINK ADDITION RESPONSE message the UTRAN Cell Identifier (UC-Id), the Frequency Number, the Primary Scrambling Code and the node identification of CN nodes connected to the RNC controlling the neighbouring cell if the neighbouring cell is not controlled by the DRNC. In addition, if the information is available, the DRNC shall also provide the [FDD-CPICH Power level]/[TDD-PCCPCH Power level, DPCH Constant Value], Frame Offset of the neighbouring cell, Tx diversity indicator [FDD], and Tx diversity capability[FDD] (i.e. *STTD Support Indicator*, *Closed Loop mode1 Support Indicator*, and *Closed Loop mode2 Support Indicator*).

The DRNC shall also provide the configured uplink Maximum SIR and UL Minimum SIR for every new RL to the SRNC in the RADIO LINK ADDITION RESPONSE message. These values are taken into consideration by DRNS admission control and shall be used by the SRNC as limits for the UL inner-loop power control target.

The DRNC shall also provide the selected scrambling and channelisation codes of the new RLs in order to enable the SRNC to inform the UE about the selected codes.

After sending of the RADIO LINK ADDITION RESPONSE message the DRNS shall continuously attempt to obtain UL synchronisation and start reception on the new RL. The DRNS shall start transmission on the new RL after synchronisation is achieved in the DL user plane as specified in ref. [4].

[FDD - If the UE has been allocated one or several DCH controlled by DRAC (*DRAC Control* IE was set to "requested" in the RADIO LINK ADDITION REQUEST message for at least one DCH) and if the DRNC supports the DRAC, the DRNC shall indicate in the RADIO LINK ADDITION RESPONSE message the *Secondary CCPCH Info* IE to be received on FACH, for each added Radio Link. If the DRNC does not support DRAC, it shall not provide these IEs in the RADIO LINK ADDITION RESPONSE message.]

[FDD – When *Diversity Mode* IE is "*STTD*", "*Closedloop mode1*", or "*Closedloop mode2*", the DRNC shall activate/deactivate the Transmit Diversity to each Radio Link in accordance with *Transmit Diversity Indication* IE]

8.3.2.3 Unsuccessful Operation

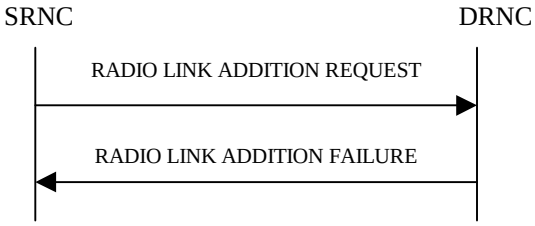

Figure 4: Radio Link Addition procedure: Unsuccessful Operation

If the establishment of at least one RL is unsuccessful, the DRNC shall send a RADIO LINK ADDITION FAILURE as response.

If some RL(s) were established successfully, the DRNC shall indicate this in the RADIO LINK ADDITION FAILURE message in the same way as in the RADIO LINK ADDITION RESPONSE message.

If the value of the *Diversity Control Field* IE of one RL is 'Must', but the DRNS cannot perform the requested combining, DRNC shall indicate this with the cause value 'Combining Resources not available' in the RADIO LINK ADDITION FAILURE message.

Typical cause values are:

Radio Network Layer Causes:

- DL Radio Resources not Available;
- UL Radio Resources not Available;
- Unknown C-ID;
- ~~Macrodiversity~~ Combining Resources not available~~not Possible~~;
- Cell not Available;
- Power Level not Supported.

Transport Layer Causes:

- Transport Link Failure.

Miscellaneous Causes:

- Control Processing Overload;
- HW Failure;
- Not enough User Plane Processing Resources.

8.3.2.4 Abnormal Conditions

-

9.2.1.5 Cause

The purpose of the cause information element is to indicate the reason for a particular event for the whole protocol.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
CHOICE *cause group*				
>Radio Network Layer				
>>Radio Network Layer Cause	M		ENUMERATED (Unknown C-ID, Cell not Available, Power Level not Supported, UL Scrambling Code Already in Use, DL Radio Resources not Available, UL Radio Resources not Available, Measurement not Supported For The Object, ~~Macrodiversity~~ Combining Resources Not ~~Possible~~Available, Reconfiguration not Allowed, Requested Configuration not Supported, Synchronisation Failure, Unspecified,...)	
>Transport Layer				
>>Transport Layer Cause	M		ENUMERATED (Transport link failure, Transmission port not available, Unspecified,...)	
>Protocol				
>>Protocol Cause			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,...)	
>Misc				
>>Miscellaneous Cause	M		ENUMERATED (Control Processing Overload, Hardware Failure, O&M Intervention, Not enough User Plane Processing Resources, Unspecified,...)	

9.3.4 Information Element Definitions

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

……..


CauseRadioNetwork ::= ENUMERATED {
    unknown-C-ID,
    cell-not-available,
    power-level-not-supported,
    ul-scrambling-code-already-in-use,
    dl-radio-resources-not-available,
    ul-radio-resources-not-available,
    measurement-not-supported-for-the-object,
    macrodiversity-combining-resources-not-possibleavalilable,
    reconfiguration-not-allowed,
    requested-configuration-not-supported,
    synchronisation-failure,
    unspecified,
    ...
}
```

3GPP TSG-RA WG3 Meeting #12
Seoul, Korea, 10-13 April 2000

Document R3-001257
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.

25.423	CR	078r2	Current Version:	3.1.0

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

For submission to:	TSG RAN#8	for approval	X	strategic		(for SMG use only)
list expected approval meeting # here ↑		for information		non-strategic		

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

Source: R-WG3 **Date:** April 2000

Subject: Correction to the Limited Power increase parameter.

Work item:

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

F	Correction	X	**Release:**	Phase 2	
A	Corresponds to a correction in an earlier release			Release 96	
B	Addition of feature			Release 97	
C	Functional modification of feature			Release 98	
D	Editorial modification			Release 99	X
				Release 00	

Reason for change:

At the WG3 meeting #11, the DCH parameter 'RLC mode' was renamed to 'Limited Power increase'. Since it is used to define if the limited power increase shall be applied to the RL or not, it shall refer to the RL instead of the DCH.

In this CR Limited Power Increase parameter is removed from the DCH parameters and included in the DL DPCH Information *(this is different idea than in the original version. Reason for this is that the same value of Limited Power increase parameter shall be used in all Radio Links)* parameters in the following messages:
Radio Link Setup Request (FDD message),
Radio Link Reconfiguration Prepare (FDD message),
Radio Link Reconfiguration Request (FDD message).

In the corresponding TDD messages Limited Power Increase parameter is removed from the DCH parameters.

Clauses affected:

8.3.4 Synchronised Radio Link Reconfiguration Preparation
8.3.7 Unsynchronised Radio Link Reconfiguration
9.1.3 Radio Link Setup Request (both FDD and TDD message)
9.1.11 Radio Link Reconfiguration Prepare (both FDD and TDD message)
9.1.16 Radio Link Reconfiguration Request (both FDD and TDD message)
9.3.3 NPAB PDU Context Definitions

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:

8.3.4 Synchronised Radio Link Reconfiguration Preparation

8.3.4.1 General

The Synchronised Radio Link Reconfiguration Preparation procedure is used to prepare a new configuration of all Radio Links related to one UE-UTRAN connection within a DRNS.

This procedure shall use the signalling bearer connection for the relevant UE context.

The Synchronised Radio Link Reconfiguration Preparation procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

8.3.4.2 Successful Operation

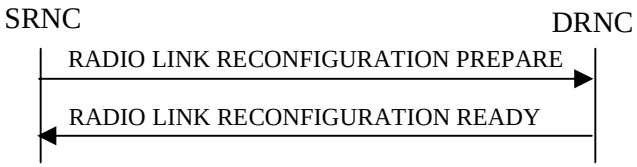

Figure 1: Synchronised Radio Link Reconfiguration Preparation procedure, Successful Operation

The Synchronised Radio Link Reconfiguration Preparation procedure is initiated by the SRNC by sending the RADIO LINK RECONFIGURATION PREPARE message to the DRNC.

Upon reception, the DRNS shall reserve necessary resources for the new configuration of the Radio Link(s) according to the parameters given in the message. Unless specified below, the meaning of parameters is specified in other specifications.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *Allowed Queuing Time* IE the DRNS may queue the request before providing a response to the SRNC.

DCH Modification:

If the RADIO LINK RECONFIGURATION PREPARE message includes the *Allocation/Retention Priority* IE for a DCH to be modified, the DRNS should use this information when reserving resources for this DCH in the new configuration.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *Frame Handling Priority* IE for a DCH to be modified, the DRNS should store this information for this DCH in the new configuration. The received Frame Handling Priority should be used when prioritising between different frames in the downlink on the radio interface in congestion situations within the DRNS once the new configuration has been activated.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *Transport Format Set* IE for the UL of a DCH to be modified, the DRNS shall apply the new Transport Format Set in the Uplink of this DCH in the new configuration.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *Transport Format Set* IE for the DL of a DCH to be modified, the DRNS shall apply the new Transport Format Set in the Downlink of this DCH in the new configuration.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *UL FP Mode* IE for a DCH to be modified, the DRNS shall apply the new FP Mode in the Uplink of the user plane for this DCH in the new configuration.

If the RADIO LINK RECONFIGURATION PREPARE message includes on the *ToAWS* IE for a DCH to be modified, the DRNS shall apply the new ToAWS in the user plane for this DCH in the new configuration.

If the RADIO LINK RECONFIGURATION PREPARE message includes on the *ToAWE* IE for a DCH to be modified, the DRNS shall apply the new ToAWE in the user plane for this DCH in the new configuration.

[FDD - If the *DRAC Control* IE is present and set to "requested" in the RADIO LINK RECONFIGURATION PREPARE message for at least one DCH and if the DRNC supports the DRAC, the DRNC shall indicate in the RADIO LINK RECONFIGURATION READY message the *Secondary CCPCH Info* IE to be received on FACH, for each

Radio Link. If the DRNC does not support DRAC, it shall not provide these IEs in the RADIO LINK RECONFIGURATION READY message.]

DCH Addition:

If the RADIO LINK RECONFIGURATION PREPARE message includes any DCH to be added to the Radio Link(s), the DRNS shall reserve necessary resources for the new configuration of the Radio Link(s) according to the parameters given in the message and include these DCH in the new configuration.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *DCH Combination Indicator* IE for a DCH to be added, the DRNS shall:

1. treat all DCHs with the same value of this IE as a set of co-ordinated DCHs; and
2. include this DCH in the new configuration only if it can include all DCHs with the same value of the *DCH Combination Indicator* IE in the new configuration.

[FDD - For DCHs with a unique or no "DCH Combination Ind" and the *QE-Selector* IE set to "selected DCH", the Transport channel BER from that DCH shall be the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [25.427]. If the QE-Selector is set to "non-selected DCH", the Physical channel BER shall be used for the QE in the UL data frames, ref. [25.427]].

[FDD - For DCHs with the same "DCH Combination Ind" the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected DCH" shall be used for the QE in the UL data frames, ref. [25.427]. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [25.427]. If all DCHs have *QE-Selector* IE set to "non-selected DCH" the Physical channel BER shall be used for the QE, ref. [25.427]].

The DRNS should store the *Frame Handling Priority* IE received for a DCH to be added in the new configuration. The received Frame Handling Priority should be used when prioritising between different frames in the downlink on the radio interface in congestion situations within the DRNS once the new configuration has been activated.

The DRNS shall use the included *UL FP Mode* IE for a DCH to be added as the new FP Mode in the Uplink of the user plane for this DCH in the new configuration.

The DRNS shall use the included *ToAWS* IE for a DCH to be added as the new Time of Arrival Window Start Point in the user plane for this DCH in the new configuration.

The DRNS shall use the included *ToAWE* IE for a DCH to be added as the new Time of Arrival Window End Point in the user plane for this DCH in the new configuration.

[FDD - If the *DRAC Control* IE is set to "requested" in the RADIO LINK RECONFIGURATION PREPARE message for at least one DCH and if the DRNC supports the DRAC, the DRNC shall indicate in the RADIO LINK RECONFIGURATION READY message the *Secondary CCPCH Info* IE to be received on FACH, for each Radio Link. If the DRNC does not support DRAC, it shall not provide these IEs in the RADIO LINK RECONFIGURATION READY message.]

DCH Deletion:

If the RADIO LINK RECONFIGURATION PREPARE message includes any DCH to be deleted from the Radio Link(s), the DRNS shall not include this DCH in the new configuration.

If all of the DCHs belonging to a set of co-ordinated DCHs are requested to be deleted, the DRNS shall not include this set of co-ordinated DCHs in the new configuration.

Physical Channel Modification:

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Uplink Scrambling Code* IE, the DRNS shall apply this Uplink Scrambling Code to the new configuration.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes one or more *Uplink Channelisation Code* IEs, the DRNS shall apply the new Uplink Channelisation Code(s) in the new configuration.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes one or more *Spreading Factor of Channelisation Code (DL)* IE, for each *Spreading Factor of Channelisation Code (DL)* IE the DRNS shall allocate one new Downlink Channelisation Code per Radio Link and apply the new Downlink Channelisation Code(s) to the new

configuration. Each Downlink Channelisation Code allocated for the new configuration shall be included as a *Channelisation Code (DL)* IE in the RADIO LINK RECONFIGURATION READY message when sent to the SRNC.]

The DRNS shall use the *TFCS* IE for the UL when reserving resources for the uplink of the new configuration. The DRNS shall apply the new TFCS in the Uplink of [TDD – the CCTrCH of] the new configuration.

The DRNS shall use the *TFCS* IE for the DL when reserving resources for the downlink of the new configuration. The DRNS shall apply the new TFCS in the Downlink of [TDD – the CCTrCH of] the new configuration.

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes on the *UL DPCCH Structure* IE, group the DRNS shall apply the new Uplink DPCCH Structure to the new configuration.]

FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *UL SIR Target* IE, the DRNS shall set the UL inner loop power control to the UL SIR target when the new configuration is being used.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Limited Power Increase* IE and the IE is set to 'Used', the DRNS shall use Limited Power Increase ref. [10] section 5.2.1 for the inner loop DL power control in the new configuration.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Limited Power Increase* IE and the IE is set to 'Not Used', the DRNS shall not use Limited Power Increase for the inner loop DL power control in the new configuration.]

[TDD – The DRNC shall include all the IEs corresponding to the new physical channel resources for the DL DPCH and/or the UL DPCH to be reconfigured in the RADIO LINK RECONFIGURATION READY message sent to the SRNC.]

SSDT Activation/Deactivation:

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *SSDT Indication* IE set to "SSDT Active in the UE", the DRNS may activate SSDT using the *SSDT Cell Identity* IE and *SSDT Cell Identity Length* IE in the new configuration.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the SSDT Indication IE set to "SSDT not Active in the UE", the DRNS shall deactivate SSDT in the new configuration.]

If the requested modifications are allowed by the DRNS, and the DRNS has successfully reserved the required resources for the new configuration of the Radio Link(s) it shall respond to the SRNC with the RADIO LINK RECONFIGURATION READY message. When this procedure has been completed successfully there exist a Prepared Reconfiguration, as defined in subclause 3.1.

The DRNS decides the maximum and minimum SIR for the uplink of the Radio Link(s) and shall return this in the *Maximum Uplink SIR* IE and *Minimum Uplink SIR* IE for each Radio Link in the RADIO LINK RECONFIGURATION READY message.

In case of a set of co-ordinated DCHs requiring a new transport bearer on Iur the *DCH to be Added* IE group or the *DCH to be Modified* IE group shall be included only for one of the DCHs in the set of co-ordinated DCHs.

In case of a Radio Link being combined with another Radio Link within the DRNS the *DCH to be Added* IE group and the *DCH to be Modified* IE group shall be included only for one of the combined Radio Links.

8.3.7 Unsynchronised Radio Link Reconfiguration

8.3.7.1 General

The Unsynchronised Radio Link Reconfiguration procedure is used to reconfigure Radio Link(s) related to one UE-UTRAN connection within a DRNS.

The procedure is used when there is no need to synchronise the time of the switching from the old to the new radio link configuration in the cells used by the UE-UTRAN connection within the DRNS.

This procedure shall use the signalling bearer connection for the relevant UE context.

The Unsynchronised Radio Link Reconfiguration procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

8.3.7.2 Successful Operation

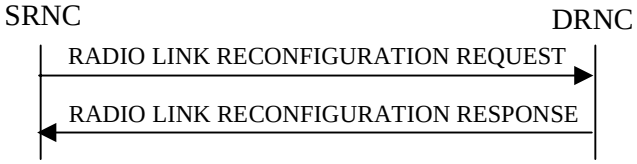

Figure 2: Unsynchronised Radio Link Reconfiguration procedure, Successful Operation

The Unsynchronised Radio Link Reconfiguration procedure is initiated by the SRNC by sending the RADIO LINK RECONFIGURATION REQUEST message to the DRNC.

Upon reception, the DRNS shall modify the configuration of the Radio Link(s) according to the parameters given in the message. Unless specified below, the meaning of parameters is specified in other specifications.

If the RADIO LINK RECONFIGURATION REQUEST message includes the *Allowed Queuing Time* IE the DRNS may queue the request before providing a response to the SRNC.

DCH Modification:

If the RADIO LINK RECONFIGURATION REQUEST message includes on the *Allocation/Retention Priority* IE for a DCH to be modified, the DRNS should use this new value when reserving resources for this DCH in the new configuration.

If the RADIO LINK RECONFIGURATION REQUEST message includes on the *Frame Handling Priority* IE for a DCH to be modified, the DRNS should store this information for this DCH in the new configuration. The received Frame Handling Priority should be used when prioritising between different frames in the downlink on the radio interface in congestion situations within the DRNS once the new configuration has been activated.

If the RADIO LINK RECONFIGURATION REQUEST message includes on the *Transport Format Set* IE for the UL of a DCH to be modified, the DRNS shall apply the new Transport Format Set in the Uplink of this DCH in the new configuration.

If the RADIO LINK RECONFIGURATION REQUEST message includes on the *Transport Format Set* IE for the DL of a DCH to be modified, the DRNS shall apply the new Transport Format Set in the Downlink of this DCH in the new configuration.

If the RADIO LINK RECONFIGURATION REQUEST message includes on the *UL FP Mode* IE for a DCH to be modified, the DRNS shall apply the new FP Mode in the Uplink of the user plane for this DCH in the new configuration.

If the RADIO LINK RECONFIGURATION REQUEST message includes on the *ToAWS* IE for a DCH to be modified, the DRNS shall apply the new ToAWS in the user plane for this DCH in the new configuration.

If the RADIO LINK RECONFIGURATION REQUEST message includes on the *ToAWE* IE for a DCH to be modified, the DRNS shall apply the new ToAWE in the user plane for this DCH in the new configuration.

[FDD - If the *DRAC Control* IE is present and set to "requested" in the RADIO LINK RECONFIGURATION REQUEST message for at least one DCH and if the DRNC supports the DRAC, the DRNC shall indicate in the RADIO LINK RECONFIGURATION RESPONSE message the *Secondary CCPCH Info* IE to be received on FACH, for each Radio Link. If the DRNC does not support DRAC, it shall not provide these IEs in the RADIO LINK RECONFIGURATION RESPONSE message.]

DCH Addition:

If the RADIO LINK RECONFIGURATION REQUEST message includes any DCH to be added to the Radio Link(s), the DRNS shall reserve necessary resources for the new configuration of the Radio Link(s) according to the parameters given in the message and include these DCH in the new configuration.

If the RADIO LINK RECONFIGURATION REQUEST message includes the *DCH Combination Indicator* IE for a DCH to be added, the DRNS shall:

1. treat all DCHs with the same value of this IE as a set of co-ordinated DCHs; and
2. include this DCH in the new configuration only if it can include all DCHs with the same value of the *DCH Combination Indicator* IE in the new configuration.

[FDD - For DCHs with a unique or no "DCH Combination Ind" and the *QE-Selector* IE set to "selected DCH", the Transport channel BER from that DCH shall be the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [25.427]. If the QE-Selector is set to "non-selected DCH", the Physical channel BER shall be used for the QE in the UL data frames, ref. [25.427]].

[FDD - For DCHs with the same "DCH Combination Ind" the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected DCH" shall be used for the QE in the UL data frames, ref. [25.427]. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [25.427]. If all DCHs have *QE-Selector* IE set to "non-selected DCH" the Physical channel BER shall be used for the QE, ref. [25.427]].

The DRNS should store the *Frame Handling Priority* IE received for a DCH to be added in the new configuration. The received Frame Handling Priority should be used when prioritising between different frames in the downlink on the radio interface in congestion situations within the DRNS once the new configuration has been activated.

The DRNS shall use the included *UL FP Mode* IE for a DCH to be added as the new FP Mode in the Uplink of the user plane for this DCH in the new configuration.

The DRNS shall use the included *ToAWS* IE for a DCH to be added as the new Time of Arrival Window Start Point in the user plane for this DCH in the new configuration.

The DRNS shall use the included *ToAWE* IE for a DCH to be added as the new Time of Arrival Window End Point in the user plane for this DCH in the new configuration.

[FDD - If the *DRAC Control* IE is set to "requested" in the RADIO LINK RECONFIGURATION REQUEST message for at least one DCH and if the DRNC supports the DRAC, the DRNC shall indicate in the RADIO LINK RECONFIGURATION RESPONSE message the *Secondary CCPCH Info* IE and the *Reference to System Information blocks IE* to be received on FACH, for each Radio Link. If the DRNC does not support DRAC, it shall not provide these IEs in the RADIO LINK RECONFIGURATION RESPONSE message.

DCH Deletion:

If the RADIO LINK RECONFIGURATION REQUEST message includes any DCH to be deleted from the Radio Link(s), the DRNS shall not include this DCH in the new configuration.

If all of the DCHs belonging to a set of co-ordinated DCHs are requested to be deleted, the DRNS shall not include this set of co-ordinated DCHs in the new configuration.

Physical Channel Modification:

If the RADIO LINK RECONFIGURATION REQUEST message includes on the *TFCS* IE for the UL, the DRNS shall apply the new TFCS in the Uplink of [TDD – the CCTrCH of] the new configuration.

If the RADIO LINK RECONFIGURATION REQUEST message includes on the *TFCS* IE for the DL, the DRNS shall apply the new TFCS in the Downlink of [TDD – the CCTrCH of] the new configuration.

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *Limited Power Increase* IE and the IE is set to 'Used', the DRNS shall use Limited Power Increase ref. [10] section 5.2.1 for the inner loop DL power control in the new configuration.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *Limited Power Increase* IE and the IE is set to 'Not Used', the DRNS shall not use Limited Power Increase for the inner loop DL power control in the new configuration.]

If the requested modifications are allowed by the DRNS, the DRNS has successfully allocated the required resources, and changed to the new configuration it shall respond to the SRNC with the RADIO LINK RECONFIGURATION RESPONSE message.

The DRNS decides the maximum and minimum SIR for the uplink of the Radio Link(s) and shall return this in the IEs *Maximum Uplink SIR* and *Minimum Uplink SIR* for each Radio Link in the RADIO LINK RECONFIGURATION RESPONSE message.

In case of a set of co-ordinated DCHs requiring a new transport bearer on Iur the *DCH to be Added* IE group or the *DCH to be Modified* IE group shall be included only for one of the DCH in the set of co-ordinated DCHs.

In case of a Radio Link being combined with another Radio Link within the DRNS the *DCH to be Added* IE group and the *DCH to be Modified* IE group shall be included only for one of the combined Radio Links.

9.1.3 RADIO LINK SETUP REQUEST

9.1.3.1 FDD Message

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				–	
S-RNTI	M				YES	reject
D-RNTI	O				YES	reject
Allowed Queuing time	O				YES	reject
UL DPCH Information		*1*			YES	reject
>UL Scrambling Code	M				–	
>Min UL Channelisation Code Length	M				–	
>Max Number of UL DPDCHs	C – CodeLen				–	
>Puncture Limit	M			For the UL.	–	
>UL Transport Format Combination Set	M				–	
>UL DPCCH Slot Format	M				–	
>Uplink SIR Target	O		Uplink SIR		–	
>Diversity mode	M				–	
>D Field Length	C-FB				–	
>SSDT Cell ID Length	O				–	
>S Field Length	O				–	
DL DPCH Information		*1*			YES	reject
>Transport Format Combination Set	M				–	
>DL DPCH Slot Format	M				–	
>TFCI Signalling Mode	M				–	
>TFCI Presence	C-SlotFormat				–	
>Multiplexing Position	M				–	
>Power Offset Information		*1*			–	
>>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.	–	
>FDD TPC Downlink Step Size	M				–	
>Limited Power Increase	M				–	
DCH Information		*1..<maxnoofDCHs>*			GLOBAL	reject
>DCH ID	M				–	
>DCH Combination Ind	O				–	
~~>Limited Power Increase~~	~~M~~				~~–~~	
>Tr Ch Source Statistics Descriptor	M				–	
>Transport Format Set	M			For the UL.	–	
>Transport Format Set	M			For the DL.	–	
>BLER	M			For the UL.	–	
>BLER	M			For the DL.	–	
>Allocation/Retention Priority	M				–	
>Frame Handling Priority	M				–	
>Payload CRC Presence Indicator	M				–	
>UL FP Mode	M				–	

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
> QE-Selector	M				–	
>ToAWS	M				–	
>ToAWE	M				–	
>DRAC control	M				–	
RL Information		*1…<maxnoofRLs>*			EACH	notify
>RL ID	M				–	
>C-ID	M				–	
>Frame Offset	M				–	
>Chip Offset	M				–	
>Propagation Delay	O				–	
>Diversity Control Field	C – NotFirstRL				–	
>Initial DL TX Power	O		DL Power		–	
>Primary CPICH Ec/No	O				–	
>SSDT Cell ID	O				–	
>Transmit Diversity Indicator	C – Diversity mode				–	

Condition	Explanation
CodeLen	This IE is present only if "Min UL Channelisation Code length" equals to 4
FB	This IE is present only if Feed Back mode diversity is activated.
SlotFormat	This IE is only present if the DL DPCH Slot Format is equal to any of the values 12 to 16.
NotFirstRL	This IE is present only if the RL is not the first one in the **RL Information**.
Diversity mode	This IE is present unless *Diversity Mode* IE in *UL DPCH Information* group is "none"

Range bound	Explanation
MaxnoofDCHs	Maximum number of DCHs for one UE.
MaxnoofRLs	Maximum number of RLs for one UE.

9.1.3.2 TDD Message

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				–	
S-RNTI	M				YES	reject
D-RNTI	O				YES	reject
Allowed Queuing time	O				YES	reject
UL CCTrCH Information		*1..<maxnoofCCTrCHs>*			EACH	notify
>CCTrCH ID	M				–	
>TFCS	M			For the UL.	–	
>TFCI Coding	M				–	
>Puncture Limit	M				–	
DL CCTrCH Information		*1..<maxnoofCCTrCHs>*			EACH	notify
>CCTrCH ID	M				–	
>TFCS	M			For the DL.	–	
>TFCI Coding	M				–	
>Puncture Limit	M				–	
>TDD TPC Downlink Step Size	M				–	
DCH Information		*1..<maxnoofDCHs>*			GLOBAL	reject
>DCH ID	M				–	
>CCTrCH ID	M			UL CCTrCH in which the DCH is mapped	–	
>CCTrCH ID	M			DL CCTrCH in which the DCH is mapped	–	
>DCH Combination Ind	O				–	
~~>Limited Power Increase~~	~~M~~				~~–~~	
>Tr Ch Source Statistics Descriptor	M				–	
>Transport Format Set	M			For the UL.	–	
>Transport Format Set	M			For the DL.	–	
>BLER	M			For the UL.	–	
>BLER	M			For the DL.	–	
>Allocation/Retention Priority	M				–	
>Frame Handling Priority	M				–	
>Payload CRC Presence Indicator	M				–	
>UL FP Mode	M				–	
>ToAWS	M				–	
>ToAWE	M				–	
RL Information		*1*			YES	reject
>RL ID	M				–	
>C-ID	M				–	
>Frame Offset	M				–	
>Primary CCPCH RSCP	O				–	

Range bound	Explanation
MaxnoofDCHs	Maximum number of DCHs for one UE.
MaxnoofCCTrCHs	Maximum number of CCTrCH for one UE.

9.1.11 RADIO LINK RECONFIGURATION PREPARE

9.1.11.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				–	
Allowed Queuing Time	O				YES	reject
UL DPCH Information		*0..1*			YES	reject
>UL Scrambling code	O				–	
>UL SIR Target	O		Uplink SIR		–	
>Min UL Channelisation Code Length	O				–	
>Max Number of UL DPDCHs	C – CodeLen				–	
>Puncture Limit	O			For the UL.	–	
>TFCS	O			TFCS for the UL.	–	
>UL DPCCH Slot Format	O				–	
>SSDT Cell Identity Length	O				–	
>S-Field Length	O				–	
DL DPCH Information		*0..1*			YES	reject
>TFCS	O			TFCS for the DL.	–	
>DL DPCH Slot Format	O				–	
>TFCI Signalling Mode	O				–	
>TFCI Presence	C-SlotFormat				–	
>MultiplexingPosition	O				–	
>Limited Power Increase	O				–	
DCHs to Modify		*0..<maxnoof DCHs>*			GLOBAL	reject
>DCH ID	M				–	
>Transport Format Set	O			For the UL.	–	
>Transport Format Set	O			For the DL.	–	
>Allocation/Retention Priority	O				–	
>Frame Handling Priority	O				–	
>UL FP Mode	O				–	
>ToAWS	O				–	
>ToAWE	O				–	
>DRAC Control	O				–	
DCHs to Add		*0..<maxnoof DCHs>*			GLOBAL	reject
>DCH ID	M				–	
>DCH Combination Indicator	O				–	
~~>Limited Power Increase~~	~~M~~				~~–~~	
>Tr Ch Source Statistics Descriptor	M				–	
>Transport Format Set	M			For the UL.	–	
>Transport Format Set	M			For the DL.	–	
>BLER	M			For the UL.	–	
>BLER	M			For the DL.	–	
>Allocation/Retention Priority	M				–	
>Frame Handling Priority	M				–	
>Payload CRC Presence Indicator	M				–	
>UL FP Mode	M				–	
>QE-Selector	M				–	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
>ToAWS	M				–	
>ToAWE	M				–	
>DRAC Control	M				–	
DCHs to Delete		*0..<maxnoof DCHs>*			GLOBAL	reject
>DCH ID	M				–	
RL Information		*0..<maxnoof RLs>*			EACH	reject
>RL ID	M				–	
>SSDT Indication	O				–	
>SSDT Cell Identity	C - SSDTIndON				–	

Condition	Explanation
SSDTIndON	The IE may be present if the SSDT Indication is set to 'SSDT Active in the UE'.
CodeLen	This IE is present only if "Min UL Channelisation Code length" equals to 4.
SlotFormat	This IE is only present if the DL DPCH Slot Format is equal to any of the values 12 to 16.

Range bound	Explanation
MaxnoofDCHs	Maximum number of DCHs for a UE.
MaxnoofRLs	Maximum number of RLs for a UE.

9.1.11.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				–	
Allowed Queuing Time	O				YES	reject
UL CCTrCH Information		*0..<maxnoofCCTrCHs>*			EACH	notify
>CCTrCH ID	M				–	
>TFCS	O			For the UL.	–	
>TFCI Coding	O				–	
>Puncture Limit	O				–	
DL CCTrCH Information		*0..<maxnoofCCTrCHs>*			EACH	notify
>CCTrCH ID	M				–	
>TFCS	O			For the DL.	–	
>TFCI Coding	O				–	
>Puncture Limit	O				–	
DCHs to Modify		*0..<maxnoofDCHs>*			GLOBAL	reject
>DCH ID	M				–	
>CCTrCH Id	O			UL CCTrCH in which the DCH is mapped.	–	
>CCTrCH Id	O			DL CCTrCH in which the DCH is mapped	–	
>Transport Format Set	O			For the UL.	–	
>Transport Format Set	O			For the DL.	–	
>Allocation/Retention Priority	O				–	
>Frame Handling Priority	O				–	
>UL FP Mode	O				–	
>ToAWS	O				–	
>ToAWE	O				–	
DCHs to Add		*0..<maxnoofDCHs>*			GLOBAL	reject
>DCH ID	M				–	
>CCTrCH Id	M			UL CCTrCH in which the DCH is mapped.	–	
>CCTrCH Id	M			DL CCTrCH in which the DCH is mapped	–	
>DCH Combination Indicator	O				–	
~~>Limited Power Increase~~	~~M~~				~~–~~	
>Tr Ch Source Statistics Descriptor	M				–	
>Transport Format Set	M			For the UL.	–	
>Transport Format Set	M			For the DL.	–	
>BLER	M			For the UL.	–	
>BLER	M			For the DL.	–	
>Allocation/Retention Priority	M				–	
>Frame Handling Priority	M				–	
>Payload CRC Presence Indicator	M				–	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
>UL FP Mode	M				–	
>ToAWS	M				–	
>ToAWE	M				–	
DCHs to Delete		*0..<maxnoofDCHs>*			GLOBAL	reject
>DCH ID	M				–	

Range bound	Explanation
MaxnoofDCHs	Maximum number of DCHs for a UE.
MaxnoofCCTrCHs	Maximum number of CCTrCHs for a UE.

9.1.16 RADIO LINK RECONFIGURATION REQUEST

9.1.16.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				–	
Allowed Queuing Time	O				YES	reject
UL DPCH Information		*0..1*			YES	reject
>TFCS	O			TFCS for the UL.	–	
DL DPCH Information		*0..1*			YES	reject
>TFCS	O			TFCS for the DL.	–	
>TFCI Signalling Mode	O				–	
>Limited Power Increase	O				–	
DCHs to Modify		*0..<maxnoofDCHs>*			GLOBAL	reject
>DCH ID	M				–	
>Transport Format Set	O			For the UL.	–	
>Transport Format Set	O			For the DL.	–	
>Allocation/Retention Priority	O				–	
>Frame Handling Priority	O				–	
>UL FP Mode	O				–	
>ToAWS	O				–	
>ToAWE	O				–	
>DRAC Control	O					
DCHs to add		*0..<maxnoofDCHs>*			GLOBAL	reject
>DCH ID	M				–	
>DCH Combination Ind	O				–	
~~>Limited Power Increase~~	~~M~~				~~–~~	
>Tr Ch Source Statistics Descriptor	M				–	
>Transport Format Set	M			For the UL.	–	
>Transport Format Set	M			For the DL.	–	
>BLER	M			For the UL.	–	
>BLER	M			For the DL.	–	
>Allocation/Retention Priority	M				–	
>Frame Handling Priority	M				–	
>Payload CRC Presence Indicator	M				–	
>UL FP mode	M				–	
>QE-Selector	M				–	
>ToAWS	M				–	
>ToAWE	M				–	
>DRAC Control	M				-	
DCHs to Delete		*0..<maxnoofDCHs>*			GLOBAL	reject
>DCH ID	M				–	

Range Bound	Explanation
MaxnoofDCHs	Maximum number of DCHs for a UE.

9.1.16.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				–	
Allowed Queuing Time	O				YES	reject
UL CCTrCH Information		*0..<maxnoof CCTrCHs>*			EACH	notify
>CCTrCH ID	M				–	
>TFCS	M				–	
DL CCTrCH Information		*0..<maxnoof CCTrCHs>*			EACH	notify
>CCTrCH ID	M				–	
>TFCS	M				–	
DCHs to Modify		*0..<maxnoof DCHs>*			GLOBAL	reject
>DCH ID	M				–	
>CCTrCH ID	O			UL CCTrCH in which the DCH is mapped.	–	
>CCTrCH ID	O			DL CCTrCH in which the DCH is mapped	–	
>Transport Format Set	O			For the UL.	–	
>Transport Format Set	O			For the DL.	–	
>Allocation/Retention Priority	O				–	
>Frame Handling Priority	O				–	
>UL FP Mode	O				–	
>ToAWS	O				–	
>ToAWE	O				–	
DCHs to Add		*0..<maxnoof DCHs>*			GLOBAL	reject
>DCH ID	M				–	
~~>Limited Power Increase~~	~~M~~				~~–~~	
>Tr Ch Source Statistics Descriptor	M				–	
>CCTrCH ID	M			UL CCTrCH in which the DCH is mapped.	–	
>CCTrCH ID	M			DL CCTrCH in which the DCH is mapped	–	
>DCH Combination Ind	O				–	
>Transport Format Set	M			For the UL.	–	
>Transport Format Set	M			For the DL.	–	
>BLER	M			For the UL.	–	
>BLER	M			For the DL.	–	
>Allocation/Retention Priority	M				–	
>Frame Handling Priority	M				–	
>Payload CRC Presence Indicator	M				–	
>UL FP Mode	M				–	
>ToAWS	M				–	
>ToAWE	M				–	
DCHs to Delete		*0..<maxnoof DCHs>*			GLOBAL	reject
>DCH ID	M				–	

Range Bound	Explanation
MaxnoofDCHs	Maximum number of DCHs for a UE.
MaxnoofCCTrCHs	Maximum number of CCTrCHs for a UE.

9.3.3 PDU Definitions

```
.. Text omitted ..

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

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

RadioLinkSetupRequestFDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-S-RNTI                  CRITICALITY reject  TYPE S-RNTI                    PRESENCE mandatory} |
    { ID id-D-RNTI                  CRITICALITY reject  TYPE D-RNTI                 PRESENCE optional     } |
    { ID id-AllowedQueuingTime          CRITICALITY reject  TYPE AllowedQueuingTime             PRESENCE optional     } |
    { ID id-UL-DPCH-Information-RL-SetupRqstFDD CRITICALITY reject  TYPE UL-DPCH-Information-RL-SetupRqstFDD          PRESENCE mandatory      } |
    { ID id-DL-DPCH-Information-RL-SetupRqstFDD CRITICALITY reject  TYPE DL-DPCH-Information-RL-SetupRqstFDD          PRESENCE mandatory      } |
    { ID id-DCH-Information-RL-SetupRqstFDD     CRITICALITY reject  TYPE DCH-InformationList-RL-SetupRqstFDD          PRESENCE mandatory      } |
    { ID id-RL-Information-RL-SetupRqstFDD      CRITICALITY notify  TYPE RL-InformationList-RL-SetupRqstFDD           PRESENCE mandatory      },
    ...
}

UL-DPCH-Information-RL-SetupRqstFDD ::= SEQUENCE {
    ul-ScramblingCode               UL-ScramblingCode,
    minUL-ChannelisationCodeLength          MinUL-ChannelisationCodeLength,
    maxNrOfUL-DPCHs                 MaxNrOfUL-DPCHs         OPTIONAL
    -- This IE is present only if minUL-ChannelisationCodeLength equals to 4 -- ,
    ul-PunctureLimit                PunctureLimit,
    ul-TFCS                         TFCS,
    ul-DPCCH-SlotFormat             UL-DPCCH-SlotFormat,
    ul-SIRTarget                    UL-SIR          OPTIONAL,
    diversityMode                   DiversityMode,
    d-FieldLength                   D-FieldLength           OPTIONAL
    -- This IE is present only if Feed Back mode diversity is activated -- ,
    sSDT-CellIdLength               SSDT-CellID-Length      OPTIONAL,
    s-FieldLength                   S-FieldLength           OPTIONAL,
    iE-Extensions                   ProtocolExtensionContainer { {UL-DPCH-Information-RL-SetupRqstFDD-ExtIEs} } OPTIONAL,
    ...
}

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

DL-DPCH-Information-RL-SetupRqstFDD ::= SEQUENCE {
    tFCS                            TFCS,
```

```
    dl-DPCH-SlotFormat              DL-DPCH-SlotFormat,
    tFCI-SignallingMode             TFCI-SignallingMode,
    tFCI-Presence                   TFCI-Presence           OPTIONAL
    -- This IE is present if Slot Format is from 12 to 16 --,
    multiplexingPosition                MultiplexingPosition,
    powerOffsetInformation              SEQUENCE {
        po1-ForTFCI-Bits                PowerOffset,
        po2-ForTPC-Bits                 PowerOffset,
        po3-ForPilotBits                PowerOffset,
        ...
    },
    fdd-dl-TPC-DownlinkStepSize     FDD-TPC-DownlinkStepSize,
    limitedPowerIncrease            LimitedPowerIncrease,
    iE-Extensions                   ProtocolExtensionContainer { {DL-DPCH-Information-RL-SetupRqstFDD-ExtIEs} } OPTIONAL,
    ...
}

DL-DPCH-Information-RL-SetupRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-InformationList-RL-SetupRqstFDD             ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-InformationItem-RL-SetupRqstFDD

DCH-InformationItem-RL-SetupRqstFDD ::= SEQUENCE {
    dCH-ID                              DCH-ID,
    dCH-CombinationInd                  DCH-CombinationInd      OPTIONAL,
    limitedPowerIncrease                LimitedPowerIncrease,
    trCH-SrcStatisticsDescr             TrCH-SrcStatisticsDescr,
    ul-transportFormatSet               TransportFormatSet,
    dl-transportFormatSet               TransportFormatSet,
    ul-BLER                             BLER,
    dl-BLER                             BLER,
    allocationRetentionPriority         AllocationRetentionPriority,
    frameHandlingPriority               FrameHandlingPriority,
    payloadCRC-PresenceIndicator        PayloadCRC-PresenceIndicator,
    ul-FP-Mode                          UL-FP-Mode,
    qE-Selector                         QE-Selector,
    toAWS                               ToAWS,
    toAWE                               ToAWE,
    dRACControl                         DRACControl,
    iE-Extensions                       ProtocolExtensionContainer { {DCH-InformationItem-RL-SetupRqstFDD-ExtIEs} } OPTIONAL,
    ...
}

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

RL-InformationList-RL-SetupRqstFDD          ::= RL-IE-ContainerList1 { {RL-InformationItemIEs-RL-SetupRqstFDD} }

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

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

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

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

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

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

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

UL-CCTrCH-InformationList-RL-SetupRqstTDD           ::= CCTrCH-IE-ContainerList1 { {UL-CCTrCH-InformationItemIEs-RL-SetupRqstTDD} }

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

```
}

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

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

DL-CCTrCH-InformationList-RL-SetupRqstTDD           ::= CCTrCH-IE-ContainerList1 { {DL-CCTrCH-InformationItemIEs-RL-SetupRqstTDD} }

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

DL-CCTrCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
    cCTrCH-ID                   CCTrCH-ID,
    dl-TFCS                     TFCS,
    tFCI-Coding                 TFCI-Coding,
    dl-PunctureLimit                PunctureLimit,
    tdd-TPC-DownlinkStepSize        TDD-TPC-DownlinkStepSize,
    iE-Extensions                   ProtocolExtensionContainer { {DL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

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

DCH-InformationList-RL-SetupRqstTDD             ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-InformationItem-RL-SetupRqstTDD

DCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
    dCH-ID                          DCH-ID,
    ul-cCTrCH-ID                    CCTrCH-ID, -- UL CCTrCH in which the DCH is mapped
    dl-cCTrCH-ID                    CCTrCH-ID, -- DL CCTrCH in which the DCH is mapped
    dCH-CombinationInd              DCH-CombinationInd      OPTIONAL,
    limitedPowerIncrease            LimitedPowerIncrease,
    trCH-SrcStatisticsDescr         TrCH-SrcStatisticsDescr,
    ul-transportFormatSet           TransportFormatSet,
    dl-transportFormatSet           TransportFormatSet,
    ul-BLER                         BLER,
    dl-BLER                         BLER,
    allocationRetentionPriority     AllocationRetentionPriority,
    frameHandlingPriority           FrameHandlingPriority,
    payloadCRC-PresenceIndicator    PayloadCRC-PresenceIndicator,
    ul-FP-Mode                      UL-FP-Mode,
    toAWS                           ToAWS,
```

```
    toAWE                           ToAWE,
    iE-Extensions                   ProtocolExtensionContainer { {DCH-InformationItem-RL-SetupRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

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

RL-Information-RL-SetupRqstTDD ::= SEQUENCE {
    rL-ID                       RL-ID,
    c-ID                        C-ID,
    frameOffset                 FrameOffset,
    primaryCCPCH-RSCP               PrimaryCCPCH-RSCP       OPTIONAL,
    iE-Extensions                   ProtocolExtensionContainer { {RL-Information-RL-SetupRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

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

RadioLinkSetupRequestTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

.. Text omitted..

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

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

RadioLinkReconfigurationPrepareFDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-AllowedQueuingTime          CRITICALITY reject  TYPE AllowedQueuingTime             PRESENCE optional     } |
    { ID id-UL-DPCH-Information-RL-ReconfPrepFDD            CRITICALITY reject  TYPE UL-DPCH-Information-RL-ReconfPrepFDD               PRESENCE
optional    } |
    { ID id-DL-DPCH-Information-RL-ReconfPrepFDD            CRITICALITY reject  TYPE DL-DPCH-Information-RL-ReconfPrepFDD               PRESENCE
optional    } |
    { ID id-DCH-ModifyList-RL-ReconfPrepFDD     CRITICALITY reject  TYPE DCH-ModifyList-RL-ReconfPrepFDD        PRESENCE optional } |
    { ID id-DCH-AddList-RL-ReconfPrepFDD        CRITICALITY reject  TYPE DCH-AddList-RL-ReconfPrepFDD           PRESENCE optional } |
    { ID id-DCH-DeleteList-RL-ReconfPrepFDD     CRITICALITY reject  TYPE DCH-DeleteList-RL-ReconfPrepFDD        PRESENCE optional } |
    { ID id-RL-InformationList-RL-ReconfPrepFDD CRITICALITY reject  TYPE RL-InformationList-RL-ReconfPrepFDD    PRESENCE optional },
    ...
}

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

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

DL-DPCH-Information-RL-ReconfPrepFDD ::= SEQUENCE {
    tFCS                            TFCS    OPTIONAL,
    dl-DPCH-SlotFormat              DL-DPCH-SlotFormat      OPTIONAL,
    tFCI-SignallingMode             TFCI-SignallingMode     OPTIONAL,
    tFCI-Presence                   TFCI-Presence           OPTIONAL
    -- This IE is present if Slot Format is from 12 to 16 --,
    multiplexingPosition            MultiplexingPosition        OPTIONAL,
    limitedPowerIncrease            LimitedPowerIncrease        OPTIONAL,
```

```
    iE-Extensions                   ProtocolExtensionContainer { {DL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs} } OPTIONAL,
    ...
}

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

DCH-ModifyList-RL-ReconfPrepFDD             ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-ModifyItem-RL-ReconfPrepFDD

DCH-ModifyItem-RL-ReconfPrepFDD ::= SEQUENCE {
    dCH-ID                          DCH-ID,
    ul-TransportformatSet           TransportFormatSet      OPTIONAL,
    dl-TransportformatSet           TransportFormatSet      OPTIONAL,
    allocationRetentionPriority     AllocationRetentionPriority     OPTIONAL,
    frameHandlingPriority           FrameHandlingPriority       OPTIONAL,
    ul-FP-Mode                      UL-FP-Mode          OPTIONAL,
    toAWS                           ToAWS               OPTIONAL,
    toAWE                           ToAWE               OPTIONAL,
    dRACControl                     DRACControl     OPTIONAL,
    iE-Extensions                   ProtocolExtensionContainer { {DCH-ModifyItem-RL-ReconfPrepFDD-ExtIEs} } OPTIONAL,
    ...
}

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

DCH-AddList-RL-ReconfPrepFDD                ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-AddItem-RL-ReconfPrepFDD

DCH-AddItem-RL-ReconfPrepFDD ::= SEQUENCE {
    dCH-ID                              DCH-ID,
    dCH-CombinationInd                  DCH-CombinationInd      OPTIONAL,
    limitedPowerIncrease                LimitedPowerIncrease,
    trCH-SrcStatisticsDescr             TrCH-SrcStatisticsDescr,
    ul-TransportformatSet               TransportFormatSet,
    dl-TransportformatSet               TransportFormatSet,
    ul-BLER                             BLER,
    dl-BLER                             BLER,
    allocationRetentionPriority         AllocationRetentionPriority,
    frameHandlingPriority               FrameHandlingPriority,
    payloadCRC-PresenceIndicator        PayloadCRC-PresenceIndicator,
    ul-FP-Mode                          UL-FP-Mode,
    qE-Selector                         QE-Selector,
    toAWS                               ToAWS,
    toAWE                               ToAWE,
    dRACControl                         DRACControl,
    iE-Extensions                       ProtocolExtensionContainer { {DCH-AddItem-RL-ReconfPrepFDD-ExtIEs} } OPTIONAL,
    ...
}

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

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

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

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

RL-InformationList-RL-ReconfPrepFDD         ::= RL-IE-ContainerList0 { {RL-Information-RL-ReconfPrepFDD-IEs} }

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

RL-Information-RL-ReconfPrepFDD ::= SEQUENCE {
    rL-ID                       RL-ID,
    sSDT-Indication                 SSDT-Indication     OPTIONAL,
    sSDT-CellIdentity               SSDT-CellID     OPTIONAL
    -- The IE may be present if the sSDT-Indication is set to 'sSDT-active-in-the-UE' --,
    iE-Extensions                   ProtocolExtensionContainer { {RL-Information-RL-ReconfPrepFDD-ExtIEs} } OPTIONAL,
    ...
}

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

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

-- **************************************************************
--
-- RADIO LINK RECONFIGURATION PREPARE TDD
--
-- **************************************************************

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

RadioLinkReconfigurationPrepareTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-AllowedQueuingTime          CRITICALITY reject  TYPE AllowedQueuingTime             PRESENCE optional     } |
    { ID id-UL-CCTrCH-InformationList-RL-ReconfPrepTDD  CRITICALITY notify  TYPE UL-CCTrCH-InformationList-RL-ReconfPrepTDD PRESENCE optional } |
    { ID id-DL-CCTrCH-InformationList-RL-ReconfPrepTDD  CRITICALITY notify  TYPE DL-CCTrCH-InformationList-RL-ReconfPrepTDD PRESENCE optional } |
    { ID id-DCH-ModifyList-RL-ReconfPrepTDD     CRITICALITY reject  TYPE DCH-ModifyList-RL-ReconfPrepTDD        PRESENCE optional } |
```

```
    { ID id-DCH-AddList-RL-ReconfPrepTDD       CRITICALITY reject  TYPE DCH-AddList-RL-ReconfPrepTDD          PRESENCE optional } |
    { ID id-DCH-DeleteList-RL-ReconfPrepTDD    CRITICALITY reject  TYPE DCH-DeleteList-RL-ReconfPrepTDD       PRESENCE optional },
    ...
}

UL-CCTrCH-InformationList-RL-ReconfPrepTDD     ::= CCTrCH-IE-ContainerList0 { {UL-CCTrCH-Information-RL-ReconfPrepTDD-IEs} }

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

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

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

DL-CCTrCH-InformationList-RL-ReconfPrepTDD     ::= CCTrCH-IE-ContainerList0 { {DL-CCTrCH-Information-RL-ReconfPrepTDD-IEs} }

DL-CCTrCH-Information-RL-ReconfPrepTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-CCTrCH-InformationItem-RL-ReconfPrepTDD  CRITICALITY notify  TYPE DL-CCTrCH-InformationItem-RL-ReconfPrepTDD PRESENCE mandatory     },
    ...
}

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

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

DCH-ModifyList-RL-ReconfPrepTDD            ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-ModifyItem-RL-ReconfPrepTDD

DCH-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dCH-ID                          DCH-ID,
    ul-CCTrCH-ID                    CCTrCH-ID       OPTIONAL,
    dl-CCTrCH-ID                    CCTrCH-ID       OPTIONAL,
    ul-TransportformatSet           TransportFormatSet  OPTIONAL,
    dl-TransportformatSet           TransportFormatSet  OPTIONAL,
    allocationRetentionPriority     AllocationRetentionPriority OPTIONAL,
```

```
    frameHandlingPriority           FrameHandlingPriority   OPTIONAL,
    ul-FP-Mode                      UL-FP-Mode      OPTIONAL,
    toAWS                           ToAWS           OPTIONAL,
    toAWE                           ToAWE           OPTIONAL,
    iE-Extensions                   ProtocolExtensionContainer { {DCH-ModifyItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
    ...
}

DCH-ModifyItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-AddList-RL-ReconfPrepTDD                ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-AddItem-RL-ReconfPrepTDD

DCH-AddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    dCH-ID                              DCH-ID,
    ul-CCTrCH-ID                        CCTrCH-ID,
    dl-CCTrCH-ID                        CCTrCH-ID,
    dCH-CombinationInd                  DCH-CombinationInd  OPTIONAL,
    limitedPowerIncrease                LimitedPowerIncrease,
    trCH-SrcStatisticsDescr             TrCH-SrcStatisticsDescr,
    ul-TransportformatSet               TransportFormatSet,
    dl-TransportformatSet               TransportFormatSet,
    ul-BLER                             BLER,
    dl-BLER                             BLER,
    allocationRetentionPriority         AllocationRetentionPriority,
    frameHandlingPriority               FrameHandlingPriority,
    payloadCRC-PresenceIndicator        PayloadCRC-PresenceIndicator,
    ul-FP-Mode                          UL-FP-Mode,
    toAWS                               ToAWS,
    toAWE                               ToAWE,
    iE-Extensions                       ProtocolExtensionContainer { {DCH-AddItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
    ...
}

DCH-AddItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

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

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

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

RadioLinkReconfigurationPrepareTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

.. Text omitted..

