TSG-RAN Meeting #15
Cheju, Korea, 5 - 8 March 2002

TSGRP#15(02) 0182

Title: **Agreed CRs to TS 25.433**

Source: **TSG-RAN WG3**

Agenda item: **7.3.3/7.3.4**

RP_Num	Tdoc_Num	Specification	CR_Num	Revision_Num	3G_Release	CR_Subject	CR_Category	Cur_Ver_Num	Workitem
RP-020182	R3-020657	25.433	585	1	Rel-4	Corrections to the Information Exchange Initiation procedure	F	4.3.0	LCS1-UEPos-lublur
RP-020182	R3-020670	25.433	586	1	Rel-4	Correction to UE position measurements quality and threshold information	F	4.3.0	LCS1-UEPos-lublur
RP-020182	R3-020660	25.433	587	1	Rel-4	Correction to UE position measurements change and deviation limit formulas	F	4.3.0	LCS1-UEPos-lublur
RP-020182	R3-020777	25.433	601	1	Rel-4	Modification of the T_utran-gps length	F	4.3.0	TEI
RP-020182	R3-020446	25.433	606		Rel-4	Amendment of the COMMON MEASUREMENT INITIATION REQUEST message	F	4.3.0	TEI
RP-020182	R3-020681	25.433	609	1	Rel-4	ASN.1 and tabular amendments for LCR TDD	F	4.3.0	TEI
RP-020182	R3-020455	25.433	610		Rel-4	Midamble shift LCR in the PHYSICAL SAHRED SCHANNEL RECONFIGURATION REQUEST [TDD] message	F	4.3.0	TEI
RP-020182	R3-020520	25.433	617		Rel-4	NBAP Rapporteur corrections	F	4.3.0	TEI

3GPP TSG-RAN3 Meeting #27
Orlando, USA, 18th – 22nd February 2002

Tdoc R3-020657

CR-Form-v3

CHANGE REQUEST

⌘ **25.433** **CR** **585** ⌘ rev **1** ⌘ Current version: **4.3.0** ⌘

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

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

Title:	⌘	Corrections to the Information Exchange Initiation procedure
Source:	⌘	R-WG3
Work item code:	⌘	LCS1-UEPos-IubIur
Date:	⌘	February 2002
Category:	⌘	**F**
Release:	⌘	REL-4

Use one of the following categories:
F *(essential correction)*
A *(corresponds to a correction in an earlier release)*
B *(Addition of feature),*
C *(Functional modification of feature)*
D *(Editorial modification)*
Detailed explanations of the above categories can be found in 3GPP TR 21.900.

Use one of the following releases:
2 *(GSM Phase 2)*
R96 *(Release 1996)*
R97 *(Release 1997)*
R98 *(Release 1998)*
R99 *(Release 1999)*
REL-4 *(Release 4)*
REL-5 *(Release 5)*

Reason for change: ⌘ This Cr corrects following three errors mentioned below.

1) With the Information Exchange Initiation procedure CRNC can request information from the Node B either 'On Demand', 'Periodic' or 'On Modification'. If the *Information Report Characteristics* IE is set to 'On Modification' and the *Information Type* IE is set to 'GPS Information', the CRNC must include the Information Threshold IE to the Information Exchange Initiation message, although there is no trigger value for the GPS Information. The Information Threshold IE (9.2.1.36B) should be changed to the optional IE and it should be used only if the DGPS corrections are requested.

2) If the Node B was able to initiate the information provision requested by the CRNC it shall respond with the INFORMATION EXCHANGE INITIATION RESPONSE message. The message shall include the same Information Exchange ID that was included in the INFORMATION EXCHANGE REQUEST message. If the *Requested Data Value* IE is included in the INFORMATION EXCHANGE INITIATION RESPONSE message, it shall include at least one IE. As the *Requested Data Value* IE may not be reported in the *in INFORMATION EXCHANGE RESPONSE* when defining future report characteristics types, the *Information Exchange Object Type in INFORMATION EXCHANGE RESPONSE is defined as optional*

3) According to the 3GPP TS 25.331 SRNC must be able to send the UE positioning GPS almanac IE to the UE. The UE positioning GPS almanac IE contains a reduced-precision subset of the ephemeris and clock correction parameters. The Node B having the GPS reference receiver provides the ephemeris and clock correction parameters, which will be sent to the CRNC with the Information Exchange Initiation elementary procedure. The current GPS almanac IE (9.2.1.31F) includes all the required ephemeris and clock correction parameters which will be needed to the UE positioning GPS almanac IE except:
- SV Global health (optional)

- DataID

These IEs shall be included to the GPS Almanac IE (9.2.1.31F).

The SV Global health IE enables GPS time recovery and possibly extended GPS correlation intervals. This information is composed of the sequence of all non-parity data bits contained in words 3-10 of page 25 of subframe 4 of the GPS navigation message followed by the sequence of all non-parity bits contained in words 3-10 of page 25 of subframe 5 of the GPS navigation message. The following GPS navigation message fields are excluded when constructing these sequences:"Data ID", "SV (Page) ID", and "t".
DataID field contained in the indicated subframe, word 3, most significant 2 bits, as defined by ICD-GPS-200: "Navstar GPS Space Segment/Navigation User Interface".

Summary of change: ⌘

Rev1

Spelling mistake in Information Exchange Initiation procedure message corrected. Abnormal section 8.2.27.4 updated to handle the Node B behaviour, when the *Information Report Characteristics* IE is set to 'On Modification', and the *Information Type Item* IE is set to 'DGPS Corrections', but the *Information Threshold* IE is not received in the INFORMATION EXCHANGE INITIATION REQUEST message. Corrections are highlighted with yellow colour.

Rev 0

In principle agreed in R3#26 and implemented to correct version of specification

Second version (no Cr number attached)

1) The presence of *Information Exchange Object Type* IE in the INFORMATION EXCHANGE RESPONSE message kept as optional. In the procedural it is clarified that "When the *Report Characteristics* IE is set to "On-Demand", or "On Modification" or "Periodic", the INFORMATION EXCANGE INITIATION RESPONSE message shall contain the requested data." With this definition we keep to door open for future extensions for report characteristics types.
2) The sentence " If the *Requested Data Value* IE is included in the INFORMATION EXCHANGE INITIATION RESPONSE message, it shall include at least one IE" removed from chapter 8.2.26.2 and this information is added for the IE description for *Requested Data Value* IE (9.2.1.51A).
3) IE type and reference for Data ID IE changed to INTEGER (0..3)
4) SV global heath IE in GPS Almanac defined as optional
5) The ASN.1 description for SV Global heath IE aligned with tabular

First version (no Cr number attached)

1)The presence of Information Threshold IE (9.2.1.36B) changed to the optional

2) The presence of *Information Exchange Object Type* IE in the INFORMATION EXCHANGE RESPONSE message changed to the optional

3) Data ID and SV Global Helth added as mandatory IEs in Satelite information of GPS Almanac IE (9.2.1.31F).

Consequences if not approved: ⌘

If this CR is not approved, identified three errors/ambiguities occurs there in the specification and the Information Exchange Initiation procedure is not properly specified (1 and 2) and it is not aligned with TS25.331 (3).

Impact Analysis:

Impact assessment towards the previous version of the specification (same release):

	This CR has isolated impact with the previous version of the specification because this CR corrects the specification for Information Exchange Initiation procedure for which the specification is ambiguous. It also aligns the specification with TS25.331. This CR has an impact under protocol and functional point of view. The impact can be considered isolated because the change affects one system function namely Information Exchange.

Clauses affected:	⌘	8.2.62.2, 9.1.70, 9.2.1.31F,9.2.1.51A, 9.3.3 and 9.3.4		
Other specs affected:	⌘	**X** Other core specifications Test specifications O&M Specifications	⌘	TS 25.423 v. 4.3.0 CR 545r1
Other comments:	⌘			

How to create CRs using this form:

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

1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.

2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://www.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2000-09 contains the specifications resulting from the September 2000 TSG meetings.

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

8.2.26 Information Exchange Initiation

8.2.26.1 General

This procedure is used by a CRNC to request the initiation of information provisioning from a Node B.

8.2.26.2 Successful Operation

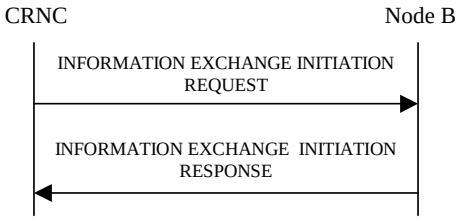

Figure 27L: Information Exchange Initiation procedure, Successful Operation

The procedure is initiated with the INFORMATION EXCHANGE INITIATION REQUEST message sent from the CRNC to the Node B using the Node B control port.

Upon reception, the Node B shall provide the requested information according to the *Information Type Item* IE. Unless specified below, the meaning of the parameters are given in other specifications.

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

If the *Information Report Characteristics* IE is set to 'On Demand', the Node B shall report the requested information immediately.

If the *Information Report Characteristics* IE is set to 'Periodic', the Node B shall periodically initiate the Information Reporting procedure for all the requested information, with the requested reporting frequency.

If the *Information Report Characteristics* IE is set to 'On Modification', the Node B shall immediately report the requested information and then shall initiate the Information Reporting procedure in accordance to the following conditions related to the *Information Type* IE:

1) If the *Information Type Item* IE is set to 'DGPS Corrections', the Node B shall initiate the Information Reporting procedure when either the PRC has drifted from the previously reported value more than the threshold indicated in the *PRC Deviation* IE or a change has occurred in the IODE.

2) If the *Information Type Item* IE is set to 'GPS Information' and the *GPS Information Item* IE includes 'GPS Navigation Model & Time Recovery', the Node B shall initiate the Information Reporting procedure for this specific GPS Information Item when a change has occurred regarding either the IODC or the list of visible satellites, identified by the *SatID* IEs.

3) If the *Information Type Item* IE is set to 'GPS Information' and the *GPS Information Item* IE includes 'GPS Ionospheric Model', the Node B shall initiate the Information Reporting procedure for this specific GPS Information Item when any change has occurred.

4) If the *Information Type Item* IE is set to 'GPS Information' and the *GPS Information Item* IE includes 'GPS UTC Model', the Node B shall initiate the Information Reporting procedure for this specific GPS Information Item when a change has occurred in the t_ot parameter.

5) If the *Information Type Item* IE is set to 'GPS Information' and the *GPS Information Item* IE includes 'GPS Almanac', the Node B shall initiate the Information Reporting procedure for this specific GPS Information Item when any change has occurred.

6) If the *Information Type Item* IE is set to 'GPS Information' and the *GPS Information Item* IE includes 'GPS Real-Time Integrity', the Node B shall initiate the Information Reporting procedure for this specific GPS Information Item when any change has occurred.

Response message
If the Node B was able to initiate the information provision requested by the CRNC it shall respond with the INFORMATION EXCHANGE INITIATION RESPONSE message sent over the Node B control port. The message shall include the same Information Exchange ID that was included in the INFORMATION EXCHANGE REQUEST message. When the *Report Characteristics* IE is set to "On-Demand" or "On Modification" or "Periodic", the INFORMATION EXCHANGE INITIATION RESPONSE message shall contain the requested data.

~~If the *Requested Data Value* IE is included in the INFORMATION EXCHANGE INITIATION RESPONSE message, it shall include at least one IE.~~

8.2.26.3 Unsuccessful Operation

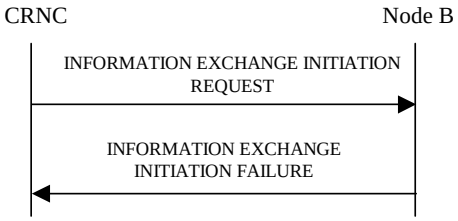

Figure 27M: Information Exchange Initiation procedure, Unsuccessful Operation

If the Information Type Item received in the *Information Type Item* IE indicates a type of information that cannot be provided, the Node B shall regard the Information Exchange Initiation procedure as failed.

If the requested information provision cannot be initiated, the Node B shall send the INFORMATION EXCHANGE INITIATION FAILURE message over the Node B control port. The message shall include the same Information Exchange ID that was used in the INFORMATION EXCHANGE INITIATION REQUEST message and the *Cause* IE set to an appropriate value.

Typical cause values are as follows:

Radio Network Layer Cause

Information temporarily not available.

Information Provision not supported for the object.

8.2.27.4 Abnormal Conditions

- If the *Information Report Characteristics* IE is set to 'On Modification', and the *Information Type Item* IE is set to 'DGPS Corrections', but the *Information Threshold* IE is not received in the INFORMATION EXCHANGE INITIATION REQUEST message, the Node B shall regard the Information Exchange Initiation procedure as failed.

9.1.70 INFORMATION EXCHANGE INITIATION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Information Exchange ID	M		9.2.1.36C		YES	ignore
CHOICE *Information Exchange Object Type*	O~~M~~				YES	ignore
>Cell					-	
>>Requested Data Value	M		9.2.1.51A		-	
Criticality Diagnostics	O		9.2.1.17		YES	ignore

9.2.1.31F GPS Almanac

This IE provides the information regarding the GPS Almanac. For further details on the meaning of parameters, see [27].

IE/Group name	Presence	Range	IE Type and Reference	Semantics description
WN_a	M		Bit string(8)	
Satellite information	M	*1,,<MaxNo Sat>*		
>DataID	M		INTEGER (0..3)	
>SatID	M		INTEGER (0..63)	Satellite ID
>e	M		Bit string(16)	
$>t_{oa}$	M		Bit string(8)	
>δi	M		Bit string(16)	
>OMEGADOT	M		Bit string(16)	
>SV Health	M		Bit string(8)	
$>A^{1/2}$	M		Bit string(24)	
$>OMEGA_0$	M		Bit string(24)	
$>M_0$	M		Bit string(24)	
>ω	M		Bit string(24)	
$>af_0$	M		Bit string(11)	
$>af_1$	M		Bit string(11)	
SV Global Health	O		Bit string(364)	

Range Bound	Explanation
MaxNoSat	Maximum number of satellites for which information can be provided

9.2.1.36B Information Report Characteristics

The information report characteristics defines how the reporting shall be performed.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE *Information Report Characteristics Type*				
>OnDemand			NULL	
>Periodic				
>>Information Report Periodicity	M		ENUMERATED (1min…1hr, …) step 1min, (1hr…24hr, …) step 1hr, …	The frequency with which the Node B shall send information reports.
>On Modification				
>>Information Threshold	O~~M~~		9.2.1.36E	

9.2.1.51A Requested Data Value

The *Requested Data Value* IE contains the relevant data concerning the ongoing information exchange. *Requested Data Value* IE shall include at least one of the following IE.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DGPS Corrections	O		9.2.1.24B	
GPS Navigation Model & Time Recovery	O		9.2.1.31B	
GPS Ionospheric Model	O		9.2.1.31C	
GPS UTC Model	O		9.2.1.31D	
GPS Almanac	O		9.2.1.31F	
GPS Real-Time Integrity	O		9.2.1.31E	
GPS RX Pos	O		9.2.1.31G	

9.3.3 PDU Definitions

. . . Partly omitted . . .

```
-- **************************************************************
--
-- INFORMATION EXCHANGE INITIATION RESPONSE
--
-- **************************************************************

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

InformationExchangeInitiationResponse-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-InformationExchangeID                            CRITICALITY ignore          TYPE                    InformationExchangeID
            PRESENCE    mandatory   }|
    { ID    id-InformationExchangeObjectType-InfEx-Rsp      CRITICALITY ignore          TYPE    InformationExchangeObjectType-InfEx-Rsp    PRESENCE
    optional~~mandatory~~   }|
        { ID    id-CriticalityDiagnostics                   CRITICALITY ignore          TYPE    CriticalityDiagnostics            PRESENCE optional
    },
    ...
}

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

InformationExchangeObjectType-InfEx-Rsp ::= CHOICE {
    cell                        Cell-InfEx-Rsp,
    ...
 }

Cell-InfEx-Rsp ::= SEQUENCE {
    requestedDataValue              RequestedDataValue,
    iE-Extensions                   ProtocolExtensionContainer  { { CellItem-InfEx-Rsp-ExtIEs} }                    OPTIONAL,
    ...
 }

CellItem-InfEx-Rsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

. . . Partly omitted . . .

9.3.4 Information Elements Definitions

. . . Partly omitted . . .

```
-- ==========================================
--  D
-- ==========================================

DATA-ID ::= INTEGER (0..3)

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

DCH-FDD-Information ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-FDD-InformationItem

DCH-FDD-InformationItem ::= SEQUENCE {
    payloadCRC-PresenceIndicator        PayloadCRC-PresenceIndicator,
    ul-FP-Mode                          UL-FP-Mode,
    toAWS                               ToAWS,
    toAWE                               ToAWE,
    dCH-SpecificInformationList         DCH-Specific-FDD-InformationList,
    iE-Extensions                       ProtocolExtensionContainer { { DCH-FDD-InformationItem-ExtIEs} }           OPTIONAL,
    ...
}

DCH-FDD-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

. . . Partly omitted . . .

```
-- ==========================================
--  G
-- ==========================================

GapLength               ::= INTEGER (1..14)
-- Unit slot

GapDuration             ::= INTEGER (1..144,...)
-- Unit frame

GPS-Almanac ::= SEQUENCE {
    wna-alm             BIT STRING (SIZE (8)),
    sat-info-almanac    SAT-Info-Almanac,
    sVGlobalHealth-alm  BIT STRING (SIZE (364)) OPTIONAL,
    ie-Extensions       ProtocolExtensionContainer { { GPS-Almanac-ExtIEs} }       OPTIONAL,
   ...
}
```

```
GPS-Almanac-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

. . . Partly omitted . . .

```
-- ========================================
--  I
-- ========================================

IB-OC-ID ::= INTEGER (1..16)

IB-SG-DATA ::= BIT STRING
-- Contains SIB data fixed" or "SIB data variable" in segment as encoded in ref.[18].

IB-SG-POS ::= INTEGER (0..4094)
-- Only even positions allowed

IB-SG-REP ::= ENUMERATED {rep4, rep8, rep16, rep32, rep64, rep128, rep256, rep512, rep1024, rep2048, rep4096}

IB-Type ::= ENUMERATED {
    mIB,
    sB1,
    sB2,
    sIB1,
    sIB2,
    sIB3,
    sIB4,
    sIB5,
    sIB6,
    sIB7,
    sIB8,
    sIB9,
    sIB10,
    sIB11,
    sIB12,
    sIB13,
    sIB13dot1,
    sIB13dot2,
    sIB13dot3,
    sIB13dot4,
    sIB14,
    sIB15,
    sIB15dot1,
    sIB15dot2,
    sIB15dot3,
    sIB16,
    ...,
    sIB17,
    sIB15dot4,
```

```
    sIB18
}

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

InformationReportCharacteristics ::= CHOICE {
    onDemand                NULL,
    periodic                InformationReportCharacteristicsType-ReportPeriodicity,
    onModification          InformationReportCharacteristicsType-OnModification,
    ...
}

InformationReportCharacteristicsType-ReportPeriodicity ::= CHOICE {
    min                 ReportPeriodicity-Scaledmin,
    hours               ReportPeriodicity-Scaledhour,
    ...
}

InformationReportCharacteristicsType-OnModification ::= SEQUENCE {
    information-thresholds        InformationThresholds      OPTIONAL,
    ie-Extensions                 ProtocolExtensionContainer { { InformationReportCharacteristicsType-OnModification-ExtIEs} } OPTIONAL,
   ...
}

InformationReportCharacteristicsType-OnModification-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

InformationThresholds ::= CHOICE {
    dgps                DGPSThresholds,
    ...
}
```

. . . Partly omitted . . .

