3GPP TSG RAN Meeting #28 **RP-050265**
Quebec, Canada, 1 - 3 June 2005

Title	**TR 34.943 on Analysis of Differences between FDD and 1.28 Mcps TDD**
Source	**RAN WG5, ZTE (Rapporteur)**
Agenda Item	**7.6.2**
Action	**For Information**

3GPP TR 34.943 V1.0.0 (2005-04)

Technical Report

3rd Generation Partnership Project; Technical Specification Group (TSG) Terminal; Analysis of Difference between FDD and 1.28 Mcps TDD and Corresponding Effect to Terminal Conformance Test in Radio Access Stratum Protocol Aspects (Release 5)

Keywords
testing, UMTS

3GPP

Postal address

3GPP support office address
650 Route des Lucioles - Sophia Antipolis
Valbonne - FRANCE
Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Internet
http://www.3gpp.org

Contents

Foreword

This Technical Report (TR) has been produced by the 3rd Generation Partnership Project (3GPP).

The contents of the present document are subject to continuing work within the TSG T1 and may change following formal TSG approval. Should the TSG modify the contents of the present document, it will be re-released by the TSG with an identifying change of release date and an increase in version number as follows:

Version x.y.z

where:

- x the first digit:
  - 1 presented to TSG for information;
  - 2 presented to TSG for approval;
  - 3 or greater indicates TSG approved document under change control.
- y the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.
- z the third digit is incremented when editorial only changes have been incorporated in the document.

Introduction

The present document analyzes the difference of Uu/Iub interface between LCR TDD (1.28 Mcps TDD) and FDD, as well as its effect on UE conformance testing for 3rd Generation Terminals.

The present document can be helpful and valuable in such aspects as followed:

Firstly, it provides a brief difference analysis of core specifications in Uu/lub interface and a clear difference description about the test specifications, such as 34.123-1, 34.123-2, 34.123-3 and 34.108, for terminal conformance test between 1.28 Mcps TDD and FDD. Further more, it also gives an efficient index between the two contents. So, users can quickly search the difference in test specification and the corresponding reason in core specification by this index.

Secondly, it can give an enhancive and all-round comparison between 1.28 Mcps TDD and FDD in terminal conformance test specification. User can quickly know of 1.28 Mcps TDD conformance test specification in base of a good background in FDD.

At the end, the present document is especially helpful in TTCN ATSs development and SS (System Simulator) development for 1.28 Mcps TDD from FDD. Since FDD and LCR TDD share most of contents in layers beyond physical layer, the different analysis will be much useful to take as mostly full reuse of FDD available resource both in software and hardware as possible. Hence manpower, time and cost will be obviously saved.

1 Scope

The present document analyzes the difference of Uu/Iub interface between LCR TDD and FDD, and its effect on UE conformance testing for 3rd Generation Terminals.

The actual test case descriptions will be contained in other documents.

2 References

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

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

[1] 3GPP TS 24.008: "Mobile radio interface Layer 3 specification, Core network protocols; Stage 3".

[2] 3GPP TS 25.321: "Medium Access Control (MAC) protocol specification".

[3] 3GPP TS 25.322: "Radio Link Control (RLC) protocol specification".

[4] 3GPP TS 25.331: "Radio Resource Control (RRC) protocol specification".

[5] 3GPP TS 25.433: "UTRAN Iub interface NBAP signaling".

[6] 3GPP TS 25.435: "UTRAN Iub interface user plane protocols for CCH data streams".

[7] 3GPP TS 25.427: "UTRAN Iur and Iub interface user plane protocols for DCH data streams".

[8] 3GPP TS 34.108: "Common test environments for User Equipment (UE) conformance testing".

[9] 3GPP TS 34.123-1: "User Equipment (UE) conformance specification; Part 1: Protocol conformance specification".

[10] 3GPP TS 34.123-2: "User Equipment (UE) conformance specification; Part 2: Implementation Conformance Statement (ICS) specification".

[11] 3GPP TS 34.123-3: "User Equipment (UE) conformance specification; Part 3: Abstract Test Suites (ATSs)".

[12] 3GPP TS 25.214 (V4.4.0): "Physical layer procedures (FDD) (Release 4)".

[13] 3GPP TS 25.224 (V4.4.0): "Physical layer procedures (TDD) (Release 4)".

3 Abbreviations

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

AFC	Automatic Frequency Control
AM	Acknowledgement Mode
ATT	ATTenuator
BCCH	Broadcast Control CHannel
CBS	Cell Broadcast Service
CC	Convolutional Coding

CCCH	Common Control CHannel
CCTrCH	Coded Composite Transport CHannel
CS	Circuit Switching
DCCH	Dedicated Control Channel
DL	DownLink
DPCH	Dedicated Physical CHannel
DT	Direct Transfer
DTCH	Dedicated Traffic CHannel
FTM	File Tunnelling Mode
HYB	HYBrid
NAS	Non-Access Stratum
OBW	Occupied BandWidth
OCNS	Orthogonal Channel Noise Simulator
PRACH	Physical Randome Access CHannel
PS	Packet Switching
RAB	Radio Access Bearer
RB	Radio Bearer
RRC	Radio Resource Control
SCCPCH	Secondary Common Control Physical CHannel
SMS	Short Message Service
SRB	Signalling Radio Bearer
SS	System Simulator
SSD	Source Statistics Descriptor
TC	Turbo Coding
TM	Transparent Mode
UL	UpLink
UM	Unacknowledgement Mode

4 Difference Analysis on Uu and Iub Interface

4.1 General Description on Uu and Iub Interface

4.1.1 Protocol structures difference on Uu interface

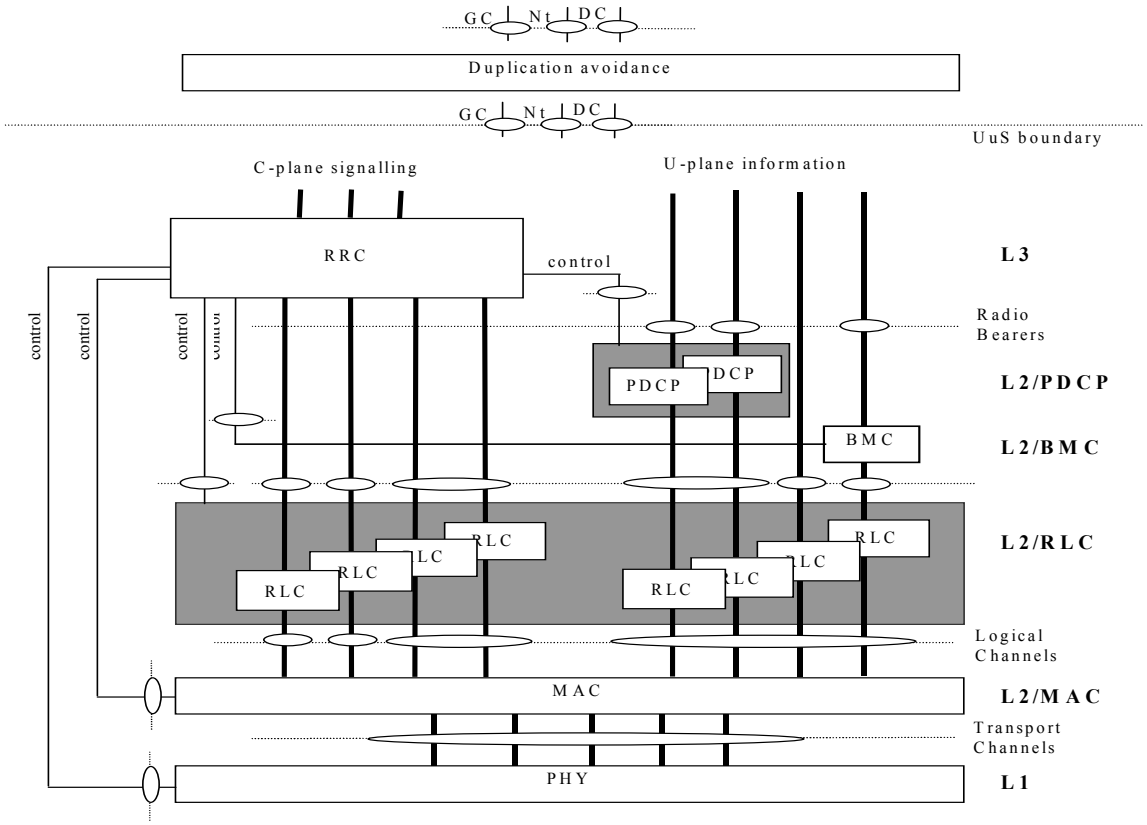


Figure 4-1: Uu interface protocol stack

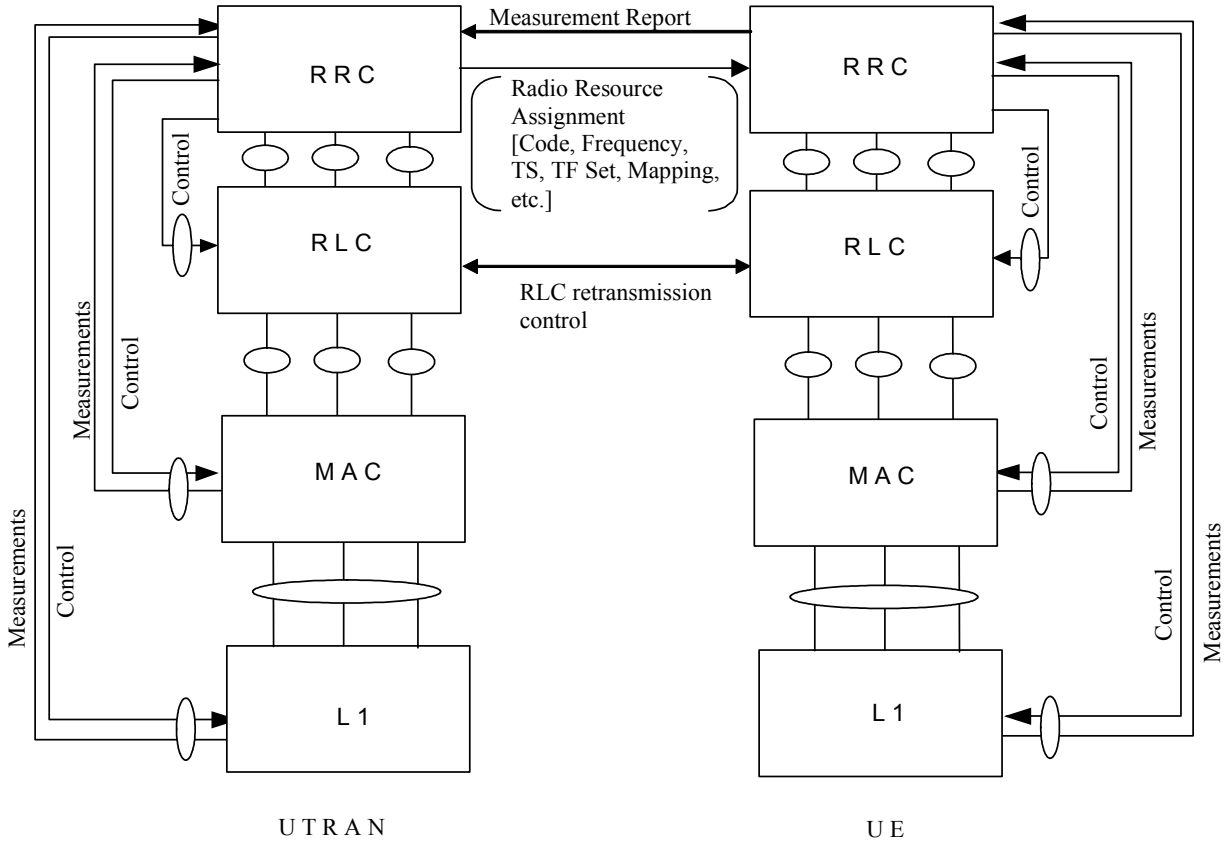


Figure 4-2

4.2 Differences in L1 on Uu interface

4.2.1 General discription

4.2.1.1 In LCR-TDD

In LCR-TDD, a physical channel is defined by frequency, timeslot, channelization code, burst type and Radio Frame allocation. The physical channels can either be of infinite duration, or a duration of the defined allocation.

All physical channels in LCR-TDD take the three-layer structure:

1) timeslots,

2) radio frames

3) system frame number (SFN)

Depending on the resource allocation, the configurations of different radio frames or timeslots can be different.

All physical channels need guard symbols in each timeslot. The timeslots are used in the sense of a TDMA component to separate different user signals in time domain.

The physical channel signal format for LCR- TDD is presented in figure 4-3.

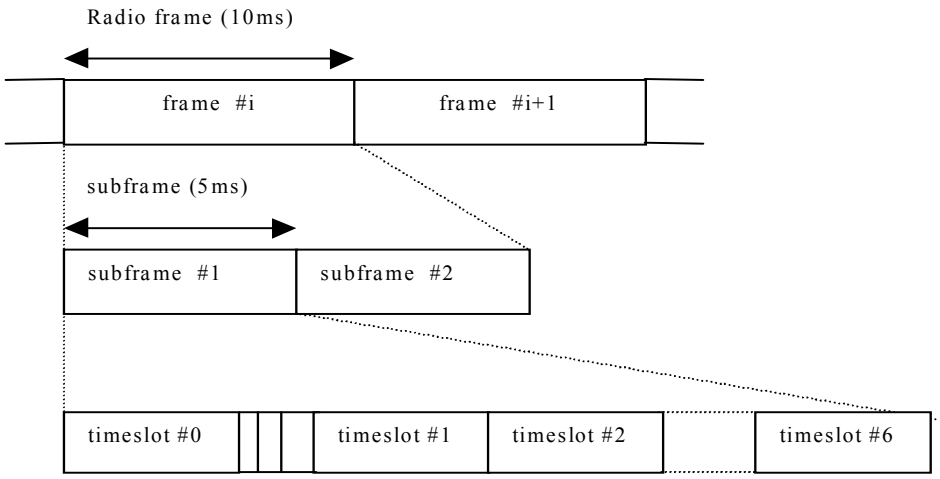


Figure 4-3: Physical channel signal format for LCR- TDD option

A physical channel in TDD is a burst, which is transmitted in a particular timeslot within allocated Radio Frames. A burst is the combination of a data part, a midamble and a guard period. The duration of a burst is one time slot. Several bursts can be transmitted at the same time from one transmitter. In this case, the data part must use different OVSF channelization codes, but the same scrambling code. The midamble part has to use the same basic midamble code, but can use different midambles.

The data part of the burst is spread with a combination of channelization code and scrambling code. The channelization code is a OVSF code, that can have a spreading factor of 1, 2, 4, 8, or 16.

The scrambling code and the basic midamble code are broadcast and may be constant within a cell.

When a physical channel is established, a start frame is given.

4.2.1.2 In FDD

Physical channels in FDD are defined by a specific frequency, scrambling code, channelization code (optional), time start and stop (giving a duration) and, on the uplink, relative phase (0 or $\pi/2$). Scrambling and channelization codes are specified in 3GPP TS 25.427 [7]. Time durations are defined by start and stop instants, measured in integer multiples of chips.

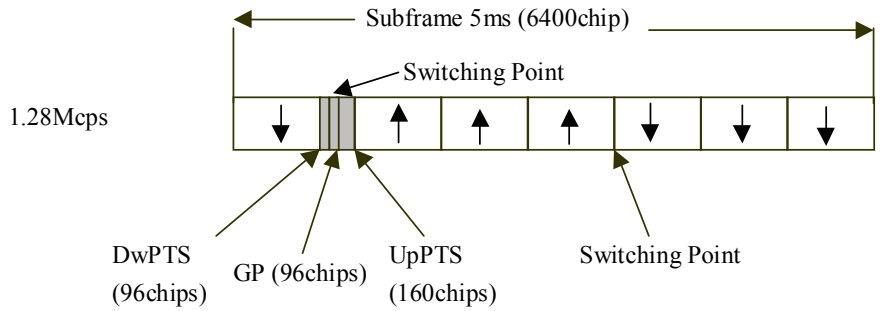
4.2.2 Specific frame structure

4.2.2.1 In LCR-TDD

The TDMA frame has a duration of 10 ms and is divided into 2 sub-frames of 5ms. The frame structure for each sub-frame in the 10ms frame length is the same. the total number of traffic time slots for uplink and downlink is 7, and the length for each traffic time slot is 864 chips duration as shown in figure 4-4.

The timeslots for the uplink and for the downlink are separated by switching points. In each sub-frame of 5ms for LCR-TDD option, there are two switching points (uplink to downlink and vice versa).

Using the above frame structure, the LCR-TDD option can operate on both symmetric and asymmetric mode by properly configuring the number of downlink and uplink timeslots. In any configuration at least one timeslot (timeslot#0) has to be allocated for the downlink and at least one timeslot has to be allocated for the uplink (timeslot#1).



DwPCH: downlink pilot time slot, 96 chips duration;
UpPCH: uplink pilot time slot, 160 chips duration;
GP: main guard period for TDD operation, 96 chips duration.

Figure 4-4: Structure of the sub-frame for LCR-TDD option

Examples for symmetric and asymmetric UL/DL allocations are given in figure 4-5.

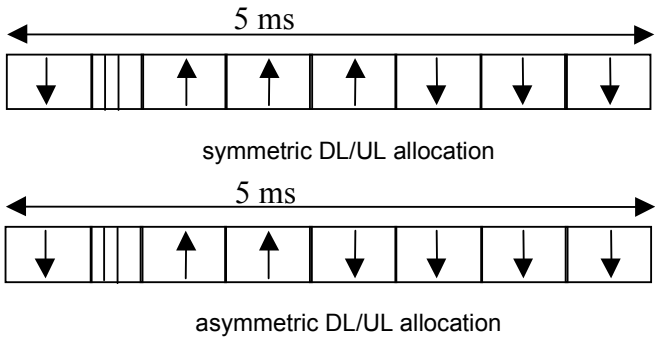


Figure 4-5: LCR- TDD sub-frame structure examples

4.2.2.2 In FDD

The FDD frame has a duration of 10 ms, including 15 timeslots. Each timeslot has 2560 chips duration. All the timeslots belong to the same direction, uplink or downlink, as shown in figure 4-6.

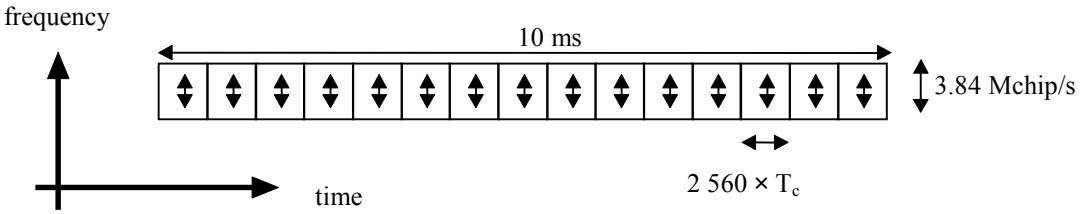


Figure 4-6: FDD frame structures

4.2.3 Burst Format (LCR-TDD only)

A traffic burst consists of two data symbol fields, a midamble of 144 chips and a guard period. The data fields of the burst are 352 chips long. The corresponding number of symbols depends on the spreading factor, as indicated in table 4-1. The guard period is 16 chip periods long.

The burst format is shown in figure 4-7. The contents of the traffic burst fields are described in table 4-2.

Table 4-1: number of symbols per data field in a traffic burst

Spreading factor (Q)	Number of symbols (N) per data field in Burst
1	352
2	176
4	88
8	44
16	22

Table 4-2: The contents of the traffic burst format fields

Chip Number (CN)	Length of field in chips	Length of field in symbols	Contents of field
0 to 351	352	cf table 4-1	Data symbols
352 to 495	144	-	Midamble
496 to 847	352	cf table 4-1	Data symbols
848 to 863	16	-	Guard period

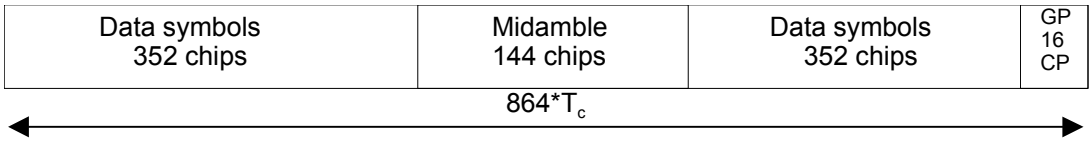


Figure 4-7: Burst structure of the traffic burst format
(GP denotes the guard period and CP the chip periods)

4.2.4 Different modulation

4.2.4.1 In LCR-TDD

Besides QPSK modulation, 8PSK modulation is also used in LCR TDD for 2Mbps data service.

4.2.4.2 In FDD

QPSK (UL), HPSK, (DL).

4.2.5 Different channel coding

There are some differences in channel coding for BCH/PCH between LCR-TDD and FDD.

Table 4-3: Comparison between LCR-TDD and FDD channel coding

Type of TrCH	TD-SCDMA		WCDMA	
	Coding Scheme	Coding Rate	Coding Scheme	Coding Rate
BCH	Convolutional Coding	1/3	Convolutional Coding	1/2
PCH	Convolutional Coding	1/2 or 1/3	Convolutional Coding	1/2
Other TrCHs	Convolutional Coding (1/2 or 1/3) or Turbo Coding (1/3)			

4.2.6 Difference on Physical Channels

Compared with FDD, the main differences in physical channel are:

1) LCR TDD uses DwPCH, UpPCH, and FPACH channel for uplink synchronization, instead of SCH and AICH which are used in FDD only;

2) LCR TDD uses DPCH, instead of DPDCH and DPCCH in FDD only;

3) LCR TDD adds PUSCH which is not used in FDD;

4) LCR TDD does not use PCPCH, CSICH which are used in FDD only.

4.2.6.1 PCCPCH

4.2.6.1.1 Frame Structure

In the view of frame structure, this clause analyzes the difference of system function on PCCPCH between LCR TDD and FDD.

4.2.6.1.1.1 FDD

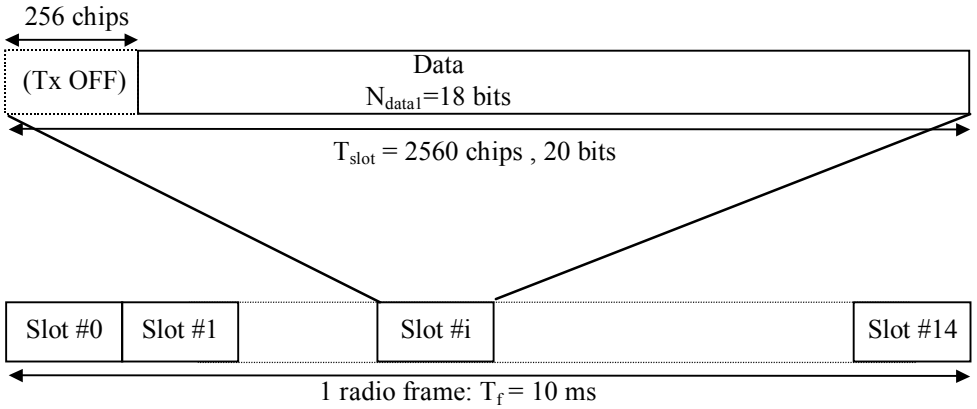


Figure 4-8: Frame structure for Primary Common Control Physical Channel

For FDD,the frequency division system, from the view of frame and timeslot, frame structure of PCCPCH is time continuous. From the view of physical channels themselves, PCCPCH and SCH share the frame structure in time domain.

For FDD system, by using such PCCPCH frame structure, before receiving PCCPCH, UE can firstly use SCH to perform downlink synchronization of PCCPCH.

4.2.6.1.1.2 LCR TDD

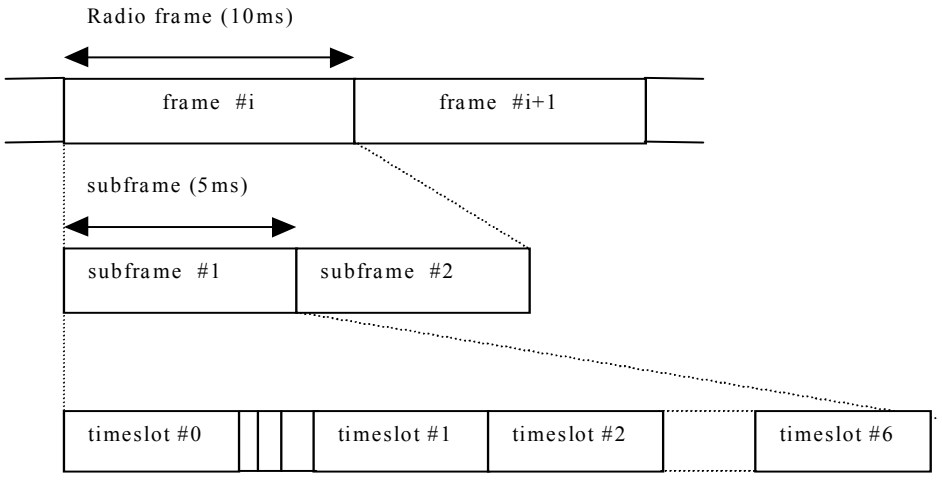


Figure 4-9: Physical channel signal format for LCR TDD option

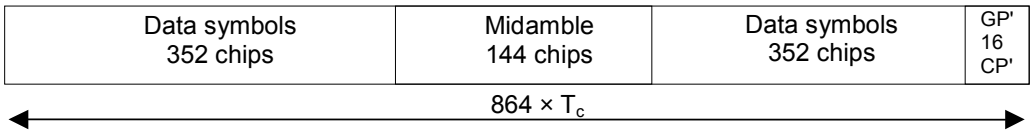


**Figure 4-10: Burst structure of the traffic burst format
(GP denotes the guard period and CP the chip periods)**

The Burst is the physical channel in one timeslot. LCR TDD is a frequency and time division system, the physical channel of PCCPCH can be discontinuous at timeslot and frame level.

LCR TDD system is a synchronization system. Before receiving PCCPCH, UE has completed downlink synchronization through special burst of DwPCH.

For LCR TDD, the frame structure of PCCPCH consists of midamble code for channel evaluation, and midamble code can also be used to evaluate the power of carrier frequency in a cell.

4.2.6.1.2 Physical Channel Structure

This clause mainly describes the definition of PCCPCH,and the difference in LCR TDD and FDD.

4.2.6.1.2.1 FDD

Channelization code for the Primary CCPCH is fixed to Cch,256,1.

4.2.6.1.2.2 LCR TDD

The P-CCPCH uses fixed spreading with a spreading factor SF = 16. The P-CCPCH1 and P-CCPCH2 always use channelization code $c_{Q=16}^{(k=1)}$ and $c_{Q=16}^{(k=2)}$ respectively.

In LCR TDD system, PCCPCH can be used as baton channel, and has follow characteristic:

- transmitted with reference power;
- transmitted without beamforming;
- using midamble m(1) and m(2) exclusively in this timeslot.

Based on the above characteristic, PCCPCH is very import for LCR TDD:

- bearing BCH transport channel;
- one reference for UE to do cell selection and reselection;
- used as baton channel, to perform a measurement method in TDD cell.

4.2.6.1.3 The difference impact on System Configurations for UE conformance testing

This clause states the system configurations difference about PCCPCH for UE conformance testing.

4.2.6.2 SCCPCH

4.2.6.2.1 Frame Structure

In the view of frame structure, this clause analyzes the difference of system function on SCCPCH between LCR TDD and FDD.

4.2.6.2.2 Physical Channel Structure

This clause mainly describes the definition of SCCPCH, and the difference in LCR TDD and FDD.

4.2.6.2.3 The difference impact on System Configurations for UE conformance testing

This clause statement the system configurations difference about SCCPCH for UE conformance testing.

4.2.6.3 PRACH

4.2.6.3.1 Frame Structure

In the view of frame structure, this clause analyzes the difference of system function on PRACH between LCR TDD and FDD.

4.2.6.3.2 Physical Channel Structure

This clause mainly describes the definition of PRACH, and the difference in LCR TDD and FDD.

4.2.6.3.3 The difference impact on System Configurations for UE conformance testing

This clause statement the system configurations difference about PRACH for UE conformance testing.

4.2.6.4 Common Pilot Channel (CPICH) (FDD only)

4.2.6.4.1 Frame Structure

In the view of frame structure, this clause analyzes system function on CPICH in FDD only.

4.2.6.4.2 Physical Channel Structure

This clause mainly describes the definition of CPICH.

4.2.6.4.3 The impact on System Configurations for UE conformance testing

This clause statement the system configurations difference about CPICH for UE conformance testing.

4.2.6.5 Synchronization Channel (SCH) (FDD only)

4.2.6.5.1 Frame Structure

In the view of frame structure, this clause analyzes system function on SCH in FDD only.

4.2.6.5.2 Physical Channel Structure

This clause mainly describes the definition of SCH.

4.2.6.5.3 The impact on System Configurations for UE conformance testing

This clause statement the system configurations difference about SCH for UE conformance testing.

4.2.6.6 Physical Downlink Shared Channel (PDSCH)

4.2.6.6.1 Frame Structure

In the view of frame structure, this clause analyzes the difference of system function on PDSCH between LCR TDD and FDD.

4.2.6.6.2 Physical Channel Structure

This clause mainly describes the definition of PDSCH, and the difference in LCR TDD and FDD.

4.2.6.6.3 The difference impact on System Configurations for UE conformance testing

This clause statement the system configurations difference about PDSCH for UE conformance testing.

4.2.6.7 Acquisition Indicator Channel (AICH) (FDD only)

4.2.6.7.1 Frame Structure

In the view of frame structure, this clause analyzes system function on AICH in FDD only.

4.2.6.7.2 Physical Channel Structure

This clause mainly describes the definition of AICH.

4.2.6.7.3 The impact on System Configurations for UE conformance testing

This clause statement the system configurations difference about AICH for UE conformance testing.

4.2.6.8 CPCH Access Preamble Acquisition Indicator Channel (AP-AICH) (FDD only)

4.2.6.8.1 Frame Structure

In the view of frame structure, this clause analyzes system function on AP-AICH in FDD only.

4.2.6.8.2 Physical Channel Structure

This clause mainly describes the definition of AP-AICH.

4.2.6.8.3 The impact on System Configurations for UE conformance testing

This clause statement the system configurations difference about AP-AICH for UE conformance testing.

4.2.6.9 CPCH Collision Detection/Channel Assignment Indicator Channel (CD/CA-ICH) (FDD only)

4.2.6.9.1 Frame Structure

In the view of frame structure, this clause analyzes system function on CD/CA-ICH in FDD only.

4.2.6.9.2 Physical Channel Structure

This clause mainly describes the definition of CD/CA-ICH.

4.2.6.9.3 The impact on System Configurations for UE conformance testing

This clause statement the system configurations difference about CD/CA-ICH for UE conformance testing.

4.2.6.10 Paging Indicator Channel (PICH)

4.2.6.10.1 Frame Structure

In the view of frame structure, this clause analyzes the difference of system function on PICH between LCR TDD and FDD.

4.2.6.10.2 Physical Channel Structure

This clause mainly describes the definition of PICH, and the difference in LCR TDD and FDD.

4.2.6.10.3 The difference impact on System Configurations for UE conformance testing

This clause statement the system configurations difference about PICH for UE conformance testing.

4.2.6.11 CPCH Status Indicator Channel (CSICH) (FDD only)

4.2.6.11.1 Frame Structure

In the view of frame structure, this clause analyzes system function on CSICH in FDD only.

4.2.6.11.2 Channel Structure

This clause mainly describes the definition of CSICH.

4.2.6.11.3 The impact on System Configurations for UE conformance testing

This clause statement the system configurations difference about CSICH for UE conformance testing.

4.2.6.12 Fast Physical Access Channel (FPACH) (TDD only)

4.2.6.12.1 Frame Structure

In the view of frame structure, this clause analyzes system function on CSICH in LCR TDD only.

4.2.6.12.2 Physical Channel Structure

This clause mainly describes the definition of FPACH.

4.2.6.12.3 The impact on System Configurations for UE conformance testing

This clause statement the system configurations difference about FPACH for UE conformance testing.

4.2.6.13 The synchronization channels (DwPCH, UpPCH) (LCR TDD only)

4.2.6.13.1 Frame Structure

In the view of frame structure, this clause analyzes system function on DwPCH and UpPCH in LCR TDD only.

4.2.6.13.2 Physical Channel Structure

This clause mainly describes the definition of DwPCH and UpPCH.

4.2.6.13.3 The impact on System Configurations for UE conformance testing

This clause statement the system configurations difference about DwPCH, UpPCH for UE conformance testing.

4.2.6.14 Physical Uplink Shared Channel (PUSCH) (LCR TDD only)

4.2.6.14.1 Frame Structure

In the view of frame structure, this clause analyzes system function on D PUSCH in LCR TDD only.

4.2.6.14.2 Physical Channel Structure

This clause mainly describes the definition of PUSCH.

4.2.6.14.3 The impact on System Configurations for UE conformance testing

This clause statement the system configurations difference about PUSCH for UE conformance testing.

4.2.6.15 Uplink Dedicated Physical Channels

4.2.6.15.1 Frame Structure

In the view of frame structure, this clause analyzes the difference of system function on Uplink Dedicated Physical Channels between LCR TDD and FDD.