```
-- **************************************************************
--
-- RADIO LINK RECONFIGURATION REQUEST FDD
--
-- **************************************************************

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

RadioLinkReconfigurationRequestFDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-AllowedQueuingTime          CRITICALITY reject  TYPE AllowedQueuingTime             PRESENCE optional     } |
    { ID id-UL-DPCH-Information-RL-ReconfRqstFDD            CRITICALITY reject  TYPE UL-DPCH-Information-RL-ReconfRqstFDD   PRESENCE optional } |
    { ID id-DL-DPCH-Information-RL-ReconfRqstFDD            CRITICALITY reject  TYPE DL-DPCH-Information-RL-ReconfRqstFDD   PRESENCE optional } |
    { ID id-DCH-ModifyList-RL-ReconfRqstFDD     CRITICALITY reject  TYPE DCH-ModifyList-RL-ReconfRqstFDD        PRESENCE optional } |
    { ID id-DCH-AddList-RL-ReconfRqstFDD        CRITICALITY reject  TYPE DCH-AddList-RL-ReconfRqstFDD           PRESENCE optional } |
    { ID id-DCH-DeleteList-RL-ReconfRqstFDD     CRITICALITY reject  TYPE DCH-DeleteList-RL-ReconfRqstFDD        PRESENCE optional },
    ...
}

UL-DPCH-Information-RL-ReconfRqstFDD ::= SEQUENCE {
    tFCS                            TFCS    OPTIONAL,
    iE-Extensions                   ProtocolExtensionContainer { {UL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs} } OPTIONAL,
    ...
}

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

DL-DPCH-Information-RL-ReconfRqstFDD ::= SEQUENCE {
    tFCS                            TFCS    OPTIONAL,
    tFCI-SignallingMode             TFCI-SignallingMode OPTIONAL,
    limitedPowerIncrease            LimitedPowerIncrease    OPTIONAL,
    iE-Extensions                   ProtocolExtensionContainer { {DL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs} } OPTIONAL,
    ...
}

DL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-ModifyList-RL-ReconfRqstFDD             ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-ModifyItem-RL-ReconfRqstFDD

DCH-ModifyItem-RL-ReconfRqstFDD ::= SEQUENCE {
    dCH-ID                          DCH-ID,
    ul-TransportformatSet           TransportFormatSet  OPTIONAL,
    dl-TransportformatSet           TransportFormatSet  OPTIONAL,
    allocationRetentionPriority     AllocationRetentionPriority OPTIONAL,
    frameHandlingPriority           FrameHandlingPriority   OPTIONAL,
```

```
    ul-FP-Mode                      UL-FP-Mode      OPTIONAL,
    toAWS                           ToAWS           OPTIONAL,
    toAWE                           ToAWE           OPTIONAL,
    dRACControl                     DRACControl     OPTIONAL,
    iE-Extensions                   ProtocolExtensionContainer { {DCH-ModifyItem-RL-ReconfRqstFDD-ExtIEs} } OPTIONAL,
    ...
}

DCH-ModifyItem-RL-ReconfRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-AddList-RL-ReconfRqstFDD                ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-AddItem-RL-ReconfRqstFDD

DCH-AddItem-RL-ReconfRqstFDD ::= SEQUENCE {
    dCH-ID                              DCH-ID,
    dCH-CombinationInd                  DCH-CombinationInd  OPTIONAL,
    limitedPowerIncrease                LimitedPowerIncrease,
    trCH-SrcStatisticsDescr             TrCH-SrcStatisticsDescr,
    ul-TransportformatSet               TransportFormatSet,
    dl-TransportformatSet               TransportFormatSet,
    ul-BLER                             BLER,
    dl-BLER                             BLER,
    allocationRetentionPriority         AllocationRetentionPriority,
    frameHandlingPriority               FrameHandlingPriority,
    payloadCRC-PresenceIndicator        PayloadCRC-PresenceIndicator,
    ul-FP-Mode                          UL-FP-Mode,
    qE-Selector                         QE-Selector,
    toAWS                               ToAWS,
    toAWE                               ToAWE,
    dRACControl                         DRACControl,
    iE-Extensions                       ProtocolExtensionContainer { {DCH-AddItem-RL-ReconfRqstFDD-ExtIEs} } OPTIONAL,
    ...
}

DCH-AddItem-RL-ReconfRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

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

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

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

RadioLinkReconfigurationRequestFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

```
-- **************************************************************
--
-- RADIO LINK RECONFIGURATION REQUEST TDD
--
-- **************************************************************

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

RadioLinkReconfigurationRequestTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-AllowedQueuingTime          CRITICALITY reject  TYPE AllowedQueuingTime             PRESENCE optional     } |
    { ID id-UL-CCTrCH-InformationList-RL-ReconfRqstTDD  CRITICALITY notify  TYPE UL-CCTrCH-InformationList-RL-ReconfRqstTDD PRESENCE optional } |
    { ID id-DL-CCTrCH-InformationList-RL-ReconfRqstTDD  CRITICALITY notify  TYPE DL-CCTrCH-InformationList-RL-ReconfRqstTDD PRESENCE optional } |
    { ID id-DCH-ModifyList-RL-ReconfRqstTDD     CRITICALITY reject  TYPE DCH-ModifyList-RL-ReconfRqstTDD        PRESENCE optional } |
    { ID id-DCH-AddList-RL-ReconfRqstTDD        CRITICALITY reject  TYPE DCH-AddList-RL-ReconfRqstTDD           PRESENCE optional } |
    { ID id-DCH-DeleteList-RL-ReconfRqstTDD     CRITICALITY reject  TYPE DCH-DeleteList-RL-ReconfRqstTDD        PRESENCE optional },
    ...
}

UL-CCTrCH-InformationList-RL-ReconfRqstTDD      ::= CCTrCH-IE-ContainerList0 { {UL-CCTrCH-InformationList-RL-ReconfRqstTDD-IEs} }

UL-CCTrCH-InformationList-RL-ReconfRqstTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-UL-CCTrCH-InformationItem-RL-ReconfRqstTDD  CRITICALITY notify  TYPE UL-CCTrCH-InformationItem-RL-ReconfRqstTDD PRESENCE mandatory     },
    ...
}

UL-CCTrCH-InformationItem-RL-ReconfRqstTDD ::= SEQUENCE {
    cCTrCH-ID                   CCTrCH-ID,
    tFCS                        TFCS,
    iE-Extensions                   ProtocolExtensionContainer { {UL-CCTrCH-InformationItem-RL-ReconfRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

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

DL-CCTrCH-InformationList-RL-ReconfRqstTDD      ::= CCTrCH-IE-ContainerList0 { {DL-CCTrCH-InformationList-RL-ReconfRqstTDD-IEs} }

DL-CCTrCH-InformationList-RL-ReconfRqstTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-CCTrCH-InformationItem-RL-ReconfRqstTDD  CRITICALITY notify  TYPE DL-CCTrCH-InformationItem-RL-ReconfRqstTDD PRESENCE mandatory     },
    ...
}

DL-CCTrCH-InformationItem-RL-ReconfRqstTDD ::= SEQUENCE {
    cCTrCH-ID                   CCTrCH-ID,
    tFCS                        TFCS,
    iE-Extensions                   ProtocolExtensionContainer { {DL-CCTrCH-InformationItem-RL-ReconfRqstTDD-ExtIEs} } OPTIONAL,
    ...
}
```

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

DCH-ModifyList-RL-ReconfRqstTDD            ::= SEQUENCE (SIZE(0..maxNrOfDCHs)) OF DCH-ModifyItem-RL-ReconfRqstTDD

DCH-ModifyItem-RL-ReconfRqstTDD ::= SEQUENCE {
    dCH-ID                          DCH-ID,
    ul-CCTrCH-ID                    CCTrCH-ID       OPTIONAL,
    dl-CCTrCH-ID                    CCTrCH-ID       OPTIONAL,
    ul-TransportformatSet           TransportFormatSet  OPTIONAL,
    dl-TransportformatSet           TransportFormatSet  OPTIONAL,
    allocationRetentionPriority     AllocationRetentionPriority OPTIONAL,
    frameHandlingPriority           FrameHandlingPriority   OPTIONAL,
    ul-FP-Mode                      UL-FP-Mode      OPTIONAL,
    toAWS                           ToAWS           OPTIONAL,
    toAWE                           ToAWE           OPTIONAL,
    iE-Extensions                   ProtocolExtensionContainer { {DCH-ModifyItem-RL-ReconfRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

DCH-ModifyItem-RL-ReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-AddList-RL-ReconfRqstTDD               ::= SEQUENCE (SIZE(0..maxNrOfDCHs)) OF DCH-AddItem-RL-ReconfRqstTDD

DCH-AddItem-RL-ReconfRqstTDD ::= SEQUENCE {
    dCH-ID                          DCH-ID,
    limitedPowerIncrease            LimitedPowerIncrease,
    trCH-SrcStatisticsDescr         TrCH-SrcStatisticsDescr,
    ul-CCTrCH-ID                    CCTrCH-ID,
    dl-CCTrCH-ID                    CCTrCH-ID,
    dCH-CombinationInd              DCH-CombinationInd  OPTIONAL,
    ul-TransportformatSet           TransportFormatSet,
    dl-TransportformatSet           TransportFormatSet,
    ul-BLER                         BLER,
    dl-BLER                         BLER,
    allocationRetentionPriority     AllocationRetentionPriority,
    frameHandlingPriority           FrameHandlingPriority,
    ul-FP-Mode                      UL-FP-Mode,
    toAWS                           ToAWS,
    toAWE                           ToAWE,
    iE-Extensions                   ProtocolExtensionContainer { {DCH-AddItem-RL-ReconfRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

DCH-AddItem-RL-ReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

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

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

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

RadioLinkReconfigurationRequestTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}
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3GPP TSG-RA WG3 Meeting #12
Seoul, Korea, 10-13 April 2000

***Document* R3-001205**
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.

25.423	CR	079r1	Current Version:	3.1.0

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

For submission to: RAN#8	For approval	X	Strategic		(for SMG use only)
list expected approval meeting # here ↑	for information		non-strategic		

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

Source: R-WG3 **Date:** April 2000

Subject: Change in the structure of Radio Link Reconfiguration Ready and Radio Link Reconfiguration Response messages.

Work item:

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

F	Correction	X	**Release:**	Phase 2	
A	Corresponds to a correction in an earlier release			Release 96	
B	Addition of feature			Release 97	
C	Functional modification of feature			Release 98	
D	Editorial modification			Release 99	X
				Release 00	

Reason for change:
If the Transport Layer Addresses information is indicated to be changed by the DRNC in Radio Link Reconfiguration Ready or Radio Link Reconfiguration Response message, 'RL Information Response' identifies new Binding ID and Transport Layer Address information separately for DCHs which are *to be modified* and *to be added*. This separation is not necessary as the SRNC knows which DCHs are modified ones and which are new ones.

For clarity, it's proposed to modify the message structure so that there's no separation the for modified and added channels that are allocated a new Transport Layer Address.

The information group DCH Information Response used in RL Setup and RL Addition is then applied also here, without the need to defines new groups.

Clauses affected:
8.3.4 Synchronised Radio Link Reconfiguration Preparation
8.3.7 Unsynchronised Radio Link Reconfiguration
9.1.12 RADIO LINK RECONFIGURATION READY
9.1.17 RADIO LINK RECONFIGURATION RESPONSE
9.3.3 PDU Definitions
9.3.6 Constant Definitions

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:

8.3.4 Synchronised Radio Link Reconfiguration Preparation

8.3.4.1 General

The Synchronised Radio Link Reconfiguration Preparation procedure is used to prepare a new configuration of all Radio Links related to one UE-UTRAN connection within a DRNS.

This procedure shall use the signalling bearer connection for the relevant UE context.

The Synchronised Radio Link Reconfiguration Preparation procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

8.3.4.2 Successful Operation

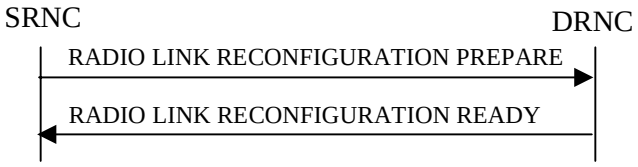

Figure 1: Synchronised Radio Link Reconfiguration Preparation procedure, Successful Operation

The Synchronised Radio Link Reconfiguration Preparation procedure is initiated by the SRNC by sending the RADIO LINK RECONFIGURATION PREPARE message to the DRNC.

Upon reception, the DRNS shall reserve necessary resources for the new configuration of the Radio Link(s) according to the parameters given in the message. Unless specified below, the meaning of parameters is specified in other specifications.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *Allowed Queuing Time* IE the DRNS may queue the request before providing a response to the SRNC.

DCH Modification:

If the RADIO LINK RECONFIGURATION PREPARE message includes the *Allocation/Retention Priority* IE for a DCH to be modified, the DRNS should use this information when reserving resources for this DCH in the new configuration.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *Frame Handling Priority* IE for a DCH to be modified, the DRNS should store this information for this DCH in the new configuration. The received Frame Handling Priority should be used when prioritising between different frames in the downlink on the radio interface in congestion situations within the DRNS once the new configuration has been activated.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *Transport Format Set* IE for the UL of a DCH to be modified, the DRNS shall apply the new Transport Format Set in the Uplink of this DCH in the new configuration.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *Transport Format Set* IE for the DL of a DCH to be modified, the DRNS shall apply the new Transport Format Set in the Downlink of this DCH in the new configuration.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *UL FP Mode* IE for a DCH to be modified, the DRNS shall apply the new FP Mode in the Uplink of the user plane for this DCH in the new configuration.

If the RADIO LINK RECONFIGURATION PREPARE message includes on the *ToAWS* IE for a DCH to be modified, the DRNS shall apply the new ToAWS in the user plane for this DCH in the new configuration.

If the RADIO LINK RECONFIGURATION PREPARE message includes on the *ToAWE* IE for a DCH to be modified, the DRNS shall apply the new ToAWE in the user plane for this DCH in the new configuration.

[FDD - If the *DRAC Control* IE is present and set to "requested" in the RADIO LINK RECONFIGURATION PREPARE message for at least one DCH and if the DRNC supports the DRAC, the DRNC shall indicate in the RADIO LINK RECONFIGURATION READY message the *Secondary CCPCH Info* IE to be received on FACH, for each

Radio Link. If the DRNC does not support DRAC, it shall not provide these IEs in the RADIO LINK RECONFIGURATION READY message.]

DCH Addition:

If the RADIO LINK RECONFIGURATION PREPARE message includes any DCH to be added to the Radio Link(s), the DRNS shall reserve necessary resources for the new configuration of the Radio Link(s) according to the parameters given in the message and include these DCH in the new configuration.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *DCH Combination Indicator* IE for a DCH to be added, the DRNS shall:

1. treat all DCHs with the same value of this IE as a set of co-ordinated DCHs; and
2. include this DCH in the new configuration only if it can include all DCHs with the same value of the *DCH Combination Indicator* IE in the new configuration.

[FDD - For DCHs with a unique or no "DCH Combination Ind" and the *QE-Selector* IE set to "selected DCH", the Transport channel BER from that DCH shall be the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [25.427]. If the QE-Selector is set to "non-selected DCH", the Physical channel BER shall be used for the QE in the UL data frames, ref. [25.427]].

[FDD - For DCHs with the same "DCH Combination Ind" the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected DCH" shall be used for the QE in the UL data frames, ref. [25.427]. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [25.427]. If all DCHs have *QE-Selector* IE set to "non-selected DCH" the Physical channel BER shall be used for the QE, ref. [25.427]].

The DRNS should store the *Frame Handling Priority* IE received for a DCH to be added in the new configuration. The received Frame Handling Priority should be used when prioritising between different frames in the downlink on the radio interface in congestion situations within the DRNS once the new configuration has been activated.

The DRNS shall use the included *UL FP Mode* IE for a DCH to be added as the new FP Mode in the Uplink of the user plane for this DCH in the new configuration.

The DRNS shall use the included *ToAWS* IE for a DCH to be added as the new Time of Arrival Window Start Point in the user plane for this DCH in the new configuration.

The DRNS shall use the included *ToAWE* IE for a DCH to be added as the new Time of Arrival Window End Point in the user plane for this DCH in the new configuration.

[FDD - If the *DRAC Control* IE is set to "requested" in the RADIO LINK RECONFIGURATION PREPARE message for at least one DCH and if the DRNC supports the DRAC, the DRNC shall indicate in the RADIO LINK RECONFIGURATION READY message the *Secondary CCPCH Info* IE to be received on FACH, for each Radio Link. If the DRNC does not support DRAC, it shall not provide these IEs in the RADIO LINK RECONFIGURATION READY message.]

DCH Deletion:

If the RADIO LINK RECONFIGURATION PREPARE message includes any DCH to be deleted from the Radio Link(s), the DRNS shall not include this DCH in the new configuration.

If all of the DCHs belonging to a set of co-ordinated DCHs are requested to be deleted, the DRNS shall not include this set of co-ordinated DCHs in the new configuration.

Physical Channel Modification:

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Uplink Scrambling Code* IE, the DRNS shall apply this Uplink Scrambling Code to the new configuration.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes one or more *Uplink Channelisation Code* IEs, the DRNS shall apply the new Uplink Channelisation Code(s) in the new configuration.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes one or more *Spreading Factor of Channelisation Code (DL)* IE, for each *Spreading Factor of Channelisation Code (DL)* IE the DRNS shall allocate one new Downlink Channelisation Code per Radio Link and apply the new Downlink Channelisation Code(s) to the new

configuration. Each Downlink Channelisation Code allocated for the new configuration shall be included as a *Channelisation Code (DL)* IE in the RADIO LINK RECONFIGURATION READY message when sent to the SRNC.]

The DRNS shall use the *TFCS* IE for the UL when reserving resources for the uplink of the new configuration. The DRNS shall apply the new TFCS in the Uplink of [TDD – the CCTrCH of] the new configuration.

The DRNS shall use the *TFCS* IE for the DL when reserving resources for the downlink of the new configuration. The DRNS shall apply the new TFCS in the Downlink of [TDD – the CCTrCH of] the new configuration.

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes on the *UL DPCCH Structure* IE, group the DRNS shall apply the new Uplink DPCCH Structure to the new configuration.]

FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *UL SIR Target* IE, the DRNS shall set the UL inner loop power control to the UL SIR target when the new configuration is being used.]

[TDD – The DRNC shall include all the IEs corresponding to the new physical channel resources for the DL DPCH and/or the UL DPCH to be reconfigured in the RADIO LINK RECONFIGURATION READY message sent to the SRNC.]

SSDT Activation/Deactivation:

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *SSDT Indication* IE set to "SSDT Active in the UE", the DRNS may activate SSDT using the *SSDT Cell Identity* IE and *SSDT Cell Identity Length* IE in the new configuration.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the SSDT Indication IE set to "SSDT not Active in the UE", the DRNS shall deactivate SSDT in the new configuration.]

If the requested modifications are allowed by the DRNS, and the DRNS has successfully reserved the required resources for the new configuration of the Radio Link(s) it shall respond to the SRNC with the RADIO LINK RECONFIGURATION READY message. When this procedure has been completed successfully there exist a Prepared Reconfiguration, as defined in subclause 3.1.

The DRNS decides the maximum and minimum SIR for the uplink of the Radio Link(s) and shall return this in the *Maximum Uplink SIR* IE and *Minimum Uplink SIR* IE for each Radio Link in the RADIO LINK RECONFIGURATION READY message.

In case of a set of co-ordinated DCHs requiring a new transport bearer on Iur the *DCH Information Response ~~to be Added~~* ~~IE~~IE group ~~or the *DCH to be Modified* IE group~~ shall be included only for one of the DCHs in the set of co-ordinated DCHs.

In case of a Radio Link being combined with another Radio Link within the DRNS the *DCH Information Response ~~to be Added~~* IE group ~~and the *DCH to be Modified* IE group~~ shall be included only for one of the combined Radio Links.

8.3.7 Unsynchronised Radio Link Reconfiguration

8.3.7.1 General

The Unsynchronised Radio Link Reconfiguration procedure is used to reconfigure Radio Link(s) related to one UE-UTRAN connection within a DRNS.

The procedure is used when there is no need to synchronise the time of the switching from the old to the new radio link configuration in the cells used by the UE-UTRAN connection within the DRNS.

This procedure shall use the signalling bearer connection for the relevant UE context.

The Unsynchronised Radio Link Reconfiguration procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

8.3.7.2 Successful Operation

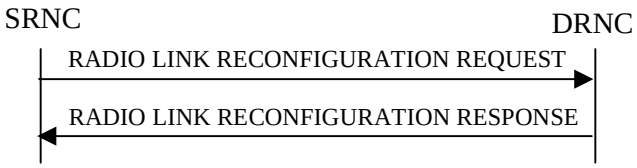

Figure 2: Unsynchronised Radio Link Reconfiguration procedure, Successful Operation

The Unsynchronised Radio Link Reconfiguration procedure is initiated by the SRNC by sending the RADIO LINK RECONFIGURATION REQUEST message to the DRNC.

Upon reception, the DRNS shall modify the configuration of the Radio Link(s) according to the parameters given in the message. Unless specified below, the meaning of parameters is specified in other specifications.

If the RADIO LINK RECONFIGURATION REQUEST message includes the *Allowed Queuing Time* IE the DRNS may queue the request before providing a response to the SRNC.

DCH Modification:

If the RADIO LINK RECONFIGURATION REQUEST message includes on the *Allocation/Retention Priority* IE for a DCH to be modified, the DRNS should use this new value when reserving resources for this DCH in the new configuration.

If the RADIO LINK RECONFIGURATION REQUEST message includes on the *Frame Handling Priority* IE for a DCH to be modified, the DRNS should store this information for this DCH in the new configuration. The received Frame Handling Priority should be used when prioritising between different frames in the downlink on the radio interface in congestion situations within the DRNS once the new configuration has been activated.

If the RADIO LINK RECONFIGURATION REQUEST message includes on the *Transport Format Set* IE for the UL of a DCH to be modified, the DRNS shall apply the new Transport Format Set in the Uplink of this DCH in the new configuration.

If the RADIO LINK RECONFIGURATION REQUEST message includes on the *Transport Format Set* IE for the DL of a DCH to be modified, the DRNS shall apply the new Transport Format Set in the Downlink of this DCH in the new configuration.

If the RADIO LINK RECONFIGURATION REQUEST message includes on the *UL FP Mode* IE for a DCH to be modified, the DRNS shall apply the new FP Mode in the Uplink of the user plane for this DCH in the new configuration.

If the RADIO LINK RECONFIGURATION REQUEST message includes on the *ToAWS* IE for a DCH to be modified, the DRNS shall apply the new ToAWS in the user plane for this DCH in the new configuration.

If the RADIO LINK RECONFIGURATION REQUEST message includes on the *ToAWE* IE for a DCH to be modified, the DRNS shall apply the new ToAWE in the user plane for this DCH in the new configuration.

[FDD - If the *DRAC Control* IE is present and set to "requested" in the RADIO LINK RECONFIGURATION REQUEST message for at least one DCH and if the DRNC supports the DRAC, the DRNC shall indicate in the RADIO LINK RECONFIGURATION RESPONSE message the *Secondary CCPCH Info* IE to be received on FACH, for each Radio Link. If the DRNC does not support DRAC, it shall not provide these IEs in the RADIO LINK RECONFIGURATION RESPONSE message.]

DCH Addition:

If the RADIO LINK RECONFIGURATION REQUEST message includes any DCH to be added to the Radio Link(s), the DRNS shall reserve necessary resources for the new configuration of the Radio Link(s) according to the parameters given in the message and include these DCH in the new configuration.

If the RADIO LINK RECONFIGURATION REQUEST message includes the *DCH Combination Indicator* IE for a DCH to be added, the DRNS shall:

1. treat all DCHs with the same value of this IE as a set of co-ordinated DCHs; and
2. include this DCH in the new configuration only if it can include all DCHs with the same value of the *DCH Combination Indicator* IE in the new configuration.

[FDD - For DCHs with a unique or no "DCH Combination Ind" and the *QE-Selector* IE set to "selected DCH", the Transport channel BER from that DCH shall be the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [25.427]. If the QE-Selector is set to "non-selected DCH", the Physical channel BER shall be used for the QE in the UL data frames, ref. [25.427]].

[FDD - For DCHs with the same "DCH Combination Ind" the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected DCH" shall be used for the QE in the UL data frames, ref. [25.427]. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [25.427]. If all DCHs have *QE-Selector* IE set to "non-selected DCH" the Physical channel BER shall be used for the QE, ref. [25.427]].

The DRNS should store the *Frame Handling Priority* IE received for a DCH to be added in the new configuration. The received Frame Handling Priority should be used when prioritising between different frames in the downlink on the radio interface in congestion situations within the DRNS once the new configuration has been activated.

The DRNS shall use the included *UL FP Mode* IE for a DCH to be added as the new FP Mode in the Uplink of the user plane for this DCH in the new configuration.

The DRNS shall use the included *ToAWS* IE for a DCH to be added as the new Time of Arrival Window Start Point in the user plane for this DCH in the new configuration.

The DRNS shall use the included *ToAWE* IE for a DCH to be added as the new Time of Arrival Window End Point in the user plane for this DCH in the new configuration.

[FDD - If the *DRAC Control* IE is set to "requested" in the RADIO LINK RECONFIGURATION REQUEST message for at least one DCH and if the DRNC supports the DRAC, the DRNC shall indicate in the RADIO LINK RECONFIGURATION RESPONSE message the *Secondary CCPCH Info* IE and the *Reference to System Information blocks IE* to be received on FACH, for each Radio Link. If the DRNC does not support DRAC, it shall not provide these IEs in the RADIO LINK RECONFIGURATION RESPONSE message.

DCH Deletion:

If the RADIO LINK RECONFIGURATION REQUEST message includes any DCH to be deleted from the Radio Link(s), the DRNS shall not include this DCH in the new configuration.

If all of the DCHs belonging to a set of co-ordinated DCHs are requested to be deleted, the DRNS shall not include this set of co-ordinated DCHs in the new configuration.

Physical Channel Modification:

If the RADIO LINK RECONFIGURATION REQUEST message includes on the *TFCS* IE for the UL, the DRNS shall apply the new TFCS in the Uplink of [TDD – the CCTrCH of] the new configuration.

If the RADIO LINK RECONFIGURATION REQUEST message includes on the *TFCS* IE for the DL, the DRNS shall apply the new TFCS in the Downlink of [TDD – the CCTrCH of] the new configuration.

If the requested modifications are allowed by the DRNS, the DRNS has successfully allocated the required resources, and changed to the new configuration it shall respond to the SRNC with the RADIO LINK RECONFIGURATION RESPONSE message.

The DRNS decides the maximum and minimum SIR for the uplink of the Radio Link(s) and shall return this in the IEs *Maximum Uplink SIR* and *Minimum Uplink SIR* for each Radio Link in the RADIO LINK RECONFIGURATION RESPONSE message.

In case of a set of co-ordinated DCHs requiring a new transport bearer on Iur the *DCH Information Response ~~to be Added~~* IE group ~~or the *DCH to be Modified* IE group~~ shall be included only for one of the DCH in the set of co-ordinated DCHs.

In case of a Radio Link being combined with another Radio Link within the DRNS the *DCH Information Response ~~to be Added~~* IE group ~~and the *DCH to be Modified* IE group~~ shall be included only for one of the combined Radio Links.

9.1.12 RADIO LINK RECONFIGURATION READY

9.1.12.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				–	
RL Information Response		*0..<maxnoofRLs>*			EACH	ignore
>RL ID	M				–	
>Maximum Uplink SIR	O		Uplink SIR		–	
>Minimum Uplink SIR	O		Uplink SIR		–	
>**Secondary CCPCH Info**		0..1			–	
>>FDD S-CCPCH Offset	M			Corresponds to: $\tau_{S\text{-}CCPCH,k}$, see ref. [8]	–	
>>DL Scrambling Code	M				–	
>>FDD DL Channelisation Code Number	M				–	
>>TFCS	M			For the DL.	–	
>>Secondary CCPCH Slot Format	M				–	
>>TFCI presence	C - SlotFormat				–	
>>MultiplexingPosition	M				–	
>>STTD Indicator	M				–	
>>FACH/PCH Information		1 .. <maxFACHcount+1>			–	
>>>TFS				For each FACH, and the PCH when multiplexed on the same Secondary CCPCH	–	
>>Scheduling Information		1			–	
>>>IB_SG REP	M				–	
>>>Segment Information		*1.. <maxIBSEG>*			–	
>>>>IB SG POS	M				–	
>Downlink Code Information		*0..<maxnoofDLCodes>*			GLOBAL	ignore
>>DL Scrambling Code	M				–	
>>FDD DL Channelisation Code Number	M				–	
>DCH <u>Information Response</u> ~~to be Added~~		*0..<maxnoofDCHs>*		Only one DCH per set of co-ordinated DCHs shall be included. The IE group shall be	GLOBAL	ignore

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
				included only once per DCH per set of combined RLs.		
>>DCH ID	M				–	
>>Binding ID	M				–	
>>Transport Layer Address	M				–	
~~**>DCH to be Modified**~~		~~*0..<maxnoofDCHs>*~~		~~Only one DCH per set of co-ordinated DCHs shall be included.~~ ~~The IE group shall be included only once per DCH per set of combined RLs.~~	~~GLOBAL~~	~~ignore~~
~~>>DCH ID~~	~~M~~				~~–~~	
~~>>Binding ID~~	~~M~~				~~–~~	
~~>>Transport Layer Address~~	~~M~~				~~–~~	
Criticality Diagnostics	O				YES	ignore

Condition	Explanation
SlotFormat	This IE is present only if the Secondary CCPCH Slot Format is equal to any of the value 8 to 17

Range bound	Explanation
MaxnoofDCHs	Maximum number of DCHs.
MaxnoofRLs	Maximum number of RLs for a UE.
MaxnoofDLCodes	Maximum number of Downlink Channelisation Codes.
MaxFACHCount	Maximum number of FACH's mapped onto secondary CCPCH's
MaxIBSEG	Maximum number of segments for one Information Block

9.1.12.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				–	
RL Information Response		*0..1*			YES	ignore
>RL ID	M				–	
>Maximum Uplink SIR	O		Uplink SIR		–	
>Minimum Uplink SIR	O		Uplink SIR		–	
>UL CCTrCH Information		*0..<maxnoof CCTrCHs>*			GLOBAL	ignore
>>CCTrCH ID	M				–	
>>UL DPCH Information		*1..<maxnoof DPCHs>*			GLOBAL	ignore
>>>DPCH ID	M				–	
>>>TDD Channelisation Code	O				–	
>>>Burst Type	O				–	
>>>Midamble Shift	O				–	
>>>Time Slot	O				–	
>>>TDD Physical Channel Offset	O				–	
>>>Repetition Period	O				–	
>>>Repetition Length	O				–	
>>>TFCI Presence	O				–	
>DL CCTrCH Information		*0..<maxnoof CCTrCHs>*			GLOBAL	ignore
>>CCTrCH ID	M				–	
>>DL DPCH Information		*1..<maxnoof DPCHs>*			GLOBAL	ignore
>>>DPCH ID	M				–	
>>>TDD Channelisation Code	O				–	
>>>Burst Type	O				–	
>>>Midamble Shift	O				–	
>>>Time Slot	O				–	
>>>TDD Physical Channel Offset	O				–	
>>> Repetition Period	O				–	
>>>Repetition Length	O				–	
>>>TFCI Presence	O				–	
>DCH Information Response ~~to be Added~~		*0..<maxnoof DCHs>*		Only one DCH per set of co-ordinated DCHs shall be included. The IE group shall be included only once per DCH per set of combined RLs.	GLOBAL	ignore
>>DCH ID	M				–	
>>Binding ID	M				–	
>>Transport Layer Address	M				–	
~~**>DCH to be Modified**~~		~~*0..<maxnoof DCHs>*~~		~~Only one DCH per set of co-ordinated DCHs shall be included.~~ ~~The IE group~~	~~GLOBAL~~	~~ignore~~

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
				~~shall be included only once per DCH per set of combined RLs.~~		
~~>>DCH ID~~	~~M~~				~~–~~	
~~>>Binding ID~~	~~M~~				~~–~~	
~~>>Transport Layer Address~~	~~M~~				~~–~~	
Criticality Diagnostics	O				YES	ignore

Range bound	Explanation
MaxnoofDCHs	Maximum number of DCHs for a UE.
MaxnoofCCTrCHs	Maximum number of CCTrCHs for a UE.
Maxnoof DPCHs	Maximum number of DPCHs in one CCTrCH.

9.1.17 RADIO LINK RECONFIGURATION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				–	
RL Information Response		*0..<maxnoofRLs>*			EACH	ignore
>RL ID	M				–	
>Maximum Uplink SIR	O		Uplink SIR		–	
>Minimum Uplink SIR	O		Uplink SIR		–	
>**Secondary CCPCH Info**		0..1			–	
>>FDD S-CCPCH Offset	M			Corresponds to: $\tau_{S\text{-}CCPCH,k}$, see ref. [8]	–	
>>DL Scrambling Code	M				–	
>>FDD DL Channelisation Code Number	M				–	
>>TFCS	M			For the DL.	–	
>>Secondary CCPCH Slot Format	M				–	
>>TFCI presence	C - SlotFormat				–	
>>MultiplexingPosition	M				–	
>>STTD Indicator	M				–	
>>FACH/PCH Information		1 .. <maxFACHcount+1>			–	
>>>TFS				For each FACH, and the PCH when multiplexed on the same Secondary CCPCH	–	
>>Scheduling Information		1			–	
>>>IB_SG REP	M				–	
>>>Segment Information		*1.. <maxIBSEG>*			–	
>>>>IB SG POS	M				–	
>DCH <u>Information Response</u>~~to be Added~~		*0..<maxnoofDCHs>*		Only one DCH per set of co-ordinated DCHs shall be included. The IE group shall be included only once per DCH per set of combined RLs.	GLOBAL	ignore
>>DCH ID	M				–	
>>Binding ID	M				–	
>>Transport Layer Address	M				–	
~~**>DCH to be Modified**~~		~~*0..<maxno*~~		~~Only one~~	~~GLOBAL~~	~~ignore~~

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
		~~*ofDCHs*>~~		~~DCH per set of co-ordinated DCHs shall be included.~~ ~~The IE group shall be included only once per DCH per set of combined RLs.~~		
~~>>DCH ID~~	~~M~~				~~–~~	
~~>>Binding ID~~	~~M~~				~~–~~	
~~>>Transport Layer Address~~	~~M~~				~~–~~	
Criticality Diagnostics	O				YES	ignore

Condition	Explanation
SlotFormat	This IE is present only if the Secondary CCPCH Slot Format is equal to any of the value 8 to 17

Range Bound	Explanation
MaxnoofDCHs	Maximum number of DCHs for a UE.
MaxnoofRLs	Maximum number of RLs for a UE.
MaxSysinfoFACHCount	Maximum number of references to system information blocks on the FACH
MaxIBSEG	Maximum number of segments for one Information Block

9.3.3 PDU Definitions

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

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

BEGIN

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

IMPORTS
    AllocationRetentionPriority,
    AllowedQueuingTime,
    BLER,
    BindingID,
    BurstType,
    C-ID,
    C-RNTI,
    CCTrCH-ID,
    CellIndividualOffset,
    CFN,
    CFNOffset,
    ClosedLoopMode1-SupportIndicator,
    ClosedLoopMode2-SupportIndicator,
    CN-CS-DomainIdentifier,
    CN-PS-DomainIdentifier,
    Cause,
    CellParameterID,
    ChipOffset,
    CompressedModeMethod,
    CriticalityDiagnostics,
    D-FieldLength,
    D-RNTI,
    D-RNTI-ReleaseIndication,
    DCH-CombinationInd,
    DCH-ID,
    DL-DPCH-SlotFormat,
    DL-SIRTarget,
    DL-FrameType,
    DL-Power,
    DL-ScramblingCode,
    DPCHConstantValue,
    DPCH-ID,
```

```
    DRACControl,
    DRXCycleLengthCoefficient,
    DedicatedMeasurementType,
    DedicatedMeasurementValue,
    DiversityControlField,
    DiversityMode,
    FACH-InitialWindowSize,
    FACH-PriorityIndicator,
    FDD-DL-ChannelisationCodeNumber,
    FDD-S-CCPCH-Offset,
    FDD-TPC-DownlinkStepSize,
    FrameHandlingPriority,
    FrameOffset,
    GapPeriod,
    GapPositionMode,
    IB-SG-POS,
    IB-SG-REP,
    IMSI,
    L3-Information,
    LimitedPowerIncrease,
    MAC-c-SDU-Length,
    MaximumAllowedULTxPower,
    MaxNrOfUL-DPCHs,
    MeasurementFilterCoefficient,
    MeasurementID,
    MidambleShift,
    MinUL-ChannelisationCodeLength,
    MultipleURAsIndicator,
    MultiplexingPosition,
    PD,
    PayloadCRC-PresenceIndicator,
    PCCPCH-Power,
    PowerAdjustmentType,
    PowerControlMode,
    PowerOffset,
    PowerResumeMode,
    PrimaryCCPCH-RSCP,
    PrimaryCPICH-EcNo,
    PrimaryCPICH-Power,
    PrimaryScramblingCode,
    PropagationDelay,
    PunctureLimit,
    QE-Selector,
    RANAP-RelocationInformation,
    RL-ID,
    RL-Set-ID,
    RNC-ID,
    RepetitionLength,
    RepetitionPeriod,
    ReportCharacteristics,
    S-FieldLength,
    S-RNTI,
    SCH-TimeSlot,
    SAI,
```

```
    SN,
    SSDT-CellID,
    SSDT-CellID-Length,
    SSDT-Indication,
    SSDT-SupportIndicator,
    STTD-Indicator,
    STTD-SupportIndicator,
    ScaledMaxAdjustmentPeriod,
    ScaledMaxAdjustmentStep,
    ScramblingCodeChange,
    SecondaryCCPCH-SlotFormat,
    SyncCase,
    TDD-ChannelisationCode,
    TDD-PhysicalChannelOffset,
    TDD-TPC-DownlinkStepSize,
    TFCI-Coding,
    TFCI-Presence,
    TFCI-SignallingMode,
    TGD,
    TGL,
    TimeSlot,
    ToAWE,
    ToAWS,
    TransmitDiversityIndicator,
    TransportBearerID,
    TransportBearerRequestIndicator,
    TFCS,
    TransportFormatSet,
    TransportLayerAddress,
    TrCH-SrcStatisticsDescr,
    TxDiversityIndicator,
    UARFCN,
    UC-ID,
    UL-DeltaSIR,
    UL-DeltaSIRAfter,
    UL-DL-CompressedModeSelection,
    UL-DPCCH-SlotFormat,
    UL-InterferenceLevel,
    UL-SIR,
    UL-FP-Mode,
    UL-ScramblingCode,
    URA-ID
FROM RNSAP-IEs

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

```
FROM RNSAP-Containers

    maxNrOfCCTrCHs,
    maxNrOfDCHs,
    maxNrOfDL-Codes,
    maxNrOfDPCHs,
    maxNrOfMACcSDU-Length,
    maxNrOfRLs,
    maxNrOfRLSets,
    maxNrOfRLs-1,
    maxNrOfRLs-2,
    maxNrOfSCCPCHs,
    maxNrOfULTs,
    maxNrOfCMpatterns,
    maxRNCinURA,
    maxNrOfNeighbouringRNCs,
    maxNrOfFDDNeighboursPerRNC,
    maxNrOfTDDNeighboursPerRNC,
    maxFACHCountPlus1,
    maxIBSEG,

    id-AllRLItem-DM-Rprt,
    id-AllRLItem-DM-Rsp,
    id-AllRL-SetItem-DM-Rprt,
    id-AllRL-SetItem-DM-Rsp,
    id-AllowedQueuingTime,
    id-BindingID,
    id-C-ID,
    id-C-RNTI,
    id-CFN,
    id-CN-CS-DomainIdentifier,
    id-CN-PS-DomainIdentifier,
    id-Cause,
    id-CellItem-PagingRqst,
    id-CM-PatternInformationItem-CompressedModePrep,
    id-CM-PatternInformationList-CompressedModePrep,
    id-CombiningItem-RL-AdditionFailureFDD,
    id-CombiningItem-RL-AdditionRspFDD,
    id-CombiningItem-RL-AdditionRspTDD,
    id-CombiningItem-RL-SetupFailureFDD,
    id-CombiningItem-RL-SetupRspFDD,
    id-CriticalityDiagnostics,
    id-D-RNTI,
    id-D-RNTI-ReleaseIndication,
    id-DCH-AddListIE-RL-ReconfReadyFDD,
    id-DCH-AddListIE-RL-ReconfReadyTDD,
    id-DCH-AddListIE-RL-ReconfRsp,
    id-DCH-AddList-RL-ReconfPrepFDD,
    id-DCH-AddList-RL-ReconfPrepTDD,
    id-DCH-AddList-RL-ReconfRqstFDD,
    id-DCH-AddList-RL-ReconfRqstTDD,
    id-DCH-DeleteList-RL-ReconfPrepFDD,
    id-DCH-DeleteList-RL-ReconfPrepTDD,
    id-DCH-DeleteList-RL-ReconfRqstFDD,
```

```
    id-DCH-DeleteList-RL-ReconfRqstTDD,
    id-DCH-Information-RL-SetupRqstFDD,
    id-DCH-InformationList-RL-SetupRqstTDD,
    id-DCH-InformationRresponseListIE-RL-ReconfReadyFDD,
    id-DCH-InformationRresponseListIE-RL-ReconfReadyTDD,
    id-DCH-InformationRresponseListIE-RL-ReconfRsp,
    id-DCH-ModifyListIE-RL-ReconfReadyFDD,
    id-DCH-ModifyListIE-RL-ReconfReadyTDD,
    id-DCH-ModifyListIE-RL-ReconfRsp,
    id-DCH-ModifyList-RL-ReconfPrepFDD,
    id-DCH-ModifyList-RL-ReconfPrepTDD,
    id-DCH-ModifyList-RL-ReconfRqstFDD,
    id-DCH-ModifyList-RL-ReconfRqstTDD,
    id-DCH-InformationResponseListIE-RL-SetupRspTDD,
    id-DL-CCTrCH-InformationItem-RL-ReconfPrepTDD,
    id-DL-CCTrCH-InformationListIE-RL-ReconfReadyTDD,
    id-DL-CCTrCH-InformationItem-RL-ReconfRqstTDD,
    id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD,
    id-DL-CCTrCH-InformationListIE-PhyChReconfRqstTDD,
    id-DL-CCTrCH-InformationListIE-RL-AdditionRspTDD,
    id-DL-CCTrCH-InformationListIE-RL-SetupRspTDD,
    id-DL-CCTrCH-InformationList-RL-ReconfPrepTDD,
    id-DL-CCTrCH-InformationList-RL-ReconfRqstTDD,
    id-DL-CCTrCH-InformationList-RL-SetupRqstTDD,
    id-DL-CodeInformationListIE-PhyChReconfRqstFDD,
    id-DL-CodeInformationListIE-RL-AdditionFailureFDD,
    id-DL-CodeInformationListIE-RL-AdditionRspFDD,
    id-DL-CodeInformationListIE-RL-ReconfReadyFDD,
    id-DL-CodeInformationListIE-RL-SetupFailureFDD,
    id-DL-DPCH-Information-RL-ReconfPrepFDD,
    id-DL-DPCH-Information-RL-SetupRqstFDD,
    id-DL-DPCH-Information-RL-ReconfRqstFDD,
    id-DL-DPCH-InformationItem-PhyChReconfRqstTDD,
    id-DL-DPCH-InformationItem-RL-AdditionRspTDD,
    id-DL-DPCH-InformationItem-RL-SetupRspTDD,
    id-DL-DPCH-InformationListIE-RL-ReconfReadyTDD,
    id-DL-SIRTarget,
    id-DLReferencePower,
    id-DLReferencePowerList-DL-PC-Rqst,
    id-DL-ReferencePowerInformation-DL-PC-Rqst,
    id-DRXCycleLengthCoefficient,
    id-DedicatedMeasurementObjectType-DM-Rprt,
    id-DedicatedMeasurementObjectType-DM-Rqst,
    id-DedicatedMeasurementObjectType-DM-Rsp,
    id-DedicatedMeasurementType,
    id-DiversityIndicationItem-RL-AdditionFailureFDD,
    id-DiversityIndicationItem-RL-AdditionRspFDD,
    id-DiversityIndicationItem-RL-AdditionRspTDD,
    id-DiversityIndicationItem-RL-SetupFailureFDD,
    id-DiversityIndicationItem-RL-SetupRspFDD,
    id-FACH-InfoForOptionalS-CCPCH-CTCH-ResourceRspFDD,
    id-FACH-InfoForOptionalS-CCPCH-CTCH-ResourceRspTDD,
    id-FACH-InfoForS-CCPCH-CoupledToPRACHorPCPCH-CTCH-ResourceRspFDD,
    id-FACH-InfoForS-CCPCH-CoupledToPRACH-CTCH-ResourceRspTDD,
```

```
    id-IMSI,
    id-L3-Information,
    id-MAC-c-SDU-LengthListIE-CTCH-ResourceRspFDD,
    id-MAC-c-SDU-LengthListIE-CTCH-ResourceRspTDD,
    id-MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspFDD,
    id-MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspTDD,
    id-MaxAdjustmentPeriod,
    id-MaxAdjustmentStep,
    id-MeasurementFilterCoefficient,
    id-MeasurementID,
    id-MultipleURAsIndicator,
    id-NeighbouringFDD-CellInformationItem-RL-AdditionFailureFDD,
    id-NeighbouringFDD-CellInformationItem-RL-AdditionRsp,
    id-NeighbouringFDD-CellInformationItem-RL-SetupFailureFDD,
    id-NeighbouringFDD-CellInformationItem-RL-SetupRsp,
    id-NeighbouringTDD-CellInformationItem-RL-AdditionFailureFDD,
    id-NeighbouringTDD-CellInformationItem-RL-AdditionRsp,
    id-NeighbouringTDD-CellInformationItem-RL-SetupFailureFDD,
    id-NeighbouringTDD-CellInformationItem-RL-SetupRsp,
    id-Neighbouring-CellInformationItem-RL-SetupFailureFDD,
    id-Neighbouring-CellInformationItem-RL-SetupRsp,
    id-NonCombiningItem-RL-AdditionFailureFDD,
    id-NonCombiningItem-RL-AdditionRspFDD,
    id-NonCombiningItem-RL-AdditionRspTDD,
    id-NonCombiningOrIEnotPresenItem-RL-SetupFailureFDD,
    id-NonCombiningOrIEnotPresenItem-RL-SetupRspFDD,
    id-PagingArea-PagingRqst,
    id-PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspFDD,
    id-PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspTDD,
    id-PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspFDD,
    id-PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspTDD,
    id-PowerAdjustmentType,
    id-ProcedureScope-DL-PC-Rqst,
    id-RANAP-RelocationInformation,
    id-RL-Information-PhyChReconfRqstFDD,
    id-RL-Information-PhyChReconfRqstTDD,
    id-RL-Information-RL-AdditionRqstFDD,
    id-RL-Information-RL-AdditionRqstTDD,
    id-RL-Information-RL-DeletionRqst,
    id-RL-Information-RL-FailureInd,
    id-RL-Information-RL-ReconfPrepFDD,
    id-RL-Information-RL-RestoreInd,
    id-RL-Information-RL-SetupRqstFDD,
    id-RL-Information-RL-SetupRqstTDD,
    id-RL-InformationItem-DM-Rprt,
    id-RL-InformationItem-DM-Rqst,
    id-RL-InformationItem-DM-Rsp,
    id-RL-InformationItem-RL-SetupRqstFDD,
    id-RL-InformationList-RL-AdditionRqstFDD,
    id-RL-InformationList-RL-DeletionRqst,
    id-RL-InformationList-RL-ReconfPrepFDD,
    id-RL-InformationResponse-RL-AdditionRspTDD,
    id-RL-InformationResponse-RL-ReconfReadyTDD,
    id-RL-InformationResponse-RL-SetupRspTDD,
```

```
    id-RL-InformationResponseItem-RL-AdditionRspFDD,
    id-RL-InformationResponseItem-RL-ReconfReadyFDD,
    id-RL-InformationResponseItem-RL-ReconfRsp,
    id-RL-InformationResponseItem-RL-SetupRspFDD,
    id-RL-InformationResponseList-RL-AdditionRspFDD,
    id-RL-InformationResponseList-RL-ReconfReadyFDD,
    id-RL-InformationResponseList-RL-ReconfRsp,
    id-RL-InformationResponseList-RL-SetupRspFDD,
    id-RLItem-DM-Rprt,
    id-RLItem-DM-Rqst,
    id-RLItem-DM-Rsp,
    id-RL-ReconfigurationFailure-RL-ReconfFail,
    id-RL-ReconfigurationFailureList-RL-ReconfFail,
    id-RL-Set-InformationItem-DM-Rprt,
    id-RL-Set-InformationItem-DM-Rqst,
    id-RL-Set-InformationItem-DM-Rsp,
    id-RL-Set-Information-RL-FailureInd,
    id-RL-Set-Information-RL-RestoreInd,
    id-RL-SetItem-DM-Rprt,
    id-RL-SetItem-DM-Rqst,
    id-RL-SetItem-DM-Rsp,
    id-RNCsWithCellsInTheAccessedURA-List-UL-ST-Ind,
    id-ReportCharacteristics,
    id-Reporting-Object-RL-FailureInd,
    id-Reporing-Object-RL-RestoreInd,
    id-S-RNTI,
    id-SAI,
    id-SRNC-ID,
    id-SecondaryCCPCHListIE-CTCH-ResourceRspTDD,
    id-SuccessfulRL-InformationResponse-RL-AdditionFailureFDD,
    id-SuccessfulRL-InformationResponse-RL-SetupFailureFDD,
    id-SuccessfulRL-InformationResponseList-RL-AdditionFailureFDD,
    id-SuccessfulRL-InformationResponseList-RL-SetupFailureFDD,
    id-TransportBearerID,
    id-TransportBearerRequestIndicator,
    id-TransportLayerAddress,
    id-UC-ID,
    id-UL-CCTrCH-Information-RL-ReconfPrepTDD,
    id-UL-CCTrCH-InformationItem-RL-ReconfRqstTDD,
    id-UL-CCTrCH-InformationList-RL-ReconfPrepTDD,
    id-UL-CCTrCH-InformationList-RL-ReconfRqstTDD,
    id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD,
    id-UL-CCTrCH-InformationList-RL-SetupRqstTDD,
    id-UL-CCTrCH-InformationListIE-PhyChReconfRqstTDD,
    id-UL-CCTrCH-InformationListIE-RL-AdditionRspTDD,
    id-UL-CCTrCH-InformationListIE-RL-ReconfReadyTDD,
    id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD,
    id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD,
    id-UL-DPCH-Information-RL-ReconfPrepFDD,
    id-UL-DPCH-Information-RL-ReconfRqstFDD,
    id-UL-DPCH-Information-RL-SetupRqstFDD,
    id-UL-DPCH-InformationItem-PhyChReconfRqstTDD,
    id-UL-DPCH-InformationItem-RL-AdditionRspTDD,
    id-UL-DPCH-InformationItem-RL-SetupRspTDD,
```

```
    id-UL-DPCH-InformationListIE-RL-ReconfReadyTDD,
    id-UL-SIRTarget,
    id-URA-ID,
    id-URAItem-PagingRqst,
    id-UnsuccessfulRL-InformationResponse,
    id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD,
    id-UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD,
    id-UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD,
    id-UnsuccessfulRL-InformationResponseList-RL-AdditionFailureFDD,
    id-UnsuccessfulRL-InformationResponseList-RL-SetupFailureFDD
FROM RNSAP-Constants;
```