```
-- ==========================================
--  S
-- ==========================================

AdjustmentPeriod            ::= INTEGER(1..256)
-- Unit Frame

SAT-ID ::= INTEGER (0..63)

SAT-Info-Almanac ::= SEQUENCE (SIZE (1..maxNoSat)) OF SAT-Info-Almanac-Item
```

```
SAT-Info-Almanac-Item ::= SEQUENCE {
    data-id             DATA-ID,
    sat-id              SAT-ID,
    gps-e-alm           BIT STRING (SIZE (16)),
    gps-toa-alm         BIT STRING (SIZE (8)),
    gps-delta-I-alm     BIT STRING (SIZE (16)),
    omegadot-alm        BIT STRING (SIZE (16)),
    svhealth-alm        BIT STRING (SIZE (8)),
    gps-a-sqrt-alm      BIT STRING (SIZE (24)),
    omegazero-alm       BIT STRING (SIZE (24)),
    m-zero-alm          BIT STRING (SIZE (24)),
    gps-omega-alm       BIT STRING (SIZE (24)),
    gps-af-zero-alm     BIT STRING (SIZE (11)),
    gps-af-one-alm      BIT STRING (SIZE (11)),
    ie-Extensions       ProtocolExtensionContainer { { SAT-Info-Almanac-Item-ExtIEs} }       OPTIONAL,
   ...
}

SAT-Info-Almanac-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

3GPP TSG-RAN3 Meeting #27
Orlando, USA, 18th – 22nd February 2002

Tdoc R3-020670

CR-Form-v3

CHANGE REQUEST

⌘ **25.433** **CR** **586** ⌘ rev **1** ⌘ Current version: **4.3.0** ⌘

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

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

Title:	⌘	Correction to UE position measurements quality and threshold information
Source:	⌘	R-WG3
Work item code:	⌘	LCS1-UEPos-IuBIur
Date:	⌘	February 2002
Category:	⌘	**F**
Release:	⌘	REL-4

Use one of the following categories:
F *(essential correction)*
A *(corresponds to a correction in an earlier release)*
B *(Addition of feature),*
C *(Functional modification of feature)*
D *(Editorial modification)*
Detailed explanations of the above categories can be found in 3GPP TR 21.900.

Use one of the following releases:

2	*(GSM Phase 2)*
R96	*(Release 1996)*
R97	*(Release 1997)*
R98	*(Release 1998)*
R99	*(Release 1999)*
REL-4	*(Release 4)*
REL-5	*(Release 5)*

Reason for change: ⌘ The ranges defined for UE position measurement Deviation Limits and Change limits corresponding to distances in the order of ten kilometers for SFN-SFN otd and hundreds of kilometers for $T_{UTRAN-GPS}$ cannot be tolerated in UE positioning.

SFN-SFN Measurement Threshold Information:

The range of SFN-SFN Change Limit and SFN-SFN Deviation Limit is decreased to INTEGER(1..256) as this corresponds to a maximum range of about 1200 m with a resolution of 1/16 chip.

$T_{Utran-GPS}$ Measurement Threshold Information:

The range of $T_{Utran-GPS}$ Change Limit and $T_{Utran-GPS}$ Deviation Limit is decreased to INTEGER(1..256) as this corresponds to a maximum range of about 1200 m with a resolution of 1/16 chip.

Also the ranges defined for UE position measurement quality information (std) corresponding to distances in the order of ten kilometers for SFN-SFN otd and hundreds of kilometers for $T_{UTRAN-GPS}$ are not applicable for UE positioning

SFN-SFN Measurement Value Information

The range of SFN-SFN Quality is decreased to INTEGER(0..255) as with a resolution of 1/16 chip this corresponds to a maximum range of approx. 1200 m which for the purposes of UE positioning is enough.

$T_{UTRAN-GPS}$ Measurement Value Information:

The range of $T_{UTRAN-GPS}$ Quality is decreased to INTEGER(0..255) which corresponds to a maximum range of approx. 1200 m with a resolution of 1/16 chip. For UE positioning this is enough.

Summary of change:	⌘	Rev 1 Following modifications are made: 1. Otd (observed time difference) spelt out 2. Units used for SFN-SFN and $T_{Utran-GPS}$ change limit, predicted change limit, drift rate and quality added for ASN.1 description. Rev0 IE Type and reference for *SFN-SFN Change Limit* IE and *Predicted SFN-SFN Deviation Limit* IE changed to INTEGER(1..256). IE Type and reference for *SFN-SFN Quality* IE changed to INTEGER(0..255). IE Type and reference for $T_{Utran-GPS}$ Change Limit IE and Predicted $T_{Utran-GPS}$ Deviation Limit IE changed to INTEGER(1..256). IE Type and reference for $T_{Utran-GPS}$ *Quality* IE changed to INTEGER(0..255).
Consequences if not approved:	⌘	Impact Analysis: Impact assessment towards the previous version of the specification (same release): This CR has isolated impact with the previous version of the specification because this CR corrects quality and threshold figures for UE position measurements. This CR has an impact under protocol and functional point of view. The impact can be considered isolated because the change affects one system function namely measurements on common resources.

Clauses affected:	⌘	9.2.1.53C, 9.2.1.53E, 9.2.1.64A, 9.2.1.64B and 9.3.4			
Other specs affected:	⌘	X	Other core specifications	⌘	TS 25.423 v. 4.3.0 CR 546r1
			Test specifications		
			O&M Specifications		
Other comments:	⌘				

How to create CRs using this form:

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1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.

2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://www.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2000-09 contains the specifications resulting from the September 2000 TSG meetings.

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

9.2.1.53C SFN-SFN Measurement Threshold Information

The SFN-SFN Measurement Threshold Information defines the related thresholds SFN-SFN Observed Time Difference measurements which shall trigger the Event On Modification.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
SFN-SFN Change Limit	O		INTEGER(1. .256~~16384~~)	Change of SFN-SFN value compared to previously reported value, which shall trigger a new report. Unit in 1/16 chip.
Predicted SFN-SFN Deviation Limit	O		INTEGER(1. .256~~16384~~)	Deviation of the predicated SFN-SFN from the latest measurement result, which shall trigger a new report. Unit in 1/16 chip.

9.2.1.53D SFN-SFN Measurement Time Stamp

IE/Group Name	Presence	Range	IE type and reference	Semantics description
CHOICE *Mode*				
>FDD				
>>SFN	M		9.2.1.53A	Indicates the SFN of the reference cell at which the measurement has been performed.
>TDD				
>>SFN	M		9.2.1.53A	Indicates the SFN of the reference cell at which the measurement has been performed.
>>Time Slot	M		9.2.3.23	Indicates the Time Slot of the reference cell at which this measurement has been performed.

9.2.1.53E SFN-SFN Measurement Value Information

The SFN-SFN Measurement Value Information IE indicates the measurement result related to SFN-SFN Observed Time Difference measurements.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
Successful Neighbouring cell SFN-SFN Observed Time Difference Measurement Information		1..<maxnoMeasNCell>		
>UC-Id	M		9.2.1.65B	
>SFN-SFN Value	M		9.2.1.53F	
>SFN-SFN Quality	O		INTEGER(0..25516383)	Indicates the standard deviation of the SFN-SFN otd (observed time difference) measurements in 1/16 chip.
>SFN-SFN Drift Rate	M		INTEGER(-100..+100)	Indicates the SFN-SFN drift rate in 1/256 chip per second. A positive value indicates that the Reference cell clock is running at a greater frequency than the measured neighbouring cell.
>SFN-SFN Drift Rate Quality	M		INTEGER(0.. 100)	Indicates the standard deviation of the SFN-SFN drift rate measurements in 1/256 chip per second.
>SFN-SFN Measurement Time Stamp	M		9.2.1.53D	
Unsuccessful Neighbouring cell SFN-SFN Observed Time Difference Measurement Information		0..<maxnoMeasNCell-1>		
>UC-Id	M		9.2.1.65B	

Range bound	Explanation
maxnoMeasNCell	Maximum number of neighbouring cells that can be measured on.

9.2.1.64A $T_{UTRAN-GPS}$ Measurement Value Information

The $T_{UTRAN-GPS}$ *Measurement Value Information* IE indicates the measurement results related to the UTRAN GPS Timing of Cell Frame for LCS measurements.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
$T_{UTRAN-GPS}$	M		INTEGER(0..3715891199 9999)	Indicates the UTRAN GPS Timing of Cell Frame for LCS. According to mapping in [22].
$T_{UTRAN-GPS}$ Quality	M		INTEGER(0..255^~~20-1~~)	Indicates the standard deviation of the $T_{UTRAN-GPS}$ measurements in 1/16 chip.
$T_{UTRAN-GPS}$ Drift Rate	M		INTEGER(-50..+50)	Indicates the $T_{UTRAN-GPS}$ drift rate in 1/256 chip per second. A positive value indicates that the UTRAN clock is running at a lower frequency than GPS clock.
$T_{UTRAN-GPS}$ Drift Rate Quality	M		INTEGER(0..50)	Indicates the standard deviation of the $T_{UTRAN-GPS}$ drift rate measurements in 1/256 chip per second.

9.2.1.64B $T_{UTRAN-GPS}$ Measurement Threshold Information

The $T_{UTRAN-GPS}$ Measurement Threshold Information defines the related thresholds for UTRAN GPS Timing of Cell Frame for LCS measurements shall ~~shall~~ trigger the event On Modification.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
$T_{UTRAN-GPS}$ Change Limit	O		INTEGER(1..256~~2^20~~)	Change of $T_{UTRAN-GPS}$ value compared to previously reported value, which shall trigger a new report. Unit in 1/16 chip.
Predicted $T_{UTRAN-GPS}$ Deviation Limit	O		INTEGER(1..256^~~20~~)	Deviation of the predicated $T_{UTRAN-GPS}$ from the latest measurement result, which shall trigger a new report. Unit in 1/16 chip.

9.3.4 Information Elements Definitions

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

. . . Partly omitted . . .

```
-- ========================================
--  P
-- ========================================
```

. . . Partly omitted . . .

```
PreambleThreshold ::= INTEGER (0..72)
-- 0= -36.0dB, 1= -35.5dB, ... , 72= 0.0dB

PredictedSFNSFNDeviationLimit ::=INTEGER (01..25616384)
-- Unit chip, Step 1/16 chip, Range 1/16..16 chip

PredictedTUTRANGPSDeviationLimit ::= INTEGER (01..2561048575)
-- Unit chip, Step 1/16 chip, Range 1/16..16 chip


Pre-emptionCapability ::= ENUMERATED {
    shall-not-trigger-pre-emption,
    may-trigger-pre-emption
}

Pre-emptionVulnerability ::= ENUMERATED {
    not-pre-emptable,
    pre-emptable
}
```

. . . Partly omitted . . .

```
-- ========================================
--  S
-- ========================================
```

. . . Partly omitted . . .

```
SFNSFNChangeLimit ::= INTEGER (01..25616384)
-- Unit chip, Step 1/16 chip, Range 1/16..16 chip

SFNSFNDriftRate ::= INTEGER (-100..100)
-- Unit chip/s, Step 1/256 chip/s, Range -100/256..+100/256 chip/s

SFNSFNDriftRateQuality ::= INTEGER (0..100)
-- Unit chip/s, Step 1/256 chip/s, Range 0..100/256 chip/s

SFNSFNMeasurementThresholdInformation::= SEQUENCE {
    sFNSFNChangeLimit                   SFNSFNChangeLimit                   OPTIONAL,
    predictedSFNSFNDeviationLimit       PredictedSFNSFNDeviationLimit       OPTIONAL,
    iE-Extensions                   ProtocolExtensionContainer { { SFNSFNMeasurementThresholdInformation-ExtIEs} }    OPTIONAL,
    ...
}

SFNSFNMeasurementThresholdInformation-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

SFNSFNMeasurementValueInformation ::= SEQUENCE {
    successfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformation      SEQUENCE (SIZE(1..maxNrOfMeasNCell)) OF
        SEQUENCE {
            uC-Id                       UC-Id,
            sFNSFNValue     SFNSFNValue,
            sFNSFNQuality       SFNSFNQuality                   OPTIONAL,
            sFNSFNDriftRate     SFNSFNDriftRate,
            sFNSFNDriftRateQuality      SFNSFNDriftRateQuality,
            sFNSFNTimeStampInformation              SFNSFNTimeStampInformation,
            iE-Extensions       ProtocolExtensionContainer { { SuccessfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-
ExtIEs} }       OPTIONAL,
            ...
        },
    unsuccessfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformation     SEQUENCE (SIZE(0..maxNrOfMeasNCell-1)) OF
        SEQUENCE {
            uC-Id                       UC-Id,
            iE-Extensions       ProtocolExtensionContainer { { UnsuccessfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-
ExtIEs} }       OPTIONAL,
                ...
        },
    iE-Extensions       ProtocolExtensionContainer { { SFNSFNMeasurementValueInformationItem-ExtIEs} }               OPTIONAL,
    ...
}
```

```
SFNSFNMeasurementValueInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

SuccessfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UnsuccessfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

SFNSFNQuality ::= INTEGER (0..2551048575)
-- Unit chip, Step 1/16 chip, Range 0.. 255/16 chip

ShutdownTimer ::= INTEGER (1..3600)
-- Unit sec
```

. . . Partly omitted . . .

```
-- ========================================
--  T
-- ========================================
```

. . . Partly omitted . . .

```
TUTRANGPS ::= INTEGER (0..37158911999999)

TUTRANGPSChangeLimit ::= INTEGER (10..25610485575)
-- Unit chip, Step 1/16 chip, Range 1/16..16 chip

TUTRANGPSDriftRate ::= INTEGER (-50..50)
-- Unit chip/s, Step 1/256 chip/s, Range -50/256..+50/256 chip/s

TUTRANGPSDriftRateQuality ::= INTEGER (0..50)
-- Unit chip/s, Step 1/256 chip/s, Range 0..50/256 chip/s


TUTRANGPSAccuracyClass ::= ENUMERATED {
    accuracy-class-A,
    accuracy-class-B,
    accuracy-class-C,
    ...
}

TUTRANGPSMeasurementThresholdInformation ::= SEQUENCE {
    tUTRANGPSChangeLimit                    TUTRANGPSChangeLimit                    OPTIONAL,
    predictedTUTRANGPSDeviationLimit        PredictedTUTRANGPSDeviationLimit        OPTIONAL,
    iE-Extensions                   ProtocolExtensionContainer { { TUTRANGPSMeasurementThresholdInformation-ExtIEs} }    OPTIONAL,
    ...
}

TUTRANGPSMeasurementThresholdInformation-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TUTRANGPSMeasurementValueInformation ::= SEQUENCE {
        tUTRANGPS                       TUTRANGPS,
        tUTRANGPSQuality                TUTRANGPSQuality,
        tUTRANGPSDriftRate              TUTRANGPSDriftRate,
        tUTRANGPSDriftRateQuality       TUTRANGPSDriftRateQuality,
        iE-Extensions                   ProtocolExtensionContainer { {TUTRANGPSMeasurementValueInformationItem-ExtIEs} }    OPTIONAL,
        ...
}

TUTRANGPSMeasurementValueInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TUTRANGPSQuality ::= INTEGER (0..25510485574)
```

```
-- Unit chip, Step 1/16 chip, Range 0.. 255/16 chip


TypeOfError ::= ENUMERATED {
    not-understood,
    missing,
    ...
}
```

3GPP TSG-RAN3 Meeting #27
Orlando, USA, 18th – 22nd February 2002

Tdoc R3-020660

CR-Form-v3

CHANGE REQUEST

⌘ **25.433** **CR** **587** ⌘ rev **1** ⌘ Current version: **4.3.0** ⌘

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

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

Title:	⌘	Correction to UE position measurements change and deviation limit formulas
Source:	⌘	R-WG3
Work item code:	⌘	LCS1-UEPos-IublIur
Date:	⌘	February 2002
Category:	⌘	**F**
Release:	⌘	REL-4

Use one of the following categories:
F *(essential correction)*
A *(corresponds to a correction in an earlier release)*
B *(Addition of feature),*
C *(Functional modification of feature)*
D *(Editorial modification)*
Detailed explanations of the above categories can be found in 3GPP TR 21.900.

Use one of the following releases:
2 *(GSM Phase 2)*
R96 *(Release 1996)*
R97 *(Release 1997)*
R98 *(Release 1998)*
R99 *(Release 1999)*
REL-4 *(Release 4)*
REL-5 *(Release 5)*

Reason for change: ⌘

Rev 1

Calculation of drift, based on the reported drift rate with unit chip/s (not converting to ppm) corrected

During the some meetings ago the reported drift rate a was defined to be reported as a resolution of 1/256 chip/s. This will result of calculating the drift for $T_{Utran-GPS}$ and SFN-SFN otd (FDD) as $\boldsymbol{(a/16) * ((SFN_n - SFN_{n-1}) \bmod 4096)/100}$, a/16 = 1/16 chip/s and the SFN need to be divided with 100 due the fact that there are 100 radio frames in one second. For SFN-SFN otd (TDD) the drift is calculated as $\boldsymbol{(a/16)*(15*(SFN_n - SFN_{n-1}) \bmod 4096 + (TS_n - TS_{n-1}))/1500}$, a = 1/16 chip/s and division 1500 comes from the fact that there are 1500 slots in one second

Rev 0

During the R3#26 meeting formulas for UE Position measurement change and deviation limits were discussed. Following correction proposals were noted:

- it shall be clarified that for the computation as described for the SFN-SFN measurement and $T_{Utran-GPS}$ measurement works as an input with interface C (25.302)

- as the SFN-SFN otd measurement was changed to be measured to frame boundaries instead of slot boundaries, formulas for FDD mode operation need to be redefined. This will result two formulas (one for TDD and one for FDD) for calculating SFN-SFN change limit and Predicted SFN-SFN Deviation Limit

Additionally in this CR it is clarified that reported drift rate values in the predicted deviation limits formulas has to be expressed in ppms in the formula.

Also the calculation of value F_n =deviation of the last measurement result from the predicted value is made simpler in the predicted deviation limit formulas.

Summary of change:	⌘	Formulas for calculating change limits and predicted deviation limits for UE position measurements ($T_{utran-GPS}$ and SFN-SFN otd) are corrected.
Consequences if not approved:	⌘	Impact Analysis: Impact assessment towards the previous version of the specification (same release): This CR has isolated impact with the previous version of the specification because this CR corrects the formulas to be used in reporting criteria evaluation phase for calculating whether the set change limit or deviation limit by Common Measurement Initiation procedure has been exceeded. This CR has an impact under protocol and functional point of view. The impact can be considered isolated because the change affects one system function namely measurements on common resources.

Clauses affected:	⌘	8.2.8		
Other specs affected:	⌘	**X** Other core specifications Test specifications O&M Specifications	⌘	TS 25.423 v. 4.3.0 CR 547r1
Other comments:	⌘			

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8.2.8 Common Measurement Initiation

8.2.8.1 General

This procedure is used by a CRNC to request the initiation of measurements on common resources in a Node B.

8.2.8.2 Successful Operation

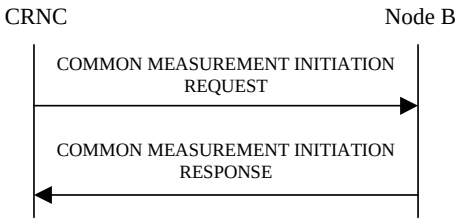

Figure 11: Common Measurement Initiation procedure, Successful Operation

The procedure is initiated with a COMMON MEASUREMENT INITIATION REQUEST message sent from the CRNC to the Node B using the Node B control port.

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

[TDD - If the Time Slot Information is provided in the *Common Measurement Object Type* IE , the measurement request shall apply to the requested time slot individually.]

[FDD - If the Spreading Factor Information is provided in the *Common Measurement Object Type* IE, measurement request shall apply to the PCPCHs whose minimum allowed spreading factor (Min UL Channelisation Code Length) is equal to the value of Spreading Factor Information.

If the *Common Measurement Type* IE is not set to 'SFN-SFN Observed Time Difference' and the *SFN Reporting Indicator* IE is set to "FN Reporting Required", the *SFN* IE shall be included in the measurement report or in the measurement response, the latter only in the case the *Report Characteristics* IE is set to 'On-Demand'. The reported SFN shall be the SFN at the time when the measurement value was reported by the layer 3 filter, referred to as point C in the measurement model [25]. If the *Common Measurement Type* IE is set to 'SFN-SFN Observed Time Difference' and the *SFN Reporting Indicator* IE is ignored.

If the *SFN* IE is provided, it indicates the frame for which the first measurement shall be provided. The provided measurement value shall be the one reported by the layer 3 filter, referred to as point C in the measurement model [25].