4.2.6.15.2 Physical Channel Structure

This clause mainly describes the definition of Uplink Dedicated Physical Channels,and the difference in LCR TDD and FDD.

4.2.6.15.3 The difference impact on System Configurations for UE conformance testing

This clause statement the system configurations difference about Uplink DPCH for UE conformance testing.

4.2.6.16 Downlink Dedicated Physical Channels

4.2.6.16.1 Frame Structure

In the view of frame structure, this clause analyzes the difference of system function on Downlink Dedicated Physical Channels between LCR TDD and FDD.

4.2.6.16.2 Physical Channel Structure

This clause mainly describes the definition of Downlink Dedicated Physical Channels, and the difference in LCR TDD and FDD.

4.2.6.16.3 The difference impact on System Configurations for UE conformance testing

This clause statement the system configurations difference about Dplink DPCH for UE conformance testing.

4.2.6.17 Physical Common Packet Channel (PCPCH) (FDD only)

4.2.6.17.1 Frame Structure

In the view of frame structure, this clause analyzes system function on PCPCH in FDD only.

4.2.6.17.2 Physical Channel Structure

This clause mainly describes the definition of PCPCH.

4.2.6.17.3 The difference impact on System Configurations for UE conformance testing

This clause statement the system configurations difference about PCCPCH for UE conformance testing.

4.2.7 void

4.2.8 Different in Transport Channels

Void

4.2.9 Different Mapping between TrCHs on PhyCHs

4.2.9.1 In LCR-TDD

In LCR TDD, the transport channels are mapped onto physical resources, see figure 4-11.

Transport channels	Physical channels
DCH	Dedicated Physical Channel (DPCH)
BCH	Primary Common Control Physical Channels (P-CCPCH)
PCH	Secondary Common Control Physical Channels(S-CCPCH)
FACH	Secondary Common Control Physical Channels(S-CCPCH)
	PICH
RACH	Physical Random Access Channel (PRACH)
USCH	Physical Uplink Shared Channel (PUSCH)
DSCH	Physical Downlink Shared Channel (PDSCH)
	Down link Pilot Channel (DwPCH)
	Up link Pilot Channel (UpPCH)
	FPACH

Figure 4-11: Transport channel to physical channel mapping for LCR- TDD

4.2.9.2 In FDD

Transport channels	Physical channels
DCH	DPDCH
	DPCCH
RACH	PRACH
CPCH	PCPCH
	CPICH
BCH	P-CCPCH
FACH	S-CCPCH
PCH	S-CCPCH
	SCH
DSCH	PDSCH
	AICH
	AP-AICH
	PICH
	CSICH
	CD/CA-ICH

Figure 4-12: Transport-channel to physical-channel mapping for FDD

4.2.10 Different Mapping between TrCHs on PhyCHs

Void

4.2.11 Different physical procedure

The details about physical procedure see 3GPP TS 25.214 [12] and 3GPP TS 25.224 [13].

4.2.11.1 Different random access procedure

In FDD, preamble is used in the initial random access on RACH. Open loop power control is used for preamble transmission. Power ramping procedure is used when retransmission. Adjusting information is feedback on AICH, and then access on RACH.

In LCR TDD, uplink synchronization code SYNC_UL is transmitted on UpPCH for initial access, open loop control and power ramping procedure is used in retransmission. Power and timing advance adjustments are feedback on FPACH, and then access on RACH.

4.2.11.2 Transmitter Power Control

The inner loop power control circles for LCR-TDD is 200 cirlce/s while for FDD is 1500 circle/s.

4.2.11.2.1 Uplink Control

4.2.11.2.1.1 In LCR-TDD

UpPTS

Open loop power control is used for UpPTS.

The transmit power level by an UE on the UpPTS shall be calculated based on the following equation:

$$P_{UpPTS} = L_{P\text{-}CCPCH} + PRX_{UpPTS,des}$$

where:

P_{UpPTS}: transmit power level in dBm;

$L_{P\text{-}CCPCH}$: measured path loss in dB (P-CCPCH reference transmit power level is broadcasted on BCH);

$PRX_{UpPTS,des}$: desired RX power level at cell's receiver in dBm, which is an average value and is broadcasted on BCH.

PRACH

In 1.28 Mcps TDD, the F-PACH is the response of a node B to the SYNC-UL burst of the UE. The response, a one burst long message, besides the acknowledgement to the received SYNC-UL burst, shall bring the timing and power level indications for preparing the transmission of the RACH burst.

The transmit power level on the PRACH is calculated by the following equation:

$$P_{PRACH} = L_{P\text{-}CCPCH} + PRX_{PRACH,des}$$

Where:

P_{PRACH} is the UE transmit power level on the PRACH;

$PRX_{PRACH,des}$ is the desired receive power level on the PRACH, which is signalled by the higher layer signalling on the F-PACH.

4.2.11.2.1.2 In FDD

PRACH

In FDD, the message part of the uplink PRACH channel shall employ gain factors to control the control/data part relative power similar to the uplink dedicated physical channels. no inner loop power control is performed in this procedure.

DPCCH/DPDCH

The initial uplink DPCCH transmit power is set by higher layers.Subsequently the uplink transmit power control procedure simultaneously controls the power of a DPCCH and its corresponding DPDCHs (if present). The relative transmit power offset between DPCCH and DPDCHs is determined by the network.

The operation of the inner power control loop, which adjusts the power of the DPCCH and DPDCHs by the same amount, provides no changes in gain factors.

- Ordinary transmit power control, see 3GPP TS 34.108 [8], subclause5.1.2.2.
- Transmit power control in compressed mode ,see 3GPP TS 34.108 [8], subclause5.1.2.3.
- Transmit power control in the uplink DPCCH power control preamble
- Setting of the uplink DPCCH/DPDCH power difference see 3GPP TS 34.108 [8], subclause5.1.2.3.

PCPCH

The protocol mainly related to the inner loop power control for the PCPCH in FDD.

- Power control in the message part, see 3GPP TS 34.108 [8]
- Power control in the power control preamble, see 3GPP TS 34.108 [8].

4.2.11.2.2 Downlink power Control

4.2.11.2.2.1 In LCR-TDD

Downlink power Control is associated with the following channels:

1) P-CCPCH
2) S-CCPCH, PICH

The relative transmit power of the Secondary CCPCH and the PICH compared to the P-CCPCH transmit power are set by higher layer signalling. The PICH power offset related to the P-CCPCH reference power is signalled on the BCH:

1) SCH;
2) PNBSCH;
3) DPCH, PDSCH.

4.2.11.2.2.2 In FDD

Downlink power Control associated with the following channels:

1) DPCCH/DPDCH:
   - ordinary transmit power control;
   - power control in compressed mode;
   - site selection diversity transmit power control.
2) PDSCH;
3) DL-DPCCH for CPCH;
4) AICH;
5) PICH;
6) S-CCPCH.

4.2.11.3 Synchronization procedures

Different cell search and cell synchronization procedure.

4.2.11.3.1 In LCR TDD

Four procedures are included in cell search and cell synchronization:

- Step 1: Search for DwPCH;
- Step 2: Scrambling and basic midamble code identification;
- Step 3: Control multi-frame synchronization;
- Step 4: Read the BCH.

4.2.11.3.2 In FDD

Three procedures are included in cell search and cell synchronization:

- Step 1: Slot synchronization;
- Step 2: Frame synchronization and code-group identification;
- Step 3: Scrambling-code identification.

4.2.11.3.3 Different Channel Synchronization procedures

In LCR-TDD the following procedures are included in Channel Synchronization procedures:

Dedicated channel synchronization.

1) Downlink synchronization primitives

Layer 1 in the UE shall check the synchronization status of each DL CCTrCH individually in every radio frame. All bursts and transport channels of a CCTrCH shall be taken into account. Synchronization status is indicated to higher layers, by using the CPHY-Sync-IND or CPHY-Out-of-Sync-IND primitives.

2) Uplink synchronization primitives

Layer 1 in the Node B shall every radio frame check synchronization status, individually for each UL CCTrCH of the radio link. Synchronization status is indicated to the RL Failure/Restored triggering function using either the CPHY-Sync-IND or CPHY-Out-of-Sync-IND primitive.

In FDD the following procedures are included in Channel Synchronization procedures:

a) Common physical channel synchronization;

b) DPCCH/DPDCH synchronization.

1) Downlink synchronization primitives

Layer 1 in the UE shall every radio frame check synchronization status of the downlink dedicated channels. Synchronization status is indicated to higher layers using the CPHY-Sync-IND and CPHY-Out-of-Sync-IND primitives.

2) Uplink synchronization primitives

Layer 1 in the Node B shall every radio frame check synchronization status of all radio link sets. Synchronization status is indicated to the RL Failure/Restored triggering function using either the CPHY-Sync-IND or CPHY-Out-of-Sync-IND primitive. Hence, only one synchronization status indication shall be given per radio link set.

4.2.12 Measurements

The physical layer measurements reported to higher layers are defined.

4.2.12.1 UE measurement abilities

There are some differences about UE measurement abilities between FDD and LCR TDD.

- The specific abilities for FDD:
  - UE Rx-Tx time difference.
- The specific abilities for TDD:
  - Timeslot ISCP.
  - SIR.
  - Timing Advance (TADV).
- Common abilities which are measured differently:
  - SFN-CFN observed time difference.
  - SFN-SFN observed time difference.
  - Observed time difference to GSM cell.
  - UE GPS Timing of Cell Frames for UE positioning.

4.2.12.2 UTRAN measurement abilities

There are some differences about UTRAN measurement abilities between FDD and LCR TDD.

- The specific abilities for FDD:
  - SIR_{error}.
  - Physical channel BER.
  - Round trip time.
  - PRACH/PCPCH Propagation delay.
  - Acknowledged PRACH preambles.
  - Detected PCPCH access preambles.
  - Acknowledged PCPCH access preambles.
- The specific abilities for LCR TDD:

  RSCP.

  Timeslot ISCP.

  RX Timing Deviation.

  Cell Sync Burst Timing.

Cell Sync Burst SIR.

Received SYNC-UL Timing Deviation.

- Common abilities which are measured differently:
  - SIR.
  - SFN-SFN observed time difference.

4.2.12.3 Compressed mode (For FDD)

The UE capabilities define whether a UE requires compressed mode in order to monitor cells on other FDD frequencies , modes or radio access technologies. UE capabilities indicate the need for compressed mode separately for the uplink and downlink and for each mode, radio access technology and frequency band.

The UE shall support one single measurement purpose for one transmission gap pattern sequence. The measurement purpose of the transmission gap pattern sequence is signalled by higher layers. In response to a request from higher layers, the UTRAN shall signal to the UE the compressed mode parameters.

A transmission gap pattern sequence consists of alternating transmission gap patterns 1 and 2, each of these patterns in turn consists of one or two transmission gaps. See figure 4-13.

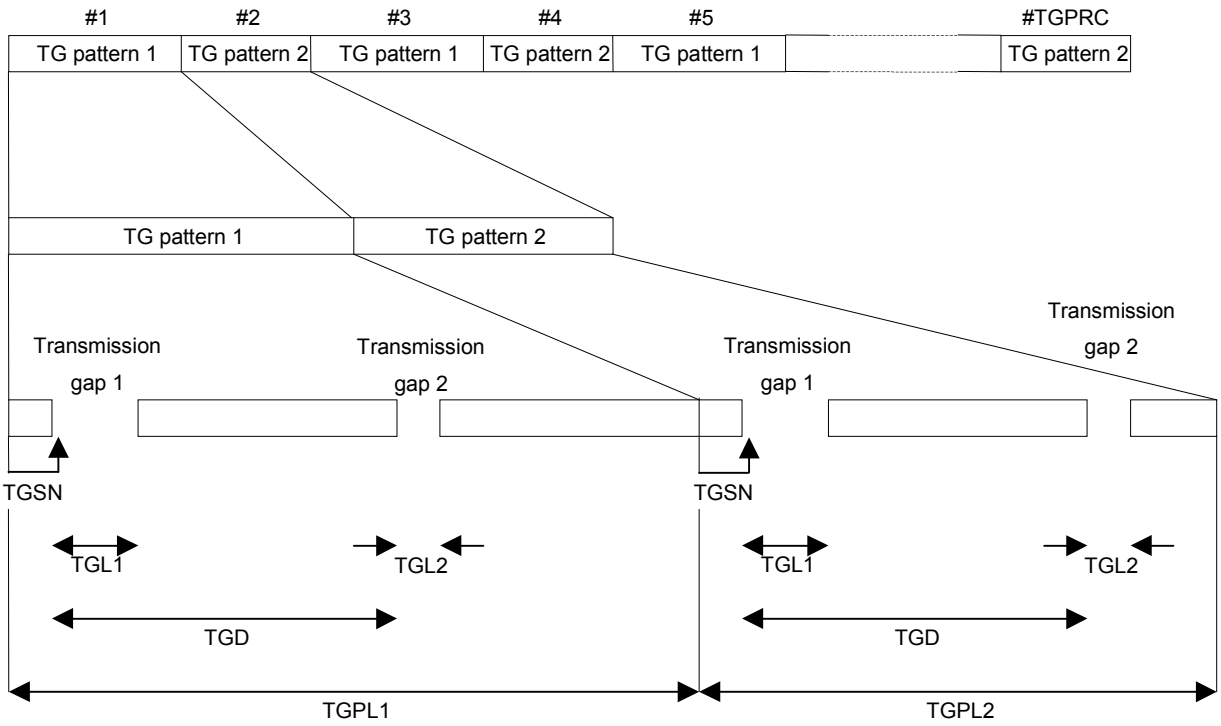


Figure 4-13: Illustration of compressed mode pattern parameters

The following parameters characterize a transmission gap pattern:

- TGSN (Transmission Gap Starting Slot Number).
- TGL1 (Transmission Gap Length 1).
- TGL2 (Transmission Gap Length 2).
- TGD (Transmission Gap start Distance).
- TGPL1 (Transmission Gap Pattern Length).
- TGPL2 (Transmission Gap Pattern Length).

The following parameters control the transmission gap pattern sequence start and repetition:

- TGPRC (Transmission Gap Pattern Repetition Count).
- TGCFN (Transmission Gap Connection Frame Number).

In addition to the parameters defining the positions of transmission gaps, each transmission gap pattern sequence is characterized by:

- UL/DL compressed mode selection.
- UL compressed mode method.
- DL compressed mode method.
- downlink frame type.
- scrambling code change.
- RPP: Recovery Period Power.
- ITP: Initial Transmit Power.

The UE shall support simultaneous compressed mode pattern sequences which can be used for different measurements. The following measurement purposes can be signalled from higher layers:

- FDD.
- TDD.
- GSM carrier RSSI measurement.
- Initial BSIC identification.
- BSIC re-confirmation.

4.2.12.4 Transmit diversity

4.2.12.4.1 In LCR-TDD

The open loop downlink transmit diversity includes two kinds of diversity:SCTD and TSTD. While SCTD can be applied to any beacon channel, typically Primary CCPCH, TSTD can ben used in DPCH, PDSCH, Primary CCPCH and DwPCH.

The closed loop mode transmit diversity can be used in DPCH and PDSCH.

4.2.12.4.2 In FDD

The open loop downlink transmit diversity includes two kinds of diversity:STTD and TSTD. While TSTD can ben used only in SCH, STTD can be used in Primary CCPCH, S-CCPCH, DPCH, PDSCH, AICH, PICH, AP-AICH, CD/CA-ICH, CSICH, and DL-DPCCH for CPCH.

The closed loop mode transmit diversity divided into two modes can be used in DPCH, PDSCH, and DL-DPCCH for CPCH.. For the closed loop mode 1 different orthogonal dedicated pilot symbols in the DPCCH are sent on two different antennas. For closed loop mode 2 the same dedicated pilot symbols in the DPCCH are sent on both antennas.

4.3 Differences in L2 on Uu interface

L2 includes four sublayer: MAC（Medium Access Control）,RLC（Radio Link Control）,PDCP(Packet Data Control Protocol)and BMC(Broadcast/Multicast Control).

The differences only exist in MAC sublayer for FDD and LCR TDD mode and the same in the other sublayers.

4.3.1 MAC Channel Structure

The MAC operates on the channels defined below; the transport channels are described between MAC and Layer 1, the logical channels are described between MAC and RLC.

There are some specific transport channels in FDD and LCR TDD.

In FDD:The CPCH (Common Packet Channel)

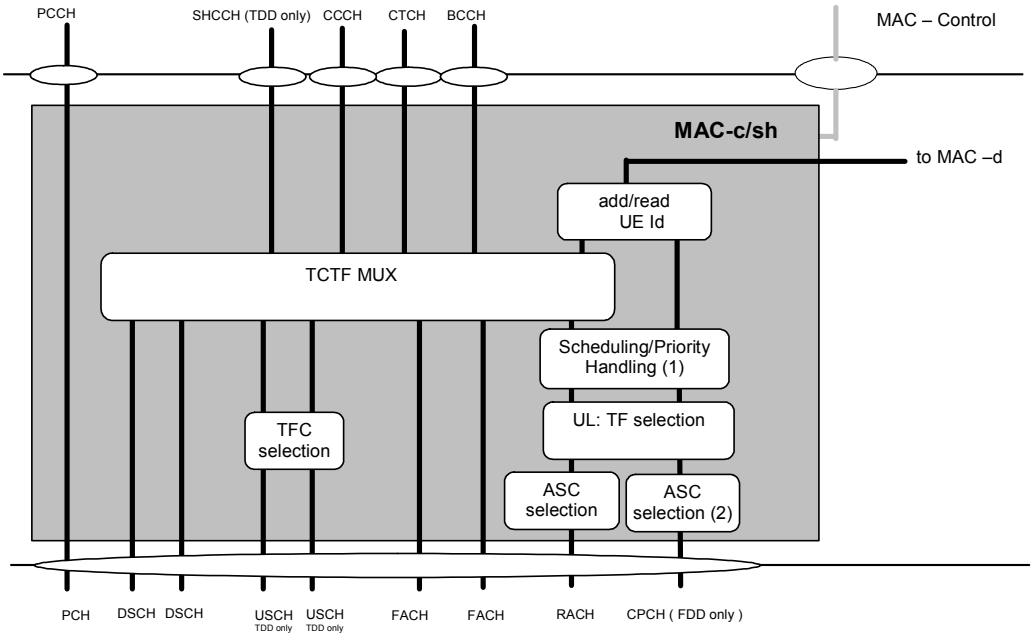
In LCR TDD:

- The USCH(Uplink Shared Channel)

4.3.2 MAC Entities

MAC architecture are constructed from MAC entities: MAC-c/sh, MAC-b and MAC-d. Because the MAC-c/sh (see figures 4-14 and 4-15) controls access to common transport channels, there are some differences in MAC-c/sh entity to handle the different transport channels for FDD and LCR TDD mode, as the following channels:

- RACH.
- CPCH, exists only in FDD mode.
- USCH, exists only in TDD mode.



NOTE 1: Scheduling /Priority handling is applicable for CPCH.
NOTE 2: In case of CPCH, ASC selection may be applicable for AP preamble.

Figure 4-14: UE side MAC architecture / MAC-c/sh details

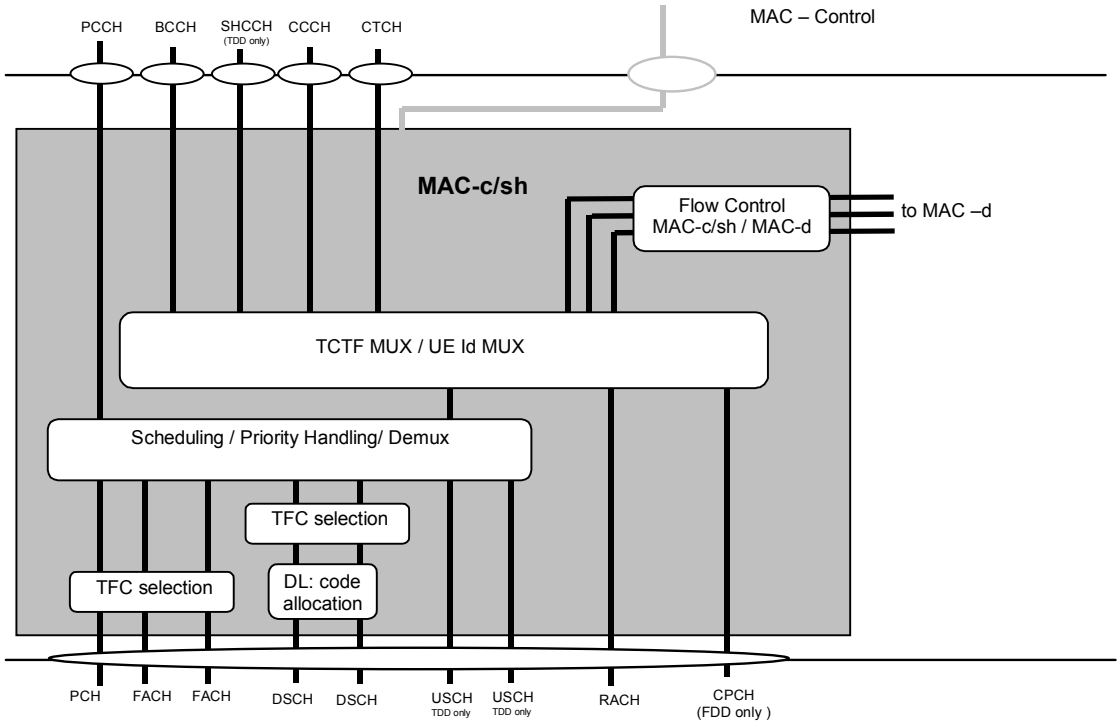


Figure 4-15: UTRAN side MAC architecture / MAC-c/sh details

4.3.3 MAC Functions

The functions offered by MAC are totally the same in LCR TDD and FDD, but there is a specific function exists only in FDD mode:

- Access Service Class selection for CPCH transmission.

4.3.4 MAC Data PDU

MAC PDU consists of an optional MAC header and a MAC Service Data Unit (MAC SDU). MAC header includes TCTF (Target Channel Type Field), UE-Id Type, UE-Id and C/T as figure 4-16.

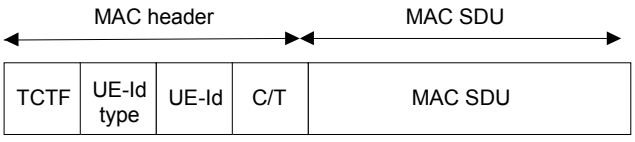


Figure 4-16: MAC Data PDU

Both the MAC header and the MAC SDU are of variable size. The content and the size of the MAC header depends on the type of the logical channel, and in some cases none of the parameters in the MAC header are needed.

Coding of the TCTF field is different for FDD and LCR TDD mode and Coding of the others is the same, But there is a specific value in UE-Id field for FDD.

1) TCTF field

The TCTF field is a flag that provides identification of the logical channel class on FACH and RACH transport channels, i.e. whether it carries BCCH, CCCH, CTCH, SHCCH or dedicated logical channel information.

- The size of the TCTF field of FACH:
  - The size of the TCTF field of FACH for FDD is either 2 bits or 8 bits depending on the value of the 2 most significant bits and for TDD is either 3 bits or 5 bits depending on the value of the 3 most significant bits, see tables 4-4 and 4-5.

Table 4-4: Coding of the Target Channel Type Field on FACH for TDD

TCTF	Designation
000	BCCH
001	CCCH
010	CTCH
01100	DCCH or DTCH over FACH
01101 to 01111	Reserved (PDUs with this coding will be discarded by this version of the protocol)
100	SHCCH
101 to 111	Reserved (PDUs with this coding will be discarded by this version of the protocol)

Table 4-5: Coding of the Target Channel Type Field on FACH for FDD

TCTF	Designation
00	BCCH
01000000	CCCH
01000001 to 01111111	Reserved (PDUs with this coding will be discarded by this version of the protocol)
10000000	CTCH
10000001 to 10111111	Reserved (PDUs with this coding will be discarded by this version of the protocol)
11	DCCH or DTCH over FACH

- The size of the TCTF of the RACH:
  - The size of the TCTF of the RACH for FDD is 2 bits and for TDD is either 2 bits or 4 bits depending on the value of the 2 most significant bits, see tables 4-6 and 4-7.

Table 4-6: Coding of the Target Channel Type Field on RACH for FDD

TCTF	Designation
00	CCCH
01	DCCH or DTCH over RACH
10 to 11	Reserved (PDUs with this coding will be discarded by this version of the protocol)

Table 4-7: Coding of the Target Channel Type Field on RACH for TDD

TCTF	Designation
00	CCCH
0100	DCCH or DTCH Over RACH
0101 to 0111	Reserved (PDUs with this coding will be discarded by this version of the protocol)
10	SHCCH
11	Reserved (PDUs with this coding will be discarded by this version of the protocol)

- The size of the TCTF of the USCH or DSCH:
  - The size of the TCTF of the USCH or DSCH for TDD is 1 bit, see table 4-8.

Table 4-8: Coding of the Target Channel Type Field on USCH or DSCH (TDD only)

TCTF	Designation
0	SHCCH
1	DCCH or DTCH over USCH or DSCH

- DTCH or DCCH mapped to DSCH or USCH:
  - The TCTF field is included in the MAC header for TDD only.
  - The UE-Id type and UE-Id are included in the MAC header for FDD only.
- DTCH or DCCH mapped to CPCH (FDD):
  - UE-Id type field and UE-Id are included in the MAC header.
- DTCH or DCCH mapped to DSCH or USCH where DTCH or DCCH are the only logical channels:
  - The UE-Id type and UE-Id are included in the MAC header for FDD only.

2) UE-Id Field

The UE-Id field provides an identifier of the UE on common transport channels.

As a specific UE-Id value, DSCH Radio Network Temporary Identity (DSCH-RNTI) is used on DTCH and DCCH in downlink when mapped onto DSCH transport channel for FDD mode.

Table 4-9: Lengths of UE-Id field

UE Id type	Length of UE Id field
U-RNTI	32 bits
C-RNTI	16 bits
DSCH-RNTI	16 bits

4.3.5 Specific Functions

1) Control of RACH transmissions

The MAC sublayer is in charge of controlling the timing of RACH transmissions on transmission time interval level. There are some differences in control of RACH transmissions owing to the following reasons:

- Different IEs for control of RACH transmission configured by RRC:
  - In FDD:
    - TTI for RACH: 10 ms or 20 ms;
  - In LCR TDD:
    - TTI for RACH: 5 ms, 10 ms or 20 ms.
- Differences in TTI selection mode.
- The different physical RACH resources, which may be divided between different Access Service Classes in order to provide different priorities of RACH usage:
  - In FDD:
    - Physical RACH resources include Access slots and preamble signatures;
  - In LCR TDD:
    - Physical RACH resource only includes SYNC1 code.RACH transmission control procedure is different for LCR TDD and FDD, see figures 4-17 and 4-18.

In FDD mode, the control procedure is more complex than TDD mode.

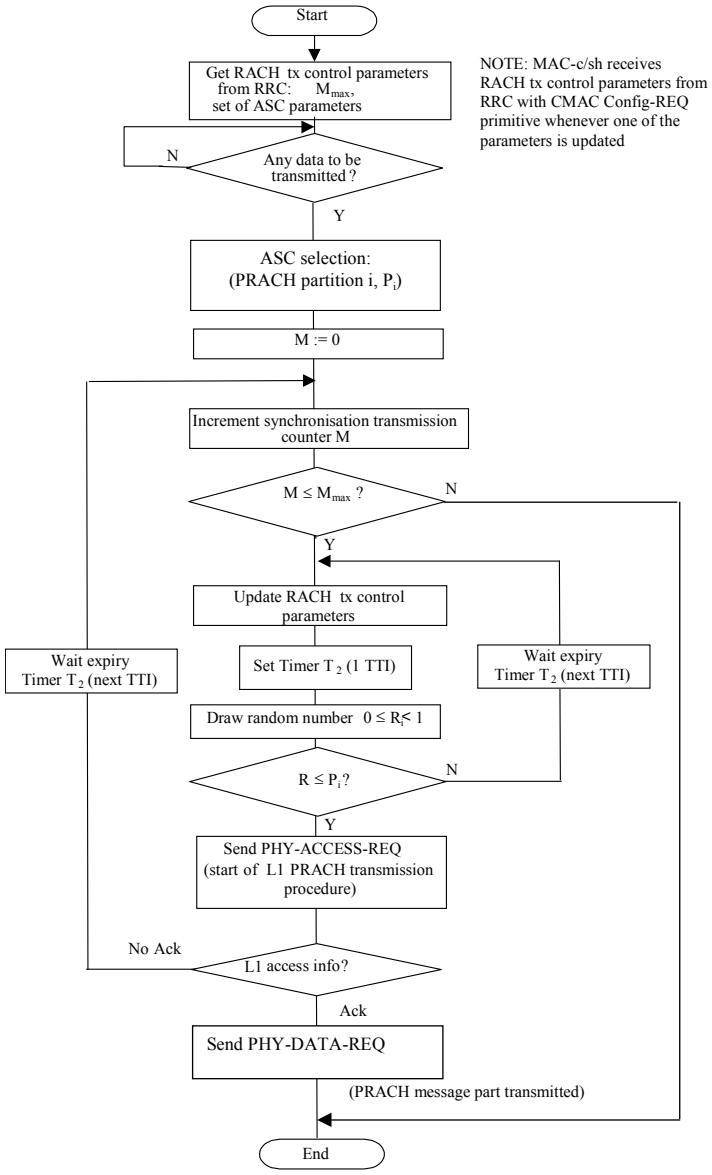


Figure 4-17 (informative): RACH transmission control procedure for LCR TDD UE Side

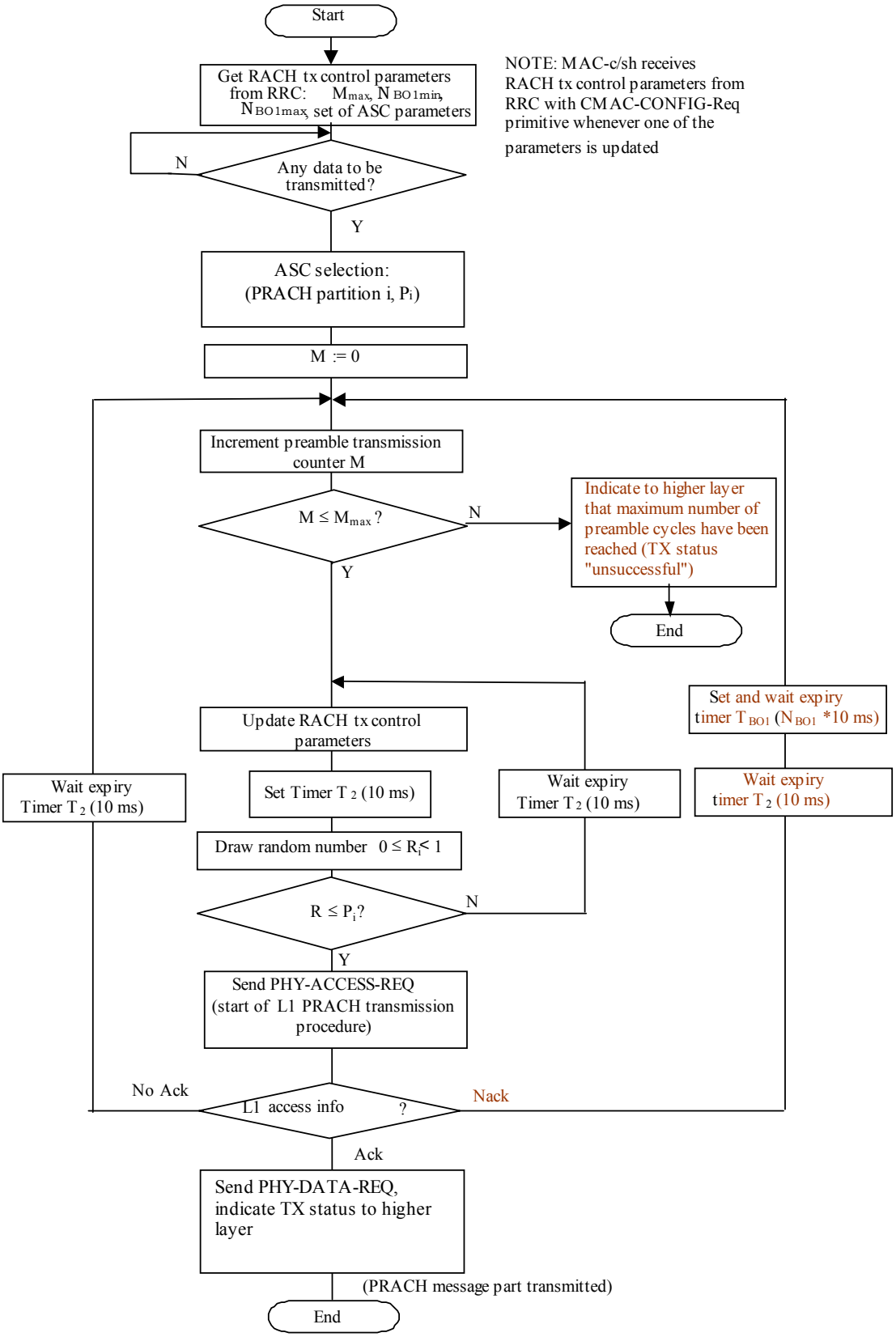


Figure 4-18 (informative): RACH transmission control procedure for FDD UE Side

2) Control of CPCH transmissions (FDD mode)

The MAC layer controls the timing of CPCH transmissions on transmission time interval level (i.e. on 10 ms, 20 ms, 40 ms or 80 ms level); the timing on access slot level is controlled by L1. MAC controls the timing of each initial preamble ramping cycle as well as successive preamble ramping cycles. Note that retransmissions in case of erroneously received CPCH message part are under control of higher layers. The CPCH transmissions are performed by the UE as illustrated in figures 4-19 and 4-20. Figure 4-19 procedure is used for access to CPCH channel. Figure 4-20 procedure is used for CPCH Message transmission on the CPCH channel obtained using the access procedure.