.. Text omitted ..

```
-- **************************************************************
--
-- RADIO LINK RECONFIGURATION READY FDD
--
-- **************************************************************

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

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

RL-InformationResponseList-RL-ReconfReadyFDD        ::= RL-IE-ContainerList0 { {RL-InformationResponse-RL-ReconfReadyFDD-IEs} }

RL-InformationResponse-RL-ReconfReadyFDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationResponseItem-RL-ReconfReadyFDD    CRITICALITY ignore  TYPE RL-InformationResponseItem-RL-ReconfReadyFDD      PRESENCE
mandatory   },
    ...
}

RL-InformationResponseItem-RL-ReconfReadyFDD ::= SEQUENCE {
    rL-ID                           RL-ID,
    max-UL-SIR                      UL-SIR          OPTIONAL,
    min-UL-SIR                      UL-SIR          OPTIONAL,
    secondary-CCPCH-Info            Secondary-CCPCH-Info-RL-ReconfReadyFDD      OPTIONAL,
    dl-CodeInformationList          DL-CodeInformationList-RL-ReconfReadyFDD    OPTIONAL,
    dCHsToBeAdded                   DCH-AddList-RL-ReconfReadyFDD           OPTIONAL,
    dCHsToBeModified                DCH-ModifyList-RL-ReconfReadyFDD        OPTIONAL,
    dCHsInformationResponseList     DCH-InformationResponseList-RL-ReconfReadyFDD   OPTIONAL,
    iE-Extensions                   ProtocolExtensionContainer { {RL-InformationResponseItem-RL-ReconfReadyFDD-ExtIEs} } OPTIONAL,
    ...
}

RL-InformationResponseItem-RL-ReconfReadyFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Secondary-CCPCH-Info-RL-ReconfReadyFDD ::= SEQUENCE {
    fDD-S-CCPCH-Offset                      FDD-S-CCPCH-Offset,
    dl-ScramblingCode                       DL-ScramblingCode,
    fDD-DL-ChannelisationCodeNumber         FDD-DL-ChannelisationCodeNumber,
    dl-TFCS                                 TFCS,
    secondaryCCPCH-SlotFormat               SecondaryCCPCH-SlotFormat,
```

```
    tFCI-Presence                           TFCI-Presence   OPTIONAL,
    -- This IE is present only if the Secondary CCPCH Slot Format is equal to any of the value 8 to 17
    multiplexingPosition                    MultiplexingPosition,
    sTTD-Indicator                          STTD-Indicator,
    fACH-PCH-InformationList                FACH-PCH-InformationList-RL-ReconfReadyFDD,
    schedulingInformation                   SchedulingInformation-RL-ReconfReadyFDD,
    iE-Extensions                           ProtocolExtensionContainer { { Secondary-CCPCH-Info-RL-ReconfReadyFDD-ExtIEs} } OPTIONAL,
    ...
}

Secondary-CCPCH-Info-RL-ReconfReadyFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

FACH-PCH-InformationList-RL-ReconfReadyFDD ::= SEQUENCE (SIZE(1..maxFACHCountPlus1)) OF FACH-PCH-InformationItem-RL-ReconfReadyFDD

FACH-PCH-InformationItem-RL-ReconfReadyFDD ::= SEQUENCE {
    transportFormatSet              TransportFormatSet,
    iE-Extensions                   ProtocolExtensionContainer { { FACH-PCH-InformationItem-RL-ReconfReadyFDD-ExtIEs} } OPTIONAL,
    ...
}

FACH-PCH-InformationItem-RL-ReconfReadyFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

SchedulingInformation-RL-ReconfReadyFDD ::= SEQUENCE {
    iB-SG-Rep                           IB-SG-REP,
    segmentInformationList              SegmentInformationList-RL-ReconfReadyFDD,
    iE-Extensions                       ProtocolExtensionContainer { { SchedulingInformation-RL-ReconfReadyFDD-ExtIEs } } OPTIONAL,
        ...
}

SchedulingInformation-RL-ReconfReadyFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

SegmentInformationList-RL-ReconfReadyFDD ::= SEQUENCE (SIZE(1..maxIBSEG)) OF SegmentInformationItem-RL-ReconfReadyFDD

SegmentInformationItem-RL-ReconfReadyFDD ::= SEQUENCE {
    iB-SG-POS                       IB-SG-POS,
    iE-Extensions                   ProtocolExtensionContainer { {  SegmentInformationItem-RL-ReconfReadyFDD-ExtIEs } } OPTIONAL,
    ...
}

SegmentInformationItem-RL-ReconfReadyFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CodeInformationList-RL-ReconfReadyFDD ::= ProtocolIE-Container {{ DL-CodeInformationListIEs-RL-ReconfReadyFDD }}

DL-CodeInformationListIEs-RL-ReconfReadyFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-CodeInformationListIE-RL-ReconfReadyFDD   CRITICALITY ignore TYPE DL-CodeInformationListIE-RL-ReconfReadyFDD       PRESENCE mandatory },
    ...
```

```
}

DL-CodeInformationListIE-RL-ReconfReadyFDD ::= SEQUENCE (SIZE (0..maxNrOfDL-Codes)) OF DL-CodeInformationItem-RL-ReconfReadyFDD

DL-CodeInformationItem-RL-ReconfReadyFDD ::= SEQUENCE {
    dl-ScramblingCode                   DL-ScramblingCode,
    fdd-DL-ChannelisationCodeNumber     FDD-DL-ChannelisationCodeNumber,
    iE-Extensions                       ProtocolExtensionContainer { { DL-CodeInformationItem-RL-ReconfReadyFDD-ExtIEs } } OPTIONAL,
    ...
}

DL-CodeInformationItem-RL-ReconfReadyFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-InformationResponseList-RL-ReconfReadyFDD               ::= ProtocolIE-Container { {DCH-InformationResponseListIEs-RL-ReconfReadyFDD} }

DCH-InformationResponseListIEs-RL-ReconfReadyFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DCH-InformationResponseListIE-RL-ReconfReadyFDD     CRITICALITY ignore  TYPE DCH-InformationResponseListIE-RL-ReconfReadyFDD
    PRESENCE mandatory  },
    ...
}

DCH-InformationResponseListIE-RL-ReconfReadyFDD ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-InformationResponseItem-RL-ReconfReadyFDD

DCH-InformationResponseItem-RL-ReconfReadyFDD ::= SEQUENCE {
    dCH-ID                          DCH-ID,
    bindingID                       BindingID,
    transportLayerAddress           TransportLayerAddress,
    iE-Extensions                   ProtocolExtensionContainer { {DCH-InformationResponseItem-RL-ReconfReadyFDD-ExtIEs} } OPTIONAL,
    ...
}

DCH-InformationResponseItem-RL-ReconfReadyFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-AddList-RL-ReconfReadyFDD               ::= ProtocolIE-Container { {DCH-AddListIEs-RL-ReconfReadyFDD} }

DCH-AddListIEs-RL-ReconfReadyFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DCH-AddListIE-RL-ReconfReadyFDD     CRITICALITY ignore  TYPE DCH-AddListIE-RL-ReconfReadyFDD         PRESENCE mandatory      },
    ...
}

DCH-AddListIE-RL-ReconfReadyFDD ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-AddItem-RL-ReconfReadyFDD

DCH-AddItem-RL-ReconfReadyFDD ::= SEQUENCE {
    dCH-ID                          DCH-ID,
    bindingID                       BindingID,
    transportLayerAddress           TransportLayerAddress,
    iE-Extensions                   ProtocolExtensionContainer { {DCH-AddItem-RL-ReconfReadyFDD-ExtIEs} } OPTIONAL,
    ...
}
```

```
DCH-AddItem-RL-ReconfReadyFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-ModifyList-RL-ReconfReadyFDD            ::= ProtocolIE-Container { {DCH-ModifyListIEs-RL-ReconfReadyFDD} }

DCH-ModifyListIEs-RL-ReconfReadyFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DCH-ModifyListIE-RL-ReconfReadyFDD  CRITICALITY ignore  TYPE DCH-ModifyListIE-RL-ReconfReadyFDD          PRESENCE mandatory      },
    ...
}

DCH-ModifyListIE-RL-ReconfReadyFDD ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-ModifyItem-RL-ReconfReadyFDD

DCH-ModifyItem-RL-ReconfReadyFDD ::= SEQUENCE {
    dCH-ID                      DCH-ID,
    bindingID                   BindingID,
    transportLayerAddress               TransportLayerAddress,
    iE-Extensions               ProtocolExtensionContainer { {DCH-ModifyItem-RL-ReconfReadyFDD-ExtIEs} } OPTIONAL,
    ...
}

DCH-ModifyItem-RL-ReconfReadyFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

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

-- **************************************************************
--
-- RADIO LINK RECONFIGURATION READY TDD
--
-- **************************************************************

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

RadioLinkReconfigurationReadyTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationResponse-RL-ReconfReadyTDD
                            CRITICALITY ignore  TYPE RL-InformationResponse-RL-ReconfReadyTDD   PRESENCE optional     } |
    { ID id-CriticalityDiagnostics          CRITICALITY ignore  TYPE CriticalityDiagnostics         PRESENCE optional },
    ...
}

RL-InformationResponse-RL-ReconfReadyTDD ::= SEQUENCE {
    rL-ID                           RL-ID,
    max-UL-SIR                      UL-SIR          OPTIONAL,
    min-UL-SIR                      UL-SIR          OPTIONAL,
    ul-CCTrCH-Information           UL-CCTrCH-InformationList-RL-ReconfReadyTDD     OPTIONAL,
    dl-CCTrCH-Information           DL-CCTrCH-InformationList-RL-ReconfReadyTDD OPTIONAL,
```

```
    dCHsToBeAdded                   DCH-AddList-RL-ReconfReadyTDD           OPTIONAL,
    dCHsToBeModified                DCH-ModifyList-RL-ReconfReadyTDD        OPTIONAL,
    dCHsInformationResponseList     DCH-InformationResponseList-RL-ReconfReadyTDD   OPTIONAL,
    iE-Extensions                   ProtocolExtensionContainer { {RL-InformationResponse-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
    ...
}

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

UL-CCTrCH-InformationList-RL-ReconfReadyTDD         ::= ProtocolIE-Container {{UL-CCTrCHInformationListIEs-RL-ReconfReadyTDD}}

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

UL-CCTrCHInformationListIE-RL-ReconfReadyTDD ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationItem-RL-ReconfReadyTDD

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

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

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

UL-DPCH-InformationListIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-InformationListIE-RL-ReconfReadyTDD   CRITICALITY ignore    TYPE UL-DPCH-InformationListIE-RL-ReconfReadyTDD       PRESENCE
mandatory },
    ...
}

UL-DPCH-InformationListIE-RL-ReconfReadyTDD ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF UL-DPCH-InformationItem-RL-ReconfReadyTDD

UL-DPCH-InformationItem-RL-ReconfReadyTDD ::= SEQUENCE {
    dPCH-ID                     DPCH-ID,
    tDD-ChannelisationCode              TDD-ChannelisationCode          OPTIONAL,
    burstType                   BurstType               OPTIONAL,
    midambleShift                   MidambleShift               OPTIONAL,
    timeSlot                    TimeSlot                OPTIONAL,
    tDD-PhysicalChannelOffset           TDD-PhysicalChannelOffset       OPTIONAL,
    repetitionPeriod                RepetitionPeriod            OPTIONAL,
    repetitionLength                RepetitionLength            OPTIONAL,
    tFCI-Presence                   TFCI-Presence               OPTIONAL,
    iE-Extensions                   ProtocolExtensionContainer { {UL-DPCH-InformationList-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
    ...
```

```
}

UL-DPCH-InformationList-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CCTrCH-InformationList-RL-ReconfReadyTDD         ::= ProtocolIE-Container {{DL-CCTrCHInformationListIEs-RL-ReconfReadyTDD}}

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

DL-CCTrCHInformationListIE-RL-ReconfReadyTDD ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationItem-RL-ReconfReadyTDD

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

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

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

DL-DPCH-InformationListIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationListIE-RL-ReconfReadyTDD   CRITICALITY ignore    TYPE DL-DPCH-InformationListIE-RL-ReconfReadyTDD       PRESENCE
mandatory },
    ...
}

DL-DPCH-InformationListIE-RL-ReconfReadyTDD ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF DL-DPCH-InformationItem-RL-ReconfReadyTDD

DL-DPCH-InformationItem-RL-ReconfReadyTDD ::= SEQUENCE {
    dPCH-ID                     DPCH-ID,
    tDD-ChannelisationCode              TDD-ChannelisationCode          OPTIONAL,
    burstType                   BurstType               OPTIONAL,
    midambleShift                   MidambleShift               OPTIONAL,
    timeSlot                    TimeSlot                OPTIONAL,
    tDD-PhysicalChannelOffset           TDD-PhysicalChannelOffset       OPTIONAL,
    repetitionPeriod                RepetitionPeriod            OPTIONAL,
    repetitionLength                RepetitionLength            OPTIONAL,
    tFCI-Presence                   TFCI-Presence               OPTIONAL,
    iE-Extensions                   ProtocolExtensionContainer { {DL-DPCH-InformationList-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
    ...
}

DL-DPCH-InformationList-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

```
DCH-InformationResponseList-RL-ReconfReadyTDD               ::= ProtocolIE-Container { {DCH-InformationResponseListIEs-RL-ReconfReadyTDD} }

DCH-InformationResponseListIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DCH-InformationResponseListIE-RL-ReconfReadyTDD     CRITICALITY ignore  TYPE DCH-InformationResponseListIE-RL-ReconfReadyTDD
    PRESENCE mandatory  },
    ...
}

DCH-InformationResponseListIE-RL-ReconfReadyTDD ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-InformationResponseItem-RL-ReconfReadyTDD

DCH-InformationResponseItem-RL-ReconfReadyTDD ::= SEQUENCE {
    dCH-ID                          DCH-ID,
    bindingID                       BindingID,
    transportLayerAddress           TransportLayerAddress,
    iE-Extensions                   ProtocolExtensionContainer { {DCH-InformationResponseItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
    ...
}

DCH-InformationResponseItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-AddList-RL-ReconfReadyTDD               ::= ProtocolIE-Container { {DCH-AddListIEs-RL-ReconfReadyTDD} }

DCH-AddListIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DCH-AddListIE-RL-ReconfReadyTDD             CRITICALITY ignore  TYPE DCH-AddListIE-RL-ReconfReadyTDD      PRESENCE mandatory      },
    ...
}

DCH-AddListIE-RL-ReconfReadyTDD ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-AddItem-RL-ReconfReadyTDD

DCH-AddItem-RL-ReconfReadyTDD ::= SEQUENCE {
    dCH-ID                          DCH-ID,
    bindingID                       BindingID,
    transportLayerAddress           TransportLayerAddress,
    iE-Extensions                   ProtocolExtensionContainer { {DCH-AddItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
    ...
}

DCH-AddItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-ModifyList-RL-ReconfReadyTDD            ::= ProtocolIE-Container { {DCH-ModifyListIEs-RL-ReconfReadyTDD} }

DCH-ModifyListIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DCH-ModifyListIE-RL-ReconfReadyTDD              CRITICALITY ignore  TYPE DCH-ModifyListIE-RL-ReconfReadyTDD          PRESENCE mandatory
    },
    ...
}

DCH-ModifyListIE-RL-ReconfReadyTDD ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-ModifyItem-RL-ReconfReadyTDD
```

```
DCH-ModifyItem-RL-ReconfReadyTDD ::= SEQUENCE {
    dCH-ID                          DCH-ID,
    bindingID                       BindingID,
    transportLayerAddress           TransportLayerAddress,
    iE-Extensions                   ProtocolExtensionContainer { {DCH-ModifyItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
    ...
}

DCH-ModifyItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

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

-- **************************************************************
--
-- RADIO LINK RECONFIGURATION COMMIT
--
-- **************************************************************

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

RadioLinkReconfigurationCommit-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-CFN                CRITICALITY ignore  TYPE CFN                    PRESENCE mandatory  },
    ...
}

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

-- **************************************************************
--
-- RADIO LINK RECONFIGURATION FAILURE
--
-- **************************************************************

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

RadioLinkReconfigurationFailure-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-Cause                   CRITICALITY ignore  TYPE Cause                  PRESENCE mandatory    } |
    { ID id-RL-ReconfigurationFailureList-RL-ReconfFail     CRITICALITY ignore  TYPE RL-ReconfigurationFailureList-RL-ReconfFail  PRESENCE optional } |
    { ID id-CriticalityDiagnostics          CRITICALITY ignore  TYPE CriticalityDiagnostics         PRESENCE optional },
    ...
```

```
}

RL-ReconfigurationFailureList-RL-ReconfFail     ::= RL-IE-ContainerList0 { {RL-ReconfigurationFailure-RL-ReconfFail-IEs} }

RL-ReconfigurationFailure-RL-ReconfFail-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-ReconfigurationFailure-RL-ReconfFail CRITICALITY ignore  TYPE RL-ReconfigurationFailure-RL-ReconfFail  PRESENCE mandatory      },
    ...
}

RL-ReconfigurationFailure-RL-ReconfFail ::= SEQUENCE {
    rL-ID                       RL-ID,
    cause                       Cause,
    iE-Extensions                   ProtocolExtensionContainer { {RL-ReconfigurationFailure-RL-ReconfFail-ExtIEs} } OPTIONAL,
    ...
}

RL-ReconfigurationFailure-RL-ReconfFail-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

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

-- **************************************************************
--
-- RADIO LINK RECONFIGURATION CANCEL
--
-- **************************************************************

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

RadioLinkReconfigurationCancel-IEs RNSAP-PROTOCOL-IES ::= {
    ...
}

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

-- **************************************************************
--
-- RADIO LINK RECONFIGURATION REQUEST FDD
--
-- **************************************************************

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

```
}

RadioLinkReconfigurationRequestFDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-AllowedQueuingTime          CRITICALITY reject  TYPE AllowedQueuingTime             PRESENCE optional     } |
    { ID id-UL-DPCH-Information-RL-ReconfRqstFDD           CRITICALITY reject  TYPE UL-DPCH-Information-RL-ReconfRqstFDD   PRESENCE optional } |
    { ID id-DL-DPCH-Information-RL-ReconfRqstFDD           CRITICALITY reject  TYPE DL-DPCH-Information-RL-ReconfRqstFDD   PRESENCE optional } |
    { ID id-DCH-ModifyList-RL-ReconfRqstFDD     CRITICALITY reject  TYPE DCH-ModifyList-RL-ReconfRqstFDD        PRESENCE optional } |
    { ID id-DCH-AddList-RL-ReconfRqstFDD        CRITICALITY reject  TYPE DCH-AddList-RL-ReconfRqstFDD           PRESENCE optional } |
    { ID id-DCH-DeleteList-RL-ReconfRqstFDD     CRITICALITY reject  TYPE DCH-DeleteList-RL-ReconfRqstFDD        PRESENCE optional },
    ...
}

UL-DPCH-Information-RL-ReconfRqstFDD ::= SEQUENCE {
    tFCS                        TFCS    OPTIONAL,
    iE-Extensions               ProtocolExtensionContainer { {UL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs} } OPTIONAL,
    ...
}

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

DL-DPCH-Information-RL-ReconfRqstFDD ::= SEQUENCE {
    tFCS                        TFCS    OPTIONAL,
    tFCI-SignallingMode         TFCI-SignallingMode OPTIONAL,
    iE-Extensions               ProtocolExtensionContainer { {DL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs} } OPTIONAL,
    ...
}

DL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-ModifyList-RL-ReconfRqstFDD         ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-ModifyItem-RL-ReconfRqstFDD

DCH-ModifyItem-RL-ReconfRqstFDD ::= SEQUENCE {
    dCH-ID                      DCH-ID,
    ul-TransportformatSet       TransportFormatSet  OPTIONAL,
    dl-TransportformatSet       TransportFormatSet  OPTIONAL,
    allocationRetentionPriority AllocationRetentionPriority OPTIONAL,
    frameHandlingPriority       FrameHandlingPriority   OPTIONAL,
    ul-FP-Mode                  UL-FP-Mode      OPTIONAL,
    toAWS                       ToAWS           OPTIONAL,
    toAWE                       ToAWE           OPTIONAL,
    dRACControl                 DRACControl     OPTIONAL,
    iE-Extensions               ProtocolExtensionContainer { {DCH-ModifyItem-RL-ReconfRqstFDD-ExtIEs} } OPTIONAL,
    ...
}

DCH-ModifyItem-RL-ReconfRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-AddList-RL-ReconfRqstFDD            ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-AddItem-RL-ReconfRqstFDD
```

```
DCH-AddItem-RL-ReconfRqstFDD ::= SEQUENCE {
    dCH-ID                          DCH-ID,
    dCH-CombinationInd              DCH-CombinationInd  OPTIONAL,
    limitedPowerIncrease            LimitedPowerIncrease,
    trCH-SrcStatisticsDescr         TrCH-SrcStatisticsDescr,
    ul-TransportformatSet           TransportFormatSet,
    dl-TransportformatSet           TransportFormatSet,
    ul-BLER                         BLER,
    dl-BLER                         BLER,
    allocationRetentionPriority     AllocationRetentionPriority,
    frameHandlingPriority           FrameHandlingPriority,
    payloadCRC-PresenceIndicator    PayloadCRC-PresenceIndicator,
    ul-FP-Mode                      UL-FP-Mode,
    qE-Selector                     QE-Selector,
    toAWS                           ToAWS,
    toAWE                           ToAWE,
    dRACControl                     DRACControl,
    iE-Extensions                   ProtocolExtensionContainer { {DCH-AddItem-RL-ReconfRqstFDD-ExtIEs} } OPTIONAL,
    ...
}

DCH-AddItem-RL-ReconfRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

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

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

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

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

-- **************************************************************
--
-- RADIO LINK RECONFIGURATION REQUEST TDD
--
-- **************************************************************

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

```
RadioLinkReconfigurationRequestTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-AllowedQueuingTime          CRITICALITY reject  TYPE AllowedQueuingTime             PRESENCE optional     } |
    { ID id-UL-CCTrCH-InformationList-RL-ReconfRqstTDD  CRITICALITY notify  TYPE UL-CCTrCH-InformationList-RL-ReconfRqstTDD PRESENCE optional } |
    { ID id-DL-CCTrCH-InformationList-RL-ReconfRqstTDD  CRITICALITY notify  TYPE DL-CCTrCH-InformationList-RL-ReconfRqstTDD PRESENCE optional } |
    { ID id-DCH-ModifyList-RL-ReconfRqstTDD     CRITICALITY reject  TYPE DCH-ModifyList-RL-ReconfRqstTDD        PRESENCE optional } |
    { ID id-DCH-AddList-RL-ReconfRqstTDD        CRITICALITY reject  TYPE DCH-AddList-RL-ReconfRqstTDD           PRESENCE optional } |
    { ID id-DCH-DeleteList-RL-ReconfRqstTDD     CRITICALITY reject  TYPE DCH-DeleteList-RL-ReconfRqstTDD        PRESENCE optional },
    ...
}

UL-CCTrCH-InformationList-RL-ReconfRqstTDD      ::= CCTrCH-IE-ContainerList0 { {UL-CCTrCH-InformationList-RL-ReconfRqstTDD-IEs} }

UL-CCTrCH-InformationList-RL-ReconfRqstTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-UL-CCTrCH-InformationItem-RL-ReconfRqstTDD  CRITICALITY notify  TYPE UL-CCTrCH-InformationItem-RL-ReconfRqstTDD PRESENCE mandatory     },
    ...
}

UL-CCTrCH-InformationItem-RL-ReconfRqstTDD ::= SEQUENCE {
    cCTrCH-ID                   CCTrCH-ID,
    tFCS                        TFCS,
    iE-Extensions                   ProtocolExtensionContainer { {UL-CCTrCH-InformationItem-RL-ReconfRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

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

DL-CCTrCH-InformationList-RL-ReconfRqstTDD      ::= CCTrCH-IE-ContainerList0 { {DL-CCTrCH-InformationList-RL-ReconfRqstTDD-IEs} }

DL-CCTrCH-InformationList-RL-ReconfRqstTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-CCTrCH-InformationItem-RL-ReconfRqstTDD  CRITICALITY notify  TYPE DL-CCTrCH-InformationItem-RL-ReconfRqstTDD PRESENCE mandatory     },
    ...
}

DL-CCTrCH-InformationItem-RL-ReconfRqstTDD ::= SEQUENCE {
    cCTrCH-ID                   CCTrCH-ID,
    tFCS                        TFCS,
    iE-Extensions                   ProtocolExtensionContainer { {DL-CCTrCH-InformationItem-RL-ReconfRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

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

DCH-ModifyList-RL-ReconfRqstTDD             ::= SEQUENCE (SIZE(0..maxNrOfDCHs)) OF DCH-ModifyItem-RL-ReconfRqstTDD

DCH-ModifyItem-RL-ReconfRqstTDD ::= SEQUENCE {
    dCH-ID                          DCH-ID,
    ul-CCTrCH-ID                    CCTrCH-ID       OPTIONAL,
    dl-CCTrCH-ID                    CCTrCH-ID       OPTIONAL,
    ul-TransportformatSet           TransportFormatSet  OPTIONAL,
    dl-TransportformatSet           TransportFormatSet  OPTIONAL,
```

```
    allocationRetentionPriority     AllocationRetentionPriority OPTIONAL,
    frameHandlingPriority           FrameHandlingPriority   OPTIONAL,
    ul-FP-Mode                      UL-FP-Mode      OPTIONAL,
    toAWS                           ToAWS           OPTIONAL,
    toAWE                           ToAWE           OPTIONAL,
    iE-Extensions                   ProtocolExtensionContainer { {DCH-ModifyItem-RL-ReconfRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

DCH-ModifyItem-RL-ReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-AddList-RL-ReconfRqstTDD               ::= SEQUENCE (SIZE(0..maxNrOfDCHs)) OF DCH-AddItem-RL-ReconfRqstTDD

DCH-AddItem-RL-ReconfRqstTDD ::= SEQUENCE {
    dCH-ID                          DCH-ID,
    limitedPowerIncrease            LimitedPowerIncrease,
    trCH-SrcStatisticsDescr         TrCH-SrcStatisticsDescr,
    ul-CCTrCH-ID                    CCTrCH-ID,
    dl-CCTrCH-ID                    CCTrCH-ID,
    dCH-CombinationInd              DCH-CombinationInd  OPTIONAL,
    ul-TransportformatSet           TransportFormatSet,
    dl-TransportformatSet           TransportFormatSet,
    ul-BLER                         BLER,
    dl-BLER                         BLER,
    allocationRetentionPriority     AllocationRetentionPriority,
    frameHandlingPriority           FrameHandlingPriority,
    ul-FP-Mode                      UL-FP-Mode,
    toAWS                           ToAWS,
    toAWE                           ToAWE,
    iE-Extensions                   ProtocolExtensionContainer { {DCH-AddItem-RL-ReconfRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

DCH-AddItem-RL-ReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

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

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

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

RadioLinkReconfigurationRequestTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

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-- **************************************************************
--
-- RADIO LINK RECONFIGURATION RESPONSE
--
-- **************************************************************

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

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

RL-InformationResponseList-RL-ReconfRsp     ::= RL-IE-ContainerList0 { {RL-InformationResponse-RL-ReconfRsp-IEs} }

RL-InformationResponse-RL-ReconfRsp-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationResponseItem-RL-ReconfRsp     CRITICALITY ignore  TYPE RL-InformationResponseItem-RL-ReconfRsp          PRESENCE mandatory
    },
    ...
}

RL-InformationResponseItem-RL-ReconfRsp ::= SEQUENCE {
    rL-ID                           RL-ID,
    max-UL-SIR                      UL-SIR          OPTIONAL,
    min-UL-SIR                      UL-SIR          OPTIONAL,
    secondary-CCPCH-Info            Secondary-CCPCH-Info-RL-ReconfRsp       OPTIONAL,
    dCHsToBeAdded                   DCH-AddList-RL-ReconfRsp            OPTIONAL,
    dCHsToBeModified                DCH-ModifyList-RL-ReconfRsp         OPTIONAL,
    dCHsInformationResponseList     DCH-InformationResponseList-RL-ReconfRsp    OPTIONAL,
    iE-Extensions                   ProtocolExtensionContainer { {RL-InformationResponseItem-RL-ReconfRsp-ExtIEs} } OPTIONAL,
    ...
}

RL-InformationResponseItem-RL-ReconfRsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Secondary-CCPCH-Info-RL-ReconfRsp ::= SEQUENCE {
    fDD-S-CCPCH-Offset                      FDD-S-CCPCH-Offset,
    dl-ScramblingCode                       DL-ScramblingCode,
    fDD-DL-ChannelisationCodeNumber         FDD-DL-ChannelisationCodeNumber,
    dl-TFCS                                 TFCS,
    secondaryCCPCH-SlotFormat               SecondaryCCPCH-SlotFormat,
    tFCI-Presence                           TFCI-Presence   OPTIONAL,
    -- This IE is present only if the Secondary CCPCH Slot Format is equal to any of the value 8 to 17
    multiplexingPosition                    MultiplexingPosition,
    sTTD-Indicator                          STTD-Indicator,
```

```
    fACH-PCH-InformationList              FACH-PCH-InformationList-RL-ReconfRsp,
    schedulingInformation                 SchedulingInformation-RL-ReconfRsp,
    iE-Extensions                         ProtocolExtensionContainer { { Secondary-CCPCH-Info-RL-ReconfRsp-ExtIEs} } OPTIONAL,
    ...
}

Secondary-CCPCH-Info-RL-ReconfRsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

FACH-PCH-InformationList-RL-ReconfRsp ::= SEQUENCE (SIZE(1..maxFACHCountPlus1)) OF FACH-PCH-InformationItem-RL-ReconfRsp

FACH-PCH-InformationItem-RL-ReconfRsp ::= SEQUENCE {
    transportFormatSet              TransportFormatSet,
    iE-Extensions                   ProtocolExtensionContainer { { FACH-PCH-InformationItem-RL-ReconfRsp-ExtIEs} } OPTIONAL,
    ...
}

FACH-PCH-InformationItem-RL-ReconfRsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

SchedulingInformation-RL-ReconfRsp ::= SEQUENCE {
    iB-SG-Rep                       IB-SG-REP,
    segmentInformationList          SegmentInformationList-RL-ReconfRsp,
    iE-Extensions                   ProtocolExtensionContainer { { SchedulingInformation-RL-ReconfRsp-ExtIEs } } OPTIONAL,
        ...
}

SchedulingInformation-RL-ReconfRsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

SegmentInformationList-RL-ReconfRsp ::= SEQUENCE (SIZE(1..maxIBSEG)) OF SegmentInformationItem-RL-ReconfRsp

SegmentInformationItem-RL-ReconfRsp ::= SEQUENCE {
    iB-SG-POS                       IB-SG-POS,
    iE-Extensions                   ProtocolExtensionContainer { {  SegmentInformationItem-RL-ReconfRsp-ExtIEs } } OPTIONAL,
    ...
}

SegmentInformationItem-RL-ReconfRsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-InformationResponseList-RL-ReconfRsp                ::= ProtocolIE-Container { {DCH-InformationResponseListIEs-RL-ReconfRsp} }

DCH-InformationResponseListIEs-RL-ReconfRsp RNSAP-PROTOCOL-IES ::= {
    { ID id-DCH-InformationResponseListIE-RL-ReconfRsp      CRITICALITY ignore  TYPE DCH-InformationResponseListIE-RL-ReconfRsp         PRESENCE
mandatory   },
    ...
}

DCH-InformationResponseListIE-RL-ReconfRsp ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-InformationResponseItem-RL-ReconfRsp
```

```
DCH-InformationResponseItem-RL-ReconfRsp ::= SEQUENCE {
    dCH-ID                          DCH-ID,
    bindingID                       BindingID,
    transportLayerAddress           TransportLayerAddress,
    iE-Extensions                   ProtocolExtensionContainer { {DCH-InformationResponseItem-RL-ReconfRsp-ExtIEs} } OPTIONAL,
    ...
}

DCH-InformationResponseItem-RL-ReconfRsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}
DCH-AddList-RL-ReconfRsp               ::= ProtocolIE-Container { {DCH-AddListIEs-RL-ReconfRsp} }

DCH-AddListIEs-RL-ReconfRsp RNSAP-PROTOCOL-IES ::= {
    { ID id-DCH-AddListIE-RL-ReconfRsp      CRITICALITY ignore  TYPE DCH-AddListIE-RL-ReconfRsp     PRESENCE mandatory      },
    ...
}

DCH-AddListIE-RL-ReconfRsp ::= SEQUENCE (SIZE(0..maxNrOfDCHs)) OF DCH-AddItem-RL-ReconfRsp

DCH-AddItem-RL-ReconfRsp ::= SEQUENCE {
    dCH-ID                          DCH-ID,
    bindingID                       BindingID,
    transportLayerAddress           TransportLayerAddress,
    iE-Extensions                   ProtocolExtensionContainer { {DCH-AddItem-RL-ReconfRspFDD-ExtIEs} } OPTIONAL,
    ...
}

DCH-AddItem-RL-ReconfRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-ModifyList-RL-ReconfRsp         ::= ProtocolIE-Container { {DCH-ModifyListIEs-RL-ReconfRsp} }

DCH-ModifyListIEs-RL-ReconfRsp RNSAP-PROTOCOL-IES ::= {
    { ID id-DCH-ModifyListIE-RL-ReconfRsp   CRITICALITY ignore  TYPE DCH-ModifyListIE-RL-ReconfRsp        PRESENCE mandatory      },
    ...
}

DCH-ModifyListIE-RL-ReconfRsp ::= SEQUENCE (SIZE(0..maxNrOfDCHs)) OF DCH-ModifyItem-RL-ReconfRsp

DCH-ModifyItem-RL-ReconfRsp ::= SEQUENCE {
    dCH-ID                          DCH-ID,
    bindingID                       BindingID,
    transportLayerAddress           TransportLayerAddress,
    iE-Extensions                   ProtocolExtensionContainer { {DCH-ModifyItem-RL-ReconfRsp-ExtIEs} } OPTIONAL,
    ...
}

DCH-ModifyItem-RL-ReconfRsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

```
RadioLinkReconfigurationResponse-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

9.3.6 Constant Definitions

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

RNSAP-Constants -- { object identifier to be allocated }--
DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

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

id-commonTransportChannelResourcesInitiationFDD             INTEGER ::= 0
id-commonTransportChannelResourcesInitiationTDD             INTEGER ::= 1
id-commonTransportChannelResourcesRelease                   INTEGER ::= 2
id-compressedModeCancellationFDD                            INTEGER ::= 3
id-compressedModeCommitFDD                                  INTEGER ::= 4
id-compressedModePrepareFDD                                 INTEGER ::= 5
id-downlinkPowerControl                                     INTEGER ::= 6
id-downlinkSignallingTransfer                               INTEGER ::= 7
id-errorIndication                                          INTEGER ::= 8
id-measurementFailure                                       INTEGER ::= 9
id-measurementInitiation                                    INTEGER ::= 10
id-measurementReporting                                     INTEGER ::= 11
id-measurementTermination                                   INTEGER ::= 12
id-pagingRequest                                            INTEGER ::= 13
id-physicalChannelReconfiguration                           INTEGER ::= 14
id-privateMessage                                           INTEGER ::= 15
id-radioLinkAddition                                        INTEGER ::= 16
id-radioLinkDeletion                                        INTEGER ::= 17
id-radioLinkFailure                                         INTEGER ::= 18
id-radioLinkRestoration                                     INTEGER ::= 19
id-radioLinkSetup                                           INTEGER ::= 20
id-srnsRelocationCommit                                     INTEGER ::= 21
id-synchronisedRadioLinkReconfigurationCancellation         INTEGER ::= 22
id-synchronisedRadioLinkReconfigurationCommit               INTEGER ::= 23
id-synchronisedRadioLinkReconfigurationPrepare              INTEGER ::= 24
id-unSynchronisedRadioLinkReconfiguration                   INTEGER ::= 25
id-uplinkSignallingTransfer                                 INTEGER ::= 26

-- **************************************************************
--
-- Extension constants
--
-- **************************************************************
```

```
maxPrivateIEs                                   INTEGER ::= 65535
maxProtocolExtensions                           INTEGER ::= 65535
maxProtocolIEs                                  INTEGER ::= 65535

-- **************************************************************
--
-- Lists
--
-- **************************************************************

maxRateMatching                         INTEGER ::= 10
maxNrOfTFCs                             INTEGER ::= 10
maxNrOfTFs                              INTEGER ::= 10
maxNrOfCCTrCHs                          INTEGER ::= 10
maxNrOfDCHs                             INTEGER ::= 10
maxNrOfDL-Codes                         INTEGER ::= 10
maxNrOfDPCHs                            INTEGER ::= 10
maxNrOfErrors                           INTEGER ::= 10
maxNrOfMACcSDU-Length                   INTEGER ::= 10
maxNrOfRLs                              INTEGER ::= 10
maxNrOfRLSets                           INTEGER ::= 10
maxNrOfRLs-1                            INTEGER ::= 10
maxNrOfRLs-2                            INTEGER ::= 10
maxNrOfSCCPCHs                          INTEGER ::= 10
maxNrOfULTs                             INTEGER ::= 15
maxNrOfCMpatterns                       INTEGER ::= 8
maxRNCinURA                             INTEGER ::= 10
maxTTI-Count                            INTEGER ::= 10
maxCTFC-1                               INTEGER ::= 10
maxNrOfNeighbouringRNCs                 INTEGER ::= 10
maxNrOfFDDNeighboursPerRNC              INTEGER ::= 10
maxNrOfTDDNeighboursPerRNC              INTEGER ::= 10
maxFACHCountPlus1                       INTEGER ::= 10
maxIBSEG                                INTEGER ::= 16

-- **************************************************************

--
-- IEs
--
-- **************************************************************

id-AllRLItem-DM-Rprt                                            INTEGER ::= 0
id-AllRLItem-DM-Rsp                                             INTEGER ::= 1
id-AllRL-SetItem-DM-Rprt                                        INTEGER ::= 2
id-AllRL-SetItem-DM-Rsp                                         INTEGER ::= 3
id-AllowedQueuingTime                                           INTEGER ::= 4
id-BindingID                                                    INTEGER ::= 5
id-C-ID                                                         INTEGER ::= 6
id-C-RNTI                                                       INTEGER ::= 7
id-CFN                                                          INTEGER ::= 8
id-CN-CS-DomainIdentifier                                       INTEGER ::= 9
id-CN-PS-DomainIdentifier                                       INTEGER ::= 10
```

```
id-Cause                                                    INTEGER ::= 11
id-CellItem-PagingRqst                                      INTEGER ::= 12
id-CM-PatternInformationItem-CompressedModePrep             INTEGER ::= 13
id-CM-PatternInformationList-CompressedModePrep             INTEGER ::= 14
id-CombiningItem-RL-AdditionFailureFDD                      INTEGER ::= 15
id-CombiningItem-RL-AdditionRspFDD                          INTEGER ::= 16
id-CombiningItem-RL-AdditionRspTDD                          INTEGER ::= 17
id-CombiningItem-RL-SetupFailureFDD                         INTEGER ::= 18
id-CombiningItem-RL-SetupRspFDD                             INTEGER ::= 19
id-CriticalityDiagnostics                                   INTEGER ::= 20
id-D-RNTI                                                   INTEGER ::= 21
id-D-RNTI-ReleaseIndication                                 INTEGER ::= 22
id-DCH-AddListIE-RL-ReconfReadyFDD                          INTEGER ::= 23
id-DCH-AddListIE-RL-ReconfReadyTDD                          INTEGER ::= 24
id-DCH-AddListIE-RL-ReconfRsp                               INTEGER ::= 25
id-DCH-AddList-RL-ReconfPrepFDD                             INTEGER ::= 26
id-DCH-AddList-RL-ReconfPrepTDD                             INTEGER ::= 27
id-DCH-AddList-RL-ReconfRqstFDD                             INTEGER ::= 28
id-DCH-AddList-RL-ReconfRqstTDD                             INTEGER ::= 29
id-DCH-DeleteList-RL-ReconfPrepFDD                          INTEGER ::= 30
id-DCH-DeleteList-RL-ReconfPrepTDD                          INTEGER ::= 31
id-DCH-DeleteList-RL-ReconfRqstFDD                          INTEGER ::= 32
id-DCH-DeleteList-RL-ReconfRqstTDD                          INTEGER ::= 33
id-DCH-Information-RL-SetupRqstFDD                          INTEGER ::= 34
id-DCH-InformationList-RL-SetupRqstTDD                      INTEGER ::= 35
id-DCH-ModifyListIE-RL-ReconfReadyFDD                       INTEGER ::= 36
id-DCH-ModifyListIE-RL-ReconfReadyTDD                       INTEGER ::= 37
id-DCH-ModifyListIE-RL-ReconfRsp                            INTEGER ::= 38
id-DCH-ModifyList-RL-ReconfPrepFDD                          INTEGER ::= 39
id-DCH-ModifyList-RL-ReconfPrepTDD                          INTEGER ::= 40
id-DCH-ModifyList-RL-ReconfRqstFDD                          INTEGER ::= 41
id-DCH-ModifyList-RL-ReconfRqstTDD                          INTEGER ::= 42
id-DCH-InformationRresponseListIE-RL-ReconfReadyFDD         INTEGER ::= xx
id-DCH-InformationRresponseListIE-RL-ReconfReadyTDD         INTEGER ::= xx
id-DCH-InformationRresponseListIE-RL-ReconfRsp              INTEGER ::= xx
id-DCH-InformationResponseListIE-RL-SetupRspTDD             INTEGER ::= 43
id-DL-CCTrCH-InformationItem-RL-ReconfPrepTDD               INTEGER ::= 44
id-DL-CCTrCH-InformationListIE-RL-ReconfReadyTDD            INTEGER ::= 45
id-DL-CCTrCH-InformationItem-RL-ReconfRqstTDD               INTEGER ::= 46
id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD                INTEGER ::= 47
id-DL-CCTrCH-InformationListIE-PhyChReconfRqstTDD           INTEGER ::= 48
id-DL-CCTrCH-InformationListIE-RL-AdditionRspTDD            INTEGER ::= 49
id-DL-CCTrCH-InformationListIE-RL-SetupRspTDD               INTEGER ::= 50
id-DL-CCTrCH-InformationList-RL-ReconfPrepTDD               INTEGER ::= 51
id-DL-CCTrCH-InformationList-RL-ReconfRqstTDD               INTEGER ::= 52
id-DL-CCTrCH-InformationList-RL-SetupRqstTDD                INTEGER ::= 53
id-DL-CodeInformationListIE-PhyChReconfRqstFDD              INTEGER ::= 54
id-DL-CodeInformationListIE-RL-AdditionFailureFDD           INTEGER ::= 55
id-DL-CodeInformationListIE-RL-AdditionRspFDD               INTEGER ::= 56
id-DL-CodeInformationListIE-RL-ReconfReadyFDD               INTEGER ::= 57
id-DL-CodeInformationListIE-RL-SetupFailureFDD              INTEGER ::= 58
id-DL-DPCH-Information-RL-ReconfPrepFDD                     INTEGER ::= 59
id-DL-DPCH-Information-RL-SetupRqstFDD                      INTEGER ::= 60
id-DL-DPCH-Information-RL-ReconfRqstFDD                     INTEGER ::= 61
```

```
id-DL-DPCH-InformationItem-PhyChReconfRqstTDD                                  INTEGER ::= 62
id-DL-DPCH-InformationItem-RL-AdditionRspTDD                                   INTEGER ::= 63
id-DL-DPCH-InformationItem-RL-SetupRspTDD                                      INTEGER ::= 64
id-DL-DPCH-InformationListIE-RL-ReconfReadyTDD                                 INTEGER ::= 65
id-DL-SIRTarget                                                                INTEGER ::= 66
id-DLReferencePower                                                            INTEGER ::= 67
id-DLReferencePowerList-DL-PC-Rqst                                             INTEGER ::= 68
id-DL-ReferencePowerInformation-DL-PC-Rqst                                     INTEGER ::= 69
id-DRXCycleLengthCoefficient                                                   INTEGER ::= 70
id-DedicatedMeasurementObjectType-DM-Rprt                                      INTEGER ::= 71
id-DedicatedMeasurementObjectType-DM-Rqst                                      INTEGER ::= 72
id-DedicatedMeasurementObjectType-DM-Rsp                                       INTEGER ::= 73
id-DedicatedMeasurementType                                                    INTEGER ::= 74
id-DiversityIndicationItem-RL-AdditionFailureFDD                               INTEGER ::= 75
id-DiversityIndicationItem-RL-AdditionRspFDD                                   INTEGER ::= 76
id-DiversityIndicationItem-RL-AdditionRspTDD                                   INTEGER ::= 77
id-DiversityIndicationItem-RL-SetupFailureFDD                                  INTEGER ::= 78
id-DiversityIndicationItem-RL-SetupRspFDD                                      INTEGER ::= 79
id-FACH-InfoForOptionalS-CCPCH-CTCH-ResourceRspFDD                             INTEGER ::= 80
id-FACH-InfoForOptionalS-CCPCH-CTCH-ResourceRspTDD                             INTEGER ::= 81
id-FACH-InfoForS-CCPCH-CoupledToPRACHorPCPCH-CTCH-ResourceRspFDD               INTEGER ::= 82
id-FACH-InfoForS-CCPCH-CoupledToPRACH-CTCH-ResourceRspTDD                      INTEGER ::= 83
id-IMSI                                                                        INTEGER ::= 84
id-L3-Information                                                              INTEGER ::= 85
id-MAC-c-SDU-LengthListIE-CTCH-ResourceRspFDD                                  INTEGER ::= 86
id-MAC-c-SDU-LengthListIE-CTCH-ResourceRspTDD                                  INTEGER ::= 87
id-MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspFDD                           INTEGER ::= 88
id-MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspTDD                           INTEGER ::= 89
id-MaxAdjustmentPeriod                                                         INTEGER ::= 90
id-MaxAdjustmentStep                                                           INTEGER ::= 91
id-MeasurementFilterCoefficient                                                INTEGER ::= 92
id-MeasurementID                                                               INTEGER ::= 93
id-MultipleURAsIndicator                                                       INTEGER ::= 94
id-Neighbouring-CellInformationItem-RL-SetupFailureFDD                         INTEGER ::= 95
id-Neighbouring-CellInformationItem-RL-SetupRsp                                INTEGER ::= 96
id-NonCombiningItem-RL-AdditionFailureFDD                                      INTEGER ::= 97
id-NonCombiningItem-RL-AdditionRspFDD                                          INTEGER ::= 98
id-NonCombiningItem-RL-AdditionRspTDD                                          INTEGER ::= 99
id-NonCombiningOrIEnotPresenItem-RL-SetupFailureFDD                            INTEGER ::= 100
id-NonCombiningOrIEnotPresenItem-RL-SetupRspFDD                                INTEGER ::= 101
id-PagingArea-PagingRqst                                                       INTEGER ::= 102
id-PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspFDD             INTEGER ::= 103
id-PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspTDD             INTEGER ::= 104
id-PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspFDD      INTEGER ::= 105
id-PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspTDD      INTEGER ::= 106
id-PowerAdjustmentType                                                         INTEGER ::= 107
id-ProcedureScope-DL-PC-Rqst                                                   INTEGER ::= 108
id-RANAP-RelocationInformation                                                 INTEGER ::= 109
id-RL-Information-PhyChReconfRqstFDD                                           INTEGER ::= 110
id-RL-Information-PhyChReconfRqstTDD                                           INTEGER ::= 111
id-RL-Information-RL-AdditionRqstFDD                                           INTEGER ::= 112
id-RL-Information-RL-AdditionRqstTDD                                           INTEGER ::= 113
id-RL-Information-RL-DeletionRqst                                              INTEGER ::= 114
id-RL-Information-RL-FailureInd                                                INTEGER ::= 115
```

```
id-RL-Information-RL-ReconfPrepFDD                                  INTEGER ::= 116
id-RL-Information-RL-RestoreInd                                     INTEGER ::= 117
id-RL-Information-RL-SetupRqstFDD                                   INTEGER ::= 118
id-RL-Information-RL-SetupRqstTDD                                   INTEGER ::= 119
id-RL-InformationItem-DM-Rprt                                       INTEGER ::= 120
id-RL-InformationItem-DM-Rqst                                       INTEGER ::= 121
id-RL-InformationItem-DM-Rsp                                        INTEGER ::= 122
id-RL-InformationItem-RL-SetupRqstFDD                               INTEGER ::= 123
id-RL-InformationList-RL-AdditionRqstFDD                            INTEGER ::= 124
id-RL-InformationList-RL-DeletionRqst                               INTEGER ::= 125
id-RL-InformationList-RL-ReconfPrepFDD                              INTEGER ::= 126
id-RL-InformationResponse-RL-AdditionRspTDD                         INTEGER ::= 127
id-RL-InformationResponse-RL-ReconfReadyTDD                         INTEGER ::= 128
id-RL-InformationResponse-RL-SetupRspTDD                            INTEGER ::= 129
id-RL-InformationResponseItem-RL-AdditionRspFDD                     INTEGER ::= 130
id-RL-InformationResponseItem-RL-ReconfReadyFDD                     INTEGER ::= 131
id-RL-InformationResponseItem-RL-ReconfRsp                          INTEGER ::= 132
id-RL-InformationResponseItem-RL-SetupRspFDD                        INTEGER ::= 133
id-RL-InformationResponseList-RL-AdditionRspFDD                     INTEGER ::= 134
id-RL-InformationResponseList-RL-ReconfReadyFDD                     INTEGER ::= 135
id-RL-InformationResponseList-RL-ReconfRsp                          INTEGER ::= 136
id-RL-InformationResponseList-RL-SetupRspFDD                        INTEGER ::= 137
id-RLItem-DM-Rprt                                                   INTEGER ::= 138
id-RLItem-DM-Rqst                                                   INTEGER ::= 139
id-RLItem-DM-Rsp                                                    INTEGER ::= 140
id-RL-ReconfigurationFailure-RL-ReconfFail                          INTEGER ::= 141
id-RL-ReconfigurationFailureList-RL-ReconfFail                      INTEGER ::= 142
id-RL-Set-InformationItem-DM-Rprt                                   INTEGER ::= 143
id-RL-Set-InformationItem-DM-Rqst                                   INTEGER ::= 144
id-RL-Set-InformationItem-DM-Rsp                                    INTEGER ::= 145
id-RL-Set-Information-RL-FailureInd                                 INTEGER ::= 146
id-RL-Set-Information-RL-RestoreInd                                 INTEGER ::= 147
id-RL-SetItem-DM-Rprt                                               INTEGER ::= 148
id-RL-SetItem-DM-Rqst                                               INTEGER ::= 149
id-RL-SetItem-DM-Rsp                                                INTEGER ::= 150
id-RNCsWithCellsInTheAccessedURA-List-UL-ST-Ind                     INTEGER ::= 151
id-ReportCharacteristics                                            INTEGER ::= 152
id-Reporting-Object-RL-FailureInd                                   INTEGER ::= 153
id-Reporing-Object-RL-RestoreInd                                    INTEGER ::= 154
id-S-RNTI                                                           INTEGER ::= 155
id-SAI                                                              INTEGER ::= 156
id-SRNC-ID                                                          INTEGER ::= 157
id-SecondaryCCPCHListIE-CTCH-ResourceRspTDD                         INTEGER ::= 158
id-SuccessfulRL-InformationResponse-RL-AdditionFailureFDD           INTEGER ::= 159
id-SuccessfulRL-InformationResponse-RL-SetupFailureFDD              INTEGER ::= 160
id-SuccessfulRL-InformationResponseList-RL-AdditionFailureFDD       INTEGER ::= 161
id-SuccessfulRL-InformationResponseList-RL-SetupFailureFDD          INTEGER ::= 162
id-TransportBearerID                                                INTEGER ::= 163
id-TransportBearerRequestIndicator                                  INTEGER ::= 164
id-TransportLayerAddress                                            INTEGER ::= 165
id-UC-ID                                                            INTEGER ::= 166
id-UL-CCTrCH-Information-RL-ReconfPrepTDD                           INTEGER ::= 167
id-UL-CCTrCH-InformationItem-RL-ReconfRqstTDD                       INTEGER ::= 168
id-UL-CCTrCH-InformationList-RL-ReconfPrepTDD                       INTEGER ::= 169
```

```
id-UL-CCTrCH-InformationList-RL-ReconfRqstTDD                    INTEGER ::= 170
id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD                     INTEGER ::= 171
id-UL-CCTrCH-InformationList-RL-SetupRqstTDD                     INTEGER ::= 172
id-UL-CCTrCH-InformationListIE-PhyChReconfRqstTDD                INTEGER ::= 173
id-UL-CCTrCH-InformationListIE-RL-AdditionRspTDD                 INTEGER ::= 174
id-UL-CCTrCH-InformationListIE-RL-ReconfReadyTDD                 INTEGER ::= 175
id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD                    INTEGER ::= 176
id-UL-DPCH-Information-RL-ReconfPrepFDD                          INTEGER ::= 177
id-UL-DPCH-Information-RL-ReconfRqstFDD                          INTEGER ::= 178
id-UL-DPCH-Information-RL-SetupRqstFDD                           INTEGER ::= 179
id-UL-DPCH-InformationItem-PhyChReconfRqstTDD                    INTEGER ::= 180
id-UL-DPCH-InformationItem-RL-AdditionRspTDD                     INTEGER ::= 181
id-UL-DPCH-InformationItem-RL-SetupRspTDD                        INTEGER ::= 182
id-UL-DPCH-InformationListIE-RL-ReconfReadyTDD                   INTEGER ::= 183
id-UL-SIRTarget                                                  INTEGER ::= 184
id-URA-ID                                                        INTEGER ::= 185
id-URAItem-PagingRqst                                            INTEGER ::= 186
id-UnsuccessfulRL-InformationResponse                            INTEGER ::= 187
id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD      INTEGER ::= 188
id-UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD         INTEGER ::= 189
id-UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD         INTEGER ::= 190
id-UnsuccessfulRL-InformationResponseList-RL-AdditionFailureFDD  INTEGER ::= 191
id-UnsuccessfulRL-InformationResponseList-RL-SetupFailureFDD     INTEGER ::= 192

END
```

3GPP-RAN-WG3 Meeting #12
Seoul, Korea, April 10-13 2000

Document *R3-001198*

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.