Common measurement type

If the *Common Measurement Type* IE is set to 'SFN-SFN Observed Time Difference', then the Node B shall initiate the SFN-SFN Observed Time Difference measurements between the reference cell identified by *C-ID* IE and the neighbouring cells identified by the *UTRAN Cell Identifier(UC-Id)* IE.

Report characteristics
The *Report Characteristics* IE indicates how the reporting of the measurement shall be performed. See also Annex B.

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

If the *Report Characteristics* IE is set to 'Periodic', the Node B shall periodically initiate a Measurement Reporting procedure for this measurement, with the requested report frequency. If the *Common Measurement Type* IE is set to 'SFN-SFN Observed Time Difference', all the available measurement results shall be reported in the *Successful Neighbouring cell SFN-SFN Observed Time Difference Measurement Information* IE in the *SFN-SFN Measurement Value Information* IE and the Node B shall indicate in the *Unsuccessful Neighbouring cell SFN-SFN Observed Time Difference Measurement Information* IE all the remaining neighbouring cells with no measurement result available in the Common Measurement Reporting procedure.

If the *Report Characteristics* IE is set to 'Event A', the Node B shall initiate the Common 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 Node B shall use the value zero for the hysteresis time.

If the *Report Characteristics* IE is set to 'Event B', the Node B shall initiate the Common 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 Node B shall use the value zero for the hysteresis time.

If the *Report Characteristics* IE is set to 'Event C', the Node B shall initiate the Common Measurement Reporting procedure when the measured entity rises by an amount greater than the requested threshold within the requested time. After having reported this type of event, the next C event reporting for the same measurement cannot be initiated before the rising/falling time has elapsed since the previous event reporting.

If the *Report Characteristics* IE is set to 'Event D', the Node B shall initiate the Common Measurement Reporting procedure when the measured entity falls more than the requested threshold within the requested time. After having reported this type of event, the next D event reporting for the same measurement cannot be initiated before the rising/falling time has elapsed since the previous event reporting.

If the *Report Characteristics* IE is set to 'Event E', the Node B shall initiate the Common Measurement Reporting procedure when the measured entity rises above the 'Measurement Threshold 1' and stays there for the 'Measurement Hysteresis Time' (Report A). When the conditions for Report A are met and the *Report Periodicity* IE is provided, the Node B shall initiate the Common Measurement Reporting procedure periodically. If the conditions for Report A have been met and the measured entity falls below the 'Measurement Threshold 2' and stays there for the 'Measurement Hysteresis Time', the Node B shall initiate the Common Measurement Reporting procedure (Report B) as well as terminating any corresponding periodic reporting. If 'Measurement Threshold 2' is not present, the Node B shall use 'Measurement Threshold 1' instead. If no 'Measurement Hysteresis Time' is provided, the Node B 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 Node B shall initiate the Common Measurement Reporting procedure when the measured entity falls below the 'Measurement Threshold 1' and stays there for the 'Measurement Hysteresis Time' (Report A). When the conditions for Report A are met and the *Report Periodicity* IE is provided the Node B shall also initiate the Common Measurement Reporting procedure periodically. If the conditions for Report A have been met and the measured entity rises above the 'Measurement Threshold 2' and stays there for the 'Measurement Hysteresis Time', the Node B shall initiate the Common Measurement Reporting procedure (Report B) as well as terminating any corresponding periodic reporting. If 'Measurement Threshold 2' is not present, the Node B shall use 'Measurement Threshold 1' instead. If no 'Measurement Hysteresis Time' is provided, the Node B shall use the value zero as hysteresis times for both Report A and Report B.

If the *Report Characteristics* IE is set to 'On Modification', the Node B shall report the result of the requested measurement immediately. Then the Node B shall initiate the Common Measurement Reporting procedure in accordance to the following conditions: 1. If the *Common Measurement Type* IE is set to 'UTRAN GPS Timing of Cell Frame for LCS':

If the $T_{UTRAN\text{-}GPS}$ *Change Limit* IE is included in the $T_{UTRAN\text{-}GPS}$ *Measurement Threshold Information* IE, the Node B shall each time a new measurement result is received after point C in the measurement model [25]~~from the physical layer measurement~~, calculate the change of $T_{UTRAN\text{-}GPS}$ value (F_n). The Node B shall initiate the Common Measurement Reporting procedure and set n equal to zero when the absolute value of F_n rises above the threshold indicated by the $T_{UTRAN\text{-}GPS}$ *Change Limit* IE. The change of $T_{UTRAN\text{-}GPS}$ value (F_n) is calculated according to the following:

$F_n = 0$ *for* $n=0$

$F_n = (M_n - M_{n-1}) \bmod 37152912000000 - ((SFN_n - SFN_{n-1}) \bmod 4096) * 10 * 3.84 * 10\hat{}3 * 16 + F_{n-1}$

for $n>0$

F_n is the change of the $T_{UTRAN\text{-}GPS}$ value expressed in unit [1/16 chip] when n measurement results has been received after first Common Measurement Reporting at initiation or after the last event was triggered.

M_n is the latest measurement result received after point C in the measurement model [25]~~from the physical layer measurements~~, measured at SFN_n~~.~~.

M_{n-1} is the previous measurement result received after point C in the measurement model [25]~~from the physical layer measurements~~, measured ~~at~~

SFN_{n-1}.

M_1 is the first measurement result received after point C in the measurement model [25], ~~from the physical layer measurements~~ after first Common Measurement Reporting at initiation or after the last event was triggered.

M_0 is equal to the value reported in the first Common Measurement Reporting at initiation or in the Common Measurement Reporting when the event was triggered.

If the *Predicted $T_{UTRAN-GPS}$ Deviation Limit* IE is included in the *$T_{UTRAN-GPS}$ Measurement Threshold Information* IE, the Node B shall each time a new measurement result is received after point C in the measurement model [25] ~~from the physical layer measurement~~, update the P_n and F_n. The Node B shall initiate the Common Measurement Reporting procedure and set n equal to zero when F_n rises above the threshold indicated by the *Predicted $T_{UTRAN-GPS}$ Deviation Limit* IE. The P_n and F_n are calculated according to the following:

$P_n = b$ *for* $n=0$

$P_n = (~~(1+~~a/16) * ((SFN_n – SFN_{n-1}) mod 4096)/100 +((SFN_n – SFN_{n-1}) mod 4096) ~~*10*3.84*10^3*16~~ + P_{n-1}) mod 37158912000000$ *for* $n>0$

~~$F_n = min(abs(M_n – P_n), abs(M_n – P_n – 37158912000000), abs(M_n – P_n + 37158912000000))$ for $n>0$~~ $F_n = min((M_n - P_n) mod 37158912000000, (P_n - M_n) mod 37158912000000)$ for $n>0$

P_n is the predicted $T_{UTRAN-GPS}$ value when n measurement results has been received after first Common Measurement Reporting at initiation or after the last event was triggered.

a is the last reported $T_{UTRAN-GPS}$ Drift Rate value.

b is the last reported $T_{UTRAN-GPS}$ value.

~~*abs* denotes the absolute value.~~

F_n is the deviation of the last measurement result from the predicted $T_{UTRAN-GPS}$ value (P_n) when n measurements has been received after first Common Measurement Reporting at initiation or after the last event was triggered.

M_n is the latest measurement result received after point C in the measurement model [25] ~~from the physical layer measurements~~, measured at SFN_n. ~~.~~

M_1 is the first measurement result received after point C in the measurement model [25], ~~from the physical layer measurements~~ after first Common Measurement Reporting at initiation or after the last event was triggered.

The $T_{UTRAN-GPS}$ Drift Rate is determined by the Node B in an implementation-dependent way after point B in the measurement model [26].

2. If the *Common Measurement Type* IE is set to 'SFN-SFN Observed Time Difference':

If the *SFN-SFN Change Limit* IE is included in the *SFN-SFN Measurement Threshold Information* IE, the Node B shall each time a new measurement result is received after point C in the measurement model [25] ~~from the physical layer measurement~~, calculate the change of SFN-SFN value (F_n). The Node B shall initiate the Common Measurement Reporting procedure in order to report the particular SFN-SFN measurement which has triggered the event and set n equal to zero when F_n rises above the threshold indicated by the *SFN-SFN Change Limit* IE. The change of the SFN-SFN value is calculated according to the following:

$F_n = 0$ *for* $n=0$

[FDD - $F_n = (M_n – a) mod 614400$ *for* $n>0$]

[TDD - $F_n = (M_n – a) mod 40960$ *for* $n>0$]

F_n is the change of the SFN-SFN

value expressed in unit [1/16 chip] when n measurement results has been received after first Common Measurement Reporting at initiation or after the last event was triggered.

a is the last reported SFN-SFN .

M_n is the latest measurement result received after point C in the measurement model [25]~~from the physical layer measurements~~, measured at SFN_n. ~~.~~

M_1 is the first measurement result received after point C in the measurement model [25]~~from the physical layer measurements~~ after first Common Measurement Reporting at initiation or after the last event was triggered.

If the *Predicted SFN-SFN Deviation Limit* IE is included in the *SFN-SFN Measurement Threshold Information* IE, the Node B shall each time a new measurement result is received after point C in the measurement model [25]~~from the physical layer measurement~~, update the P_n and F_n . The Node B shall initiate the Common Measurement Reporting procedure in order to report the particular SFN-SFN measurement which has triggered the event and set n equal to zero when the F_n rises above the threshold indicated by the *Predicted SFN-SFN Deviation Limit* IE. The P_n and F_n are calculated according to the following:

$P_n = b$ *for* $n=0$

[FDD - $P_n = ((a/16) * ((SFN_n - SFN_{n-1}) \bmod 4096)/100 + P_{n-1}) \bmod 614400$ *for* $n>0$

$F_n = \min((M_n - P_n) \bmod 614400, (P_n - M_n) \bmod 614400)$ *for* $n>0$]

[TDD - $P_n = ((a/16) * (15*(SFN_n - SFN_{n-1}) \bmod 4096 + (TS_n - TS_{n-1}))/1500 + P_{n-1}) \bmod 40960$ for $n>0$ ~~$((a * (15*((SFN_n - SFN_{n-1}) \bmod 4096) + (TS_n - TS_{n-1}))*2560*16 + P_{n-1}) \bmod 40960) - 20480$ for $n>0$~~

~~$F_n = \min(abs(M_n - P_n), abs(M_n - P_n - 40960), abs(M_n - P_n + 40960))$ for $n>0$~~ $F_n = \min((M_n - P_n) \bmod 40960, (P_n - M_n) \bmod 40960)$ for $n>0$]

P_n is the predicted *SFN-SFN* value when n measurement results has been received after first Common Measurement Reporting at initiation or after the last event was triggered.

a is the last reported SFN-SFN Drift Rate value.

b is the last reported SFN-SFN value.

abs denotes the absolute value.

F_n is the deviation of the last measurement result from the predicted *SFN-SFN* value (P_n) when n measurements has been received after first Common Measurement Reporting at initiation or after the last event was triggered.

M_n is the latest measurement result received after point C in the measurement model [25]~~from the physical layer measurements~~, measured at the [TDD -Time Slot TS_n] of the Frame SFN_n.

M_1 is the first measurement result received after point C in the measurement model [25]~~from the physical layer measurements~~ after first Common Measurement Reporting at initiation or after the last event was triggered.

The ~~$T_{UTRAN-GPS}$~~ SFN-SFN Drift Rate is determined by the Node B in an implementation-dependent way after point B in the measurement model [26].

If the *Report Characteristics* IE is not set to 'On-Demand', the Node B is required to perform reporting for a common measurement object, in accordance with the conditions provided in the COMMON MEASUREMENT INITIATION REQUEST message, as long as the object exists. If no common measurement object(s) for which a measurement is defined exists any more the Node B shall terminate the measurement locally without reporting this to the CRNC.

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 Node B shall initiate the Common Measurement Reporting procedure immediately, and then continue with the measurements as specified in the COMMON MEASUREMENT INITIATION REQUEST message.

Higher layer filtering
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

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

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

Common measurement accuracy

If the *Common Measurement Type* IE is set to 'UTRAN GPS Timing of Cell Frame for LCS', then the Node B shall use the *UTRAN GPS Timing Measurement Accuracy Class* IE included in the *Common Measurement Accuracy* IE according to the following:

If the *UTRAN GPS Timing Measurement Accuracy Class* IE indicates 'Class A', then the Node B shall perform the measurement with highest supported accuracy within the accuracy classes A, B and C.

If the *UTRAN GPS Timing Measurement Accuracy Class* IE indicates 'Class B', then the Node B shall perform the measurement with highest supported accuracy within the accuracy classes B and C.

If the *UTRAN GPS Timing Measurement Accuracy Class* IE indicates 'Class C' then the Node B shall perform the measurements with the accuracy according to class C.

Response message
If the Node B was able to initiate the measurement requested by the CRNC it shall respond with the COMMON MEASUREMENT INITIATION RESPONSE message sent over the Node B control port. 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", or "On Modification", the COMMON MEASUREMENT INITIATION RESPONSE message shall contain the measurement result and also the *Common Measurement Achieved Accuracy* IE if the *Common Measurement Type* IE is set to 'UTRAN GPS Timing of Cell Frame for LCS'.

If the *Common Measurement Type* IE is set to 'SFN-SFN Observed Time Difference' and the *Report Characteristics* IE is set to 'On Demand' or "On Modification", all the available measurement results shall be reported in the *Successful Neighbouring cell SFN-SFN Observed Time Difference Measurement Information* IE in the *SFN-SFN Measurement Value Information* IE and the Node B shall indicate in the *Unsuccessful Neighbouring cell SFN-SFN Observed Time Difference Measurement Information* IE all the remaining neighbouring cells with no measurement result available in the COMMON MEASUREMENT INITIATION RESPONSE message.

3GPP TSG-RAN3 Meeting #27 **R3-020777**
Orlando, USA, 18th – 22nd February, 2002

CR-Form-v4

CHANGE REQUEST

⌘ **25.433** **CR** **601** ⌘ ev **1** ⌘ Current version: **4.3.0** ⌘

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

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

Title:	⌘	Modification of the T_utran-gps length
Source:	⌘	~~Ericsson~~R-WG3
Work item code:	⌘	TEI
Date:	⌘	January, 2002
Category:	⌘	**F**
Release:	⌘	REL-4

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
C *(functional modification of feature)*
D *(editorial modification)*
Detailed explanations of the above categories can be found in 3GPP TR 21.900.

Use one of the following releases:
2 (GSM Phase 2)
R96 (Release 1996)
R97 (Release 1997)
R98 (Release 1998)
R99 (Release 1999)
REL-4 (Release 4)
REL-5 (Release 5)

Reason for change:	⌘	It is generally ackowledged that long integers could cause problems with regards to e.g.hardware support in many commonly used tools. Regarding this issue, it was in the past decided to adopt the general principle of limiting integers length to 32 bits. As the $T_{utran-gps}$ does not comply to this principle a correction is needed.
Summary of change:	⌘	The length of the $T_{utran-gps}$ IE is modified so that the 64-bit integer is coded by means of two 32-bit integers.
Consequences if not approved:	⌘	The presence of a 64-bit integer could cause support problems in many commonly used tools. Impact Analysis: Impact assessment towards the previous version of the specification (same release): This CR has impact on the previous version of the specification (same release) under protocol point of view, because the coding of one IE was modified. The impact can be considered isolated as it concerns part of one system function, namely the UE Positioning (for A-GPS and OTDOA only). R1: the MS length was reduced because not necessary given the assumed values of the information element.

Clauses affected:	⌘	9.2.1.64A, 9.3.4		
Other specs affected:	⌘	**X** Other core specifications ☐ Test specifications ☐ O&M Specifications	⌘	CR 562 RNSAP
Other comments:	⌘			

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

1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.

2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.

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

9.2.1.64A $T_{UTRAN-GPS}$ Measurement Value Information

The $T_{UTRAN-GPS}$ *Measurement Value Information* IE indicates the measurement results related to the UTRAN GPS Timing of Cell Frame for LCS measurements.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
~~$T_{UTRAN-GPS}$~~ **$T_{UTRAN-GPS}$**	~~M~~	1	~~INTEGER(0..3715891199 9999)~~	Indicates the UTRAN GPS Timing of Cell Frame for LCS. According to mapping in [22]. Significant values range from 0 to 37158911999999
>MS	M		INTEGER (0..16383)	Most Significant Part
>LS	M		INTEGER (0..4294967 295)	Least Significant Part
$T_{UTRAN-GPS}$ Quality	M		INTEGER(0..2^20-1)	Indicates the standard deviation of the $T_{UTRAN-GPS}$ measurements.
$T_{UTRAN-GPS}$ Drift Rate	M		INTEGER(-50..50)	Indicates the $T_{UTRAN-GPS}$ drift rate in 1/256 chip per second. A positive value indicates that the UTRAN clock is running at a lower frequency than GPS clock.
$T_{UTRAN-GPS}$ Drift Rate Quality	M		INTEGER(0..50)	Indicates the standard deviation of the $T_{UTRAN-GPS}$ drift rate measurements.

9.3.4 Information Element Definitions

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

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

DEFINITIONS AUTOMATIC TAGS ::=
BEGIN

****UNCHANGED PARTS WERE REMOVED****

TUTRANGPS ::= SEQUENCE {
    ms-part     INTEGER (0..16383),
    ls-part     INTEGER (0..4294967295)
}
INTEGER (0..37158911999999)