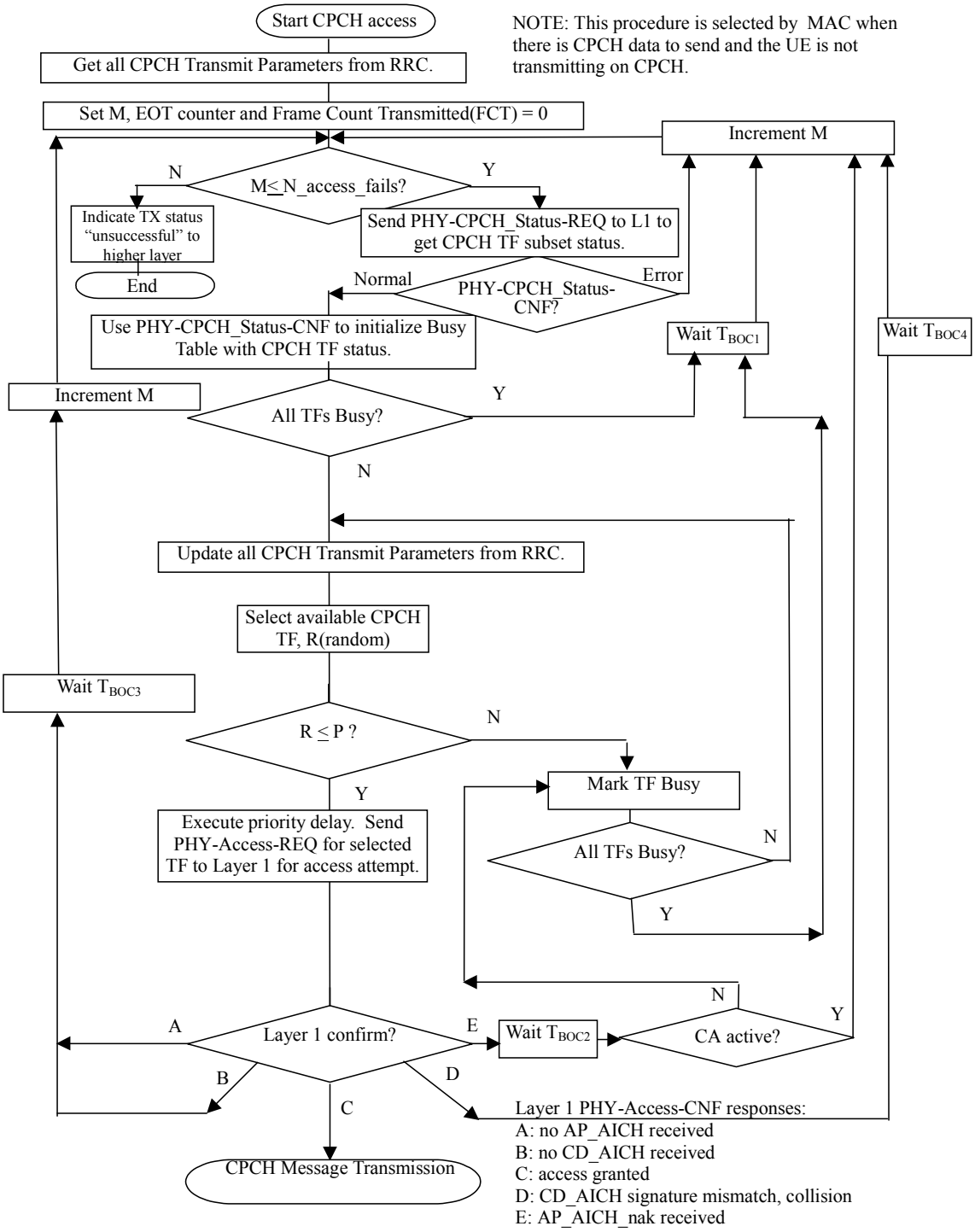


Figure 4-19: CPCH transmission control procedure for access (informative)

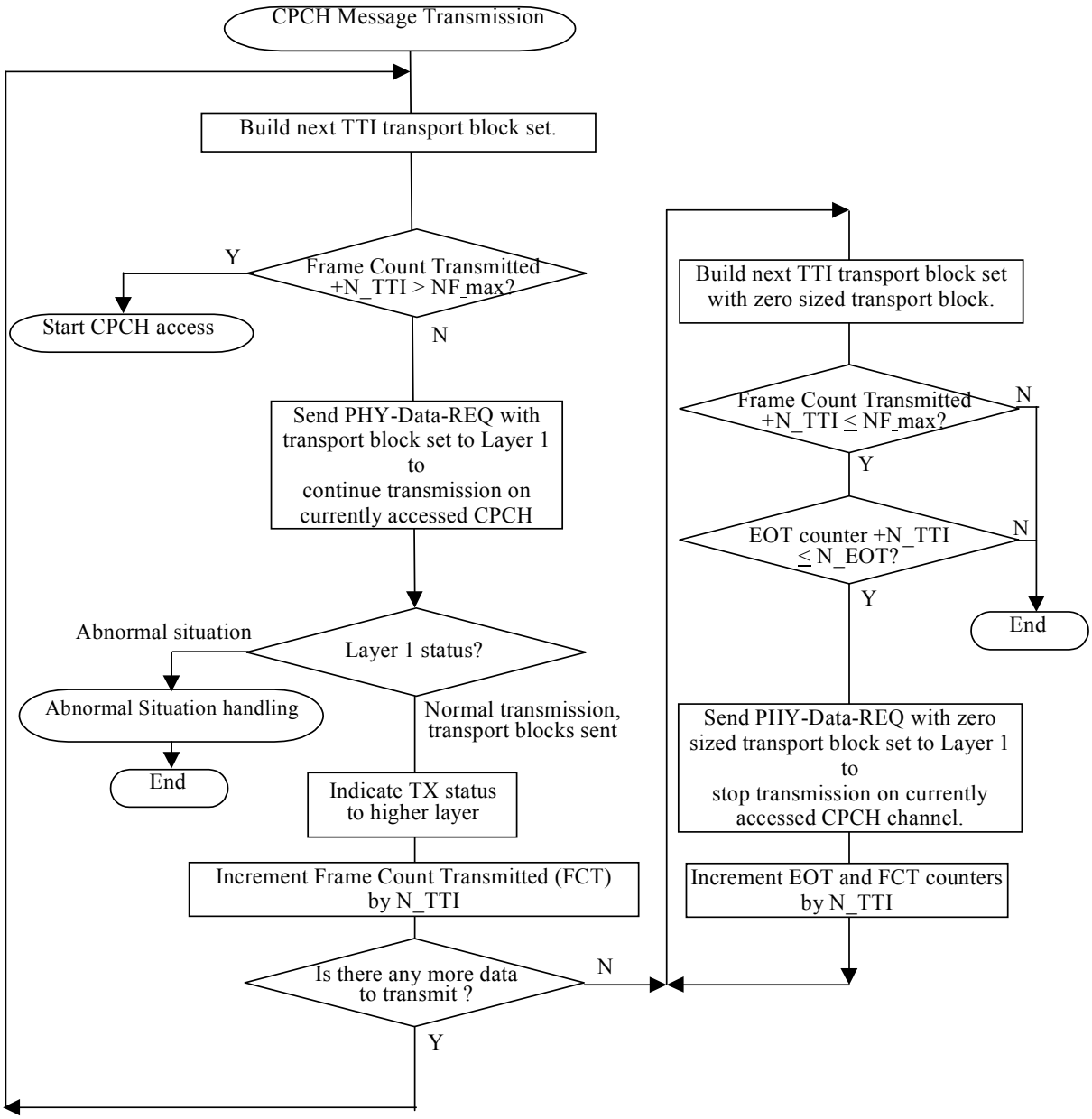


Figure 4-20: CPCH transmission control procedure for CPCH Message Transmission (informative)

3) Transport format combination selection in UE

RRC can control the scheduling of uplink data by giving each logical channel a priority between 1 and 8, where 1 is the highest priority and 8 the lowest. TFC selection in the UE shall be done in accordance with the priorities indicated by RRC.

In TDD mode:

UEs in CELL_FACH state using the USCH transport channel and UEs in CELL_DCH state shall continuously monitor the state of each TFC based on its required transmit power versus the maximum UE transmit power.

In FDD Mode:

UEs in CELL_FACH state may estimate the channel path loss and set to excess power state all the TFCs requiring more power than the Maximum UE transmitter power.

4.3.6 Elements for layer-to-layer communication

Primitives between MAC and RLC or RRC are the same, but their parameters are different.

1) Primitives between MAC and RLC

- RX Timing Deviation, TDD only it contains the RX Timing Deviation as measured by the physical layer for the physical resources carrying the data of the Message Unit. This parameter is optional and only for Indication. It is needed for the transfer of the RX Timing Deviation measurement of RACH transmissions carrying CCCH data to RRC.

2) Primitives between MAC and RRC

- RACH transmission control elements:
  - In FDD:
    - Maximum number of preamble ramping cycles (Mmax), Minimum and maximum number of time units between two preamble ramping cycles (NBO1min and NBO1max).
  - In LCR TDD:
    - synchronization attempts (Mmax).
- CPCH transmission control element, FDD only:
  - CPCH persistency value, P for each Transport Format.
  - Maximum number of preamble ramping cycles N_{access_fails}.
  - NF_max (Maximum number of frames for CPCH transmission for each Transport Format).
  - N_EOT (Number of EOT for release of CPCH transmission).
  - Backoff control timer parameters.
  - Transport Format Set.
  - Initial Priority Delays.
  - Channel Assignment Active indication.

4.4 Differences in L3 on Uu interface

4.4.1 RRC Services

RRC Services provided to upper layers are the same as for UTRA FDD/LCR TDD.

4.4.2 RRC Functions

In the whole stratum, there is no other difference between FDD and LCR TDD except for slow DCA , a function of allocation of preferred radio resources based on long-term decision criteria in LCR TDD.

There are still some specific RRC functions differences existing between FDD and LCR TDD.

4.4.2.1 Specific functions for FDD only

4.4.2.1.1 Dynamic resource allocation control of Uplink DCH

The network uses this function to dynamically control the allocation of resources on an uplink DCH. A UE that supports the simultaneous reception of one SCCPCH and one DPCH shall support the DRAC function.

This function shall be activated in the UE when it has been allocated an uplink DCH with DRAC static information elements. Such uplink DCHs can be established through RB establishment procedure, RB reconfiguration procedure, RB release procedure or Transport Channel Reconfiguration procedure by setting the DRAC static information elements to indicate that the DCH is controlled by the DRAC function.

The UE shall periodically listen to the SIB 10 of each cell in its Active Set. The scheduling information of SIB10 and the SCCPCH info on which the SIB10 is transmitted are provided to the UE when the DCH is set up and when a cell is added in its active set. In case several SIB10 messages from different cells are scheduled at the same time, the UE shall only listen to the SIB10 broadcast in the cell of its Active Set having the best CPICH measurements.

The UE determines the allowed subset of TFCS according to the selected maximum bit rate value calculated from DRAC parameters in SIB10. The allowed subset of TFCS are the ones of the TFCS for which the sum of bit rates of the DCH controlled by DRAC is lower than Maximum Bit Rate IE, i.e.:

$$\sum_{\text{DCHi controlled by DRAC}} TBSsize_i / TTI_i < MaximumBitRate$$

4.4.2.1.2 UE autonomous update of active set on non-used frequency

For event-triggered inter frequency measurements it is possible to specify intra-frequency measurements reporting events for support of maintenance of an active set associated with a non-used frequency considered in that measurement, a "virtual active set" is used in the evaluation of the frequency quality estimates. The "initial virtual active set" for a frequency is the virtual active set that is associated to that frequency just after a message was received that sets up or modifies the inter-frequency measurement.

The way the virtual active sets being initiated and updated for the non-used frequencies considered in an inter-frequency measurement depends on whether the IE "intra-frequency reporting criteria" is stored for the inter-frequency measurement or not. In case that IE is not stored, the IE "intra-frequency measurement" stored in other measurements of type intra-frequency shall be used.

4.4.2.1.3 Versatile channel assignment mode mapping rule

When Versatile Channel Assignment Method (VCAM) is used in the CPCH procedure, the following mapping rules shall be used to specify one PCPCH.

If the number of PCPCHs is less than or equal to 16, there is a one to one mapping between the CA index and the PCPCH index.

When the number of PCPCHs is greater than 16, a combination of an AP signature (and/or AP sub-channel) number and a CA signature number specifies one PCPCH.

4.4.2.2 Specific functions for LCR TDD only

There is no specific function for LCR TDD only.

4.4.2.3 Specific functions for FDD/LCR TDD with different using method

Because FDD and LCR TDD have different physical layer structure, in FDD, radio resource unit is specified by frequency, SF, channel code and scramble code, in LCR TDD, radio resource unit is specified by frequency, SF, channel code, scramble code, time slot, and midamble code. For supporting layer 3 radio resource control function, some kinds of layer1 measurement are performed by UE both in FDD and LCR TDD, but differ in using method.

4.4.2.3.1 Intra-frequency measurement

The differences existing in measurement quantities and concerned report quantities are as follows:

- Downlink path loss in FDD means path loss of Primary CPICH, while in LCR TDD it means path loss of Primary CCPCH.
- RSCP in FDD means Primary CPICH RSCP, while in LCR TDD it means Primary CCPCH RSCP.
- Downlink E_c/N_0 is used only in FDD.
- Timeslot ISCP is used only in LCR TDD.

The other difference existing in report quantity is Proposed TGSN in LCR TDD.

A description of those values can be found in 3GPP TS 34.123-1

Reporting event 1G, Reporting event 1H and Reporting event 1I are added for Intra-frequency reporting events in LCR TDD.

Reporting event 1G: Change of best cell, is used in LCR TDD to collect some information of best cell in monitor set for handover.

Reporting event 1H: Timeslot ISCP below a certain threshold, is used in LCR TDD to collect some information of slot interference of different adjacent cells in order to assist UTRAN to perform slow DCA procedure to allocate radio resources amongst adjacent cells.

Reporting event 1I: Timeslot ISCP above a certain threshold, is used in LCR TDD to collect some information of slot interference in different adjacent cells in order to assist UTRAN to perform slow DCA procedure to allocate radio resources amongst adjacent cells.

4.4.2.3.2 Inter-frequency measurement

The differences existing in measurement quantities and concerned report quantities are as follows:

- Downlink path loss in FDD means pathloss of Primary CPICH, while in LCR TDD it means pathloss of Primary CCPCH.
- RSCP in FDD means Primary CPICH RSCP, while in LCR TDD it means Primary CCPCH RSCP.
- Downlink E_c/N_0 is used only in FDD.

The other difference existing in report quantities are ISCP measured on Timeslot basis and Proposed TGSN in LCR TDD.

A description of those values can be found in 3GPP TS 34.123-1

Frequency quality estimate is different in FDD and LCR TDD:

- in FDD it is the estimated quality of the virtual active set on non-used frequency;
- in LCR TDD it is the estimated quality of a cell on non-used frequency.

4.4.2.3.3 UE Internal measurement

The following differences in measurement quantities exist:

- UE transmission (Tx) power, for LCR TDD measured on a timeslot basis.
- T_{ADV} only for LCR TDD.
- UE Rx-Tx time difference only for FDD.

4.4.2.3.4 Quality measurement

The additional quality measurement quantity in LCR TDD is Timeslot SIR.

4.4.3 RRC Procedures

4.4.3.1 Specific procedures for FDD only

4.4.3.1.1 Active set update

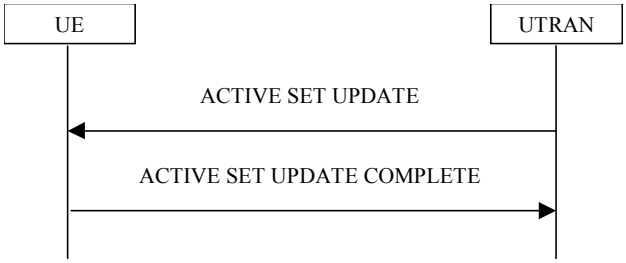


Figure 4-21: Active Set Update procedure

The purpose of the active set update procedure is to update the active set of the connection between the UE and UTRAN. This procedure shall be used in CELL_DCH state to make the following modifications of the active set of the connection:

a) Radio link addition;

b) Radio link removal;

c) Combined radio link addition and removal.

The UE should keep on using the old RLs while configuring the new RLs. Also the UE should keep the transmitter turned on during the procedure.

4.4.3.1.2 Open loop power control upon establishment of DPCCH

When establishing the first DPCCH the UE shall start the UL inner loop power control at a power level according to:

1) DPCCH_Initial_power = DPCCH_Power_offset – CPICH_RSCP.

Where:

- DPCCH_Power_offset shall have the value of IE "DPCCH Power offset" in IE "Uplink DPCH power control info".

The value for the CPICH_RSCP shall be measured by the UE.

4.4.3.1.3 Physical channel establishment criteria

When a physical dedicated channel establishment is initiated by the UE, the UE performs synchronization procedure A (FDD only), starts a timer T312 and waits for layer 1 to indicate N312 "in sync" indications. On receiving N312 "in sync" indications, the physical channel is considered established and the timer T312 is stopped and reset.

If the timer T312 expires before the physical channel is established, the UE shall consider this as a "physical channel failure".

4.4.3.2 Specific procedures for LCR TDD only

4.4.3.2.1 Physical Shared Channel Allocation

Figure 4-22: Physical Shared Channel Allocation procedure

The purpose of this procedure is to allocate radio resources to USCH and/or DSCH transport channels for use by a UE. This procedure can also be used to indicate to the UE, that a PUSCH allocation is pending, in order to prevent further capacity requests from the UE.

UEs are not required to receive FACH and DSCH simultaneously, i.e. if resources are allocated to DSCH the FACH reception may be suspended.

4.4.3.2.2 PUSCH capacity request

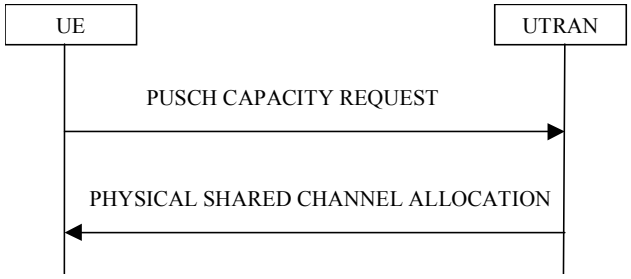


Figure 4-23: PUSCH Capacity request procedure

With this procedure, the UE transmits its request for PUSCH resources to the UTRAN. In the normal case, the UTRAN responds with a PHYSICAL SHARED CHANNEL ALLOCATION message, which either allocates the requested PUSCH resources, and/or allocates a PDSCH resource, or may just serve as an acknowledgement, indicating that PUSCH allocation is pending.

This procedure can also be used to acknowledge the reception of a PHYSICAL SHARED CHANNEL ALLOCATION message, or to indicate a protocol error in that message.

With the PUSCH CAPACITY REQUEST message, the UE can request capacity for one or more USCH.

if the Radio Bearer associated with the MEASUREMENT_IDENTITY fulfilling the reporting criteria for an ongoing traffic volume measurement is mapped on transport channel of type USCH, the UE shall initiate the "PUSCH CAPACITY REQUEST" procedure instead of transmitting a MEASUREMENT REPORT.

4.4.3.2.3 Uplink Physical Channel Control

Figure 4-24: Uplink Physical Channel Control procedure

The uplink physical channel control procedure is used to control the uplink outer loop power control and Uplink synchronization running in the UE.

The UTRAN uses the procedure to update parameters for uplink open loop power control in the UE for one CCTrCH or to inform the UE about a new Uplink synchronization step size and Uplink synchronization frequency.

4.4.3.2.4 UL Timing advance control

When the UE process "physical shared channel allocation", "physical channel reconfig", "handover to UTRAN", "cell update confirm ", or "rb setup/reconfig" procedures with the IE "UL Timing Advance Control" in LCR TDD, the UE shall:

- if the IE "Synchronization parameters" is included:
  - initiate a sequence of UpPCH SYNC_UL code transmissions using a code selected from the set specified and continue until a timing correction is received in the specified FPACH (received for WT sub-frames following the sub-frame in which the transmission was made) or until Max SYNC_UL transmissions have been completed. Each transmission is made in the first sub-frame possible following the end of each FPACH reception interval using the timing specified. A new code is selected for each transmission. - if a timing correction is received within Max SYNC_UL transmissions the procedure is completed. The assigned uplink resources may then be used, commencing at the first possible TTI boundary or the SFN in which the assignment commences, whichever is the later. - if no timing correction has been received within Max SYNC_UL transmissions, the synchronization procedure has failed. If the assigned resources are DCH, the UE should not transmit using these resources and should respond as if a physical channel failure has occurred. If the assigned resources are USCH then the UE should ignore the USCH allocation.
- if the IE "Synchronization parameters" is not included:
  - in case of no cell change:
    - continue to use the current uplink timing.
  - in case of cell change:
    - evaluate and apply the timing correction TA_{new} for uplink transmissions.

4.4.3.3 Common procedures for FDD/LCR TDD with different process

4.4.3.3.1 Open loop power control

In FDD, preamble is used in the initial random access on RACH and CPCHand open loop power control is used for preamble transmission. In LCR TDD, uplink synchronization code SYNC_UL is transmitted on UpPCH for initial access and open loop control is also used for UpPCH transmission.

For FDD, prior to PRACH or PCPCH transmission the UE shall:

- read the IEs "Primary CPICH Tx power" and "Constant value" in System Information Block type 6 (or System Information Block type 5, if system information block type 6 is not being broadcast) and the IE "UL interference" in System Information Block type 7;
- measure the value for the CPICH_RSCP;
- calculate the power for the first preamble as:

Preamble_Initial_Power = Primary CPICH TX power – CPICH_RSCP + UL interference + Constant Value

For LCR TDD the UE shall:

- calculate the UL transmit power according to the following formula for each UpPCH code transmission:

$$P_{UpPCH} = L_{PCCPCH} + PRX_{UpPCHdes} + (i-1) \times Pwr_{ramp}$$

NOTE: When i equals 1, the initial signature power "Signature_Initial_Power" corresponds to P_{UpPCH} with i set to 1.

- calculate the UL transmit power according to the following formula for each PRACH transmission:

$$P_{PRACH} = L_{PCCPCH} + PRX_{PRACHdes} + (i_{UpPCH}-1) \times Pwrramp$$

- calculate the initial UL transmit power according to the following formula for the PUSCH. Once the UE receives TPC bits relating to the PUSCH then it transits to closed loop power control. If successive PUSCH resource allocations are contiguous then no return is made to open loop power control at the beginning of the succeeding resource allocation.

$$P_{USCH} = PRX_{PUSCHdes} + L_{PCCPCH}$$

- calculate the initial UL transmit power according to the following formula for the DPCH. Once the UE receives TPC bits relating to the uplink DPCH then it transits to closed loop power control.

$$P_{DPCH} = PRX_{PDPCHdes} + L_{PCCPCH}$$

Where:

- P_{UpPCH}, P_{PRACH}, P_{DPCH} and P_{USCH}: Transmitter power level in dBm.
- L_{PCCPCH}: Measurement representing path loss in dB.
- $PRXchannel_{des}$: Desired channel RX power at the cell's receiver in dBm.
- Pwr_{ramp}: increasing step value in transmission power by every UpPCH transmission.

4.4.3.3.2 CFN calculation

The DOFF used in the formulas in this clause concerns the value of IE "Default DPCH Offset Value" received in the message that instructs the UE to enter CELL_DCH state or to perform timing re-initialized hard handover.

When the UE receives any of the messages causing the UE to perform a state transition to CELL_DCH, or the UE is in CELL_DCH state and receives any of the messages causing the UE to perform a timing re-initialized hard handover, the UE shall set the CFN in relation to the SFN of the first radio link listed in the IE "Downlink information per radio link list" included in that message according to the following formula:

- for FDD:

$$CFN = (SFN - (DOFF \text{ div } 38400)) \bmod 256$$

where the formula gives the CFN of the downlink DPCH frame which starts at the same time as or which starts during the PCCPCH frame with the given SFN.

- for TDD:

CFN = (SFN - DOFF) mod 256.

Upon inter RAT handover to UTRAN the UE shall, regardless of the value received within IE "Timing indication" (if received) read SFN on target cell and set the CFN according to the preceding two formulas.

When the UE performs cell selection, re-selection or changes to CELL_FACH state the UE shall set CFN for all common or shared channels according to:

CFN = SFN mod 256

where the formula gives the CFN of the downlink common or shared channel frame which starts at the same time as or which starts during the PCCPCH frame with the given SFN.

4.4.3.3.3 PRACH selection

For this version of the specification, when a UE selects a cell, the uplink frequency to be used for the initial PRACH transmission shall have a default duplex frequency spacing offset from the downlink frequency that the cell was selected on (for FDD only).

The UE shall select a "PRACH system information" according to the following rule. The UE shall:

- select a "PRACH system information" from the ones indicated in the IE "PRACH system information list" in System Information Block type 5 (applicable in Idle Mode and Connected Mode) or System Information Block type 6 (applicable in Connected Mode only), as follows:
  - if in connected mode and System Information Block type 6 is defined and includes PRACH info:
    - compile a list of candidate PRACHs that consists of the PRACH system information listed in SIB 6, in the order of appearance as in SIB 6.
  - otherwise:
    - compile a list of candidate PRACHs that consists of the PRACH system information listed in SIB 5, in the order of appearance as in SIB 5.
  - remove from the list of candidate PRACHs those PRACHs that have a TTI length different from the selected value;
  - select a PRACH randomly from the list of candidate PRACHs as follows:

    "Index of selected PRACH" = floor (rand * K)

    where K is equal to the number of candidate PRACH system informations, "rand" is a random number uniformly distributed in the $0 \leq rand < 1$ and "floor" refers to rounding down to nearest integer. At start-up of the random number generator in the UE the seed shall be dependent on the IMSI of the UE or time, thereby avoiding that all UEs select the same RACH;
  - use the TFCS of the selected PRACH when performing TFC selection;
  - reselect the PRACH system information when a new cell is selected. RACH reselection may also be performed after each transmission of a Transport Block Set on RACH.
- for emergency call, the UE is allowed to select any of the available PRACH system informations.

After selecting a PRACH system information, the RRC in the UE shall configure the MAC and the physical layer for the RACH access according to the parameters included in the selected "PRACH system information" IE.

4.4.3.3.4 RACH TTI selection

In FDD, perform RACH TTI selection as follows:

- RACH may be assigned a 10 or 20 ms TTI. The supported TTI is indicated as a semi-static parameter of the RACH Transport Format in system information. If only RACHs with one particular TTI length are included in the list of candidate PRACH(s), select this TTI length . If both PRACHs with 10ms and 20ms TTI lengths are included in the list, perform TTI selection as follows:

- when the UE calculates the initial preamble transmit power ("Preamble_Initial_Power"), select a TF to be employed for calculation of a transmit power margin as follows:

  • from the TFs supported by all candidate PRACHs keep those which correspond to a single transport block of all configured RLC sizes (i.e., in idle mode, the RLC size applicable for RB0, in connected mode, the RLC sizes configured with explicit "RB mapping info"). If more than a single TF remain applicable, the UE may select any of these. Preferably the UE should select the TF which is intended to be used at the next transmission or, if such information is not available, the TF corresponding to the largest configured RLC size.

- calculate a transmit power margin,

  Margin = {min(Maximum allowed UL tx power, P_MAX) –max(Preamble_Initial_Power,
  Preamble_Initial_Power + ΔPp-m + 10*log10(1 + (βd /βc)2)}

  where "Maximum allowed UL tx power" is the maximum allowed uplink transmit power indicated in system information (in dBm), and P_MAX is the maximum RF output power of the UE (dBm). The margin shall be calculated for the gain factors β_d and β_c of the TF selected in the step above, using 10ms TTI length.

NOTE: the expression Preamble_Initial_Power + ΔPp-m + $10*\log_{10}(1 + (\beta_d /\beta_c)^2)$ represents the total RACH message power if the message would be sent after the initial preamble.

- if the resulting "Margin" value is less than 6 dB:
  - select RACH with 20 ms TTI.
- otherwise, if the last L1 message transmission on PRACH failed:
  - the UE may select RACH with 20ms TTI length.
- otherwise:
  - select RACH with 10ms TTI length.

In LCR TDD, perform RACH TTI selection as follows:

- RACH may be assigned a 5 ms, 10 ms or 20 ms TTI. If, in one cell, more than one RACH is defined a UE shall select the RACH that is to be used for each transmission according to the following rule:
  - if only RACHs with one particular TTI length are assigned a transport format that is suitable for the transmission of the transport block set:
    • select this RACH's TTI length.
  - if more than one RACHs are assigned a transport format that is suitable for the transmission of the transport block set:
    • select the longest of the TTI lengths of these RACHs.

4.4.3.3.5 Reception of Handover to UTRAN command message by the UE

The UE shall be able to receive a HANDOVER TO UTRAN COMMAND message and perform an inter-RAT handover, even if no prior UE measurements have been performed on the target UTRAN cell and/or frequency.

- if IE "Specification mode" is set to "Preconfiguration":
  - use the following values for parameters that are neither signalled within the HANDOVER TO UTRAN COMMAND message nor included within pre-defined or default configuration:
    • 0 dB for the power offset $P_{Pilot\text{-}DPDCH}$ bearer in FDD;
    • calculate the Default DPCH Offset Value using the following formula:
    • in FDD:

Default DPCH Offset Value = (SRNTI 2 mod 600) × 512

- in TDD:

Default DPCH Offset Value = (SRNTI 2 mod 7)

- handle the above Default DPCH Offset Value as if an IE with that value was included in the message.

4.4.4 Generic actions on receipt of an information element

4.4.4.1 Specific information elements for FDD only

4.4.4.1.1DRAC static information

If the IE "DRAC static information" is included the UE shall:

- store the content of the IE "Transmission Time Validity";
- store the content of the IE "Time duration before retry";
- store the content of the IE "DRAC Class identity".

4.4.4.1.2Secondary CPICH info

If the IE Secondary CPICH info is included, the UE may:

- use the channelization code according to IE "channelization code", with scrambling code according to IE "DL scrambling code" in the IE "Secondary CPICH info", for channel estimation of that radio link;
- use the pilot bits on DPCCH for channel estimation.

If the IE Secondary CPICH info is not included, the UE shall:

- not use any previously stored configuration corresponding to the usage of the Secondary CPICH info.

4.4.4.1.3Primary CPICH usage for channel estimation

If the IE "Primary CPICH usage for channel estimation" is included and has the value "Primary CPICH may be used" the UE:

- may use the Primary CPICH for channel estimation;
- may use the pilot bits on DPCCH for channel estimation.

If the IE "Primary CPICH usage for channel estimation" is included and has the value "Primary CPICH shall not be used" the UE:

- shall not use the Primary CPICH for channel estimation;
- may use the Secondary CPICH for channel estimation;
- may use the pilot bits on DPCCH for channel estimation.

4.4.4.1.5PDSCH with SHO DCH Info

If the IE "PDSCH with SHO DCH Info" is included, the UE shall:

- configure itself to receive the PDSCH from the specified radio link within the active set identified by the IE "DSCH radio link identifier";
- if the TFCI has a 'hard' split:
  - if the IE "TFCI(field2) combining set" is included:

- configure the Layer 1 to combine soft only the DPCCH TFCI(field 2) of the radio links within the active set which are identified by the IE "Radio link identifier" in the IE "TFCI(field2) Combining set".

- if the IE "TFCI(field2) combining set" is not included:

- configure the L1 to combine soft the DPCCH TFCI(field 2) of all radio links within the active set.

4.4.4.1.6PDSCH code mapping

If the IE "PDSCH code mapping" is included, the UE shall:

- use the scrambling code defined by the IE "DL Scrambling Code" to receive the PDSCH;
- if the IE choice "signalling method" is set to 'code range', 'TFCI range', 'Explicit', or 'Replace', map the TFCI(field2) values to PDSCH codes.