25.423	**CR**	**082r1**	Current Version:	3.1.0

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

For submission to:	TSG RAN#8	for approval	X	strategic		(for SMG use only)
list expected approval meeting # here ↑		for information		non-strategic		

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: R3-WG3 **Date:** April 10, 2000

Subject: Modification to TFS definition

Work item:

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

F	Correction	X	**Release:**	Phase 2	
A	Corresponds to a correction in an earlier release			Release 96	
B	Addition of feature			Release 97	
C	Functional modification of feature			Release 98	
D	Editorial modification			Release 99	X
				Release 00	

Reason for change: The range of Transport Block size shall start from 0 instead of 1. This change is proposed in accordance with the agreement on R1-000278.

Clauses affected:
9.2.1.54 Transport Format Set
9.3.4 Information Element Definitions

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.

9.2.1.54 Transport Format Set

The Transport Format Set is defined as the set of Transport Formats associated to a Transport Channel, e.g. DCH.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Transport Format Set				
>Dynamic Transport Format Information		1..<maxTFcount>		
>>Number of Transport blocks	M		INTEGER (0..4095)	
>>Transport Block Size	C – Blocks		INTEGER (~~1~~0..5000)	Bits
>CHOICE *mode*				
>>*TDD*				
>>>Transmission time interval	C-TTIdynamic	1..<maxTTIcount>	Enumerated(10, 20, 40, 80)	
>Semi-static Transport Format Information				
>>Transmission time interval	C-TTIsemistatic		ENUMERATED (10, 20, 40, 80)	msec
>>Type of channel coding	M		ENUMERATED (No coding, Convolutional, Turbo)	
>>Coding Rate	C – Coding		ENUMERATED (1/2, 1/3)	
>>Rate matching attribute	M		INTEGER (1..maxRM)	
>>CRC size	M		ENUMERATED (0, 8, 12, 16, 24)	
>>CHOICE *mode*				
>>>*TDD*				
>>>>2nd interleaving mode	M		Enumerated (Frame related, Timeslot related)	

Condition	Explanation
Blocks	This IE is only present if "Number of Transport Blocks" is greater than 0.
Coding	This IE is only present if IE "Type of channel coding" is "Convolutional" or "Turbo"
TTIdynamic	This IE is mandatory if not defined as semistatic parameter. Otherwise it is absent.
TTIsemistatic	This IE is mandatory if not defined as dynamic parameter. Otherwise it is absent.

Range bound	Explanation
MaxTFcount	The maximum number of different transport formats that can be included in the Transport format set for one transport channel is 32.
MaxRM	The maximum number that could be set as rate matching attribute for a transport channel is 256.
MaxTTIcount	The amount of different TTI that are possible for that transport format is 4.

9.3.4 Information Element Definitions

--- partly omitted ---

```
-- T

TDD-ChannelisationCode          ::= ENUMERATED {
    chCode1div1,
    chCode2div1,
    chCode2div2,
    chCode4div1,
    chCode4div2,
    chCode4div3,
    chCode4div4,
    chCode8div1,
    chCode8div2,
    chCode8div3,
    chCode8div4,
    chCode8div5,
    chCode8div6,
    chCode8div7,
    chCode8div8,
    chCode16div1,
    chCode16div2,
    chCode16div3,
    chCode16div4,
    chCode16div5,
    chCode16div6,
    chCode16div7,
    chCode16div8,
    chCode16div9,
    chCode16div10,
    chCode16div11,
    chCode16div12,
    chCode16div13,
    chCode16div14,
    chCode16div15,
    chCode16div16,
    ...
}

TDD-PhysicalChannelOffset       ::= INTEGER (0..63)

TDD-TPC-DownlinkStepSize ::= ENUMERATED {
    step-size1,
    step-size2,
    step-size3,
    ...
}

TFCI-Coding ::= ENUMERATED {
    v4,
    v8,
    v16,
    v32
}

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

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

TimeSlot                ::= INTEGER (0..14)

ToAWE                   ::= INTEGER (0..2559)

ToAWS                   ::= INTEGER (0..1279)

TGD                 ::= INTEGER (0..3839)

TGL                 ::= INTEGER (3| 4| 7| 10| 14)

TransmissionTimeInterval ::= ENUMERATED {
    msec-10,
    msec-20,
    msec-40,
```

```
    msec-80
}

TransmitDiversityIndicator ::= ENUMERATED {
    active,
    inactive
}

TransportBearerID       ::= INTEGER (0..4095)

TransportBearerRequestIndicator     ::= ENUMERATED {
    bearer-requested,
    bearer-not-requested
}

TransportBlockSize          ::= INTEGER (10..5000)
-- Unit is bits

TransportFormatCombination-Beta ::= CHOICE {
    signalledGainFactors    SEQUENCE {
        betaC                   BetaCD,
        betaD                   BetaCD,
        refTFCNumber            RefTFCNumber    OPTIONAL
    },
    refTFCNumber            RefTFCNumber
}

TFCS ::= SEQUENCE (SIZE (1..maxNrOfTFCs)) OF
    SEQUENCE {
        cTFC                CTFC,
        tFC-Beta            TransportFormatCombination-Beta     OPTIONAL,
        iE-Extensions           ProtocolExtensionContainer { {TFCS-ExtIEs} } OPTIONAL,
        ...
    }

TFCS-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

TransportFormatSet ::= SEQUENCE {
    dynamicParts            TransportFormatSet-DynamicPartList,
    semi-staticPart         TransportFormatSet-Semi-staticPart,
    iE-Extensions           ProtocolExtensionContainer { {TransportFormatSet-ExtIEs} } OPTIONAL,
    ...
}

TransportFormatSet-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

TransportFormatSet-DynamicPartList ::= SEQUENCE (SIZE (1..maxNrOfTFs)) OF
    SEQUENCE {
        nrOfTransportBlocks     NrOfTransportBlocks,
        transportBlockSize      TransportBlockSize      OPTIONAL
        -- This IE is only present if nrOfTransportBlocks is greater than 0 --,
        mode                TransportFormatSet-ModeDP,
        iE-Extensions           ProtocolExtensionContainer { {TransportFormatSet-DynamicPartList-
ExtIEs} } OPTIONAL,
        ...
    }

TransportFormatSet-DynamicPartList-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

TransportFormatSet-ModeDP ::= CHOICE {
    tdd                 TransmissionTimeIntervalList,
    -- This IE is mandatory if not defined as semistatic parameter, otherwise it is absent --
    ...
}

TransmissionTimeIntervalList ::= SEQUENCE (SIZE (1..maxTTI-Count)) OF
    SEQUENCE {
        transmissionTimeInterval    TransmissionTimeInterval,
        iE-Extensions           ProtocolExtensionContainer { {TransmissionTimeIntervalList-ExtIEs}
} OPTIONAL,
        ...
    }

TransmissionTimeIntervalList-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Transmitted-Code-Power-Value ::= INTEGER (0..127)
-- According to mapping in 25.215/25.225
```

```
Transmitted-Code-Power-Value-IncrDecrThres ::= INTEGER (0..112,...)

TransportFormatSet-Semi-staticPart ::= SEQUENCE {
    transmissionTime        TransmissionTimeInterval,
    channelCoding           ChannelCodingType,
    codingRate          CodingRate              OPTIONAL
    -- This IE is only present if channelCoding is 'convolutional' or 'turbo' --,
    rateMatcingAttribute        RateMatchingAttribute,
    cRC-Size            CRC-Size,
    mode                TransportFormatSet-ModeSSP,
    iE-Extensions           ProtocolExtensionContainer { {TransportFormatSet-Semi-staticPart-
ExtIEs} } OPTIONAL,
    ...
}

TransportFormatSet-Semi-staticPart-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

TransportFormatSet-ModeSSP ::= CHOICE {
    tdd             SecondInterleavingMode,
    ...
}

SecondInterleavingMode ::= ENUMERATED {
    frame-related,
    timeslot-related,
    ...
}

TransportLayerAddress           ::= BIT STRING (SIZE(1..160, ...))

TrCH-SrcStatisticsDescr     ::= ENUMERATED {
    speech,
    rRC,
    unknown,
    ...
}

TxDiversityIndicator    ::= ENUMERATED {
    true,
    false
}

-- U

UARFCN                  ::= INTEGER (0..16383,...)
-- Corresponds to: 0.0Hz..3276.6Mhz. See 25.101, 25.105
```

--- partly omitted ---

TSG-RAN Working Group 3 Meeting #12
Seoul, Korea, 10th– 13th April 2000

Document R3-001116
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.

25.423	CR	086	Current Version:	3.1.0

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

For submission to: TSG RAN #8 *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: R-WG3 **Date:** April 2000

Subject: Removal of the Definition of Radio Link Set

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	[ ]
C	Functional modification of feature	[X]
D	Editorial modification	[ ]

Release:

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

Reason for change: Previously the concept Radio Link Set has been introduced in NBAP and RNSAP. However, since this is a concept existing in several specifications (R3 and R1) it is proposed to remove it from NBAP and RNSAP and instead move it to the TS 25.401.

Clauses affected: 3.1

Other specs affected:

Other 3G core specifications	[X]	→ List of CRs:	25.401 v3.2.0 CR008, 25.433 v3.1.0 CR101
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:

3.1 Definitions

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

Elementary Procedure: RNSAP protocol consists of Elementary Procedures (EPs). An Elementary Procedure is a unit of interaction between two RNCs. An EP consists of an initiating message and possibly a response message. Two kinds of EPs are used:

- **Class 1:** Elementary Procedures with response (success or failure);
- **Class 2:** Elementary Procedures without response.

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

Successful

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

Unsuccessful

- A signalling message explicitly indicates that the EP failed.
- On time supervision expiry (i.e. absence of expected response). Whether or not any Class 1 procedure will have a timer on RNSAP is FFS. To de sorted out when discussing the details of the error cases.

Class 2 EPs are considered always successful.

Prepared Reconfiguration: Prepared Reconfiguration exists when the Synchronised Radio Link Reconfiguration Preparation procedure has been completed successfully. The Prepared Reconfiguration does not exist any more after either of the procedures Synchronised Radio Link Reconfiguration Commit or Synchronised Radio Link Reconfiguration Cancellation has been completed.

~~**Radio Link Set:** set of one or more Radio Links that has a common generation of Transmit Power Control (TPC) commands in the DL.~~

TSG-RAN Working Group 3 Meeting #12
Seoul, Korea, 10th – 13th April 2000

Document ***R3-001126***
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.

25.423	CR	88	Current Version:	3.1.0

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

For submission to:	TSG RAN #8	for approval	X	strategic		(for SMG use only)
list expected approval meeting # here ↑		for information		non-strategic		

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: R-WG3 **Date:** April 2000

Subject: RNSAP Range Bounds, FDD parts

Work item:

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

F	Correction	X
A	Corresponds to a correction in an earlier release	
B	Addition of feature	
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: This Change Request defines the upper bounds on the range bounds in RNSAP. The CR is a result of the agreements on Tdoc R3-00125.

Clauses affected: 9.1.36, 9.2.1.11, 9.3.3, 9.3.6

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.

9.1.36 COMMON TRANSPORT CHANNEL RESOURCES RESPONSE

9.1.36.1 FDD Message

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				–	
S-RNTI	M				YES	ignore
FACH Info for S-CCPCH coupled to PRACH or PCPCH		1			YES	ignore
>Priority Indicator & Initial Window Size		*1..16*		Provide Information for each priority class used	GLOBAL	ignore
>>FACH Priority Indicator	M				–	
>>MAC-c SDU Length		*1..<Maxnoo fMACcSDU lengthsper Priority~~MaxNbMACcSDULength~~>*			GLOBAL	ignore
>>>MAC-c SDU Length	M				–	
>>FACH Initial Window Size	M				–	
FACH Info for optional S-CCPCH		0..1			YES	ignore
>FDD S-CCPCH Offset	M			Corresponds to: $\tau_{S\text{-}CCPCH,k}$, see ref. [7]	–	
>DL Scrambling Code	M				–	
>FDD DL Channelisation Code Number	M				–	
>TFCS	M			For the DL.	–	
>Secondary CCPCH Slot Format	M				–	
>MultiplexingPosition	M				–	
>STTD Indicator	M				–	
>Priority Indicator & Initial Window Size		*1..16*		Provide Information for each priority class used	GLOBAL	ignore
>>FACH Priority Indicator	M				–	
>>MAC-c SDU Length		*1..<Maxnoo fMACcSDU lengthsper Priority~~NbMACcSDULength~~>*			GLOBAL	ignore
>>>MAC-c SDU Length	M				–	
>>FACH Initial Window Size	M				–	
Transport Layer Address	O				YES	ignore
Binding Identity	O				YES	ignore
Criticality Diagnostics	O				YES	ignore

Range Bound	Explanation
MaxnoofMACcSDUlengthsperPriority~~NbMACcSDULength~~	Maximum number of different MAC-c SDU Lengths.

9.1.36.2 TDD Message

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				–	
S-RNTI	M				YES	ignore
FACH Info for S-CCPCHs coupled to PRACH		*1*			YES	ignore
>Priority Indicator & Initial Window Size		*1 .. 16*		Provide Information for each priority class used	GLOBAL	ignore
>>FACH Priority Indicator	M				–	
>>MAC-c SDU Length		*1..<MaxnoofMACcSDUlengthsperPriority~~MaxNbMACcSDULength~~>*			GLOBAL	ignore
>>>MAC-c SDU Length	M				–	
>>FACH Initial Window Size	M				–	
FACH Info for optional group of S-CCPCHs		*0 .. 1*			YES	ignore
>TFCS	M			For DL CCTrCH supporting several Secondary CCPCHs	–	
>Secondary CCPCH	M	*1.. <MaxnoofSCCPCHs>*			GLOBAL	ignore
>>TDD Channelisation Code	M				–	
>>Time Slot	M				–	
>>Burst Type	M				–	
>>Midamble shift	M				–	
>>TDD Physical Channel Offset	M				–	
>>Repetition Period	M				–	
>>Repetition Length	M				–	
>>Priority Indicator & Initial Window Size		*1..16*		Provide Information for each priority class used	GLOBAL	ignore
>>>FACH Priority Indicator	M				–	
>>>MAC-c SDU Length		*1..<MaxnoofMACcSDUlengthsperPriority~~MaxNbMACcSDULength~~>*			GLOBAL	ignore
>>>>MAC-c SDU Length	M				–	
>>>FACH Initial Window Size	M				–	
>>>Transport Layer	O				YES	ignore

Address						
>>>Binding Identity	O				YES	ignore
Criticality Diagnostics	O				YES	ignore

Range Bound	**Explanation**
MaxnoofMSCcSDUlengthsperPriority~~NbMACcSDULength~~	Maximum number of different MAC-c SDU Lengths.
MaxnoofSCCPCHs	TBD

9.2.1.11 Criticality Diagnostics

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Criticality Diagnostics				
>Procedure Code	O		INTEGER (0..255)	Procedure code is to be used if Criticality diagnostics is part of Error Indication procedure, and not within the response message of the same operation that caused the error
>Triggering Message	O		ENUMERATED(initiating message, successful outcome, unsuccessful outcome, outcome)	The Triggering Message is used only if the Criticality diagnostics is part of Error Indication except when the procedure code is not understood.
>Criticality Response	O		ENUMERATED(reject, ignore, notify)	This Criticality response IE is used for reporting the Criticality of the Triggering message
>Transaction Id	O		INTEGER (0..255)	
Information Element Criticality Diagnostics		*1..<maxnoof errors>*		
>Criticality Response	M		ENUMERATED(reject, ignore, notify)	The Criticality response IE is used for reporting the criticality of the triggering IE. The value 'Ignore" shall never be used.
>IE Id	M		INTEGER (0..65535)	The IE Id of the not understood IE as defined in the ASN.1 part of the specification.
>Repetition Number	O		INTEGER (0..255)	The repetition number of the not understood IE if applicable

Range bound	Explanation
maxnooferrors	Maximum number. of IE errors allowed to be reported with a single message. ~~The value for maxnooferrors is 256.~~

9.3.3 PDU Definitions

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

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

BEGIN

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

IMPORTS
    AllocationRetentionPriority,
    AllowedQueuingTime,
    BLER,
    BindingID,
    BurstType,
    C-ID,
    C-RNTI,
    CCTrCH-ID,
    CellIndividualOffset,
    CFN,
    CFNOffset,
    ClosedLoopMode1-SupportIndicator,
    ClosedLoopMode2-SupportIndicator,
    CN-CS-DomainIdentifier,
    CN-PS-DomainIdentifier,
    Cause,
    CellParameterID,
    ChipOffset,
    CompressedModeMethod,
    CriticalityDiagnostics,
    D-FieldLength,
    D-RNTI,
    D-RNTI-ReleaseIndication,
    DCH-CombinationInd,
    DCH-ID,
    DL-DPCH-SlotFormat,
    DL-SIRTarget,
    DL-FrameType,
    DL-Power,
    DL-ScramblingCode,
```

```
    DPCHConstantValue,
    DPCH-ID,
    DRACControl,
    DRXCycleLengthCoefficient,
    DedicatedMeasurementType,
    DedicatedMeasurementValue,
    DiversityControlField,
    DiversityMode,
    FACH-InitialWindowSize,
    FACH-PriorityIndicator,
    FDD-DL-ChannelisationCodeNumber,
    FDD-S-CCPCH-Offset,
    FDD-TPC-DownlinkStepSize,
    FrameHandlingPriority,
    FrameOffset,
    GapPeriod,
    GapPositionMode,
    IB-SG-POS,
    IB-SG-REP,
    IMSI,
    L3-Information,
    LimitedPowerIncrease,
    MAC-c-SDU-Length,
    MaximumAllowedULTxPower,
    MaxNrOfUL-DPCHs,
    MeasurementFilterCoefficient,
    MeasurementID,
    MidambleShift,
    MinUL-ChannelisationCodeLength,
    MultipleURAsIndicator,
    MultiplexingPosition,
    PD,
    PayloadCRC-PresenceIndicator,
    PCCPCH-Power,
    PowerAdjustmentType,
    PowerControlMode,
    PowerOffset,
    PowerResumeMode,
    PrimaryCCPCH-RSCP,
    PrimaryCPICH-EcNo,
    PrimaryCPICH-Power,
    PrimaryScramblingCode,
    PropagationDelay,
    PunctureLimit,
    QE-Selector,
    RANAP-RelocationInformation,
    RL-ID,
    RL-Set-ID,
    RNC-ID,
    RepetitionLength,
    RepetitionPeriod,
```

```
    ReportCharacteristics,
    S-FieldLength,
    S-RNTI,
    SCH-TimeSlot,
    SAI,
    SN,
    SSDT-CellID,
    SSDT-CellID-Length,
    SSDT-Indication,
    SSDT-SupportIndicator,
    STTD-Indicator,
    STTD-SupportIndicator,
    ScaledMaxAdjustmentPeriod,
    ScaledMaxAdjustmentStep,
    ScramblingCodeChange,
    SecondaryCCPCH-SlotFormat,
    SyncCase,
    TDD-ChannelisationCode,
    TDD-PhysicalChannelOffset,
    TDD-TPC-DownlinkStepSize,
    TFCI-Coding,
    TFCI-Presence,
    TFCI-SignallingMode,
    TGD,
    TGL,
    TimeSlot,
    ToAWE,
    ToAWS,
    TransmitDiversityIndicator,
    TransportBearerID,
    TransportBearerRequestIndicator,
    TFCS,
    TransportFormatSet,
    TransportLayerAddress,
    TrCH-SrcStatisticsDescr,
    TxDiversityIndicator,
    UARFCN,
    UC-ID,
    UL-DeltaSIR,
    UL-DeltaSIRAfter,
    UL-DL-CompressedModeSelection,
    UL-DPCCH-SlotFormat,
    UL-InterferenceLevel,
    UL-SIR,
    UL-FP-Mode,
    UL-ScramblingCode,
    URA-ID
FROM RNSAP-IEs

    PrivateIE-Container{},
    ProtocolExtensionContainer{},
```

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

    maxNrOfCCTrCHs,
    maxNrOfDCHs,
    maxNrOfDL-Codes,
    maxNrOfDPCHs,
    maxNrOfMACcSDU-Length,
    maxNrOfRLs,
    maxNrOfRLSets,
    maxNrOfRLs-1,
    maxNrOfRLs-2,
    maxNrOfSCCPCHs,
    maxNrOfULTs,
    maxNrOfCMpatterns,
    maxRNCinURA,
    maxNrOfNeighbouringRNCs,
    maxNrOfFDDNeighboursPerRNC,
    maxNrOfTDDNeighboursPerRNC,
    maxFACHCountPlus1,
    maxIBSEG,

    id-AllRLItem-DM-Rprt,
    id-AllRLItem-DM-Rsp,
    id-AllRL-SetItem-DM-Rprt,
    id-AllRL-SetItem-DM-Rsp,
    id-AllowedQueuingTime,
    id-BindingID,
    id-C-ID,
    id-C-RNTI,
    id-CFN,
    id-CN-CS-DomainIdentifier,
    id-CN-PS-DomainIdentifier,
    id-Cause,
    id-CellItem-PagingRqst,
    id-CM-PatternInformationItem-CompressedModePrep,
    id-CM-PatternInformationList-CompressedModePrep,
    id-CombiningItem-RL-AdditionFailureFDD,
    id-CombiningItem-RL-AdditionRspFDD,
    id-CombiningItem-RL-AdditionRspTDD,
    id-CombiningItem-RL-SetupFailureFDD,
    id-CombiningItem-RL-SetupRspFDD,
    id-CriticalityDiagnostics,
    id-D-RNTI,
```

```
    id-D-RNTI-ReleaseIndication,
    id-DCH-AddListIE-RL-ReconfReadyFDD,
    id-DCH-AddListIE-RL-ReconfReadyTDD,
    id-DCH-AddListIE-RL-ReconfRsp,
    id-DCH-AddList-RL-ReconfPrepFDD,
    id-DCH-AddList-RL-ReconfPrepTDD,
    id-DCH-AddList-RL-ReconfRqstFDD,
    id-DCH-AddList-RL-ReconfRqstTDD,
    id-DCH-DeleteList-RL-ReconfPrepFDD,
    id-DCH-DeleteList-RL-ReconfPrepTDD,
    id-DCH-DeleteList-RL-ReconfRqstFDD,
    id-DCH-DeleteList-RL-ReconfRqstTDD,
    id-DCH-Information-RL-SetupRqstFDD,
    id-DCH-InformationList-RL-SetupRqstTDD,
    id-DCH-ModifyListIE-RL-ReconfReadyFDD,
    id-DCH-ModifyListIE-RL-ReconfReadyTDD,
    id-DCH-ModifyListIE-RL-ReconfRsp,
    id-DCH-ModifyList-RL-ReconfPrepFDD,
    id-DCH-ModifyList-RL-ReconfPrepTDD,
    id-DCH-ModifyList-RL-ReconfRqstFDD,
    id-DCH-ModifyList-RL-ReconfRqstTDD,
    id-DCH-InformationResponseListIE-RL-SetupRspTDD,
    id-DL-CCTrCH-InformationItem-RL-ReconfPrepTDD,
    id-DL-CCTrCH-InformationListIE-RL-ReconfReadyTDD,
    id-DL-CCTrCH-InformationItem-RL-ReconfRqstTDD,
    id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD,
    id-DL-CCTrCH-InformationListIE-PhyChReconfRqstTDD,
    id-DL-CCTrCH-InformationListIE-RL-AdditionRspTDD,
    id-DL-CCTrCH-InformationListIE-RL-SetupRspTDD,
    id-DL-CCTrCH-InformationList-RL-ReconfPrepTDD,
    id-DL-CCTrCH-InformationList-RL-ReconfRqstTDD,
    id-DL-CCTrCH-InformationList-RL-SetupRqstTDD,
    id-DL-CodeInformationListIE-PhyChReconfRqstFDD,
    id-DL-CodeInformationListIE-RL-AdditionFailureFDD,
    id-DL-CodeInformationListIE-RL-AdditionRspFDD,
    id-DL-CodeInformationListIE-RL-ReconfReadyFDD,
    id-DL-CodeInformationListIE-RL-SetupFailureFDD,
    id-DL-DPCH-Information-RL-ReconfPrepFDD,
    id-DL-DPCH-Information-RL-SetupRqstFDD,
    id-DL-DPCH-Information-RL-ReconfRqstFDD,
    id-DL-DPCH-InformationItem-PhyChReconfRqstTDD,
    id-DL-DPCH-InformationItem-RL-AdditionRspTDD,
    id-DL-DPCH-InformationItem-RL-SetupRspTDD,
    id-DL-DPCH-InformationListIE-RL-ReconfReadyTDD,
    id-DL-SIRTarget,
    id-DLReferencePower,
    id-DLReferencePowerList-DL-PC-Rqst,
    id-DL-ReferencePowerInformation-DL-PC-Rqst,
    id-DRXCycleLengthCoefficient,
    id-DedicatedMeasurementObjectType-DM-Rprt,
    id-DedicatedMeasurementObjectType-DM-Rqst,
```

```
    id-DedicatedMeasurementObjectType-DM-Rsp,
    id-DedicatedMeasurementType,
    id-DiversityIndicationItem-RL-AdditionFailureFDD,
    id-DiversityIndicationItem-RL-AdditionRspFDD,
    id-DiversityIndicationItem-RL-AdditionRspTDD,
    id-DiversityIndicationItem-RL-SetupFailureFDD,
    id-DiversityIndicationItem-RL-SetupRspFDD,
    id-FACH-InfoForOptionalS-CCPCH-CTCH-ResourceRspFDD,
    id-FACH-InfoForOptionalS-CCPCH-CTCH-ResourceRspTDD,
    id-FACH-InfoForS-CCPCH-CoupledToPRACHorPCPCH-CTCH-ResourceRspFDD,
    id-FACH-InfoForS-CCPCH-CoupledToPRACH-CTCH-ResourceRspTDD,
    id-IMSI,
    id-L3-Information,
    id-MAC-c-SDU-LengthListIE-CTCH-ResourceRspFDD,
    id-MAC-c-SDU-LengthListIE-CTCH-ResourceRspTDD,
    id-MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspFDD,
    id-MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspTDD,
    id-MaxAdjustmentPeriod,
    id-MaxAdjustmentStep,
    id-MeasurementFilterCoefficient,
    id-MeasurementID,
    id-MultipleURAsIndicator,
    id-NeighbouringFDD-CellInformationItem-RL-AdditionFailureFDD,
    id-NeighbouringFDD-CellInformationItem-RL-AdditionRsp,
    id-NeighbouringFDD-CellInformationItem-RL-SetupFailureFDD,
    id-NeighbouringFDD-CellInformationItem-RL-SetupRsp,
    id-NeighbouringTDD-CellInformationItem-RL-AdditionFailureFDD,
    id-NeighbouringTDD-CellInformationItem-RL-AdditionRsp,
    id-NeighbouringTDD-CellInformationItem-RL-SetupFailureFDD,
    id-NeighbouringTDD-CellInformationItem-RL-SetupRsp,
    id-Neighbouring-CellInformationItem-RL-SetupFailureFDD,
    id-Neighbouring-CellInformationItem-RL-SetupRsp,
    id-NonCombiningItem-RL-AdditionFailureFDD,
    id-NonCombiningItem-RL-AdditionRspFDD,
    id-NonCombiningItem-RL-AdditionRspTDD,
    id-NonCombiningOrIEnotPresenItem-RL-SetupFailureFDD,
    id-NonCombiningOrIEnotPresenItem-RL-SetupRspFDD,
    id-PagingArea-PagingRqst,
    id-PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspFDD,
    id-PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspTDD,
    id-PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspFDD,
    id-PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspTDD,
    id-PowerAdjustmentType,
    id-ProcedureScope-DL-PC-Rqst,
    id-RANAP-RelocationInformation,
    id-RL-Information-PhyChReconfRqstFDD,
    id-RL-Information-PhyChReconfRqstTDD,
    id-RL-Information-RL-AdditionRqstFDD,
    id-RL-Information-RL-AdditionRqstTDD,
    id-RL-Information-RL-DeletionRqst,
    id-RL-Information-RL-FailureInd,
```

```
    id-RL-Information-RL-ReconfPrepFDD,
    id-RL-Information-RL-RestoreInd,
    id-RL-Information-RL-SetupRqstFDD,
    id-RL-Information-RL-SetupRqstTDD,
    id-RL-InformationItem-DM-Rprt,
    id-RL-InformationItem-DM-Rqst,
    id-RL-InformationItem-DM-Rsp,
    id-RL-InformationItem-RL-SetupRqstFDD,
    id-RL-InformationList-RL-AdditionRqstFDD,
    id-RL-InformationList-RL-DeletionRqst,
    id-RL-InformationList-RL-ReconfPrepFDD,
    id-RL-InformationResponse-RL-AdditionRspTDD,
    id-RL-InformationResponse-RL-ReconfReadyTDD,
    id-RL-InformationResponse-RL-SetupRspTDD,
    id-RL-InformationResponseItem-RL-AdditionRspFDD,
    id-RL-InformationResponseItem-RL-ReconfReadyFDD,
    id-RL-InformationResponseItem-RL-ReconfRsp,
    id-RL-InformationResponseItem-RL-SetupRspFDD,
    id-RL-InformationResponseList-RL-AdditionRspFDD,
    id-RL-InformationResponseList-RL-ReconfReadyFDD,
    id-RL-InformationResponseList-RL-ReconfRsp,
    id-RL-InformationResponseList-RL-SetupRspFDD,
    id-RLItem-DM-Rprt,
    id-RLItem-DM-Rqst,
    id-RLItem-DM-Rsp,
    id-RL-ReconfigurationFailure-RL-ReconfFail,
    id-RL-ReconfigurationFailureList-RL-ReconfFail,
    id-RL-Set-InformationItem-DM-Rprt,
    id-RL-Set-InformationItem-DM-Rqst,
    id-RL-Set-InformationItem-DM-Rsp,
    id-RL-Set-Information-RL-FailureInd,
    id-RL-Set-Information-RL-RestoreInd,
    id-RL-SetItem-DM-Rprt,
    id-RL-SetItem-DM-Rqst,
    id-RL-SetItem-DM-Rsp,
    id-RNCsWithCellsInTheAccessedURA-List-UL-ST-Ind,
    id-ReportCharacteristics,
    id-Reporting-Object-RL-FailureInd,
    id-Reporing-Object-RL-RestoreInd,
    id-S-RNTI,
    id-SAI,
    id-SRNC-ID,
    id-SecondaryCCPCHListIE-CTCH-ResourceRspTDD,
    id-SuccessfulRL-InformationResponse-RL-AdditionFailureFDD,
    id-SuccessfulRL-InformationResponse-RL-SetupFailureFDD,
    id-SuccessfulRL-InformationResponseList-RL-AdditionFailureFDD,
    id-SuccessfulRL-InformationResponseList-RL-SetupFailureFDD,
    id-TransportBearerID,
    id-TransportBearerRequestIndicator,
    id-TransportLayerAddress,
    id-UC-ID,
```

```
    id-UL-CCTrCH-Information-RL-ReconfPrepTDD,
    id-UL-CCTrCH-InformationItem-RL-ReconfRqstTDD,
    id-UL-CCTrCH-InformationList-RL-ReconfPrepTDD,
    id-UL-CCTrCH-InformationList-RL-ReconfRqstTDD,
    id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD,
    id-UL-CCTrCH-InformationList-RL-SetupRqstTDD,
    id-UL-CCTrCH-InformationListIE-PhyChReconfRqstTDD,
    id-UL-CCTrCH-InformationListIE-RL-AdditionRspTDD,
    id-UL-CCTrCH-InformationListIE-RL-ReconfReadyTDD,
    id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD,
    id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD,
    id-UL-DPCH-Information-RL-ReconfPrepFDD,
    id-UL-DPCH-Information-RL-ReconfRqstFDD,
    id-UL-DPCH-Information-RL-SetupRqstFDD,
    id-UL-DPCH-InformationItem-PhyChReconfRqstTDD,
    id-UL-DPCH-InformationItem-RL-AdditionRspTDD,
    id-UL-DPCH-InformationItem-RL-SetupRspTDD,
    id-UL-DPCH-InformationListIE-RL-ReconfReadyTDD,
    id-UL-SIRTarget,
    id-URA-ID,
    id-URAItem-PagingRqst,
    id-UnsuccessfulRL-InformationResponse,
    id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD,
    id-UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD,
    id-UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD,
    id-UnsuccessfulRL-InformationResponseList-RL-AdditionFailureFDD,
    id-UnsuccessfulRL-InformationResponseList-RL-SetupFailureFDD
FROM RNSAP-Constants;

-- **************************************************************
--
-- Common Container List
--
-- **************************************************************

DPCH-IE-ContainerList       { RNSAP-PROTOCOL-IES : IEsSetParam}     ::= ProtocolIE-ContainerList { 1, maxNrOfDPCHs,    { IEsSetParam } }
RL-IE-ContainerList0        { RNSAP-PROTOCOL-IES : IEsSetParam}     ::= ProtocolIE-ContainerList { 0, maxNrOfRLs,      { IEsSetParam } }
RL-IE-ContainerList1        { RNSAP-PROTOCOL-IES : IEsSetParam}     ::= ProtocolIE-ContainerList { 1, maxNrOfRLs,      { IEsSetParam } }
RL-IE-ContainerList1-1      { RNSAP-PROTOCOL-IES : IEsSetParam}     ::= ProtocolIE-ContainerList { 1, maxNrOfRLs-1,    { IEsSetParam } }
RL-IE-ContainerList0-1      { RNSAP-PROTOCOL-IES : IEsSetParam}     ::= ProtocolIE-ContainerList { 0, maxNrOfRLs-1,    { IEsSetParam } }
RL-IE-ContainerList0-2      { RNSAP-PROTOCOL-IES : IEsSetParam}     ::= ProtocolIE-ContainerList { 0, maxNrOfRLs-2,    { IEsSetParam } }
RL-Set-IE-ContainerList     { RNSAP-PROTOCOL-IES : IEsSetParam}     ::= ProtocolIE-ContainerList { 1, maxNrOfRLSets,   { IEsSetParam } }
CCTrCH-IE-ContainerList0    { RNSAP-PROTOCOL-IES : IEsSetParam}     ::= ProtocolIE-ContainerList { 0, maxNrOfCCTrCHs,  { IEsSetParam } }
CCTrCH-IE-ContainerList1    { RNSAP-PROTOCOL-IES : IEsSetParam}     ::= ProtocolIE-ContainerList { 1, maxNrOfCCTrCHs,  { IEsSetParam } }

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

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

RadioLinkSetupRequestFDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-S-RNTI                  CRITICALITY reject  TYPE S-RNTI                    PRESENCE mandatory } |
    { ID id-D-RNTI                  CRITICALITY reject  TYPE D-RNTI                 PRESENCE optional  } |
    { ID id-AllowedQueuingTime          CRITICALITY reject  TYPE AllowedQueuingTime             PRESENCE optional  } |
    { ID id-UL-DPCH-Information-RL-SetupRqstFDD CRITICALITY reject  TYPE UL-DPCH-Information-RL-SetupRqstFDD    PRESENCE mandatory   } |
    { ID id-DL-DPCH-Information-RL-SetupRqstFDD CRITICALITY reject  TYPE DL-DPCH-Information-RL-SetupRqstFDD    PRESENCE mandatory   } |
    { ID id-DCH-Information-RL-SetupRqstFDD     CRITICALITY reject  TYPE DCH-InformationList-RL-SetupRqstFDD    PRESENCE mandatory   } |
    { ID id-RL-Information-RL-SetupRqstFDD      CRITICALITY notify  TYPE RL-InformationList-RL-SetupRqstFDD     PRESENCE mandatory   },
    ...
}

UL-DPCH-Information-RL-SetupRqstFDD ::= SEQUENCE {
    ul-ScramblingCode               UL-ScramblingCode,
    minUL-ChannelisationCodeLength          MinUL-ChannelisationCodeLength,
    maxNrOfUL-DPCHs                 MaxNrOfUL-DPCHs         OPTIONAL
    -- This IE is present only if minUL-ChannelisationCodeLength equals to 4 -- ,
    ul-PunctureLimit                PunctureLimit,
    ul-TFCS                         TFCS,
    ul-DPCCH-SlotFormat             UL-DPCCH-SlotFormat,
    ul-SIRTarget                    UL-SIR          OPTIONAL,
    diversityMode                   DiversityMode,
    d-FieldLength                   D-FieldLength           OPTIONAL
    -- This IE is present only if Feed Back mode diversity is activated -- ,
    sSDT-CellIdLength               SSDT-CellID-Length      OPTIONAL,
    s-FieldLength                   S-FieldLength           OPTIONAL,
    iE-Extensions                   ProtocolExtensionContainer { {UL-DPCH-Information-RL-SetupRqstFDD-ExtIEs} } OPTIONAL,
    ...
}

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

DL-DPCH-Information-RL-SetupRqstFDD ::= SEQUENCE {
    tFCS                            TFCS,
    dl-DPCH-SlotFormat              DL-DPCH-SlotFormat,
    tFCI-SignallingMode             TFCI-SignallingMode,
    tFCI-Presence                   TFCI-Presence           OPTIONAL
    -- This IE is present if Slot Format is from 12 to 16 --,
    multiplexingPosition                MultiplexingPosition,
    powerOffsetInformation              SEQUENCE {
        po1-ForTFCI-Bits                PowerOffset,
        po2-ForTPC-Bits                 PowerOffset,
        po3-ForPilotBits                PowerOffset,
        ...
```

```
    },
    fdd-dl-TPC-DownlinkStepSize     FDD-TPC-DownlinkStepSize,
    iE-Extensions                   ProtocolExtensionContainer { {DL-DPCH-Information-RL-SetupRqstFDD-ExtIEs} } OPTIONAL,
    ...
}

DL-DPCH-Information-RL-SetupRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-InformationList-RL-SetupRqstFDD            ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-InformationItem-RL-SetupRqstFDD

DCH-InformationItem-RL-SetupRqstFDD ::= SEQUENCE {
    dCH-ID                          DCH-ID,
    dCH-CombinationInd              DCH-CombinationInd      OPTIONAL,
    limitedPowerIncrease            LimitedPowerIncrease,
    trCH-SrcStatisticsDescr         TrCH-SrcStatisticsDescr,
    ul-transportFormatSet           TransportFormatSet,
    dl-transportFormatSet           TransportFormatSet,
    ul-BLER                         BLER,
    dl-BLER                         BLER,
    allocationRetentionPriority     AllocationRetentionPriority,
    frameHandlingPriority           FrameHandlingPriority,
    payloadCRC-PresenceIndicator    PayloadCRC-PresenceIndicator,
    ul-FP-Mode                      UL-FP-Mode,
    qE-Selector                     QE-Selector,
    toAWS                           ToAWS,
    toAWE                           ToAWE,
    dRACControl                     DRACControl,
    iE-Extensions                   ProtocolExtensionContainer { {DCH-InformationItem-RL-SetupRqstFDD-ExtIEs} } OPTIONAL,
    ...
}

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

RL-InformationList-RL-SetupRqstFDD          ::= RL-IE-ContainerList1 { {RL-InformationItemIEs-RL-SetupRqstFDD} }

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

RL-InformationItem-RL-SetupRqstFDD ::= SEQUENCE {
    rL-ID                           RL-ID,
    c-ID                            C-ID,
    frameOffset                     FrameOffset,
    chipOffset                      ChipOffset,
    propagationDelay                PropagationDelay        OPTIONAL,
    diversityControlField           DiversityControlField       OPTIONAL
```

```
    -- This IE is present only if the RL is not the first one in the RL-InformationList-RL-SetupRqstFDD --,
    dl-InitialTX-Power              DL-Power            OPTIONAL,
    primaryCPICH-EcNo               PrimaryCPICH-EcNo           OPTIONAL,
    sSDT-CellID                     SSDT-CellID         OPTIONAL,
    transmitDiversityIndicator      TransmitDiversityIndicator      OPTIONAL,
    -- This IE is present unless Diversity Mode IE in UL DPCH Information group is "none"
    iE-Extensions                   ProtocolExtensionContainer { {RL-InformationItem-RL-SetupRqstFDD-ExtIEs} } OPTIONAL,
    ...
}

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

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

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

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

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

UL-CCTrCH-InformationList-RL-SetupRqstTDD           ::= CCTrCH-IE-ContainerList1 { {UL-CCTrCH-InformationItemIEs-RL-SetupRqstTDD} }

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

UL-CCTrCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
    cCTrCH-ID                   CCTrCH-ID,
    ul-TFCS                     TFCS,
```

```
    tFCI-Coding                 TFCI-Coding,
    ul-PunctureLimit                PunctureLimit,
    iE-Extensions                   ProtocolExtensionContainer { {UL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

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

DL-CCTrCH-InformationList-RL-SetupRqstTDD           ::= CCTrCH-IE-ContainerList1 { {DL-CCTrCH-InformationItemIEs-RL-SetupRqstTDD} }

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

DL-CCTrCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
    cCTrCH-ID                   CCTrCH-ID,
    dl-TFCS                     TFCS,
    tFCI-Coding                 TFCI-Coding,
    dl-PunctureLimit                PunctureLimit,
    tdd-TPC-DownlinkStepSize        TDD-TPC-DownlinkStepSize,
    iE-Extensions                   ProtocolExtensionContainer { {DL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

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

DCH-InformationList-RL-SetupRqstTDD             ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-InformationItem-RL-SetupRqstTDD

DCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
    dCH-ID                              DCH-ID,
    ul-cCTrCH-ID                        CCTrCH-ID, -- UL CCTrCH in which the DCH is mapped
    dl-cCTrCH-ID                        CCTrCH-ID, -- DL CCTrCH in which the DCH is mapped
    dCH-CombinationInd                  DCH-CombinationInd      OPTIONAL,
    limitedPowerIncrease                LimitedPowerIncrease,
    trCH-SrcStatisticsDescr             TrCH-SrcStatisticsDescr,
    ul-transportFormatSet               TransportFormatSet,
    dl-transportFormatSet               TransportFormatSet,
    ul-BLER                             BLER,
    dl-BLER                             BLER,
    allocationRetentionPriority         AllocationRetentionPriority,
    frameHandlingPriority               FrameHandlingPriority,
    payloadCRC-PresenceIndicator        PayloadCRC-PresenceIndicator,
    ul-FP-Mode                          UL-FP-Mode,
    toAWS                               ToAWS,
    toAWE                               ToAWE,
    iE-Extensions                       ProtocolExtensionContainer { {DCH-InformationItem-RL-SetupRqstTDD-ExtIEs} } OPTIONAL,
```

```
    ...
}

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

RL-Information-RL-SetupRqstTDD ::= SEQUENCE {
    rL-ID                       RL-ID,
    c-ID                        C-ID,
    frameOffset                 FrameOffset,
    primaryCCPCH-RSCP               PrimaryCCPCH-RSCP       OPTIONAL,
    iE-Extensions                   ProtocolExtensionContainer { {RL-Information-RL-SetupRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

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

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

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

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

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

RL-InformationResponseList-RL-SetupRspFDD       ::= RL-IE-ContainerList1 { {RL-InformationResponseItemIEs-RL-SetupRspFDD} }

RL-InformationResponseItemIEs-RL-SetupRspFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationResponseItem-RL-SetupRspFDD
```

```
                        CRITICALITY ignore  TYPE RL-InformationResponseItem-RL-SetupRspFDD  PRESENCE mandatory },
    ...
}

RL-InformationResponseItem-RL-SetupRspFDD ::= SEQUENCE {
    rL-ID                           RL-ID,
    rL-Set-ID                       RL-Set-ID,
    sAI                             SAI,
    ul-InterferenceLevel            UL-InterferenceLevel,
    secondary-CCPCH-Info            Secondary-CCPCH-Info-RL-SetupRspFDD     OPTIONAL,
    dl-CodeInformation              DL-CodeInformationList-RL-SetupRspFDD,
    diversityIndication             DiversityIndication-RL-SetupRspFDD,
    sSDT-SupportIndicator           SSDT-SupportIndicator,
    maxUL-SIR                       UL-SIR,
    minUL-SIR                       UL-SIR,
    maximumAllowedULTxPower         MaximumAllowedULTxPower,
    neighbouring-CellInformation    Neighbouring-CellInformationList-RL-SetupRsp OPTIONAL,
    iE-Extensions                   ProtocolExtensionContainer { {RL-InformationResponseItem-RL-SetupRspFDD-ExtIEs} } OPTIONAL,
    ...
}

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

Secondary-CCPCH-Info-RL-SetupRspFDD ::= SEQUENCE {
    fDD-S-CCPCH-Offset                      FDD-S-CCPCH-Offset,
    dl-ScramblingCode                       DL-ScramblingCode,
    fDD-DL-ChannelisationCodeNumber         FDD-DL-ChannelisationCodeNumber,
    dl-TFCS                                 TFCS,
    secondaryCCPCH-SlotFormat               SecondaryCCPCH-SlotFormat,
    tFCI-Presence                           TFCI-Presence   OPTIONAL,
    -- This IE is present only if the Secondary CCPCH Slot Format is equal to any of the value 8 to 17
    multiplexingPosition                    MultiplexingPosition,
    sTTD-Indicator                          STTD-Indicator,
    fACH-PCH-InformationList                FACH-PCH-InformationList-RL-SetupRspFDD,
    schedulingInformation                   SchedulingInformation-RL-SetupRspFDD,
    iE-Extensions                           ProtocolExtensionContainer { { Secondary-CCPCH-Info-RL-SetupRspFDD-ExtIEs} } OPTIONAL,
    ...
}

Secondary-CCPCH-Info-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

FACH-PCH-InformationList-RL-SetupRspFDD ::= SEQUENCE (SIZE(1..maxFACHCountPlus1)) OF FACH-PCH-InformationItem-RL-SetupRspFDD

FACH-PCH-InformationItem-RL-SetupRspFDD ::= SEQUENCE {
    transportFormatSet              TransportFormatSet,
    iE-Extensions                   ProtocolExtensionContainer { { FACH-PCH-InformationItem-RL-SetupRspFDD-ExtIEs} } OPTIONAL,
    ...
```

```
}

FACH-PCH-InformationItem-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

SchedulingInformation-RL-SetupRspFDD ::= SEQUENCE {
    iB-SG-Rep                       IB-SG-REP,
    segmentInformationList          SegmentInformationList-RL-SetupRspFDD,
    iE-Extensions                   ProtocolExtensionContainer { { SchedulingInformation-RL-SetupRspFDD-ExtIEs } } OPTIONAL,
        ...
}

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

SegmentInformationList-RL-SetupRspFDD ::= SEQUENCE (SIZE(1..maxIBSEG)) OF SegmentInformationItem-RL-SetupRspFDD

SegmentInformationItem-RL-SetupRspFDD ::= SEQUENCE {
    iB-SG-POS                       IB-SG-POS,
    iE-Extensions                   ProtocolExtensionContainer { {  SegmentInformationItem-RL-SetupRspFDD-ExtIEs } } OPTIONAL,
    ...
}

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

DL-CodeInformationList-RL-SetupRspFDD ::= SEQUENCE (SIZE (1..maxNrOfDL-Codes)) OF DL-CodeInformationItem-RL-SetupRspFDD

DL-CodeInformationItem-RL-SetupRspFDD ::= SEQUENCE {
    dl-ScramblingCode               DL-ScramblingCode,
    fDD-DL-ChannelisationCodeNumber         FDD-DL-ChannelisationCodeNumber,
    iE-Extensions                   ProtocolExtensionContainer { {DL-CodeInformationItem-RL-SetupRspFDD-ExtIEs} } OPTIONAL,
    ...
}

DL-CodeInformationItem-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}
DiversityIndication-RL-SetupRspFDD ::= ProtocolIE-Container {{ DiversityIndicationIE-RL-SetupRspFDD }}

DiversityIndicationIE-RL-SetupRspFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DiversityIndicationItem-RL-SetupRspFDD   CRITICALITY ignore TYPE     DiversityIndicationItem-RL-SetupRspFDD  PRESENCE mandatory },
    ...
}

DiversityIndicationItem-RL-SetupRspFDD ::= CHOICE {
    combining                       Combining-RL-SetupRspFDD,
    nonCombiningOrIEnotPresent      NonCombiningOrIEnotPresen-RL-SetupRspFDD,
```

```
    ...
}

Combining-RL-SetupRspFDD ::= ProtocolIE-Container {{ CombiningIE-RL-SetupRspFDD }}

CombiningIE-RL-SetupRspFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-CombiningItem-RL-SetupRspFDD   CRITICALITY ignore   TYPE CombiningItem-RL-SetupRspFDD PRESENCE mandatory },
    ...
}

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

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

NonCombiningOrIEnotPresen-RL-SetupRspFDD ::= ProtocolIE-Container {{ NonCombiningOrIEnotPresenIE-RL-SetupRspFDD }}

NonCombiningOrIEnotPresenIE-RL-SetupRspFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-NonCombiningOrIEnotPresenItem-RL-SetupRspFDD   CRITICALITY ignore   TYPE    NonCombiningOrIEnotPresenItem-RL-SetupRspFDD  PRESENCE
    mandatory },
    ...
}

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

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

DCH-InformationResponseList-RL-SetupRspFDD ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-InformationResponseItem-RL-SetupRspFDD

DCH-InformationResponseItem-RL-SetupRspFDD ::= SEQUENCE {
    dCH-ID                      DCH-ID,
    bindingID                   BindingID,
    transportLayerAddress               TransportLayerAddress,
    iE-Extensions                   ProtocolExtensionContainer { {DCH-InformationResponseItem-RL-SetupRspFDD-ExtIEs} } OPTIONAL,
    ...
}

DCH-InformationResponseItem-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