****UNCHANGED PARTS WERE REMOVED****
```

3GPP TSG-RAN WG3 Meeting #27 **R3-020446**
Orlando, FL, USA, 18th – 22nd February 2002

CR-Form-v3

CHANGE REQUEST

⌘ **25.433** **CR** **606** ⌘ rev **-** ⌘ Current version: **4.3.0** ⌘

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

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

Title:	⌘	Amendment of the COMMON MEASUREMENT INITIATION REQUEST message
Source:	⌘	R-WG3
Work item code:	⌘	TEI
Date:	⌘	February 2002
Category:	⌘	**F**
Release:	⌘	REL-4

Use one of the following categories:
F *(essential correction)*
A *(corresponds to a correction in an earlier release)*
B *(Addition of feature),*
C *(Functional modification of feature)*
D *(Editorial modification)*
Detailed explanations of the above categories can be found in 3GPP TR 21.900.

Use one of the following releases:
2 *(GSM Phase 2)*
R96 *(Release 1996)*
R97 *(Release 1997)*
R98 *(Release 1998)*
R99 *(Release 1999)*
REL-4 *(Release 4)*
REL-5 *(Release 5)*

Reason for change:	⌘	The tabulat format and the ASN.1 are not aligned w.r.t. *the "Neighbouring Cell Measurement Information"* IE in the COMMON MEASUREMENT INITIATION REQUEST message. Also the *Time slot* IE and *Midamlble shift and burst type* IE in the "*Neighbouring TDD Cell Measurement Information" IE* should be made optional due to aligning with RNSAP and because there are situation where these IEs are not available, e.g. the neighbouring cell belongs to another RNS area.
Summary of change:	⌘	The tabular format is aligned with ASN.1, that means introducing a CHOICE *Neighbouring Cell Measurement Information.* The *Time slot* IE and *Midamlble shift and burst type* IE in the *Neighbouring TDD Cell Measurement Information* IE is made optional. Impact Analysis: Impact Assessment towards the previous version of the specification (same release): This CR has isolated impact with the previous version of the specification (same release) because it affects the Common Measurement Initiation procedure only. This CR has an impact under functional point of view. The impact can be considered isolated because the change affects one function.
Consequences if not approved:	⌘	If this CR is not approved, misalignment between tabular format and ASN.1 is remaining.

Clauses affected:	⌘	8.2.8.4, 9.1.18, 9.2.1.47D, 9.3.4			
Other specs affected:	⌘	**X** Other core specifications ☐ Test specifications	⌘	25.423 v4.3.0 CR567	

	☐ O&M Specifications	
Other comments:	⌘	

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2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://www.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2000-09 contains the specifications resulting from the September 2000 TSG meetings.
3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

8.2.8 Common Measurement Initiation

/* partly omitted */

8.2.8.4 Abnormal Conditions

If the Common Measurement Type received in the *Common Measurement Type* IE is not defined in ref. [4] or [5] to be measured on the Common Measurement Object Type received in the *Common Measurement Object Type* IE in the COMMON MEASUREMENT INITIATION REQUEST message the Node B shall regard the Common Measurement Initiation procedure as failed.

[TDD - If the common measurement type requires the Time Slot Information but the [3.84Mcps TDD - *Time Slot* IE] [1.28Mcps TDD - - *Time SlotLCR* IE] is not provided in the *Common Measurement Object Type* IE in the COMMON MEASUREMENT INITIATION REQUEST message the Node B shall regard the Common Measurement Initiation procedure as failed.]

If the COMMON MEASUREMENT INITIATION REQUEST message contains the *SFN-SFN Measurement Threshold Information* IE (in the *Measurement Threshold* IE contained in the *Report Characteristics* IE) and it does not contain at least one IE, the Node B shall reject the procedure using the COMMON MEASUREMENT INITIATION FAILURE message.

If the COMMON MEASUREMENT INITIATION REQUEST message contains the $T_{UTRAN-GPS}$ *Measurement Threshold Information* IE (in the *Measurement Threshold* IE contained in the *Report Characteristics* IE) and it does not contain at least one IE, the Node B shall reject the procedure using the COMMON MEASUREMENT INITIATION FAILURE message.

If the *Common Measurement Type* IE is set to 'SFN-SFN Observed Time Difference', but the *Neighbouring Cell Measurement Information* IE is not received in the COMMON MEASUREMENT INITIATION REQUEST message, the Node B shall regard the Common Measurement Initiation procedure as failed.

If the *Common Measurement Type* IE is set to 'UTRAN GPS Timing of Cell Frame for LCS', but the $T_{UTRAN-GPS}$ *Measurement Accuracy Class* IE in the *Common Measurement Accuracy* IE is not received in the COMMON MEASUREMENT INITIATION REQUEST message, the Node B shall regard the Common Measurement Initiation procedure as failed.

The allowed combinations of the Common measurement type and Report characteristics type are shown in the table below marked with "X". For not allowed combinations, the Node B shall regard the Common Measurement Initiation procedure as failed.

Table 4: Allowed Common measurement type and Report characteristics type combinations

Common measurement type	Report characteristics type								
	On Demand	Periodic	Event A	Event B	Event C	Event D	Event E	Event F	On Modification
Received total wide band power	X	X	X	X	X	X	X	X	
Transmitted Carrier Power	X	X	X	X	X	X	X	X	
Acknowledged PRACH preambles	X	X	X	X	X	X	X	X	
UL Timeslot ISCP	X	X	X	X	X	X	X	X	
Acknowledged PCPCH Access Preambles	X	X	X	X	X	X	X	X	
Detected PCPCH Access Preambles	X	X	X	X	X	X	X	X	
UTRAN GPS Timing of Cell Frames for LCS	X	X							X
SFN-SFN Observed Time Difference	X	X							X

/* partly omitted */

9.1.18 COMMON MEASUREMENT INITIATION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Measurement ID	M		9.2.1.42		YES	reject
Common Measurement Object Type	M		9.2.1.10		YES	reject
CHOICE Common *Measurement Object Type*	M				YES	reject
>Cell					–	
>>C-ID	M		9.2.1.9		–	
>>Time Slot	O		9.2.3.23	For 3.84Mcps TDD only	–	
>>Time Slot LCR	O		9.2.3.24A	For 1.28Mcps TDD only	YES	reject
>>Neighbouring Cell Measurement Information		0..<maxnoMeasNCells>			GLOBAL	ignore
>>>CHOICE *Neighbouring Cell Measurement Information*					–	–
>>>> *Neighbouring FDD Cell Measurement Information*				FDD only	–	–
>>>>Neighbouring FDD Cell Measurement Information	~~O~~M		9.2.1.47C		–	–
>>>> *Neighbouring TDD Cell Measurement Information*				3.84Mcps TDD only	–	–
>>>>Neighbouring TDD Cell Measurement Information	~~O~~M		9.2.1.47D		–	–
>RACH				FDD only	–	
>>C-ID	M		9.2.1.9		–	
>>Common Transport Channel ID	M		9.2.1.14		–	
>CPCH				FDD only	–	
>>C-ID	M		9.2.1.9		–	
>>Common Transport Channel ID	M		9.2.1.14		–	
>>Spreading Factor	O		Minimum UL Channelisation Code Length 9.2.2.22		–	
Common Measurement Type	M		9.2.1.11		YES	reject
Measurement Filter Coefficient	O		9.2.1.41		YES	reject
Report Characteristics	M		9.2.1.51		YES	reject

SFN reporting indicator	M		FN reporting indicator 9.2.1.29B		YES	reject
SFN	O		9.2.1.53A		YES	reject
Common Measurement Accuracy	O		9.2.1.9B		YES	reject

Range bound	Explanation
maxnoMeasNCells	Maximum number of neighbouring cells that can be measured on.

/* partly omitted */

9.2.1.47D Neighbouring TDD Cell Measurement Information

This IE provides information on the 3.84Mcps TDD neighbouring cells used for the purpose of measurements.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
UC-Id	M		9.2.1.65B	
UARFCN	M		9.2.1.65	Corresponds to Nt [15]
Cell Parameter ID	M		9.2.3.4	
Time slot	~~M~~O		9.2.3.23	
Midamble shift and burst type	~~M~~O		9.2.3.7	

/* partly omitted */

9.3.4 Information Elements Definitions

/* partly omitted */

```
-- ========================================
--  N
-- ========================================

NCyclesPerSFNperiod ::= ENUMERATED {
    v1,
    v2,
    v4,
    v8,
    ...
}

NEOT ::= INTEGER (0..8)

NFmax ::= INTEGER (1..64,...)

NRepetitionsPerCyclePeriod ::= INTEGER (2..10)

N-INSYNC-IND ::= INTEGER (1..256)

N-OUTSYNC-IND ::= INTEGER (1..256)

NeighbouringCellMeasurementInformation ::= SEQUENCE (SIZE (1..maxNrOfMeasNCell)) OF
        CHOICE {
                neighbouringFDDCellMeasurementInformation       NeighbouringFDDCellMeasurementInformation, -- FDD only
                neighbouringTDDCellMeasurementInformation       NeighbouringTDDCellMeasurementInformation, -- 3.84Mcps TDD only
                ...
            }

NeighbouringFDDCellMeasurementInformation ::= SEQUENCE {
    uC-Id                               UC-Id,
    uARFCN                              UARFCN,
    primaryScramblingCode               PrimaryScramblingCode,
    iE-Extensions                       ProtocolExtensionContainer { { NeighbouringFDDCellMeasurementInformationItem-ExtIEs} } OPTIONAL,
    ...
}

NeighbouringFDDCellMeasurementInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

```
NeighbouringTDDCellMeasurementInformation ::= SEQUENCE {
    uC-Id                               UC-Id,
    uARFCN                              UARFCN,
    cellParameterID                     CellParameterID,
    timeSlot                            TimeSlot                        OPTIONAL,
    midambleShiftAndBurstType           MidambleShiftAndBurstType       OPTIONAL,
    iE-Extensions                       ProtocolExtensionContainer { { NeighbouringTDDCellMeasurementInformationItem-ExtIEs} } OPTIONAL,
    ...
}

NeighbouringTDDCellMeasurementInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

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

NStartMessage ::= INTEGER (1..8)
```

/* partly omitted */

3GPP TSG-RAN WG3 Meeting #27 ***R3-020681***
Orlando, FL, USA, 18th – 22nd February 2002

CR-Form-v3

CHANGE REQUEST

⌘ **25.433** **CR** **609** ⌘ rev **1** ⌘ Current version: **4.3.0** ⌘

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

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

Title:	⌘	ASN.1 and tabular amendments for LCR TDD
Source:	⌘	R-WG3
Work item code:	⌘	TEI
Date:	⌘	February 2002
Category:	⌘	**F**
Release:	⌘	REL-4

Use one of the following categories:
F *(essential correction)*
A *(corresponds to a correction in an earlier release)*
B *(Addition of feature),*
C *(Functional modification of feature)*
D *(Editorial modification)*
Detailed explanations of the above categories can be found in 3GPP TR 21.900.

Use one of the following releases:
2 (GSM Phase 2)
R96 (Release 1996)
R97 (Release 1997)
R98 (Release 1998)
R99 (Release 1999)
REL-4 (Release 4)
REL-5 (Release 5)

Reason for change: ⌘ The id-RL-InformationResponse-LCR-RL-AdditionRspTDD in ASN.1 of the COMMON MEASUREMENT INITIATION REQUEST TDD message must be optional because this id is used for 1.28Mcps TDD only and shall not be used for 3.84Mcps TDD. ASN.1 deviats from the tabular format.
UARFCN is defined twice in the PDU Definition.
The Definition of the DwPCH Power and the Max FPACH Power are incorrect because the power definitions should have the same range as the PCCPCH Power to cover the entire range.
The Extension Container in the SynchronisationReportCharacteristics and in the intStdPhSyncInfo-CellSyncReprtTDD of the CELL SYNCHRONISATION REPORT [TDD] message in ASN.1 is missing and therefore it cannot be extended in future releases.

Summary of change: ⌘ The id-RL-InformationResponse-LCR-RL-AdditionRspTDD in ASN.1 of the COMMON MEASUREMENT INITIATION REQUEST TDD message is changed to optional.
UARFCN is removed once in the PDU Definition.
DwPCH Power and MAX FPACH Power is corrected.
Extension Container and Ellipsis are added in the SynchronisationReportCharacteristics and in the intStdPhSyncInfo-CellSyncReprtTDD of the CELL SYNCHRONISATION REPORT [TDD] message.

Rev.1:
IntStdPhCellSyncInfoList-CellSyncReprtTDD is corrected to IntStdPhCellSyncInfo-CellSyncReprtTDD in ASN.1
Removal of the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST TDD in ASN.1, because it still unclear using ProtocolIE-Single-Container or not for adding new IES.

Impact Analysis:
Impact assessment towards the previous version of the specification (same

		release): This CR has non isolated impact with the previous version of the specification (same release) because it affects the RADIO LINK ADDITION procedure for TDD and the functions for DwPCH and MAX FPACH Power. This CR has an impact under protocol & functional point of view. The impact cannot be considered isolated because the changes affects more than one functions. If only NodeB or RNC implement this CR then the affected procedure will not work for 3.84Mcps TDD however all other procedures are not affected.
Consequences if not approved:	⌘	If this CR is not approved, the COMMON MEASUREMENT INITIATION REQUEST TDD message is not fully supported for HCR TDD. DwPCH Power, MAX FPACH Power definitions and ASN.1 remain incorrect.

Clauses affected:	⌘	9.2.3.5B, 9.2.3.5E, 9.3.3, 9.3.4		
Other specs affected:	⌘	☐ Other core specifications ☐ Test specifications ☐ O&M Specifications	⌘	
Other comments:	⌘			

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2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://www.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2000-09 contains the specifications resulting from the September 2000 TSG meetings.
3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

9.2.3.5B DwPCH Power

DwPCH Power is the power that shall be used for transmitting the DwPCH in a cell.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
DwPCH Power			INTEGER(-15..+40,…)~~Enumerated(-10..+5dB,...)~~	Unit dBm Granularity 0.1 dB ~~Step 1dB~~

/* partly omitted */

9.2.3.5E Max FPACH Power

Max FPACH Power is the maximum power that shall be used for transmitting the FPACH in a cell.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
~~Max~~ FPACH Power			INTEGER(-15..+40,…)~~Enumerated(-10..+5dB,...)~~	Unit dBm Granularity 0.1 dB ~~Step 1dB~~

/* partly omitted */

9.3.3 PDU Definitions

/* partly omitted */

```
    TFCI-SignallingMode,
    TFCS,
    TimeSlot,
    TimeSlotLCR,
    TimeSlotDirection,
    TimeSlotStatus,
    TimingAdjustmentValue,
    TimingAdvanceApplied,
    ToAWE,
    ToAWS,
    TransmissionDiversityApplied,
    TransmitDiversityIndicator,
    TransmissionGapPatternSequenceCodeInformation,
    Transmission-Gap-Pattern-Sequence-Information,
    TransportBearerRequestIndicator,
    TransportFormatSet,
    TransportLayerAddress,
    TSTD-Indicator,
    UARFCN,
    TUTRANGPS,
    TUTRANGPSChangeLimit,
    TUTRANGPSDriftRate,
    TUTRANGPSDriftRateQuality,
    TUTRANGPSQuality,
    UARFCN,
    UC-Id,
    USCH-Information,
    USCH-InformationResponse,
    UL-CapacityCredit,
    UL-DPCCH-SlotFormat,
    UL-SIR,
    UL-FP-Mode,
    UL-PhysCH-SF-Variation,
    UL-ScramblingCode,
    UL-Timeslot-Information,
    UL-TimeslotLCR-Information,
    UL-TimeSlot-ISCP-Info,
    UL-TimeSlot-ISCP-LCR-Info,
    UL-TimeslotISCP-Value,
    UL-TimeslotISCP-Value-IncrDecrThres,
    USCH-ID
FROM NBAP-IEs
```

/* partly omitted */

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


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

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

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

RL-InformationResponse-RL-AdditionRspTDD ::= SEQUENCE {
    rL-ID                                   RL-ID,
    uL-TimeSlot-ISCP-Info                   UL-TimeSlot-ISCP-Info,
    ul-PhysCH-SF-Variation                  UL-PhysCH-SF-Variation,
    dCH-Information                         DCH-Information-RL-AdditionRspTDD               OPTIONAL,
    dSCH-InformationResponseList            DSCH-InformationResponseList-RL-AdditionRspTDD                  OPTIONAL,
    uSCH-InformationResponseList            USCH-InformationResponseList-RL-AdditionRspTDD                  OPTIONAL,
    iE-Extensions                           ProtocolExtensionContainer { { RL-InformationResponse-RL-AdditionRspTDD-ExtIEs} }    OPTIONAL,
    ...
}

RL-InformationResponse-RL-AdditionRspTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

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

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

DiversityIndication-RL-AdditionRspTDD ::= CHOICE {
    combining                               Combining-RL-AdditionRspTDD,
    non-Combining                           Non-Combining-RL-AdditionRspTDD
}

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

CombiningItem-RL-AdditionRspTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Non-Combining-RL-AdditionRspTDD ::= SEQUENCE {
    dCH-InformationResponse                DCH-InformationResponse,
    iE-Extensions                           ProtocolExtensionContainer { { Non-CombiningItem-RL-AdditionRspTDD-ExtIEs} }      OPTIONAL,
    ...
}

Non-CombiningItem-RL-AdditionRspTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

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

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

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

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

RL-InformationResponse-LCR-RL-AdditionRspTDD ::= SEQUENCE {
    rL-ID                                   RL-ID,
    uL-TimeSlot-ISCP-InfoLCR                UL-TimeSlot-ISCP-LCR-Info,
    ul-PhysCH-SF-Variation                  UL-PhysCH-SF-Variation,
    dCH-Information                         DCH-Information-RL-AdditionRspTDD               OPTIONAL,
    dSCH-InformationResponseList            DSCH-InformationResponseList-RL-AdditionRspTDD                    OPTIONAL,
    uSCH-InformationResponseList            USCH-InformationResponseList-RL-AdditionRspTDD                    OPTIONAL,
    iE-Extensions                           ProtocolExtensionContainer { { RL-InformationResponse-LCR-RL-AdditionRspTDD-ExtIEs} }   OPTIONAL,
    ...
}

RL-InformationResponse-LCR-RL-AdditionRspTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
```

```
    ...
}
```

/* partly omitted */

```
-- **************************************************************
--
-- CELL SYNCHRONISATION REPORT TDD
--
-- **************************************************************

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

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

CellSynchronisationReportTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-CellSyncInfo-CellSyncReprtTDD        CRITICALITY ignore      TYPE    CellSyncInfo-CellSyncReprtTDD        PRESENCE mandatory   },
    ...
}


CellSyncInfo-CellSyncReprtTDD ::= SEQUENCE (SIZE (1..maxCellinNodeB))   OF ProtocolIE-Single-Container {{ CellSyncInfoItemIE-CellSyncReprtTDD }}

CellSyncInfoItemIE-CellSyncReprtTDD NBAP-PROTOCOL-IES ::= {
    { ID    id-C-ID                                     CRITICALITY ignore  TYPE C-ID
    PRESENCE    mandatory}|
    { ID    id-SyncReportType-CellSyncReprtTDD      CRITICALITY ignore      TYPE SyncReportType-CellSyncReprtTDD      PRESENCE optional},
    ...
}

SyncReportType-CellSyncReprtTDD ::= CHOICE {
    intStdPhSyncInfo~~Item~~-CellSyncReprtTDD       IntStdPhCellSyncInfo~~Item~~-CellSyncReprtTDD,
    lateEntrantCell             NULL,
    frequencyAcquisition        NULL,
    ...
}

IntStdPhCellSyncInfo-CellSyncReprtTDD ::= SEQUENCE {
    cellSyncBurstMeasuredInfo                   CellSyncBurstMeasInfoList-CellSyncReprtTDD,
    iE-Extensions                               ProtocolExtensionContainer { { IntStdPhCellSyncInfoList-CellSyncReprtTDD-ExtIEs} }   OPTIONAL,
    ...
}
```

```
IntStdPhCellSyncInfoList-CellSyncReprtTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

IntStdPhCellSyncBurstMeasInfoListItem-CellSyncReprtTDD ::= SEQUENCE (SIZE (1.. maxNrOfCellSyncBursts)) OF CellSyncBurstMeasInfoItem-CellSyncReprtTDD

CellSyncBurstMeasInfoItem-CellSyncReprtTDD ::= SEQUENCE {
    sFN                                     SFN,
    cellSyncBurstInfo-CellSyncReprtTDD      SEQUENCE (SIZE (1..maxNrOfReceptsPerSyncFrame)) OF CellSyncBurstInfo-CellSyncReprtTDD,
    ...
}

CellSyncBurstInfo-CellSyncReprtTDD ::= CHOICE {
    cellSyncBurstAvailable      CellSyncBurstAvailable-CellSyncReprtTDD,
    cellSyncBurstNotAvailable   NULL,
    ...
}

CellSyncBurstAvailable-CellSyncReprtTDD ::= SEQUENCE {
    cellSyncBurstTiming         CellSyncBurstTiming,
    cellSyncBurstSIR            CellSyncBurstSIR,
    ...
}

END
```

9.3.4 Information Elements Definitions

/* partly omitted */

```
-- ========================================
--  D
-- ========================================
```

/* partly omitted */

```
DwPCH-Power ::= INTEGER (-150..400,...)ENUMERATED {minus10, minus9, minus8, minus7, minus6, minus5, minus4, minus3, minus2, minus1, zero, plus1,
plus2, plus3, plus4, plus5, ...}
-- DwPCH-power = power * 10
-- If power <= -15 DwPCH shall be set to -150
-- If power >= 40 DwPCH shall be set to 400
-- Unit dBm, Range -15dBm .. +40 dBm, Step +0.1dB
```

/* partly omitted */

```
FPACH-Power ::= INTEGER (-150..400,...)ENUMERATED {minus10, minus9, minus8, minus7, minus6, minus5, minus4, minus3, minus2, minus1, zero, plus1,
plus2, plus3, plus4, plus5, ...}
-- FPACH-power = power * 10
-- If power <= -15 FPACH shall be set to -150
-- If power >= 40 FPACH shall be set to 400
-- Unit dBm, Range -15dBm .. +40 dBm, Step +0.1dB
```

/* partly omitted */

```
SYNCDlCodeId ::= INTEGER (1..32,...)