4.4.4.1.7CPCH SET Info

If the UE has the capability to use CPCH, the UE shall use the following general procedures:

- if an IE "CPCH SET Info" is included in a dedicated message:
  - read the "CPCH set ID" included in the IE;
  - store the IE using the "CPCH set ID" as an address tag;
  - release any active dedicated physical channels in the uplink;
  - let the PCPCHs listed in the CPCH set be the default in the uplink for CPCH.
- if an IE "CPCH SET Info" is included in a System Information message:
  - read the "CPCH set ID" included in the IE;
  - store the IE using the "CPCH set ID" as an address tag.

4.4.4.1.8CPCH set ID

If the UE has the capability to use CPCH, the UE shall use the following general procedures. The UE shall:

- if an IE "CPCH set ID" is included in a dedicated message and not as part of IE "CPCH SET Info":
  - use the IE as an address tag to retrieve the corresponding stored "CPCH SET Info";
  - release any active dedicated physical channels in the uplink;
  - let the PCPCHs listed in the CPCH set be the default in the uplink for CPCH.
- if an IE "CPCH set ID" is included in a dedicated message and not as part of IE "CPCH SET Info", and if there is no corresponding stored "CPCH SET Info":
  - release any active dedicated physical channels in the uplink;
  - let the last assigned PRACH be the default in the uplink for RACH;
  - obtain current System Information on SCCPCH to obtain and store the "CPCH SET info" IE(s);
  - upon receipt of a "CPCH SET Info" which corresponds to the "CPCH set ID" IE:
    - let the PCPCHs listed in that CPCH set be the default in the uplink for CPCH.
- if an IE "CPCH set ID" is not included in a dedicated message and the UE prior to the receipt of this message had configured the PCPCH as the default in the uplink:
  - stop using the PCPCH;

- let the last assigned PRACH be the default in the uplink for RACH.

4.4.4.1.9Secondary Scrambling Code, Code Number

Code Number can be assigned by following rules:

- When more than one DL DPDCH is assigned per RL, the segmented physical channel shall be mapped on to DL DPDCHs according to 3GPP TS 25.435 [6]. When *p* number of DL DPDCHs are assigned to each RL, the first pair of Secondary Scrambling Code and Code Number corresponds to "*PhCH number 1*", the second to "*PhCH number 2"*, and so on until the *p*th to "*PhCH number p*".

4.4.4.1.10 SRB delay, PC preamble

When the IE "SRB delay" and IE "PC preamble" is received in a message that results in a configuration of uplink DPCH, the UE shall:

- after the establishment of the uplink physical channel, send DPCCH and no DPDCH according to 3GPP TS 25.433 [5] during the number of frames indicated in the IE "PC preamble"; and

- then do not send any data on signalling radio bearers RB0 to RB4 during the number of frames indicated in the IE "SRB delay".

4.4.4.2 Specific information elements for LCR TDD only

4.4.4.2.1Repetition period, Repetition length, Offset

In case the physical allocations of different channels overlap in TDD the following priority rules shall be appliedfor common channels and shall be taken into account by the UE:

- PICH takes precedence over Primary CCPCH;

- PICH takes precedence over Secondary CCPCH;

- Secondary CCPCH takes precedence over Primary CCPCH.

The frame allocation can be derived by following rules:

If no IE "Offset" is explicitly given, the parameter "Offset" to be used is calculated by the following equation:

Activation time mod Repetition period = Offset.

Frames from CFN CFN_{off} to CFN_{off} + Repetition length - 1 belong to the allocation with CFN_{off} fulfilling the following equation:

CFN_{off} mod Repetition period = Offset.

Repetition length is always a multiple of the largest TTI within the CCTrCH fulfilling the following equation:

(largest TTI within CCTrCH) × X = Repetition Length

Example of usage:

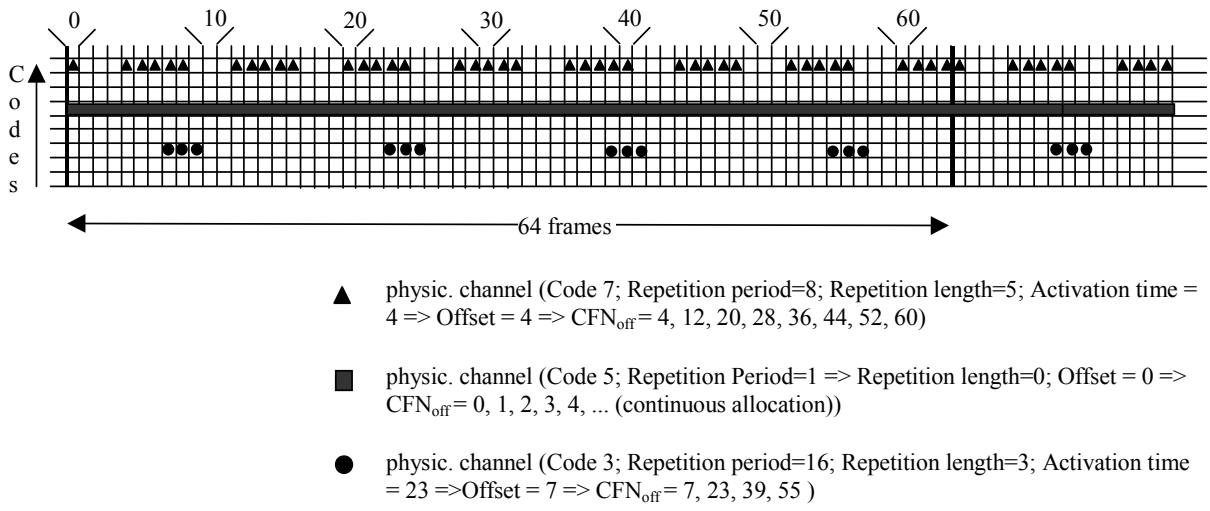


Figure 4.25: Examples for frame allocations in TDD

4.4.4.2.2UL Timing advance control

4.4.4.2.3FPACH/PRACH Selection

Where more than one FPACH is defined, the FPACH that a UE should receive following a UpPCH transmission is defined by the UpPCH signature (SYNC_UL) code that the UE used. The FPACH/PRACH number = N mod M where N denotes the signature number (0..7) and M denotes the number of FPACH/PRACH combinations that have been defined. The FPACH/PRACH number indicates the position of the FPACH/PRACH description in the IE "PRACH info".

The PRACH that should be used is selected out of the ones associated with the FPACH in the IE "PRACH info".

The relevant PRACH is the n_{RACHi}^{th} PRACH associated to the $FPACH_i$ if the following equation is fulfilled:

$$(SFN' \bmod L)=n_{RACHi};$$

Where:

- SFN': the sub-frame number of the arrival of the FPACH acknowledgement.
- L: the number of PRACHs associated to the i^{th} FPACH.

4.4.4.3 Common information elements for FDD/LCR TDD with different process

4.4.4.3.1New DSCH-RNTI

If the IE "New DSCH-RNTI" is included, the UE shall:

- in FDD:
  - if the UE will be in CELL_DCH at the end of the procedure where the received message included this IE:
    - if the UE supports DSCH as indicated in the IE "Physical Channel Capability" included in the IE "UE Radio Access Capability":
      - store the value in the variable DSCH_RNTI, replacing any old stored value;
      - use that DSCH-RNTI when using common transport channels of type DSCH in the current cell.
- in TDD:

- if the UE will be in CELL_DCH or CELL_FACH at the end of the procedure where the received message included this IE:
  - if the UE supports DSCH or USCH as indicated in the IE "Physical Channel Capability" included in the IE "UE Radio Access Capability":
    - store the value in the variable DSCH_RNTI, replacing any old stored value;
    - use that DSCH-RNTI when using SHCCH signalling in the current cell.

4.4.4.3.2Capability Update Requirement

If the IE "Capability Update Requirement" is included the UE shall:

- if the IE "UE radio access FDD capability update requirement" has the value TRUE:
  - if the UE supports FDD mode:
    - store its UTRA FDD capabilities and its UTRA capabilities common to FDD and TDD in the IE "UE radio access capability" and the IE "UE radio access capability extension" in variable UE_CAPABILITY_REQUESTED.
- if the IE "UE radio access 1.28 Mcps TDD capability update requirement" has the value TRUE:
  - if the UE supports 1.28 Mcps TDD mode:
    - store its UTRAN-specific 1.28 Mcps TDD capabilities and its UTRAN–specific capabilities common to FDD and TDD in the variable UE_CAPABILITY_REQUESTED.
- if the IE "System specific capability update requirement list" is present:
  - for each of the RAT requested in the IE "UE system specific capability":
    - if the UE supports the listed RAT:
      - include its inter-RAT radio access capabilities for the listed RAT in the IE "UE system specific capability" from the variable UE_CAPABILITY_REQUESTED.

4.4.4.3.3Transport Format Set

if the IE "Transport format set" has the choice "Transport channel type" set to "Common transport channel":

- in FDD:
  - for transport channels other than DSCH calculate the transport block size for all transport formats in the TFS using the following:

    TB size = RLC size.

  - for DSCH transport channels calculate the transport block size for all transport formats in the TFS using the following:

    TB size = RLC size + MAC header size if "RLC size" <> 0,
    TB size = 0 if "RLC size" = 0,

    where:
    - 'RLC size' reflects the RLC PDU size.
- for TDD calculate the transport block size for all transport formats in the TFS using the following:

  TB size = RLC size.

4.4.4.3.4Transport format combination subset

Contrary to FDD, more than one CCTrCH can be configured in uplink in TDD, thus an identifier (TFCS Identity)for the CCTrCHs is required. If the IE "Transport format combination subset"("TFC subset") is included, the UE shall:

- if the UE consider the TFC subset to be compatible with the current Transport format combination set:
  - restrict the transport format combination set in the uplink to the value of the IE "Transport format combination subset" (in case of TDD for the uplink CCTrCH specified by the IE "TFCS Id");
  - clear the IE "Duration" in the variable TFC_SUBSET.
- if the transport format combination subset indicates the "full transport format combination set":
  - any restriction on transport format combination set is released and the UE may use the full transport format combination set.

4.4.4.3.5TFCS Reconfiguration/Addition Information

If the IE "TFCS Reconfiguration/Addition Information" is used in case of TFCS "Complete reconfiguration" the UE shall:

- remove the previously stored transport format combination set if exists;
- consider the first instance of the IE "CTFC information" as Transport Format Combination 0 in FDD (TFCI=0) and 1 in TDD (TFCI=1), the second instance as Transport Format Combination 1 in FDD (TFCI=1) and 2 in TDD (TFCI=2) and so on. In TDD the TFCI value = 0 is reserved for physical layer use.

If the IE "TFCS Reconfiguration/Addition Information" is used in case of TFCS "Addition" the UE shall insert the new additional(s) TFC into the first available position(s) in ascending TFCI order in the TFCS.

4.4.4.3.6Uplink DPCH power control info

The UE shall:

- in FDD:
  - if the IE "Uplink DPCH power control info" is included:
    - if a synchronization procedure A is performed according to 3GPP TS 25.322:
      - calculate and set an initial uplink transmission power;
      - start inner loop power control;
      - for the UL inner loop power control:
        - use the parameters specified in the IE.
    - else:
      - act on the IE "Power control algorithm" and the IE "TPC step size" if included and ignore any other IEs that are included.
- in LCR TDD:
  - if the IE "Uplink DPCH power control info"is included:
    - if the IE " $PRX_{PDPCHdes}$ " is included:
      - calculate and set an initial uplink transmission power.
      - if the IE " TPC step size" is included:
        - use this IE upon reception of TPC commands for closed loop power control.

- else:
  - use the current value of this IE upon reception of TPC commands for closed loop power control.

- else:
  - if the IE " TPC step size" is included:
    - use this IE for closed loop power control;
  - else:
    - ignore the IE "Uplink DPCH power control info".

4.4.5 RRC Messages

4.4.5.1 Specific messages for FDD

4.4.5.1.1ACTIVE SET UPDATE

Void.

4.4.5.1.2ACTIVE SET UPDATE COMPLETE

Void.

4.4.5.1.3ACTIVE SET UPDATE FAILURE

Void.

4.4.5.2 Specific messages for LCR TDD

4.4.5.2.1Physical Shared Channel Allocation

Void.

4.4.5.2.2PUSCH Capacity Request

Void.

4.4.5.2.3Uplink Physical Channel Control

Void.

4.4.6 Common messages for FDD/LCR TDD with different content

4.4.6.1 CELL UPDATE

Void.

4.4.6.2 CELL UPDATE CONFIRM

Void.

4.4.6.3 HANDOVER TO UTRAN COMMAND

Void.

4.4.6.4 INITIAL DIRECT TRANSFER

Void.

4.4.6.5 INTER RAT HANDOVER INFO

Void.

4.4.6.6 MEASUREMENT CONTROL

Void.

4.4.6.7 MEASUREMENT REPORT

Void.

4.4.6.8 PHYSICAL CHANNEL RECONFIGURATION

Void.

4.4.6.9 PHYSICAL CHANNEL RECONFIGURATION COMPLETE

Void.

4.4.6.10 RADIO BEARER RECONFIGURATION

Void.

4.4.6.11 RADIO BEARER RECONFIGURATION COMPLETE

Void.

4.4.6.12 RADIO BEARER RELEASE

Void.

4.4.6.13 RADIO BEARER RELEASE COMPLETE

Void.

4.4.6.14 RADIO BEARER SETUP

Void.

4.4.6.15 RADIO BEARER RELEASE COMPLETE

Void.

4.4.6.16 RRC CONNECTION SETUP

Void.

4.4.6.17 RRC CONNECTION SETUP COMPLETE

Void.

4.4.6.18 SYSTEM INFORMATION

System Information Block type 8, System Information Block type 9, and System Information Block type 10 are used only in FDD.

System Information Block type 17 is used only in LCR TDD.

System Information Block type 5 and System Information Block type 6 include AICH info for FDD, PDSCH information and/or PUSCH information for LCR TDD.

4.4.6.19 TRANSPORT CHANNEL RECONFIGURATION

Void.

4.4.6.20 RANSPORT CHANNEL RECONFIGURATION COMPLETE

Void.

4.4.6.21 TRANSPORT FORMAT COMBINATION CONTROL

Void.

4.4.6.22 UE CAPABILITY ENQUIRY

Void.

4.4.6.23 UE CAPABILITY INFORMATION

Void.

4.4.6.24 UPLINK DIRECT TRANSFER

Void.

4.4.7 RRC Information Elements

4.4.7.1 FDD specific information elements

- CPCH Parameters.
- Maximum bit rate.
- Transmission probability.
- RF capability FDD.
- RF capability FDD extension.
- CPCH set ID.
- DRAC Static Information.
- AICH Info.
- AICH Power offset.
- Constant value.
- CPCH persistence levels.
- CPCH set info.

- CPCH Status Indication mode.
- CSICH Power offset.
- Downlink PDSCH information.
- DPCH compressed mode info.
- PDSCH code mapping.
- PDSCH with SHO DCH Info.
- PRACH power offset.
- Primary CPICH info.
- Primary CPICH Tx power.
- Primary CPICH usage for channel estimation.
- RACH transmission parameters.
- Secondary CPICH info.
- SSDT cell identity.
- SSDT information.
- STTD indicator.
- TFCI Combining Indicator.
- TPC combination index.
- TX Diversity Mode.
- Inter-frequency SET UPDATE.
- UE Rx-Tx time difference type 1.

4.4.7.2 TDD specific information elements

- RF capability TDD.
- Transport Format Combination Set Identity (TDD).
- Allocation period info.
- CCTrCH power control info.
- Cell and Channel Identity info.
- Downlink channelization codes.
- Downlink Timeslots and Codes.
- FPACH info.
- Individual timeslot info.
- Individual Timeslot interference.
- Midamble shift and burst type.
- PDSCH Capacity Allocation info.

- PDSCH info.
- PDSCH Power Control info.
- PDSCH system information.
- PRACH Channelization Code 1.28 Mcps TDD.
- Primary CCPCH info post.
- Primary CCPCH TX Power.
- PUSCH info.
- PUSCH Capacity Allocation info.
- PUSCH power control info.
- PUSCH system information.
- SCTD indicator.
- Special Burst Scheduling.
- SYNC_UL info.
- TDD open loop power control.
- Timeslot number.
- TSTD indicator.
- UL interference TDD.
- Uplink Timeslots and Codes.
- Uplink Timing Advance Control.
- Primary CCPCH RSCP info.
- Timeslot ISCP info.
- T_{ADV} info.

4.4.7.3 Common information elements with different process

- Cell selection and re-selection info for SIB3/4.
- Cell selection and re-selection info for SIB11/12.
- Measurement capability.
- Measurement capability extension.
- Physical channel capability.
- DL Transport channel information common for all transport channels.
- Power Offset Information.
- Transport Format Set.
- UL Transport channel information common for all transport channels.
- ASC setting.

- Default DPCH Offset Value.
- Downlink DPCH info common for all RL.
- Downlink DPCH info common for all RL Pre.
- Downlink DPCH info for each RL.
- Downlink DPCH info for each RL Post.
- Downlink DPCH power control information.
- Downlink information common for all radio links.
- Downlink information for each radio link.
- Downlink information for each radio link Post.
- Frequency info.
- PICH Info.
- PRACH info (for RACH).
- PRACH system information list.
- Primary CCPCH info.
- SCCPCH Information for FACH.
- Secondary CCPCH info.
- Uplink DPCH info.
- Uplink DPCH info Post.
- Uplink DPCH info Pre.
- Uplink DPCH power control info.
- Uplink DPCH power control info Post.
- Uplink DPCH power control info Pre.
- Cell info.
- Cell measured results.
- Cell measurement event results.
- Cell reporting quantities.
- Cell synchronization information.
- FACH measurement occasion info.
- Inter-frequency measurement quantity.
- Intra-frequency measurement quantity.
- Intra-frequency measurement reporting criteria.
- Intra-frequency reporting quantity for RACH reporting.
- Measured results on RACH.
- Quality measured results list.

- Quality reporting quantity.
- UE internal measured results.
- UE internal measurement event results.
- UE internal measurement quantity.
- UE internal measurement reporting criteria.
- UE Internal reporting quantity.
- UE positioning GPS acquisition assistance.
- UE positioning GPS measured results.
- UE positioning GPS reference time.
- UE positioning IPDL parameters.
- UE positioning OTDOA measured results.
- UE positioning OTDOA neighbour cell info.
- UE positioning OTDOA reference cell info.
- UE positioning position estimate info.

4.5 Difference on Iub Interface

4.5.1 Node B logical model over Iub interface

For Iub is based on a logical model of Node B, the model shows the Node B as seen from the controlling RNC, and includes a common controlling port**,** common signalling link, a set of SAPs and dedicated signalling links.

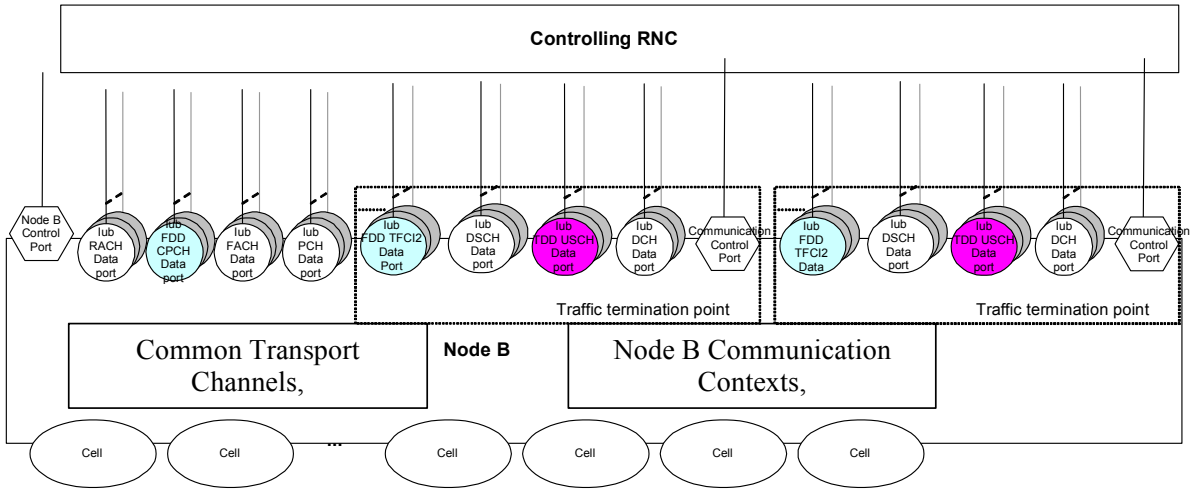


Figure 5-1: The Node B logical model for Iub interface

In FDD, the CPCH data interface transmits CPCH data stream between the Node B and the RNC. When DCH+DSCH channel allocation method (DSCH binds to DCH) is applied, the TFCI2 data interface is used to transmit data stream of control frame DSCH TFCI SIGNALLING.

In LCR TDD, the USCH data interface transmits data stream on the USCH. For CPCH and DSCH, DCH are not bound together in LCR TDD, so CPCH data interface and TFCI2 data interface are not used. The USCH is an uplink channel exists in LCR TDD system only, so USCH data interface is added in LCR TDD.

The CPCH data port and the TFCI2 data port in FDD are rejected in LCR TDD, and a special USCH data port is employed. The CPCH data port is used to transmit CPCH data stream between the Node B and the RNC.

When DCH+DSCH channel allocation method (DSCH binds to DCH) is used, the TFCI2 data port is used to transmit data stream for DSCH TFCI SIGNALLING control frame.

The USCH data port is used to transmit data stream on USCH.

For CPCH and DSCH, DCH are not bound in the LCR TDD system, CPCH data port and TFCI2 data port are not used in the LCR TDD system.

The USCH is an uplink channel presents in LCR TDD only, compared with FDD, USCH data port is added in the LCR TDD system.

4.5.2 Common Resources over Iub Interface

4.5.2.1 General

This function performs configures the radio network resources, i.e. cells and common transport channels, and takes the resources into or out of operation.

Compared with FDD, based on the special sub frame structure and timeslot in LCR TDD, there are many differences in code resource allocations, timeslot configuration, Tx diversity, physical channels configuration, transport channels configuration, etc.

4.5.2.2 Iub aspect of Cell configuration

The procedure is initiated with a CELL SETUP REQUEST message sent from the CRNC to the Node B using the Node B Control Port. Upon Reception, the Node B shall reserve the necessary resources and configure the new cell according to the parameters given in the message.

Compared to FDD, Cell Setup procedure is used in LCR TDD to configure and transfer many special important parameters of common resource of the cell, as follows.

- Cell Parameter ID: including SYNC-DL and SYNC-UL sequences, the scrambling codes and the midamble codes.
- The Constant Value: the power margin used by a UE to set the proper uplink power for a DCH, USCH, or a RACH.
- Time Slot Configuration: including Time Slot LCR [0,,.6], Time Slot Status[active or inactive]and Time Slot Direction[UL or DL].
- Transmission Diversity Applied: on DCHs applied in a cell.
- Repetition Period: the number of consecutive Radio Frames after which the same assignment scheme of Time Slots to a Physical Channel is repeated.
- Repetition Length: the number of consecutive Radio Frames inside a Repetition Period in which the same Time Slot is assigned to the same Physical Channel.
- DwPCH Information: used in the special physical channel of LCR TDD.

4.5.2.3 Iub aspects of common transport channels management

Both in LCR TDD and FDD, although CCTrCH has been used, CCTrCH has different function. In LCR TDD, one CCTrCH can be mapped into one or several physical channel, while in FDD, one CCTrCH can be mapped into only one physical channel.

- CCTrCH ID: The CCTrCH ID for dedicated and shared channels identifies unambiguously an uplink or downlink CCTrCH inside a Radio Link. For S-CCPCH, it identifies unambiguously a downlink CCTrCH within a cell.

- FPACH Parameters: used in the special physical channel of LCR TDD.

4.5.2.4 Iub aspects of RL management

In LCR TDD, common resources, i.e. cell, common physical channels and common transport channels have been established when the cell configuration and common transport channels configuration, while dedicated resources, including share channels, are allocated dynamically when every user applies RL.

On the same reason as above, some new IEs will be induced and some IEs will be modified to comply with the characteristics of LCR TDD, Every user can only setup one radio link, other than one or several radio link in FDD.

- DL DPCH information LCR.
- Special Burst Scheduling: The number of frames between special burst transmissions during DTX.
- The DL Time Slot ISCP Info LCR: this IE provides information for DL Interference level for each time slot within the Radio Link.

4.5.3 Iub aspects of Share Channels

USCH is unique in TDD, while DSCH is used both in TDD and FDD, but in different way.

4.5.3.1 Iub aspects of USCH [TDD only]

4.5.3.1.1 USCH Data Transfer procedure [TDD]

Data Transfer procedure is used to transfer data received from Uu interface from Node B to CRNC. Data Transfer procedure consists of a transmission of Data Frame from Node B to CRNC.

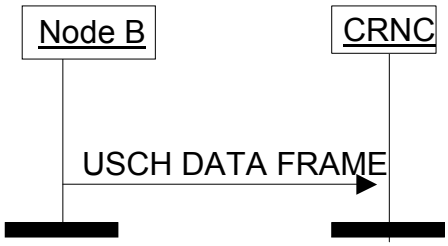


Figure 5-2: USCH Data Transfer procedure

Node B shall always send an USCH DATA FRAME to the CRNC provided the Transport Format addressed by the TFI indicates that the number of Transport Blocks is greater than 0.

When UL synchronization is lost or not yet achieved on the Uu, USCH DATA FRAMEs shall not be sent to the CRNC.

When Node B receives an invalid TFCI in the PUSCH, USCH DATA FRAMEs shall not be sent to the CRNC.

4.5.3.1.2 USCH DATA FRAME structure [TDD]

USCH DATA FRAME includes the CFN in which the payload was received. If the payload was received in several frames, the CFN corresponding to the first frame will be indicated.

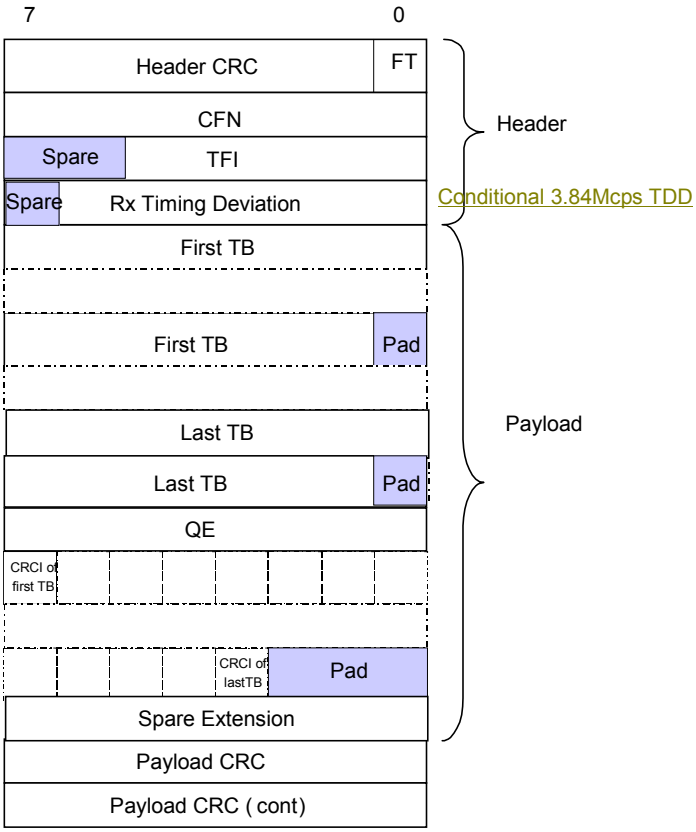


Figure 5-3: USCH DATA FRAME structure

4.5.3.1.3 Dynamic PUSCH Assignment procedure [TDD]

Procedure for dynamic allocation of physical resources to uplink shared channels (USCH) in the Node B. The control frame includes a parameter "PUSCH Set Id" which is a pointer to a pre-configured table of PUSCH Sets in the Node B.

When this control frame is sent via a certain Iub USCH data port, then it applies to that USCH and in addition to any other USCH channel which is multiplexed into the same CCTrCH in the Node B.

Node B behaviour: When the Node B receives the "DYNAMIC PUSCH ASSIGNMENT" from the CRNC in the USCH frame protocol over an Iub USCH data port within a Traffic Termination Point, it shall behave as follows:

1) The Node B shall extract the PUSCH Set Id.

2) It shall extract the parameters "Activation CFN" and "Duration" which identify the allocation period of that physical channel.

3) It shall retrieve the PUSCH Set which is referred to by the PUSCH Set Id.

4) It shall identify the CCTrCH to which the USCH is multiplexed, and hence the TFCS which is applicable for the USCH.

5) Within the time interval indicated by Activation CFN and Duration, the Node B shall make the specified PUSCH Set available to the CCTrCH.

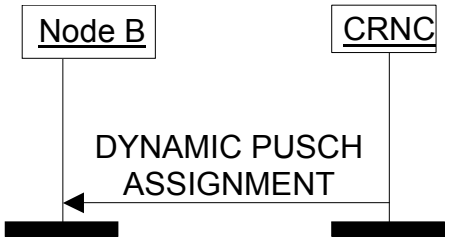


Figure 5-4: Dynamic PUSCH Assignment procedure

4.5.3.2 Iub aspects of DSCH

4.5.3.2.1 DSCH Data Transfer procedure

The Data Transfer procedure is used to transfer a DSCH DATA FRAME from the CRNC to a Node B.

If the Node B does not receive a valid DSCH DATA FRAME for transmission in a given TTI, it assumes that there is no data to be transmitted in that TTI for this transport channel. For the DSCH transport channel, the TFS shall never define a Transport Block Size of zero bits.

[FDD - The Node B shall use the header information in the DSCH DATA FRAME to determine which channelization code(s) and power offset should be used in the PDSCH Uu frame associated to the specified CFN. The specified channelization code(s) and power offset shall then be used for PDSCH transmission for as long as there are data to transmit or until a new DSCH DATA FRAME arrives that specifies that a different PDSCH channelization code(s) and/or power offset should be used. This feature enables multiple DSCH's with different TTI to be supported].

[FDD - In the event that the DSCH FP header indicates that a multi-code PDSCH transmission is to be applied ('MC Info' value > 1) then the 'power offset' field indicates the power offset at which each individual code should be transmitted relative to the power of the TFCI bits of the downlink DPCCH directed to the same UE as the DSCH].

[FDD - The Node B may receive a DSCH DATA FRAME which contains a TFI value corresponding to no data to transmit. Such a DSCH DATA FRAME has no transport blocks. On receiving such a data frame the Node B shall apply the specified channelization code(s) and power offset as described above starting in the PDSCH Uu frame associated to the specified CFN. This feature enables multiple DSCH's with different TTI to be supported, the use of such a zero payload DSCH DATA FRAME solves the problem of how the Node B determine what channelization code(s) and power offset should be used in the event that transmission of a transport block set being transmitted with a short TTI comes to an end, whilst the transmission of a TBS with a long TTI continues].

[TDD - The Node B shall use the header information in the DSCH DATA FRAME to determine which PDSCH Set and power offset should be used in the PDSCH Uu frames associated to the specified CFN. The specified PDSCH Set and power offset shall then be used for DSCH transmission for as long as there is data to transmit or until a new DSCH DATA FRAME arrives that specifies that a different PDSCH Set and/or power offset should be used. This feature enables multiple DSCH's with different TTI to be supported].

[TDD - The Node B may receive a DSCH data frame which contains a TFI value corresponding to there being no data to transmit, such a DSCH DATA FRAME will have no transport blocks. On receiving such a DATA FRAME the Node B shall apply the specified PDSCH Set and power offset as described above starting in the PDSCH Uu frame associated to the specified CFN. This feature enables multiple DSCH's with different TTI to be supported, the use of such a zero payload DSCH DATA FRAME solves the problem of how the Node B should determine what PDSCH Set and power offset should be used in the event that transmission of a transport block set being transmitted with a short TTI comes to an end, whilst the transmission of a TBS with a long TTI continues].

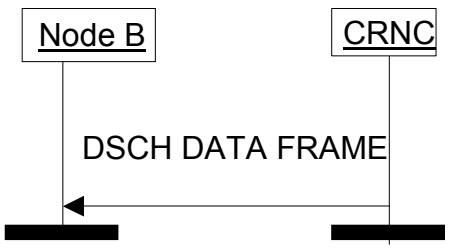


Figure 5-5: DSCH Data Transfer procedure

4.5.3.2.2 DSCH DATA FRAME structure

DSCH DATA FRAME includes a CFN indicating the SFN of the PDSCH in which the payload shall be sent. If the payload is to be sent over several frames, the CFN corresponding to the first frame shall be indicated.