```
Neighbouring-CellInformationList-RL-SetupRsp ::= SEQUENCE (SIZE (0..maxNrOfNeighbouringRNCs)) OF ProtocolIE-Container {{ Neighbouring-
CellInformationItemIE-RL-SetupRsp }}

Neighbouring-CellInformationItemIE-RL-SetupRsp RNSAP-PROTOCOL-IES ::= {
    { ID id-Neighbouring-CellInformationItem-RL-SetupRsp   CRITICALITY ignore   TYPE    Neighbouring-CellInformationItem-RL-SetupRsp  PRESENCE
    mandatory },
    ...
}

Neighbouring-CellInformationItem-RL-SetupRsp ::= SEQUENCE {
    rNC-ID                              RNC-ID,
    cN-PS-DomainIdentifier              CN-PS-DomainIdentifier      OPTIONAL,
    cN-CS-DomainIdentifier              CN-CS-DomainIdentifier      OPTIONAL,
    per-FDD-Cell-InformationList        Per-FDD-Cell-InformationList-RL-SetupRsp    OPTIONAL,
    per-TDD-Cell-InformationList        Per-TDD-Cell-InformationList-RL-SetupRsp    OPTIONAL,
    iE-Extensions                       ProtocolExtensionContainer { {Neighbouring-CellInformationItem-RL-SetupRsp-ExtIEs} } OPTIONAL,
    ...
}

Neighbouring-CellInformationItem-RL-SetupRsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Per-FDD-Cell-InformationList-RL-SetupRsp ::= SEQUENCE ( SIZE (1..maxNrOfFDDNeighboursPerRNC,...)) OF Per-FDD-Cell-InformationItem-RL-SetupRsp

Per-FDD-Cell-InformationItem-RL-SetupRsp ::= SEQUENCE {
    c-ID                                C-ID,
    uARFCNforNu                         UARFCN,
    uARFCNforNd                         UARFCN,
    frameOffset                         FrameOffset         OPTIONAL,
    primaryScramblingCode               PrimaryScramblingCode,
    primaryCPICH-Power                  PrimaryCPICH-Power      OPTIONAL,
    cellIndividualOffset                CellIndividualOffset    OPTIONAL,
    txDiversityIndicator                TxDiversityIndicator    OPTIONAL,
    sTTD-SupportIndicator               STTD-SupportIndicator   OPTIONAL,
    closedLoopMode1-SupportIndicator    ClosedLoopMode1-SupportIndicator    OPTIONAL,
    closedLoopMode2-SupportIndicator    ClosedLoopMode2-SupportIndicator    OPTIONAL,
    iE-Extensions                       ProtocolExtensionContainer { { Per-FDD-Cell-InformationItem-RL-SetupRsp-ExtIEs} } OPTIONAL,
    ...
}

Per-FDD-Cell-InformationItem-RL-SetupRsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Per-TDD-Cell-InformationList-RL-SetupRsp ::= SEQUENCE ( SIZE (1..maxNrOfTDDNeighboursPerRNC,...)) OF Per-TDD-Cell-InformationItem-RL-SetupRsp

Per-TDD-Cell-InformationItem-RL-SetupRsp ::= SEQUENCE {
    c-ID                            C-ID,
    uARFCNforNt                     UARFCN,
```

```
    frameOffset                     FrameOffset         OPTIONAL,
    cellParameterID                 CellParameterID,
    syncCase                        SyncCase,
    timeSlot                        TimeSlot            OPTIONAL
    -- This IE is present only if Sync Case = Case1 -- ,
    sCH-TimeSlot                    SCH-TimeSlot            OPTIONAL
    -- This IE is present only if Sync Case = Case2 -- ,
    cellIndividualOffset            CellIndividualOffset    OPTIONAL,
    dPCHConstantValue               DPCHConstantValue   OPTIONAL,
    pCCPCH-Power                    PCCPCH-Power            OPTIONAL,
    iE-Extensions                   ProtocolExtensionContainer { { Per-TDD-Cell-InformationItem-RL-SetupRsp-ExtIEs} } OPTIONAL,
    ...
}

Per-TDD-Cell-InformationItem-RL-SetupRsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

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

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

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

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

RL-InformationResponse-RL-SetupRspTDD ::= SEQUENCE {
    rL-ID                       RL-ID,
    sAI                         SAI,
    ul-InterferencePerTimeslot  UL-InterferenceList-RL-SetupRspTDD,
    maxUL-SIR                   UL-SIR,
    minUL-SIR                   UL-SIR,
```

```
    maximumAllowedULTxPower     MaximumAllowedULTxPower,
    ul-CCTrCHInformation                UL-CCTrCHInformationList-RL-SetupRspTDD,
    dl-CCTrCHInformation                DL-CCTrCHInformationList-RL-SetupRspTDD,
    dCH-InformationResponse             DCH-InformationResponseList-RL-SetupRspTDD,
    neighbouring-CellInformationList            Neighbouring-CellInformationList-RL-SetupRsp OPTIONAL,
    -- note: refer to "Neighbouring-CellInformationList-RL-SetupRsp" in the "RL Seup Response FDD
    iE-Extensions                   ProtocolExtensionContainer { {RL-InformationResponse-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
    ...
}

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

UL-InterferenceList-RL-SetupRspTDD ::= SEQUENCE (SIZE (1..maxNrOfULTs)) OF UL-InterferenceItem-RL-SetupRspTDD

UL-InterferenceItem-RL-SetupRspTDD ::= SEQUENCE {
    timeSlot                    TimeSlot,
    ul-InterferenceLevel        UL-InterferenceLevel,
    iE-Extensions                   ProtocolExtensionContainer { { UL-InterferenceItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
    ...
}

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

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

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

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

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

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

UL-DPCH-InformationList-RL-SetupRspTDD ::= DPCH-IE-ContainerList { {UL-DPCH-InformationListIEs-RL-SetupRspTDD} }

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

```
    ...
}

UL-DPCH-InformationItem-RL-SetupRspTDD ::= SEQUENCE {
    dPCH-ID                     DPCH-ID,
    tDD-ChannelisationCode              TDD-ChannelisationCode,
    burstType                   BurstType,
    midambleShift                   MidambleShift,
    timeSlot                    TimeSlot,
    tDD-PhysicalChannelOffset           TDD-PhysicalChannelOffset,
    repetitionPeriod                RepetitionPeriod,
    repetitionLength                RepetitionLength,
    tFCI-Presence                   TFCI-Presence,
    iE-Extensions                   ProtocolExtensionContainer { {UL-DPCH-InformationItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
    ...
}

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

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

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

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

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

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

DL-DPCH-InformationList-RL-SetupRspTDD ::= DPCH-IE-ContainerList { {DL-DPCH-InformationListIEs-RL-SetupRspTDD} }

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

DL-DPCH-InformationItem-RL-SetupRspTDD ::= SEQUENCE {
    dPCH-ID                     DPCH-ID,
    tDD-ChannelisationCode              TDD-ChannelisationCode,
```

```
    burstType                   BurstType,
    midambleShift                   MidambleShift,
    timeSlot                    TimeSlot,
    tDD-PhysicalChannelOffset           TDD-PhysicalChannelOffset,
    repetitionPeriod                RepetitionPeriod,
    repetitionLength                RepetitionLength,
    tFCI-Presence                   TFCI-Presence,
    iE-Extensions                   ProtocolExtensionContainer { {DL-DPCH-InformationItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
    ...
}

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

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

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

DCH-InformationResponseListIE-RL-SetupRspTDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-InformationResponseItem-RL-SetupRspTDD

DCH-InformationResponseItem-RL-SetupRspTDD ::= SEQUENCE {
    dCH-ID                      DCH-ID,
    bindingID                   BindingID,
    transportLayerAddress               TransportLayerAddress,
    iE-Extensions                   ProtocolExtensionContainer { {DCH-InformationResponseItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
    ...
}

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

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

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

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

```
}

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

UnsuccessfulRL-InformationResponseList-RL-SetupFailureFDD ::= RL-IE-ContainerList1-1 { {UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD-IEs} }

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

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

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

SuccessfulRL-InformationResponseList-RL-SetupFailureFDD ::= RL-IE-ContainerList0-1 { {SuccessfulRL-InformationResponse-RL-SetupFailureFDD-IEs} }

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

SuccessfulRL-InformationResponse-RL-SetupFailureFDD ::= SEQUENCE {
    rL-ID                               RL-ID,
    rL-Set-ID                           RL-Set-ID,
    sAI                                 SAI,
    ul-InterferenceLevel                UL-InterferenceLevel,
    dl-CodeInformation                  DL-CodeInformationList-RL-SetupFailureFDD,
```

```
    diversityIndication                 DiversityIndication-RL-SetupFailureFDD,
    sSDT-SupportIndicator               SSDT-SupportIndicator,
    maxUL-SIR                           UL-SIR,
    minUL-SIR                           UL-SIR,
    maximumAllowedULTxPower             MaximumAllowedULTxPower,
    neighbouring-CellInformationList    Neighbouring-CellInformationList-RL-SetupFailureFDD OPTIONAL,
    iE-Extensions                       ProtocolExtensionContainer { {SuccessfulRL-InformationResponse-RL-SetupFailureFDD-ExtIEs} } OPTIONAL,
    ...
}

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


DL-CodeInformationList-RL-SetupFailureFDD ::= ProtocolIE-Container {{ DL-CodeInformationListIEs-RL-SetupFailureFDD }}

DL-CodeInformationListIEs-RL-SetupFailureFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-CodeInformationListIE-RL-SetupFailureFDD   CRITICALITY ignore    TYPE DL-CodeInformationListIE-RL-SetupFailureFDD     PRESENCE mandatory
},
    ...
}

DL-CodeInformationListIE-RL-SetupFailureFDD ::= SEQUENCE (SIZE (1..maxNrOfDL-Codes)) OF DL-CodeInformationItem-RL-SetupFailureFDD

DL-CodeInformationItem-RL-SetupFailureFDD ::= SEQUENCE {
    dl-ScramblingCode               DL-ScramblingCode,
    fDD-DL-ChannelisationCodeNumber         FDD-DL-ChannelisationCodeNumber,
    iE-Extensions                   ProtocolExtensionContainer { {DL-CodeInformationItem-RL-SetupFailureFDD-ExtIEs} } OPTIONAL,
    ...
}

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

DiversityIndication-RL-SetupFailureFDD ::= ProtocolIE-Container {{ DiversityIndicationIE-RL-SetupFailureFDD }}

DiversityIndicationIE-RL-SetupFailureFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DiversityIndicationItem-RL-SetupFailureFDD   CRITICALITY ignore TYPE     DiversityIndicationItem-RL-SetupFailureFDD  PRESENCE mandatory },
    ...
}

DiversityIndicationItem-RL-SetupFailureFDD ::= CHOICE {
    combining                       Combining-RL-SetupFailureFDD,
    nonCombiningOrIEnotPresent      NonCombiningOrIEnotPresen-RL-SetupFailureFDD,
    ...
}

Combining-RL-SetupFailureFDD ::= ProtocolIE-Container {{ CombiningIE-RL-SetupFailureFDD }}
```

```
CombiningIE-RL-SetupFailureFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-CombiningItem-RL-SetupFailureFDD   CRITICALITY ignore   TYPE CombiningItem-RL-SetupFailureFDD  PRESENCE mandatory },
    ...
}

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

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

NonCombiningOrIEnotPresen-RL-SetupFailureFDD ::= ProtocolIE-Container {{ NonCombiningOrIEnotPresenIE-RL-SetupFailureFDD }}

NonCombiningOrIEnotPresenIE-RL-SetupFailureFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-NonCombiningOrIEnotPresenItem-RL-SetupFailureFDD   CRITICALITY ignore   TYPE    NonCombiningOrIEnotPresenItem-RL-SetupFailureFDD  PRESENCE
mandatory },
    ...
}

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

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

DCH-InformationResponseList-RL-SetupFailureFDD ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-InformationResponseItem-RL-SetupFailureFDD

DCH-InformationResponseItem-RL-SetupFailureFDD ::= SEQUENCE {
    dCH-ID                      DCH-ID,
    bindingID                   BindingID,
    transportLayerAddress               TransportLayerAddress,
    iE-Extensions                   ProtocolExtensionContainer { {DCH-InformationResponseItem-RL-SetupFailureFDD-ExtIEs} } OPTIONAL,
    ...
}

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

Neighbouring-CellInformationList-RL-SetupFailureFDD ::= SEQUENCE (SIZE (0..maxNrOfNeighbouringRNCs)) OF ProtocolIE-Container {{ Neighbouring-
CellInformationItemIE-RL-SetupFailureFDD }}

Neighbouring-CellInformationItemIE-RL-SetupFailureFDD RNSAP-PROTOCOL-IES ::= {
```

```
    { ID id-Neighbouring-CellInformationItem-RL-SetupFailureFDD   CRITICALITY ignore    TYPE    Neighbouring-CellInformationItem-RL-SetupFailureFDD
PRESENCE    mandatory },
    ...
}

Neighbouring-CellInformationItem-RL-SetupFailureFDD ::= SEQUENCE {
    rNC-ID                              RNC-ID,
    cN-PS-DomainIdentifier              CN-PS-DomainIdentifier      OPTIONAL,
    cN-CS-DomainIdentifier              CN-CS-DomainIdentifier      OPTIONAL,
    per-FDD-Cell-InformationList        Per-FDD-Cell-InformationList-RL-SetupFailureFDD OPTIONAL,
    per-TDD-Cell-InformationList        Per-TDD-Cell-InformationList-RL-SetupFailureFDD OPTIONAL,
    iE-Extensions                       ProtocolExtensionContainer { {Neighbouring-CellInformationItem-RL-SetupFailureFDD-ExtIEs} } OPTIONAL,
    ...
}

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

Per-FDD-Cell-InformationList-RL-SetupFailureFDD ::= SEQUENCE ( SIZE (1..maxNrOfFDDNeighboursPerRNC,...)) OF Per-FDD-Cell-InformationItem-RL-
SetupFailureFDD

Per-FDD-Cell-InformationItem-RL-SetupFailureFDD ::= SEQUENCE {
    c-ID                                C-ID,
    uARFCNforNu                         UARFCN,
    uARFCNforNd                         UARFCN,
    frameOffset                         FrameOffset         OPTIONAL,
    primaryScramblingCode               PrimaryScramblingCode,
    primaryCPICH-Power                  PrimaryCPICH-Power      OPTIONAL,
    cellIndividualOffset                CellIndividualOffset    OPTIONAL,
    txDiversityIndicator                TxDiversityIndicator    OPTIONAL,
    sTTD-SupportIndicator               STTD-SupportIndicator   OPTIONAL,
    closedLoopMode1-SupportIndicator    ClosedLoopMode1-SupportIndicator    OPTIONAL,
    closedLoopMode2-SupportIndicator    ClosedLoopMode2-SupportIndicator    OPTIONAL,
    iE-Extensions                       ProtocolExtensionContainer { { Per-FDD-Cell-InformationItem-RL-SetupFailureFDD-ExtIEs} } OPTIONAL,
    ...
}

Per-FDD-Cell-InformationItem-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Per-TDD-Cell-InformationList-RL-SetupFailureFDD ::= SEQUENCE ( SIZE (1..maxNrOfTDDNeighboursPerRNC,...)) OF Per-TDD-Cell-InformationItem-RL-
SetupFailureFDD

Per-TDD-Cell-InformationItem-RL-SetupFailureFDD ::= SEQUENCE {
    c-ID                            C-ID,
    uARFCNforNt                     UARFCN,
    frameOffset                     FrameOffset         OPTIONAL,
    cellParameterID                 CellParameterID,
    syncCase                        SyncCase,
```

```
    timeSlot                        TimeSlot            OPTIONAL
    -- This IE is present only if Sync Case = Case1 -- ,
    sCH-TimeSlot                    SCH-TimeSlot            OPTIONAL
    -- This IE is present only if Sync Case = Case2 -- ,
    cellIndividualOffset            CellIndividualOffset    OPTIONAL,
    dPCHConstantValue               DPCHConstantValue   OPTIONAL,
    pCCPCH-Power                    PCCPCH-Power,
    iE-Extensions                   ProtocolExtensionContainer { { Per-TDD-Cell-InformationItem-RL-SetupFailureFDD-ExtIEs} } OPTIONAL,
    ...
}

Per-TDD-Cell-InformationItem-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

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

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

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

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

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

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

RadioLinkSetupFailureTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
```

```
    ...
}

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

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

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

RL-InformationList-RL-AdditionRqstFDD           ::= RL-IE-ContainerList1-1 { {RL-Information-RL-AdditionRqstFDD-IEs} }

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

RL-Information-RL-AdditionRqstFDD ::= SEQUENCE {
    rL-ID                           RL-ID,
    c-ID                            C-ID,
    frameOffset                     FrameOffset,
    chipOffset                      ChipOffset,
    diversityControlField           DiversityControlField,
    primaryCPICH-EcNo               PrimaryCPICH-EcNo       OPTIONAL,
    sSDT-CellID                     SSDT-CellID         OPTIONAL,
    transmitDiversityIndicator      TransmitDiversityIndicator      OPTIONAL,
    -- This IE is present unless Diversity Mode IE in UL DPCH Information group is "none"
    iE-Extensions                   ProtocolExtensionContainer { {RL-Information-RL-AdditionRqstFDD-ExtIEs} } OPTIONAL,
    ...
}

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

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

-- **************************************************************
```

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

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

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

RL-Information-RL-AdditionRqstTDD ::= SEQUENCE {
    rL-ID                           RL-ID,
    c-ID                            C-ID,
    frameOffset                     FrameOffset,
    diversityControlField           DiversityControlField,
    primaryCCPCH-RSCP               PrimaryCCPCH-RSCP       OPTIONAL,
    iE-Extensions                   ProtocolExtensionContainer { {RL-Information-RL-AdditionRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

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

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

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

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

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

```
}

RL-InformationResponseList-RL-AdditionRspFDD       ::= RL-IE-ContainerList1-1 { {RL-InformationResponseItemIEs-RL-AdditionRspFDD} }

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

RL-InformationResponseItem-RL-AdditionRspFDD ::= SEQUENCE {
    rL-ID                           RL-ID,
    rL-Set-ID                       RL-Set-ID,
    sAI                             SAI,
    ul-InterferenceLevel            UL-InterferenceLevel,
    secondary-CCPCH-Info            Secondary-CCPCH-Info-RL-AdditionRspFDD      OPTIONAL,
    dl-CodeInformation              DL-CodeInformationList-RL-AdditionRspFDD,
    diversityIndication             DiversityIndication-RL-AdditionRspFDD,
    sSDT-SupportIndicator           SSDT-SupportIndicator,
    minUL-SIR                       UL-SIR,
    maxUL-SIR                       UL-SIR,
    maximumAllowedULTxPower         MaximumAllowedULTxPower,
    neighbouring-CellInformation    Neighbouring-CellInformationList-RL-SetupRsp    OPTIONAL,
    iE-Extensions                   ProtocolExtensionContainer { {RL-InformationResponseItem-RL-AdditionRspFDD-ExtIEs} } OPTIONAL,
    ...
}

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

Secondary-CCPCH-Info-RL-AdditionRspFDD ::= SEQUENCE {
    fDD-S-CCPCH-Offset                      FDD-S-CCPCH-Offset,
    dl-ScramblingCode                       DL-ScramblingCode,
    fDD-DL-ChannelisationCodeNumber         FDD-DL-ChannelisationCodeNumber,
    dl-TFCS                                 TFCS,
    secondaryCCPCH-SlotFormat               SecondaryCCPCH-SlotFormat,
    tFCI-Presence                           TFCI-Presence   OPTIONAL,
    -- This IE is present only if the Secondary CCPCH Slot Format is equal to any of the value 8 to 17
    multiplexingPosition                    MultiplexingPosition,
    sTTD-Indicator                          STTD-Indicator,
    fACH-PCH-InformationList                FACH-PCH-InformationList-RL-AdditionRspFDD,
    schedulingInformation                   SchedulingInformation-RL-AdditionRspFDD,
    iE-Extensions                           ProtocolExtensionContainer { { Secondary-CCPCH-Info-RL-AdditionRspFDD-ExtIEs} } OPTIONAL,
    ...
}

Secondary-CCPCH-Info-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

```
FACH-PCH-InformationList-RL-AdditionRspFDD ::= SEQUENCE (SIZE(1..maxFACHCountPlus1)) OF FACH-PCH-InformationItem-RL-AdditionRspFDD

FACH-PCH-InformationItem-RL-AdditionRspFDD ::= SEQUENCE {
    transportFormatSet              TransportFormatSet,
    iE-Extensions                   ProtocolExtensionContainer { { FACH-PCH-InformationItem-RL-AdditionRspFDD-ExtIEs} } OPTIONAL,
    ...
}

FACH-PCH-InformationItem-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

SchedulingInformation-RL-AdditionRspFDD ::= SEQUENCE {
    iB-SG-Rep                       IB-SG-REP,
    segmentInformationList          SegmentInformationList-RL-AdditionRspFDD,
    iE-Extensions                   ProtocolExtensionContainer { { SchedulingInformation-RL-AdditionRspFDD-ExtIEs } } OPTIONAL,
        ...
}

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

SegmentInformationList-RL-AdditionRspFDD ::= SEQUENCE (SIZE(1..maxIBSEG)) OF SegmentInformationItem-RL-AdditionRspFDD

SegmentInformationItem-RL-AdditionRspFDD ::= SEQUENCE {
    iB-SG-POS                       IB-SG-POS,
    iE-Extensions                   ProtocolExtensionContainer { {  SegmentInformationItem-RL-AdditionRspFDD-ExtIEs } } OPTIONAL,
    ...
}

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

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

DL-CodeInformationListIEs-RL-AdditionRspFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-CodeInformationListIE-RL-AdditionRspFDD   CRITICALITY ignore TYPE DL-CodeInformationListIE-RL-AdditionRspFDD    PRESENCE mandatory },
    ...
}

DL-CodeInformationListIE-RL-AdditionRspFDD ::= SEQUENCE (SIZE (1..maxNrOfDL-Codes)) OF DL-CodeInformationItem-RL-AdditionRspFDD

DL-CodeInformationItem-RL-AdditionRspFDD ::= SEQUENCE {
    dl-ScramblingCode               DL-ScramblingCode,
    fDD-DL-ChannelisationCodeNumber         FDD-DL-ChannelisationCodeNumber,
    iE-Extensions                   ProtocolExtensionContainer { {DL-CodeInformationItem-RL-AdditionRspFDD-ExtIEs} } OPTIONAL,
    ...
}
```

```
DL-CodeInformationItem-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DiversityIndication-RL-AdditionRspFDD ::= ProtocolIE-Container {{ DiversityIndicationIE-RL-AdditionRspFDD }}

DiversityIndicationIE-RL-AdditionRspFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DiversityIndicationItem-RL-AdditionRspFDD   CRITICALITY ignore  TYPE     DiversityIndicationItem-RL-AdditionRspFDD  PRESENCE mandatory },
    ...
}

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

Combining-RL-AdditionRspFDD ::= ProtocolIE-Container {{ CombiningIE-RL-AdditionRspFDD }}

CombiningIE-RL-AdditionRspFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-CombiningItem-RL-AdditionRspFDD   CRITICALITY ignore    TYPE CombiningItem-RL-AdditionRspFDD  PRESENCE mandatory },
    ...
}

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

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

NonCombining-RL-AdditionRspFDD ::= ProtocolIE-Container {{ NonCombiningIE-RL-AdditionRspFDD }}

NonCombiningIE-RL-AdditionRspFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-NonCombiningItem-RL-AdditionRspFDD   CRITICALITY ignore TYPE NonCombiningItem-RL-AdditionRspFDD  PRESENCE mandatory },
    ...
}

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

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

```
DCH-InformationResponseList-RL-AdditionRspFDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-InformationResponseItem-RL-AdditionRspFDD

DCH-InformationResponseItem-RL-AdditionRspFDD ::= SEQUENCE {
    dCH-ID                      DCH-ID,
    bindingID                   BindingID,
    transportLayerAddress               TransportLayerAddress,
    iE-Extensions                   ProtocolExtensionContainer { {DCH-InformationResponseItem-RL-AdditionRspFDD-ExtIEs} } OPTIONAL,
    ...
}

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

Neighbouring-CellInformationList-RL-AdditionRsp ::= SEQUENCE (SIZE (0..maxNrOfNeighbouringRNCs)) OF Neighbouring-CellInformationItem-RL-AdditionRsp

Neighbouring-CellInformationItem-RL-AdditionRsp ::= SEQUENCE {
    rNC-ID                                  RNC-ID,
    cN-PS-DomainIdentifier                  CN-PS-DomainIdentifier      OPTIONAL,
    cN-CS-DomainIdentifier                  CN-CS-DomainIdentifier      OPTIONAL,
    per-FDD-Cell-InformationList            Per-FDD-Cell-InformationList-RL-AdditionRsp OPTIONAL,
    per-TDD-Cell-InformationList            Per-TDD-Cell-InformationList-RL-AdditionRsp OPTIONAL,
    iE-Extensions                           ProtocolExtensionContainer { {Neighbouring-CellInformationItem-RL-AdditionRsp-ExtIEs} } OPTIONAL,
    ...
}

Neighbouring-CellInformationItem-RL-AdditionRsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Per-FDD-Cell-InformationList-RL-AdditionRsp ::= SEQUENCE ( SIZE (1..maxNrOfFDDNeighboursPerRNC,…)) OF Per-FDD-Cell-InformationItem-RL-AdditionRsp

Per-FDD-Cell-InformationItem-RL-AdditionRsp ::= SEQUENCE {
    c-ID                                C-ID,
    uARFCNforNu                         UARFCN,
    uARFCNforNd                         UARFCN,
    frameOffset                         FrameOffset         OPTIONAL,
    primaryScramblingCode               PrimaryScramblingCode,
    primaryCPICH-Power                  PrimaryCPICH-Power          OPTIONAL,
    cellIndividualOffset                CellIndividualOffset        OPTIONAL,
    txDiversityIndicator                TxDiversityIndicator        OPTIONAL,
    sTTD-SupportIndicator               STTD-SupportIndicator       OPTIONAL,
    closedLoopMode1-SupportIndicator    ClosedLoopMode1-SupportIndicator    OPTIONAL,
    closedLoopMode2-SupportIndicator    ClosedLoopMode2-SupportIndicator    OPTIONAL,
    iE-Extensions                       ProtocolExtensionContainer { { Per-FDD-Cell-InformationItem-RL-AdditionRsp-ExtIEs} } OPTIONAL,
    ...
}

Per-FDD-Cell-InformationItem-RL-AdditionRsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

```
Per-TDD-Cell-InformationList-RL-AdditionRsp ::= SEQUENCE ( SIZE (1..maxNrOfTDDNeighboursPerRNC,…)) OF Per-TDD-Cell-InformationItem-RL-AdditionRsp

Per-TDD-Cell-InformationItem-RL-AdditionRsp ::= SEQUENCE {
    c-ID                            C-ID,
    uARFCNforNt                     UARFCN,
    frameOffset                     FrameOffset         OPTIONAL,
    cellParameterID                 CellParameterID,
    syncCase                        SyncCase,
    timeSlot                        TimeSlot            OPTIONAL
    -- This IE is present only if Sync Case = Case1 -- ,
    sCH-TimeSlot                    SCH-TimeSlot            OPTIONAL
    -- This IE is present only if Sync Case = Case2 -- ,
    cellIndividualOffset            CellIndividualOffset    OPTIONAL,
    dPCHConstantValue               DPCHConstantValue   OPTIONAL,
    pCCPCH-Power                    PCCPCH-Power,
    iE-Extensions                   ProtocolExtensionContainer { { Per-TDD-Cell-InformationItem-RL-AdditionRsp-ExtIEs} } OPTIONAL,
    ...
}

Per-TDD-Cell-InformationItem-RL-AdditionRsp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

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

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

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

RadioLinkAdditionResponseTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationResponse-RL-AdditionRspTDD
                        CRITICALITY ignore  TYPE RL-InformationResponse-RL-AdditionRspTDD   PRESENCE mandatory } |
    { ID id-CriticalityDiagnostics          CRITICALITY ignore  TYPE CriticalityDiagnostics      PRESENCE optional },
    ...
}

RL-InformationResponse-RL-AdditionRspTDD ::= SEQUENCE {
    rL-ID                               RL-ID,
    sAI                                 SAI,
    ul-InteferencePerTimeslot           UL-InterferenceList-RL-AdditionRspTDD,
```

```
    ul-CCTrCHInformation                UL-CCTrCHInformationList-RL-AdditionRspTDD,
    dl-CCTrCHInformation                DL-CCTrCHInformationList-RL-AdditionRspTDD,
    diversityIndication                 DiversityIndication-RL-AdditionRspTDD,
    minUL-SIR                           UL-SIR,
    maxUL-SIR                           UL-SIR,
    maximumAllowedULTxPower             MaximumAllowedULTxPower,
    neighbouring-CellInformationList    Neighbouring-CellInformationList-RL-AdditionRspTDD  OPTIONAL,
    iE-Extensions                       ProtocolExtensionContainer { {RL-InformationResponse-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    ...
}

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

UL-InterferenceList-RL-AdditionRspTDD ::= SEQUENCE (SIZE (1..maxNrOfULTs)) OF UL-InterferenceItem-RL-AdditionRspTDD

UL-InterferenceItem-RL-AdditionRspTDD ::= SEQUENCE {
    timeSlot                    TimeSlot,
    ul-InterferenceLevel        UL-InterferenceLevel,
    iE-Extensions               ProtocolExtensionContainer { { UL-InterferenceItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    ...
}

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

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

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

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

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

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

UL-DPCH-InformationList-RL-AdditionRspTDD ::= DPCH-IE-ContainerList { {UL-DPCH-InformationListIEs-RL-AdditionRspTDD} }
```

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

UL-DPCH-InformationItem-RL-AdditionRspTDD ::= SEQUENCE {
    dPCH-ID                         DPCH-ID,
    tDD-ChannelisationCode          TDD-ChannelisationCode,
    burstType                       BurstType,
    midambleShift                   MidambleShift,
    timeSlot                        TimeSlot,
    tDD-PhysicalChannelOffset       TDD-PhysicalChannelOffset,
    repetitionPeriod                RepetitionPeriod,
    repetitionLength                RepetitionLength,
    tFCI-Presence                   TFCI-Presence,
    iE-Extensions                   ProtocolExtensionContainer { {UL-DPCH-InformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    ...
}

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

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

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

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

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

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

DL-DPCH-InformationList-RL-AdditionRspTDD ::= DPCH-IE-ContainerList { {DL-DPCH-InformationListIEs-RL-AdditionRspTDD} }

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

```
DL-DPCH-InformationItem-RL-AdditionRspTDD ::= SEQUENCE {
    dPCH-ID                         DPCH-ID,
    tDD-ChannelisationCode          TDD-ChannelisationCode,
    burstType                       BurstType,
    midambleShift                   MidambleShift,
    timeSlot                        TimeSlot,
    tDD-PhysicalChannelOffset       TDD-PhysicalChannelOffset,
    repetitionPeriod                RepetitionPeriod,
    repetitionLength                RepetitionLength,
    tFCI-Presence                   TFCI-Presence,
    iE-Extensions                   ProtocolExtensionContainer { {DL-DPCH-InformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    ...
}

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

DiversityIndication-RL-AdditionRspTDD ::= ProtocolIE-Container {{DiversityIndicationIE-RL-AdditionRspTDD}}

DiversityIndicationIE-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DiversityIndicationItem-RL-AdditionRspTDD   CRITICALITY ignore  TYPE DiversityIndicationItem-RL-AdditionRspTDD  PRESENCE mandatory },
    ...
}

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

Combining-RL-AdditionRspTDD ::=     ProtocolIE-Container {{CombiningIE-RL-AdditionRspTDD}}

CombiningIE-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-CombiningItem-RL-AdditionRspTDD   CRITICALITY ignore    TYPE CombiningItem-RL-AdditionRspTDD  PRESENCE mandatory },
    ...
}

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

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

NonCombining-RL-AdditionRspTDD  ::=     ProtocolIE-Container {{NonCombiningIE-RL-AdditionRspTDD}}

NonCombiningIE-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
```

```
    { ID id-NonCombiningItem-RL-AdditionRspTDD   CRITICALITY ignore TYPE NonCombiningItem-RL-AdditionRspTDD  PRESENCE mandatory },
    ...
}
NonCombiningItem-RL-AdditionRspTDD ::= SEQUENCE {
    dCH-InformationResponse-RL-AdditionRspFDD       DCH-InformationResponseList-RL-AdditionRspFDD,
    iE-Extensions                   ProtocolExtensionContainer { { NonCombiningItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    ...
}

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

DCH-InformationResponseList-RL-AdditionRspTDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-InformationResponseItem-RL-AdditionRspTDD

DCH-InformationResponseItem-RL-AdditionRspTDD ::= SEQUENCE {
    dCH-ID                          DCH-ID,
    bindingID                       BindingID,
    transportLayerAddress           TransportLayerAddress,
    iE-Extensions                   ProtocolExtensionContainer { {DCH-InformationResponseItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    ...
}

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

Neighbouring-CellInformationList-RL-AdditionRspTDD ::= SEQUENCE (SIZE (0..maxNrOfNeighbouringRNCs)) OF Neighbouring-CellInformationItem-RL-
AdditionRspTDD

Neighbouring-CellInformationItem-RL-AdditionRspTDD ::= SEQUENCE {
    rNC-ID                                  RNC-ID,
    cN-PS-DomainIdentifier                  CN-PS-DomainIdentifier      OPTIONAL,
    cN-CS-DomainIdentifier                  CN-CS-DomainIdentifier      OPTIONAL,
    per-FDD-Cell-InformationList            Per-FDD-Cell-InformationList-RL-AdditionRspTDD  OPTIONAL,
    per-TDD-Cell-InformationList            Per-TDD-Cell-InformationList-RL-AdditionRspTDD  OPTIONAL,
    iE-Extensions                           ProtocolExtensionContainer { {Neighbouring-CellInformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    ...
}

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

Per-FDD-Cell-InformationList-RL-AdditionRspTDD ::= SEQUENCE ( SIZE (1..maxNrOfFDDNeighboursPerRNC,...)) OF Per-FDD-Cell-InformationItem-RL-AdditionRspTDD

Per-FDD-Cell-InformationItem-RL-AdditionRspTDD ::= SEQUENCE {
    c-ID                                C-ID,
    uARFCNforNu                         UARFCN,
    uARFCNforNd                         UARFCN,
    frameOffset                         FrameOffset         OPTIONAL,
```

```
    primaryScramblingCode               PrimaryScramblingCode,
    primaryCPICH-Power                  PrimaryCPICH-Power      OPTIONAL,
    cellIndividualOffset                CellIndividualOffset    OPTIONAL,
    txDiversityIndicator                TxDiversityIndicator    OPTIONAL,
    sTTD-SupportIndicator               STTD-SupportIndicator   OPTIONAL,
    closedLoopMode1-SupportIndicator    ClosedLoopMode1-SupportIndicator    OPTIONAL,
    closedLoopMode2-SupportIndicator    ClosedLoopMode2-SupportIndicator    OPTIONAL,
    iE-Extensions                       ProtocolExtensionContainer { { Per-FDD-Cell-InformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    ...
}

Per-FDD-Cell-InformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Per-TDD-Cell-InformationList-RL-AdditionRspTDD ::= SEQUENCE ( SIZE (1..maxNrOfTDDNeighboursPerRNC,...)) OF Per-TDD-Cell-InformationItem-RL-AdditionRspTDD

Per-TDD-Cell-InformationItem-RL-AdditionRspTDD ::= SEQUENCE {
    c-ID                            C-ID,
    uARFCNforNt                     UARFCN,
    frameOffset                     FrameOffset         OPTIONAL,
    cellParameterID                 CellParameterID,
    syncCase                        SyncCase,
    timeSlot                        TimeSlot            OPTIONAL
    -- This IE is present only if Sync Case = Case1 -- ,
    sCH-TimeSlot                    SCH-TimeSlot            OPTIONAL
    -- This IE is present only if Sync Case = Case2 -- ,
    cellIndividualOffset            CellIndividualOffset    OPTIONAL,
    dPCHConstantValue               DPCHConstantValue   OPTIONAL,
    pCCPCH-Power                    PCCPCH-Power,
    iE-Extensions                   ProtocolExtensionContainer { { Per-TDD-Cell-InformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    ...
}

Per-TDD-Cell-InformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

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

-- **************************************************************
--
-- RADIO LINK ADDITION FAILURE FDD
--
-- **************************************************************

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

```
    ...
}

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

UnsuccessfulRL-InformationResponseList-RL-AdditionFailureFDD ::= RL-IE-ContainerList1-1 { {UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD-
IEs} }

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

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

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

SuccessfulRL-InformationResponseList-RL-AdditionFailureFDD ::= RL-IE-ContainerList0-2 { {SuccessfulRL-InformationResponse-RL-AdditionFailureFDD-IEs} }

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

SuccessfulRL-InformationResponse-RL-AdditionFailureFDD ::= SEQUENCE {
    rL-ID                               RL-ID,
    rL-Set-ID                           RL-Set-ID,
    sAI                                 SAI,
    ul-InterferenceLevel                UL-InterferenceLevel,
    dl-CodeInformation                  DL-CodeInformationList-RL-AdditionFailureFDD,
    diversityIndication                 DiversityIndication-RL-AdditionFailureFDD,
    sSDT-SupportIndicator               SSDT-SupportIndicator,
    minUL-SIR                           UL-SIR,
    maxUL-SIR                           UL-SIR,
    maximumAllowedULTxPower             MaximumAllowedULTxPower,
```

```
    neighbouring-CellInformationList    Neighbouring-CellInformationList-RL-AdditionFailureFDD OPTIONAL,
    iE-Extensions                       ProtocolExtensionContainer { {SuccessfulRL-InformationResponse-RL-AdditionFailureFDD-ExtIEs} } OPTIONAL,
    ...
}

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

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

DL-CodeInformationListIEs-RL-AdditionFailureFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-CodeInformationListIE-RL-AdditionFailureFDD   CRITICALITY ignore TYPE DL-CodeInformationListIE-RL-AdditionFailureFDD     PRESENCE
mandatory },
    ...
}

DL-CodeInformationListIE-RL-AdditionFailureFDD ::= SEQUENCE (SIZE (1..maxNrOfDL-Codes)) OF DL-CodeInformationItem-RL-AdditionFailureFDD

DL-CodeInformationItem-RL-AdditionFailureFDD ::= SEQUENCE {
    dl-ScramblingCode                   DL-ScramblingCode,
    fdd-DL-ChannelisationCodeNumber     FDD-DL-ChannelisationCodeNumber,
    iE-Extensions                       ProtocolExtensionContainer { {DL-CodeInformationItem-RL-AdditionFailureFDD-ExtIEs} } OPTIONAL,
    ...
}

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

DiversityIndication-RL-AdditionFailureFDD ::= ProtocolIE-Container {{ DiversityIndicationIE-RL-AdditionFailureFDD }}

DiversityIndicationIE-RL-AdditionFailureFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DiversityIndicationItem-RL-AdditionFailureFDD   CRITICALITY ignore  TYPE     DiversityIndicationItem-RL-AdditionFailureFDD  PRESENCE
mandatory },
    ...
}

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

Combining-RL-AdditionFailureFDD ::= ProtocolIE-Container {{ CombiningIE-RL-AdditionFailureFDD }}

CombiningIE-RL-AdditionFailureFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-CombiningItem-RL-AdditionFailureFDD   CRITICALITY ignore    TYPE CombiningItem-RL-AdditionFailureFDD  PRESENCE mandatory },
    ...
}
```

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

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

NonCombining-RL-AdditionFailureFDD ::= ProtocolIE-Container {{ NonCombiningIE-RL-AdditionFailureFDD }}

NonCombiningIE-RL-AdditionFailureFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-NonCombiningItem-RL-AdditionFailureFDD   CRITICALITY ignore TYPE NonCombiningItem-RL-AdditionFailureFDD  PRESENCE mandatory },
    ...
}

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

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

DCH-InformationResponseList-RL-AdditionFailureFDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-InformationResponseItem-RL-AdditionFailureFDD

DCH-InformationResponseItem-RL-AdditionFailureFDD ::= SEQUENCE {
    dCH-ID                      DCH-ID,
    bindingID                   BindingID,
    transportLayerAddress               TransportLayerAddress,
    iE-Extensions                   ProtocolExtensionContainer { {DCH-InformationResponseItem-RL-AdditionFailureFDD-ExtIEs} } OPTIONAL,
    ...
}

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

Neighbouring-CellInformationList-RL-AdditionFailureFDD ::= SEQUENCE (SIZE (0..maxNrOfNeighbouringRNCs)) OF Neighbouring-CellInformationItem-RL-
AdditionFailureFDD

Neighbouring-CellInformationItem-RL-AdditionFailureFDD ::= SEQUENCE {
    rNC-ID                                  RNC-ID,
    cN-PS-DomainIdentifier                  CN-PS-DomainIdentifier      OPTIONAL,
    cN-CS-DomainIdentifier                  CN-CS-DomainIdentifier      OPTIONAL,
    per-FDD-Cell-InformationList            Per-FDD-Cell-InformationList-RL-AdditionFailureFDD  OPTIONAL,
    per-TDD-Cell-InformationList            Per-TDD-Cell-InformationList-RL-AdditionFailureFDD  OPTIONAL,
    iE-Extensions                           ProtocolExtensionContainer { {Neighbouring-CellInformationItem-RL-AdditionFailureFDD-ExtIEs} } OPTIONAL,
```

```
    ...
}

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

Per-FDD-Cell-InformationList-RL-AdditionFailureFDD ::= SEQUENCE ( SIZE (1..maxNrOfFDDNeighboursPerRNC,…)) OF Per-FDD-Cell-InformationItem-RL-
AdditionFailureFDD

Per-FDD-Cell-InformationItem-RL-AdditionFailureFDD ::= SEQUENCE {
    c-ID                                C-ID,
    uARFCNforNu                         UARFCN,
    uARFCNforNd                         UARFCN,
    frameOffset                         FrameOffset         OPTIONAL,
    primaryScramblingCode               PrimaryScramblingCode,
    primaryCPICH-Power                  PrimaryCPICH-Power      OPTIONAL,
    cellIndividualOffset                CellIndividualOffset    OPTIONAL,
    txDiversityIndicator                TxDiversityIndicator    OPTIONAL,
    sTTD-SupportIndicator               STTD-SupportIndicator   OPTIONAL,
    closedLoopMode1-SupportIndicator    ClosedLoopMode1-SupportIndicator    OPTIONAL,
    closedLoopMode2-SupportIndicator    ClosedLoopMode2-SupportIndicator    OPTIONAL,
    iE-Extensions                       ProtocolExtensionContainer { { Per-FDD-Cell-InformationItem-RL-AdditionFailureFDD-ExtIEs} } OPTIONAL,
    ...
}

Per-FDD-Cell-InformationItem-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Per-TDD-Cell-InformationList-RL-AdditionFailureFDD ::= SEQUENCE ( SIZE (1..maxNrOfTDDNeighboursPerRNC,…)) OF Per-TDD-Cell-InformationItem-RL-
AdditionFailureFDD

Per-TDD-Cell-InformationItem-RL-AdditionFailureFDD ::= SEQUENCE {
    c-ID                            C-ID,
    uARFCNforNt                     UARFCN,
    frameOffset                     FrameOffset         OPTIONAL,
    cellParameterID                 CellParameterID,
    syncCase                        SyncCase,
    timeSlot                        TimeSlot            OPTIONAL
    -- This IE is present only if Sync Case = Case1 -- ,
    sCH-TimeSlot                    SCH-TimeSlot            OPTIONAL
    -- This IE is present only if Sync Case = Case2 -- ,
    cellIndividualOffset            CellIndividualOffset    OPTIONAL,
    dPCHConstantValue               DPCHConstantValue   OPTIONAL,
    pCCPCH-Power                    PCCPCH-Power,
    iE-Extensions                   ProtocolExtensionContainer { { Per-TDD-Cell-InformationItem-RL-AdditionFailureFDD-ExtIEs} } OPTIONAL,
    ...
}

Per-TDD-Cell-InformationItem-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

```
    ...
}

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

<CR editor note: Rest of Clause 9.3.3 intentionally not included in this CR. This CR has no changes on rest of 9.3.3>

9.3.6 Constant Definitions

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

RNSAP-Constants -- { object identifier to be allocated }--
DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

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

id-commonTransportChannelResourcesInitiationFDD             INTEGER ::= 0
id-commonTransportChannelResourcesInitiationTDD             INTEGER ::= 1
id-commonTransportChannelResourcesRelease                   INTEGER ::= 2
id-compressedModeCancellationFDD                            INTEGER ::= 3
id-compressedModeCommitFDD                                  INTEGER ::= 4
id-compressedModePrepareFDD                                 INTEGER ::= 5
id-downlinkPowerControl                                     INTEGER ::= 6
id-downlinkSignallingTransfer                               INTEGER ::= 7
id-errorIndication                                          INTEGER ::= 8
id-measurementFailure                                       INTEGER ::= 9
id-measurementInitiation                                    INTEGER ::= 10
id-measurementReporting                                     INTEGER ::= 11
id-measurementTermination                                   INTEGER ::= 12
id-pagingRequest                                            INTEGER ::= 13
id-physicalChannelReconfiguration                           INTEGER ::= 14
id-privateMessage                                           INTEGER ::= 15
id-radioLinkAddition                                        INTEGER ::= 16
id-radioLinkDeletion                                        INTEGER ::= 17
id-radioLinkFailure                                         INTEGER ::= 18
id-radioLinkRestoration                                     INTEGER ::= 19
id-radioLinkSetup                                           INTEGER ::= 20
id-srnsRelocationCommit                                     INTEGER ::= 21
id-synchronisedRadioLinkReconfigurationCancellation         INTEGER ::= 22
id-synchronisedRadioLinkReconfigurationCommit               INTEGER ::= 23
id-synchronisedRadioLinkReconfigurationPrepare              INTEGER ::= 24
id-unSynchronisedRadioLinkReconfiguration                   INTEGER ::= 25
id-uplinkSignallingTransfer                                 INTEGER ::= 26

-- **************************************************************
--
-- Extension constants
```

```
--
-- **************************************************************

maxPrivateIEs                                   INTEGER ::= 65535
maxProtocolExtensions                           INTEGER ::= 65535
maxProtocolIEs                                  INTEGER ::= 65535

-- **************************************************************
--
-- Lists
--
-- **************************************************************

maxRateMatching                         INTEGER ::= 10
maxNrOfTFCs                             INTEGER ::= 10
maxNrOfTFs                              INTEGER ::= 10
maxNrOfCCTrCHs                          INTEGER ::= 10
maxNrOfDCHs                             INTEGER ::= 128~~10~~
maxNrOfDL-Codes                         INTEGER ::= 8~~10~~
maxNrOfDPCHs                            INTEGER ::= 10
maxNrOfErrors                           INTEGER ::= 256~~10~~
maxNrOfMACcSDU-Length                   INTEGER ::= 8~~10~~
maxNrOfRLs                              INTEGER ::= 16~~10~~
maxNrOfRLSets                           INTEGER ::= maxNrOfRLs~~10~~
maxNrOfRLs-1                            INTEGER ::= maxNrOfRLs - 1~~10~~
maxNrOfRLs-2                            INTEGER ::= maxNrOfRLs - 2~~10~~
maxNrOfSCCPCHs                          INTEGER ::= 10
maxNrOfULTs                             INTEGER ::= 15
maxNrOfCMpatterns                       INTEGER ::= 8
maxRNCinURA                             INTEGER ::= 16~~10~~
maxTTI-Count                            INTEGER ::= 10
maxCTFC-1                               INTEGER ::= 10
maxNrOfNeighbouringRNCs                 INTEGER ::= 10
maxNrOfFDDNeighboursPerRNC              INTEGER ::= 256~~10~~
maxNrOfTDDNeighboursPerRNC              INTEGER ::= 256~~10~~
maxFACHCountPlus1                       INTEGER ::= 10
maxIBSEG                                INTEGER ::= 16

-- **************************************************************

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

<CR editor note: Rest of Clause 9.3.6 intentionally not included in this CR. This CR has no changes on rest of 9.3.6>

3GPP TAG RAN WG3 Meeting #12
Seoul, Korea, 10 - 13 April, 2000

Document R3-001193
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.

25.423	CR	092	Current Version:	3.1.0

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

For submission to:	RAN#8	for approval	X	strategic		(for SMG use only)
list expected approval meeting # here ↑		for information		non-strategic		

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: R-WG3 **Date:** April 13, 2000

Subject: RNSAP range bounds, TDD part

Work item:

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

F	Correction	X
A	Corresponds to a correction in an earlier release	
B	Addition of feature	
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: Range bounds for RNSAP messages are specified in the ASN.1 code. This CR includes those range bounds which apply exclusively to TDD.