SyncFrameNumber ::= INTEGER (1..10)

SynchronisationReportCharacteristics ::= SEQUENCE {
    synchronisationReportCharacteristicsType    SynchronisationReportCharacteristicsType,
    synchronisationReportCharactThreExc         SynchronisationReportCharactThreExc      OPTIONAL,
        -- Thies IE shall be included if the synchronisationReportCharacteristicsType IE is set to "thresholdExceeding".
    iE-Extensions                               ProtocolExtensionContainer { { SynchronisationReportCharacteristics-ExtIEs } } OPTIONAL,
    ...
}

SynchronisationReportCharacteristics-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

SynchronisationReportCharactThreExc::=  SEQUENCE (SIZE (1..maxNrOfCellSyncBursts)) OF SynchronisationReportCharactThreInfoItem

SynchronisationReportCharactThreInfoItem ::= SEQUENCE {
    syncFrameNumber             SyncFrameNumber,
    cellSyncBurstInformation    SEQUENCE (SIZE (1.. maxNrOfReceptsPerSyncFrame)) OF SynchronisationReportCharactCellSyncBurstInfoItem,
    iE-Extensions               ProtocolExtensionContainer { { SynchronisationReportCharactThreInfoItem-ExtIEs } }    OPTIONAL,
    ...
}

SynchronisationReportCharactThreInfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

SynchronisationReportCharactCellSyncBurstInfoItem ::= SEQUENCE {
    cellSyncBurstCode               CellSyncBurstCode,
    cellSyncBurstCodeShift          CellSyncBurstCodeShift,
    cellSyncBurstTiming             CellSyncBurstTiming             OPTIONAL,
    cellSyncBurstTimingThreshold    CellSyncBurstTimingThreshold    OPTIONAL,
    iE-Extensions                   ProtocolExtensionContainer { { SynchronisationReportCharactCellSyncBurstInfoItem-ExtIEs } }   OPTIONAL,
    ...
}

SynchronisationReportCharactCellSyncBurstInfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

```
SynchronisationReportCharacteristicsType ::= ENUMERATED {
    frameRelated,
    sFNperiodRelated,
    cycleLengthRelated,
    thresholdExceeding,
    frequencyAcquisitionCompleted,
    ...
}

SynchronisationReportType ::= ENUMERATED {
    initialPhase,
    steadyStatePhase,
    lateEntrantCell,
    frequencyAcquisition,
    ...
}
```

/* partly omitted */

3GPP TSG-RAN WG3 Meeting #27 **R3-020455**
Orlando, FL, USA, 18th – 22nd February 2002

CR-Form-v3

CHANGE REQUEST

⌘ **25.433** **CR** **610** ⌘ rev **-** ⌘ Current version: **4.3.0** ⌘

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

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

Title:	⌘	Midamble shift LCR in the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST [TDD] message
Source:	⌘	R-WG3
Work item code:	⌘	TEI
Date:	⌘	February 2002
Category:	⌘	**F**
Release:	⌘	REL-4

Use one of the following categories:
F *(essential correction)*
A *(corresponds to a correction in an earlier release)*
B *(Addition of feature),*
C *(Functional modification of feature)*
D *(Editorial modification)*
Detailed explanations of the above categories can be found in 3GPP TR 21.900.

Use one of the following releases:
2 *(GSM Phase 2)*
R96 *(Release 1996)*
R97 *(Release 1997)*
R98 *(Release 1998)*
R99 *(Release 1999)*
REL-4 *(Release 4)*
REL-5 *(Release 5)*

Reason for change: ⌘

1) There is the “Midamble shift LCR” IE for 1.28Mcps TDD missing in the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST [TDD] message in the “PDSCH to add Information LCR” IEgroup but the corresponding “Midamble Shift and Burst Type” IE for 3.84Mcps TDD is existing therefore the “Midamble shift LCR” IE shall be included.

2) The “Midamble shift LCR” IE for 1.28Mcps TDD in the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST [TDD] message in the “PUSCH to modify Information LCR” IEgroup is defined MANDATORY but it shall be defined as OPTIONAL to be aligned with the corresponding 3.84Mcps TDD IE.

Summary of change: ⌘

“Midamble shift LCR” IE is introduced in the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST [TDD] message in the “PDSCH to add Information LCR” IEgroup in the tabular format and ASN.1.

“Midamble shift LCR” IE is made OPTIONAL in the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST [TDD] message in the the “PUSCH to modify Information LCR” IEgroup.

Impact Analysis:
Impact assessment towards the previous version of the specification (same release):
This CR has isolated impact with the previous version of the specification (same release) because the Midamble shift LCR is not correct supported in the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST [TDD] message.
This CR has an impact under protocol & functional point of view.
The impact can be considered isolated because the change affects one protocol & function.

Consequences if not approved:	⌘	If this CR is not approved, Midamble shift LCR is missing and/or not correct defined for 1.28Mcps TDD in the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST [TDD].

Clauses affected:	⌘	9.1.62, 9.3.3		
Other specs affected:	⌘	☐ Other core specifications ☐ Test specifications ☐ O&M Specifications	⌘	
Other comments:	⌘			

How to create CRs using this form:

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

1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.

2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://www.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2000-09 contains the specifications resulting from the September 2000 TSG meetings.

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

9.1.62 PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST [TDD]

IE/Group Name	Presence	Range	IE Type and Reference	Semantic Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		-	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		-	
C-ID	M		9.2.1.9		YES	reject
SFN	O		9.2.1.53A		YES	reject
PDSCH Sets to add		*0..<maxnoofPDSCHSets>*			GLOBAL	reject
>PDSCH Set ID	M		9.2.3.11		-	
>PDSCH to add Information		*0..1*		Mandatory for 3.84Mcps TDD	YES	reject
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD Physical Channel Offset	M		9.2.3.20		–	
>>DL Timeslot Information		1 .. <maxnoofDLts>			–	
>>>Time Slot	M		9.2.3.23		–	
>>>Midamble Shift and Burst Type	M		9.2.3.7		–	
>>>TFCI Presence	M		9.2.1.57		–	
>>>DL Code Information		1 .. <maxnoOfPDSCH>			–	
>>>>PDSCH ID	M		9.2.3.10		–	
>>>>TDD Channelisation Code	M		9.2.3.19		–	
>PDSCH to add Information LCR		*0..1*		Mandatory for 1.28Mcps TDD	YES	reject
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD Physical Channel Offset	M		9.2.3.20		–	
>>DL Timeslot Information LCR		1 .. <MaxnoofDLtsLCR>			GLOBAL	reject
>>>Time Slot LCR	M		9.2.3.24A		–	
>>>Midamble shift LCR	M		9.2.3.7A		-	
>>>TFCI Presence	M		9.2.1.57		–	
>>>DL Code Information LCR		1 .. <maxnoOfPDSCH>			GLOBAL	reject
>>>>PDSCH ID	M		9.2.3.10		–	
>>>>TDD Channelisation Code LCR	M		9.2.3.19a		–	
PDSCH Sets to Modify		*0..<maxnoofPDSCHSets>*			GLOBAL	reject

>PDSCH Set ID	M		9.2.3.11		-	
>PDSCH to modify Information		*0..1*		Mandatory for 3.84Mcps TDD	YES	reject
>>Repetition Period	O		9.2.3.16		–	
>>Repetition Length	O		9.2.3.15		–	
>>TDD Physical Channel Offset	O		9.2.3.20		–	
>>DL Timeslot Information		0 .. <maxnoofDLts>			–	
>>>Time Slot	M		9.2.3.23		–	
>>>Midamble Shift and Burst Type	O		9.2.3.7		–	
>>>TFCI Presence	O		9.2.1.57		–	
>>>DL Code Information		0 .. <maxnoOfPDSCH>			–	
>>>>PDSCH ID	M		9.2.3.10		–	
>>>>TDD Channelisation Code	M		9.2.3.19		–	
>PDSCH to modify Information LCR		0..1		Mandatory for 1.28 Mcps TDD	YES	reject
>>Repetition Period	O		9.2.3.16		–	
>>Repetition Length	O		9.2.3.15		–	
>>TDD Physical Channel Offset	O		9.2.3.20		–	
>>DL Timeslot Information LCR		0 .. <MaxnoofDLtsLCR>			GLOBAL	reject
>>>Time Slot LCR	M		9.2.3.24A		–	
>>>Midamble shift LCR	O		9.2.3.7A			
>>>TFCI Presence	O		9.2.1.57		–	
>>>DL Code Information LCR		0 .. <maxnoOfPDSCHLCR>			GLOBAL	reject
>>>>PDSCH ID	M		9.2.3.10		–	
>>>>TDD Channelisation Code LCR	M		9.2.3.19a		–	
PDSCH Sets to Delete		*0..<maxnoofPDSCHSets>*			GLOBAL	reject
>PDSCH Set ID	M		9.2.3.11		-	
PUSCH Sets to add		*0..<maxnoofPUSCHSets>*			GLOBAL	reject
>PUSCH Set ID	M		9.2.3.13		-	
>PUSCH to add Information		*0..1*		Mandatory for 3.84Mcps TDD	YES	reject
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD Physical Channel Offset	M		9.2.3.20		–	
>>UL Timeslot Information		1 .. <maxnoofULts>			–	
>>>Time Slot	M		9.2.3.23		–	
>>>Midamble Shift and Burst Type	M		9.2.3.7		–	

>>>TFCI Presence	M		9.2.1.57		–	
>>>UL Code Information		1 .. <maxnoOfPUSCH>			–	
>>>>PUSCH ID	M		9.2.3.12		–	
>>>>TDD Channelisation Code	M		9.2.3.19		–	
>PUSCH to add Information LCR	O	1		For 1.28Mcps TDD only	YES	reject
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD Physical Channel Offset	M		9.2.3.20		–	
>>UL Timeslot Information LCR		1 .. <MaxnoofULtsLCR>			GLOBAL	reject
>>>Time Slot LCR	M		9.2.3.24A		–	
>>>Midamble shift LCR	M		9.2.3.7A			
>>>TFCI Presence	M		9.2.1.57		–	
>>>UL Code Information LCR		1 .. <maxnoOfPUSCHLCR>			GLOBAL	reject
>>>>PUSCH ID	M		9.2.3.12		–	
>>>>TDD Channelisation Code LCR	M		9.2.3.19a		–	
PUSCH Sets to Modify		*0..<maxnoofPUSCHSets>*			GLOBAL	reject
>PUSCH Set ID	M		9.2.3.13		-	
>PUSCH to modify Information		*0..1*		For 3.84Mcps TDD only	YES	reject
>>Repetition Period	O		9.2.3.16		–	
>>Repetition Length	O		9.2.3.15		–	
>>TDD Physical Channel Offset	O		9.2.3.20		–	
>>UL Timeslot Information		0 .. <maxnoofULts>			–	
>>>Time Slot	M		9.2.3.23		–	
>>>Midamble Shift and Burst Type	O		9.2.3.7		–	
>>>TFCI Presence	O		9.2.1.57		–	
>>>UL Code Information		0 .. <maxnoOfPDSCH>			–	
>>>>PUSCH ID	M		9.2.3.12		–	
>>>>TDD Channelisation Code	M		9.2.3.19		–	
>PUSCH to modify Information LCR		0..1		For 1.28Mcps TDD only	YES	reject
>>Repetition Period	O		9.2.3.16		–	
>>Repetition Length	O		9.2.3.15		–	
>>TDD Physical Channel Offset	O		9.2.3.20		–	
>>UL Timeslot Information LCR		0 .. <MaxnoofULtsLCR>		For 1.28Mcps TDD only	GLOBAL	reject
>>>Time Slot LCR	M		9.2.3.24A		–	
>>>Midamble shift LCR	O~~M~~		9.2.3.7A		–	

>>>TFCI Presence	O		9.2.1.57		–	
>>>UL Code Information LCR		0 .. <maxnoOfPDSCHLCR>			GLOBAL	reject
>>>>PUSCH ID	M		9.2.3.12		–	
>>>>TDD Channelisation Code LCR	M		9.2.3.19a		–	
PUSCH Sets to Delete		*0..<maxnoof PUSCHSets>*			GLOBAL	reject
>PUSCH Set ID	M		9.2.3.13		-	

Range bound	Explanation
Maxnoof PDSCH Sets	Maximum number of PDSCH Sets in a cell.
Maxnoof PDSCH	Maximum number of PDSCH in a cell for 3.84Mcps TDD only.
MaxnoOfPDSCHLCR	Maximum number of PDSCH in a cell for 1.28Mcps TDD only.
Maxnoof PUSCH Sets	Maximum number of PUSCH Sets in a cell.
Maxnoof PUSCH	Maximum number of PUSCH in a cell for 3.84Mcps TDD.
Maxnoof PUSCHLCR	Maximum number of PUSCH in a cell for 1.28Mcps TDD.
MaxnoofDLts	Maximum number of Downlink time slots in a cell for 3.84Mcps TDD.
MaxnoofULts	Maximum number of Uplink time slots in a cell for 3.84Mcps TDD.
MaxnoofULtsLCR	Maximum number of Uplink time slots in a cell for 1.28Mcps TDD

/* party omitted */

9.3.3 PDU Definitions

/* partly omitted */

```
-- **************************************************************
--
-- PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST TDD
--
-- **************************************************************

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

PhysicalSharedChannelReconfigurationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-C-ID                                     CRITICALITY     reject          TYPE    C-ID
    PRESENCE    mandatory   } |
    { ID    id-SFN                                      CRITICALITY     reject          TYPE    SFN
    PRESENCE    optional} |
    { ID    id-PDSCHSets-AddList-PSCH-ReconfRqst        CRITICALITY     reject          TYPE    PDSCHSets-AddList-PSCH-ReconfRqst       PRESENCE
    optional    } |
    { ID    id-PDSCHSets-ModifyList-PSCH-ReconfRqst     CRITICALITY     reject          TYPE    PDSCHSets-ModifyList-PSCH-ReconfRqst    PRESENCE
    optional    } |
    { ID    id-PDSCHSets-DeleteList-PSCH-ReconfRqst     CRITICALITY     reject          TYPE    PDSCHSets-DeleteList-PSCH-ReconfRqst    PRESENCE
    optional    } |
    { ID    id-PUSCHSets-AddList-PSCH-ReconfRqst        CRITICALITY     reject          TYPE    PUSCHSets-AddList-PSCH-ReconfRqst       PRESENCE
    optional    } |
    { ID    id-PUSCHSets-ModifyList-PSCH-ReconfRqst     CRITICALITY     reject          TYPE    PUSCHSets-ModifyList-PSCH-ReconfRqst    PRESENCE
    optional    } |
    { ID    id-PUSCHSets-DeleteList-PSCH-ReconfRqst     CRITICALITY     reject          TYPE    PUSCHSets-DeleteList-PSCH-ReconfRqst    PRESENCE
    optional    },
    ...
}

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

PDSCHSets-AddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHSets)) OF PDSCHSets-AddItem-PSCH-ReconfRqst
```

```
PDSCHSets-AddItem-PSCH-ReconfRqst    ::= SEQUENCE {
    pDSCHSet-ID                             PDSCHSet-ID,
    pDSCH-InformationList                   PDSCH-Information-AddList-PSCH-ReconfRqst   OPTIONAL,
    iE-Extensions                           ProtocolExtensionContainer { {PDSCHSets-AddItem-PSCH-ReconfRqst-ExtIEs} }   OPTIONAL,
    ...
}

PDSCHSets-AddItem-PSCH-ReconfRqst-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...,
    {ID id-PDSCH-AddInformation-LCR-PSCH-ReconfRqst     CRITICALITY reject      EXTENSION   PDSCH-AddInformation-LCR-PSCH-ReconfRqst       PRESENCE
    optional}
}

PDSCH-Information-AddList-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PDSCH-Information-AddListIEs-PSCH-ReconfRqst }}   -- Mandatory for
3.84Mcps TDD only

PDSCH-Information-AddListIEs-PSCH-ReconfRqst    NBAP-PROTOCOL-IES ::= {
    {ID id-PDSCH-Information-AddListIE-PSCH-ReconfRqst  CRITICALITY reject      TYPE    PDSCH-Information-AddItem-PSCH-ReconfRqst       PRESENCE
    mandatory}
}

PDSCH-Information-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod                        RepetitionPeriod,
    repetitionLength                        RepetitionLength,
    tdd-PhysicalChannelOffset                   TDD-PhysicalChannelOffset,
    dL-Timeslot-InformationAddList-PSCH-ReconfRqst              DL-Timeslot-InformationAddList-PSCH-ReconfRqst,
    iE-Extensions                           ProtocolExtensionContainer { {PDSCH-Information-AddItem-PSCH-ReconfRqst-ExtIEs} }    OPTIONAL,
        ...
    }

PDSCH-Information-AddItem-PSCH-ReconfRqst-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-Timeslot-InformationAddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1.. maxNrOfDLTSs)) OF DL-Timeslot-InformationAddItem-PSCH-ReconfRqst

DL-Timeslot-InformationAddItem-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlot                            TimeSlot,
    midambleShiftAndBurstType           MidambleShiftAndBurstType,
    tFCI-Presence                       TFCI-Presence,
    dL-Code-InformationAddList-PSCH-ReconfRqst              DL-Code-InformationAddList-PSCH-ReconfRqst,
    iE-Extensions                       ProtocolExtensionContainer { { DL-Timeslot-InformationAddItem-PSCH-ReconfRqst-ExtIEs} }     OPTIONAL,
    ...
}

DL-Timeslot-InformationAddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-Code-InformationAddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF DL-Code-InformationAddItem-PSCH-ReconfRqst

DL-Code-InformationAddItem-PSCH-ReconfRqst ::= SEQUENCE {
    pDSCH-ID                            PDSCH-ID,
```

```
    tdd-ChannelisationCode                  TDD-ChannelisationCode,
    iE-Extensions                           ProtocolExtensionContainer { { DL-Code-InformationAddItem-PSCH-ReconfRqst-ExtIEs} }   OPTIONAL,
    ...
}

DL-Code-InformationAddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PDSCH-AddInformation-LCR-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PDSCH-AddInformation-LCR-AddListIEs-PSCH-ReconfRqst }}   -- Mandatory
for 1.28Mcps TDD only

PDSCH-AddInformation-LCR-AddListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    {ID id-PDSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst   CRITICALITY reject      TYPE    PDSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst
    PRESENCE    optional}
}

PDSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod                        RepetitionPeriod,
    repetitionLength                        RepetitionLength,
    tdd-PhysicalChannelOffset               TDD-PhysicalChannelOffset,
    dL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst              DL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst,
    iE-Extensions                               ProtocolExtensionContainer { {PDSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst-ExtIEs} }   OPTIONAL,
        ...
    }

PDSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1.. maxNrOfDLTSLCRs)) OF DL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst

DL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlotLCR                             TimeSlotLCR,
    midambleShiftLCR                        MidambleShiftLCR,
    tFCI-Presence                           TFCI-Presence,
    dL-Code-InformationAddList-LCR-PSCH-ReconfRqst              DL-Code-InformationAddList-LCR-PSCH-ReconfRqst,
    iE-Extensions                           ProtocolExtensionContainer { { DL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs} }    OPTIONAL,
    ...
}

DL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-Code-InformationAddList-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF DL-Code-InformationAddItem-LCR-PSCH-ReconfRqst

DL-Code-InformationAddItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
    pDSCH-ID                                PDSCH-ID,
    tdd-ChannelisationCodeLCR               TDD-ChannelisationCodeLCR,
    iE-Extensions                           ProtocolExtensionContainer { { DL-Code-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs} }     OPTIONAL,
    ...
}
```

```
DL-Code-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PDSCHSets-ModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHSets)) OF PDSCHSets-ModifyItem-PSCH-ReconfRqst

PDSCHSets-ModifyItem-PSCH-ReconfRqst     ::= SEQUENCE {
    pDSCHSet-ID                             PDSCHSet-ID,
    pDSCH-InformationList                   PDSCH-Information-ModifyList-PSCH-ReconfRqst,
    iE-Extensions                           ProtocolExtensionContainer { {PDSCHSets-ModifyItem-PSCH-ReconfRqst-ExtIEs} }   OPTIONAL,
    ...
}

PDSCHSets-ModifyItem-PSCH-ReconfRqst-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...,
    {ID id-PDSCH-ModifyInformation-LCR-PSCH-ReconfRqst  CRITICALITY reject      EXTENSION   PDSCH-ModifyInformation-LCR-PSCH-ReconfRqst
    PRESENCE    optional}   -- Mandatory for 1.28Mcps TDD only
}

PDSCH-Information-ModifyList-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PDSCH-Information-ModifyListIEs-PSCH-ReconfRqst }}

PDSCH-Information-ModifyListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    {ID id-PDSCH-Information-ModifyListIE-PSCH-ReconfRqst   CRITICALITY reject      TYPE    PDSCH-Information-ModifyItem-PSCH-ReconfRqst
    PRESENCE    optional}   -- Mandatory for 3.84Mcps TDD only
}

PDSCH-Information-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod                        RepetitionPeriod                    OPTIONAL,
    repetitionLength                        RepetitionLength                    OPTIONAL,
    tdd-PhysicalChannelOffset                   TDD-PhysicalChannelOffset       OPTIONAL,
    dL-Timeslot-InformationModifyList-PSCH-ReconfRqst               DL-Timeslot-InformationModifyList-PSCH-ReconfRqst    OPTIONAL,
    iE-Extensions                           ProtocolExtensionContainer { {PDSCH-Information-ModifyItem-PSCH-ReconfRqst-ExtIEs} }    OPTIONAL,
        ...
    }

PDSCH-Information-ModifyItem-PSCH-ReconfRqst-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-Timeslot-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1.. maxNrOfDLTSs)) OF DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst

DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlot                                TimeSlot,
    midambleShiftAndBurstType               MidambleShiftAndBurstType   OPTIONAL,
    tFCI-Presence                           TFCI-Presence   OPTIONAL,
    dL-Code-InformationModifyList-PSCH-ReconfRqst               DL-Code-InformationModifyList-PSCH-ReconfRqst         OPTIONAL,
    iE-Extensions                           ProtocolExtensionContainer { { DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }     OPTIONAL,
    ...
}

DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
```

```
}

DL-Code-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHs)) OF DL-Code-InformationModifyItem-PSCH-ReconfRqst

DL-Code-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    pDSCH-ID                                PDSCH-ID,
    tdd-ChannelisationCode                  TDD-ChannelisationCode,
    iE-Extensions                           ProtocolExtensionContainer { { DL-Code-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }   OPTIONAL,
    ...
}

DL-Code-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PDSCH-ModifyInformation-LCR-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    {ID id-PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst     CRITICALITY reject      TYPE                PDSCH-ModifyInformation-LCR-
ModifyItem-PSCH-ReconfRqst          PRESENCE    mandatory}
}

PDSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod                        RepetitionPeriod                    OPTIONAL,
    repetitionLength                        RepetitionLength                    OPTIONAL,
    tdd-PhysicalChannelOffset                   TDD-PhysicalChannelOffset       OPTIONAL,
    dL-Timeslot-LCR-InformationModifyList-PSCH-ReconfRqst               DL-Timeslot-LCR-InformationModifyList-PSCH-ReconfRqst     OPTIONAL,
    iE-Extensions                               ProtocolExtensionContainer { {PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst-ExtIEs} }
    OPTIONAL,
        ...
    }

PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-Timeslot-LCR-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1.. maxNrOfDLTSLCRs)) OF DL-Timeslot-InformationModifyItem-PSCH-ReconfRqst

DL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlotLCR                             TimeSlotLCR,
    midambleShiftLCR                        MidambleShiftLCR    OPTIONAL,
    tFCI-Presence                           TFCI-Presence   OPTIONAL,
    dL-Code-LCR-InformationModifyList-PSCH-ReconfRqst               DL-Code-LCR-InformationModifyList-PSCH-ReconfRqst    OPTIONAL,
    iE-Extensions                           ProtocolExtensionContainer { { DL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }
    OPTIONAL,
    ...
}

DL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-Code-LCR-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHs)) OF DL-Code-InformationModifyItem-PSCH-ReconfRqst

DL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
```

```
    pDSCH-ID                                PDSCH-ID,
    tdd-ChannelisationCodeLCR                   TDD-ChannelisationCodeLCR,
    iE-Extensions                           ProtocolExtensionContainer { { DL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }     OPTIONAL,
    ...
}

DL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PDSCHSets-DeleteList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHSets)) OF PDSCHSets-DeleteItem-PSCH-ReconfRqst

PDSCHSets-DeleteItem-PSCH-ReconfRqst     ::= SEQUENCE {
    pDSCHSet-ID                             PDSCHSet-ID,
    iE-Extensions                           ProtocolExtensionContainer { {PDSCHSets-DeleteItem-PSCH-ReconfRqst-ExtIEs} }   OPTIONAL,
    ...
}

PDSCHSets-DeleteItem-PSCH-ReconfRqst-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PUSCHSets-AddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHSets)) OF PUSCHSets-AddItem-PSCH-ReconfRqst

PUSCHSets-AddItem-PSCH-ReconfRqst    ::= SEQUENCE {
    pUSCHSet-ID                             PUSCHSet-ID,
    pUSCH-InformationList                   PUSCH-Information-AddList-PSCH-ReconfRqst   OPTIONAL,
    iE-Extensions                           ProtocolExtensionContainer { {PUSCHSets-AddItem-PSCH-ReconfRqst-ExtIEs} }   OPTIONAL,
    ...
}

PUSCHSets-AddItem-PSCH-ReconfRqst-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...,
    {ID id-PUSCH-AddInformation-LCR-PSCH-ReconfRqst     CRITICALITY reject      EXTENSION   PUSCH-AddInformation-LCR-PSCH-ReconfRqst       PRESENCE
    optional}   -- Mandatory for 1.28Mcps TDD only
}

PUSCH-Information-AddList-PSCH-ReconfRqst ::=  ProtocolIE-Single-Container {{ PUSCH-Information-AddListIEs-PSCH-ReconfRqst }}  -- Mandatory for
3.84Mcps TDD only

PUSCH-Information-AddListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    {ID id-PUSCH-Information-AddListIE-PSCH-ReconfRqst  CRITICALITY reject      TYPE    PUSCH-Information-AddItem-PSCH-ReconfRqst       PRESENCE
    mandatory}
}

PUSCH-Information-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod                        RepetitionPeriod,
    repetitionLength                        RepetitionLength,
    tdd-PhysicalChannelOffset               TDD-PhysicalChannelOffset,
    uL-Timeslot-InformationAddList-PSCH-ReconfRqst              UL-Timeslot-InformationAddList-PSCH-ReconfRqst,
    iE-Extensions                           ProtocolExtensionContainer { {PUSCH-Information-AddItem-PSCH-ReconfRqst-ExtIEs} }    OPTIONAL,
        ...
    }
```

```
PUSCH-Information-AddItem-PSCH-ReconfRqst-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Timeslot-InformationAddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Timeslot-InformationAddItem-PSCH-ReconfRqst

UL-Timeslot-InformationAddItem-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlot                                TimeSlot,
    midambleShiftAndBurstType               MidambleShiftAndBurstType,
    tFCI-Presence                           TFCI-Presence,
    uL-Code-InformationAddList-PSCH-ReconfRqst              UL-Code-InformationAddList-PSCH-ReconfRqst,
    iE-Extensions                           ProtocolExtensionContainer { { UL-Timeslot-InformationAddItem-PSCH-ReconfRqst-ExtIEs} }     OPTIONAL,
    ...
}

UL-Timeslot-InformationAddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Code-InformationAddList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHs)) OF UL-Code-InformationAddItem-PSCH-ReconfRqst

UL-Code-InformationAddItem-PSCH-ReconfRqst ::= SEQUENCE {
    pUSCH-ID                                PUSCH-ID,
    tdd-ChannelisationCode                  TDD-ChannelisationCode,
    iE-Extensions                           ProtocolExtensionContainer { { UL-Code-InformationAddItem-PSCH-ReconfRqst-ExtIEs} }   OPTIONAL,
    ...
}

UL-Code-InformationAddItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PUSCH-AddInformation-LCR-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PUSCH-AddInformation-LCR-AddListIEs-PSCH-ReconfRqst }}

PUSCH-AddInformation-LCR-AddListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    {ID id-PUSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst   CRITICALITY reject      TYPE    PUSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst
    PRESENCE    optional}
}

PUSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod                        RepetitionPeriod,
    repetitionLength                        RepetitionLength,
    tdd-PhysicalChannelOffset               TDD-PhysicalChannelOffset,
    uL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst              UL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst,
    iE-Extensions                               ProtocolExtensionContainer { {PUSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst-ExtIEs} }   OPTIONAL,
        ...
    }

PUSCH-AddInformation-LCR-AddItem-PSCH-ReconfRqst-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