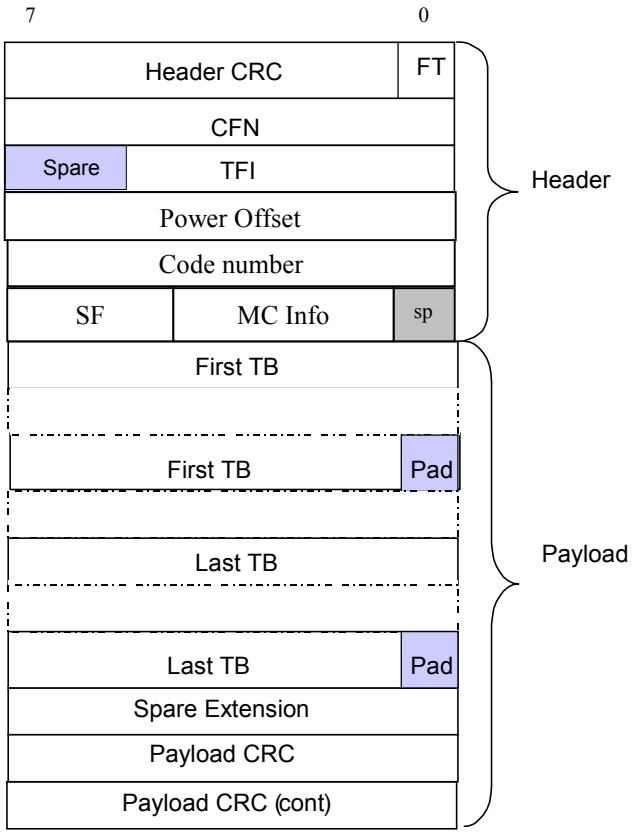


Figure 5-6: FDD DSCH DATA FRAME structure

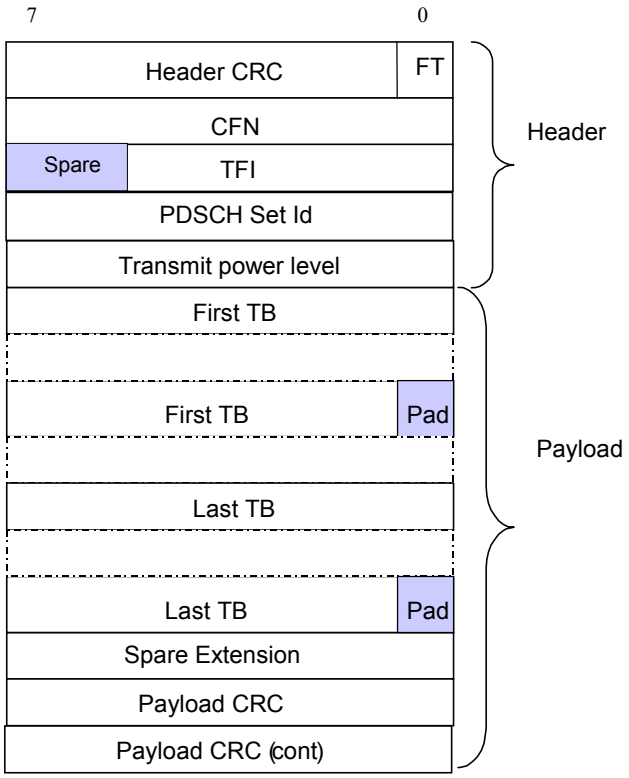


Figure 5-7: TDD DSCH DATA FRAME structure

Transmit Power Level is a conditional Information Element which is only present when the Cell supporting the DSCH Transport Channel is a TDD Cell.

4.5.4 Iub aspects of Synchronization procedure

4.5.4.1 General

Uplink synchronization is only used in LCR TDD. The utilization of uplink synchronization in LCR TDD makes changes on Iub protocol.

This aspect includes the following items:

- Special Layer1-Synchronization Shift (SS) symbols (Synchronization Shift);
- Number of used SS symbols can take 3 values（'Down'，'Up'，'Do Nothing'）;
- SS-symbols are transmitted once per subframe.
- Midamble.

The SS, as one of L1 signals, is to be transmitted once per 5ms sub frame in downlink.The burst type for dedicated channels provides the possibility for transmission of Uplink Synchronization Control (ULSC).The transmission of ULSC is done in the data parts of the traffic burst. The ULSC information is to be transmitted directly after the midamble.

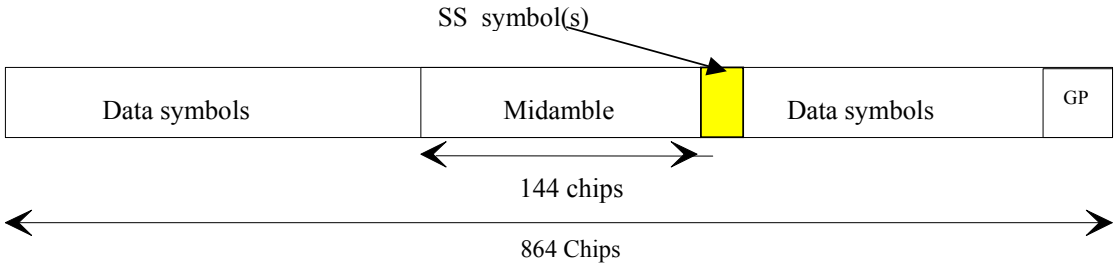


Figure 5-8: Position of ULSC information in the traffic burst

In principle, this feature replaces the "Propagation delay" function which is performed by higher layer interaction in FDD.

4.5.4.2 Establishment and Maintenance of UL Synchronization

- Step1: Preparation of uplink synchronization by downlink synchronization

When a UE is powered on, it should set downlink synchronization with the cell first as describe in cell search procedure. Only when UE sets and maintains downlink synchronization, uplink synchronization procedure could be started.

- Setp2: Establishment of uplink synchronization

Although UE can receive downlink synchronization signal via Node B, for the distance between UE and Node B is uncertain, this may cause uplink transmission un-synchronized. So, a special channel UpPCH is employed for the uplink transmission to reduce the interference in traffic timeslots.

The transmission time of SYNC_UL burst can be set according to the received DwPCH and/or P-CCPCH power level. Node B evaluates power and time of the received SYNC-UL sequence in the searching window, and then sends time and power level adjustment information to UE. Node B will send adjustment information in a single sub-frame to UE by FPACH. Normally, the uplink synchronization procedure is used for system random access, but it also can be used to rebuild uplink synchronization if it lost synchronization.

- Setp3: Maintenance of uplink synchronization

The Midamble code of every uplink burst is required for uplink synchronization maintenance. The Midamble code of each UE in uplink timeslot is different. Node B can measure and estimate the power level and time offset of midamble field in a same timeslot, and then, by using L1 signalling SS (synchronization shift) and PC (Power control), Node B informs UE to adjust its Tx timing and power level in the next available downlink timeslot. These procedures guarantee the availability of uplink synchronization. The uplink synchronization can be detected in every sub-frame, with step range of 1/8~1 chip. The operations for uplink synchronization can be '1 step up', '1 step down' or 'no update'.

The UE implements random access by adopting "two-steps" method mentioned above. Thus the PRACH will at the lowest level interferes other traffic channels, or be interfered by other traffic channels. This is different from FDD and 3.84 Mcps TDD system.

4.5.5 Iub aspects of Power Control

4.5.5.1 General

The power control procedure controls the level of the transmitted power in order to minimize interference and keep the quality of the connections. It consist of the following functions: UL Outer Loop Power Control, DL Outer Loop Power Control, UL Inner Loop Power Control, DL Inner Loop Power Control, UL Open Loop Power Control and DL Open Loop Power Control.

For LCR TDD and FDD, the power control procedure have the same type and usage, but are different in measurement parameters, power control characteristics and TPC information. For this reason, there are special sub frame structure, burst and TPC information transmission in LCR TDD only.

4.5.5.2 Transmission of TPC

The transmission of the radio frame burst is discontinuous, which provides the possibility for transmission of L1 control signal "TPC" both in up- and downlink every 5 ms sub frame for each user. Hence, the rate of close loop power control is 200 cycles/sec in LCR TDD, other than 1500 cycles/sec in FDD.

In LCR TDD, the TPC commands is assigned by CCTrCH, other than by DPCCH in FDD.

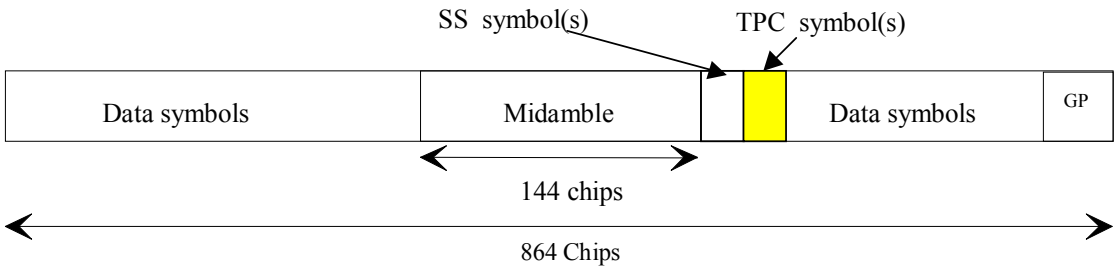


Figure 5-9: Position of TPC information in the traffic burst in downlink and uplink

4.5.5.3 Power Control characteristics

The main characteristics of power control are summarized in the following table.

Table 5-1: Transmit Power Control characteristics

	Uplink	Downlink
Power control rate	Variable Closed loop: 0 to 200 cycles/s. Open loop: (about 200 µs to 3 575 µs delay)	Variable Closed loop: 0 to 200 cycles/s.
Step size	1 dB, 2 dB, 3 dB (close loop)	1 dB, 2 dB, 3 dB (close loop)
Remarks	All figures do not include processing and measurement times	
NOTE: All codes within one timeslot allocated to the same CCTrCH use the same transmission power because they have the same Spreading Factor.		

4.5.5.4 Measurement of Downlink Power Control for LCR TDD

If a downlink transmission pauses on the DPCH or PDSCH, the receive power (RSCP) of the data can no longer be used for inner loop SIR calculations in the UE. In this case the UE should trace the fluctuations of the pathloss based on the P-CCPCH and use these values instead for generating the TPC commands. This pathloss together with the timeslot ISCP measurement in the data timeslot, which is ongoing, should be used to calculate a virtual SIR value:

$$SIR_{virt}(i) = RSCP_{virt}(i) - ISCP(i),$$

$$RSCP_{virt}(i) = RSCP_0 + L_0 - L(i) + \sum_{k=1}^{i-1} TPC(k),$$

RSCP: Received signal code power in dBm.

ISCP: Interference signal code power in the DPCH / PDSCH timeslot in dBm.

L: pathloss in dB measured on the P-CCPCH. The same weighting of the long- and short-term pathloss should be used as for uplink open loop power control, see clause A.1.

i: index for the frames during a transmission pause, $1 \le i \le$ number of frames in the pause.

L_0: weighted pathloss in the last frame before the transmission pause in dB.

$RSCP_0$: RSCP of the data that was used in the SIR calculation of the last frame before the pause in dBm.

TPC (k): ± power control stepsize in dB according to the TPC bit generated and transmitted in frame k, TPC bit "up" = +stepsize, TPC bit "down" = -stepsize.

4.5.6 Iub aspects of Measurements

4.5.6.1 General

In Iub interface, physical layer measurements (in Node B) are initiated and controlled by higher layers (in RRC), so measurements is performed in Node B and reported to DRNC/SRNC, then the messurement results can be used by DRNC, SRNC or Node B.

For LCR TDD, some measurments are added/deleted and modified, in order to realize different procedures and functions of LCR TDD,such as power control ,uplink synchronization, dynamic channel allocation (DCA), and so on.

Table 5-2: mearsurement types compared LCR TDD to FDD

Types of measurements	LCR TDD	FDD
Received Total Wide Band Power	X	X
Transmitted Carrier Power	X	X
Acknowledged PRACH Preambles	-	X
UL Timeslot ISCP	X	-
Acknowledged PCPCH Access Preambles,	-	X
Detected PCPCH Access Preambles	-	X
UTRAN GPS Timing of Cell Frames for UE Positioning	X	X
SFN-SFN Observed Time Difference	X	X
SIR	X	X
SIR Error	-	X
Transmitted Code Power	X	x
RSCP	x	-
Rx Timing Deviation	-	-
Round Trip Time	-	X
Timeslot ISCP	X	-
Transport channel BER	X	X
Cell Sync Burst Timing	X	-
Cell Sync Burst SIR	X	-
Received SYNC_UL Timing Deviation for 1.28 Mcps TDD	X	-
Physical channel BER	-	X
PRACH/PCPCH Propagation delay	-	X
"X": available. "-": not available.		

4.5.6.2 Measurement relate to DCA

Based on the timeslot structure, DCA technology is only used in LCR TDD, including fast DCA and slow DCA. Slow DCA is the process of assigning radio resources, including time slots, to different TDD cells according to the varying cell load, so In order to realize DCA, special measurement of "Timeslot ISCP" is added in Iub interface.

Table 5-3: Timeslot ISCP

Definition	Interference Signal Code Power, the interference on the received signal in a specified timeslot measured on the midamble. The reference point for the ISCP shall be the Rx antenna connector.

4.5.6.3 Measurement related to RACH

Random assess procedure of LCR TDD is different from that of FDD, which must have Uplink synchronization first, so in Iub interface, different propagation delay measurements are expected.

Table 5-4: Received SYNC-UL Timing Deviation for LCR TDD

Definition	'Received SYNC-UL Timing Deviation' is the time difference: $UpPCH_{POS} = UpPTS_{Rxpath} - UpPTS_{TS}$ Where $UpPTS_{Rxpath}$: time of the reception in the Node B of the SYNC-UL to be used in the uplink synchronization process $UpPTS_{TS}$: time instance two symbols prior to the end of the DwPCH according to the Node B internal timing UE can calculate Round Trip Time (RTT) towards the UTRAN after the reception of the FPACH containing $UpPCH_{POS}$ transmitted from the UTRAN. Round Trip Time RTT is defined by: $RTT = UpPCH_{AVD} + UpPCH_{POS} – 8*16\ T_C$ Where $UpPCH_{ADV}$: the amount of time by which the transmission of UpPCH is advanced in time relative to the end of the guard period according to the UE Rx timing.

Table 5-5: PRACH/PCPCH Propagation delay

Definition	Propagation delay is defined as one-way propagation delay as measured during either PRACH or PCPCH access: **PRACH:** Propagation delay = $(T_{RX} – T_{TX} – 2560)/2$, where: T_{TX} = The transmission time of AICH access slot (n-2-AICH transmission timing), where $0 \le$ (n-2-AICH Transmission Timing)$\le$14 and AICH_Transmission_Timing can have values 0 or 1. The reference point for T_{TX} shall be the Tx antenna connector. T_{RX} = The time of reception of the beginning (the first detected path, in time) of the PRACH message from the UE at PRACH access slot n. The reference point for T_{RX} shall be the Rx antenna connector. **PCPCH:** Propagation delay = $(T_{RX} - T_{TX} – (L_{pc\text{-}preamble} +1)\times2560 – (k-1)\times38400)/2$, where T_{TX} = The transmission time of CD-ICH at access slot (n-2-T_{cpch}), where $0 \le$ (n-2-T_{cpch}) ≤ 14 and T_{cpch} can have values 0 or 1. The reference point for T_{TX} shall be the Tx antenna connector. T_{RX} = The time of reception of the first chip (the first detected path, in time) of the kth frame of the PCPCH message from the UE, where k $\in${1, 2,…, N_Max_frames}. The reference point for T_{RX} shall be the Rx antenna connector. N_max_frames is a higher layer parameter and defines the maximum length of the PCPCH message. The PCPCH message begins at uplink access slot (n+$L_{pc\text{-}preamble}$/2), where $0 \le (n + L_{pc\text{-}preamble}/2) \le 14$ and where $L_{pc\text{-}preamble}$ can have values 0 or 8.

4.5.7 Iub Interface Protocol

4.5.7.1 General

The logical interface between a RNC and a Node B is called the Iub interface. The separation of Iub interface Radio Network functionality and Transport Network functionality is considered to facilitate introduction of future technology, and the radio network layer is consisted of NBAP of control plane and Frame Protocol of user plane.

The transport layer and the physical layer for Iub interface in LCR TDD and FDD are same, the main difference is the radio network layer, as follow figure 5-10.

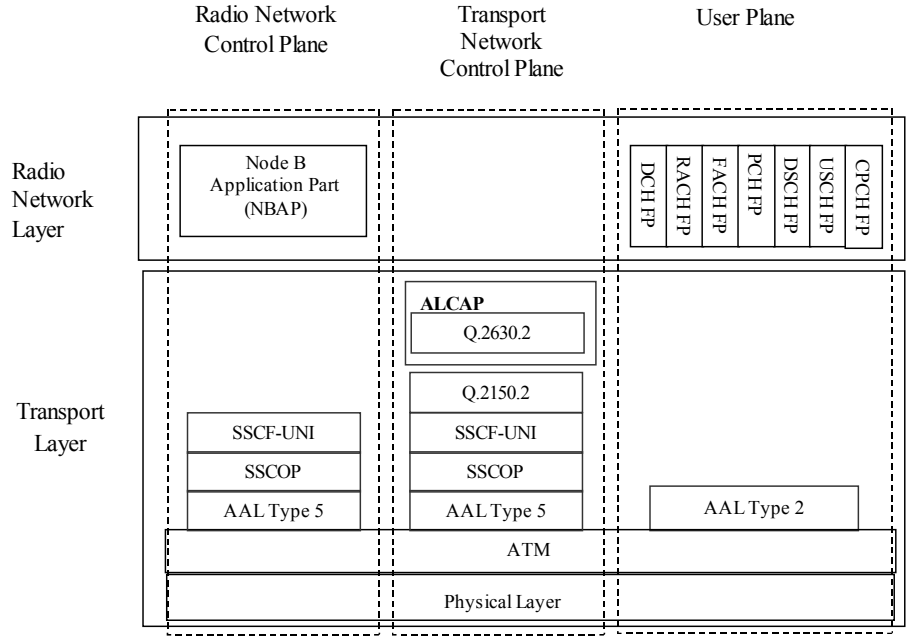


Figure 5-10: Iub interface protocol structure

4.5.7.2 NBAP Specification

4.5.7.2.1 Different NBAP Functions/EPs/Messages compared to FDD

The principle for specifying the procedure logic is to specify the functional behaviour of the Node B exactly and completely. The CRNC functional behavior is left unspecified. The Reset procedure is an exception from this principle.

Table 5-6 : Mapping between functions and NBAP elementary procedures

Function	Elementary Procedure(s)
Cell Configuration Management	a) Cell Setup b) Cell Reconfiguration c) Cell Deletion
Common Transport Channel Management	a) Common Transport Channel Setup b) Common Transport Channel Reconfiguration c) Common Transport Channel Deletion
System Information Management	System Information Update
Resource Event Management	a) Block Resource b) Unblock Resource c) Resource Status Indication
Configuration Alignment	a) Audit Required b) Audit c) Reset
Measurements on Common Resources	a) Common Measurement Initiation b) Common Measurement Reporting c) Common Measurement Termination d) Common Measurement Failure
Radio Link Management.	a) Radio Link Setup b) Radio Link Addition c) Radio Link Deletion d) Unsynchronized Radio Link Reconfiguration e) Synchronized Radio Link Reconfiguration Preparation f) Synchronized Radio Link Reconfiguration Commit g) Synchronized Radio Link Reconfiguration Cancellation h) Radio Link Pre-emption
Radio Link Supervision.	a) Radio Link Failure b) Radio Link Restoration
Compressed Mode Control [FDD]	a) Radio Link Setup b) Radio Link Addition c) Compressed Mode Command d) Unsynchronized Radio Link Reconfiguration e) Synchronized Radio Link Reconfiguration Preparation f) Synchronized Radio Link Reconfiguration Commit g) Synchronized Radio Link Reconfiguration Cancellation
Measurements on Dedicated Resources	a) Dedicated Measurement Initiation b) Dedicated Measurement Reporting c) Dedicated Measurement Termination d) Dedicated Measurement Failure
DL Power Drifting Correction [FDD]	Downlink Power Control
Reporting of General Error Situations	Error Indication
Physical Shared Channel Management [TDD]	Physical Shared Channel Reconfiguration
DL Power Timeslot Correction [TDD]	Downlink Power Timeslot Control
Cell Synchronization [3.84Mcps TDD]	a) Cell Synchronization Initiation b) Cell Synchronization Reconfiguration c) Cell Synchronization Reporting d) Cell Synchronization Termination e) Cell Synchronization Failure f) Cell Synchronization Adjustment
Information Exchange	a) Information Exchange Initiation b) Information Reporting c) Information Exchange Termination d) Information Exchange Failure

Table 5-7: Class 1

Elementary Procedure	Message	Successful Outcome	Unsuccessful Outcome
		Response message	Response message
Cell Setup	CELL SETUP REQUEST	CELL SETUP RESPONSE	CELL SETUP FAILURE
Cell Reconfiguration	CELL RECONFIGURATION REQUEST	CELL RECONFIGURATION RESPONSE	CELL RECONFIGURATION FAILURE
Cell Deletion	CELL DELETION REQUEST	CELL DELETION RESPONSE	
Common Transport Channel Setup	COMMON TRANSPORT CHANNEL SETUP REQUEST	COMMON TRANSPORT CHANNEL SETUP RESPONSE	COMMON TRANSPORT CHANNEL SETUP FAILURE
Common Transport Channel Reconfiguration	COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST	COMMON TRANSPORT CHANNEL RECONFIGURATION RESPONSE	COMMON TRANSPORT CHANNEL RECONFIGURATION FAILURE
Common Transport Channel Deletion	COMMON TRANSPORT CHANNEL DELETION REQUEST	COMMON TRANSPORT CHANNEL DELETION RESPONSE	
Physical Shared Channel Reconfigure [TDD]	PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST	PHYSICAL SHARED CHANNEL RECONFIGURATION RESPONSE	PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE
Audit	AUDIT REQUEST	AUDIT RESPONSE	AUDIT FAILURE
Block Resource	BLOCK RESOURCE REQUEST	BLOCK RESOURCE RESPONSE	BLOCK RESOURCE FAILURE
Radio Link Setup	RADIO LINK SETUP REQUEST	RADIO LINK SETUP RESPONSE	RADIO LINK SETUP FAILURE
System Information Update	SYSTEM INFORMATION UPDATE REQUEST	SYSTEM INFORMATION UPDATE RESPONSE	SYSTEM INFORMATION UPDATE FAILURE
Common Measurement Initiation	COMMON MEASUREMENT INITIATION REQUEST	COMMON MEASUREMENT INITIATION RESPONSE	COMMON MEASUREMENT INITIATION FAILURE
Radio Link Addition	RADIO LINK ADDITION REQUEST	RADIO LINK ADDITION RESPONSE	RADIO LINK ADDITION FAILURE
Radio Link Deletion	RADIO LINK DELETION REQUEST	RADIO LINK DELETION RESPONSE	
Synchronized Radio Link Reconfiguration Preparation	RADIO LINK RECONFIGURATION PREPARE	RADIO LINK RECONFIGURATION READY	RADIO LINK RECONFIGURATION FAILURE
Unsynchronized Radio Link Reconfiguration	RADIO LINK RECONFIGURATION REQUEST	RADIO LINK RECONFIGURATION RESPONSE	RADIO LINK RECONFIGURATION FAILURE
Dedicated Measurement Initiation	DEDICATED MEASUREMENT INITIATION REQUEST	DEDICATED MEASUREMENT INITIATION RESPONSE	DEDICATED MEASUREMENT INITIATION FAILURE
Reset	RESET REQUEST	RESET RESPONSE	
Cell Synchronization Initiation [3.84 Mcps TDD]	CELL SYNCHRONIZATION INITIATION REQUEST	CELL SYNCHRONIZATION INITIATION RESPONSE	CELL SYNCHRONIZATION INITIATION FAILURE
Cell Synchronization Reconfiguration [3.84 Mcps TDD]	CELL SYNCHRONIZATION RECONFIGURATION REQUEST	CELL SYNCHRONIZATION RECONFIGURATION RESPONSE	CELL SYNCHRONIZATION RECONFIGURATION FAILURE
Cell Synchronization Adjustment [3.84 Mcps TDD]	CELL SYNCHRONIZATION ADJUSTMENT REQUEST	CELL SYNCHRONIZATION ADJUSTMENT RESPONSE	CELL SYNCHRONIZATION ADJUSTMENT FAILURE
Information Exchange Initiation	INFORMATION EXCHANGE INITIATION REQUEST	INFORMATION EXCHANGE INITIATION RESPONSE	INFORMATION EXCHANGE INITIATION FAILURE

Table 5-8: Class 2

Elementary Procedure	Message
Resource Status Indication	RESOURCE STATUS INDICATION
Audit Required	AUDIT REQUIRED INDICATION
Common Measurement Reporting	COMMON MEASUREMENT REPORT
Common Measurement Termination	COMMON MEASUREMENT TERMINATION REQUEST
Common Measurement Failure	COMMON MEASUREMENT FAILURE INDICATION
Synchronized Radio Link Reconfiguration Commit	RADIO LINK RECONFIGURATION COMMIT
Synchronized Radio Link Reconfiguration Cancellation	RADIO LINK RECONFIGURATION CANCEL
Radio Link Failure	RADIO LINK FAILURE INDICATION
Radio Link Restoration	RADIO LINK RESTORE INDICATION
Dedicated Measurement Reporting	DEDICATED MEASUREMENT REPORT
Dedicated Measurement Termination	DEDICATED MEASUREMENT TERMINATION REQUEST
Dedicated Measurement Failure	DEDICATED MEASUREMENT FAILURE INDICATION
Downlink Power Control [FDD]	DL POWER CONTROL REQUEST
Compressed Mode Command [FDD]	COMPRESSED MODE COMMAND
Unblock Resource	UNBLOCK RESOURCE INDICATION
Error Indication	ERROR INDICATION
Downlink Power Timeslot Control [TDD]	DL POWER TIMESLOT CONTROL REQUEST
Radio Link Pre-emption	RADIO LINK PREEMPTION REQUIRED INDICATION
Cell Synchronization Reporting [3.84Mcps TDD]	CELL SYNCHRONIZATION REPORT
Cell Synchronization Termination [3.84Mcps TDD]	CELL SYNCHRONIZATION TERMINATION REQUEST
Cell Synchronization Failure [3.84Mcps TDD]	CELL SYNCHRONIZATION FAILURE INDICATION
Information Reporting	INFORMATION REPORT
Information Exchange Termination	INFORMATION EXCHANGE TERMINATION REQUEST
Information Exchange Failure	INFORMATION EXCHANGE FAILURE INDICATION

4.5.7.2.2 Different content in the same NBAP messages compared to FDD

In view of the Iub aspects, the requirements resulting from the different frame structure, timeslot structure, burst type and code resource assigning are different, so in NBAP messages, the information elements referring to these difference will have to be updated to cover both LCR TDD and FDD, if necessary, new IEs dedicated to LCR TDD will have to be added.

In NBAP messages, the following NBAP messages are with some message name but with different IE or IE value in the LCR TDD and FDD system.

- CELL SETUP REQUEST.
- CELL RECONFIGURATION REQUEST.
- COMMON TRANSPORT CHANNEL SETUP REQUEST.
- COMMON TRANSPORT CHANNEL RECONFIGURATION REQUEST.
- RADIO LINK SETUP REQUEST.
- RADIO LINK SETUP RESPONSE.
- RADIO LINK SETUP FAILURE.
- RADIO LINK ADDITION REQUEST.
- RADIO LINK ADDITION RESPONSE.
- RADIO LINK ADDITION FAILURE.
- RADIO LINK RECONFIGURATION PREPARE.
- RADIO LINK RECONFIGURATION REQUEST.
- AUDIT RESPONSE.

- COMMON MEASUREMENT INITIATION REQUEST.
- COMMON MEASUREMENT INITIATION RESPONSE.
- COMMON MEASUREMENT REPORT.
- RESOURCE STATUS INDICATION.
- RADIO LINK RECONFIGURATION READY.
- DEDICATED MEASUREMENT INITIATION REQUEST.
- DEDICATED MEASUREMENT INITIATION RESPONSE.
- DEDICATED MEASUREMENT REPORT.

4.5.7.2.3 Special Parameters for TDD only

In NBAP messages, the following specific parameters in TDD only have been induced.

- Block STTD Indicator (3GPP TS 25.433 [5], subclause 9.2.3.1);
- Burst Type (3GPP TS 25.433 [5], subclause 9.2.3.2);
- CCTrCH ID (3GPP TS 25.433 [5], subclause 9.2.3.3);
- Cell Parameter ID (3GPP TS 25.433 [5], subclause 9.2.3.4);
- Constant Value (3GPP TS 25.433 [5], subclause 9.2.3.4A);
- DL Timeslot ISCP (3GPP TS 25.433 [5], subclause 9.2.3.4B);
- DCH TDD Information (3GPP TS 25.433 [5], subclause 9.2.3.4C);
- DCHs TDD To Modify (3GPP TS 25.433 [5], subclause 9.2.3.4D);
- DL Timeslot Information (3GPP TS 25.433 [5], subclause 9.2.3.4E);
- DL Time Slot ISCP Info (3GPP TS 25.433 [5], subclause 9.2.3.4F);
- Cell Sync Burst Code (3GPP TS 25.433 [5], subclause 9.2.3.4G);
- Cell Sync Burst Code Shift (3GPP TS 25.433 [5], subclause 9.2.3.4H);
- CSB Measurement ID (3GPP TS 25.433 [5], subclause 9.2.3.4I);
- Cell Sync Burst Repetition Period (3GPP TS 25.433 [5], subclause 9.2.3.4J);
- Cell Sync Burst SIR (3GPP TS 25.433 [5], subclause 9.2.3.4K);
- Cell Sync Burst Timing (3GPP TS 25.433 [5], subclause 9.2.3.4L);
- Cell Sync Burst Timing Threshold (3GPP TS 25.433 [5], subclause 9.2.3.4M);
- CSB Transmission ID (3GPP TS 25.433 [5], subclause 9.2.3.4N);
- DL Timeslot Information LCR (3GPP TS 25.433 [5], subclause 9.2.3.4O);
- DL Time Slot ISCP Info LCR (3GPP TS 25.433 [5], subclause 9.2.3.4P);
- DPCH ID (3GPP TS 25.433 [5], subclause 9.2.3.5);
- DSCH TDD Information (3GPP TS 25.433 [5], subclause 9.2.3.5A);
- DwPCH Power (3GPP TS 25.433 [5], subclause 9.2.3.5B ）;)

- Frame Adjustment Value (3GPP TS 25.433 [5], subclause 9.2.3.5C) ;
- IPDL TDD Parameter (3GPP TS 25.433 [5], subclause 9.2.3.5D);
- Max FPACH Power (3GPP TS 25.433 [5], subclause 9.2.3.5E);
- Max PRACH Midamble Shift (3GPP TS 25.433 [5], subclause 9.2.3.6);
- Midamble Shift And Burst Type (3GPP TS 25.433 [5], subclause [5], subclause 9.2.3.7);
- Midamble Shift LCR (3GPP TS 25.433 [5], subclause 9.2.3.7A);
- Number Of cycles Per SFN Period (3GPP TS 25.433 [5], subclause 9.2.3.7B);
- Number Of Repetitions Per Cycle Period (3GPP TS 25.433 [5], subclause 9.2.3.7C);
- Paging Indicator Length (3GPP TS 25.433 [5], subclause 9.2.3.8);
- PCCPCH Power (3GPP TS 25.433 [5], subclause 9.2.3.9);
- PDSCH ID (3GPP TS 25.433 [5], subclause 9.2.3.10);
- PDSCH Set ID (3GPP TS 25.433 [5], subclause 9.2.3.11);
- PUSCH ID (3GPP TS 25.433 [5], subclause 9.2.3.12);
- PUSCH Set ID (3GPP TS 25.433 [5], subclause 9.2.3.13);
- PRACH Midamble (3GPP TS 25.433 [5], subclause 9.2.3.14);
- Reference Clock Availability (3GPP TS 25.433 [5], subclause 9.2.3.14A);
- Reference SFN Offset (3GPP TS 25.433 [5], subclause 9.2.3.14B);
- Repetition Length (3GPP TS 25.433 [5], subclause 9.2.3.15);
- Repetition Period (3GPP TS 25.433 [5], subclause 9.2.3.16);
- SCH Time Slot (3GPP TS 25.433 [5], subclause 9.2.3.17);
- Sync Case (3GPP TS 25.433 [5], subclause 9.2.3.18);
- Special Burst Scheduling (3GPP TS 25.433 [5], subclause 9.2.3.18A);
- SYNC_DL Code ID (3GPP TS 25.433 [5], subclause 9.2.3.18B);
- Sync Frame Number (3GPP TS 25.433 [5], subclause 9.2.3.18C);
- Synchronization Report Characteristics (3GPP TS 25.433 [5], subclause 9.2.3.18D);
- Synchronization Report Type (3GPP TS 25.433 [5], subclause 9.2.3.18E);
- TDD Channelization Code (3GPP TS 25.433 [5], subclause 9.2.3.19);
- TDD Channelization Code LCR (3GPP TS 25.433 [5], subclause 9.2.3.19a);
- TDD DPCH Offset (3GPP TS 25.433 [5], subclause 9.2.3.19A);
- TDD DL Code Information (3GPP TS 25.433 [5], subclause 9.2.3.19B);
- TDD DL Code Information LCR (3GPP TS 25.433 [5], subclause 9.2.3.19C);
- TDD Physical Channel Offset (3GPP TS 25.433 [5], subclause 9.2.3.20);
- TDD TPC DL Step Size (3GPP TS 25.433 [5], subclause 9.2.3.21);

- TDD UL Code Information (3GPP TS 25.433 [5], subclause 9.2.3.21A);
- TDD UL Code Information LCR (3GPP TS 25.433 [5], subclause 9.2.3.21B);
- TFCI Coding (3GPP TS 25.433 [5], subclause 9.2.3.22);
- Timing Adjustment Value (3GPP TS 25.433 [5], subclause 9.2.3.22a);
- Timing Advance Applied (3GPP TS 25.433 [5], subclause 9.2.3.22A);
- Time Slot (3GPP TS 25.433 [5], subclause 9.2.3.23);
- Time Slot Direction (3GPP TS 25.433 [5], subclause 9.2.3.24);
- Time Slot Direction (3GPP TS 25.433 [5], subclause 9.2.3.24A);
- Time Slot Status (3GPP TS 25.433 [5], subclause 9.2.3.25);
- Transmission Diversity Applied (3GPP TS 25.433 [5], subclause 9.2.3.26);
- UL Timeslot ISCP (3GPP TS 25.433 [5], subclause 9.2.3.26A);
- UL PhysCH SF Variation (3GPP TS 25.433 [5], subclause 9.2.3.26B);
- UL Timeslot Information (3GPP TS 25.433 [5], subclause 9.2.3.26C);
- UL Time Slot ISCP Info (3GPP TS 25.433 [5], subclause 9.2.3.26D);
- UL Timeslot Information LCR (3GPP TS 25.433 [5], subclause 9.2.3.26E);
- UL Time Slot ISCP Info LCR (3GPP TS 25.433 [5], subclause 9.2.3.26F);
- USCH ID (3GPP TS 25.433 [5], subclause 9.2.3.27);
- USCH Information (3GPP TS 25.433 [5], subclause 9.2.3.28);
- USCH Information Response (3GPP TS 25.433 [5], subclause 9.2.3.29);
- SCTD Indicator (3GPP TS 25.433 [5], subclause 9.2.3.30).