Clauses affected: 9.3.4

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: The ranges for FDD or applying to both modes may be found in another CR, in R3-001126.


help.doc

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

```
**************************************************************
--
-- Lists
--
-- **************************************************************

maxRateMatching                         INTEGER ::= 10
maxNrOfTFCs                             INTEGER ::= 10
maxNrOfTFs                              INTEGER ::= 10
maxNrOfCCTrCHs                          INTEGER ::= 16 10
maxNrOfDCHs                             INTEGER ::= 10
maxNrOfDL-Codes                         INTEGER ::= 10
maxNrOfDPCHs                            INTEGER ::= 240 10
maxNrOfErrors                           INTEGER ::= 10
maxNrOfMACcSDU-Length                   INTEGER ::= 10
maxNrOfRLs                              INTEGER ::= 10
maxNrOfRLSets                           INTEGER ::= 10
maxNrOfRLs-1                            INTEGER ::= 10
maxNrOfRLs-2                            INTEGER ::= 10
maxNrOfSCCPCHs                          INTEGER ::= 10
maxNrOfULTs                             INTEGER ::= 15
maxNrOfCMpatterns                       INTEGER ::= 8
maxRNCinURA                             INTEGER ::= 10
maxTTI-Count                            INTEGER ::= 10
maxCTFC-1                               INTEGER ::= 10
maxNrOfNeighbouringRNCs                 INTEGER ::= 10
maxNrOfFDDNeighboursPerRNC              INTEGER ::= 10
maxNrOfTDDNeighboursPerRNC              INTEGER ::= 10
maxFACHCountPlus1                       INTEGER ::= 10
maxIBSEG                                INTEGER ::= 16

-- **************************************************************

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

3GPP TSG-RAN Working Group Meeting #12
Seoul, South-Korea, 10th – 13th April 2000

Document R3-001219
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.

25.423	CR	095	Current Version:	3.1.0.

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

For submission to:	TSG RAN #8	For approval	X	Strategic		(for SMG use only)
list expected approval meeting # here ↑		for information		non-strategic		

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

Source: R-WG3 **Date:** April , 2000

Subject: Handling of Closed Loop Timing Adjustment mode over RNSAP: additional failure cause

Work item:

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

F	Correction	X	**Release:**	Phase 2	
A	Corresponds to a correction in an earlier release			Release 96	
B	Addition of feature			Release 97	
C	Functional modification of feature			Release 98	
D	Editorial modification			Release 99	X
				Release 00	

Reason for change: In line with what is proposed on NBAP, the cause value “No Closed Loop Timing Adjustment Mode configured” is defined over RNSAP.

Clauses affected: 8.3.1.3., 8.3.2.3, 9.2.1.5, 9.3.4.

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:

8.3.1.3 Unsuccessful Operation

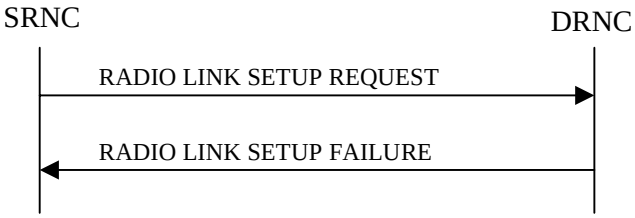

Figure 1: Radio Link Setup procedure: Unsuccessful Operation

In unsuccessful case (i.e. one or more RLs can not be setup) the RADIO LINK SETUP FAILURE message shall be sent to the SRNC, indicating the reason for failure. If some radio links were established successfully, the DRNC shall indicate this in the RADIO LINK SETUP FAILURE message in the same way as in the RADIO LINK SETUP RESPONSE message.

[FDD - If more than one DCH of a set of co-ordinated DCHs has the *QE-Selector* IE set to "selected DCH" the DRNS shall regard the Radio Link Setup procedure as failed and shall respond with a RADIO LINK SETUP FAILURE message].

[FDD – When the *Diversity Mode* IE equals "*Closedloop mode1*" or "*Closedloop mode2*" and no Closed Loop Timing Adjustment Mode is configured for a cell, establishment of the concerning RL shall fail with cause value *"No Closed Loop Timing Adjustment Mode configured"*.]

Typical cause values are:

Radio Network Layer Causes:

- [FDD - UL Scrambling Code Already in Use];
- DL Radio Resources not Available;
- UL Radio Resources not Available;
- Unknown C-ID;
- [FDD - Macrodiversity Combining not Possible];
- Requested Configuration not Supported;
- Cell not Available;
- [FDD - No Closed Loop Timing Adjustment Mode configured];
- Power Level not Supported.

Transport Layer Causes:

- Transport Link Failure

Protocol Causes:

- Transaction not Allowed

Miscellaneous Causes:

- Control Processing Overload;
- HW Failure;
- Not enough User Plane Processing Resources.

8.3.2.3 Unsuccessful Operation

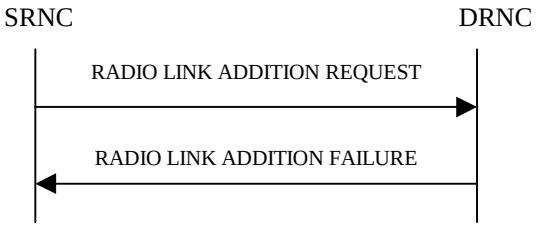

Figure 2: Radio Link Addition procedure: Unsuccessful Operation

If the establishment of at least one RL is unsuccessful, the DRNC shall send a RADIO LINK ADDITION FAILURE as response.

If some RL(s) were established successfully, the DRNC shall indicate this in the RADIO LINK ADDITION FAILURE message in the same way as in the RADIO LINK ADDITION RESPONSE message.

[FDD – When the *Diversity Mode* IE equals "*Closedloop mode1*" or "*Closedloop mode2*" and no Closed Loop Timing Adjustment Mode is configured for a cell, establishment of the concerning RL shall fail with cause value *"No Closed Loop Timing Adjustment Mode configured"*.]

Typical cause values are:

Radio Network Layer Causes:

- DL Radio Resources not Available;
- UL Radio Resources not Available;
- Unknown C-ID;
- Macrodiversity Combining not Possible;
- Cell not Available;
- [FDD - No Closed Loop Timing Adjustment Mode configured];
- Power Level not Supported.

Transport Layer Causes:

- Transport Link Failure.

Miscellaneous Causes:

- Control Processing Overload;
- HW Failure;
- Not enough User Plane Processing Resources.

9.2.1.5 Cause

The purpose of the cause information element is to indicate the reason for a particular event for the whole protocol.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
CHOICE *cause group*				
>Radio Network Layer				
>>Radio Network Layer Cause	M		ENUMERATED (Unknown C-ID, Cell not Available, Power Level not Supported, UL Scrambling Code Already in Use, DL Radio Resources not Available, UL Radio Resources not Available, Measurement not Supported For The Object, Macrodiversity Combining Not Possible, Reconfiguration not Allowed, Requested Configuration not Supported, Synchronisation Failure, No Closed Loop Timing Adjustment Mode configured, Unspecified,...)	
>Transport Layer				
>>Transport Layer Cause	M		ENUMERATED (Transport link failure, Transmission port not available, Unspecified,...)	
>Protocol				
>>Protocol Cause			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,...)	
>Misc				
>>Miscellaneous Cause	M		ENUMERATED (Control Processing Overload, Hardware Failure, O&M Intervention, Not enough User Plane Processing Resources, Unspecified,...)	

```
-- C

Cause ::= CHOICE {
    radioNetwork        CauseRadioNetwork,
    transport           CauseTransport,
    protocol            CauseProtocol,
    misc                CauseMisc,
    ...
}

CauseMisc ::= ENUMERATED {
    control-processing-overload,
    hardware-failure,
    om-intervention,
    not-enough-user-plane-processing-resources,
    unspecified,
    ...
}

CauseProtocol ::= ENUMERATED {
    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,
    ...
}

CauseRadioNetwork ::= ENUMERATED {
    unknown-C-ID,
    cell-not-available,
    power-level-not-supported,
    ul-scrambling-code-already-in-use,
    dl-radio-resources-not-available,
    ul-radio-resources-not-available,
    measurement-not-supported-for-the-object,
    macrodiversity-combining-not-possible,
    reconfiguration-not-allowed,
    requested-configuration-not-supported,
    synchronisation-failure,
    no-closed-loop-timing-adjustment-mode-configured,
    unspecified,
    ...
}

CauseTransport ::= ENUMERATED {
    transmission-link-failure,
    transmission-port-not-available,
    unspecified,
    ...
}

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

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

CellIndividualOffset    ::= INTEGER (-20..20)

CellParameterID             ::= INTEGER (0..127)

CFN                 ::= INTEGER (0..255)

CFNOffset ::= INTEGER (0..255)

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

ChipOffset              ::= INTEGER (0..38399)

ClosedLoopMode1-SupportIndicator    ::= ENUMERATED {
    closedLoop-Mode1-Supported,
    closedLoop-Mode1-not-Supported
}
```

```
ClosedLoopMode2-SupportIndicator    ::= ENUMERATED {
    closedLoop-Mode2-Supported,
    closedLoop-Mode2-not-Supported
}

CodingRate ::= ENUMERATED {
    half,
    third
}

CompressedModeMethod ::= ENUMERATED {
    none,
    puncturing,
    half-SF,
    higher-Layer-Schduling
}

CRC-Size                ::= ENUMERATED {
    v0,
    v8,
    v12,
    v16,
    v24
}

CriticalityDiagnostics ::= SEQUENCE {
    procedureCode               ProcedureCode           OPTIONAL,
    triggeringMessage           TriggeringMessage       OPTIONAL,
    criticalityResponse         Criticality             OPTIONAL,
    transactionID               TransactionID           OPTIONAL,
    iEsCriticalityResponses     CriticalityDiagnostics-IE-List,
    iE-Extensions               ProtocolExtensionContainer { {CriticalityDiagnostics-ExtIEs} }
OPTIONAL,
    ...
}

CriticalityDiagnostics-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

CriticalityDiagnostics-IE-List ::= SEQUENCE (SIZE (1..maxNrOfErrors)) OF
    SEQUENCE {
        criticalityResponse     Criticality,
        iE-ID                   ProtocolIE-ID,
        repetitionNumber        RepetitionNumber        OPTIONAL,
        iE-Extensions           ProtocolExtensionContainer { {CriticalityDiagnostics-IE-List-ExtIEs}
} OPTIONAL,
        ...
    }

CriticalityDiagnostics-IE-List-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

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

CN-CS-DomainIdentifier ::= SEQUENCE {
    pLMN-ID             PLMN-ID,
    lAC                 LAC,
    iE-Extensions       ProtocolExtensionContainer { {CN-CS-DomainIdentifier-ExtIEs} } OPTIONAL
}

CN-CS-DomainIdentifier-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

CN-PS-DomainIdentifier ::= SEQUENCE {
    pLMN-ID             PLMN-ID,
    lAC                 LAC,
    rAC                 RAC,
    iE-Extensions       ProtocolExtensionContainer { {CN-PS-DomainIdentifier-ExtIEs} } OPTIONAL
}

CN-PS-DomainIdentifier-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

```
C-RNTI                  ::= INTEGER (0..65535)
```

3GPP TAG RAN WG3 Meeting #12
Seoul, Korea, 10 - 13 April, 2000

***Document* R3-001256**
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.

25.423	CR	096	Current Version:	3.1.0

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

For submission to:	RAN#8	for approval	X	strategic		*(for SMG use only)*
list expected approval meeting # here ↑		for information		non-strategic		

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: R-WG3 **Date:** April 12, 2000

Subject: Out-of-sync handling in DRNC

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: This documents provides text in the procedure description to describr the behaviour of DRNC in respect to Out-of-Sync parameters.

Clauses affected: 8.3.2.2, 8.3.3.2

Other specs affected:

Other 3G core specifications	X	→ List of CRs:	R1-000372, R1-000365
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:

8.3.2 Radio Link Addition

8.3.2.1 General

This procedure is used for establishing the necessary resources in the DRNS for one or more additional RLs towards a UE when there is already at least one RL established to the concerning UE via this DRNS.

This procedure shall use the signalling bearer connection for the relevant UE context.

The Radio Link Addition procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

8.3.2.2 Successful Operation

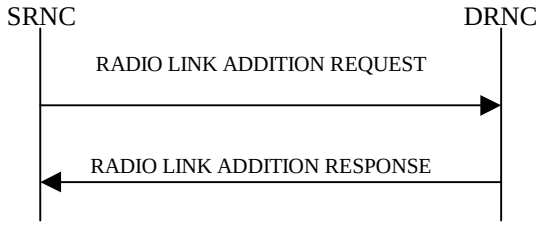

Figure 17: Radio Link Addition procedure: Successful Operation

The procedure is initiated with a RADIO LINK ADDITION REQUEST message sent from the SRNC to the DRNC.

Upon reception, the DRNS shall reserve the necessary resources and configure the new RL(s) according to the parameters given in the message. Unless specified below, the meaning of parameters is specified in other specifications.

The Diversity Control Field indicates for each RL whether the DRNS shall combine the new RL with existing RL(s) or not on the Iur. If the *Diversity Control Field* IE is set to "May" (be combined with another RL), then the DRNS shall decide for any of the alternatives. When a new RL is to be combined the DRNS shall choose which RL(s) to combine it with.

If the *Primary CCPCH Ec/No* IE [FDD] or the *Primary CCPCH RSCP* IE [TDD] measured by the UE is included in the RADIO LINK ADDITION REQUEST message, the DRNS shall use this in the calculation of the Initial DL TX Power. If the *Primary CCPCH Ec/No* IE is not present, the DRNS sets the Initial DL TX Power accordingly to the power used by the existing RLs.

[FDD - The DRNS shall use the provided Uplink SIR Target value as the current target for the inner-loop power control.]

[FDD - If the RADIO LINK ADDITION REQUEST message contains an *SSDT Cell Identity* IE, SSDT may be activated for the concerned new RL, with the indicated SSDT Cell Identity used for that RL.]

The DRNS shall activate any feedback mode diversity according to the received settings.

If all requested RLs are successfully added, the DRNC shall respond with a RADIO LINK ADDITION RESPONSE message.

[FDD – For each RL not having a common generation of the TPC commands in the DL with another RL, the DRNS shall assign the *RL Set ID* IE included in the RADIO LINK ADDITION RESPONSE message a value that uniquely identifies the RL Set within the UE context.]

[FDD – For all RLs having a common generation of the TPC commands in the DL with another new or existing RL, the DRNS shall assign the *RL Set ID* IE included in the RADIO LINK ADDITION RESPONSE message the same value. This value shall uniquely identify the RL Set within the UE context.]

In the case of combining an RL with existing RL(s) the DRNC shall indicate in the RADIO LINK ADDITION RESPONSE message with the Diversity Indication that the RL is combined. In this case the Reference RL ID shall be included to indicate one of the existing RLs that the new RL is combined with.

In the case of not combining an RL with existing RL(s), the DRNC shall indicate in the RADIO LINK ADDITION RESPONSE message with the Diversity Indication that no combining is done. In this case the DRNC shall include both the Transport Layer Address and the binding ID for the transport bearer to be established for each DCH of the RL in the RADIO LINK ADDITION RESPONSE message.

In case of coordinated DCH, the binding ID and the transport address shall be included for only one of the co-ordinated DCHs.

[FDD - Irrespective of SSDT activation, the DRNS shall include in the RADIO LINK ADDITION RESPONSE message an indication concerning the capability to support SSDT on this RL. Only if the RADIO LINK ADDITION REQUEST message requested SSDT activation and the RADIO LINK ADDITION RESPONSE message indicates that the SSDT capability is supported for this RL, SSDT is activated in the DRNS.]

For any cell neighbouring of a cell in which a RL was added, the DRNC shall provide in the RADIO LINK ADDITION RESPONSE message the UTRAN Cell Identifier (UC-Id), the Frequency Number, the Primary Scrambling Code and the node identification of CN nodes connected to the RNC controlling the neighbouring cell if the neighbouring cell is not controlled by the DRNC. In addition, if the information is available, the DRNC shall also provide the [FDD-CPICH Power level]/[TDD-PCCPCH Power level, DPCH Constant Value], Frame Offset of the neighbouring cell, Tx diversity indicator [FDD], and Tx diversity capability[FDD] (i.e. *STTD Support Indicator*, *Closed Loop mode1 Support Indicator*, and *Closed Loop mode2 Support Indicator*).

The DRNC shall also provide the configured uplink Maximum SIR and UL Minimum SIR for every new RL to the SRNC in the RADIO LINK ADDITION RESPONSE message. These values are taken into consideration by DRNS admission control and shall be used by the SRNC as limits for the UL inner-loop power control target.

The DRNC shall also provide the selected scrambling and channelisation codes of the new RLs in order to enable the SRNC to inform the UE about the selected codes.

After sending of the RADIO LINK ADDITION RESPONSE message the DRNS shall continuously attempt to obtain UL synchronisation and start reception on the new RL. The DRNS shall start transmission on the new RL after synchronisation is achieved in the DL user plane as specified in ref. [4].

[FDD - If the UE has been allocated one or several DCH controlled by DRAC (*DRAC Control* IE was set to "requested" in the RADIO LINK ADDITION REQUEST message for at least one DCH) and if the DRNC supports the DRAC, the DRNC shall indicate in the RADIO LINK ADDITION RESPONSE message the *Secondary CCPCH Info* IE to be received on FACH, for each added Radio Link. If the DRNC does not support DRAC, it shall not provide these IEs in the RADIO LINK ADDITION RESPONSE message.]

[FDD – When *Diversity Mode* IE is "*STTD*", "*Closedloop mode1*", or "*Closedloop mode2*", the DRNC shall activate/deactivate the Transmit Diversity to each Radio Link in accordance with *Transmit Diversity Indication* IE]

[FDD – After addition of the new RL, the UL out-of-sync algorithm defined in [10] shall use the maximum value of the parameters N_OUTSYNC_IND and T_RLFAILURE, and the minimum value of the parameters N_INSYNC_IND, that are configured in the DRNC cells supporting the radio links of the RL Set].

8.3.3 Radio Link Deletion

8.3.3.1 General

The Radio Link Deletion procedure is used to release the resources in a DRNS for one or more established radio links towards a UE.

This procedure shall use the signalling bearer connection for the relevant UE context.

The Radio Link Deletion procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

8.3.3.2 Successful Operation

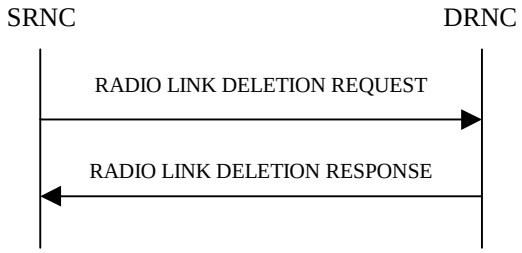

Figure 2~~9~~: Radio Link Deletion procedure, Successful Operation

The procedure is initiated with a RADIO LINK DELETION REQUEST message sent from the SRNC to the DRNC.

Upon receipt of this message, the DRNS shall delete the radio link(s) identified in the message and release all associated resources and respond to the SRNC with a RADIO LINK DELETION RESPONSE message.

If the radio link(s) to be deleted represent the last radio link(s) for the UE in the DRNS then the DRNC shall also release the UE context, unless the UE is using common resources in the DRNS.

[FDD – After deletion of the RL, the UL out-of-sync algorithm defined in [10] shall use the maximum value of the parameters N_OUTSYNC_IND and T_RLFAILURE, and the minimum value of the parameters N_INSYNC_IND, that are configured in the DRNC cells supporting the radio links of the RL Set].

3GPP TSG-RAN3 Meeting #13
Hawaii, USA, 22 - 26 May 2000

Document R3-001269
e.g. for 3GPP use the format TP-99xxx
or for SMG, use the format P-99-xxx

CHANGE REQUEST

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25.423	CR	107	Current Version:	3.1.0

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

For submission to:	RAN#8	for approval	X	strategic		(for SMG use only)
list expected approval meeting # here ↑		for information		non-strategic		

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: R-WG3 **Date:** 2000-05-08

Subject: Clarification that Basic PER is used.

Work item:

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

F	Correction	X	**Release:**	Phase 2	
A	Corresponds to a correction in an earlier release			Release 96	
B	Addition of feature			Release 97	
C	Functional modification of feature			Release 98	
D	Editorial modification			Release 99	X
				Release 00	

Reason for change: There are two variants of PER described in the indicated ref. [20], Basic and Canonical. It should be clarified that Basic PER is used for RNSAP.

Clauses affected: 9.4

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.

9.4 Message Transfer Syntax

RNSAP shall use the ASN.1 Basic Packed Encoding Rules (BASIC-PER) Aligned Variant as transfer syntax as specified in ref. [20].

3GPP TSG-RAN Working Group Meeting #13
Ohau, Hawaii, 22th – 26th May 2000

***Document* R3-001273**
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.

25.423	CR	111	Current Version:	3.1.0.

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

For submission to:	TSG RAN #8	for approval	X	Strategic		*(for SMG use only)*
list expected approval meeting # here ↑		for information		non-strategic		

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: R-WG3 **Date:** May , 2000

Subject: Handling of Presence field

Work item:

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

F	Correction	X	**Release:**	Phase 2	
A	Corresponds to a correction in an earlier release			Release 96	
B	Addition of feature			Release 97	
C	Functional modification of feature			Release 98	
D	Editorial modification			Release 99	X
				Release 00	

Reason for change:

In the tabular format and in the ASN.1, for many IE's and IE groups a "presence" is specified. Currently no behaviour related to this presence is indicated.

This contribution proposes to handle the absence of an IE/IE-group that should have been present according to the presence field in the corresponding object as an abstract syntax error.

The proposed handling is aligned with the criticality information specified for the concerning IE/IE-group, since mandatory rejection would disable the possibility of ever removing an IE/IE-group in a backward compatible way.

Clauses affected: 9.2.1.11, 10.3.

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: Similar contributions are provided for the other application protocols.

9.2.1.11 Criticality Diagnostics

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Criticality Diagnostics				
>Procedure Code	O		INTEGER (0..255)	Procedure code is to be used if Criticality diagnostics is part of Error Indication procedure, and not within the response message of the same operation that caused the error
>Triggering Message	O		ENUMERATED(initiating message, successful outcome, unsuccessful outcome, outcome)	The Triggering Message is used only if the Criticality diagnostics is part of Error Indication except when the procedure code is not understood.
>Criticality Response	O		ENUMERATED(reject, ignore, notify)	This Criticality response IE is used for reporting the Criticality of the Triggering message
>Transaction Id	O		INTEGER (0..255)	
Information Element Criticality Diagnostics		*1..<maxnoof errors>*		
>Criticality Response	M		ENUMERATED(reject, ignore, notify)	The Criticality response IE is used for reporting the criticality of the triggering IE. The value 'Ignore" shall never be used.
>IE Id	M		INTEGER (0..65535)	The IE Id of the not understood or missing IE as defined in the ASN.1 part of the specification.
>Repetition Number	O		INTEGER (0..255)	The repetition number of the not understood IE if applicable

Range bound	Explanation
maxnooferrors	Maximum number. of IE errors allowed to be reported with a single message. The value for maxnooferrors is 256.

10.3 Abstract Syntax Error

10.3.1 General

An Abstract Syntax Error occurs when the receiving functional RNSAP entity:

1. receives IEs or IE groups that cannot be understood (unknown IE id);

2. The abstract syntax error also appears ifreceives IEs for which the logical range of an IE is violated (e.g.: ASN.1 definition: 0 to 15, the logical range is 0 to 10 (values 11 to 15 are undefined), and 12 will be received; this case will be handled as an abstract syntax error using criticality information sent by the originator of the message);

3. does not receive IEs or IE groups but according to the specified presence of the concerning object, the IEs or IE groups should have been present in the received message.

Cases 1 and 2 (not comprehended IE/IE group) are handled based on received Criticality information. Case 3 (missing IE/IE group) is handled based on Criticality information and Presence information for the missing IE/IE group specified in the version of the specification used by the receiver.

If an Abstract Syntax Error occurs, the receiver shall read the remaining message and shall then for each detected Abstract Syntax Error act according to the Criticality Information and Presence Information for the IE/IE group due to which Abstract Syntax Error occurred in accordance with subclauses 10.3.4 and 10.3.5.

10.3.2 Definition of Criticality Information

In the RNSAP messages there is criticality information set for individual IEs and/or IE groups. This criticality information instructs the receiver how to act when receiving an IE or an IE group that is not comprehended, i.e. the entire item (IE or IE group) which is not (fully or partially) comprehended shall be treated in accordance with its own criticality information as specified in subclause 10.3.43.

In addition, the criticality information is used in case of the missing IE/IE group abstract syntax error (see subclause 10.3.5).

If an Abstract Syntax Error occurs, the receiver shall read the remaining message and shall then for each detected Abstract Syntax Error act according to the Criticality Information for the IE/IE group due to which Abstract Syntax Error occurred in accordance with subclause 10.3.3.

The receiving node shall take different actions depending on the value of the Criticality Information. The three possible values of the Criticality Information for an IE/IE group are:

1. Reject IE;
2. Ignore IE and Notify Sender;
3. Ignore IE.

10.3.3 Presence Information

For many IEs/IE groups which are optional according to the ASN.1 transfer syntax, RNSAP specifies separately if the presence of these IEs/IE groups is optional or mandatory with respect to RNS application by means of the presence field of the concerning object of class RNSAP-PROTOCOL-IES, RNSAP-PROTOCOL-IES-PAIR, RNSAP-PROTOCOL-EXTENSION or RNSAP-PRIVATE-IES.

The presence field of the indicated classes supports three values:

1. Optional;
2. Conditional;
3. Mandatory.

If an IE/IE group is not included in a received message and the presence of the IE/IE group is mandatory or the presence is conditional and the condition is true according to the version of the specification used by the receiver, an abstract syntax error occurs due to a missing IE/IE group.

~~10.3.2~~10.3.4 Not comprehended IE/IE group

~~10.3.3 Handling of the Criticality Information at Reception~~

10.3.~~4~~3.1 Procedure Code

The receiving node shall treat the different types of received criticality information of the *Procedure Code* according to the following:

Reject IE:

- if a message is received with a *Procedure Code* marked with "*Reject IE*" which the receiving node does not comprehend, the receiving node shall reject the procedure using the Error Indication procedure.

Ignore IE and Notify Sender:

- if a message is received with a *Procedure Code* marked with "*Ignore IE and Notify Sender*" which the receiving node does not comprehend, the receiving node shall ignore the procedure and initiate the Error Indication procedure.

Ignore IE:

- if a message is received with a *Procedure Code* marked with "*Ignore IE*" which the receiving node does not comprehend, the receiving node shall ignore the procedure.

10.3.~~3~~4.2 IEs other than the Procedure Code

The receiving node shall treat the different types of received criticality information of an IE/IE group other than the *Procedure Code* according to the following:

Reject IE:

- if a message *initiating* a procedure is received containing one or more IEs/IE groups marked with "*Reject IE*" which the receiving node does not comprehend; none of the functional requests of the message shall be executed. The receiving node shall reject the procedure and report the rejection of one or more IEs/IE groups using the message normally used to report unsuccessful outcome of the procedure.

- if a message *initiating* a procedure that does not have a message to report unsuccessful outcome is received containing one or more IEs/IE groups marked with "*Reject IE*" which the receiving node does not comprehend, the receiving node shall initiate the Error Indication procedure.

- if a *response* message is received containing one or more IEs/IE groups marked with "*Reject IE*, that the receiving node does not comprehend, the receiving node shall initiate local error handling.

Ignore IE and Notify Sender:

- if a message *initiating* a procedure is received containing one or more IEs/IE groups marked with "*Ignore IE and Notify Sender*" which the receiving node does not comprehend, the receiving node shall ignore the content of the not comprehended IEs/IE groups, continue with the procedure as if the not comprehended IEs/IE groups were not received (except for the reporting) using ~~only~~ the understood IEs/IE groups, and report in the response message of the procedure that one or more IEs/IE groups have been ignored.

- if a *response* message is received containing one or more IEs/IE groups marked with "*Ignore IE and Notify Sender*" which the receiving node does not comprehend, the receiving node shall ignore the content of the not comprehended IEs/IE groups and initiate the Error Indication procedure.

Ignore IE:

- ~~—~~if a message *initiating* a procedure is received containing one or more IEs/IE groups marked with "*Ignore IE*" which the receiving node does not comprehend, the receiving node shall ignore the content of the not comprehended IEs/IE groups and continue with the procedure as if the not comprehended IEs/IE groups were not received using ~~only~~ the understood IEs/IE groups.

10.3.5 Missing IE or IE group

The receiving node shall treat the missing IE/IE group according to the criticality information for the missing IE/IE group in the received message specified in the version of this specification used by the receiver:

Reject IE:

- if a received message *initiating* a procedure is missing one or more IEs/IE groups with specified criticality "*Reject IE*"; none of the functional requests of the message shall be executed. The receiving node shall reject the procedure and report the missing IEs/IE groups using the message normally used to report unsuccessful outcome of the procedure.

- if a received message *initiating* a procedure that does not have a message to report unsuccessful outcome is missing one or more IEs/IE groups with specified criticality "*Reject IE*", the receiving node shall initiate the Error Indication procedure.

- if a received *response* message is missing one or more IEs/IE groups with specified criticality "*Reject IE*, the receiving node shall initiate local error handling.

Ignore IE and Notify Sender:

- if a received message *initiating* a procedure is missing one or more IEs/IE groups with specified criticality "*Ignore IE and Notify Sender*", the receiving node shall continue with the procedure based on the other IEs/IE groups present in the message and report in the response message of the procedure that one or more IEs/IE groups were missing.

- if a received *response* message is missing one or more IEs/IE groups with specified criticality "*Ignore IE and Notify Sender*", the receiving node shall initiate the Error Indication procedure.

Ignore IE:

- if a received message *initiating* a procedure is missing one or more IEs/IE groups with specified criticality "*Ignore IE*", the receiving node shall continue with the procedure based on the other IEs/IE groups present in the message.

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Document R3-001276
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.

25.423	CR	CR112	Current Version:	3.1.0

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

For submission to:	TSG RAN #8	for approval	X	strategic		(for SMG use only)
list expected approval meeting # here ↑		for information		non-strategic		

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: R-WG3 **Date:** April 2000

Subject: Basic RNSAP Protocol Robustness

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	
C	Functional modification of feature	X
D	Editorial modification	

Release:

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

Reason for change:

In the current RNSAP specification there are no procedure timers defined. Further more, the procedure parallelism is quite restricted. This may under some circumstances lead to hangings, e.g. if there the DRNC receives no RL RECONFIGURATION COMMIT or RL RECONFIGURATION CANCEL message when a reconfiguration has been prepared there may be hanging resources in the DRNS. Further more, it this situation is due to a RL RECONFIGURATION COMMIT or RL RECONFIGURATION CANCEL message being “lost” (not in the transport layer) the DRNC may ignore any message not allowed while a Prepared reconfiguration exists since it still waits for a RL RECONFIGURATION COMMIT or RL RECONFIGURATION CANCEL message.

To ensure that it is always possible for the SRNC to “get out of” such situations (no matter how strange) it is proposed to allow the RL Deletion procedure under any circumstance.

Clauses affected: 8.3.3.1

Other specs affected:

Other 3G core specifications		→ List of CRs:	TS 25.433 CR131
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:

8.3.3 Radio Link Deletion

8.3.3.1 General

The Radio Link Deletion procedure is used to release the resources in a DRNS for one or more established radio links towards a UE.

This procedure shall use the signalling bearer connection for the relevant UE context.

The Radio Link Deletion procedure may be initiated by the SRNC at any time after establishing a Radio Link~~shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1~~.

8.3.3.2 Successful Operation

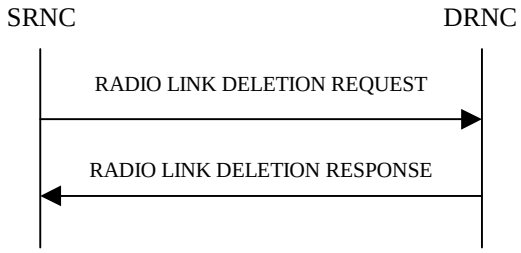

Figure 1: Radio Link Deletion procedure, Successful Operation

The procedure is initiated with a RADIO LINK DELETION REQUEST message sent from the SRNC to the DRNC.

Upon receipt of this message, the DRNS shall delete the radio link(s) identified in the message and release all associated resources and respond to the SRNC with a RADIO LINK DELETION RESPONSE message.

If the radio link(s) to be deleted represent the last radio link(s) for the UE in the DRNS then the DRNC shall also release the UE context, unless the UE is using common resources in the DRNS.

8.3.3.3 Unsuccessful Operation

-

8.3.3.4 Abnormal Conditions

-

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Document R3-001282
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.

25.423	CR	114	Current Version:	3.1.0

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

For submission to:	TSG RAN #8	for approval	X	strategic		(for SMG use only)
list expected approval meeting # here ↑		for information		non-strategic		

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: R-WG3 **Date:** May 2000

Subject: Addition of new step sizes alternatives for FDD DL power adjustment.

Work item:

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

F	Correction	X	**Release:**	Phase 2	
A	Corresponds to a correction in an earlier release			Release 96	
B	Addition of feature			Release 97	
C	Functional modification of feature			Release 98	
D	Editorial modification			Release 99	X
				Release 00	

Reason for change: In order to align with L1 (25.214 CR 090) new step size values of 1.5 dB and 2 dB in addition to the existing 0.5 dB and 1 dB are defined for Information Element FDD TPC DL step size. Similar CR is issued also to NBAP Specification.

Clauses affected: 9.2.2.11, 9.3.4

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:

9.2.2.11 FDD TPC Downlink Step Size

This parameter indicates step size for the DL power adjustment.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
FDD TPC Downlink step size			ENUMERATED (0.5, 1,1.5, 2)	

```
-- F

FACH-InitialWindowSize          ::= INTEGER { unlimited(255) } (0..255)
-- Number of frames MAC-c SDUs.
-- 255 = Unlimited number of FACH data frames

FDD-DL-ChannelisationCodeNumber     ::= INTEGER (0..255)

FDD-S-CCPCH-Offset          ::= INTEGER (0..149)

FDD-TPC-DownlinkStepSize ::= ENUMERATED {
    step-size0-5,
    step-size1,
    step-size1-5,
    step-size2,
    ...
}
```

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Document R3-001284
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.

25.423	CR	CR115	Current Version:	3.1.0

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

For submission to:	TSG RAN #8	for approval	X	strategic		(for SMG use only)
list expected approval meeting # here ↑		for information		non-strategic		

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: R-WG3 **Date:** April 2000

Subject: Correction of reference handling and some other editorial issues

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	
C	Functional modification of feature	
D	Editorial modification	X

Release:

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

Reason for change:

The scope of this CR is:
a) to ensure that all references in the specification are made to the numbered references in the reference list in chapter 2.
b) to correct some editorial detected during review of the CR implementation of CRs on v3.0.0.

All references have been corrected to be references to the numbered reference in the list of references (chapter 2). This required some new references to be added to the list of references

This CR contains the follow editorial corrections:

- Chapter 9.2.1.21: Correction of paragraph format and heading (paragraph format incorrect in CR13).
- Chapter 9.2.1.66: Correction of paragraph style (paragraph style incorrect in CR37r1).
- Chapter 9.2.1.69: Correction of paragraph style (paragraph style incorrect in CR6).
- Chapter 9.2.1.70: Correction of paragraph style (paragraph style incorrect in CR13).
- Chapter 9.3.4: Some IEs were not placed in correct alphabetic order.
- Some minor editorial corrections (not listed explicitly).

Clauses affected: 2, 8.2.4.2, 8.3.1.2, 8.3.4.2, 8.3.7.2, 8.3.9.2, 8.3.10.2, 9.1.4, 9.1.5.1, 9.1.7, 9.1.8.1, 9.2.1.16, 9.2.1.17, 9.2.1.21, 9.2.1.53, 9.2.1.55, 9.2.1.66, 9.2.1.67, 9.2.1.69, 9.2.1.70, 9.2.2.39, 9.2.2.40, 9.2.2.51, 9.2.2.52, 9.2.3.5, and 9.3.4.

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:

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

2 References

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

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies.

[1] 3G TS 23.003: "Numbering, addressing and identification".

[2] 3G TS 25.413: "UTRAN Iu Interface RANAP Signalling".

[3] 3G TS 25.426: "UTRAN Iur and Iub Interface Data Transport & Transport Layer Signalling for DCH Data Streams".

[4] 3G TS 25.427: "UTRAN Iur and Iub Interface User Plane Protocols for DCH Data Streams".

[5] 3G TS xx.yyy: "Specification containing different Identifiers for UMTS (to be identified)".

[6] 3G TS 25.104: "UTRA (BS) FDD; Radio transmission and Reception"

[7] 3G TS 25.105: "UTRA (BS) TDD; Radio Transmission and Reception".

[8] 3G TS 25.211: "Physical Channels and Mapping of Transport Channels onto Physical Channels (FDD)".

[9] 3G TS 25.212: "Multiplexing and Channel Coding (FDD)

[10] UMTS 25.214:, "Physical Layer Procedures (FDD)".

[11] 3G TS 25.215: "Physical Layer – Measurements (FDD)".

[12] 3G TS 25.221: "Physical Channels and Mapping of Transport Channels onto Physical Channels (TDD)".

[13] 3G TS 25.223: "Spreading and Modulation (TDD)".

[14] 3G TS 25.225: "Physical Layer – Measurements (TDD)".

[15] 3G TS 25.304: "UE Procedures in Idle Mode"

[16] 3G TS 25.331: "RRC Protocol Specification".

[17] 3G TS 25.402: "Synchronisation in UTRAN, Stage 2".

[18] X.680 (12/94): "Information technology - Abstract Syntax Notation One (ASN.1): Specification of basic notation".

[19] ITU-T Recommendation X.681 (12/94): "Information technology - Abstract Syntax Notation One (ASN.1): Information object specification".

[20] ITU-T Recommendation X.691 (12/94): "Information technology - ASN.1 encoding rules - Specification of Packed Encoding Rules (PER)".

[21] 3G TS 25.213: " Spreading and modulation (FDD)"

[22] 3G TS 25.224: " Physical Layer Procedures (TDD)"

[Editor's note: The dating of reference [20] needs to be verified. It has been included from the ITU-T list of recommendations in force. The dating of the reference is FFS.]

[Editor's note: The reference [5] needs to be identified. Until then the description of the parameters CN PS Domain Identifier, CN CS Domain Identifier, and CRNC ID contains more information than otherwise may be needed.]

8.2.4.2 Successful Operation

Figure 1: Paging procedure, Successful Operation

The procedure is initiated with a PAGING REQUEST message sent from the SRNC to the CRNC.

If the message contains the *C-Id* IE, the CRNC shall page in the indicated cell. Alternatively, if the message contains the *URA-Id* IE, the CRNC shall page in all cells that it controls in the indicated URA.

The CRNC shall calculate the Paging Occasions from the *IMSI* IE and the *DRX Cycle Length Coefficient* IE according to specification in ref. [15] and apply transmission on PICH and PCH accordingly.

8.3.1.2 Successful Operation

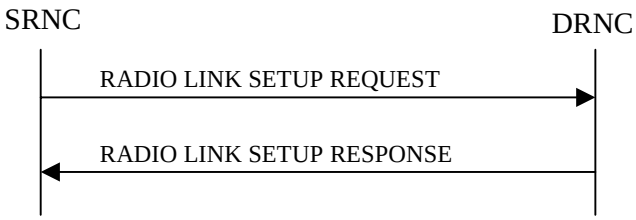

Figure 2: Radio Link Setup procedure: Successful Operation

When the SRNC makes an algorithmic decision to add the first cell or set of cells from a DRNS to the active set of a specific RRC connection, the RADIO LINK SETUP REQUEST message is sent to the corresponding DRNC to request setup of the radio link(s).

The message includes the S-RNTI associated to the UE, and, if the UE context is already present in the DRNC, the corresponding D-RNTI.

[FDD - The Diversity Control Field indicates for each RL except for the first RL whether the DRNS shall combine the RL with any of the other RLs or not on the Iur. If the *Diversity Control Field* IE is set to "May" (be combined with another RL), then the DRNS shall decide for any of the alternatives. When an RL is to be combined the DRNS shall choose which RL(s) to combine it with.]

If the RADIO LINK SETUP REQUEST message includes the *Allowed Queuing Time* IE the DRNS may queue the request before providing a response to the SRNC.

[FDD - If the *Initial DL TX Power* IE and *Uplink SIR Target* IE are present in the message, the DRNS shall use the indicated DL TX Power and Uplink SIR Target as initial value.]

If the *Primary CPICH Ec/No* IE [FDD] or the *Primary CCPCH RSCP* IE [TDD] is present, the DRNC should use them when deciding the Initial DL TX Power.

If the RADIO LINK SETUP REQUEST message includes the *DCH Combination Indicator* IE for a DCH, the DRNS shall treat all DCHs with the same value of this IE as a set of co-ordinated DCHs.

[FDD - For DCHs with a unique or no "DCH Combination Ind" and the *QE-Selector* IE set to "selected DCH", the Transport channel BER from that DCH shall be the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [~~25.427~~4]. If the QE-Selector is set to "non-selected DCH", the Physical channel BER shall be used for the QE in the UL data frames, ref. [~~25.427~~4]].

[FDD - For DCHs with the same "DCH Combination Ind" the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected DCH" shall be used for the QE in the UL data frames, ref. [~~25.427~~4]. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [~~25.427~~4]. If all DCHs have *QE-Selector* IE set to "non-selected DCH" the Physical channel BER shall be used for the QE, ref. [~~25.427~~4]].

The *Allocation/Retention Priority* IE defines the priority level that should be used by the DRNS to prioritise the allocation and the retention of the resources used by the DCH. The *Frame Handling Priority* IE defines the priority level that should be used by the DRNS to prioritise the discard/delay of the data frames of the DCH.

The DRNS shall use the included *UL DCH FP Mode* IE for a DCH as the new DCH FP Mode in the Uplink of the user plane for this DCH.

The DRNS shall use the included *ToAWS* IE for a DCH as the new Time of Arrival Window Start Point in the user plane for this DCH.

The DRNS shall use the included *ToAWE* IE for a DCH as the new Time of Arrival Window End Point in the user plane for this DCH.

[FDD - If the RADIO LINK SETUP REQUEST message includes the *SSDT Cell Identity* IE, the DRNS may activate SSDT using the *SSDT Cell Identity* IE and *SSDT Cell Identity Length* IE.]

At the reception of the RADIO LINK SETUP REQUEST message, DRNS allocates requested type of channelisation codes and other physical channel resources for each RL and assigns a binding identifier and a transport layer address for each DCH or set of co-ordinated DCHs. This information shall be sent to the SRNS in the message RADIO LINK SETUP RESPONSE when all the RLs have been successfully setup.

[FDD - If the *Initial DL TX Power* and the *Uplink SIR Target* IEs are not present in the RADIO LINK SETUP REQUEST message, then DRNC shall include the suggested initial Uplink and Downlink SIR Targets in the RADIO LINK SETUP RESPONSE message.]

[FDD – For each RL not having a common generation of the TPC commands in the DL with another RL, the DRNS shall assign the *RL Set ID* IE included in the RADIO LINK SETUP RESPONSE message a value that uniquely identifies the RL Set within the UE context.]

[FDD – For all RLs having a common generation of the TPC commands in the DL with another RL, the DRNS shall assign the *RL Set ID* IE included in the RADIO LINK SETUP RESPONSE message the same value. This value shall uniquely identify the RL Set within the UE context.]

[FDD - In the case of combining one or more RLs the DRNC shall indicate in the RADIO LINK SETUP RESPONSE message with the Diversity Indication that the RL is combined with another RL. In this case the Reference RL ID shall be included to indicate with which RL the combination is performed. The Reference RL ID shall be included for all but one of the combined RLs, for which the *Transport Layer Address* IE and the *Binding ID* IE shall be included.]

[FDD - In the case of not combining an RL with another RL, the DRNC shall indicate in the RADIO LINK SETUP RESPONSE message with the *Diversity Indication* IE that no combining is performed. In this case the DRNC shall include both the *Transport Layer Address* IE and the *Binding ID* IE for the transport bearer to be established for each DCH of the RL in the RADIO LINK SETUP RESPONSE message.]

[TDD - The DRNC shall always include in the RADIO LINK SETUP RESPONSE message both the *Transport Layer Address* IE and the *Binding ID* IE for the transport bearer to be established for each DCH of the RL.]

In case of a set of coordinated DCHs requiring a new transport bearer on Iur the *Binding Identifier* IE and the *Transport Layer Address* IE shall be included only for one of the DCH in the set of co-ordinated DCHs.

[FDD - Irrespective of SSDT activation, the DRNS shall include in the RADIO LINK SETUP RESPONSE message an indication concerning the capability to support SSDT on this RL. Only if the RADIO LINK SETUP REQUEST message requested SSDT activation and the RADIO LINK SETUP RESPONSE message indicates that the SSDT capability is supported for this RL, SSDT is activated in the DRNS.]

The DRNS shall also provide the SRNC with the UTRAN Cell Identifier (UC-Id), the Frequency Number, the [FDD-Primary Scrambling Code], the [TDD-Cell Parameter ID, the Sync Case, the PSCH Time Slot information] of the neighbouring cells to the cell(s) where the radio link(s) are added. In addition, if the information is available, the DRNC shall also provide the [FDD-CPICH Power level]/[TDD-PCCPCH Power level, DPCH Constant Value] and Frame Offset of the neighbouring cell.

If a neighbouring cell is controlled by another RNC, the DRNC shall report also the node identifications (i.e. RNC, CN domain nodes) of the RNC controlling the neighbouring cell. [FDD – If the information is available, the DRNC shall include the *Tx diversity indicator* and Tx diversity capability (i.e. *STTD Support Indicator*, *Closed Loop mode1 Support Indicator*, and *Closed Loop mode2 Support Indicator*) in Neighbouring FDD Cell Information].

If there was no UE context for this UE in the DRNS before the RADIO LINK SETUP REQUEST message was received the DRNC shall include the node identifications of the CN Domain nodes that the RNC is connected to (using LAC and RAC of the current cell), and the D-RNTI in the RADIO LINK SETUP RESPONSE message.

[FDD - If the *DRAC Control* IE is set to "requested" in the RADIO LINK SETUP REQUEST message for at least one DCH and if the DRNC supports the DRAC, the DRNC shall indicate in the RADIO LINK SETUP RESPONSE message the *Secondary CCPCH Info IE* to be received on FACH, for each added Radio Link. If the DRNC does not support DRAC, it shall not provide these IEs in the RADIO LINK SETUP RESPONSE message.]

After sending of the RADIO LINK SETUP RESPONSE message the DRNS shall continuously attempt to obtain UL synchronisation and start reception on the new RL. The DRNS shall start transmission on the new RL after synchronisation is achieved in the DL user plane as specified in ref. [3].

[FDD – When *Diversity Mode* IE is "*STTD*", "*Closedloop mode1*", or "*Closedloop mode2*", the DRNC shall activate/deactivate the Transmit Diversity to each Radio Link in accordance with *Transmit Diversity Indication* IE]

8.3.4.2 Successful Operation

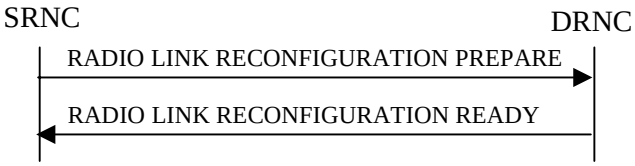

Figure 3: Synchronised Radio Link Reconfiguration Preparation procedure, Successful Operation

The Synchronised Radio Link Reconfiguration Preparation procedure is initiated by the SRNC by sending the RADIO LINK RECONFIGURATION PREPARE message to the DRNC.

Upon reception, the DRNS shall reserve necessary resources for the new configuration of the Radio Link(s) according to the parameters given in the message. Unless specified below, the meaning of parameters is specified in other specifications.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *Allowed Queuing Time* IE the DRNS may queue the request before providing a response to the SRNC.

DCH Modification:

If the RADIO LINK RECONFIGURATION PREPARE message includes the *Allocation/Retention Priority* IE for a DCH to be modified, the DRNS should use this information when reserving resources for this DCH in the new configuration.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *Frame Handling Priority* IE for a DCH to be modified, the DRNS should store this information for this DCH in the new configuration. The received Frame Handling Priority should be used when prioritising between different frames in the downlink on the radio interface in congestion situations within the DRNS once the new configuration has been activated.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *Transport Format Set* IE for the UL of a DCH to be modified, the DRNS shall apply the new Transport Format Set in the Uplink of this DCH in the new configuration.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *Transport Format Set* IE for the DL of a DCH to be modified, the DRNS shall apply the new Transport Format Set in the Downlink of this DCH in the new configuration.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *UL FP Mode* IE for a DCH to be modified, the DRNS shall apply the new FP Mode in the Uplink of the user plane for this DCH in the new configuration.

If the RADIO LINK RECONFIGURATION PREPARE message includes on the *ToAWS* IE for a DCH to be modified, the DRNS shall apply the new ToAWS in the user plane for this DCH in the new configuration.

If the RADIO LINK RECONFIGURATION PREPARE message includes on the *ToAWE* IE for a DCH to be modified, the DRNS shall apply the new ToAWE in the user plane for this DCH in the new configuration.

[FDD - If the *DRAC Control* IE is present and set to "requested" in the RADIO LINK RECONFIGURATION PREPARE message for at least one DCH and if the DRNC supports the DRAC, the DRNC shall indicate in the RADIO LINK RECONFIGURATION READY message the *Secondary CCPCH Info* IE to be received on FACH, for each Radio Link. If the DRNC does not support DRAC, it shall not provide these IEs in the RADIO LINK RECONFIGURATION READY message.]

DCH Addition:

If the RADIO LINK RECONFIGURATION PREPARE message includes any DCH to be added to the Radio Link(s), the DRNS shall reserve necessary resources for the new configuration of the Radio Link(s) according to the parameters given in the message and include these DCH in the new configuration.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *DCH Combination Indicator* IE for a DCH to be added, the DRNS shall:

1. treat all DCHs with the same value of this IE as a set of co-ordinated DCHs; and

2. include this DCH in the new configuration only if it can include all DCHs with the same value of the *DCH Combination Indicator* IE in the new configuration.

[FDD - For DCHs with a unique or no "DCH Combination Ind" and the *QE-Selector* IE set to "selected DCH", the Transport channel BER from that DCH shall be the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [~~25.427~~4]. If the QE-Selector is set to "non-selected DCH", the Physical channel BER shall be used for the QE in the UL data frames, ref. [~~25.427~~4]].

[FDD - For DCHs with the same "DCH Combination Ind" the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected DCH" shall be used for the QE in the UL data frames, ref. [~~25.427~~4]. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [~~25.427~~4]. If all DCHs have *QE-Selector* IE set to "non-selected DCH" the Physical channel BER shall be used for the QE, ref. [~~25.427~~4]].

The DRNS should store the *Frame Handling Priority* IE received for a DCH to be added in the new configuration. The received Frame Handling Priority should be used when prioritising between different frames in the downlink on the radio interface in congestion situations within the DRNS once the new configuration has been activated.

The DRNS shall use the included *UL FP Mode* IE for a DCH to be added as the new FP Mode in the Uplink of the user plane for this DCH in the new configuration.