```
UL-Timeslot-InformationAddList-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1.. maxNrOfDLTSLCRs)) OF UL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst

UL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlotLCR                          TimeSlotLCR,
    midambleShiftLCR                     MidambleShiftLCR,
    tFCI-Presence                        TFCI-Presence,
    uL-Code-InformationAddList-LCR-PSCH-ReconfRqst          UL-Code-InformationAddList-LCR-PSCH-ReconfRqst,
    iE-Extensions                        ProtocolExtensionContainer { { UL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs} }    OPTIONAL,
    ...
}

UL-Timeslot-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Code-InformationAddList-LCR-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Code-InformationAddItem-LCR-PSCH-ReconfRqst

UL-Code-InformationAddItem-LCR-PSCH-ReconfRqst ::= SEQUENCE {
    pUSCH-ID                             PUSCH-ID,
    tdd-ChannelisationCodeLCR            TDD-ChannelisationCodeLCR,
    iE-Extensions                        ProtocolExtensionContainer { { UL-Code-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs} }     OPTIONAL,
    ...
}

UL-Code-InformationAddItem-LCR-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PUSCHSets-ModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHSets)) OF PUSCHSets-ModifyItem-PSCH-ReconfRqst

PUSCHSets-ModifyItem-PSCH-ReconfRqst     ::= SEQUENCE {
    pUSCHSet-ID                              PUSCHSet-ID,
    pUSCH-InformationList                    PUSCH-Information-ModifyList-PSCH-ReconfRqst    OPTIONAL,
    iE-Extensions                            ProtocolExtensionContainer { {PUSCHSets-ModifyItem-PSCH-ReconfRqst-ExtIEs} }   OPTIONAL,
    ...
}

PUSCHSets-ModifyItem-PSCH-ReconfRqst-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...,
    {ID id-PUSCH-ModifyInformation-LCR-PSCH-ReconfRqst  CRITICALITY reject      EXTENSION   PUSCH-ModifyInformation-LCR-PSCH-ReconfRqst
    PRESENCE    optional}   -- For 1.28Mcps TDD only
}

PUSCH-Information-ModifyList-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PUSCH-Information-ModifyListIEs-PSCH-ReconfRqst }}   -- For 3.84Mcps
TDD only

PUSCH-Information-ModifyListIEs-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    {ID id-PUSCH-Information-ModifyListIE-PSCH-ReconfRqst   CRITICALITY reject      TYPE    PUSCH-Information-ModifyItem-PSCH-ReconfRqst
    PRESENCE    mandatory}
}

PUSCH-Information-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod                     RepetitionPeriod                   OPTIONAL,
```

```
    repetitionLength                        RepetitionLength                    OPTIONAL,
    tdd-PhysicalChannelOffset               TDD-PhysicalChannelOffset           OPTIONAL,
    uL-Timeslot-InformationModifyList-PSCH-ReconfRqst               UL-Timeslot-InformationModifyList-PSCH-ReconfRqst    OPTIONAL,
    iE-Extensions                               ProtocolExtensionContainer { {PUSCH-Information-ModifyItem-PSCH-ReconfRqst-ExtIEs} }    OPTIONAL,
        ...
    }

PUSCH-Information-ModifyItem-PSCH-ReconfRqst-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Timeslot-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfULTSs)) OF UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst

UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlot                                TimeSlot,
    midambleShiftAndBurstType               MidambleShiftAndBurstType   OPTIONAL,
    tFCI-Presence                           TFCI-Presence   OPTIONAL,
    uL-Code-InformationModifyList-PSCH-ReconfRqst               UL-Code-InformationModifyList-PSCH-ReconfRqst         OPTIONAL,
    iE-Extensions                           ProtocolExtensionContainer { { UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }     OPTIONAL,
    ...
}

UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Code-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHs)) OF UL-Code-InformationModifyItem-PSCH-ReconfRqst

UL-Code-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    pUSCH-ID                                PUSCH-ID,
    tdd-ChannelisationCode                  TDD-ChannelisationCode,
    iE-Extensions                           ProtocolExtensionContainer { { UL-Code-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }   OPTIONAL,
    ...
}

UL-Code-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PUSCH-ModifyInformation-LCR-PSCH-ReconfRqst ::= ProtocolIE-Single-Container {{ PUSCH-ModifyInformation-LCR-ModifyListIEs-PSCH-ReconfRqst }}

PUSCH-ModifyInformation-LCR-ModifyListIEs-PSCH-ReconfRqst   NBAP-PROTOCOL-IES ::= {
    {ID id-PUSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst     CRITICALITY reject      TYPE                PUSCH-ModifyInformation-LCR-
ModifyItem-PSCH-ReconfRqst          PRESENCE    optional}
}

PUSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    repetitionPeriod                        RepetitionPeriod        OPTIONAL,
    repetitionLength                        RepetitionLength        OPTIONAL,
    tdd-PhysicalChannelOffset               TDD-PhysicalChannelOffset   OPTIONAL,
    uL-Timeslot-InformationModifyList-LCR-PSCH-ReconfRqst               UL-Timeslot-LCR-InformationModifyList-PSCH-ReconfRqst     OPTIONAL,
    iE-Extensions                               ProtocolExtensionContainer { {PUSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRqst-ExtIEs} }
    OPTIONAL,
```

```
        ...
    }

PUSCH-ModifyInformation-LCR-ModifyItem-PSCH-ReconfRqst-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Timeslot-LCR-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfULTSLCRs)) OF UL-Timeslot-InformationModifyItem-PSCH-ReconfRqst

UL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    timeSlotLCR                             TimeSlotLCR,
    midambleShiftLCR                        MidambleShiftLCR    OPTIONAL,
    tFCI-Presence                           TFCI-Presence       OPTIONAL,
    uL-Code-InformationModifyList-PSCH-ReconfRqst               UL-Code-InformationModifyList-PSCH-ReconfRqst         OPTIONAL,
    iE-Extensions                           ProtocolExtensionContainer { { UL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }
    OPTIONAL,
    ...
}

UL-Timeslot-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Code-LCR-InformationModifyList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPDSCHs)) OF UL-Code-InformationModifyItem-PSCH-ReconfRqst

UL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst ::= SEQUENCE {
    pUSCH-ID                                PUSCH-ID,
    tdd-ChannelisationCodeLCR                   TDD-ChannelisationCodeLCR,
    iE-Extensions                           ProtocolExtensionContainer { { UL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs} }     OPTIONAL,
    ...
}

UL-Code-LCR-InformationModifyItem-PSCH-ReconfRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PUSCHSets-DeleteList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfPUSCHSets)) OF PUSCHSets-DeleteItem-PSCH-ReconfRqst

PUSCHSets-DeleteItem-PSCH-ReconfRqst     ::= SEQUENCE {
    pUSCHSet-ID                                 PUSCHSet-ID,
    iE-Extensions                               ProtocolExtensionContainer { {PUSCHSets-DeleteItem-PSCH-ReconfRqst-ExtIEs} }   OPTIONAL,
    ...
}

PUSCHSets-DeleteItem-PSCH-ReconfRqst-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

3GPP TSG-RAN3 #27 Meeting ***Tdoc R3-020520***
Orlando, Florida, USA, 18 – 22 February 2002

CR-Form-v3

CHANGE REQUEST

⌘ **25.433** **CR** **617** ⌘ rev **-** ⌘ Current version: **4.3.0** ⌘

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

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

Title:	⌘	Rapporteur Corrections
Source:	⌘	~~Nortel Networks~~R-WG3
Work item code:	⌘	TEI-Rel4
Date:	⌘	February 2002
Category:	⌘	**F**
Release:	⌘	REL-4

Use one of the following categories:
F *(essential correction)*
A *(corresponds to a correction in an earlier release)*
B *(Addition of feature),*
C *(Functional modification of feature)*
D *(Editorial modification)*
Detailed explanations of the above categories can be found in 3GPP TR 21.900.

Use one of the following releases:
2 (GSM Phase 2)
R96 (Release 1996)
R97 (Release 1997)
R98 (Release 1998)
R99 (Release 1999)
REL-4 (Release 4)
REL-5 (Release 5)

Reason for change:	⌘	There are some conflicting Ids in the definition of the Procedure Codes and ProtocolIE-Ids in the ASN.1.
Summary of change:	⌘	The conflicts are resolved by changing the Ids. Compatibility Analysis: This correction does not have isolated impact on the previous version of the specification. There is no impact on the R99 version of the specifications as the Procedures and IEs for which the Ids have been changed have all been introduced in Rel-4.
Consequences if not approved:	⌘	If this CR is not approved, then the conflicts will remain in the ASN.1 resulting in interoperability issues.

Clauses affected:	⌘	9.3.6
Other specs affected:	⌘	☐ Other core specifications ⌘ ☐ Test specifications ☐ O&M Specifications
Other comments:	⌘	

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

1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.

2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be

downloaded from the 3GPP server under ftp://www.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2000-09 contains the specifications resulting from the September 2000 TSG meetings.

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

9.3.6 Constant Definitions

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

NBAP-Constants {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-Constants (4)}

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

IMPORTS
    ProcedureCode,
    ProtocolIE-ID
FROM NBAP-CommonDataTypes;

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

id-audit                                        ProcedureCode ::= 0
id-auditRequired                                ProcedureCode ::= 1
id-blockResource                                ProcedureCode ::= 2
id-cellDeletion                                 ProcedureCode ::= 3
id-cellReconfiguration                          ProcedureCode ::= 4
id-cellSetup                                    ProcedureCode ::= 5
id-cellSynchronisationInitiation                ProcedureCode ::= 39 45
id-cellSynchronisationReconfiguration           ProcedureCode ::= 40 46
id-cellSynchronisationReporting                 ProcedureCode ::= 41 47
id-cellSynchronisationTermination               ProcedureCode ::= 42 48
id-cellSynchronisationFailure                   ProcedureCode ::= 43 49
id-commonMeasurementFailure                     ProcedureCode ::= 6
id-commonMeasurementInitiation                  ProcedureCode ::= 7
id-commonMeasurementReport                      ProcedureCode ::= 8
id-commonMeasurementTermination                 ProcedureCode ::= 9
id-commonTransportChannelDelete                 ProcedureCode ::= 10
id-commonTransportChannelReconfigure            ProcedureCode ::= 11
id-commonTransportChannelSetup                  ProcedureCode ::= 12
id-compressedModeCommand                        ProcedureCode ::= 14
id-dedicatedMeasurementFailure                  ProcedureCode ::= 16
id-dedicatedMeasurementInitiation               ProcedureCode ::= 17
id-dedicatedMeasurementReport                   ProcedureCode ::= 18
id-dedicatedMeasurementTermination              ProcedureCode ::= 19
id-downlinkPowerControl                         ProcedureCode ::= 20
```

```
id-downlinkPowerTimeslotControl                         ProcedureCode ::= 38
id-errorIndicationForCommon                             ProcedureCode ::= 35
id-errorIndicationForDedicated                          ProcedureCode ::= 21
id-informationExchangeFailure                           ProcedureCode ::= 40
id-informationExchangeInitiation                        ProcedureCode ::= 41
id-informationExchangeTermination                       ProcedureCode ::= 42
id-informationReporting                                 ProcedureCode ::= 43
id-physicalSharedChannelReconfiguration                 ProcedureCode ::= 37
id-privateMessageForCommon                              ProcedureCode ::= 36
id-privateMessageForDedicated                           ProcedureCode ::= 22
id-radioLinkAddition                                    ProcedureCode ::= 23
id-radioLinkDeletion                                    ProcedureCode ::= 24
id-radioLinkFailure                                     ProcedureCode ::= 25
id-radioLinkPreemption                                  ProcedureCode ::= 39
id-radioLinkRestoration                                 ProcedureCode ::= 26
id-radioLinkSetup                                       ProcedureCode ::= 27
id-reset                                                ProcedureCode ::= 13
id-resourceStatusIndication                             ProcedureCode ::= 28
id-cellSynchronisationAdjustment                        ProcedureCode ::= 44
id-synchronisedRadioLinkReconfigurationCancellation     ProcedureCode ::= 29
id-synchronisedRadioLinkReconfigurationCommit           ProcedureCode ::= 30
id-synchronisedRadioLinkReconfigurationPreparation      ProcedureCode ::= 31
id-systemInformationUpdate                              ProcedureCode ::= 32
id-unblockResource                                      ProcedureCode ::= 33
id-unSynchronisedRadioLinkReconfiguration               ProcedureCode ::= 34