4.5.7.3 FP Specification

4.5.7.3.1 Different FP Procedures compared to FDD

Common FP procedures	LCR TDD	FDD	Remarks
RACH Data Transfer	X	X	
CPCH Data Transfer	-	X	
FACH Data Transfer	X	X	
PCH Data Transfer	X	X	
DSCH Data Transfer	X	X	
USCH Data Transfer	X	-	
UL Node Synchronization	X	X	
DL Node Synchronization	X	X	
UL Transport Channels Synchronization	X	X	
DL Transport Channels Synchronization	X	X	
Timing Adjustment	X	X	Only used in UL
Dynamic PUSCH Assignment	X	-	
DSCH TFCI Signaling	-	X	
Timing Advance	-	-	Only in 3.84Mcps TDD
Outer Loop Power Control Information Transfer	X	-	
Dedicated FP procedures	**LCR TDD**	**FDD**	**Note**
Uplink Data Transfer	X	X	
Downlink Data Transfer	X	X	
Timing Adjustment	X	X	
UL DCH Synchronization	X	X	
DL DCH Synchronization	X	X	
Outer Loop Power Control Information Transfer	X	X	
UL Node Synchronization	X	X	
DL Node Synchronization	X	X	
Rx Timing Deviation Measurement	-	-	Only in 3.84 Mcps TDD
DSCH TFCI Signaling	-	X	
Radio Interface Parameter Update	-	X	
Timing Advance	-	-	Only in 3.84 Mcps TDD

4.5.7.3.2 Different FP Frame Type compared to FDD

4.5.7.3.3 Different FP Date Frame Type

Data frame	LCR TDD	FDD	Remarks
BCH	X	X	
RACH	X	X	different message content
FACH	X	X	
PCH	X	X	
DSCH	X	X	different structure
USCH	X	-	
CPCH	-	X	
DCH	X	X	

4.5.7.3.4 Different FP Control Frame Type

4.5.7.3.4.1 Different FP control frames in common transport channel

Control Frame in CCH	Value	Remarks
OUTER LOOP POWER CONTROL	0000 0001	In LCR TDD only
TIMING ADJUSTMENT	0000 0010	In both TDD and FDD
DL SYNCHRONIZATION	0000 0011	In both TDD and FDD
UL SYNCHRONIZATION	0000 0100	In both TDD and FDD
DSCH TFCI SIGNALLING	0000 0101	In FDD only
DL NODE SYNCHRONIZATION	0000 0110	In both TDD and FDD
UL NODE SYNCHRONIZATION	0000 0111	In both TDD and FDD
DYNAMIC PUSCH ASSIGNMENT	0000 1000	In TDD only
TIMING ADVANCE	0000 1001	In 3.84 Mcps TDD only

4.5.7.3.4.2 Different FP control frames in dedicated transport channel

Control frame type	value	Remarks
OUTER LOOP POWER CONTROL	0000 0001	In both LCR TDD and FDD, not in 3.84 Mcps TDD
TIMING ADJUSTMENT	0000 0010	In both TDD and FDD
DL SYNCHRONIZATION	0000 0011	In both TDD and FDD
UL SYNCHRONIZATION	0000 0100	In both TDD and FDD
DSCH TFCI SIGNALLING	0000 0101	In FDD only
DL NODE SYNCHRONIZATION	0000 0110	In both TDD and FDD
UL NODE SYNCHRONIZATION	0000 0111	In both TDD and FDD
RX TIMING DEVIATION	0000 1000	In 3.84 Mcps TDD only
RADIO INTERFACE PARAMETER UPDATE	0000 1001	In FDD only
TIMING ADVANCE	0000 1010	In 3.84 Mcps TDD only

4.6 Difference Analysis on Supported Capability of Traffic

4.6.1 Supported Capability of Traffic Classes

This clause mainly analyzes the different RABs between LCR TDD and FDD.

4.6.2 Supported Capability of SRB

This clause mainly analyzes the different SRB between LCR TDD and FDD.

4.6.3 Supported Capability of Combinations of RABs and Signaling RBs

This clause mainly analyzes the different is clause mainly analyzes the different Combinations of RABs and Signaling RBs between LCR TDD and FDD.

4.6.4 Reference Radio Bearer configurations used in Radio Bearer interoperability testing

4.6.4.1 QoS Architecture and RAB attributes

4.6.4.1.1 UMTS QoS Architecture

Void.

4.6.4.1.2 Traffic classes

Void.

4.6.4.2 RAB and signaling RB for LCR TDD

4.6.4.2.1 RABs and signaling RBs

4.6.4.2.1.1 Prioritized RABs

Void.

4.6.4.2.1.2 Signaling RBs

Void.

5 Effect to 3GPP TS 34.123-1

Effect to Reference Conditions.

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
5.1	Generic setup procedures	√	√		√		

Effect to Idle mode operations.

5.1 Idle mode operations

5.1.1 In a pure 3GPP environment

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
6.1.1	**PLMN selection**						
6.1.1.1	PLMN selection of RPLMN, HPLMN, UPLMN and OPLMN; Manual mode	√	√	√		The physical channel used in the measurement for cell selection and reselection for TDD and FDD is different.	4.2.6.1 4.2.6.4
6.1.1.2	PLMN selection of "Other PLMN / access technology combinations"; Manual mode	√	√	√		The physical channel used in the measurement for cell selection and reselection for TDD and FDD is different.	4.2.6.1 4.2.6.4
6.1.1.3	PLMN selection; independence of RF level and preferred PLMN; Manual mode	√	√	√		The physical channel used in the measurement for cell selection and reselection for TDD and FDD is different.	4.2.6.1 4.2.6.4
6.1.1.4	PLMN selection of RPLMN, HPLMN, UPLMN and OPLMN;	√	√	√		The physical channel used in the measurement for cell selection and	4.2.6.1 4.2.6.4

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
	Automatic mode					reselection for TDD and FDD is different.	
6.1.1.5	PLMN selection of "Other PLMN / access technology combinations"; Automatic mode	√	√	√		The physical channel used in the measurement for cell selection and reselection for TDD and FDD is different.	4.2.6.1 4.2.6.4
6.1.1.6	void						
6.1.1.7	Cell reselection of ePLMN in manual mode	√	√	√		The physical channel used in the measurement for cell selection and reselection for TDD and FDD is different.	4.2.6.1 4.2.6.4
6.1.2	**Cell selection and reselection**						
6.1.2.1	Cell reselection	√	√	√		The physical channel used in the measurement for cell selection and reselection for TDD and FDD is different.	4.2.6.1 4.2.6.4
6.1.2.2	Cell reselection using Qhyst, Qoffset and Treselection	√	√	√		The physical channel used in the measurement for cell selection and reselection for TDD and FDD is different.	4.2.6.1 4.2.6.4
6.1.2.3	HCS Cell reselection	√	√	√		The physical channel used in the measurement for cell selection and reselection for TDD and FDD is different.	4.2.6.1 4.2.6.4
6.1.2.4	HCS Cell reselection using reselection timing parameters for the H criterion	√	√	√		The physical channel used in the measurement for cell selection and reselection for TDD and FDD is different.	4.2.6.1 4.2.6.4
6.1.2.5	HCS Cell reselection using reselection timing parameters for the R criterion	√	√	√		The physical channel used in the measurement for cell selection and reselection for TDD and FDD is different.	4.2.6.1 4.2.6.4
6.1.2.6	Emergency calls	√	√	√		The physical channel used in the measurement for cell selection and reselection for TDD and FDD is different.	4.2.6.1 4.2.6.4
6.1.2.7	Emergency calls; Intra-frequency cell "Not allowed"	√	√	√		The physical channel used in the measurement for cell selection and reselection for TDD	4.2.6.1 4.2.6.4

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
						and FDD is different.	
6.1.2.8	Cell reselection: Equivalent PLMN	√	√	√		The physical channel used in the measurement for cell selection and reselection for TDD and FDD is different.	4.2.6.1 4.2.6.4
6.1.2.9	Cell reselection using cell status and cell reservations	√	√	√		The physical channel used in the measurement for cell selection and reselection for TDD and FDD is different.	4.2.6.1 4.2.6.4

5.1.2 In Multi-mode environment (2G/3G case)

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
6.2.1	**PLMN and RAT selection**						
6.2.1.1	Selection of the correct PLMN and associated RAT	√	√	√		The physical channel used in the measurement for cell selection and reselection for TDD and FDD is different.	4.2.6.1 4.2.6.4
6.2.1.2	Selection of RAT for HPLMN; Manual mode	√	√	√		The physical channel used in the measurement for cell selection and reselection for TDD and FDD is different.	4.2.6.1 4.2.6.4
6.2.1.3	Selection of RAT for UPLMN; Manual mode	√	√	√		The physical channel used in the measurement for cell selection and reselection for TDD and FDD is different.	4.2.6.1 4.2.6.4
6.2.1.4	Selection of RAT for OPLMN; Manual mode	√	√	√		The physical channel used in the measurement for cell selection and reselection for TDD and FDD is different.	4.2.6.1 4.2.6.4
6.2.1.5	Selection of "Other PLMN / access technology combinations"; Manual mode	√	√	√		The physical channel used in the measurement for cell selection and reselection for TDD and FDD is different.	4.2.6.1 4.2.6.4
6.2.1.6	Selection of RAT for HPLMN; Automatic mode	√	√	√		The physical channel used in the measurement for cell selection and reselection for TDD and FDD is different.	4.2.6.1 4.2.6.4

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
6.2.1.7	Selection of RAT for UPLMN; Automatic mode	√	√	√		The physical channel used in the measurement for cell selection and reselection for TDD and FDD is different.	4.2.6.1 4.2.6.4
6.2.1.8	Selection of RAT for OPLMN; Automatic mode	√	√	√		The physical channel used in the measurement for cell selection and reselection for TDD and FDD is different.	4.2.6.1 4.2.6.4
6.2.1.9	Selection of "Other PLMN / access technology combinations"; Automatic mode	√	√	√		The physical channel used in the measurement for cell selection and reselection for TDD and FDD is different.	4.2.6.1 4.2.6.4
6.2.2	**Cell selection and reselection**						
6.2.2.1	Cell reselection if cell becomes barred or S<0; UTRAN to GSM	√	√	√		The physical channel used in the measurement for cell selection and reselection for TDD and FDD is different.	4.2.6.1 4.2.6.4
6.2.2.2	Cell reselection if cell becomes barred or C1<0; GSM to UTRAN	√	√	√		The physical channel used in the measurement for cell selection and reselection for TDD and FDD is different.	4.2.6.1 4.2.6.4

5.2 Effect to Layer 2

5.2.1 Effect to MAC

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
7.1.1.1	CCCH mapped to RACH/FACH / Invalid TCTF	√	√	√		TCTF coding for TDD and FDD is different	4.3.1
7.1.1.2	DTCH or DCCH mapped to RACH/FACH / Invalid TCTF	√	√	√		TCTF coding for TDD and FDD is different	4.3.1
7.1.1.3	DTCH or DCCH mapped to RACH/FACH / Invalid C/T Field	√	√		√		
7.1.1.4	DTCH or DCCH mapped to RACH/FACH / Invalid UE ID Type Field	√	√		√		
7.1.1.5	DTCH or DCCH mapped to RACH/FACH / Incorrect UE ID	√	√		√		
7.1.1.6	DTCH or DCCH mapped to DSCH or USCH	√	√	√		USCH is only for TDD	4.3.1
7.1.1.7	DTCH or DCCH mapped to CPCH	√					
7.1.1.8	DTCH or DCCH mapped to DCH / Invalid C/T Field	√	√		√		
7.1.2.1.1	Void						
7.1.2.1.2	Selection and control of Power Level (3.84 Mcps TDD option)					Only for 3.84 Mcps TDD	
7.1.2.1.3	Selection and control of Power Level (1.28 Mcps TDD option)		√			Only for 1.28 Mcps TDD	4.3.5
7.1.2.2.1	Void						
7.1.2.2.2	Correct application of Dynamic Persistence (3.84 Mcps TDD Mcps option)					Only for 3.84 Mcps TDD	
7.1.2.2.3	Correct application of Dynamic Persistence (1.2 Mcps TDD Mcps option)		√			Only for 1.28 Mcps TDD	4.3.5
7.1.2.3.1	Correct Selection of RACH parameters (FDD)	√					

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
7.1.2.3.2	Correct Selection of RACH parameters (3.84 Mcps TDD option)					Only for 3.84 Mcps TDD	
7.1.2.3.3	Correct Selection of RACH parameters (1.28 Mcps TDD option)		√			Only for 1.28 Mcps TDD	4.3.5
7.1.2.4	Correct Detection and Response to FPACH (1.28 Mcps TDD option)		√			Only for 1.28 Mcps TDD	4.3.5
7.1.2.4a	Access Service class selection for RACH transmission	√	√		√		
7.1.2.5	Void						
7.1.3.1	Priority handling between data flows of one UE	√	√		√		
7.1.4.1	Control of CPCH transmissions for FDD	√					
7.1.5.1	MAC-hs reordering and stall avoidance	√	√		√		
7.1.5.2	Priority queue handling	√	√		√		
7.1.5.3	MAC-hs PDU header handling	√	√		√		
7.1.5.4	MAC-hs retransmissions	√	√		√		
7.1.5.5	MAC-hs reset	√	√		√		

5.2.2 Effect to RLC

Void.

5.3 Effect to Radio Resource Control RRC

5.3.1 RRC Connection Management Procedure

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
8.1.1	**Paging**						
8.1.1.1	RRC / Paging for Connection in idle mode	√	√		√		
8.1.1.2	RRC / Paging for Connection in connected mode (CELL_PCH)	√	√		√		
8.1.1.3	RRC / Paging for Connection in connected mode (URA_PCH)	√	√		√		
8.1.1.4	RRC / Paging for notification of BCCH modification in idle mode	√	√	√		The parameter changed in SIB5 for TDD and FDD in this test case is different.	4.4.6.3.18
8.1.1.5	RRC / Paging for notification of BCCH modification in connected mode (CELL_PCH)	√	√	√		The parameter changed in SIB5 for TDD and FDD in this test case is different.	4.4.6.3.18
8.1.1.6	RRC / Paging for notification of BCCH modification in connected mode (URA_PCH)	√	√	√		The parameter changed in SIB5 for TDD and FDD in this test case is different.	4.4.6.3.18
8.1.1.7	RRC / Paging for Connection in connected mode (CELL_DCH)	√	√		√		
8.1.1.8	RRC / Paging for Connection in connected mode (CELL_FACH)	√	√		√		
8.1.1.9	RRC / Paging for Connection in idle mode (multiple paging records)	√	√		√		
8.1.1.10	RRC / Paging for Connection in connected mode (URA_PCH, multiple paging records)	√	√		√		

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
8.1.2	**RRC Connection Establishment**						
8.1.2.1	RRC / RRC Connection Establishment in CELL_DCH state: Success	√	√	√		The measurement quantity in SIB11 and RRC CONNECTION SETUP for LCR TDD and FDD is different.	4.4.6.3.18
8.1.2.2	RRC / RRC Connection Establishment: Success after T300 timeout	√	√	√		The setting of SIB5 for LCR TDD and FDD is different.	4.4.6.3.18
8.1.2.3	RRC / RRC Connection Establishment: Failure (V300 is greater than N300)	√	√		√		
8.1.2.4	RRC / RRC Connection Establishment: Reject ("wait time" is not equal to 0)	√	√	√		The transmission power of cells for LCR TDD and FDD is different.	5.5
8.1.2.5	RRC / RRC Connection Establishment: Reject ("wait time" is not equal to 0 and V300 is greater than N300)	√	√		√		
8.1.2.6	RRC / RRC Connection Establishment: Reject ("wait time" is set to 0)	√	√		√		
8.1.2.7	RRC / RRC Connection Establishment in CELL_FACH state: Success	√	√	√		The IE of "Capability update requirement" in RRC CONNECTION SETUP for LCR TDD and FDD is different.	4.4.7.3
8.1.2.8	Void						
8.1.2.9	RRC / RRC Connection Establishment: Success after Physical channel failure and Invalid configuration	√	√		√		
8.1.2.10	RRC / RRC connection establishment in CELL_DCH on another frequency	√	√	√		The IE of "Frequency Info" in RRC CONNECTION SETUP for LCR TDD and FDD is different.	4.4.7.3

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
8.1.2.11	RRC Connection Establishment in FACH state (Frequency band modification): Success	√	√	√		[1] The IE of "Capability update requirement" in RRC CONNECTION SETUP for LCR TDD and FDD is different. [2] The IE of "Frequency Info" in RRC CONNECTION SETUP for LCR TDD and FDD is different.	4.4.7.3 4.4.7.3
8.1.2.12	RRC Connection Establishment: Reject with interRATInfo is set to GSM	√	√		√		
8.1.2.13	RRC Connection Establishment: Reject with InterRATInfo is set to GSM and selection to the designated system fails	√	√		√		
8.1.3	**RRC Connection Release**						
8.1.3.1	RRC / RRC Connection Release in CELL_DCH state: Successful	√	√		√		
8.1.3.2	RRC / RRC Connection Release using on DCCH in CELL_FACH state: Successful	√	√		√		
8.1.3.3	RRC / RRC Connection Release using on CCCH in CELL_FACH state: Failure	√	√		√		
8.1.3.4	RRC / RRC Connection Release in CELL_FACH state: Failure	√	√		√		
8.1.3.5	RRC / RRC Connection Release in CELL_FACH state: Invalid message	√	√		√		
8.1.3.6	RRC / RRC Connection Release in CELL_DCH state (Frequency band modification): Success	√	√	√		The setting of SIB11 is different for LCR TDD and FDD.	4.4.6.3.18
8.1.3.7	RRC Connection Release in CELL_FACH state (Frequency band modification): Success	√	√	√		The transmission power of cells for LCR TDD and FDD is different.	5.5
8.1.3.8	Void						
8.1.3.9	RRC Connection Release in CELL_DCH state (Network Authentication Failure): Success	√	√	√		The transmission power of cells for LCR TDD and FDD is different.	5.5

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
8.1.4	**Void**						
8.1.5	**UE capability**						
8.1.5.1	RRC / UE Capability in CELL_DCH state: Success					The IE of "Capability update requirement" in UE CAPABILITY ENQUIRY for LCR TDD and FDD is different.	
8.1.5.2	RRC / UE Capability in CELL_DCH state: Success after T304 timeout	√	√	√		The setting of CELL UPDATE CONFIRM for LCR TDD and FDD is different in this test case.	4.4.6.3.2
8.1.5.3	RRC / UE Capability in CELL_DCH state: Failure (After N304 re-transmissions)	√	√	√		The setting of CELL UPDATE CONFIRM for LCR TDD and FDD is different in this test case.	4.4.6.3.2
8.1.5.4	RRC / UE Capability in CELL_FACH state: Success	√	√		√		
8.1.5.5	RRC / UE Capability in CELL_FACH state: Success after T304 timeout	√	√		√		
8.1.5.6	UE Capability Information/ Reporting Of InterRAT Specific UE RadioAccessCapability.	√	√		√		
8.1.6	**Direct Transfer**						
8.1.6.1	Direct Transfer in CELL_DCH state (invalid message reception and no signalling connection exists)	√	√		√		
8.1.6.2	Direct Transfer in CELL_FACH state (invalid message reception and no signalling connection exists)	√	√	√		The setting of SIB11 is different for LCR TDD and FDD.	4.4.6.3.18
8.1.6.3	Measurement Report on INITIAL DIRECTTRANSFER message and UPLINK DIRECT TRANSFER message	√	√	√		The setting of SIB11 is different for LCR TDD and FDD.	4.4.6.3.18
8.1.6.4	UPLINK Direct Transfer (RLC re-establishment)	√	√		√		

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
8.1.7	**Security mode command**						
8.1.7.1	RRC / Security mode control in CELL_DCH state	√	√		√		
8.1.7.1b	Security mode command in CELL_DCH state (PS Domain)	√	√		√		
8.1.7.1c	Security mode control in CELL_DCH state (CN Domain switch and new keys at RRC message sequence number wrap around)	√	√		√		
8.1.7.1d	Security mode control in CELL_DCH state interrupted by a cell update	√	√	√		The setting of CELL UPDATE CONFIRM for LCR TDD and FDD is different in this test case.	4.4.6.3.2
8.1.7.2	RRC / Security mode control in CELL_FACH state	√	√		√		
8.1.8	**Counter check**						
8.1.8.1	Counter check in CELL_DCH state, with symmetrical RAB	√	√		√		
8.1.8.2	RRC / Counter check in CELL_FACH state	√	√		√		
8.1.8.3	Counter check in CELL_DCH state, with asymmetric RAB	√	√		√		
8.1.9	RRC / Signalling Connection Release Indication	√	√		√		
8.1.9a	Signalling Connection Release Indication (RLC re-establishment): CS signalling connection release	√	√		√		
8.1.9b	Signalling Connection Release Indication (RLC re-establishment): PS signalling connection release	√	√		√		
8.1.10	**Broadcast of system information**						
8.1.10.1	Dynamic change of segmentation, concatenation & scheduling and handling of unsupported information blocks	√	√		√		
8.1.11	RRC / Signalling Connection Release (Invalid configuration)	√	√		√		
8.1.12	Integrity Protection	√	√		√		

5.3.2 Radio Bearer Control Procedure

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
8.2.1.1	RRC / Radio Bearer Establishment for transition from CELL_DCH to CELL_DCH: Success	√	√	√		The content of RADIO BEARER SETUP is different	
8.2.1.2	Void						
8.2.1.3	RRC / Radio Bearer Establishment for transition from CELL_DCH to CELL_DCH: Failure (Unsupported configuration)	√	√	√		The content of RADIO BEARER SETUP is different	
8.2.1.4	RRC / Radio Bearer Establishment for transition from CELL_DCH to CELL_DCH: Failure (Physical channel Failure and successful reversion to old configuration)	√	√	√		The parameter of the cell configuration is different, CPICH Ec (FDD), P-CCPCH RSCP (TDD) The content of RADIO BEARER SETUP is different	
8.2.1.5	Void						
8.2.1.6	Void						
8.2.1.7	RRC / Radio Bearer Establishment for transition from CELL_DCH to CELL_DCH: Failure (Invalid message reception and invalid configuration)	√	√		√		
8.2.1.8	RRC / Radio Bearer Establishment for transition from CELL_DCH to CELL_FACH: Success	√	√	√		Different reconfiguration parameter "Primary CPICH info" (for FDD) or "Primary CCPCH info" (for TDD) will be used	
8.2.1.9	RRC / Radio Bearer Establishment for transition from CELL_DCH to CELL_FACH: Success (Cell re-selection)	√	√		√		
8.2.1.10	RRC / Radio Bearer Establishment for transition from CELL_FACH to CELL_DCH: Success	√	√		√		
8.2.1.11	RRC / Radio Bearer Establishment for transition from CELL_FACH to CELL_DCH: Failure (Unsupported configuration)	√	√	√		The content of RADIO BEARER SETUP is different	

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
8.2.1.12	RRC / Radio Bearer Establishment for transition from CELL_FACH to CELL_DCH: Failure (Physical channel Failure and successful reversion to old configuration)	√	√		√		
8.2.1.13	RRC / Radio Bearer Establishment for transition from CELL_FACH to CELL_DCH: Failure (Physical channel Failure and reversion failure)	√	√	√		The parameter of the cell configuration is different, CPICH Ec (FDD), P-CCPCH RSCP (TDD)	
8.2.1.14	RRC / Radio Bearer Establishment for transition from CELL_FACH to CELL_DCH: Failure (Incompatible simultaneous reconfiguration)	√	√	√		Content of RADIO BEARER RECONFIGURATION And RADIO BEARER SETUP are different	
8.2.1.15	Void						
8.2.1.16	RRC / Radio Bearer Establishment for transition from CELL_FACH to CELL_FACH: Success	√	√	√		Different reconfiguration message will be used	
8.2.1.17	RRC / Radio Bearer Establishment for transition from CELL_DCH to CELL_DCH: Success (Subsequently received)	√	√	√		Content of RADIO BEARER SETUP are different	
8.2.1.18	RRC / Radio Bearer Establishment for transition from CELL_FACH to CELL_DCH: Success (Subsequently received)	√	√	√		Content of RADIO BEARER SETUP are different	
8.2.1.19	Void						
8.2.1.20	Void						
8.2.1.21	Void						
8.2.1.22	RRC / Radio Bearer Establishment for transition from CELL_DCH to CELL_FACH (Frequency band modification): Success	√	√	√		The parameter of the cell configuration is different, CPICH Ec (FDD), P-CCPCH RSCP (TDD)	
8.2.1.23	RRC / Radio Bearer Establishment for transition from CELL_FACH to CELL_DCH (Frequency band modification):	√	√	√		Content of RADIO BEARER SETUP are different	

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
	Success						

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
8.2.1.24	Radio Bearer Establishment for transition from CELL_DCH to CELL_DCH (Frequency band modification): Success	√	√	√		Content of RADIO BEARER SETUP are different	
8.2.1.25	Radio Bearer Establishment for transition from CELL_FACH to CELL_FACH (Frequency band modification): Success	√	√	√		Different reconfiguration message will be used "Primary CPICH info" (for FDD) or "Primary CCPCH info" (for TDD) The parameter of the cell configuration is different, CPICH Ec (FDD), P-CCPCH RSCP (TDD)	
8.2.1.26	Radio Bearer Establishment for transition from CELL_DCH to CELL_DCH: Success (Transparent mode with ciphering on)	void					
8.2.1.27	Radio Bearer Establishment for transition from CELL_DCH to CELL_DCH: Success (two radio links, start of HS-DSCH reception)	√				FFS for TDD	
8.2.1.28	Radio Bearer Establishment for transition from CELL_DCH to CELL_DCH: Success (RB mapping for both DL DCH and HS-DSCH in cell without HS-DSCH support)	√				FFS for TDD	
8.2.1.29	Radio Bearer Establishment for transition from CELL_DCH to CELL_DCH: Success (Uplink TFCS restriction, start of HS-DSCH reception)	√				FFS for TDD	
8.2.1.30	Radio Bearer Establishment for transition from CELL_DCH to CELL_DCH: Success (Timing re-initialized hard handover to another frequency, start of	√				FFS for TDD	

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
	HS-DSCH reception)						
8.2.2.1	RRC / Radio Bearer Reconfiguration (Hard Handover) from CELL_DCH to CELL_DCH: Success	√	√	√		The content of RADIO BEARER RECONFIGURATION is different	
8.2.2.2	RRC / Radio Bearer Reconfiguration from CELL_DCH to CELL_DCH: Failure (Unsupported configuration)	√	√	√		The content of RADIO BEARER RECONFIGURATION is different	
8.2.2.3	Void						
8.2.2.4	RRC / Radio Bearer Reconfiguration from CELL_DCH to CELL_DCH: Failure (Physical channel failure and reversion failure)	√	√	√		The content of CELL UPDATE CONFIRM is different	
8.2.2.5	Void						
8.2.2.6	Void						
8.2.2.7	RRC / Radio Bearer Reconfiguration from CELL_DCH to CELL_DCH: Success (Continue and stop)	√	√	√		The content of RADIO BEARER RECONFIGURATION is different	
8.2.2.8	RRC / Radio Bearer Reconfiguration from CELL_DCH to CELL_FACH: Success	√	√	√		The content of RADIO BEARER RECONFIGURATION is different	
8.2.2.9	RRC / Radio Bearer Reconfiguration from CELL_DCH to CELL_FACH: Success (Cell re-selection)	√	√	√		The content of RADIO BEARER RECONFIGURATION is different	
8.2.2.10	RRC / Radio Bearer Reconfiguration from CELL_FACH to CELL_DCH: Success	√	√	√		The content of RADIO BEARER RECONFIGURATION is different	
8.2.2.11	Radio Bearer Reconfiguration from CELL_FACH to CELL_DCH: Failure (Unsupported configuration)	√	√	√		The content of RADIO BEARER RECONFIGURATION is different	
8.2.2.12	Void						
8.2.2.13	Void						
8.2.2.14	Void						
8.2.2.15	Void						
8.2.2.16	Void						
8.2.2.17	RRC / Radio Bearer Reconfiguration from CELL_FACH to CELL_FACH: Success	√	√	√		Different reconfiguration parameter "Primary CPICH info" (for FDD) or "Primary CCPCH info" (for TDD) will be used	
8.2.2.18	RRC / Radio Bearer Reconfiguration	√	√	√		The parameter of the cell configuration is	

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
	from CELL_FACH to CELL_FACH: Success (Cell re-selection)					different, CPICH Ec (FDD), P-CCPCH RSCP (TDD)	
8.2.2.19	RRC / Radio Bearer Reconfiguration from CELL_DCH to CELL_DCH: Success (Subsequently received)	√	√	√		The content of RADIO BEARER RECONFIGURATION is different	

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
8.2.2.20	void						
8.2.2.21	Void						
8.2.2.22	Void						
8.2.2.23	RRC / Radio Bearer Reconfiguration from CELL_FACH to CELL_PCH: Success	√	√		√		
8.2.2.24	Void						
8.2.2.25	void						
8.2.2.26	RRC / Radio Bearer Reconfiguration from CELL_DCH to CELL_DCH: Success (Incompatible Simultaneous Reconfiguration)	√	√		√		
8.2.2.27	Radio Bearer Reconfiguration for transition from CELL_DCH to CELL_DCH (Frequency band modification): Success	√	√	√		The content of RADIO BEARER RECONFIGURATION is different	
8.2.2.28	Radio Bearer Reconfiguration for transition from CELL_DCH to CELL_FACH (Transport channel type switching with frequency band modification): Success	√	√	√		The content of RADIO BEARER RECONFIGURATION is different	
8.2.2.29	Void						
8.2.2.30	Void						
8.2.2.31	Radio Bearer Reconfiguration for transition from CELL_FACH to CELL_DCH (Frequency band modification): Success	√	√	√		The content of RADIO BEARER RECONFIGURATION is different	
8.2.2.32	Radio Bearer Reconfiguration for transition from CELL_FACH to CELL_FACH (Frequency band modification): Success	√	√	√		The content of RADIO BEARER RECONFIGURATION is different	
8.2.2.33	Void						
8.2.2.34	Radio Bearer Reconfiguration for transition from CELL_FACH to URA_PCH (Frequency band modification): Success	√	√	√		The content of RADIO BEARER RECONFIGURATION is different	
8.2.2.35	Radio Bearer Reconfiguration from CELL_DCH to	√	√	√		The content of RADIO BEARER RECONFIGURATION	

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
	CELL_FACH: Successful channel switching with multiple PS RABs established					is different	
8.2.2.36	Radio Bearer Reconfiguration for transition from CELL_DCH to CELL_DCH: Success (Start and stop of HS-DSCH reception)	√				FFS for TDD	
8.2.2.37	Radio Bearer Reconfiguration for transition from CELL_FACH to CELL_DCH and from CELL_DCH to CELL_FACH: Success (start and stop of HS-DSCH reception)	√				FFS for TDD	
8.2.2.38	Radio Bearer Reconfiguration from CELL_DCH to CELL_DCH: Success (with active HS-DSCH reception)	√				FFS for TDD	
8.2.2.39	Radio Bearer Reconfiguration for transition from CELL_DCH to CELL_DCH: Success (Timing re-initialized hard handover to another frequency, start and stop of HS-DSCH reception)	√				FFS for TDD	
8.2.2.40	Radio Bearer Reconfiguration for transition from CELL_DCH to CELL_FACH and from CELL_FACH to CELL_DCH: Success (frequency band modification, start and stop of HS-DSCH reception)	√				FFS for TDD	
8.2.3.1	RRC / Radio Bearer Release for transition from CELL_DCH to CELL_DCH: Success	√	√		√	FFS for TDD	
8.2.3.2	Void						
8.2.3.3	Void						
8.2.3.4	Void						
8.2.3.5	Void						
8.2.3.6	Void						
8.2.3.7	RRC / Radio Bearer Release for transition from	√	√	√		Different reconfiguration parameter "Primary	