The DRNS shall use the included *ToAWS* IE for a DCH to be added as the new Time of Arrival Window Start Point in the user plane for this DCH in the new configuration.

The DRNS shall use the included *ToAWE* IE for a DCH to be added as the new Time of Arrival Window End Point in the user plane for this DCH in the new configuration.

[FDD - If the *DRAC Control* IE is set to "requested" in the RADIO LINK RECONFIGURATION PREPARE message for at least one DCH and if the DRNC supports the DRAC, the DRNC shall indicate in the RADIO LINK RECONFIGURATION READY message the *Secondary CCPCH Info* IE to be received on FACH, for each Radio Link. If the DRNC does not support DRAC, it shall not provide these IEs in the RADIO LINK RECONFIGURATION READY message.]

DCH Deletion:

If the RADIO LINK RECONFIGURATION PREPARE message includes any DCH to be deleted from the Radio Link(s), the DRNS shall not include this DCH in the new configuration.

If all of the DCHs belonging to a set of co-ordinated DCHs are requested to be deleted, the DRNS shall not include this set of co-ordinated DCHs in the new configuration.

Physical Channel Modification:

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Uplink Scrambling Code* IE, the DRNS shall apply this Uplink Scrambling Code to the new configuration.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes one or more *Uplink Channelisation Code* IEs, the DRNS shall apply the new Uplink Channelisation Code(s) in the new configuration.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes one or more *Spreading Factor of Channelisation Code (DL)* IE, for each *Spreading Factor of Channelisation Code (DL)* IE the DRNS shall allocate one new Downlink Channelisation Code per Radio Link and apply the new Downlink Channelisation Code(s) to the new configuration. Each Downlink Channelisation Code allocated for the new configuration shall be included as a *Channelisation Code (DL)* IE in the RADIO LINK RECONFIGURATION READY message when sent to the SRNC.]

The DRNS shall use the *TFCS* IE for the UL when reserving resources for the uplink of the new configuration. The DRNS shall apply the new TFCS in the Uplink of [TDD – the CCTrCH of] the new configuration.

The DRNS shall use the *TFCS* IE for the DL when reserving resources for the downlink of the new configuration. The DRNS shall apply the new TFCS in the Downlink of [TDD – the CCTrCH of] the new configuration.

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes on the *UL DPCCH Structure* IE, group the DRNS shall apply the new Uplink DPCCH Structure to the new configuration.]

FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *UL SIR Target* IE, the DRNS shall set the UL inner loop power control to the UL SIR target when the new configuration is being used.]

[TDD – The DRNC shall include all the IEs corresponding to the new physical channel resources for the DL DPCH and/or the UL DPCH to be reconfigured in the RADIO LINK RECONFIGURATION READY message sent to the SRNC.]

SSDT Activation/Deactivation:

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *SSDT Indication* IE set to "SSDT Active in the UE", the DRNS may activate SSDT using the *SSDT Cell Identity* IE and *SSDT Cell Identity Length* IE in the new configuration.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the SSDT Indication IE set to "SSDT not Active in the UE", the DRNS shall deactivate SSDT in the new configuration.]

If the requested modifications are allowed by the DRNS, and the DRNS has successfully reserved the required resources for the new configuration of the Radio Link(s) it shall respond to the SRNC with the RADIO LINK RECONFIGURATION READY message. When this procedure has been completed successfully there exist a Prepared Reconfiguration, as defined in subclause 3.1.

The DRNS decides the maximum and minimum SIR for the uplink of the Radio Link(s) and shall return this in the *Maximum Uplink SIR* IE and *Minimum Uplink SIR* IE for each Radio Link in the RADIO LINK RECONFIGURATION READY message.

In case of a set of co-ordinated DCHs requiring a new transport bearer on Iur the *DCH to be Added* IE group or the *DCH to be Modified* IE group shall be included only for one of the DCHs in the set of co-ordinated DCHs.

In case of a Radio Link being combined with another Radio Link within the DRNS the *DCH to be Added* IE group and the *DCH to be Modified* IE group shall be included only for one of the combined Radio Links.

8.3.7.2 Successful Operation

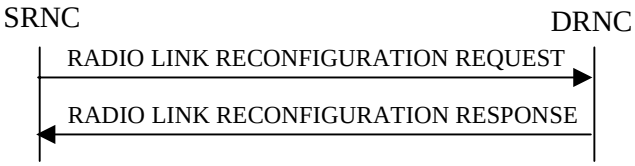

Figure 4: Unsynchronised Radio Link Reconfiguration procedure, Successful Operation

The Unsynchronised Radio Link Reconfiguration procedure is initiated by the SRNC by sending the RADIO LINK RECONFIGURATION REQUEST message to the DRNC.

Upon reception, the DRNS shall modify the configuration of the Radio Link(s) according to the parameters given in the message. Unless specified below, the meaning of parameters is specified in other specifications.

If the RADIO LINK RECONFIGURATION REQUEST message includes the *Allowed Queuing Time* IE the DRNS may queue the request before providing a response to the SRNC.

DCH Modification:

If the RADIO LINK RECONFIGURATION REQUEST message includes on the *Allocation/Retention Priority* IE for a DCH to be modified, the DRNS should use this new value when reserving resources for this DCH in the new configuration.

If the RADIO LINK RECONFIGURATION REQUEST message includes on the *Frame Handling Priority* IE for a DCH to be modified, the DRNS should store this information for this DCH in the new configuration. The received Frame Handling Priority should be used when prioritising between different frames in the downlink on the radio interface in congestion situations within the DRNS once the new configuration has been activated.

If the RADIO LINK RECONFIGURATION REQUEST message includes on the *Transport Format Set* IE for the UL of a DCH to be modified, the DRNS shall apply the new Transport Format Set in the Uplink of this DCH in the new configuration.

If the RADIO LINK RECONFIGURATION REQUEST message includes on the *Transport Format Set* IE for the DL of a DCH to be modified, the DRNS shall apply the new Transport Format Set in the Downlink of this DCH in the new configuration.

If the RADIO LINK RECONFIGURATION REQUEST message includes on the *UL FP Mode* IE for a DCH to be modified, the DRNS shall apply the new FP Mode in the Uplink of the user plane for this DCH in the new configuration.

If the RADIO LINK RECONFIGURATION REQUEST message includes on the *ToAWS* IE for a DCH to be modified, the DRNS shall apply the new ToAWS in the user plane for this DCH in the new configuration.

If the RADIO LINK RECONFIGURATION REQUEST message includes on the *ToAWE* IE for a DCH to be modified, the DRNS shall apply the new ToAWE in the user plane for this DCH in the new configuration.

[FDD - If the *DRAC Control* IE is present and set to "requested" in the RADIO LINK RECONFIGURATION REQUEST message for at least one DCH and if the DRNC supports the DRAC, the DRNC shall indicate in the RADIO LINK RECONFIGURATION RESPONSE message the *Secondary CCPCH Info* IE to be received on FACH, for each Radio Link. If the DRNC does not support DRAC, it shall not provide these IEs in the RADIO LINK RECONFIGURATION RESPONSE message.]

DCH Addition:

If the RADIO LINK RECONFIGURATION REQUEST message includes any DCH to be added to the Radio Link(s), the DRNS shall reserve necessary resources for the new configuration of the Radio Link(s) according to the parameters given in the message and include these DCH in the new configuration.

If the RADIO LINK RECONFIGURATION REQUEST message includes the *DCH Combination Indicator* IE for a DCH to be added, the DRNS shall:

1. treat all DCHs with the same value of this IE as a set of co-ordinated DCHs; and

2. include this DCH in the new configuration only if it can include all DCHs with the same value of the *DCH Combination Indicator* IE in the new configuration.

[FDD - For DCHs with a unique or no "DCH Combination Ind" and the *QE-Selector* IE set to "selected DCH", the Transport channel BER from that DCH shall be the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [~~25.427~~4]. If the QE-Selector is set to "non-selected DCH", the Physical channel BER shall be used for the QE in the UL data frames, ref. [~~25.427~~4]].

[FDD - For DCHs with the same "DCH Combination Ind" the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected DCH" shall be used for the QE in the UL data frames, ref. [~~25.427~~4]. If no Transport channel BER is available for the selected DCH the Physical channel BER shall be used for the QE, ref. [~~25.427~~4]. If all DCHs have *QE-Selector* IE set to "non-selected DCH" the Physical channel BER shall be used for the QE, ref. [~~25.427~~4]].

The DRNS should store the *Frame Handling Priority* IE received for a DCH to be added in the new configuration. The received Frame Handling Priority should be used when prioritising between different frames in the downlink on the radio interface in congestion situations within the DRNS once the new configuration has been activated.

The DRNS shall use the included *UL FP Mode* IE for a DCH to be added as the new FP Mode in the Uplink of the user plane for this DCH in the new configuration.

The DRNS shall use the included *ToAWS* IE for a DCH to be added as the new Time of Arrival Window Start Point in the user plane for this DCH in the new configuration.

The DRNS shall use the included *ToAWE* IE for a DCH to be added as the new Time of Arrival Window End Point in the user plane for this DCH in the new configuration.

[FDD - If the *DRAC Control* IE is set to "requested" in the RADIO LINK RECONFIGURATION REQUEST message for at least one DCH and if the DRNC supports the DRAC, the DRNC shall indicate in the RADIO LINK RECONFIGURATION RESPONSE message the *Secondary CCPCH Info* IE and the *Reference to System Information blocks IE* to be received on FACH, for each Radio Link. If the DRNC does not support DRAC, it shall not provide these IEs in the RADIO LINK RECONFIGURATION RESPONSE message.

DCH Deletion:

If the RADIO LINK RECONFIGURATION REQUEST message includes any DCH to be deleted from the Radio Link(s), the DRNS shall not include this DCH in the new configuration.

If all of the DCHs belonging to a set of co-ordinated DCHs are requested to be deleted, the DRNS shall not include this set of co-ordinated DCHs in the new configuration.

Physical Channel Modification:

If the RADIO LINK RECONFIGURATION REQUEST message includes on the *TFCS* IE for the UL, the DRNS shall apply the new TFCS in the Uplink of [TDD – the CCTrCH of] the new configuration.

If the RADIO LINK RECONFIGURATION REQUEST message includes on the *TFCS* IE for the DL, the DRNS shall apply the new TFCS in the Downlink of [TDD – the CCTrCH of] the new configuration.

If the requested modifications are allowed by the DRNS, the DRNS has successfully allocated the required resources, and changed to the new configuration it shall respond to the SRNC with the RADIO LINK RECONFIGURATION RESPONSE message.

The DRNS decides the maximum and minimum SIR for the uplink of the Radio Link(s) and shall return this in the IEs *Maximum Uplink SIR* and *Minimum Uplink SIR* for each Radio Link in the RADIO LINK RECONFIGURATION RESPONSE message.

In case of a set of co-ordinated DCHs requiring a new transport bearer on Iur the *DCH to be Added* IE group or the *DCH to be Modified* IE group shall be included only for one of the DCH in the set of co-ordinated DCHs.

In case of a Radio Link being combined with another Radio Link within the DRNS the *DCH to be Added* IE group and the *DCH to be Modified* IE group shall be included only for one of the combined Radio Links.

8.3.9.2 Successful Operation

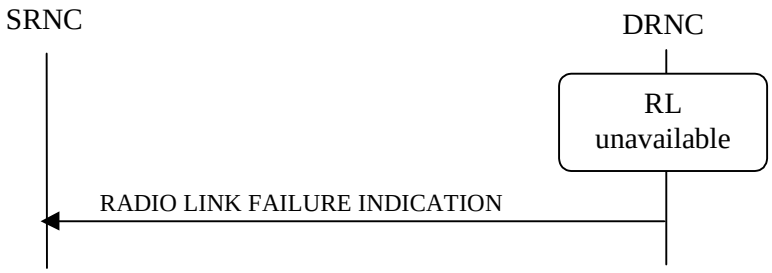

Figure 5: RL Failure procedure, Successful Operation

When DRNC detects that a one or more Radio Links or Radio Link Sets are no longer available, it shall send the RL FAILURE INDICATION message to the SRNC. The message indicates the failed Radio Links or Radio Link Sets with the most appropriate cause values defined in the *Cause* IE. If the failure concerns one or more individual Radio Links the DRNS shall indicate the affected Radio Link(s) using the *RL Information* IE group. [FDD - If the failure concerns one or more Radio Link Sets the DRNS shall indicate the affected Radio Link Set(s) using the *RL Set Information* IE group.]

[FDD - When the RL Failure procedure is used to notify loss of UL synchronisation: the message shall be sent when indicated by the UL sync detection algorithm defined in ref. [~~TS25.214~~10] and ~~TS25.224~~][22].

[TDD - When the RL Failure procedure is used to notify the non achievement or loss of UL synchronisation: the message shall be sent when the UL synchronisation of newly established Radio Link is not achieved after any of the procedures RL Setup or RL Addition. The message shall also be sent if the UL synchronisation it is lost during an active connection.]

Typical cause values are:

Radio Network Layer Causes:

- Synchronisation Failure.

Miscellaneous Causes:

- Control Processing Overload;
- HW Failure;
- O&M Intervention.

8.3.10.2 Successful Operation

Figure 6: RL Restoration procedure, Successful Operation

The DRNC shall send the RADIO LINK RESTORE INDICATION message to the SRNC when indicated by the UL sync detection algorithm defined in ref. [~~TS~~25.~~214~~10] and ~~TS~~25.~~224~~[22].

9.1.4 RADIO LINK SETUP RESPONSE

9.1.4.1 FDD Message

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				–	
D-RNTI	O				YES	
CN PS Domain Identifier	O				YES	ignore
CN CS Domain Identifier	O				YES	ignore
RL Information Response		*1..<maxnoofRLs>*			EACH	ignore
>RL ID	M				–	
>RL Set ID	M				–	
>SAI	M				–	
>UL Interference Level	M				–	
> **Secondary CCPCH Info**		0..1			–	
>>FDD S-CCPCH Offset	M			Corresponds to: $\tau_{S\text{-}CCPCH,k}$, see ref. [8]	–	
>>DL Scrambling Code	M				–	
>>FDD DL Channelisation Code Number	M				–	
>>TFCS	M			For the DL.	–	
>>Secondary CCPCH Slot Format	M				–	
>>TFCI presence	C - SlotFormat				–	
>>MultiplexingPosition	M				–	
>>STTD Indicator	M				–	
>>FACH/PCH Information		1 .. <maxFACHcount+1>			–	
>>>TFS				For each FACH, and the PCH when multiplexed on the same Secondary CCPCH	–	
>>Scheduling Information		1			–	
>>>IB_SG REP	M				–	
>>>Segment Information		*1.. <maxIBSEG>*			–	
>>>>IB SG POS	M				–	
>DL Code Information		*1.. <maxnoofDLCodes*			–	
>>DL Scrambling Code	M				–	
>>FDD DL Channelisation Code Number	M				–	
>Diversity Indication	C-NotFirstRL				–	
>CHOICE *diversity Indication*						
>>*Combining*					YES	ignore
>>>RL ID	M			Reference RL ID for the	–	

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
				combining		
>>Non Combining or IE not present				"IE not present" is equivalent to "First RL".	YES	ignore
>>>DCH Information Response		*0..<maxnoofDCHs>*		Only one DCH per set of co-ordinated DCHs shall be included	–	
>>>>DCH ID	M				–	
>>>>Binding ID	M				–	
>>>>Transport Layer Address	M				–	
>SSDT Support Indicator	M				–	
>Maximum Uplink SIR	M		Uplink SIR		–	
>Minimum Uplink SIR	M		Uplink SIR		–	
>Maximum Allowed UL Tx Power	M				–	
>Neighbouring Cell Information		*0..<maxnoofneighbouringRNCs>*			EACH	ignore
>> RNC-Id	M				–	
>>CN PS Domain Identifier	O				–	
>>CN CS Domain Identifier	O				–	
>>Per FDD Cell Information		*0..<maxnoofFDDneighbours>*				
>>>C-Id	M					
>>>UARFCN	M			Corresponds to Nu in ref. [~~TS25.104~~6]	–	
>>>UARFCN	M			Corresponds to Nd in ref. [~~TS25.104~~6]		
>>>Frame Offset	O				–	
>>>Primary Scrambling Code	M				–	
>>>Primary CPICH Power	O				–	
>>>Cell Individual Offset	O					
>>>Tx diversity Indicator	O					
>>>STTD Support Indicator	O					
>>>Closed Loop mode1 Support Indicator	O					
>>>Closed Loop mode2 Support Indicator	O					
>>Per TDD Cell Information		*0..<maxnoofTDDneighbours>*				
>>>C-Id	M					
>>>UARFCN	M			Corresponds to Nt in ref. [7] [~~TS25.105~~]	–	
>>>Frame Offset	O				–	
>>>Cell Parameter ID	M				–	
>>>Sync Case	M				–	
>>>Time Slot	C-Case1				–	
>>>SCH Time Slot	C-Case2				–	

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
>>>Cell Individual Offset	O				–	
>>>DPCH Constant Value	O				–	
>>>PCCPCH Power	O				–	
Uplink SIR Target	O		Uplink SIR		YES	ignore
Downlink SIR Target	M		Uplink SIR		YES	ignore
Criticality Diagnostics	O				YES	ignore

Condition	Explanation
NotFirstRL	The IE is present only if the RL is not the first RL in the RL Information
Case1	This IE is present only if Sync Case = Case1.
Case2	This IE is present only if Sync Case = Case2.
SlotFormat	This IE is present only if the Secondary CCPCH Slot Format is equal to any of the value 8 to 17

Range bound	Explanation
MaxnoofRLs	Maximum number of RLs for one UE.
MaxnoofDCHs	Maximum number of DCHs for one UE.
MaxnoofneighbouringRNCs	Maximum number of neighbouring RNCs
MaxnoofFDDneighbours	Maximum number of neighbouring FDD cell for one cell.
MaxnoofTDDneighbours	Maximum number of neighbouring TDD cell for one cell.
MaxFACHCount	Maximum number of FACH's mapped onto secondary CCPCH's
MaxIBSEG	Maximum number of segments for one Information Block

9.1.4.2 TDD Message

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				–	
D-RNTI	O				YES	ignore
CN PS Domain Identifier	O				YES	ignore
CN CS Domain Identifier	O				YES	ignore
RL Information Response		*1*			YES	ignore
>RL ID	M				–	
>SAI	M				–	
>UL Interference per Time Slot		1 .. <maxnoof ULts>		Interference Level for each UL time slot within the Radio Link	–	
>>Time Slot	M				–	
>>UL Interference Level	M				–	
>Maximum Uplink SIR	M		Uplink SIR		–	
>Minimum Uplink SIR	M		Uplink SIR		–	
>Maximum Allowed UL Tx Power	M				–	
>UL CCTrCH Information		*1..<maxnoofCCTrCHs>*			GLOBAL	ignore
>>CCTrCH ID	M				–	
>>UL DPCH Information		*1..<MaxnoofDPCHs>*			EACH	ignore
>>> DPCH ID	M				–	
>>>TDD Channelisation Code	M				–	
>>>Burst Type	M				–	
>>>Midamble Shift	M				–	
>>>Time Slot	M				–	
>>>TDD Physical Channel Offset	M				–	
>>>Repetition Period	M				–	
>>>Repetition Length	M				–	
>>>TFCI Presence	M				–	
>DL CCTrCH Information		*1..<maxnoofCCTrCHs>*			GLOBAL	ignore
>>CCTrCH ID	M				–	
>>DL DPCH Information		*1..<MaxnoofDPCHs>*			EACH	ignore
>>>DPCH ID	M				–	
>>>TDD Channelisation Code	M				–	
>>>Burst Type	M				–	
>>>Midamble Shift	M				–	
>>>Time Slot	M				–	
>>>TDD Physical Channel Offset	M				–	
>>>Repetition Period	M				–	
>>>Repetition Length	M				–	
>>>TFCI Presence	M				–	
>DCH Information Response		*1..<maxnoofDCHs>*		Only one DCH per set of co-ordinated DCHs shall be included.	GLOBAL	ignore
>>DCH ID	M				–	

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
>>Binding ID	M				–	
>>Transport Layer Address	M				–	
>Neighbouring Cell Information	O	0..<maxnoofneighbouringRNCs>			EACH	ignore
>>RNC-Id	M				–	
>>CN PS Domain Identifier	O				–	
>>CN CS Domain Identifier	O				–	
>>Per FDD Cell Information		*0..<maxnoofFDDneighbours>*				
>>>C-Id	M					
>>>UARFCN	M			Corresponds to Nu in ref. [~~TS25.104~~6]	–	
>>>UARFCN	M			Corresponds to Nd in ref. [~~TS25.104~~6]		
>>>Frame Offset	O				–	
>>>Primary Scrambling Code	M				–	
>>>Cell Individual Offset	O					
>>>Primary CPICH Power	O				–	
>>>Tx diversity Indicator	O					
>>>STTD Support Indicator	O					
>>>Closed Loop mode1 Support Indicator	O					
>>>Closed Loop mode2 Support Indicator	O					
>>Per TDD Cell Information		*0..<maxnoofTDDneighbours>*				
>>>C-Id	M					
>>>UARFCN	M			Corresponds to Nt in ref. [7][~~TS25.105~~]	–	
>>>Frame Offset	O				–	
>>>Cell Parameter ID	M				–	
>>>Sync Case	M				–	
>>>Time Slot	C-Case1				–	
>>>SCH Time Slot	C-Case2				–	
>>>Cell Individual Offset	O				–	
>>>DPCH Constant Value	O				–	
>>>PCCPCH Power	O				–	
Uplink SIR Target	O		Uplink SIR		–	
Downlink SIR Target	M		Uplink SIR		–	
Criticality Diagnostics	O				YES	ignore

Condition	Explanation
Case1	This IE is present only if Sync Case = Case1.
Case2	This IE is present only if Sync Case = Case2.

Range bound	Explanation
MaxnoofDPCHs	Maximum number of DPCHs for one CCTrCH.
MaxnoofDCHs	Maximum number of DCHs for one UE.
MaxnoofneighbouringRNCs	Maximum number of neighbouring RNCs
MaxnoofFDDneighbours	Maximum number of neighbouring FDD cell for one cell
MaxnoofTDDneighbours	Maximum number of neighbouring TDD cell for one cell
MaxnoofCCTrCHs	Maximum number of CCTrCH for one UE.
MaxnoofULts	Maximum number of Uplink time slots per Radio Link

9.1.5 RADIO LINK SETUP FAILURE

9.1.5.1 FDD Message

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				–	
D-RNTI	O				YES	ignore
CN PS Domain Identifier	O				YES	ignore
CN CS Domain Identifier	O				YES	ignore
Unsuccessful RL Information Response		*1...<maxnoofRLs>*			EACH	ignore
>RL ID	M				–	
>Cause	M				–	
Successful RL Information Response		*0..<maxnoofRLs-1>*			EACH	ignore
>RL ID	M				–	
>RL Set ID	M				–	
>SAI	M				–	
>UL Interference Level	M				–	
>DL Code Information		*1..<maxnoofDLCodes*			GLOBAL	ignore
>>DL Scrambling Code	M				–	
>>FDD DL Channelisation Code Number	M				–	
>Diversity Indication	M				–	
>CHOICE *diversity Indication*						
>>*Combining*					YES	ignore
>>>RL ID	M			Reference RL ID for the combining	–	
>>*Non Combining or IE not present*				"IE not present" is equivalent to "First RL".	YES	ignore
>>>DCH Information Response		*0..<maxnoofDCHs>*		Only one DCH per set of co-ordinated DCHs shall be included.	–	
>>>>DCH ID	M				–	
>>>>Binding ID	M				–	
>>>>Transport Layer Address	M				–	
>SSDT Support Indicator	M				–	
>Maximum Uplink SIR	M		Uplink SIR		–	
>Minimum Uplink SIR	M		Uplink SIR		–	
>Maximum Allowed UL Tx Power	M				–	
>Neighbouring Cell Information	O	*0..<maxnoofneighbouringRNCs>*			EACH	ignore
>>RNC-Id	M				–	
>>CN PS Domain Identifier	O				–	
>>CN CS Domain Identifier	O				–	
>>**Per FDD Cell Information**		*0..<maxnoofFDDneighbours>*				

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
>>>C-Id	M					
>>>UARFCN	M			Corresponds to Nu in ref. [6][TS25.104]	–	
>>>UARFCN	M			Corresponds to Nd in ref. [6][TS25.104]		
>>>Frame Offset	O				–	
>>>Primary Scrambling Code	M				–	
>>>Primary CPICH Power	O				–	
>>>Cell Individual Offset	O					
>>>Tx diversity Indicator	O					
>>>STTD Support Indicator	O					
>>>Closed Loop mode1 Support Indicator	O					
>>>Closed Loop mode2 Support Indicator	O					
>>**Per TDD Cell Information**		*0..<maxnoofTDDneighbours>*				
>>>C-Id	M					
>>>UARFCN	M			Corresponds to Nt in ref. [7][TS25.105]	–	
>>>Frame Offset	O				–	
>>>Cell Parameter ID	M				–	
>>>Sync Case	M				–	
>>>Time Slot	C-Case1				–	
>>>SCH Time Slot	C-Case2				–	
>>>Cell Individual Offset	O				–	
>>>DPCH Constant Value	O				–	
>>>PCCPCH Power	O				–	
Uplink SIR Target	O		Uplink SIR		–	
Downlink SIR Target	M		Uplink SIR		–	
Criticality Diagnostics	O				YES	ignore

Condition	Explanation
Case1	This IE is present only if Sync Case = Case1.
Case2	This IE is present only if Sync Case = Case2.

Range bound	Explanation
MaxnoofRLs	Maximum number of RLs for one UE.
MaxnoofDCHs	Maximum number of DCHs for one UE.
MaxnoofneighbouringRNCs	Maximum number of neighbouring RNCs
MaxnoofFDDneighbours	Maximum number of neighbouring FDD cell for one cell
MaxnoofTDDneighbours	Maximum number of neighbouring TDD cell for one cell

9.1.7 RADIO LINK ADDITION RESPONSE

9.1.7.1 FDD Message

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				–	
RL Information Response		*1..<maxnoof RLs-1>*			EACH	ignore
>RL ID	M				–	
>RL Set ID	M				–	
>SAI	M				–	
>UL Interference Level	M				–	
>**Secondary CCPCH Info**		0..1			–	
>>FDD S-CCPCH Offset	M			Corresponds to: $\tau_{S\text{-}CCPCH,k}$, see ref. [8]	–	
>>DL Scrambling Code	M				–	
>>FDD DL Channelisation Code Number	M				–	
>>TFCS	M			For the DL.	–	
>>Secondary CCPCH Slot Format	M				–	
>>TFCI presence	C - SlotFormat				–	
>>MultiplexingPosition	M				–	
>>STTD Indicator	M				–	
>>FACH/PCH Information		1 .. <maxFACHcount+1>			–	
TFS				For each FACH, and the PCH when multiplexed on the same Secondary CCPCH	–	
>>Scheduling Information		1			–	
>>>IB_SG REP	M				–	
>>>Segment Information		*1.. <maxIBSEG>*			–	
>>>>IB SG POS	M				–	
>DL Code Information		*1..<maxnoof DLCodes>*			GLOBAL	ignore
>>DL Scrambling Code	M				–	
>>FDD DL Channelisation Code Number	M				–	
>Diversity Indication	M				YES	ignore
>CHOICE *diversity indication*						
>>Combining					YES	ignore
>>>RL ID	M			Reference RL-Id	–	
>>Non combining					YES	ignore

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
>>>DCH Information Response		*1..<maxnoofDCHs>*		Only one DCH per set of co-ordinated DCHs shall be included.	–	
>>>>DCH ID	M				–	
>>>>Binding ID	M				–	
>>>>Transport Layer Address	M				–	
>SSDT Support Indicator	M				–	
>Minimum Uplink SIR	M		Uplink SIR		–	
>Maximum Uplink SIR	M		Uplink SIR		–	
>Maximum Allowed UL Tx Power	M				–	
>Neighbouring Cell Information		*0..<maxnoofneighbouringRNCs>*			EACH	ignore
>>RNC-Id	M				–	
>>CN PS Domain Identifier	O				–	
>>CN CS Domain Identifier	O				–	
>>Per FDD Cell Information		*0..<maxnoofFDDneighbours>*				
>>>C-Id	M					
>>>UARFCN	M			Corresponds to Nu in ref. [6]~~[TS25.104]~~	–	
>>>UARFCN	M			Corresponds to Nd in ref. [6]~~[TS25.104]~~		
>>>Frame Offset	O				–	
>>>Primary Scrambling Code	M				–	
>>>Primary CPICH Power	O				–	
>>>Cell Individual Offset	O					
>>>Tx diversity Indicator	O					
>>>STTD Support Indicator	O					
>>>Closed Loop mode1 Support Indicator	O					
>>>Closed Loop mode2 Support Indicator	O					
>>Per TDD Cell Information		*0..<maxnoofTDDneighbours>*				
>>>C-Id	M					
>>>UARFCN	M			Corresponds to Nt in ref. [7]~~[TS25.105]~~	–	
>>>Frame Offset	O				–	
>>>Cell Parameter ID	M				–	
>>>Sync Case	M				–	
>>>Time Slot	C-Case1				–	

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
>>>SCH Time Slot	C-Case2				–	
>>>Cell Individual Offset	O				–	
>>>DPCH Constant Value	O				–	
>>>PCCPCH Power	O				–	
Criticality Diagnostics	O				YES	ignore

Condition	Explanation
Case1	This IE is present only if Sync Case = Case1.
Case2	This IE is present only if Sync Case = Case2.
SlotFormat	This IE is present only if the Secondary CCPCH Slot Format is equal to any of the value 8 to 17

Range bound	Explanation
MaxnoofDCHs	Maximum number of dedicated channels on one RL
MaxnoofRLs	Maximum number of radio links for one UE
MaxnoofneighbouringRNCs	Maximum number of neighbouring RNCs
MaxnoofFDDNeighbours	Maximum number of neighbouring FDD cells for one cell
MaxnoofTDDNeighbours	Maximum number of neighbouring TDD cells for one cell
MaxnoofDLCodes	Maximum number of DL code information
MaxFACHCount	Maximum number of FACH's mapped onto secondary CCPCH's
MaxIBSEG	Maximum number of segments for one Information Block

9.1.7.2 TDD Message

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				–	
RL Information Response		*1*			YES	ignore
>RL ID	M				–	
>SAI	M				–	
>UL Interference per Time Slot		1 .. <maxnoofULts>		Interference Level for each UL time slot within the Radio Link	–	
>>Time Slot	M				–	
>>UL Interference Level	M				–	
>UL CCTrCH Information		*1..<maxnoofCCTrCHs>*			GLOBAL	ignore
>>CCTrCH ID	M				–	
>>UL DPCH Information		*1..<maxnoOfDPCHs>*			EACH	ignore
>>>DPCH ID	M				–	
>>>TDD Channelisation Code	M				–	
>>>Burst Type	M				–	
>>>Midamble Shift	M				–	
>>>Time Slot	M				–	
>>>TDD Physical Channel Offset	M				–	
>>>Repetition Period	M				–	
>>>Repetition Length	M				–	
>>>TFCI Presence	M				–	
>DL CCTrCH Information		*1..<maxnoofCCTrCHs>*			GLOBAL	ignore
>>CCTrCH ID	M				–	
>>DL DPCH Information		*1..<maxnoOfDPCHs>*			EACH	ignore
>>>DPCH ID	M				–	
>>>TDD Channelisation Code	M				–	
>>>Burst Type	M				–	
>>>Midamble Shift	M				–	
>>>Time Slot	M				–	
>>>TDD Physical Channel Offset	M				–	
>>>Repetition Period	M				–	
>>>Repetition Length	M				–	
>>>TFCI Presence	M				–	
>Diversity Indication	M				YES	ignore
>CHOICE *diversity indication*						
>>*Combining*					YES	ignore
>>>RL ID	M			Reference RL	–	
>>*Non combining*					YES	ignore
>>>DCH Information Response		*1..<maxnoofDCHs>*		Only one DCH per set of co-ordinated DCHs shall be included.	–	
>>>>DCH ID	M				–	
>>>>Binding ID	M				–	
>>>>Transport Layer	M				–	

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Address						
>Minimum Uplink SIR	M		Uplink SIR		–	
>Maximum Uplink SIR	M		Uplink SIR		–	
>Maximum Allowed UL Tx Power	M				–	
>Neighbouring Cell Information		*0..<maxnoofneighbouringRNCs>*			EACH	ignore
>>RNC-Id	M				–	
>>CN PS Domain Identifier	O				–	
>>CN CS Domain Identifier	O				–	
>>Per FDD Cell Information		*0..<maxnoofFDDneighbours>*				
>>>C-Id	M					
>>>UARFCN	M			Corresponds to Nu in ref. [6]~~[TS25.104]~~	–	
>>>UARFCN	M			Corresponds to Nd in ref. [6]~~[TS25.104]~~		
>>>Frame Offset	O				–	
>>>Primary Scrambling Code	M				–	
>>>Primary CPICH Power	O				–	
>>>Cell Individual Offset	O					
>>>Tx diversity Indicator	O					
>>>STTD Support Indicator	O					
>>>Closed Loop mode1 Support Indicator	O					
>>>Closed Loop mode2 Support Indicator	O					
>>Per TDD Cell Information		*0..<maxnoofTDDneighbours>*				
>>>C-Id	M					
>>>UARFCN	M			Corresponds to Nt in ref. [7]~~[TS25.105]~~	–	
>>>Frame Offset	O				–	
>>>Cell Parameter ID	M				–	
>>>Sync Case	M				–	
>>>Time Slot	C-Case1				–	
>>>SCH Time Slot	C-Case2				–	
>>>Cell Individual Offset	O				–	
>>>DPCH Constant Value	O				–	
>>>PCCPCH Power	O				–	
Criticality Diagnostics	O				YES	ignore

Condition	Explanation
Case1	This IE is present only if Sync Case = Case1
Case2	This IE is present only if Sync Case = Case2.

Range Bound	Explanation
MaxnoofDCHs	Maximum number of dedicated channels on one RL
Maxno*ofneighbouringRNC*s	Maximum number of neighbouring RNCs
MaxnoofFDDNeighbours	Maximum number of neighbouring FDD cells for one cell
MaxnoofTDDNeighbours	Maximum number of neighbouring TDD cells for one cell
MaxnoofDLCodes	Maximum number of DL code information
MaxnoOfDPCHs	Maximum number of DPCH in one CCTrCH
MaxnoofCCTrCHs	number of CCTrCH for one UE.
MaxnoofULts	Maximum number of Uplink time slots per Radio Link

9.1.8 RADIO LINK ADDITION FAILURE

9.1.8.1 FDD Message

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				–	
Unsuccessful RL Information Response		*1..<maxnoof RLs-1>*			EACH	ignore
>RL ID	M				–	
>Cause	M				–	
Succesfull RL Information Response		*0..<maxnoof RLs-2>*			EACH	ignore
>RL ID	M				–	
>RL Set ID	M				–	
>SAI	M				–	
>UL Interference Level	M				–	
>DL Code Information		*1..<maxnoof DLCodes>*			GLOBAL	ignore
>>DL scrambling code	M				–	
>>FDD DL channelisation code Number	M				–	
>Diversity Indication	M				YES	ignore
>CHOICE *diversity indication*						
>>Combining					YES	ignore
>>>RL ID	M			Reference RL-Id	–	
>>Non combining					YES	ignore
>>>DCH Information Response		*1..<maxnoof DCHs>*		Only one DCH per set of co-ordinated DCHs shall be included.	–	
>>>>DCH ID	M				–	
>>>>Binding ID	M				–	
>>>>Transport Layer Address	M				–	
>SSDT Support Indicator	M				–	
>Minimum Uplink SIR	M		Uplink SIR		–	
>Maximum Uplink SIR	M		Uplink SIR		–	
>Maximum Allowed UL Tx Power	M				–	
>Neighbouring Cell Information		*0..<maxnoofneighbouringRNCs>*			EACH	ignore
>>RNC-Id	M				–	
>>CN PS Domain Identifier	O				–	
>>CN CS Domain Identifier	O				–	
>>Per FDD Cell Information		*0..<maxnoof FDDneighbours>*				
>>>C-Id	M					
>>>UARFCN	M			Corresponds to Nu in ref. [6]~~[TS25.104]~~	–	
>>>UARFCN	M			Corresponds to Nd in ref.		

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
				[6][~~TS25.104~~]		
>>>Frame Offset	O				–	
>>>Primary Scrambling Code	M				–	
>>>Primary CPICH Power	O				–	
>>>Cell Individual Offset	O					
>>>Tx diversity Indicator	O					
>>>STTD Support Indicator	O					
>>>Closed Loop mode1 Support Indicator	O					
>>>Closed Loop mode2 Support Indicator	O					
>>Per TDD Cell Information		*0..<maxnoofTDDneighbours>*				
>>>C-Id	M					
>>>UARFCN	M			Corresponds to Nt in ref. [7][~~TS25.105~~]	–	
>>>Frame Offset	O				–	
>>>Cell Parameter ID	M				–	
>>>Sync Case	M				–	
>>>Time Slot	C-Case1				–	
>>>SCH Time Slot	C-Case2				–	
>>>Cell Individual Offset	O				–	
>>>DPCH Constant Value	O				–	
>>>PCCPCH Power	O				–	
Criticality Diagnostics	O				YES	ignore

Condition	Explanation
Case1	This IE is present only if Sync Case = Case1.
Case2	This IE is present only if Sync Case = Case2.

Range bound	Explanation
MaxnoofDCHs	Maximum number of dedicated channels on one RL
MaxnoofRLs	Maximum number of radio links for one UE
Maxnoof*neighbouringRNC*s	Maximum number of neighbouring RNCs
MaxnoofFDDNeighbours	Maximum number of neighbouring FDD cells for one cell
MaxnoofTDDNeighbours	Maximum number of neighbouring TDD cells for one cell
MaxnoofDLCodes	Maximum number of DL code information

9.2.1.16 Dedicated Measurement Type

The Dedicated Measurement Type identifies the type of measurement that shall be performed.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Dedicated Measurement Type			ENUMERATED (SIR, SIR Error, Transmitted Code Power, RSCP,…)	RSCP is used by TDD only.

NOTE: For definitions of the measurement types refer to ref. [~~1~~11] and [14].

9.2.1.17 Dedicated Measurement Value

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

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Dedicated measurement Value				
>SIR value	C *MeasValue*		INTEGER(0. .63)	According to mapping in ~~25.215~~ref. [11]~~/25.225~~ and [14].
>SIR error Value	C *MeasValue*		INTEGER(0. .125)	SIR_Error=SIR-SIR_target 0: < -31.0 dB 1: -31.0dB ≤ SIR_Error < 30.5dB 2: -30.5dB ≤ SIR_Error < 30.0dB … 62: -0.5dB ≤ SIR_Error < 0dB 63: 0dB ≤ SIR_Error < 0.5dB … 124: 30.5dB ≤ SIR_Error < 31dB 125: ≥ 31dB
>Transmitted Code Power Value	C *MeasValue*		INTEGER(0. .127)	According to mapping in ref. [11] and [14].~~25.215/25.225~~
>RSCP	C *MeasValue*		INTEGER(0. .81)	According to mapping in ref. [14]. ~~25.225~~ (TDD only)

Condition	Explanation
MeasValue	Only one measurement value can be present at the same time.

9.2.1.21 DRX Cycle Length Coefficient

~~The DRX Cycle Length Coefficient is used as input for the formula to establish the paging occasions to be used in DRX.~~ The DRX Cycle Length Coefficient is used as input for the formula to establish the paging occasions to be used in DRX.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
DRX Cycle Length Coefficient			Integer (2, .., 12)	Refers to 'k' in the formula as specified in ref. [15], ~~Discontinous~~Discontinuous Reception.

9.2.1.53 Transport Format Combination Set

The Transport Format Combination Set is defined as a set of Transport Format Combinations on a Coded Composite Transport Channel. It is the allowed Transport Format Combinations of the corresponding Transport Channels. The DL Transport Format Combination Set is applicable for DL Transport Channels.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
TFCS		1 to <maxnoofTFCs>		The first instance of the parameter corresponds to TFC zero, the second to 1 and so on.
>CTFC	M		INTEGER(0..MaxCTFC-1)	Integer number calculated according to ref. [14].
>CHOICE Gain Factors	C-PhysChan			
>>Signalled Gain Factors				
>>>Gain Factor β_C	M		Integer (0..15)	For UL DPCCH or control part of PRACH in FDD; mapping in accordance to ~~TS 25.213~~ref. [21].
>>>Gain Factor β_D	M		Integer (0..15)	For UL DPDCH or data part of PRACH in FDD: mapping in accordance to ~~TS 25.213~~ ref. [21].
>>>Reference TFC nr	O		Integer (0..15)	If this TFC is a reference TFC, this IE indicates the reference number
>>Computed Gain Factors				
>>>Reference TFC nr	M		Integer (0..15)	Indicates the reference TFC to be used to calculate the gain factors for this TFC

Condition	Explanation
PhysChan	The choice shall be present if the TFCS concerns a UL DPCH or PRACH channel in FDD, not when the TFCS is used for other physical channels.

Range bound	Explanation
MaxnoofTFCs	The maximum number of Transport Format Combinations (1024).
MaxCTFC	Maximum number of the CTFC value is calculated according to the following: $\sum_{i=1}^{I}(L_i - 1)P_i$ with the notation according to ref. [16].

9.2.1.55 UARFCN

The UTRA Absolute Radio Frequency Channel Number defines the carrier.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
UARFCN			INTEGER (0..16383, …)	Corresponds to: 0.0Hz.. 3276.6MHz see ref. [6]~~25.104~~ and~~,~~ ref. [7]~~25.105~~.

9.2.1.66 DPCH Constant Value

~~DPCH Constant Value is the power margin used by a UE to set the proper uplink power.~~

DPCH Constant Value is the power margin used by a UE to set the proper uplink power.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
DPCH Constant Value			INTEGER (-32...31)	Unit dBm Granularity 1 dB.

9.2.1.67 Measurement Threshold

The Measurement Threshold defines which threshold that shall trigger Event A, B, E or F.

Information Element / Group Name	Presence	Range	IE Type and Reference	Semantics Description
SIR	*C – Threshold*		INTEGER(0. .63)	According to mapping in ref. [11] and [14].~~25.215/25.225~~
SIR Error	*C – Threshold*		INTEGER(0. .125)	SIR_Error=SIR-SIR_target 0: < -31.0 dB 1: -31.0dB ≤ SIR_Error < 30.5dB 2: -30.5dB ≤ SIR_Error < 30.0dB … 62: -0.5dB ≤ SIR_Error < 0dB 63: 0dB ≤ SIR_Error < 0.5dB … 124: 30.5dB ≤ SIR_Error < 31dB 125: ≥ 31dB
Transmitted Code Power	*C – Threshold*		INTEGER(0. .127)	According to mapping in ref. [11] and [14].~~25.215/25.225~~
RSCP	*C – Threshold*		INTEGER(0. .81)	According to mapping in ref. [14]. ~~25.225~~ (TDD only)

Condition	Explanation
Threshold	Only one measurement threshold can be present at the same time.

9.2.1.69 PCCPCH Power

Primary CCPCH power is the power that shall be used for reference power value in a TDD cell.~~Primary CCPCH power is the power that shall be used for reference power value in a TDD cell.~~

IE/Group Name	Presence	Range	IE type and reference	Semantics description
PCCPCH power			INTEGER(-15..40)	Unit dBm Granularity 0.1 dB.

9.2.1.70 IMSI

~~The IMSI is the permanent UE user Identity, see ref. 1.~~The IMSI is the permanent UE user Identity, see ref. 1.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
IMSI			OCTET STRING (SIZE(3..8))	-Decimal digits coded in BCD -'1111' used as filler -bit 4 to 1 of octet n is encoding digit 2n-1 -bit 8 to 5 of octet n is encoding digit 2n

9.2.2.39 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.

IE/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]~~ref. [8]

9.2.2.40 Secondary CCPCH Slot Format

Information Element/Group Name	Presence	Range	IE type and reference	Semantics description
Secondary CCPCH Slot Format			INTEGER (0..17)	~~refer to~~See ~~25.211~~ref. [8].

9.2.2.51 IB_SG_REP

Repetition distance for an Information Block segment. The segment shall be transmitted when SFN mod IB_SG_REP = IB_SG_POS.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
IB SG REP			INTEGER (16, 32, 64, 128, 256, 512, 1024, 2048)	Repetition period for the IB segment in frames

9.2.2.52 Power Adjustment Type

Defines the characteristic of the power adjustment.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Power_Adjustment Type			ENUMERATED (None, Common, Individual)	

9.2.3.5 Primary CCPCH RSCP

Received Signal Code Power is the received power on PCCPCH of the target cell after despreading. The reference point for the RSCP is the antenna connector at the UE, see ref. [14].

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Primary CCPCH RSCP			INTEGER (0..91)	According to mapping in ref. [14].~~25.225~~.

9.3.4 Information Element Definitions

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

RNSAP-IEs -- { object identifier to be allocated }--
DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

IMPORTS
    maxNrOfErrors,
    maxRateMatching,
    maxNrOfTFCs,
    maxNrOfTFs,
    maxCTFC-1,
    maxTTI-Count
FROM RNSAP-Constants

    Criticality,
    ProcedureCode,
    ProtocolIE-ID,
    TransactionID,
    TriggeringMessage
FROM RNSAP-CommonDataTypes

    ProtocolExtensionContainer{},
    RNSAP-PROTOCOL-EXTENSION
FROM RNSAP-Containers;

•
•
•
<Editor’s note: Several IEs have been omitted.>

•
•
•
-- L

LAC                 ::= OCTET STRING (SIZE (2)) --(EXCEPT ('0000'H|'FFFF'H))

LimitedPowerIncrease ::= ENUMERATED {
    used,
    not-used
}
```

```
L3-Information               ::= BIT STRING

-- M

MaxNrOfUL-DPCHs              ::= INTEGER (1..6)

MAC-c-SDU-Length             ::= INTEGER (1..5000)

MaximumAllowedULTxPower      ::= INTEGER (-50..33)

MeasurementFilterCoefficient ::= INTEGER (1..256)
-- Measurement Filter Coefficient to be used for measurement

MeasurementID                ::= INTEGER (0..1048575)

MultipleURAsIndicator ::= ENUMERATED {
    multiple-URAs-exist,
    single-URA-exists
}

ScaledMaxAdjustmentPeriod            ::= INTEGER(1..50)
-- MaxAdjustmentPeriod (slots) = 10 * ScaledMaxAdjustmentPeriod

ScaledMaxAdjustmentStep          ::= INTEGER(1..10)
-- MaxAdjustmentStep (dB) = ScaledMaxAdjustmentStep / 10

MeasurementChangeTime        ::= INTEGER (1..6000)
-- The MeasurementChangeTime  gives the MeasurementChangeTime
-- in number of 10 ms periods.
-- E.g. Value 6000 means 60000ms(1min)
-- Unis is ms, Step is 10 ms

MeasurementHysteresisTime       ::= INTEGER (1..6000)
-- The MeasurementHysteresisTime  gives the
-- MeasurementHysteresisTime in number of 10 ms periods.
-- E.g. Value 6000 means 60000ms(1min)
-- Unit is ms, Step is 10ms

MeasurementIncreaseDecreaseThreshold        ::= CHOICE {
    sir                             SIR-Value-IncrDecrThres,
    sir-error                       SIR-Error-Value-IncrDecrThres,
    transmitted-code-power          Transmitted-Code-Power-Value-IncrDecrThres,
    rscp                            RSCP-Value-IncrDecrThres,
    ...
}

MeasurementThreshold            ::= CHOICE {
    sir                             SIR-Value,
    sir-error                       SIR-Error-Value,
    transmitted-code-power          Transmitted-Code-Power-Value,
    rscp                            RSCP-Value,
```

```
    ...
}

MidambleShift               ::= INTEGER (0..15)

MinUL-ChannelisationCodeLength      ::= ENUMERATED {
    v4,
    v8,
    v16,
    v32,
    v64,
    v128,
    v256
}

MultiplexingPosition ::= ENUMERATED {
    fixed,
    flexible
}

-- N

•
•
•
<Editor’s note: Several IEs have been omitted.>

•
•
•

-- P

PD                  ::= INTEGER (0..2047, ...)