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

maxNrOfCodes                INTEGER ::= 10
maxNrOfDLTSs                INTEGER ::= 15
maxNrOfDLTSLCRs             INTEGER ::= 6
maxNrOfErrors               INTEGER ::= 256
maxNrOfTFs                  INTEGER ::= 32
maxNrOfTFCs                 INTEGER ::= 1024
maxNrOfRLs                  INTEGER ::= 16
maxNrOfRLs-1                INTEGER ::= 15  -- maxNrOfRLs – 1
maxNrOfRLs-2                INTEGER ::= 14  -- maxNrOfRLs – 2
maxNrOfRLSets               INTEGER ::= maxNrOfRLs
maxNrOfDPCHs                INTEGER ::= 240
maxNrOfDPCHLCRs             INTEGER ::= 240
maxNrOfSCCPCHs              INTEGER ::= 8
maxNrOfCPCHs                INTEGER ::= 16
maxNrOfPCPCHs               INTEGER ::= 64
maxNrOfDCHs                 INTEGER ::= 128
maxNrOfDSCHs                INTEGER ::= 32
maxNrOfFACHs                INTEGER ::= 8
maxNrOfCCTrCHs              INTEGER ::= 16
maxNrOfPDSCHs               INTEGER ::= 256
maxNrOfPUSCHs               INTEGER ::= 256
```

```
maxNrOfPDSCHSets            INTEGER ::= 256
maxNrOfPRACHLCRs            INTEGER ::= 8
maxNrOfPUSCHSets            INTEGER ::= 256
maxNrOfSCCPCHLCRs           INTEGER ::= 8
maxNrOfULTSs                INTEGER ::= 15
maxNrOfULTSLCRs             INTEGER ::= 6
maxNrOfUSCHs                INTEGER ::= 32
maxAPSigNum                 INTEGER ::= 16
maxNrOfSlotFormatsPRACH     INTEGER ::= 8
maxCellinNodeB              INTEGER ::= 256
maxCCPinNodeB               INTEGER ::= 256
maxCPCHCell                 INTEGER ::= maxNrOfCPCHs
maxCTFC                     INTEGER ::= 16777215
maxLocalCellinNodeB         INTEGER ::= maxCellinNodeB
maxNoofLen                  INTEGER ::= 7
maxFPACHCell                INTEGER ::= 8
maxRACHCell                 INTEGER ::= maxPRACHCell
maxPRACHCell                INTEGER ::= 16
maxPCPCHCell                INTEGER ::= 64
maxSCCPCHCell               INTEGER ::= 32
maxSCPICHCell               INTEGER ::= 32
maxTTI-count                INTEGER ::= 4
maxIBSEG                    INTEGER ::= 16
maxIB                       INTEGER ::= 64
maxFACHCell                 INTEGER ::= 256 -- maxNrOfFACHs * maxSCCPCHCell
maxRateMatching             INTEGER ::= 256
maxCodeNrComp-1             INTEGER ::= 256
maxNrOfCellSyncBursts       INTEGER ::= 10
maxNrOfCodeGroups           INTEGER ::= 256
maxNrOfReceptsPerSyncFrame  INTEGER ::= 16
maxNrOfMeasNCell            INTEGER ::= 96
maxNrOfMeasNCell-1          INTEGER ::= 95  -- maxNrOfMeasNCell – 1
maxNrOfTFCIGroups           INTEGER ::= 256
maxNrOfTFCI1Combs           INTEGER ::= 512
maxNrOfTFCI2Combs           INTEGER ::= 1024
maxNrOfTFCI2Combs-1         INTEGER ::= 1023
maxNrOfSF                   INTEGER ::= 8
maxTGPS                     INTEGER ::= 6
maxCommunicationContext     INTEGER ::= 1048575
maxNrOfLevels               INTEGER ::= 256
maxNoSat                    INTEGER ::= 16
maxNoGPSItems               INTEGER ::= 8

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

id-AICH-Information                                          ProtocolIE-ID ::= 0
id-AICH-InformationItem-ResourceStatusInd                    ProtocolIE-ID ::= 1
id-BCH-Information                                           ProtocolIE-ID ::= 7
id-BCH-InformationItem-ResourceStatusInd                     ProtocolIE-ID ::= 8
```

```
id-BCCH-ModificationTime                                    ProtocolIE-ID ::= 9
id-BlockingPriorityIndicator                                ProtocolIE-ID ::= 10
id-Cause                                                    ProtocolIE-ID ::= 13
id-CCP-InformationItem-AuditRsp                             ProtocolIE-ID ::= 14
id-CCP-InformationList-AuditRsp                             ProtocolIE-ID ::= 15
id-CCP-InformationItem-ResourceStatusInd                    ProtocolIE-ID ::= 16
id-Cell-InformationItem-AuditRsp                            ProtocolIE-ID ::= 17
id-Cell-InformationItem-ResourceStatusInd                   ProtocolIE-ID ::= 18
id-Cell-InformationList-AuditRsp                            ProtocolIE-ID ::= 19
id-CellParameterID                                          ProtocolIE-ID ::= 23
id-CFN                                                      ProtocolIE-ID ::= 24
id-C-ID                                                     ProtocolIE-ID ::= 25
id-CommonMeasurementAccuracy                                ProtocolIE-ID ::= 39
id-CommonMeasurementObjectType-CM-Rprt                      ProtocolIE-ID ::= 31
id-CommonMeasurementObjectType-CM-Rqst                      ProtocolIE-ID ::= 32
id-CommonMeasurementObjectType-CM-Rsp                       ProtocolIE-ID ::= 33
id-CommonMeasurementType                                    ProtocolIE-ID ::= 34
id-CommonPhysicalChannelID                                  ProtocolIE-ID ::= 35
id-CommonPhysicalChannelType-CTCH-SetupRqstFDD              ProtocolIE-ID ::= 36
id-CommonPhysicalChannelType-CTCH-SetupRqstTDD              ProtocolIE-ID ::= 37
id-CommunicationControlPortID                               ProtocolIE-ID ::= 40
id-ConfigurationGenerationID                                ProtocolIE-ID ::= 43
id-CRNC-CommunicationContextID                              ProtocolIE-ID ::= 44
id-CriticalityDiagnostics                                   ProtocolIE-ID ::= 45
id-DCHs-to-Add-FDD                                          ProtocolIE-ID ::= 48
id-DCH-AddList-RL-ReconfPrepTDD                             ProtocolIE-ID ::= 49
id-DCHs-to-Add-TDD                                          ProtocolIE-ID ::= 50
id-DCH-DeleteList-RL-ReconfPrepFDD                          ProtocolIE-ID ::= 52
id-DCH-DeleteList-RL-ReconfPrepTDD                          ProtocolIE-ID ::= 53
id-DCH-DeleteList-RL-ReconfRqstFDD                          ProtocolIE-ID ::= 54
id-DCH-DeleteList-RL-ReconfRqstTDD                          ProtocolIE-ID ::= 55
id-DCH-FDD-Information                                      ProtocolIE-ID ::= 56
id-DCH-TDD-Information                                      ProtocolIE-ID ::= 57
id-DCH-InformationResponse                                  ProtocolIE-ID ::= 59
id-FDD-DCHs-to-Modify                                       ProtocolIE-ID ::= 62
id-TDD-DCHs-to-Modify                                       ProtocolIE-ID ::= 63
id-DCH-ModifyList-RL-ReconfRqstTDD                          ProtocolIE-ID ::= 65
id-DedicatedMeasurementObjectType-DM-Rprt                   ProtocolIE-ID ::= 67
id-DedicatedMeasurementObjectType-DM-Rqst                   ProtocolIE-ID ::= 68
id-DedicatedMeasurementObjectType-DM-Rsp                    ProtocolIE-ID ::= 69
id-DedicatedMeasurementType                                 ProtocolIE-ID ::= 70
id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD                ProtocolIE-ID ::= 72
id-DL-CCTrCH-InformationList-RL-AdditionRqstTDD             ProtocolIE-ID ::= 73
id-DL-CCTrCH-InformationList-RL-SetupRqstTDD                ProtocolIE-ID ::= 76
id-DL-DPCH-InformationItem-RL-AdditionRqstTDD               ProtocolIE-ID ::= 77
id-DL-DPCH-InformationList-RL-SetupRqstTDD                  ProtocolIE-ID ::= 79
id-DL-DPCH-Information-RL-ReconfPrepFDD                     ProtocolIE-ID ::= 81
id-DL-DPCH-Information-RL-ReconfRqstFDD                     ProtocolIE-ID ::= 82
id-DL-DPCH-Information-RL-SetupRqstFDD                      ProtocolIE-ID ::= 83
id-DL-ReferencePowerInformationItem-DL-PC-Rqst              ProtocolIE-ID ::= 84
id-DLReferencePower                                         ProtocolIE-ID ::= 85
id-DLReferencePowerList-DL-PC-Rqst                          ProtocolIE-ID ::= 86
id-DSCH-AddItem-RL-ReconfPrepFDD                            ProtocolIE-ID ::= 87
```

```
id-DSCHs-to-Add-FDD                                    ProtocolIE-ID ::= 89
id-DSCH-DeleteItem-RL-ReconfPrepFDD                    ProtocolIE-ID ::= 91
id-DSCH-DeleteList-RL-ReconfPrepFDD                    ProtocolIE-ID ::= 93
id-DSCHs-to-Add-TDD                                    ProtocolIE-ID ::= 96
id-DSCH-Information-DeleteList-RL-ReconfPrepTDD        ProtocolIE-ID ::= 98
id-DSCH-Information-ModifyList-RL-ReconfPrepTDD        ProtocolIE-ID ::= 100
id-DSCH-InformationResponse                            ProtocolIE-ID ::= 105
id-DSCH-FDD-Information                                ProtocolIE-ID ::= 106
id-DSCH-TDD-Information                                ProtocolIE-ID ::= 107
id-DSCH-ModifyItem-RL-ReconfPrepFDD                    ProtocolIE-ID ::= 108
id-DSCH-ModifyList-RL-ReconfPrepFDD                    ProtocolIE-ID ::= 112
id-End-Of-Audit-Sequence-Indicator                     ProtocolIE-ID ::= 113
id-FACH-Information                                    ProtocolIE-ID ::= 116
id-FACH-InformationItem-ResourceStatusInd              ProtocolIE-ID ::= 117
id-FACH-ParametersList-CTCH-ReconfRqstTDD              ProtocolIE-ID ::= 120
id-FACH-ParametersListIE-CTCH-SetupRqstFDD             ProtocolIE-ID ::= 121
id-FACH-ParametersListIE-CTCH-SetupRqstTDD             ProtocolIE-ID ::= 122
id-IndicationType-ResourceStatusInd                    ProtocolIE-ID ::= 123
id-Local-Cell-ID                                       ProtocolIE-ID ::= 124
id-Local-Cell-Group-InformationItem-AuditRsp           ProtocolIE-ID ::= 2
id-Local-Cell-Group-InformationItem-ResourceStatusInd  ProtocolIE-ID ::= 3
id-Local-Cell-Group-InformationItem2-ResourceStatusInd ProtocolIE-ID ::= 4
id-Local-Cell-Group-InformationList-AuditRsp           ProtocolIE-ID ::= 5
id-Local-Cell-InformationItem-AuditRsp                 ProtocolIE-ID ::= 125
id-Local-Cell-InformationItem-ResourceStatusInd        ProtocolIE-ID ::= 126
id-Local-Cell-InformationItem2-ResourceStatusInd       ProtocolIE-ID ::= 127
id-Local-Cell-InformationList-AuditRsp                 ProtocolIE-ID ::= 128
id-AdjustmentPeriod                                    ProtocolIE-ID ::= 129
id-MaxAdjustmentStep                                   ProtocolIE-ID ::= 130
id-MaximumTransmissionPower                            ProtocolIE-ID ::= 131
id-MeasurementFilterCoefficient                        ProtocolIE-ID ::= 132
id-MeasurementID                                       ProtocolIE-ID ::= 133
id-MessageStructure                                    ProtocolIE-ID ::= 115
id-MIB-SB-SIB-InformationList-SystemInfoUpdateRqst     ProtocolIE-ID ::= 134
id-NodeB-CommunicationContextID                        ProtocolIE-ID ::= 143
id-NeighbouringCellMeasurementInformation              ProtocolIE-ID ::= 455
id-P-CCPCH-Information                                 ProtocolIE-ID ::= 144
id-P-CCPCH-InformationItem-ResourceStatusInd           ProtocolIE-ID ::= 145
id-P-CPICH-Information                                 ProtocolIE-ID ::= 146
id-P-CPICH-InformationItem-ResourceStatusInd           ProtocolIE-ID ::= 147
id-P-SCH-Information                                   ProtocolIE-ID ::= 148
id-PCCPCH-Information-Cell-ReconfRqstTDD               ProtocolIE-ID ::= 150
id-PCCPCH-Information-Cell-SetupRqstTDD                ProtocolIE-ID ::= 151
id-PCH-Parameters-CTCH-ReconfRqstTDD                   ProtocolIE-ID ::= 155
id-PCH-ParametersItem-CTCH-SetupRqstFDD                ProtocolIE-ID ::= 156
id-PCH-ParametersItem-CTCH-SetupRqstTDD                ProtocolIE-ID ::= 157
id-PCH-Information                                     ProtocolIE-ID ::= 158
id-PDSCH-Information-AddListIE-PSCH-ReconfRqst         ProtocolIE-ID ::= 161
id-PDSCH-Information-ModifyListIE-PSCH-ReconfRqst      ProtocolIE-ID ::= 162
id-PDSCHSets-AddList-PSCH-ReconfRqst                   ProtocolIE-ID ::= 163
id-PDSCHSets-DeleteList-PSCH-ReconfRqst                ProtocolIE-ID ::= 164
id-PDSCHSets-ModifyList-PSCH-ReconfRqst                ProtocolIE-ID ::= 165
id-PICH-Information                                    ProtocolIE-ID ::= 166
```

```
id-PICH-Parameters-CTCH-ReconfRqstTDD                    ProtocolIE-ID ::= 168
id-PowerAdjustmentType                                   ProtocolIE-ID ::= 169
id-PRACH-Information                                     ProtocolIE-ID ::= 170
id-PrimaryCCPCH-Information-Cell-ReconfRqstFDD           ProtocolIE-ID ::= 175
id-PrimaryCCPCH-Information-Cell-SetupRqstFDD            ProtocolIE-ID ::= 176
id-PrimaryCPICH-Information-Cell-ReconfRqstFDD           ProtocolIE-ID ::= 177
id-PrimaryCPICH-Information-Cell-SetupRqstFDD            ProtocolIE-ID ::= 178
id-PrimarySCH-Information-Cell-ReconfRqstFDD             ProtocolIE-ID ::= 179
id-PrimarySCH-Information-Cell-SetupRqstFDD              ProtocolIE-ID ::= 180
id-PrimaryScramblingCode                                 ProtocolIE-ID ::= 181
id-SCH-Information-Cell-ReconfRqstTDD                    ProtocolIE-ID ::= 183
id-SCH-Information-Cell-SetupRqstTDD                     ProtocolIE-ID ::= 184
id-PUSCH-Information-AddListIE-PSCH-ReconfRqst           ProtocolIE-ID ::= 185
id-PUSCH-Information-ModifyListIE-PSCH-ReconfRqst        ProtocolIE-ID ::= 186
id-PUSCHSets-AddList-PSCH-ReconfRqst                     ProtocolIE-ID ::= 187
id-PUSCHSets-DeleteList-PSCH-ReconfRqst                  ProtocolIE-ID ::= 188
id-PUSCHSets-ModifyList-PSCH-ReconfRqst                  ProtocolIE-ID ::= 189
id-RACH-Information                                      ProtocolIE-ID ::= 190
id-RACH-ParametersItem-CTCH-SetupRqstFDD                 ProtocolIE-ID ::= 196
id-RACH-ParameterItem-CTCH-SetupRqstTDD                  ProtocolIE-ID ::= 197
id-ReportCharacteristics                                 ProtocolIE-ID ::= 198
id-Reporting-Object-RL-FailureInd                        ProtocolIE-ID ::= 199
id-Reporting-Object-RL-RestoreInd                        ProtocolIE-ID ::= 200
id-RL-InformationItem-DM-Rprt                            ProtocolIE-ID ::= 202
id-RL-InformationItem-DM-Rqst                            ProtocolIE-ID ::= 203
id-RL-InformationItem-DM-Rsp                             ProtocolIE-ID ::= 204
id-RL-InformationItem-RL-AdditionRqstFDD                 ProtocolIE-ID ::= 205
id-RL-informationItem-RL-DeletionRqst                    ProtocolIE-ID ::= 206
id-RL-InformationItem-RL-FailureInd                      ProtocolIE-ID ::= 207
id-RL-InformationItem-RL-PreemptRequiredInd              ProtocolIE-ID ::= 286
id-RL-InformationItem-RL-ReconfPrepFDD                   ProtocolIE-ID ::= 208
id-RL-InformationItem-RL-ReconfRqstFDD                   ProtocolIE-ID ::= 209
id-RL-InformationItem-RL-RestoreInd                      ProtocolIE-ID ::= 210
id-RL-InformationItem-RL-SetupRqstFDD                    ProtocolIE-ID ::= 211
id-RL-InformationList-RL-AdditionRqstFDD                 ProtocolIE-ID ::= 212
id-RL-informationList-RL-DeletionRqst                    ProtocolIE-ID ::= 213
id-RL-InformationList-RL-PreemptRequiredInd              ProtocolIE-ID ::= 237
id-RL-InformationList-RL-ReconfPrepFDD                   ProtocolIE-ID ::= 214
id-RL-InformationList-RL-ReconfRqstFDD                   ProtocolIE-ID ::= 215
id-RL-InformationList-RL-SetupRqstFDD                    ProtocolIE-ID ::= 216
id-RL-InformationResponseItem-RL-AdditionRspFDD          ProtocolIE-ID ::= 217
id-RL-InformationResponseItem-RL-ReconfReady             ProtocolIE-ID ::= 218
id-RL-InformationResponseItem-RL-ReconfRsp               ProtocolIE-ID ::= 219
id-RL-InformationResponseItem-RL-SetupRspFDD             ProtocolIE-ID ::= 220
id-RL-InformationResponseList-RL-AdditionRspFDD          ProtocolIE-ID ::= 221
id-RL-InformationResponseList-RL-ReconfReady             ProtocolIE-ID ::= 222
id-RL-InformationResponseList-RL-ReconfRsp               ProtocolIE-ID ::= 223
id-RL-InformationResponseList-RL-SetupRspFDD             ProtocolIE-ID ::= 224
id-RL-InformationResponse-RL-AdditionRspTDD              ProtocolIE-ID ::= 225
id-RL-InformationResponse-RL-SetupRspTDD                 ProtocolIE-ID ::= 226
id-RL-Information-RL-AdditionRqstTDD                     ProtocolIE-ID ::= 227
id-RL-Information-RL-ReconfRqstTDD                       ProtocolIE-ID ::= 228
id-RL-Information-RL-ReconfPrepTDD                       ProtocolIE-ID ::= 229
```