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
	CELL_DCH to CELL_FACH: Success					CPICH info" (for FDD) or "Primary CCPCH info" (for TDD) will be used	

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
8.2.3.8	RRC / Radio Bearer Release for transition from CELL_DCH to CELL_FACH: Success (Cell re-selection)	√	√	√		Different RADIO BEARER RELEASE msg	
8.2.3.9	RRC / Radio Bearer Release for transition from CELL_FACH to CELL_DCH: Success	√	√		√		
8.2.3.10	Void						
8.2.3.11	RRC / Radio Bearer Release for transition from CELL_FACH to CELL_DCH: Failure (Physical channel failure and successful reversion to old configuration)	√	√		√		
8.2.3.12	Void						
8.2.3.13	Void						
8.2.3.14	Void						
8.2.3.15	RRC / Radio Bearer Release for transition from CELL_FACH to CELL_FACH: Success	√	√		√		
8.2.3.16	RRC / Radio Bearer Release for transition from CELL_DCH to CELL_DCH: Success (Subsequently received)	√	√	√		Different RADIO BEARER RELEASE msg	
8.2.3.17	RRC / Radio Bearer Release for transition from CELL_FACH to CELL_DCH: Success (Subsequently received)	√	√	√		Different RADIO BEARER RELEASE msg	
8.2.3.18	RRC / Radio Bearer Release from CELL_DCH to CELL_PCH: Success	√	√	√		Different RADIO BEARER RELEASE msg	
8.2.3.19	RRC / Radio Bearer Release from CELL_DCH to URA_PCH: Success	√	√	√		Different RADIO BEARER RELEASE msg	
8.2.3.20	RRC / Radio Bearer Release for transition from CELL_DCH to CELL_FACH (Frequency band modification): Success	√	√		√		

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
8.2.3.21	RRC / Radio Bearer Release from CELL_DCH to CELL_PCH (Frequency band modification): Success	√	√		√		
8.2.3.22	Radio Bearer Release for transition from CELL_FACH to CELL_PCH: Success	√	√		√		
8.2.3.23	Radio Bearer Release for transition from CELL_FACH to URA_PCH: Success	√	√		√		
8.2.3.24	Radio Bearer Release for transition from CELL_DCH to CELL_DCH (Frequency band modification): Success	√	√		√		
8.2.3.25	Radio Bearer Release for transition from CELL_DCH to URA_PCH (Frequency band modification): Success	√	√		√		
8.2.3.26	Radio Bearer Release for transition from CELL_FACH to CELL_PCH (Frequency band modification): Success	√	√		√		
8.2.3.27	Radio Bearer Release for transition from CELL_FACH to URA_PCH (Frequency band modification): Success	√	√		√		
8.2.3.28	Radio Bearer Release for transition from CELL_FACH to CELL_FACH (Frequency band modification): Success	√	√		√		
8.2.3.29	Radio Bearer Release for transition from CELL_DCH to CELL_DCH: Associated with signalling connection release	√	√		√		

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
	during multi call for PS and CS services						
8.2.3.30	Radio Bearer Release for transition from CELL_DCH to CELL_DCH: Success (stop of HS-DSCH reception)	√				FFS for TDD	
8.2.4.1	RRC / Transport channel reconfiguration (Timing re-initialized hard handover with transmission rate modification) from CELL_DCH to CELL_DCH (Hard handover to same radio frequency): Success	√	√	√		Different TRANSPORT CHANNEL RECONFIGURATION Msg	

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
8.2.4.1a	RRC / Transport channel reconfiguration (Transmission Rate Modification) from CELL_DCH to CELL_DCH of the same cell: Success	√	√		√		
8.2.4.2	Void						
8.2.4.3	RRC / Transport channel reconfiguration from CELL_DCH to CELL_DCH: Failure (Physical channel failure and reversion to old configuration)	√	√	√		The parameter of the cell configuration is different, CPICH Ec (FDD), P-CCPCH RSCP (TDD)	
8.2.4.4	RRC / Transport channel reconfiguration from CELL_DCH to CELL_DCH: Failure (Physical channel failure and reversion failure)	√	√	√		Different CELL UPDATE CONFIRM msg content	
8.2.4.5	Void						
8.2.4.6	Void						
8.2.4.7	Void						
8.2.4.8	Void						
8.2.4.9	Void						
8.2.4.10	RRC / Transport channel reconfiguration from CELL_FACH to CELL_DCH: Success	√	√		√		
8.2.4.11	Void						
8.2.4.12	Void						
8.2.4.13	Void						
8.2.4.14	Void						
8.2.4.15	Void						
8.2.4.16	Void						
8.2.4.17	Void						
8.2.4.18	RRC / Transport Channel Reconfiguration from CELL_DCH to CELL_DCH: Success (Subsequently received)	√	√	√		Different TRANSPORT CHANNEL RECONFIGURATION Msg	
8.2.4.19	RRC / Transport Channel Reconfiguration from CELL_FACH to CELL_DCH: Success (Subsequently received)	√	√	√		Different TRANSPORT CHANNEL RECONFIGURATION Msg	
8.2.4.20	Void						
8.2.4.21	Void						
8.2.4.22	Void						
8.2.4.23	Void						

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
8.2.4.24	RRC / Transport channel reconfiguration from CELL_DCH to CELL_DCH: Success with uplink transmission rate modification	√	√		√		
8.2.4.25	RRC / Transport channel reconfiguration from CELL_FACH to CELL_DCH (Frequency band modification): Success	√	√		√		
8.2.4.26	Void						
8.2.4.27	Void						
8.2.4.28	Void						
8.2.4.29	Transport Channel Reconfiguration for transition from CELL_DCH to CELL_DCH (Frequency band modification): Success	√	√	√		Different TRANSPORT CHANNEL RECONFIGURATION Msg	
8.2.4.30	Void						
8.2.4.31	Void						
8.2.4.32	Void						
8.2.4.33	Void						
8.2.4.34	Void						
8.2.4.35	Void						
8.2.5.1	Void						
8.2.5.2	Void						
8.2.5.3	Void						
8.2.5.4	RRC / Transport format combination Control in CELL_DCH: Failure (Invalid message reception and invalid configuration)	√	√		√		
8.2.6.1	RRC / Physical channel reconfiguration for transition from CELL_DCH to CELL_DCH (Hard handover for code modification): Success	√	√	√		Different PHYSICAL CHANNEL RECONFIGURATION Msg content	
8.2.6.2	RRC / Physical channel reconfiguration for transition from CELL_DCH to CELL_DCH (Hard handover for code modification): Failure (Unsupported configuration)	√	√	√		Different PHYSICAL CHANNEL RECONFIGURATION Msg content	
8.2.6.3	Void						
8.2.6.4	Void						

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
8.2.6.5	RRC / Physical channel reconfiguration for transition from CELL_DCH to CELL_DCH (Hard handover for code modification): Failure (Incompatible simultaneous reconfiguration)	√	√	√		Different RADIO BEARER RECONFIGURATION ,PHYSICAL CHANNEL RECONFIGURATION Msg content	
8.2.6.6	RRC / Physical channel reconfiguration for transition from CELL_DCH to CELL_DCH (Hard handover for code modification): Failure (Invalid message reception and invalid configuration)	√	√	√		Different PHYSICAL CHANNEL RECONFIGURATION Msg content	
8.2.6.7	RRC / Physical channel reconfiguration for transition from CELL_DCH to CELL_FACH: Success	√	√		√		
8.2.6.8	RRC / Physical channel reconfiguration for transition from CELL_DCH to CELL_FACH: Success (Cell re-selection)	√	√	√		Different PHYSICAL CHANNEL RECONFIGURATION Msg content	
8.2.6.9	RRC / Physical channel reconfiguration for transition from CELL_FACH to CELL_DCH: Success	√	√		√		
8.2.6.10	Void						
8.2.6.11	RRC / Physical channel reconfiguration for transition from CELL_FACH to CELL_DCH: Failure (Physical channel failure and successful reversion to old configuration)	√	√		√		
8.2.6.12	RRC / Physical channel reconfiguration for transition from CELL_FACH to CELL_DCH: Failure (Physical channel failure and cellupdate)	√	√	√		The parameter of the cell configuration is different, CPICH Ec (FDD), P-CCPCH RSCP (TDD)	

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
8.2.6.13	Void						
8.2.6.14	RRC / Physical channel reconfiguration for transition from CELL_FACH to CELL_DCH: Failure (Invalid message reception and invalid configuration)	√	√	√		Different PHYSICAL CHANNEL RECONFIGURATION Msg content	
8.2.6.15	Void						
8.2.6.16	Void						
8.2.6.17	RRC / Physical Channel Reconfiguration from CELL_DCH to CELL_DCH (Hard Handover for code modification): Success (Subsequently received)	√	√	√		Different PHYSICAL CHANNEL RECONFIGURATION Msg content	
8.2.6.18	RRC / Physical Channel Reconfiguration from CELL_FACH to CELL_DCH: Success (Subsequently received)	√	√	√		Different PHYSICAL CHANNEL RECONFIGURATION Msg content	
8.2.6.19	RRC / Physical channel from CELL_DCH to CELL_PCH: Success	√	√	√		Different PHYSICAL CHANNEL RECONFIGURATION Msg content	
8.2.6.20	RRC / Physical channel from CELL_DCH to URA_PCH: Success	√	√	√		Different PHYSICAL CHANNEL RECONFIGURATION Msg content	
8.2.6.21	RRC / Physical channel reconfiguration for transition from CELL_FACH to URA_PCH: Success	√	√		√		
8.2.6.22	RRC / Physical channel reconfiguration for transition from CELL_FACH to CELL_PCH: Success	√	√		√		
8.2.6.23	RRC / Physical channel reconfiguration for transition from CELL_DCH to CELL_DCH (Hard handover to another frequency with timing maintain): Success	√	√		√		
8.2.6.24	Void						

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
8.2.6.25	RRC / Physical channel reconfiguration for transition from CELL_DCH to CELL_FACH (Frequency band modification): Success	√	√		√		
8.2.6.26	RRC / Physical Channel Reconfiguration from CELL_DCH to CELL_PCH (Frequency band modification): Success	√	√		√		
8.2.6.27	RRC / Physical channel reconfiguration from CELL_FACH to CELL_PCH: Success	√	√		√		
8.2.6.28	RRC / Physical channel reconfiguration for transition from CELL_DCH to CELL_DCH (Downlink channelization code modification): Success	√	√		√		
8.2.6.29	RRC / Physical channel reconfiguration for transition from CELL_DCH to CELL_DCH (Compressed mode initiation): Success	√	√		√		
8.2.6.30	RRC / Physical channel reconfiguration for transition from CELL_DCH to CELL_DCH (Modify active set cell): Success	√	√		√		
8.2.6.31	RRC / Physical channel reconfiguration transition from CELL_FACH to URA_PCH: Success	√	√		√		
8.2.6.32	RRC / Physical channel reconfiguration for transition from CELL_DCH to URA_PCH (Frequency band modification): Success	√	√		√		

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
8.2.6.33	RRC / Physical channel reconfiguration for transition from CELL_FACH to CELL_DCH (Frequency band modification): Success	√	√		√		
8.2.6.34	RRC / Physical channel reconfiguration from CELL_FACH to CELL_PCH (Frequency band modification): Success	√	√		√		
8.2.6.35	RRC / Physical channel reconfiguration for transition from CELL_FACH to URA_PCH (Frequency band modification): Success	√	√		√		
8.2.6.36	Physical channel reconfiguration for transition from CELL_FACH to CELL FACH with frequency band modification	√	√		√		
8.2.6.37	RRC / Physical channel reconfiguration for transition from CELL_DCH to CELL_DCH (Hard handover to another frequency with timing re-initialized	√					
8.2.6.37a	RRC / Physical channel reconfiguration for transition from CELL_DCH to CELL_DCH (Hard handover to another frequency with timing re-initialized) (1.28 Mcps TDD)		√				
8.2.6.38	Physical channel reconfiguration for transition from CELL_DCH to CELL_DCH (Hard handover to another frequency with timing re-initialized): Failure (Physical channel failure and reversion to old channel)	√	√		√		

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
8.2.6.39	RRC / Physical Channel Reconfiguration for transition from CELL_DCH to CELL_DCH (without pending of ciphering)	√	√		√		
8.2.6.39a	Physical Channel Reconfiguration for transition from CELL_DCH to CELL_DCH: Success (serving HS-DSCH cell change without MAC-hs reset)	√					

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
8.2.6.39b	Physical Channel Reconfiguration for transition from CELL_DCH to CELL_DCH: Success (serving HS-DSCH cell change with MAC-hs reset)	√					
8.2.6.40	Physical Channel Reconfiguration for transition from CELL_DCH to CELL_DCH: Success (Two radio links, change of HS-PDSCH configuration)	√					
8.2.6.41	Physical Channel Reconfiguration for transition from CELL_DCH to CELL_DCH: Success (Timing re-initialized hard handover to another frequency, signalling only)	√	√		√		
8.2.6.42	Physical Channel Reconfiguration for transition from CELL_DCH to CELL_DCH: Success (Timing re-initialized hard handover to another frequency, Serving HS-DSCH cell change)	√					
8.2.6.43	Physical Channel Reconfiguration for transition from CELL_DCH to CELL_DCH: Success (Seamless SRNS relocation with pending of ciphering)	√	√		√		
8.2.6.44	Physical Channel Reconfiguration for transition from CELL_DCH to CELL_DCH: Failure (Radio link failure in new configuration)	√	√		√		
8.2.6.45	Physical Channel Reconfiguration for transition from CELL_DCH to URA_PCH: Failure (Radio link failure in old configuration)	√	√		√		
8.2.6.46	Physical channel reconfiguration for transition from CELL_DCH to	√					

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
	CELL_DCH (Hard handover to another frequency with timing re-initialised. Serving HS-DSCH cell change): Failure (Physical channel failure and reversion to old channel)						
8.2.6.47	Physical channel reconfiguration for transition from CELL_DCH to CELL_DCH (Compressed mode initiation, with active HS-DSCH reception): Success	√					
8.2.6.48	Physical Channel Reconfiguration for transition from CELL_DCH to CELL_DCH: Success (Timing re-initialized hard handover to another frequency, serving HS-DSCH cell change, compressed mode)	√					
8.2.7	RRC / Physical Shared Channel Allocation [TDD only]		√				
8.2.8	RRC / PUSCH capacity request [TDD only]		√				

5.3.3 RRC Connection Mobility Procedure

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
8.3.1.1	RRC / Cell Update: cell reselection in CELL_FACH	√	√	√		[1] The IE "Uplink DPCH info", "Downlink information common for all radio links " and "Downlink information per radio link list" in CELL UPDATE CONFIRM (Step 12,17) for FDD and TDD is different. [2] Different parameter : CPICH Ec (FDD) P-CCPCH RSCP (TDD) [3] PHYSICAL CHANNEL RECONFIGURATION (Step 13 and 19) for FDD and TDD is different.	
8.3.1.2	RRC / Cell Update: cell reselection in CELL_PCH	√	√		√		
8.3.1.3	RRC / Cell Update: periodical cell update in CELL_FACH	√	√	√		Different parameter : CPICH Ec (FDD) P-CCPCH RSCP (TDD)	
8.3.1.4	RRC / Cell Update: periodical cell update in CELL_PCH	√	√	√		Different parameter : CPICH Ec (FDD) P-CCPCH RSCP (TDD)	
8.3.1.5	RRC / Cell Update: UL data transmission in URA_PCH	√	√		√		
8.3.1.6	RRC / Cell Update: UL data transmission in CELL_PCH	√	√		√		
8.3.1.7	Void						
8.3.1.8	Void						
8.3.1.9	RRC / Cell Update: re-entering of service area after T305 expiry and being out of service area	√	√	√		Different parameter : CPICH Ec (FDD) P-CCPCH RSCP (TDD)	
8.3.1.10	RRC / Cell Update: expiry of T307 after T305 expiry and being out of service area	√	√	√		Different parameter : CPICH Ec (FDD) P-CCPCH RSCP (TDD)	
8.3.1.11	RRC / Cell Update:	√	√		√		

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
8.3.1.1	RRC / Cell Update: cell reselection in CELL_FACH	√	√	√		[1] The IE "Uplink DPCH info", "Downlink information common for all radio links " and "Downlink information per radio link list" in CELL UPDATE CONFIRM (Step 12,17) for FDD and TDD is different. [2] Different parameter : CPICH Ec (FDD) P-CCPCH RSCP (TDD) [3] PHYSICAL CHANNEL RECONFIGURATION (Step 13 and 19) for FDD and TDD is different.	
	Success after T302 time-out						
8.3.1.12	RRC / Cell Update: Failure (After Maximum Re-transmissions)	√	√		√		
8.3.1.13	RRC / Cell Update: Reception of Invalid CELL UPDATE CONFIRM message	√	√		√		
8.3.1.14	RRC / Cell Update: Incompatible simultaneous reconfiguration	√	√		√		
8.3.1.15	RRC / Cell Update: Unrecoverable error in Acknowledged Mode RLC	√	√		√		
8.3.1.16	Void						
8.3.1.17	RRC / Cell Update: Failure (UTRAN initiate an RRC connection release procedure on CCCH)	√	√		√		
8.3.1.18	RRC / Cell Update: Radio Link Failure (T314>0, T315=0), CS RAB established	√	√	√		[1] The IE "Downlink information common for all radio links " and "Downlink information per radio link list" in CELL UPDATE CONFIRM (Step 8 and 11) for FDD and TDD is different. [2] Different parameter : CPICH Ec	

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
8.3.1.1	RRC / Cell Update: cell reselection in CELL_FACH	√	√	√		[1] The IE "Uplink DPCH info", "Downlink information common for all radio links " and "Downlink information per radio link list" in CELL UPDATE CONFIRM (Step 12,17) for FDD and TDD is different. [2] Different parameter : CPICH Ec (FDD) P-CCPCH RSCP (TDD) [3] PHYSICAL CHANNEL RECONFIGURATION (Step 13 and 19) for FDD and TDD is different.	
						(FDD) P-CCPCH RSCP (TDD)	
8.3.1.19	Void						
8.3.1.20	RRC / Cell Update: Reception of CELL UPDATE CONFIRM Message that causes invalid configuration	√	√		√		
8.3.1.21	Cell Update: Cell reselection to cell of another PLMN belonging to the equivalent PLMN list	√	√	√		[1] Different parameter : CPICH Ec (FDD) P-CCPCH RSCP (TDD) [2] The transmit power for FDD and TDD is different. [3] System Information Block type 11 (Step 1a) for FDD and TDD is different	
8.3.1.22	Cell update: Restricted cell reselection to a cell belonging to forbidden LA list (Cell_FACH)	√	√	√		[1] Different parameter : CPICH Ec (FDD) P-CCPCH RSCP (TDD) [2] The transmit power for FDD and TDD is different.	
8.3.1.23	Cell Update: HCS cell reselection in	√	√	√		[1] There is difference in	

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
8.3.1.1	RRC / Cell Update: cell reselection in CELL_FACH	√	√	√		[1] The IE "Uplink DPCH info", "Downlink information common for all radio links " and "Downlink information per radio link list" in CELL UPDATE CONFIRM (Step 12,17) for FDD and TDD is different. [2] Different parameter : CPICH Ec (FDD) P-CCPCH RSCP (TDD) [3] PHYSICAL CHANNEL RECONFIGURATION (Step 13 and 19) for FDD and TDD is different.	
	CELL_FACH					Block type 4 and block type 11 for TDD and FDD [2] Different parameter : CPICH Ec (FDD) P-CCPCH RSCP (TDD)	
8.3.1.24	Cell Update: HCS cell reselection in CELL_PCH	√	√	√		[1] There is difference in Block type 4 and block type 11 for TDD and FDD [2] Different parameter : CPICH Ec (FDD) P-CCPCH RSCP (TDD) [3] The transmit power for FDD and TDD is different.	
8.3.1.25	CELL UPDATE: Radio Link Failure (T314=0, T315=0)	√	√	√		Different parameter : CPICH Ec (FDD) P-CCPCH RSCP (TDD)	
8.3.1.26	Cell Update: Radio Link Failure (T314>0, T315=0), PS RAB established	√	√	√		[1] The IE "Downlink information common for all radio links " and "Downlink information per radio link list" in CELL UPDATE	

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
8.3.1.1	RRC / Cell Update: cell reselection in CELL_FACH	√	√	√		[1] The IE "Uplink DPCH info", "Downlink information common for all radio links " and "Downlink information per radio link list" in CELL UPDATE CONFIRM (Step 12,17) for FDD and TDD is different. [2] Different parameter : CPICH Ec (FDD) P-CCPCH RSCP (TDD) [3] PHYSICAL CHANNEL RECONFIGURATION (Step 13 and 19) for FDD and TDD is different.	
						CONFIRM for FDD and TDD is different. [2] Different parameter : CPICH Ec (FDD) P-CCPCH RSCP (TDD)	
8.3.1.27	Cell Update: Radio Link Failure (T314=0, T315>0), CS RAB	√	√	√		Different parameter : CPICH Ec (FDD) P-CCPCH RSCP (TDD)	
8.3.1.28	Cell Update: Radio Link Failure (T314=0, T315>0), PS RAB	√	√	√		[1] The IE "Downlink information common for all radio links " and "Downlink information per radio link list" in CELL UPDATE CONFIRM for FDD and TDD is different. [2] Different parameter : CPICH Ec (FDD) P-CCPCH RSCP (TDD)	
8.3.1.29	Cell Update: Radio Link Failure (T314>0, T315>0), CS RAB	√	√	√		Different parameter : CPICH Ec (FDD) P-CCPCH RSCP (TDD)	

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
8.3.1.1	RRC / Cell Update: cell reselection in CELL_FACH	√	√	√		[1] The IE "Uplink DPCH info", "Downlink information common for all radio links " and "Downlink information per radio link list" in CELL UPDATE CONFIRM (Step 12,17) for FDD and TDD is different. [2] Different parameter : CPICH Ec (FDD) P-CCPCH RSCP (TDD) [3] PHYSICAL CHANNEL RECONFIGURATION (Step 13 and 19) for FDD and TDD is different.	
8.3.1.30	Cell Update: Radio Link Failure (T314>0, T315>0), PS RAB	√	√	√		[1] The IE "Downlink information common for all radio links " and "Downlink information per radio link list" in CELL UPDATE CONFIRM for FDD and TDD is different. [2] Different parameter : CPICH Ec (FDD) P-CCPCH RSCP (TDD)	
8.3.1.31	Cell Update: re-entering of service area from URA_PCH after T316 expiry but before T317 expiry	√	√	√		Different parameter : CPICH Ec (FDD) P-CCPCH RSCP (TDD)	
8.3.1.32	Cell Update: Transition from URA_PCH to CELL_DCH, start of HS-DSCH reception	√	√	√		The IE "Downlink information common for all radio links " and "Downlink information per radio link list" in CELL UPDATE CONFIRM for FDD and TDD is different.	
8.3.1.33	Cell Update: Transition from CELL_PCH to CELL_DCH, start of	√				Only for FDD	

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
8.3.1.1	RRC / Cell Update: cell reselection in CELL_FACH	√	√	√		[1] The IE "Uplink DPCH info", "Downlink information common for all radio links " and "Downlink information per radio link list" in CELL UPDATE CONFIRM (Step 12,17) for FDD and TDD is different. [2] Different parameter : CPICH Ec (FDD) P-CCPCH RSCP (TDD) [3] PHYSICAL CHANNEL RECONFIGURATION (Step 13 and 19) for FDD and TDD is different.	
	HS-DSCH reception, frequency band modification						
8.3.1.34	Cell Update: Transition from CELL_DCH to CELL_FACH, stop of HS-DSCH reception	√	√	√		[1] RADIO BEARER SETUP for FDD and TDD is different [2] Different parameter : CPICH Ec (FDD) P-CCPCH RSCP (TDD)	
8.3.1.35	Cell Update: Transition from CELL_DCH to CELL_DCH, with active HS-DSCH reception	√	√	√		[1] RADIO BEARER SETUP for FDD and TDD is different. [2] The IE "Downlink information common for all radio links " and "Downlink information per radio link list" in CELL UPDATE CONFIRM for FDD and TDD is different. [3] Different parameter : CPICH Ec (FDD) P-CCPCH RSCP (TDD)	
8.3.1.36	Cell Update: Transition from CELL_DCH to	√	√	√		[1] RADIO BEARER	

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
8.3.1.1	RRC / Cell Update: cell reselection in CELL_FACH	√	√	√		[1] The IE "Uplink DPCH info", "Downlink information common for all radio links " and "Downlink information per radio link list" in CELL UPDATE CONFIRM (Step 12,17) for FDD and TDD is different. [2] Different parameter : CPICH Ec (FDD) P-CCPCH RSCP (TDD) [3] PHYSICAL CHANNEL RECONFIGURATION (Step 13 and 19) for FDD and TDD is different.	
	CELL_FACH (stop of HS-DSCH reception with frequency modification)					SETUP for FDD and TDD is different [2] Different parameter : CPICH Ec (FDD) P-CCPCH RSCP (TDD)	
8.3.1.37	Cell Update: Transition from CELL_DCH to CELL_DCH (with active HS-DSCH reception and frequency modification)	√	√	√		[1] RADIO BEARER SETUP for FDD and TDD is different. [2] CELL UPDATE CONFIRM for FDD and TDD is different. [3] Different parameter : CPICH Ec (FDD) P-CCPCH RSCP (TDD)	
8.3.2.1	RRC / URA Update: Change of URA	√	√	√		Different parameter : CPICH Ec (FDD) P-CCPCH RSCP (TDD)	
8.3.2.2	RRC / URA Update: Periodical URA update and Reception of Invalid message	√	√		√		
8.3.2.3	Void						
8.3.2.4	RRC / URA Update: loss of service after expiry of timers T307	√	√	√		Different parameter : CPICH Ec	

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
8.3.1.1	RRC / Cell Update: cell reselection in CELL_FACH	√	√	√		[1] The IE "Uplink DPCH info", "Downlink information common for all radio links " and "Downlink information per radio link list" in CELL UPDATE CONFIRM (Step 12,17) for FDD and TDD is different. [2] Different parameter : CPICH Ec (FDD) P-CCPCH RSCP (TDD) [3] PHYSICAL CHANNEL RECONFIGURATION (Step 13 and 19) for FDD and TDD is different.	
	after T306					(FDD) P-CCPCH RSCP (TDD)	
8.3.2.5	RRC / URA Update: Success after Confirmation error of URA-ID list	√	√		√		
8.3.2.6	RRC / URA Update: Failure (V303 is greater than N303: Confirmation error of URA-ID list)	√	√		√		
8.3.2.7	RRC / URA Update: Success after T303 timeout	√	√		√		
8.3.2.8	Void						
8.3.2.9	RRC / URA Update: Failure (UTRAN initiate an RRC connection release procedure on CCCH)	√	√		√		
8.3.2.10	RRC / URA Update: Reception of URA UPDATE CONFIRM message that causes invalid configuration	√	√		√		
8.3.2.11	URA Update: Cell reselection to cell of another PLMN belonging to the equivalent PLMN list	√	√	√		[1] Different parameter : CPICH Ec (FDD) P-CCPCH RSCP (TDD) [2] The transmit power for FDD and TDD is different.	
8.3.2.12	Restricted cell reselection to a cell	√	√	√		[1] Different parameter :	

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
8.3.1.1	RRC / Cell Update: cell reselection in CELL_FACH	√	√	√		[1] The IE "Uplink DPCH info", "Downlink information common for all radio links " and "Downlink information per radio link list" in CELL UPDATE CONFIRM (Step 12,17) for FDD and TDD is different. [2] Different parameter : CPICH Ec (FDD) P-CCPCH RSCP (TDD) [3] PHYSICAL CHANNEL RECONFIGURATION (Step 13 and 19) for FDD and TDD is different.	
	belonging to forbidden LA list (URA_PCH)					CPICH Ec (FDD) P-CCPCH RSCP (TDD) [2] The transmit power for FDD and TDD is different.	
8.3.2.13	URA Update: Change of URA due to HCS Cell Reselection	√	√	√		[1] Block type 4 and block type 11 in FDD and TDD are different。 [2] Different parameter : CPICH Ec (FDD) P-CCPCH RSCP (TDD) [3] The transmit power for FDD and TDD is different.	
8.3.3.1	RRC / UTRAN Mobility Information: Success	√	√		√		
8.3.3.2	RRC / UTRAN Mobility Information: Failure (Invalid message reception)	√	√		√		
8.3.3.3	RRC / UTRAN Mobility Information: Seamless SRNS relocation in CELL_DCH (without pending of ciphering)	√	√		√		
8.3.4.1	RRC / Active set update in soft handover: Radio Link	√				Only for FDD	

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
8.3.1.1	RRC / Cell Update: cell reselection in CELL_FACH	√	√	√		[1] The IE "Uplink DPCH info", "Downlink information common for all radio links " and "Downlink information per radio link list" in CELL UPDATE CONFIRM (Step 12,17) for FDD and TDD is different. [2] Different parameter : CPICH Ec (FDD) P-CCPCH RSCP (TDD) [3] PHYSICAL CHANNEL RECONFIGURATION (Step 13 and 19) for FDD and TDD is different.	
	addition						
8.3.4.2	RRC / Active set update in soft handover: Radio Link removal	√				Only for FDD	
8.3.4.3	RRC / Active set update in soft handover: Combined radio link addition and removal	√				Only for FDD	
8.3.4.4	RRC / Active set update in soft handover: Invalid Configuration	√				Only for FDD	
8.3.4.5	RRC / Active set update in soft handover: Reception of an ACTIVE SET UPDATE message in wrong state	√				Only for FDD	
8.3.4.6	Void						
8.3.4.7	RRC / Active set update in soft handover: Invalid Message Reception	√				Only for FDD	

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
8.3.1.1	RRC / Cell Update: cell reselection in CELL_FACH	√	√	√		[1] The IE "Uplink DPCH info", "Downlink information common for all radio links " and "Downlink information per radio link list" in CELL UPDATE CONFIRM (Step 12,17) for FDD and TDD is different. [2] Different parameter : CPICH Ec (FDD) P-CCPCH RSCP (TDD) [3] PHYSICAL CHANNEL RECONFIGURATION (Step 13 and 19) for FDD and TDD is different.	
8.3.4.8	RRC / Active set update in soft handover: Radio Link addition in multiple radio link environment	√				Only for FDD	
8.3.5.1	Void						
8.3.5.2	Void						
8.3.5.3	Void						
8.3.7.1	Inter system handover from UTRAN/To GSM/Speech/Success	√	√		√		
8.3.7.2	Inter system handover from UTRAN/To GSM/Data/Same data rate/Success	√	√		√		
8.3.7.2a	Inter system handover from UTRAN/To GSM/Data/Same data rate/Extended Rates/Success	√	√		√		
8.3.7.3	Inter system handover from UTRAN/To GSM/Data/Data rate down grading/Success	√	√		√		
8.3.7.3a	Inter system handover from UTRAN/To GSM/Data/Data rate down grading/Extended Rates/Success	√	√		√		
8.3.7.4	Inter system handover from UTRAN/To GSM/Speech/Establishment/Success	√	√		√		
8.3.7.5	Inter system handover from UTRAN/To GSM/Speech/Failure	√	√		√		
8.3.7.6	Inter system handover from UTRAN/To	√	√		√		

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
8.3.1.1	RRC / Cell Update: cell reselection in CELL_FACH	√	√	√		[1] The IE "Uplink DPCH info", "Downlink information common for all radio links " and "Downlink information per radio link list" in CELL UPDATE CONFIRM (Step 12,17) for FDD and TDD is different. [2] Different parameter : CPICH Ec (FDD) P-CCPCH RSCP (TDD) [3] PHYSICAL CHANNEL RECONFIGURATION (Step 13 and 19) for FDD and TDD is different.	
	GSM/Speech/Failure (L2 Establishment)						
8.3.7.7	Inter system handover from UTRAN/To GSM/Speech/Failure (L1 Synchronization)	√	√		√		
8.3.7.8	Inter system handover from UTRAN/To GSM/Speech/Failure (Invalid Inter-RAT message)	√	√		√		
8.3.7.9	Inter system handover from UTRAN/To GSM/Speech/Failure (Unsupported configuration)	√	√		√		
8.3.7.10	Inter system handover from UTRAN/To GSM/Speech/Failure (Reception by UE in CELL_FACH)	√	√		√		
8.3.7.11	Inter system handover from UTRAN/To GSM/Speech/Failure (Invalid message reception)	√	√		√		