PayloadCRC-PresenceIndicator ::= ENUMERATED {
    crc-included,
    crc-not-included
}

PCCPCH-Power ::= INTEGER (-150..400)
-- PCCPCH-power = power * 10
-- If power <= -15 PCCPCH shall be set to -150
-- If power >= 40 PCCPCH shall be set to 400
-- Unit dBm, Range -15dBm .. +40 dBm, Step +0.1dBm

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

Periodic ::= SEQUENCE {
    reportPeriodicity       ReportPeriodicity,
    iE-Extensions           ProtocolExtensionContainer { {Periodic-ExtIEs} } OPTIONAL,
    ...
```

```
}

Periodic-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

PLMN-ID ::= OCTET STRING (SIZE(3))

PowerAdjustmentType ::= ENUMERATED {
    none,
    common,
    individual
}

PowerControlMode ::= ENUMERATED {
    v0,
    v1,
    ...
}

PowerOffset             ::= INTEGER (0..24)

PowerResumeMode ::= ENUMERATED {
    v0,
    v1,
    ...
}

PrimaryCPICH-Power          ::= INTEGER (-100..500)
-- step 0.1 (Range –10.0..50.0) Unit is dBm

PrimaryCPICH-EcNo           ::= INTEGER (-30..30)

PrimaryCCPCH-RSCP           ::= INTEGER (0..91)
-- According to maping in 25.225

PrimaryScramblingCode           ::= INTEGER (0..511)

PropagationDelay            ::= INTEGER (0..255)

SyncCase ::= ENUMERATED {
    case1,
    case2
}

PunctureLimit               ::= INTEGER (0..15)
-- 0: 40%; 1: 44%; ... 14: 96%; 15: 100

-- Q

QE-Selector ::= ENUMERATED {
```

```
    selected-DCH,
    non-selected-DCH
}

-- R

RAC                 ::= OCTET STRING (SIZE(1))

RANAP-RelocationInformation     ::= BIT STRING

RateMatchingAttribute           ::= INTEGER (1..maxRateMatching)

RefTFCNumber ::= INTEGER (0..15)

RepetitionLength            ::= INTEGER (1..63)

RepetitionPeriod ::= ENUMERATED {
    v1,
    v2,
    v4,
    v8,
    v16,
    v32,
    v64
}

RepetitionNumber ::= INTEGER (0..255)

ReportCharacteristics ::= CHOICE {
    onDemand            NULL,
    periodic            Periodic,
    eventA              EventA,
    eventB              EventB,
    eventC              EventC,
    eventD              EventD,
    eventE              EventE,
    eventF              EventF,
    ...
}

ReportPeriodicity ::= CHOICE {
    ten-msec                INTEGER (1..6000),
-- The Report Periodicity gives the reporting periodicity in number of 10 ms periods.
-- E.g. value 6000 means 60000ms (i.e. 1min)
-- Unit ms, Step 10ms
    min             INTEGER (1..60)
-- Unit min, Step 1min
}

LimitedPowerIncrease ::= ENUMERATED {
    used,
```

```
    not-used
}

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

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

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

RSCP-Value ::= INTEGER (0..81)
-- According to mapping in 25.225

RSCP-Value-IncrDecrThres ::= INTEGER (0..80)

-- S

SAC                 ::= OCTET STRING (SIZE (2))

SAI ::= SEQUENCE {
    pLMN-ID             PLMN-ID,
    lAC                 LAC,
    sAC                 SAC,
    iE-Extensions       ProtocolExtensionContainer { {SAI-ExtIEs} } OPTIONAL
}

SAI-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

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

ScaledMaxAdjustmentPeriod           ::= INTEGER(1..50)
-- MaxAdjustmentPeriod (slots) = 10 * ScaledMaxAdjustmentPeriod

ScaledMaxAdjustmentStep         ::= INTEGER(1..10)
-- MaxAdjustmentStep (dB) = ScaledMaxAdjustmentStep / 10

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

SIR-Error-Value         ::= INTEGER (0..125)

SIR-Error-Value-IncrDecrThres           ::= INTEGER (0..124)

SIR-Value               ::= INTEGER (0..63)
-- According to mapping in 25.215/25.225

SIR-Value-IncrDecrThres ::= INTEGER (0..62)
```

```
SecondaryCCPCH-SlotFormat       ::= INTEGER (0..17)
-- refer to 25.211

SN                  ::= TimeSlot

S-FieldLength               ::= ENUMERATED {
    v1,
    v2
}

S-RNTI                  ::= INTEGER (0..1048575)
-- From 0 to 2^20-1

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

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

SSDT-Indication ::= ENUMERATED {
    sSDT-active-in-the-UE,
    sSDT-not-active-in-the-UE
}

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

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

STTD-SupportIndicator   ::= ENUMERATED {
    sTTD-Supported,
    sTTD-not-Supported
}

-- T
```

•
•
•

<Editor’s note: Several IEs have been omitted.>

•
•
•

TSG-RAN Working Group 3 Meeting #13
Hawaii, USA, 22nd – 26th May 2000

Document R3-001296
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.

25.423	CR	CR118	Current Version:	3.1.0

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

For submission to:	TSG RAN #8	for approval	X	strategic		(for SMG use only)
list expected approval meeting # here ↑		for information		non-strategic		

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: R-WG3 **Date:** April 2000

Subject: Selection of Secondary CCPCH in RNSAP

Work item:

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

F	Correction	X	**Release:**	Phase 2	
A	Corresponds to a correction in an earlier release			Release 96	
B	Addition of feature			Release 97	
C	Functional modification of feature			Release 98	
D	Editorial modification			Release 99	X
				Release 00	

Reason for change:

In the current RNSAP specification the selection of the Secondary CCPCH to be used is currently defined to be either the S-CCPCH coupled to the PRACH or PCPCH where the UE made its first access to the cell or the S-CCPCH selected by the DRNC. However, in the RRC Specification it is defined that the selection of the Secondary CCPCH is based on the U-RNTI currently assigned to the UE (in RRC described as "old U-RNTI"), see the RRC Specification chapter 8.5.7.6.3. This means that the "FACH coupled to the PRACH or PCPCH" does not exist. This instead the Secondary CCPCH selected by the UE.

This CR clarifies that the Secondary CCPCH to be used is either the one selected by the UE or the one selected by the DRNC.

Clauses affected: 8.4.1.2, 9.1.36, 9.3.3, and 9.3.6

Other specs affected:

Other 3G core specifications	[ ]	→ List of CRs:	TS 25.425 CR016
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:

8.4 Common Transport Channel Procedures

8.4.1 Common Transport Channel Resources Initialisation

8.4.1.1 General

The Common Transport Channel Resources Initialisation procedure is used by the SRNC for the initialisation of the Common Transport Channel user plane towards the DRNC and/or for the initialisation of the UE context in the DRNC.

This procedure shall use the connectionless mode of the signalling bearer.

8.4.1.2 Successful Operation

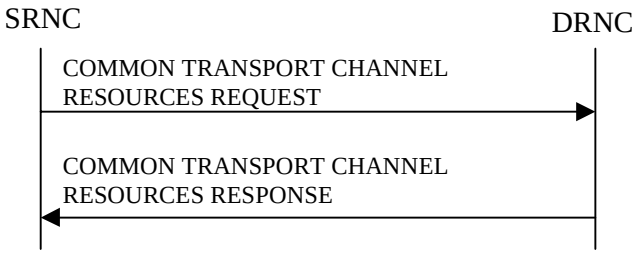

Figure 1: Common Transport Channel Resources Initialisation procedure, Successful Operation

The SRNC initiates the procedure by sending the message COMMON TRANSPORT CHANNEL RESOURCES REQUEST to the DRNC.

Upon reception of the COMMON TRANSPORT CHANNEL RESOURCES REQUEST message, the DRNC shall respond by sending a COMMON TRANSPORT CHANNEL RESOURCES RESPONSE message to the SRNC.

If the value of the *Transport Bearer Request Indicator* IE is set to "Bearer Requested", the DRNC shall store the received *Transport Bearer ID* IE and include the *Binding Identity* and *Transport Layer Address* IEs in the COMMON TRANSPORT CHANNEL RESOURCES RESPONSE message.

If the value of the *Transport Bearer Request Indicator* IE is set to" Bearer not Requested", the DRNC shall use the transport bearer for the indicated by the *Transport Bearer ID* IE.

The DRNC shall include the *FACH Priority Indicator* IE and *FACH Initial Window Size* IE for each priority class that the DRNC has determined shall be used. The DRNC may include several *MAC-c SDU Length* IEs for each priority class.

If there exists multiple Secondary CCPCHs in the cell where the UE is located, the DRNC may include in the COMMON TRANSPORT CHANNEL RESOURCES RESPONSE message the *FACH Info for ~~optional~~ DRNC Selected S-CCPCH* IE group to be used by the UE which is different from the Secondary CCPCH used by the UE at reception of the COMMON TRANSPORT CHANNEL RESOURCES REQUEST message. If the DRNC includes the *FACH Info for ~~optional~~ DRNC Selected S-CCPCH* IE group, then it shall also include the *FACH Priority Indicator* IE and *FACH Initial Window Size* IE for each priority class for the new Secondary CCPCH.

8.4.1.3 Unsuccessful Operation

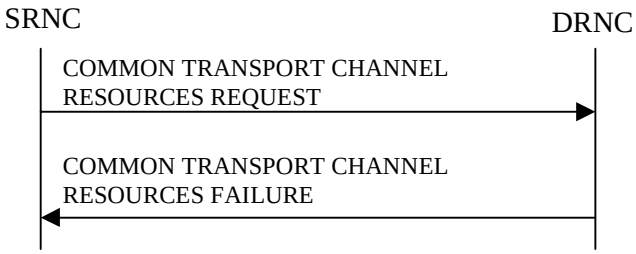

Figure 2: Common Transport Channel Resources Initialisation procedure, Unsuccessful Operation

If the *Transport Bearer Request Indicator* IE is set to "Bearer Requested" and the DRNC is not able to provide a Transport Bearer, the DRNC shall respond to the SRNC with the COMMON TRANSPORT CHANNEL RESOURCES FAILURE message, indicating the cause of the failure.

8.4.1.4 Abnormal Conditions

-

9.1.36 COMMON TRANSPORT CHANNEL RESOURCES RESPONSE

9.1.36.1 FDD Message

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				–	
S-RNTI	M				YES	ignore
FACH Info for UE Selected S-CCPCH ~~coupled to PRACH or PCPCH~~		1			YES	ignore
>Priority Indicator & Initial Window Size		*1..16*		Provide Information for each priority class used	GLOBAL	ignore
>>FACH Priority Indicator	M				–	
>>MAC-c SDU Length		*1..<MaxNb MACcSDU Length>*			GLOBAL	ignore
>>>MAC-c SDU Length	M				–	
>>FACH Initial Window Size	M				–	
FACH Info for ~~optional~~ DRNC Selected S-CCPCH		0..1			YES	ignore
>FDD S-CCPCH Offset	M			Corresponds to: $\tau_{S\text{-}CCPCH,k}$, see ref. [7]	–	
>DL Scrambling Code	M				–	
>FDD DL Channelisation Code Number	M				–	
>TFCS	M			For the DL.	–	
>Secondary CCPCH Slot Format	M				–	
>MultiplexingPosition	M				–	
>STTD Indicator	M				–	
>Priority Indicator & Initial Window Size		*1..16*		Provide Information for each priority class used	GLOBAL	ignore
>>FACH Priority Indicator	M				–	
>>MAC-c SDU Length		*1..<MaxNb MACcSDU Length>*			GLOBAL	ignore
>>>MAC-c SDU Length	M				–	
>>FACH Initial Window Size	M				–	
Transport Layer Address	O				YES	ignore
Binding Identity	O				YES	ignore
Criticality Diagnostics	O				YES	ignore

Range Bound	Explanation
MaxNbMACcSDULength	Maximum number of different MAC-c SDU Lengths.

9.1.36.2 TDD Message

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
Message Type	M				YES	reject
Transaction ID	M				–	
S-RNTI	M				YES	ignore
FACH Info for UE Selected S-CCPCHs ~~coupled to PRACH~~		*1*			YES	ignore
>Priority Indicator & Initial Window Size		*1 .. 16*		Provide Information for each priority class used	GLOBAL	ignore
>>FACH Priority Indicator	M				–	
>>MAC-c SDU Length		*1..< MaxNbMACcSDULength>*			GLOBAL	ignore
>>>MAC-c SDU Length	M				–	
>>FACH Initial Window Size	M				–	
FACH Info for ~~optional~~ DRNC Selected group of S-CCPCHs		*0 .. 1*			YES	ignore
>TFCS	M			For DL CCTrCH supporting several Secondary CCPCHs	–	
>Secondary CCPCH	M	*1.. <MaxnoofSCCPCHs>*			GLOBAL	ignore
>>TDD Channelisation Code	M				–	
>>Time Slot	M				–	
>>Burst Type	M				–	
>>Midamble shift	M				–	
>>TDD Physical Channel Offset	M				–	
>>Repetition Period	M				–	
>>Repetition Length	M				–	
>>Priority Indicator & Initial Window Size		*1..16*		Provide Information for each priority class used	GLOBAL	ignore
>>>FACH Priority Indicator	M				–	
>>>MAC-c SDU Length		*1..< MaxNbMACcSDULength>*			GLOBAL	ignore
>>>>MAC-c SDU Length	M				–	
>>>FACH Initial Window Size	M				–	
>>>Transport Layer Address	O				YES	ignore
>>>Binding Identity	O				YES	ignore
Criticality Diagnostics	O				YES	ignore

Range Bound	Explanation
MaxNbMACcSDULength	Maximum number of different MAC-c SDU Lengths.
MaxnoofSCCPCHs	TBD

9.3.3 PDU Definitions

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

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

BEGIN

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

IMPORTS
    AllocationRetentionPriority,
    AllowedQueuingTime,
    BLER,
    BindingID,
    BurstType,
    C-ID,
    C-RNTI,
    CCTrCH-ID,
    CellIndividualOffset,
    CFN,
    CFNOffset,
    ClosedLoopMode1-SupportIndicator,
    ClosedLoopMode2-SupportIndicator,
    CN-CS-DomainIdentifier,
    CN-PS-DomainIdentifier,
    Cause,
    CellParameterID,
    ChipOffset,
    CompressedModeMethod,
    CriticalityDiagnostics,
    D-FieldLength,
    D-RNTI,
    D-RNTI-ReleaseIndication,
    DCH-CombinationInd,
    DCH-ID,
    DL-DPCH-SlotFormat,
    DL-SIRTarget,
    DL-FrameType,
    DL-Power,
    DL-ScramblingCode,
```

```
DPCHConstantValue,
DPCH-ID,
DRACControl,
DRXCycleLengthCoefficient,
DedicatedMeasurementType,
DedicatedMeasurementValue,
DiversityControlField,
DiversityMode,
FACH-InitialWindowSize,
FACH-PriorityIndicator,
FDD-DL-ChannelisationCodeNumber,
FDD-S-CCPCH-Offset,
FDD-TPC-DownlinkStepSize,
FrameHandlingPriority,
FrameOffset,
GapPeriod,
GapPositionMode,
IB-SG-POS,
IB-SG-REP,
IMSI,
L3-Information,
LimitedPowerIncrease,
MAC-c-SDU-Length,
MaximumAllowedULTxPower,
MaxNrOfUL-DPCHs,
MeasurementFilterCoefficient,
MeasurementID,
MidambleShift,
MinUL-ChannelisationCodeLength,
MultipleURAsIndicator,
MultiplexingPosition,
PD,
PayloadCRC-PresenceIndicator,
PCCPCH-Power,
PowerAdjustmentType,
PowerControlMode,
PowerOffset,
PowerResumeMode,
PrimaryCCPCH-RSCP,
PrimaryCPICH-EcNo,
PrimaryCPICH-Power,
PrimaryScramblingCode,
PropagationDelay,
PunctureLimit,
QE-Selector,
RANAP-RelocationInformation,
RL-ID,
RL-Set-ID,
RNC-ID,
RepetitionLength,
RepetitionPeriod,
```

```
    ReportCharacteristics,
    S-FieldLength,
    S-RNTI,
    SCH-TimeSlot,
    SAI,
    SN,
    SSDT-CellID,
    SSDT-CellID-Length,
    SSDT-Indication,
    SSDT-SupportIndicator,
    STTD-Indicator,
    STTD-SupportIndicator,
    ScaledMaxAdjustmentPeriod,
    ScaledMaxAdjustmentStep,
    ScramblingCodeChange,
    SecondaryCCPCH-SlotFormat,
    SyncCase,
    TDD-ChannelisationCode,
    TDD-PhysicalChannelOffset,
    TDD-TPC-DownlinkStepSize,
    TFCI-Coding,
    TFCI-Presence,
    TFCI-SignallingMode,
    TGD,
    TGL,
    TimeSlot,
    ToAWE,
    ToAWS,
    TransmitDiversityIndicator,
    TransportBearerID,
    TransportBearerRequestIndicator,
    TFCS,
    TransportFormatSet,
    TransportLayerAddress,
    TrCH-SrcStatisticsDescr,
    TxDiversityIndicator,
    UARFCN,
    UC-ID,
    UL-DeltaSIR,
    UL-DeltaSIRAfter,
    UL-DL-CompressedModeSelection,
    UL-DPCCH-SlotFormat,
    UL-InterferenceLevel,
    UL-SIR,
    UL-FP-Mode,
    UL-ScramblingCode,
    URA-ID
FROM RNSAP-IEs

    PrivateIE-Container{},
    ProtocolExtensionContainer{},
```

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

    maxNrOfCCTrCHs,
    maxNrOfDCHs,
    maxNrOfDL-Codes,
    maxNrOfDPCHs,
    maxNrOfMACcSDU-Length,
    maxNrOfRLs,
    maxNrOfRLSets,
    maxNrOfRLs-1,
    maxNrOfRLs-2,
    maxNrOfSCCPCHs,
    maxNrOfULTs,
    maxNrOfCMpatterns,
    maxRNCinURA,
    maxNrOfNeighbouringRNCs,
    maxNrOfFDDNeighboursPerRNC,
    maxNrOfTDDNeighboursPerRNC,
    maxFACHCountPlus1,
    maxIBSEG,

    id-AllRLItem-DM-Rprt,
    id-AllRLItem-DM-Rsp,
    id-AllRL-SetItem-DM-Rprt,
    id-AllRL-SetItem-DM-Rsp,
    id-AllowedQueuingTime,
    id-BindingID,
    id-C-ID,
    id-C-RNTI,
    id-CFN,
    id-CN-CS-DomainIdentifier,
    id-CN-PS-DomainIdentifier,
    id-Cause,
    id-CellItem-PagingRqst,
    id-CM-PatternInformationItem-CompressedModePrep,
    id-CM-PatternInformationList-CompressedModePrep,
    id-CombiningItem-RL-AdditionFailureFDD,
    id-CombiningItem-RL-AdditionRspFDD,
    id-CombiningItem-RL-AdditionRspTDD,
    id-CombiningItem-RL-SetupFailureFDD,
    id-CombiningItem-RL-SetupRspFDD,
    id-CriticalityDiagnostics,
    id-D-RNTI,
```

```
id-D-RNTI-ReleaseIndication,
id-DCH-AddListIE-RL-ReconfReadyFDD,
id-DCH-AddListIE-RL-ReconfReadyTDD,
id-DCH-AddListIE-RL-ReconfRsp,
id-DCH-AddList-RL-ReconfPrepFDD,
id-DCH-AddList-RL-ReconfPrepTDD,
id-DCH-AddList-RL-ReconfRqstFDD,
id-DCH-AddList-RL-ReconfRqstTDD,
id-DCH-DeleteList-RL-ReconfPrepFDD,
id-DCH-DeleteList-RL-ReconfPrepTDD,
id-DCH-DeleteList-RL-ReconfRqstFDD,
id-DCH-DeleteList-RL-ReconfRqstTDD,
id-DCH-Information-RL-SetupRqstFDD,
id-DCH-InformationList-RL-SetupRqstTDD,
id-DCH-ModifyListIE-RL-ReconfReadyFDD,
id-DCH-ModifyListIE-RL-ReconfReadyTDD,
id-DCH-ModifyListIE-RL-ReconfRsp,
id-DCH-ModifyList-RL-ReconfPrepFDD,
id-DCH-ModifyList-RL-ReconfPrepTDD,
id-DCH-ModifyList-RL-ReconfRqstFDD,
id-DCH-ModifyList-RL-ReconfRqstTDD,
id-DCH-InformationResponseListIE-RL-SetupRspTDD,
id-DL-CCTrCH-InformationItem-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationListIE-RL-ReconfReadyTDD,
id-DL-CCTrCH-InformationItem-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD,
id-DL-CCTrCH-InformationListIE-PhyChReconfRqstTDD,
id-DL-CCTrCH-InformationListIE-RL-AdditionRspTDD,
id-DL-CCTrCH-InformationListIE-RL-SetupRspTDD,
id-DL-CCTrCH-InformationList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationList-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationList-RL-SetupRqstTDD,
id-DL-CodeInformationListIE-PhyChReconfRqstFDD,
id-DL-CodeInformationListIE-RL-AdditionFailureFDD,
id-DL-CodeInformationListIE-RL-AdditionRspFDD,
id-DL-CodeInformationListIE-RL-ReconfReadyFDD,
id-DL-CodeInformationListIE-RL-SetupFailureFDD,
id-DL-DPCH-Information-RL-ReconfPrepFDD,
id-DL-DPCH-Information-RL-SetupRqstFDD,
id-DL-DPCH-Information-RL-ReconfRqstFDD,
id-DL-DPCH-InformationItem-PhyChReconfRqstTDD,
id-DL-DPCH-InformationItem-RL-AdditionRspTDD,
id-DL-DPCH-InformationItem-RL-SetupRspTDD,
id-DL-DPCH-InformationListIE-RL-ReconfReadyTDD,
id-DL-SIRTarget,
id-DLReferencePower,
id-DLReferencePowerList-DL-PC-Rqst,
id-DL-ReferencePowerInformation-DL-PC-Rqst,
id-DRXCycleLengthCoefficient,
id-DedicatedMeasurementObjectType-DM-Rprt,
id-DedicatedMeasurementObjectType-DM-Rqst,
```

id-DedicatedMeasurementObjectType-DM-Rsp,
id-DedicatedMeasurementType,
id-DiversityIndicationItem-RL-AdditionFailureFDD,
id-DiversityIndicationItem-RL-AdditionRspFDD,
id-DiversityIndicationItem-RL-AdditionRspTDD,
id-DiversityIndicationItem-RL-SetupFailureFDD,
id-DiversityIndicationItem-RL-SetupRspFDD,
id-FACH-InfoForDRNCSelected~~Optional~~S-CCPCH-CTCH-ResourceRspFDD,
id-FACH-InfoForDRNCSelected~~Optional~~S-CCPCH-CTCH-ResourceRspTDD,
id-FACH-InfoForUESelectedS-CCPCH~~-CoupledToPRACHorPCPCH~~-CTCH-ResourceRspFDD,
id-FACH-InfoForUESelectedS-CCPCH~~-CoupledToPRACH~~-CTCH-ResourceRspTDD,
id-IMSI,
id-L3-Information,
id-MAC-c-SDU-LengthListIE-CTCH-ResourceRspFDD,
id-MAC-c-SDU-LengthListIE-CTCH-ResourceRspTDD,
id-MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspFDD,
id-MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspTDD,
id-MaxAdjustmentPeriod,
id-MaxAdjustmentStep,
id-MeasurementFilterCoefficient,
id-MeasurementID,
id-MultipleURAsIndicator,
id-NeighbouringFDD-CellInformationItem-RL-AdditionFailureFDD,
id-NeighbouringFDD-CellInformationItem-RL-AdditionRsp,
id-NeighbouringFDD-CellInformationItem-RL-SetupFailureFDD,
id-NeighbouringFDD-CellInformationItem-RL-SetupRsp,
id-NeighbouringTDD-CellInformationItem-RL-AdditionFailureFDD,
id-NeighbouringTDD-CellInformationItem-RL-AdditionRsp,
id-NeighbouringTDD-CellInformationItem-RL-SetupFailureFDD,
id-NeighbouringTDD-CellInformationItem-RL-SetupRsp,
id-Neighbouring-CellInformationItem-RL-SetupFailureFDD,
id-Neighbouring-CellInformationItem-RL-SetupRsp,
id-NonCombiningItem-RL-AdditionFailureFDD,
id-NonCombiningItem-RL-AdditionRspFDD,
id-NonCombiningItem-RL-AdditionRspTDD,
id-NonCombiningOrIEnotPresenItem-RL-SetupFailureFDD,
id-NonCombiningOrIEnotPresenItem-RL-SetupRspFDD,
id-PagingArea-PagingRqst,
id-PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspFDD,
id-PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspTDD,
id-PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspFDD,
id-PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspTDD,
id-PowerAdjustmentType,
id-ProcedureScope-DL-PC-Rqst,
id-RANAP-RelocationInformation,
id-RL-Information-PhyChReconfRqstFDD,
id-RL-Information-PhyChReconfRqstTDD,
id-RL-Information-RL-AdditionRqstFDD,
id-RL-Information-RL-AdditionRqstTDD,
id-RL-Information-RL-DeletionRqst,
id-RL-Information-RL-FailureInd,

```
id-RL-Information-RL-ReconfPrepFDD,
id-RL-Information-RL-RestoreInd,
id-RL-Information-RL-SetupRqstFDD,
id-RL-Information-RL-SetupRqstTDD,
id-RL-InformationItem-DM-Rprt,
id-RL-InformationItem-DM-Rqst,
id-RL-InformationItem-DM-Rsp,
id-RL-InformationItem-RL-SetupRqstFDD,
id-RL-InformationList-RL-AdditionRqstFDD,
id-RL-InformationList-RL-DeletionRqst,
id-RL-InformationList-RL-ReconfPrepFDD,
id-RL-InformationResponse-RL-AdditionRspTDD,
id-RL-InformationResponse-RL-ReconfReadyTDD,
id-RL-InformationResponse-RL-SetupRspTDD,
id-RL-InformationResponseItem-RL-AdditionRspFDD,
id-RL-InformationResponseItem-RL-ReconfReadyFDD,
id-RL-InformationResponseItem-RL-ReconfRsp,
id-RL-InformationResponseItem-RL-SetupRspFDD,
id-RL-InformationResponseList-RL-AdditionRspFDD,
id-RL-InformationResponseList-RL-ReconfReadyFDD,
id-RL-InformationResponseList-RL-ReconfRsp,
id-RL-InformationResponseList-RL-SetupRspFDD,
id-RLItem-DM-Rprt,
id-RLItem-DM-Rqst,
id-RLItem-DM-Rsp,
id-RL-ReconfigurationFailure-RL-ReconfFail,
id-RL-ReconfigurationFailureList-RL-ReconfFail,
id-RL-Set-InformationItem-DM-Rprt,
id-RL-Set-InformationItem-DM-Rqst,
id-RL-Set-InformationItem-DM-Rsp,
id-RL-Set-Information-RL-FailureInd,
id-RL-Set-Information-RL-RestoreInd,
id-RL-SetItem-DM-Rprt,
id-RL-SetItem-DM-Rqst,
id-RL-SetItem-DM-Rsp,
id-RNCsWithCellsInTheAccessedURA-List-UL-ST-Ind,
id-ReportCharacteristics,
id-Reporting-Object-RL-FailureInd,
id-Reporing-Object-RL-RestoreInd,
id-S-RNTI,
id-SAI,
id-SRNC-ID,
id-SecondaryCCPCHListIE-CTCH-ResourceRspTDD,
id-SuccessfulRL-InformationResponse-RL-AdditionFailureFDD,
id-SuccessfulRL-InformationResponse-RL-SetupFailureFDD,
id-SuccessfulRL-InformationResponseList-RL-AdditionFailureFDD,
id-SuccessfulRL-InformationResponseList-RL-SetupFailureFDD,
id-TransportBearerID,
id-TransportBearerRequestIndicator,
id-TransportLayerAddress,
id-UC-ID,
```

```
    id-UL-CCTrCH-Information-RL-ReconfPrepTDD,
    id-UL-CCTrCH-InformationItem-RL-ReconfRqstTDD,
    id-UL-CCTrCH-InformationList-RL-ReconfPrepTDD,
    id-UL-CCTrCH-InformationList-RL-ReconfRqstTDD,
    id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD,
    id-UL-CCTrCH-InformationList-RL-SetupRqstTDD,
    id-UL-CCTrCH-InformationListIE-PhyChReconfRqstTDD,
    id-UL-CCTrCH-InformationListIE-RL-AdditionRspTDD,
    id-UL-CCTrCH-InformationListIE-RL-ReconfReadyTDD,
    id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD,
    id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD,
    id-UL-DPCH-Information-RL-ReconfPrepFDD,
    id-UL-DPCH-Information-RL-ReconfRqstFDD,
    id-UL-DPCH-Information-RL-SetupRqstFDD,
    id-UL-DPCH-InformationItem-PhyChReconfRqstTDD,
    id-UL-DPCH-InformationItem-RL-AdditionRspTDD,
    id-UL-DPCH-InformationItem-RL-SetupRspTDD,
    id-UL-DPCH-InformationListIE-RL-ReconfReadyTDD,
    id-UL-SIRTarget,
    id-URA-ID,
    id-URAItem-PagingRqst,
    id-UnsuccessfulRL-InformationResponse,
    id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD,
    id-UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD,
    id-UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD,
    id-UnsuccessfulRL-InformationResponseList-RL-AdditionFailureFDD,
    id-UnsuccessfulRL-InformationResponseList-RL-SetupFailureFDD
FROM RNSAP-Constants;

-- **************************************************************
--
-- Common Container List
--
-- **************************************************************

DPCH-IE-ContainerList       { RNSAP-PROTOCOL-IES : IEsSetParam}     ::= ProtocolIE-ContainerList { 1, maxNrOfDPCHs,    { IEsSetParam } }
RL-IE-ContainerList0        { RNSAP-PROTOCOL-IES : IEsSetParam}     ::= ProtocolIE-ContainerList { 0, maxNrOfRLs,      { IEsSetParam } }
RL-IE-ContainerList1        { RNSAP-PROTOCOL-IES : IEsSetParam}     ::= ProtocolIE-ContainerList { 1, maxNrOfRLs,      { IEsSetParam } }
RL-IE-ContainerList1-1      { RNSAP-PROTOCOL-IES : IEsSetParam}     ::= ProtocolIE-ContainerList { 1, maxNrOfRLs-1,    { IEsSetParam } }
RL-IE-ContainerList0-1      { RNSAP-PROTOCOL-IES : IEsSetParam}     ::= ProtocolIE-ContainerList { 0, maxNrOfRLs-1,    { IEsSetParam } }
RL-IE-ContainerList0-2      { RNSAP-PROTOCOL-IES : IEsSetParam}     ::= ProtocolIE-ContainerList { 0, maxNrOfRLs-2,    { IEsSetParam } }
RL-Set-IE-ContainerList     { RNSAP-PROTOCOL-IES : IEsSetParam}     ::= ProtocolIE-ContainerList { 1, maxNrOfRLSets,   { IEsSetParam } }
CCTrCH-IE-ContainerList0    { RNSAP-PROTOCOL-IES : IEsSetParam}     ::= ProtocolIE-ContainerList { 0, maxNrOfCCTrCHs,  { IEsSetParam } }
CCTrCH-IE-ContainerList1    { RNSAP-PROTOCOL-IES : IEsSetParam}     ::= ProtocolIE-ContainerList { 1, maxNrOfCCTrCHs,  { IEsSetParam } }

•
•
•
<Parts of the ASN.1 module is omitted>
•
•
•
```

```
-- **************************************************************
--
-- COMMON TRANSPORT CHANNEL RESOURCES RESPONSE FDD
--
-- **************************************************************

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

CommonTransportChannelResourcesResponseFDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-S-RNTI                  CRITICALITY ignore  TYPE S-RNTI                PRESENCE mandatory  } |
    { ID id-FACH-InfoForUESelectedS-CCPCH-CoupledToPRACHorPCPCH-CTCH-ResourceRspFDD CRITICALITY ignore  TYPE FACH-InfoForUESelectedS-CCPCH-
CoupledToPRACHorPCPCH-CTCH-ResourceRspFDD       PRESENCE mandatory  } |
    { ID id-FACH-InfoForDRNCSelectedOptionalS-CCPCH-CTCH-ResourceRspFDD     CRITICALITY ignore  TYPE FACH-InfoForDRNCSelectedOptionalS-CCPCH-CTCH-
ResourceRspFDD      PRESENCE optional   } |
    { ID id-TransportLayerAddress           CRITICALITY ignore  TYPE TransportLayerAddress       PRESENCE optional } |
    { ID id-BindingID               CRITICALITY ignore  TYPE BindingID                  PRESENCE optional  } |
    { ID id-CriticalityDiagnostics          CRITICALITY ignore  TYPE CriticalityDiagnostics      PRESENCE optional },
    ...
}

FACH-InfoForUESelectedS-CCPCH-CoupledToPRACHorPCPCH-CTCH-ResourceRspFDD ::= SEQUENCE {
    priorityIndicatorAndInitialWindowSizes      PriorityIndicatorAndInitialWindowSizeList-CTCH-ResourceRspFDD,
    iE-Extensions                   ProtocolExtensionContainer { {FACH-InfoForUESelectedS-CCPCH-CoupledToPRACHorPCPCH-CTCH-ResourceRspFDD-ExtIEs} }
OPTIONAL,
    ...
}

FACH-InfoForUESelectedS-CCPCH-CoupledToPRACHorPCPCH-CTCH-ResourceRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

PriorityIndicatorAndInitialWindowSizeList-CTCH-ResourceRspFDD ::= ProtocolIE-Container {{ PriorityIndicatorAndInitialWindowSizeListIEs-CTCH-
ResourceRspFDD }}

PriorityIndicatorAndInitialWindowSizeListIEs-CTCH-ResourceRspFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspFDD CRITICALITY ignore  TYPE PriorityIndicatorAndInitialWindowSizeListIE-CTCH-
ResourceRspFDD  PRESENCE mandatory  },
    ...
}

PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspFDD ::= SEQUENCE (SIZE (1..16)) OF PriorityIndicatorAndInitialWindowSizeItem-CTCH-
ResourceRspFDD

PriorityIndicatorAndInitialWindowSizeItem-CTCH-ResourceRspFDD ::= SEQUENCE {
    fACH-PriorityIndicator              FACH-PriorityIndicator,
    mAC-c-SDU-Lengths               MAC-c-SDU-LengthList-CTCH-ResourceRspFDD,
```

```
    fACH-InitialWindowSize              FACH-InitialWindowSize,
    iE-Extensions                   ProtocolExtensionContainer { {PriorityIndicatorAndInitialWindowSizeItem-CTCH-ResourceRspFDD-ExtIEs} } OPTIONAL,
    ...
}

PriorityIndicatorAndInitialWindowSizeItem-CTCH-ResourceRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

MAC-c-SDU-LengthList-CTCH-ResourceRspFDD ::= ProtocolIE-Container {{ MAC-c-SDU-LengthListIEs-CTCH-ResourceRspFDD }}

MAC-c-SDU-LengthListIEs-CTCH-ResourceRspFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-MAC-c-SDU-LengthListIE-CTCH-ResourceRspFDD  CRITICALITY ignore  TYPE    MAC-c-SDU-LengthListIE-CTCH-ResourceRspFDD PRESENCE mandatory   },
    ...
}

MAC-c-SDU-LengthListIE-CTCH-ResourceRspFDD  ::= SEQUENCE (SIZE (1..maxNrOfMACcSDU-Length)) OF MAC-c-SDU-LengthItem-CTCH-ResourceRspFDD

MAC-c-SDU-LengthItem-CTCH-ResourceRspFDD ::= SEQUENCE {
    mAC-c-SDU-Length                MAC-c-SDU-Length,
    iE-Extensions                   ProtocolExtensionContainer { {MAC-c-SDU-LengthItem-CTCH-ResourceRspFDD-ExtIEs} } OPTIONAL,
    ...
}

MAC-c-SDU-LengthItem-CTCH-ResourceRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

FACH-InfoForDRNCSelectedOptionalS-CCPCH-CTCH-ResourceRspFDD ::= SEQUENCE {
    fDD-S-CCPCH-Offset              FDD-S-CCPCH-Offset,
    dl-ScrablingCode                DL-ScramblingCode,
    fDD-DL-ChannelisationCodeNumber         FDD-DL-ChannelisationCodeNumber,
    dl-TFCS                     TFCS,
    secondaryCCPCH-SlotFormat                   SecondaryCCPCH-SlotFormat,
    multiplexingPosition                MultiplexingPosition,
    sTTD-Indicator                  STTD-Indicator,
    priorityIndicatorAndInitialWindowSizeList   PriorityIndicatorAndInitialWindowSizeList-option-CTCH-ResourceRspFDD,
    iE-Extensions                   ProtocolExtensionContainer { {FACH-InfoForDRNCSelectedOptionalS-CCPCH-CTCH-ResourceRspFDD-ExtIEs} } OPTIONAL,
    ...
}

FACH-InfoForDRNCSelectedOptionalS-CCPCH-CTCH-ResourceRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

PriorityIndicatorAndInitialWindowSizeList-option-CTCH-ResourceRspFDD ::= ProtocolIE-Container {{ PriorityIndicatorAndInitialWindowSizeListIEs-option-
CTCH-ResourceRspFDD }}

PriorityIndicatorAndInitialWindowSizeListIEs-option-CTCH-ResourceRspFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspFDD  CRITICALITY ignore  TYPE
    PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspFDD  PRESENCE mandatory  },
```

```
    ...
}

PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspFDD ::= SEQUENCE (SIZE (1..16)) OF PriorityIndicatorAndInitialWindowSizeItem-option-
CTCH-ResourceRspFDD

PriorityIndicatorAndInitialWindowSizeItem-option-CTCH-ResourceRspFDD ::= SEQUENCE {
    fACH-PriorityIndicator          FACH-PriorityIndicator,
    mAC-c-SDU-Lengths               MAC-c-SDU-LengthList-option-CTCH-ResourceRspFDD,
    fACH-InitialWindowSize          FACH-InitialWindowSize,
    iE-Extensions                   ProtocolExtensionContainer { {PriorityIndicatorAndInitialWindowSizeItem-option-CTCH-ResourceRspFDD-ExtIEs} }
OPTIONAL,
    ...
}

PriorityIndicatorAndInitialWindowSizeItem-option-CTCH-ResourceRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

MAC-c-SDU-LengthList-option-CTCH-ResourceRspFDD ::= ProtocolIE-Container {{ MAC-c-SDU-LengthListIEs-option-CTCH-ResourceRspFDD }}

MAC-c-SDU-LengthListIEs-option-CTCH-ResourceRspFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspFDD   CRITICALITY ignore  TYPE    MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspFDD PRESENCE
mandatory   },
    ...
}

MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspFDD ::= SEQUENCE (SIZE (1..maxNrOfMACcSDU-Length)) OF MAC-c-SDU-LengthItem-option-CTCH-ResourceRspFDD

MAC-c-SDU-LengthItem-option-CTCH-ResourceRspFDD ::= SEQUENCE {
    mAC-c-SDU-Length                MAC-c-SDU-Length,
    iE-Extensions                   ProtocolExtensionContainer { {MAC-c-SDU-LengthItem-option-CTCH-ResourceRspFDD-ExtIEs} } OPTIONAL,
    ...
}

MAC-c-SDU-LengthItem-option-CTCH-ResourceRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

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

-- **************************************************************
--
-- COMMON TRANSPORT CHANNEL RESOURCES RESPONSE TDD
--
-- **************************************************************

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

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

CommonTransportChannelResourcesResponseTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-S-RNTI                  CRITICALITY ignore  TYPE S-RNTI                PRESENCE mandatory  } |
    { ID id-FACH-InfoForUESelectedS-CCPCH-CoupledToPRACH-CTCH-ResourceRspTDD    CRITICALITY ignore   TYPE FACH-InfoForUESelectedS-CCPCH-CoupledToPRACH-
CTCH-ResourceRspTDD     PRESENCE mandatory  } |
    { ID id-FACH-InfoForDRNCSelectedOptionalS-CCPCH-CTCH-ResourceRspTDD CRITICALITY ignore  TYPE FACH-InfoForDRNCSelectedOptionalS-CCPCH-CTCH-
ResourceRspTDD      PRESENCE optional   } |
    { ID id-TransportLayerAddress           CRITICALITY ignore  TYPE TransportLayerAddress       PRESENCE optional } |
    { ID id-BindingID               CRITICALITY ignore  TYPE BindingID                  PRESENCE optional  } |
    { ID id-CriticalityDiagnostics          CRITICALITY ignore  TYPE CriticalityDiagnostics      PRESENCE optional },
    ...
}

FACH-InfoForUESelectedS-CCPCH-CoupledToPRACH-CTCH-ResourceRspTDD ::= SEQUENCE {
    priorityIndicatorAndInitialWindowSizes      PriorityIndicatorAndInitialWindowSizeList-CTCH-ResourceRspTDD,
    iE-Extensions                   ProtocolExtensionContainer { {FACH-InfoForUESelectedS-CCPCH-CoupledToPRACH-CTCH-ResourceRspTDD-ExtIEs} } OPTIONAL,
    ...
}

FACH-InfoForUESelectedS-CCPCH-CoupledToPRACH-CTCH-ResourceRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

PriorityIndicatorAndInitialWindowSizeList-CTCH-ResourceRspTDD ::= ProtocolIE-Container {{ PriorityIndicatorAndInitialWindowSizeListIEs-CTCH-
ResourceRspTDD }}

PriorityIndicatorAndInitialWindowSizeListIEs-CTCH-ResourceRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspTDD CRITICALITY ignore  TYPE PriorityIndicatorAndInitialWindowSizeListIE-CTCH-
ResourceRspTDD  PRESENCE mandatory  },
    ...
}

PriorityIndicatorAndInitialWindowSizeListIE-CTCH-ResourceRspTDD ::= SEQUENCE (SIZE (1..16)) OF PriorityIndicatorAndInitialWindowSizeItem-CTCH-
ResourceRspTDD

PriorityIndicatorAndInitialWindowSizeItem-CTCH-ResourceRspTDD ::= SEQUENCE {
    fACH-PriorityIndicator          FACH-PriorityIndicator,
    mAC-c-SDU-Lengths               MAC-c-SDU-LengthList-CTCH-ResourceRspTDD,
    fACH-InitialWindowSize          FACH-InitialWindowSize,
    iE-Extensions                   ProtocolExtensionContainer { {PriorityIndicatorAndInitialWindowSizeItem-CTCH-ResourceRspTDD-ExtIEs} } OPTIONAL,
    ...
}

PriorityIndicatorAndInitialWindowSizeItem-CTCH-ResourceRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

MAC-c-SDU-LengthList-CTCH-ResourceRspTDD ::= ProtocolIE-Container {{ MAC-c-SDU-LengthListIEs-CTCH-ResourceRspTDD }}
```

```
MAC-c-SDU-LengthListIEs-CTCH-ResourceRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-MAC-c-SDU-LengthListIE-CTCH-ResourceRspTDD  CRITICALITY ignore  TYPE    MAC-c-SDU-LengthListIE-CTCH-ResourceRspTDD PRESENCE mandatory   },
    ...
}

MAC-c-SDU-LengthListIE-CTCH-ResourceRspTDD  ::= SEQUENCE (SIZE (1..maxNrOfMACcSDU-Length)) OF MAC-c-SDU-LengthItem-CTCH-ResourceRspTDD

MAC-c-SDU-LengthItem-CTCH-ResourceRspTDD ::= SEQUENCE {
    mAC-c-SDU-Length                MAC-c-SDU-Length,
    iE-Extensions                   ProtocolExtensionContainer { {MAC-c-SDU-LengthList-CTCH-ResourceRspTDD-ExtIEs} } OPTIONAL,
    ...
}

MAC-c-SDU-LengthList-CTCH-ResourceRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

FACH-InfoForDRNCSelectedOptionalS-CCPCH-CTCH-ResourceRspTDD ::= SEQUENCE {
    dl-TFCS                     TFCS,
    secondaryCCPCHs                 SecondaryCCPCHList-CTCH-ResourceRspTDD,
    iE-Extensions                   ProtocolExtensionContainer { {FACH-InfoForDRNCSelectedOptionalS-CCPCH-CTCH-ResourceRspTDD-ExtIEs} } OPTIONAL,
    ...
}

FACH-InfoForDRNCSelectedOptionalS-CCPCH-CTCH-ResourceRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

SecondaryCCPCHList-CTCH-ResourceRspTDD ::= ProtocolIE-Container {{ SecondaryCCPCHListIEs-CTCH-ResourceRspTDD }}

SecondaryCCPCHListIEs-CTCH-ResourceRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-SecondaryCCPCHListIE-CTCH-ResourceRspTDD    CRITICALITY ignore  TYPE    SecondaryCCPCHListIE-CTCH-ResourceRspTDD PRESENCE mandatory   },
    ...
}

SecondaryCCPCHListIE-CTCH-ResourceRspTDD ::= SEQUENCE (SIZE (1..maxNrOfSCCPCHs)) OF SecondaryCCPCHItem-CTCH-ResourceRspTDD

SecondaryCCPCHItem-CTCH-ResourceRspTDD ::= SEQUENCE {
    tDD-ChannelisationCode              TDD-ChannelisationCode,
    timeSlot                    TimeSlot,
    burstType                   BurstType,
    midambleShift                   MidambleShift,
    tDD-PhysicalChannelOffset           TDD-PhysicalChannelOffset,
    repetitionPeriod                RepetitionPeriod,
    repetitionLength                RepetitionLength,
    priorityIndicatorAndInitialWindowSizeList   PriorityIndicatorAndInitialWindowSizeList-CTCH-ResourceRspTDD,
    iE-Extensions                   ProtocolExtensionContainer { {SecondaryCCPCHItem-CTCH-ResourceRspTDD-ExtIEs} } OPTIONAL,
    ...
}
```

```
SecondaryCCPCHItem-CTCH-ResourceRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

PriorityIndicatorAndInitialWindowSizeList-option-CTCH-ResourceRspTDD ::= ProtocolIE-Container {{ PriorityIndicatorAndInitialWindowSizeListIEs-option-
CTCH-ResourceRspTDD }}

PriorityIndicatorAndInitialWindowSizeListIEs-option-CTCH-ResourceRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspTDD  CRITICALITY ignore  TYPE
    PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspTDD  PRESENCE mandatory  },
    ...
}

PriorityIndicatorAndInitialWindowSizeListIE-option-CTCH-ResourceRspTDD ::= SEQUENCE (SIZE (1..16)) OF PriorityIndicatorAndInitialWindowSizeItem-option-
CTCH-ResourceRspTDD

PriorityIndicatorAndInitialWindowSizeItem-option-CTCH-ResourceRspTDD ::= SEQUENCE {
    fACH-PriorityIndicator          FACH-PriorityIndicator,
    mAC-c-SDU-Lengths               MAC-c-SDU-LengthList-option-CTCH-ResourceRspTDD,
    fACH-InitialWindowSize          FACH-InitialWindowSize,
    iE-Extensions                   ProtocolExtensionContainer { {PriorityIndicatorAndInitialWindowSizeItem-option-CTCH-ResourceRspTDD-ExtIEs} }
OPTIONAL,
    ...
}

PriorityIndicatorAndInitialWindowSizeItem-option-CTCH-ResourceRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

MAC-c-SDU-LengthList-option-CTCH-ResourceRspTDD ::= ProtocolIE-Container {{ MAC-c-SDU-LengthListIEs-option-CTCH-ResourceRspTDD }}

MAC-c-SDU-LengthListIEs-option-CTCH-ResourceRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspTDD   CRITICALITY ignore  TYPE    MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspTDD PRESENCE
mandatory   },
    ...
}

MAC-c-SDU-LengthListIE-option-CTCH-ResourceRspTDD ::= SEQUENCE (SIZE (1..maxNrOfMACcSDU-Length)) OF MAC-c-SDU-LengthItem-option-CTCH-ResourceRspTDD

MAC-c-SDU-LengthItem-option-CTCH-ResourceRspTDD ::= SEQUENCE {
    mAC-c-SDU-Length                MAC-c-SDU-Length,
    iE-Extensions                   ProtocolExtensionContainer { {MAC-c-SDU-LengthItem-option-CTCH-ResourceRspTDD-ExtIEs} } OPTIONAL,
    ...
}

MAC-c-SDU-LengthItem-option-CTCH-ResourceRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

CommonTransportChannelResourcesResponseTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
```

```
}

•
•
•
<The rest of the ASN.1 module is omitted>
•
•
•
```

9.3.6 Constant Definitions

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

RNSAP-Constants -- { object identifier to be allocated }--
DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

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

id-commonTransportChannelResourcesInitiationFDD             INTEGER ::= 0
id-commonTransportChannelResourcesInitiationTDD             INTEGER ::= 1
id-commonTransportChannelResourcesRelease                   INTEGER ::= 2
id-compressedModeCancellationFDD                            INTEGER ::= 3
id-compressedModeCommitFDD                                  INTEGER ::= 4
id-compressedModePrepareFDD                                 INTEGER ::= 5
id-downlinkPowerControl                                     INTEGER ::= 6
id-downlinkSignallingTransfer                               INTEGER ::= 7
id-errorIndication                                          INTEGER ::= 8
id-measurementFailure                                       INTEGER ::= 9
id-measurementInitiation                                    INTEGER ::= 10
id-measurementReporting                                     INTEGER ::= 11
id-measurementTermination                                   INTEGER ::= 12
id-pagingRequest                                            INTEGER ::= 13
id-physicalChannelReconfiguration                           INTEGER ::= 14
id-privateMessage                                           INTEGER ::= 15
id-radioLinkAddition                                        INTEGER ::= 16
id-radioLinkDeletion                                        INTEGER ::= 17
id-radioLinkFailure                                         INTEGER ::= 18
id-radioLinkRestoration                                     INTEGER ::= 19
id-radioLinkSetup                                           INTEGER ::= 20
id-srnsRelocationCommit                                     INTEGER ::= 21
id-synchronisedRadioLinkReconfigurationCancellation         INTEGER ::= 22
id-synchronisedRadioLinkReconfigurationCommit               INTEGER ::= 23
id-synchronisedRadioLinkReconfigurationPrepare              INTEGER ::= 24
id-unSynchronisedRadioLinkReconfiguration                   INTEGER ::= 25
id-uplinkSignallingTransfer                                 INTEGER ::= 26

-- **************************************************************
--
-- Extension constants
```

```
--
-- **************************************************************

maxPrivateIEs                                   INTEGER ::= 65535
maxProtocolExtensions                           INTEGER ::= 65535
maxProtocolIEs                                  INTEGER ::= 65535

-- **************************************************************
--
-- Lists
--
-- **************************************************************

maxRateMatching                         INTEGER ::= 10
maxNrOfTFCs                             INTEGER ::= 10
maxNrOfTFs                              INTEGER ::= 10
maxNrOfCCTrCHs                          INTEGER ::= 10
maxNrOfDCHs                             INTEGER ::= 10
maxNrOfDL-Codes                         INTEGER ::= 10
maxNrOfDPCHs                            INTEGER ::= 10
maxNrOfErrors                           INTEGER ::= 10
maxNrOfMACcSDU-Length                   INTEGER ::= 10
maxNrOfRLs                              INTEGER ::= 10
maxNrOfRLSets                           INTEGER ::= 10
maxNrOfRLs-1                            INTEGER ::= 10
maxNrOfRLs-2                            INTEGER ::= 10
maxNrOfSCCPCHs                          INTEGER ::= 10
maxNrOfULTs                             INTEGER ::= 15
maxNrOfCMpatterns                       INTEGER ::= 8
maxRNCinURA                             INTEGER ::= 10
maxTTI-Count                            INTEGER ::= 10
maxCTFC-1                               INTEGER ::= 10
maxNrOfNeighbouringRNCs                 INTEGER ::= 10
maxNrOfFDDNeighboursPerRNC              INTEGER ::= 10
maxNrOfTDDNeighboursPerRNC              INTEGER ::= 10
maxFACHCountPlus1                       INTEGER ::= 10
maxIBSEG                                INTEGER ::= 16

-- **************************************************************

--
-- IEs
--
-- **************************************************************

id-AllRLItem-DM-Rprt                                            INTEGER ::= 0
id-AllRLItem-DM-Rsp                                             INTEGER ::= 1
id-AllRL-SetItem-DM-Rprt                                        INTEGER ::= 2
id-AllRL-SetItem-DM-Rsp                                         INTEGER ::= 3
id-AllowedQueuingTime                                           INTEGER ::= 4
id-BindingID                                                    INTEGER ::= 5
```

```
id-C-ID                                                    INTEGER ::= 6
id-C-RNTI                                                  INTEGER ::= 7
id-CFN                                                     INTEGER ::= 8
id-CN-CS-DomainIdentifier                                  INTEGER ::= 9
id-CN-PS-DomainIdentifier                                  INTEGER ::= 10
id-Cause                                                   INTEGER ::= 11
id-CellItem-PagingRqst                                     INTEGER ::= 12
id-CM-PatternInformationItem-CompressedModePrep            INTEGER ::= 13
id-CM-PatternInformationList-CompressedModePrep            INTEGER ::= 14
id-CombiningItem-RL-AdditionFailureFDD                     INTEGER ::= 15
id-CombiningItem-RL-AdditionRspFDD                         INTEGER ::= 16
id-CombiningItem-RL-AdditionRspTDD                         INTEGER ::= 17
id-CombiningItem-RL-SetupFailureFDD                        INTEGER ::= 18
id-CombiningItem-RL-SetupRspFDD                            INTEGER ::= 19
id-CriticalityDiagnostics                                  INTEGER ::= 20
id-D-RNTI                                                  INTEGER ::= 21
id-D-RNTI-ReleaseIndication                                INTEGER ::= 22
id-DCH-AddListIE-RL-ReconfReadyFDD                         INTEGER ::= 23
id-DCH-AddListIE-RL-ReconfReadyTDD                         INTEGER ::= 24
id-DCH-AddListIE-RL-ReconfRsp                              INTEGER ::= 25
id-DCH-AddList-RL-ReconfPrepFDD                            INTEGER ::= 26
id-DCH-AddList-RL-ReconfPrepTDD                            INTEGER ::= 27
id-DCH-AddList-RL-ReconfRqstFDD                            INTEGER ::= 28
id-DCH-AddList-RL-ReconfRqstTDD                            INTEGER ::= 29
id-DCH-DeleteList-RL-ReconfPrepFDD                         INTEGER ::= 30
id-DCH-DeleteList-RL-ReconfPrepTDD                         INTEGER ::= 31
id-DCH-DeleteList-RL-ReconfRqstFDD                         INTEGER ::= 32
id-DCH-DeleteList-RL-ReconfRqstTDD                         INTEGER ::= 33
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