```
id-RL-Information-RL-SetupRqstTDD                                ProtocolIE-ID ::= 230
id-RL-ReconfigurationFailureItem-RL-ReconfFailure                ProtocolIE-ID ::= 236
id-RL-Set-InformationItem-DM-Rprt                                ProtocolIE-ID ::= 238
id-RL-Set-InformationItem-DM-Rsp                                 ProtocolIE-ID ::= 240
id-RL-Set-InformationItem-RL-FailureInd                          ProtocolIE-ID ::= 241
id-RL-Set-InformationItem-RL-RestoreInd                          ProtocolIE-ID ::= 242
id-S-CCPCH-Information                                           ProtocolIE-ID ::= 247
id-S-CPICH-Information                                           ProtocolIE-ID ::= 249
id-SCH-Information                                               ProtocolIE-ID ::= 251
id-S-SCH-Information                                             ProtocolIE-ID ::= 253
id-Secondary-CCPCHListIE-CTCH-ReconfRqstTDD                      ProtocolIE-ID ::= 257
id-Secondary-CCPCH-parameterListIE-CTCH-SetupRqstTDD             ProtocolIE-ID ::= 258
id-Secondary-CCPCH-Parameters-CTCH-ReconfRqstTDD                 ProtocolIE-ID ::= 259
id-SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD             ProtocolIE-ID ::= 260
id-SecondaryCPICH-InformationItem-Cell-SetupRqstFDD              ProtocolIE-ID ::= 261
id-SecondaryCPICH-InformationList-Cell-ReconfRqstFDD             ProtocolIE-ID ::= 262
id-SecondaryCPICH-InformationList-Cell-SetupRqstFDD              ProtocolIE-ID ::= 263
id-SecondarySCH-Information-Cell-ReconfRqstFDD                   ProtocolIE-ID ::= 264
id-SecondarySCH-Information-Cell-SetupRqstFDD                    ProtocolIE-ID ::= 265
id-SegmentInformationListIE-SystemInfoUpdate                     ProtocolIE-ID ::= 266
id-SFN                                                           ProtocolIE-ID ::= 268
id-ShutdownTimer                                                 ProtocolIE-ID ::= 269
id-Start-Of-Audit-Sequence-Indicator                             ProtocolIE-ID ::= 114
id-Successful-RL-InformationRespItem-RL-AdditionFailureFDD       ProtocolIE-ID ::= 270
id-Successful-RL-InformationRespItem-RL-SetupFailureFDD          ProtocolIE-ID ::= 271
id-SyncCase                                                      ProtocolIE-ID ::= 274
id-SyncCaseIndicatorItem-Cell-SetupRqstTDD-PSCH                  ProtocolIE-ID ::= 275
id-T-Cell                                                        ProtocolIE-ID ::= 276
id-TimeSlotConfigurationList-Cell-ReconfRqstTDD                  ProtocolIE-ID ::= 277
id-TimeSlotConfigurationList-Cell-SetupRqstTDD                   ProtocolIE-ID ::= 278
id-TransmissionDiversityApplied                                  ProtocolIE-ID ::= 279
id-TypeOfError                                                   ProtocolIE-ID ::= 508
id-UARFCNforNt                                                   ProtocolIE-ID ::= 280
id-UARFCNforNd                                                   ProtocolIE-ID ::= 281
id-UARFCNforNu                                                   ProtocolIE-ID ::= 282
id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD                     ProtocolIE-ID ::= 284
id-UL-CCTrCH-InformationList-RL-AdditionRqstTDD                  ProtocolIE-ID ::= 285
id-UL-CCTrCH-InformationList-RL-SetupRqstTDD                     ProtocolIE-ID ::= 288
id-UL-DPCH-InformationItem-RL-AdditionRqstTDD                    ProtocolIE-ID ::= 289
id-UL-DPCH-InformationList-RL-SetupRqstTDD                       ProtocolIE-ID ::= 291
id-UL-DPCH-Information-RL-ReconfPrepFDD                          ProtocolIE-ID ::= 293
id-UL-DPCH-Information-RL-ReconfRqstFDD                          ProtocolIE-ID ::= 294
id-UL-DPCH-Information-RL-SetupRqstFDD                           ProtocolIE-ID ::= 295
id-Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD     ProtocolIE-ID ::= 296
id-Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD        ProtocolIE-ID ::= 297
id-Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD         ProtocolIE-ID ::= 300
id-Unsuccessful-RL-InformationResp-RL-SetupFailureTDD            ProtocolIE-ID ::= 301
id-USCH-Information-Add                                          ProtocolIE-ID ::= 302
id-USCH-Information-DeleteList-RL-ReconfPrepTDD                  ProtocolIE-ID ::= 304
id-USCH-Information-ModifyList-RL-ReconfPrepTDD                  ProtocolIE-ID ::= 306
id-USCH-InformationResponse                                      ProtocolIE-ID ::= 309
id-USCH-Information                                              ProtocolIE-ID ::= 310
id-Active-Pattern-Sequence-Information                           ProtocolIE-ID ::= 315
```

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id-AICH-ParametersListIE-CTCH-ReconfRqstFDD                    ProtocolIE-ID ::= 316
id-AdjustmentRatio                                             ProtocolIE-ID ::= 317
id-AP-AICH-Information                                         ProtocolIE-ID ::= 320
id-AP-AICH-ParametersListIE-CTCH-ReconfRqstFDD                 ProtocolIE-ID ::= 322
id-FACH-ParametersListIE-CTCH-ReconfRqstFDD                    ProtocolIE-ID ::= 323
id-CauseLevel-PSCH-ReconfFailureTDD                            ProtocolIE-ID ::= 324
id-CauseLevel-RL-AdditionFailureFDD                            ProtocolIE-ID ::= 325
id-CauseLevel-RL-AdditionFailureTDD                            ProtocolIE-ID ::= 326
id-CauseLevel-RL-ReconfFailure                                 ProtocolIE-ID ::= 327
id-CauseLevel-RL-SetupFailureFDD                               ProtocolIE-ID ::= 328
id-CauseLevel-RL-SetupFailureTDD                               ProtocolIE-ID ::= 329
id-CDCA-ICH-Information                                        ProtocolIE-ID ::= 330
id-CDCA-ICH-ParametersListIE-CTCH-ReconfRqstFDD                ProtocolIE-ID ::= 332
id-Closed-Loop-Timing-Adjustment-Mode                          ProtocolIE-ID ::= 333
id-CommonPhysicalChannelType-CTCH-ReconfRqstFDD                ProtocolIE-ID ::= 334
id-Compressed-Mode-Deactivation-Flag                           ProtocolIE-ID ::= 335
id-CPCH-Information                                            ProtocolIE-ID ::= 336
id-CPCH-Parameters-CTCH-SetupRsp                               ProtocolIE-ID ::= 342
id-CPCH-ParametersListIE-CTCH-ReconfRqstFDD                    ProtocolIE-ID ::= 343
id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD               ProtocolIE-ID ::= 346
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD            ProtocolIE-ID ::= 347
id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD            ProtocolIE-ID ::= 348
id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD            ProtocolIE-ID ::= 349
id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD            ProtocolIE-ID ::= 350
id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD            ProtocolIE-ID ::= 351
id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD            ProtocolIE-ID ::= 352
id-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD               ProtocolIE-ID ::= 353
id-DL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD        ProtocolIE-ID ::= 355
id-DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD     ProtocolIE-ID ::= 356
id-DL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD     ProtocolIE-ID ::= 357
id-DL-TPC-Pattern01Count                                       ProtocolIE-ID ::= 358
id-DPC-Mode                                                    ProtocolIE-ID ::= 450
id-DPCHConstant                                                ProtocolIE-ID ::= 359
id-DSCH-FDD-Common-Information                                 ProtocolIE-ID ::= 94
id-EnhancedDSCHPC                                              ProtocolIE-ID ::= 110
id-EnhancedDSCHPCIndicator                                     ProtocolIE-ID ::= 111
id-FACH-ParametersList-CTCH-SetupRsp                           ProtocolIE-ID ::= 362
id-Limited-power-increase-information-Cell-SetupRqstFDD        ProtocolIE-ID ::= 369
id-PCH-Parameters-CTCH-SetupRsp                                ProtocolIE-ID ::= 374
id-PCH-ParametersItem-CTCH-ReconfRqstFDD                       ProtocolIE-ID ::= 375
id-PCPCH-Information                                           ProtocolIE-ID ::= 376
id-PICH-ParametersItem-CTCH-ReconfRqstFDD                      ProtocolIE-ID ::= 380
id-PRACHConstant                                               ProtocolIE-ID ::= 381
id-PRACH-ParametersListIE-CTCH-ReconfRqstFDD                   ProtocolIE-ID ::= 383
id-PUSCHConstant                                               ProtocolIE-ID ::= 384
id-RACH-Parameters-CTCH-SetupRsp                               ProtocolIE-ID ::= 385
id-SSDT-CellIDforEDSCHPC                                       ProtocolIE-ID ::= 443
id-Synchronisation-Configuration-Cell-ReconfRqst               ProtocolIE-ID ::= 393
id-Synchronisation-Configuration-Cell-SetupRqst                ProtocolIE-ID ::= 394
id-Transmission-Gap-Pattern-Sequence-Information               ProtocolIE-ID ::= 395
id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD               ProtocolIE-ID ::= 396
id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD            ProtocolIE-ID ::= 397
id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD            ProtocolIE-ID ::= 398
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id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD                ProtocolIE-ID ::= 399
id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD                ProtocolIE-ID ::= 400
id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD                ProtocolIE-ID ::= 401
id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD                ProtocolIE-ID ::= 402
id-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD                   ProtocolIE-ID ::= 403
id-UL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD            ProtocolIE-ID ::= 405
id-UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD         ProtocolIE-ID ::= 406
id-UL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD         ProtocolIE-ID ::= 407
id-Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD                 ProtocolIE-ID ::= 408
id-Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD                 ProtocolIE-ID ::= 409
id-CommunicationContextInfoItem-Reset                              ProtocolIE-ID ::= 412
id-CommunicationControlPortInfoItem-Reset                          ProtocolIE-ID ::= 414
id-ResetIndicator                                                  ProtocolIE-ID ::= 416
id-TFCI2-Bearer-Information-RL-SetupRqstFDD                        ProtocolIE-ID ::= 417
id-TFCI2-BearerSpecificInformation-RL-ReconfPrepFDD                ProtocolIE-ID ::= 418
id-TFCI2-BearerInformationResponse                                 ProtocolIE-ID ::= 419
id-TimingAdvanceApplied                                            ProtocolIE-ID ::= 287
id-CFNReportingIndicator                                           ProtocolIE-ID ::= 6
id-SFNReportingIndicator                                           ProtocolIE-ID ::= 11
id-InnerLoopDLPCStatus                                             ProtocolIE-ID ::= 12
id-TimeslotISCPInfo                                                ProtocolIE-ID ::= 283
id-PICH-ParametersItem-CTCH-SetupRqstTDD                           ProtocolIE-ID ::= 167
id-PRACH-ParametersItem-CTCH-SetupRqstTDD                          ProtocolIE-ID ::= 20
id-CCTrCH-InformationItem-RL-FailureInd                            ProtocolIE-ID ::= 46
id-CCTrCH-InformationItem-RL-RestoreInd                            ProtocolIE-ID ::= 47
id-CauseLevel-SyncAdjustmntFailureTDD                              ProtocolIE-ID ::= 420
id-CellAdjustmentInfo-SyncAdjustmntRqstTDD                         ProtocolIE-ID ::= 421
id-CellAdjustmentInfoItem-SyncAdjustmentRqstTDD                    ProtocolIE-ID ::= 494
id-CellSyncBurstInfoList-CellSyncReconfRqstTDD                     ProtocolIE-ID ::= 482
id-CellSyncBurstTransInit-CellSyncInitiationRqstTDD                ProtocolIE-ID ::= 422
id-CellSyncBurstMeasureInit-CellSyncInitiationRqstTDD              ProtocolIE-ID ::= 423
id-CellSyncBurstTransReconfiguration-CellSyncReconfRqstTDD         ProtocolIE-ID ::= 424
id-CellSyncBurstMeasReconfiguration-CellSyncReconfRqstTDD          ProtocolIE-ID ::= 425
id-CellSyncBurstTransInfoList-CellSyncReconfRqstTDD                ProtocolIE-ID ::= 426
id-CellSyncBurstMeasInfoList-CellSyncReconfRqstTDD                 ProtocolIE-ID ::= 427
id-CellSyncBurstTransReconfInfo-CellSyncReconfRqstTDD              ProtocolIE-ID ::= 428
id-CellSyncInfo-CellSyncReprtTDD                                   ProtocolIE-ID ::= 429
id-CSBTransmissionID                                               ProtocolIE-ID ::= 430
id-CSBMeasurementID                                                ProtocolIE-ID ::= 431
id-IntStdPhCellSyncInfoItem-CellSyncReprtTDD                       ProtocolIE-ID ::= 432
id-NCyclesPerSFNperiod                                             ProtocolIE-ID ::= 433
id-NRepetitionsPerCyclePeriod                                      ProtocolIE-ID ::= 434
id-SyncFrameNumber                                                 ProtocolIE-ID ::= 437
id-SynchronisationReportType                                       ProtocolIE-ID ::= 438
id-SynchronisationReportCharacteristics                            ProtocolIE-ID ::= 439
id-Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD   ProtocolIE-ID ::= 440
id-LateEntranceCellSyncInfoItem-CellSyncReprtTDD                   ProtocolIE-ID ::= 119
id-ReferenceClockAvailability                                      ProtocolIE-ID ::= 435
id-ReferenceSFNoffset                                              ProtocolIE-ID ::= 436
id-InformationExchangeID                                           ProtocolIE-ID ::= 444
id-InformationExchangeObjectType-InfEx-Rqst                        ProtocolIE-ID ::= 445
id-InformationType                                                 ProtocolIE-ID ::= 446
id-InformationReportCharacteristics                                ProtocolIE-ID ::= 447
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id-InformationExchangeObjectType-InfEx-Rsp                          ProtocolIE-ID ::= 448
id-InformationExchangeObjectType-InfEx-Rprt                         ProtocolIE-ID ::= 449
id-IPDLParameter-Information-Cell-ReconfRqstFDD                     ProtocolIE-ID ::= 451
id-IPDLParameter-Information-Cell-SetupRqstFDD                      ProtocolIE-ID ::= 452
id-IPDLParameter-Information-Cell-ReconfRqstTDD                     ProtocolIE-ID ::= 453
id-IPDLParameter-Information-Cell-SetupRqstTDD                      ProtocolIE-ID ::= 454
id-DL-DPCH-LCR-Information-RL-SetupRqstTDD                          ProtocolIE-ID ::= 74
id-DL-DPCH-LCR-InformationList-RL-SetupRqstTDD                      ProtocolIE-ID ::= 75
id-DwPCH-LCR-Information                                            ProtocolIE-ID ::= 78
id-DwPCH-LCR-Information-AuditRsp                                   ProtocolIE-ID ::= 80
id-DwPCH-LCR-InformationList-AuditRsp                               ProtocolIE-ID ::= 90
id-DwPCH-LCR-Information-Cell-SetupRqstTDD                          ProtocolIE-ID ::= 97
id-DwPCH-LCR-Information-Cell-ReconfRqstTDD                         ProtocolIE-ID ::= 99
id-DwPCH-LCR-Information-ResourceStatusInd                          ProtocolIE-ID ::= 101
id-maxFACH-Power-LCR-CTCH-SetupRqstTDD                              ProtocolIE-ID ::= 154
id-maxFACH-Power-LCR-CTCH-ReconfRqstTDD                             ProtocolIE-ID ::= 174
id-FPACH-LCR-Information                                            ProtocolIE-ID ::= 290
id-FPACH-LCR-Information-AuditRsp                                   ProtocolIE-ID ::= 292
id-FPACH-LCR-InformationList-AuditRsp                               ProtocolIE-ID ::= 310 22
id-FPACH-LCR-InformationList-ResourceStatusInd                      ProtocolIE-ID ::= 311
id-FPACH-LCR-Parameters-CTCH-SetupRqstTDD                           ProtocolIE-ID ::= 312
id-FPACH-LCR-ParametersItem-CTCH-SetupRqstTDD                       ProtocolIE-ID ::= 313
id-FPACH-LCR-Parameters-CTCH-ReconfRqstTDD                          ProtocolIE-ID ::= 314
id-PCCPCH-LCR-Information-Cell-SetupRqstTDD                         ProtocolIE-ID ::= 456
id-PCH-Power-LCR-CTCH-SetupRqstTDD                                  ProtocolIE-ID ::= 457
id-PCH-Power-LCR-CTCH-ReconfRqstTDD                                 ProtocolIE-ID ::= 458
id-PICH-LCR-Parameters-CTCH-SetupRqstTDD                            ProtocolIE-ID ::= 459
id-PICH-LCR-ParametersItem-CTCH-SetupRqstTDD                        ProtocolIE-ID ::= 460
id-PRACH-LCR-ParametersList-CTCH-SetupRqstTDD                       ProtocolIE-ID ::= 461
id-PRACH-LCR-ParametersListIE-CTCH-SetupRqstTDD                     ProtocolIE-ID ::= 462
id-RL-InformationResponse-LCR-RL-SetupRspTDD                        ProtocolIE-ID ::= 463
id-Secondary-CCPCH-LCR-parameterListIE-CTCH-SetupRqstTDD            ProtocolIE-ID ::= 464
id-Secondary-CCPCH-LCR-parameterList-CTCH-SetupRqstTDD              ProtocolIE-ID ::= 465
id-TimeSlot                                                         ProtocolIE-ID ::= 495
id-TimeSlotConfigurationList-LCR-Cell-ReconfRqstTDD                 ProtocolIE-ID ::= 466
id-TimeSlotConfigurationList-LCR-Cell-SetupRqstTDD                  ProtocolIE-ID ::= 467
id-TimeslotISCP-LCR-InfoList-RL-SetupRqstTDD                        ProtocolIE-ID ::= 468
id-TimeSlotLCR-CM-Rqst                                              ProtocolIE-ID ::= 469
id-UL-DPCH-LCR-Information-RL-SetupRqstTDD                          ProtocolIE-ID ::= 470
id-UL-DPCH-LCR-InformationList-RL-SetupRqstTDD                      ProtocolIE-ID ::= 471
id-DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD                   ProtocolIE-ID ::= 472
id-UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD                   ProtocolIE-ID ::= 473
id-TimeslotISCP-InformationList-LCR-RL-AdditionRqstTDD              ProtocolIE-ID ::= 474
id-DL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD                  ProtocolIE-ID ::= 475
id-DL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD                ProtocolIE-ID ::= 476
id-DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD           ProtocolIE-ID ::= 477
id-DL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD         ProtocolIE-ID ::= 478
id-DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD    ProtocolIE-ID ::= 479
id-TimeslotISCPInfoList-LCR-DL-PC-RqstTDD                           ProtocolIE-ID ::= 480
id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD                ProtocolIE-ID ::= 481
id-UL-DPCH-LCR-InformationModify-AddList                            ProtocolIE-ID ::= 483
id-UL-DPCH-LCR-InformationModify-AddListIE-RL-ReconfPrepTDD         ProtocolIE-ID ::= 484
id-UL-TimeslotLCR-Information-RL-ReconfPrepTDD                      ProtocolIE-ID ::= 485
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id-UL-SIRTarget                                          ProtocolIE-ID ::= 510
id-PDSCH-AddInformation-LCR-PSCH-ReconfRqst              ProtocolIE-ID ::= 486
id-PDSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst    ProtocolIE-ID ::= 487
id-PDSCH-ModifyInformation-LCR-PSCH-ReconfRqst           ProtocolIE-ID ::= 488
id-PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst ProtocolIE-ID ::= 489
id-PUSCH-AddInformation-LCR-PSCH-ReconfRqst              ProtocolIE-ID ::= 490
id-PUSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst    ProtocolIE-ID ::= 491
id-PUSCH-ModifyInformation-LCR-PSCH-ReconfRqst           ProtocolIE-ID ::= 492
id-PUSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst ProtocolIE-ID ::= 493
id-timeslotInfo-CellSyncInitiationRqstTDD                ProtocolIE-ID ::= 496
id-SyncReportType-CellSyncReprtTDD                       ProtocolIE-ID ::= 497
id-PUSCH-Info-DM-Rqst                                    ProtocolIE-ID ::= 505
id-PUSCH-Info-DM-Rsp                                     ProtocolIE-ID ::= 506
id-PUSCH-Info-DM-Rprt                                    ProtocolIE-ID ::= 507
id-InitDL-Power                                          ProtocolIE-ID ::= 509
id-cellSyncBurstRepetitionPeriod                         ProtocolIE-ID ::= 511
id-ReportCharacteristicsType-OnModification              ProtocolIE-ID ::= 512
id-SFNSFNMeasurementValueInformation                     ProtocolIE-ID ::= 513
id-SFNSFNMeasurementThresholdInformation                 ProtocolIE-ID ::= 514
id-TUTRANGPSMeasurementValueInformation                  ProtocolIE-ID ::= 515
id-TUTRANGPSMeasurementThresholdInformation              ProtocolIE-ID ::= 516
id-Rx-Timing-Deviation-Value-LCR                         ProtocolIE-ID ::= 520
id-RL-InformationResponse-LCR-RL-AdditionRspTDD          ProtocolIE-ID ::= 51

END
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