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
8.3.1.1	RRC / Cell Update: cell reselection in CELL_FACH	√	√	√		[1] The IE "Uplink DPCH info", "Downlink information common for all radio links " and "Downlink information per radio link list" in CELL UPDATE CONFIRM (Step 12,17) for FDD and TDD is different. [2] Different parameter : CPICH Ec (FDD) P-CCPCH RSCP (TDD) [3] PHYSICAL CHANNEL RECONFIGURATION (Step 13 and 19) for FDD and TDD is different.	
8.3.7.12	Inter system handover from UTRAN/To GSM/Speech/Failure (Physical channel Failure and Reversion Failure)	√	√	√		CELL UPDATE CONFIRM is different	
8.3.7.13	Inter system handover from UTRAN/To GSM/ success / call under establishment	√	√		√		
8.3.7.14	Inter system handover from UTRAN/To GSM/Speech/Success (stop of HS-DSCH reception)	√				Only for FDD	
8.3.7.15	Inter system handover from UTRAN/To GSM/Speech/Failure(stop of HS-DSCH reception)	√	√		√		
8.3.7.16	Inter system handover from UTRAN/To GSM/Simultaneous CS and PS domain services/Success/TBF Establishment Success	√	√		√		
8.3.8	RRC / Inter system cell reselection to UTRAN	Void					
8.3.9	RRC / Inter system cell reselection from UTRAN						
8.3.9.1	Cell reselection if cell becomes barred or S<0; UTRAN to GPRS (CELL_FACH)	√	√	√		Different parameter : CPICH Ec (FDD) P-CCPCH RSCP (TDD)	
8.3.9.2	Cell reselection if cell becomes barred or	√	√	√		Different parameter :	

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
8.3.1.1	RRC / Cell Update: cell reselection in CELL_FACH	√	√	√		[1] The IE "Uplink DPCH info", "Downlink information common for all radio links " and "Downlink information per radio link list" in CELL UPDATE CONFIRM (Step 12,17) for FDD and TDD is different. [2] Different parameter : CPICH Ec (FDD) P-CCPCH RSCP (TDD) [3] PHYSICAL CHANNEL RECONFIGURATION (Step 13 and 19) for FDD and TDD is different.	
	S<0; UTRAN to GPRS (URA_PCH)					CPICH Ec (FDD) P-CCPCH RSCP (TDD)	
8.3.9.3	Cell reselection if S<0; UTRAN to GPRS (UE in CELL_FACH fails to complete an inter-RAT cell reselection)	√	√	√		Different parameter : CPICH Ec (FDD) P-CCPCH RSCP (TDD)	
8.3.9.4	Cell reselection if S<0; UTRAN to GPRS (UE in CELL_PCH fails to complete an inter-RAT cell reselection)	√	√	√		Different parameter : CPICH Ec (FDD) P-CCPCH RSCP (TDD)	
8.3.9.5	Successful Cell Reselection with RAU – Q_{offset} value modification; UTRAN to GPRS (CELL_FACH)	√	√	√		Different parameter : CPICH Ec (FDD) P-CCPCH RSCP (TDD)	
8.3.11.1	Inter-RAT cell change order from UTRAN/To GPRS/CELL_DCH/Success	√	√		√		
8.3.11.2	Inter-RAT cell change order from UTRAN/To GPRS/CELL_FACH/Success	√	√		√		
8.3.11.3	Inter-RAT cell change order from UTRAN/To GPRS/CELL_DCH/Failure (T309 expiry)	√	√		√		
8.3.11.4	Inter-RAT cell change order from UTRAN/To GPRS/CELL_DCH/Failure (Physical channel Failure and Reversion	√	√	√		CELL UPDATE CONFIRM is different	

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
8.3.1.1	RRC / Cell Update: cell reselection in CELL_FACH	√	√	√		[1] The IE "Uplink DPCH info", "Downlink information common for all radio links " and "Downlink information per radio link list" in CELL UPDATE CONFIRM (Step 12,17) for FDD and TDD is different. [2] Different parameter : CPICH Ec (FDD) P-CCPCH RSCP (TDD) [3] PHYSICAL CHANNEL RECONFIGURATION (Step 13 and 19) for FDD and TDD is different.	
	Failure)						
8.3.11.5	Inter-RAT cell change order from UTRAN/To GPRS/CELL_FACH/Failure (T309 expiry)	√	√		√		
8.3.11.6	Inter-RAT cell change order from UTRAN/To GPRS/CELL_FACH/Failure (Physical channel Failure and Reversion Failure)	√	√		√		
8.3.11.7	Inter-RAT cell change order from UTRAN/To GPRS/ Failure (Unsupported configuration)	√	√		√		
8.3.11.8	Inter-RAT cell change order from UTRAN/To GPRS/ Failure (Invalid Inter-RAT message)	√	√		√		
8.3.11.9	Inter-RAT Cell Change Order from UTRAN to GPRS/CELL_DCH/Success (stop of HS-DSCH reception)	√				Only for FDD	
8.3.11.10	Inter-RAT Cell Change Order from UTRAN to GPRS/CELL_DCH/Failure (Physical channel Failure, stop of HS-DSCH reception)	√				Only for FDD	
8.3.11.11	Inter-RAT cell change order from UTRAN/To GPRS/CELL_FACH/No RAB established/Success	√	√		√		

5.3.4 Measurement Procedure

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
8.4.1.1	RRC / Measurement Control and Report: Intra-frequency measurement for transition from idle mode to CELL_DCH state (FDD)	√				FDD only.	
8.4.1.1A	RRC / Measurement Control and Report: Intra-frequency measurement for transition from idle mode to CELL_DCH state (TDD)		√			TDD only. [1] In System Information Block type 11 and MEASUREMENT CONTROL "measurement quantity" is "PCCPCH RSCP" for LCR TDD while for FDD is "CPICH RSCP". [2] In MEASUREMENT CONTROL "intra-frequency event identity" is "1g" for LCR TDD while for FDD is "1e". [3] the downlink power for LCR TDD and FDD is different. [4] the test procedure for LCR TDD and FDD is different	
8.4.1.2	RRC / Measurement Control and Report: Inter-frequency measurement for transition from idle mode to CELL_DCH state (FDD)	√				FDD only.	
8.4.1.2A	RRC / Measurement Control and Report: Inter-frequency measurement for transition from idle mode to CELL_DCH state (TDD)		√			TDD only. [1] compressed mode is not required for LCR TDD. [2] In MEASUREMENT CONTROL "measurement quantity for frequency quality estimate" is "PCCPCH RSCP" for LCR TDD while for FDD is "CPICH RSCP". [3] the test procedure for LCR TDD and FDD is different	
8.4.1.3	RRC / Measurement Control and Report: Intra-frequency measurement for transition from idle mode to CELL_FACH state (FDD)	√				FDD only.	
8.4.1.3A	RRC / Measurement Control and Report: Intra-frequency measurement for transition from idle		√			TDD only. [1] In System Information Block type 11 (Step 1), the report criteria is Periodical	

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
	mode to CELL_FACH state (TDD)					reporting criteria while the report criteria for FDD is Event Trigger Reporting Mode [2] In System Information Block type 11 “measurement quantity” is “PCCPCH RSCP” for LCR TDD while for FDD is “CPICH RSCP”. [3] the downlink power for LCR TDD and FDD is different.	
8.4.1.4	RRC / Measurement Control and Report: Inter-frequency measurement for transition from idle mode to CELL_FACH state (FDD)	√				FDD only.	
8.4.1.4A	RRC / Measurement Control and Report: Inter-frequency measurement for transition from idle mode to CELL_FACH state (TDD)		√			TDD only.	
8.4.1.5	RRC / Measurement Control and Report: Intra-frequency measurement for transition from CELL_DCH to CELL_FACH state (FDD)	√				FDD only.	
8.4.1.5A	RRC / Measurement Control and Report: Intra-frequency measurement for transition from CELL_DCH to CELL_FACH state (TDD)		√			TDD only. [1] In System Information Block type 12 and MEASUREMENT CONTROL “measurement quantity” is “PCCPCH RSCP” for LCR TDD while for FDD is “CPICH RSCP”. [2] In MEASUREMENT CONTROL “intra-frequency event identity” is “1g” for LCR TDD while for FDD is “1a”. [3] the downlink power for LCR TDD and FDD is different. [4] the test procedure for LCR TDD and FDD is different	
8.4.1.6	RRC / Measurement Control and Report: Inter- frequency measurement for transition from	√				FDD only.	

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
	CELL_DCH to CELL_FACH state (FDD)						
8.4.1.6A	RRC / Measurement Control and Report: Inter- frequency measurement for transition from CELL_DCH to CELL_FACH state (TDD)		√			TDD only. [1] compressed mode is not required for LCR TDD. [2] In MEASUREMENT CONTROL "measurement quantity for frequency quality estimate" is "PCCPCH RSCP" for LCR TDD while for FDD is "CPICH RSCP".	
8.4.1.7	RRC / Measurement Control and Report: Intra- frequency measurement for transition from CELL_FACH to CELL_DCH state (FDD)	√				FDD only.	
8.4.1.7A	RRC / Measurement Control and Report: Intra- frequency measurement for transition from CELL_FACH to CELL_DCH state (TDD)		√			TDD only. [1] In System Information Block type 12 and MEASUREMENT CONTROL "measurement quantity" is "PCCPCH RSCP" for LCR TDD while for FDD is "CPICH RSCP". [2] In SIB12 (step1) "intra-frequency event identity" is "1g" for LCR TDD while for FDD is "1e". [3] In MEASUREMENT CONTROL (Step 5,10,17) the report criteria is Periodical reporting criteria while the report criteria for FDD is Event Trigger Reporting Mode [4] In SIB12 (step 21) "intra-frequency event identity" is "1g" for LCR TDD while for FDD is "1a". [5] there are more MEASUREMENT REPORT for LCR TDD [6] the downlink power for LCR TDD and FDD is different. [7] the test procedure for LCR TDD and FDD is different	

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
8.4.1.8	RRC / Measurement Control and Report: Inter- frequency measurement for transition from CELL_FACH to CELL_DCH state (FDD)	√				FDD only.	
8.4.1.8A	RRC / Measurement Control and Report: Inter- frequency measurement for transition from CELL_FACH to CELL_DCH state (TDD)		√			TDD only. [1] compressed mode is not required for LCR TDD. [2] In MEASUREMENT CONTROL "measurement quantity for frequency quality estimate" is "PCCPCH RSCP" for LCR TDD while for FDD is "CPICH RSCP". [3] the test procedure for LCR TDD and FDD is different	
8.4.1.9	RRC / Measurement Control and Report: Unsupported measurement in the UE	√	√	√		[1] The IE of "CHOICE mode" in MEASUREMENT CONTROL and MEASUREMENT REPORT for LCR TDD and FDD is different.	
8.4.1.10	RRC / Measurement Control and Report: Failure (Invalid Message Reception)	√	√	√		[1] The IE of "CHOICE mode" in MEASUREMENT CONTROL and MEASUREMENT REPORT for LCR TDD and FDD is different.	
8.4.1.11	void						
8.4.1.12	void						
8.4.1.13	RRC / Measurement Control and Report: Compressed Mode Configuration Failure during physical channel reconfiguration procedure						
8.4.1.14	RRC / Measurement Control and Report: Cell forbidden to affect reporting range	√					
8.4.1.15	RRC / Measurement Control and Report Incomplete	√	√	√		[1] The measurement parameter in MEASUREMENT CONTROL for LCR TDD and FDD is different.	
8.4.1.16	RRC / Measurement Control and Report: Traffic volume measurement for transition from idle mode to CELL_FACH state	√	√	√		The cell info in SIB11 for TDD and FDD in this test case is different	

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
8.4.1.17	RRC / Measurement Control and Report: Traffic volume measurement for transition from idle mode to CELL_DCH state	√	√	√		The cell info in SIB11 for TDD and FDD in this test case is different	
8.4.1.18	RRC / Measurement Control and Report: Traffic volume measurement for transition from CELL_FACH state to CELL_DCH state	√	√	√		The RADIO BEARER RECONFIGURATION (Step 3, 11, 19, 27, and 35, Step 6, 15, 23, and 31) for TDD and FDD in this test case is different	
8.4.1.19	RRC / Measurement Control and Report: Traffic volume measurement for transition from CELL_DCH to CELL_FACH state	√	√	√		The RADIO BEARER RECONFIGURATION (Step 3, 11, 19, 27, and 35, Step 6, 15, 23, and 31) for TDD and FDD in this test case is different	
8.4.1.20	Void						
8.4.1.21	Void						
8.4.1.22	RRC / Measurement Control and Report: Quality measurements	√	√	√		The IE of "CHOICE mode" in MEASUREMENT CONTROL and MEASUREMENT REPORT for LCR TDD and FDD is different.	
8.4.1.23	RRC / Measurement Control and Report: Intra-frequency measurement for events 1C and 1D	√					
8.4.1.24	RRC / Measurement Control and Report: Inter-frequency measurement for event 2A	√	√	√		[1] step2 and step 3 only use in FDD. [2] The IE of "CHOICE mode" in MEASUREMENT CONTROL and MEASUREMENT REPORT for LCR TDD and FDD is different.	
8.4.1.25	RRC / Measurement Control and Report: Inter-frequency measurement for events 2B and 2E	√	√	√		[1] step2 and step 3 only use in FDD. [2] The IE of "cell info" “inter-frequency measurement quantity ” “inter-frenquency reporting quantity”in MEASUREMENT CONTROL for LCR TDD and FDD is different. [3] The IE of “interFreqMeasQuantity” -“modeSpecificInfo” in MEASUREMENT REPORT for LCR TDD and FDD is different.	
8.4.1.26	RRC / Measurement Control and Report: Measurement for events 2D and 2F	√	√	√		[1]The IE of "cell info" “inter-frequency measurement quantity ” “inter-frenquency reporting quantity”in	

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
						MEASUREMENT CONTROL for LCR TDD and FDD is different. [2] The IE of "event results" in MEASUREMENT REPORT for LCR TDD and FDD is different.	
8.4.1.27	RRC / Measurement Control and Report: UE internal measurement for events 6A and 6B	√	√			[1] The IE of "UE internal measurement quantity"- “CHOICE mode ” “UE internal reporting quantity”in MEASUREMENT CONTROL for LCR TDD and FDD is different. [2] The IE of " UE internal measured results"- “CHOICE mode ” in MEASUREMENT REPORT for LCR TDD and FDD is different.	
8.4.1.28	RRC / Measurement Control and Report: UE internal measurement for events 6F and 6G	√					
8.4.1.28a	RRC / Measurement Control and Report: UE internal measurement for events 6F (1.28 Mcps TDD)		√				
8.4.1.29	RRC / Measurement Control and Report: Event based Traffic Volume measurement in CELL_FACH state	√	√	√		[1] The IE of "cell info", “intra-frequency measurement quantity ”, “intra-frequency measurement for RACH reporting”, “intra-frenquency reporting quantity”, “Parameters required for each event” in SIB12 for LCR TDD and FDD is different. [2] The IE of "measured results on RACH" in MEASUREMENT REPORT for LCR TDD and FDD is different.	
8.4.1.30	RRC / Measurement Control and Report: Event based Traffic Volume measurement in CELL_DCH state	√	√		√		
8.4.1.31	RRC / Measurement Control and Report: Inter-RAT measurement in CELL_DCH state	√	√	√		[1] step2 and step 3 only use in FDD.	
8.4.1.32	Void						

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
8.4.1.33	Measurement Control and Report: Inter-RAT measurement, event 3a	√	√	√		[1] step2 and step 3 only use in FDD.	
8.4.1.34	Measurement Control and Report: Inter-RAT measurement, event 3b	√	√	√		[1] step2 and step 3 only use in FDD.	
8.4.1.35	Measurement Control and Report: Inter-RAT measurement, event 3c	√	√	√		[1] step2 and step 3 only use in FDD.	
8.4.1.36	Measurement Control and Report: Inter-RAT measurement, event 3d	√	√	√		[1] step2 and step 3 only use in FDD.	
8.4.1.37	Measurement Control and Report: UE internal measurement, event 6c	√	√	√		[1] some detail in MEASUREMENT CONTROL and MEASUREMENT REPORT for LCR TDD and FDD is different.	
8.4.1.38	Measurement Control and Report: UE internal measurement, event 6d	√	√	√		[1] some detail in MEASUREMENT CONTROL and MEASUREMENT REPORT for LCR TDD and FDD is different.	
8.4.1.39	Measurement Control and Report: UE internal measurement, event 6e	√	√	√		[1] some detail in MEASUREMENT CONTROL and MEASUREMENT REPORT for LCR TDD and FDD is different.	
8.4.1.40	Measurement Control and Report: Inter-RAT measurement event 3C in CELL_DCH state using sparse compressed mode pattern	√					
8.4.1.41	Measurement Control and Report: Additional Measurements list	√					
8.4.1.42	Measurement Control and Report: Change of Compressed Mode Method	√				FDD only.	
8.4.1.43	Measurement Control and Report: Compressed Mode Reconfiguration	√				FDD only.	
8.4.1.44	RRC / Measurement Control and Report: Intra-frequency measurement for events 1H and 1I (TDD)		√			TDD only.	

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
8.4.1.45	RRC / Measurement Control and Report: Intra-frequency measurement for events 1G (1.28 Mcps TDD)		√			TDD only.	

5.4 Effect to mobility management

5.4.1 Circuit Switched Call Control (CC)

<FFS>

5.4.2 Packet Switched Mobility Management

<FFS>

5.5 Session Management Procedures

5.5.1 PDP context activation

Void.

5.5.2 PDP context modification procedure

Void.

5.5.3 PDP context deactivation procedures

Void.

5.5.4 Unknown or Unforeseen Transaction Identifier/Non-semantical Mandatory Information Element Errors

Void.

5.6 Elementary procedure for Packet Switched Mobility Management

5.6.1 Applicability, default conditions and default messages

Void.

5.6.2 PS attach procedure

Void.

5.6.3 PS detach procedure

Void.

5.6.4 Routing area updating procedure

Void.

5.6.5 P-TMSI reallocation

Void.

5.6.6 PS authentication

Void.

5.6.7 Identification procedure

Void.

5.6.8 GMM READY timer handling

Void.

5.6.9 Service Request procedure (UMTS Only)

Void.

5.7 General Tests

5.7.1 Emergency call / general

Void.

5.7.2 Emergency call

Void.

5.8 Interoperability Radio Bearer Tests

5.8.1 General information for interoperability radio bearer tests

Void.

5.8.2 Combinations on DPCH

Void.

5.8.3 Combinations on PDSCH and DPCH

Void.

5.8.4 Combinations on SCCPCH

Void.

5.8.5 Combinations on PRACH

Void.

5.8.6 Combinations on DPCH and HS-PDSCH

Void.

5.9 Supplementary Services

Void.

5.10 Short message service (SMS)

5.10.1 Short message service point to point on CS mode

Void.

5.10.2 Short message service point to point on PS mode

Void.

5.10.3 Short message service cell broadcast

Void.

5.10.4 Default message contents

Void.

5.11 Specific features

5.11.1 Test of autocalling restrictions

Void.

5.11.2 Location Services

Void.

5.12 Multi-Layer Functional Tests

5.12.1 Radio Bearer Tests for 1.28 Mcps TDD option

Void.

6 Effect to 3GPP TS 34.123-2

6.1 Effect to recommended test case applicability Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
IDLE MODE							
6.1.1.1	PLMN selection of RPLMN, HPLMN, UPLMN and OPLMN; Manual mode	√	√	√		for FDD: UEs supporting FDD and PLMN selection; for LCR TDD: UEs supporting TDD and PLMN selection	
6.1.1.2	PLMN selection of "Other PLMN / access technology combinations"; Manual mode	√	√	√		for FDD: UEs supporting FDD and PLMN selection; for LCR TDD: UEs supporting TDD and PLMN selection	
6.1.1.3	PLMN selection; independence of RF level and preferred PLMN; Manual mode	√	√	√		for FDD: UEs supporting FDD and PLMN selection; for LCR TDD: UEs supporting TDD and PLMN selection	
6.1.1.4	PLMN selection of RPLMN, HPLMN, UPLMN and OPLMN; Automatic mode	√	√	√		for FDD: UEs supporting FDD and PLMN selection; for LCR TDD: UEs supporting TDD and PLMN selection	
6.1.1.5	PLMN selection of "Other PLMN / access technology combinations"; Automatic mode	√	√	√		for FDD: UEs supporting FDD and PLMN selection; for LCR TDD: UEs supporting TDD and PLMN selection	
6.1.1.7	Cell reselection of ePLMN in manual mode	√				UEs supporting FDD	
6.1.2.1	Cell reselection	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting TDD	
6.1.2.2	Cell reselection using Qhyst, Qoffset and Treselection	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting TDD	
6.1.2.3	HCS cell reselection	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting TDD	
6.1.2.4	HCS cell reselection using reselection timing parameters for the H criterion	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting TDD	
6.1.2.5	HCS Cell reselection using reselection timing parameters for the R criterion	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting TDD	
6.1.2.6	Emergency calls	√	√	√		for FDD: UEs supporting FDD and emergency speech call; for LCR TDD: UEs supporting and emergency speech call TDD	
6.1.2.7	Void						
6.1.2.8	Cell reselection: Equivalent PLMN	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting TDD	

6.1.2.9	Cell reselection using cell status and cell reservations	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting TDD	
6.2.1.1	Selection of the correct PLMN and associated RAT	√	√	√		for FDD: UEs supporting FDD and GSM and PLMN selection; for LCR TDD: UEs supporting TDD and GSM and PLMN selection	
6.2.1.2	Selection of RAT for HPLMN; Manual mode	√	√	√		for FDD: UEs supporting FDD and GSM and PLMN selection; for LCR TDD: UEs supporting TDD and GSM and PLMN selection	
6.2.1.3	Selection of RAT for UPLMN; Manual mode	√	√	√		for FDD: UEs supporting FDD and GSM and PLMN selection; for LCR TDD: UEs supporting TDD and GSM and PLMN selection	
6.2.1.4	Selection of RAT for OPLMN; Manual mode	√	√	√		for FDD: UEs supporting FDD and GSM and PLMN selection; for LCR TDD: UEs supporting TDD and GSM and PLMN selection	
6.2.1.5	Selection of "Other PLMN / access technology combinations"; Manual mode	√	√	√		for FDD: UEs supporting FDD and GSM and PLMN selection; for LCR TDD: UEs supporting TDD and GSM and PLMN selection	
6.2.1.6	Selection of RAT for HPLMN; Automatic mode	√	√	√		for FDD: UEs supporting FDD and GSM and PLMN selection; for LCR TDD: UEs supporting TDD and GSM and PLMN selection	
6.2.1.7	Selection of RAT for UPLMN; Automatic mode	√	√	√		for FDD: UEs supporting FDD and GSM and PLMN selection; for LCR TDD: UEs supporting TDD and GSM and PLMN selection	
6.2.1.8	Selection of RAT for OPLMN; Automatic mode	√	√	√		for FDD: UEs supporting FDD and GSM and PLMN selection; for LCR TDD: UEs supporting TDD and GSM and PLMN selection	
6.2.1.9	Selection of "Other PLMN / access technology combinations"; Automatic mode	√	√	√		for FDD: UEs supporting FDD and GSM and PLMN selection; for LCR TDD: UEs supporting TDD and GSM and PLMN selection	

6.2.2.1	Cell reselection if cell becomes barred or S<0; UTRAN to GSM	√	√	√		for FDD: UEs supporting FDD and GSM; for LCR TDD: UEs supporting TDD and GSM	
6.2.2.2	Cell reselection if cell becomes barred or C1<0; GSM to; UTRAN	√	√	√		for FDD: UEs supporting FDD and GSM; for LCR TDD: UEs supporting TDD and GSM	
6.2.2.3	Cell reselection timings; GSM to UTRAN	√	√	√		for FDD: UEs supporting FDD and GSM; for LCR TDD: UEs supporting TDD and GSM	
LAYER 2							
7.1.1.1	CCCH mapped to RACH/FACH / Invalid TCTF	√	√		√		
7.1.1.2	DTCH or DCCH mapped to RACH/FACH / Invalid TCTF	√	√		√		
7.1.1.3	DTCH or DCCH mapped to RACH/FACH / Invalid C/T Field	√	√		√		
7.1.1.4	DTCH or DCCH mapped to RACH/FACH / Invalid UE ID Type Field	√	√		√		
7.1.1.5	DTCH or DCCH mapped to RACH/FACH / Incorrect UE ID	√	√		√		
7.1.1.6	DTCH or DCCH mapped to DSCH or USCH	√	√		√		
7.1.1.7	DTCH or DCCH mapped to CPCH	√					
7.1.1.8	DTCH or DCCH mapped to DCH / Invalid C/T Field	√	√		√		
7.1.2.1.1	Void						
7.1.2.1.2	Selection and control of Power Level (3.84 Mcps TDD option)						
7.1.2.1.3	Selection and control of Power Level (1.28 Mcps TDD option)		√			UEs supporting 1.28 Mcps TDD (LCR TDD)	
7.1.2.2.1	Void						
7.1.2.2.2	Correct application of Dynamic Persistence (3.84 TDD Mcps option)						
7.1.2.2.3	Correct application of Dynamic Persistence (1.28 TDD Mcps option)		√			UEs supporting 1.28 Mcps TDD (LCR TDD)	
7.1.2.3.1	Correct Selection of RACH parameters (FDD)	√				UEs supporting FDD	
7.1.2.3.2	Correct Selection of RACH parameters (3.84 Mcps TDD option)						
7.1.2.3.3	Correct Selection of RACH parameters (1.28 Mcps TDD option)		√			UEs supporting 1.28 Mcps TDD (LCR TDD)	
7.1.2.4	Correct Detection and Response to FPACH (1.28 Mcps TDD option)		√			UEs supporting 1.28 Mcps TDD option (LCR TDD)	
7.1.2.4a	Access Service class selection for RACH transmission	√	√		√		
7.1.2.5	Void						
7.1.3.1	Priority handling between data flows of one UE	√	√		√		
7.1.3.2	TFC Selection	√					
7.1.4.1	Control of CPCH transmissions for FDD	√					
7.1.5.1	MAC-hs reordering and stall avoidance	√					
7.1.5.2	Priority queue handling	√					
7.1.5.3	MAC-hs PDU header handling	√					
7.1.5.4	MAC-hs retransmissions	√					
7.1.5.5	MAC-hs reset	√					
7.2.1.1	RLC testing / Transparent mode / Segmentation and reassembly	√	√		√		
7.2.2.2	UM RLC / Segmentation and reassembly / Selection of 7 or 15 bit	√	√		√		

	"Length Indicators"						
7.2.2.3	UM RLC / Segmentation and Reassembly / 7-bit "Length Indicators" / Padding	√	√		√		
7.2.2.4	UM RLC / Segmentation and Reassembly / 7-bit "Length Indicators" / LI = 0	√	√		√		
7.2.2.5	UM RLC / Reassembly / 7-bit "Length Indicators" / Invalid LI value	√	√		√		
7.2.2.6	UM RLC / Reassembly / 7-bit "Length Indicators" / LI value > PDU	√	√		√		
7.2.2.7	UM RLC / Reassembly / 7-bit "Length Indicators" / First data octet LI	√	√		√		
7.2.2.8	UM RLC / Segmentation and Reassembly / 15-bit "Length Indicators" / Padding	√	√		√		
7.2.2.9	UM RLC / Segmentation and Reassembly / 15-bit "Length Indicators" / LI = 0	√	√		√		
7.2.2.10	UM RLC / Segmentation / 15-bit "Length Indicators" / One octet short LI	√	√		√		
7.2.2.11	UM RLC / Reassembly/ 15-bit "Length Indicators" / Invalid LI value	√	√		√		
7.2.2.12	UM RLC / Reassembly/ 15-bit "Length Indicators" / LI value > PDU size	√	√		√		
7.2.2.13	UM RLC / Reassembly / 15-bit "Length Indicators" / First data octet LI	√	√		√		
7.2.3.2	AM RLC / Segmentation and reassembly / Selection of 7 or 15 bit "Length Indicators"	√	√		√		
7.2.3.3	AM RLC / Segmentation and Reassembly / 7-bit "Length Indicators" / Padding	√	√		√		
7.2.3.4	AM RLC / Segmentation and Reassembly / 7-bit "Length Indicators" / LI = 0	√	√		√		
7.2.3.5	AM RLC / Reassembly / 7-bit "Length Indicators" / Reserved LI value	√	√		√		
7.2.3.6	AM RLC / Reassembly/ 7-bit "Length Indicators" / LI value > PDU	√	√		√		
7.2.3.7	AM RLC / Segmentation and Reassembly / 15-bit "Length Indicators" / Padding or Piggy-backed Status	√	√		√		
7.2.3.8	AM RLC / Segmentation and Reassembly / 15-bit "Length Indicators" / LI = 0	√	√		√		
7.2.3.9	AM RLC / Segmentation and Reassembly / 15-bit "Length Indicators" / One octet short LI	√	√		√		
7.2.3.10	AM RLC / Reassembly/ 15-bit "Length Indicators" / Reserved LI value	√	√		√		
7.2.3.11	AM RLC / Reassembly/ 15-bit "Length Indicators" / LI value > PDU size	√	√		√		
7.2.3.12	AM RLC / Correct use of Sequence Numbering	√	√		√		
7.2.3.13	AM RLC / Control of Transmit Window	√	√		√		
7.2.3.14	AM RLC / Control of Receive Window	√	√		√		
7.2.3.15	AM RLC / Polling for status / Last PDU in transmission queue	√	√		√		
7.2.3.16	AM RLC / Polling for status / Last PDU in retransmission queue	√	√		√		
7.2.3.17	AM RLC / Polling for status / Poll every Poll_PU PDUs	√	√		√		
7.2.3.18	AM RLC / Polling for status / Poll every Poll_SDU SDUs	√	√		√		
7.2.3.19	AM RLC / Polling for status / Timer triggered polling (Timer_Poll_Periodic)	√	√		√		
7.2.3.20	AM RLC / Polling for status / Polling on Poll_Window% of transmission window	√	√		√		
7.2.3.21	AM RLC / Polling for status / Operation of Timer_Poll timer / Timer expiry	√	√		√		
7.2.3.22	AM RLC / Polling for status / Operation of Timer_Poll timer / Stopping	√	√		√		

	Timer_Poll timer						
7.2.3.23	AM RLC / Polling for status / Operation of Timer_Poll timer / Restart of the Timer_Poll timer	√	√		√		
7.2.3.24	AM RLC / Polling for status / Operation of timer Timer_Poll_Prohibit	√	√		√		
7.2.3.25	AM RLC / Receiver Status Triggers / Detection of missing PUs	√	√		√		
7.2.3.26	AM RLC / Receiver Status Triggers / Operation of timer Timer_Status_Periodic	√	√		√		
7.2.3.27	AM RLC / Receiver Status Triggers / Operation of timer Timer_Status_Prohibit	√	√		√		
7.2.3.28	AM RLC / Status reporting / Abnormal conditions / Reception of LIST SUFI with Length set to zero	√	√		√		
7.2.3.29	AM RLC / Timer based discard, with explicit signalling / Expiry of Timer_Discard	√	√		√		
7.2.3.29a	AM RLC / Timer based discard, with explicit signalling / Expiry of Timer_Discard when Timer_STATUS_prohibit is active	√	√		√		
7.2.3.30	AM RLC / Timer based discard, with explicit signalling / Obsolete MRW_ACK	√	√		√		
7.2.3.31	AM RLC / Timer based discard, with explicit signalling / Failure of MRW procedure	√	√		√		
7.2.3.32	AM RLC / SDU discard after MaxDAT number of retransmissions	√	√		√		
7.2.3.33	AM RLC / Operation of the RLC Reset procedure / UE Originated	√	√		√		
7.2.3.34	AM RLC / Operation of the RLC Reset procedure / UE Terminated	√	√		√		
7.2.3.35	AM RLC / Reconfiguration of RLC parameters by upper layers	√	√		√		
7.3.2.1.1	IP Header Compression and PID assignment / UE in RLC AM / Transmission of uncompressed Header	√	√		√		
7.3.2.1.2	IP Header Compression and PID assignment / UE in RLC AM / Transmission of compressed Header	√	√		√		
7.3.2.2.1	IP Header Compression and PID assignment / UE in RLC UM / Transmission of uncompressed Header	√	√		√		
7.3.2.2.2	IP Header Compression and PID assignment / UE in RLC UM / Transmission of compressed Header	√	√		√		
7.3.2.2.3	IP Header Compression and PID assignment / UE in RLC UM / Extension of used compression methods	√	√		√		
7.3.2.2.4	IP Header Compression and PID assignment / UE in RLC UM / Compression type used for different entities	√	√		√		
7.3.2.2.5	IP Header Compression and PID assignment / UE in RLC UM / Reception of not defined PID values	√	√		√		
7.3.3.1	PDCP sequence numbering when lossless SRNS Relocation / Data transmission if lossless SRNS Relocation is supported	√	√		√		
7.3.3.2	PDCP sequence numbering when lossless SRNS Relocation / Synchronisation of PDCP sequence numbers	√	√		√		
7.3.3.5	UTRAN MOBILITY INFORMATION: Lossless SRNS relocation in CELL_FACH (without pending of ciphering)	√	√		√		
7.3.3.6	Cell Update: Lossless SRNS relocation in CELL_FACH (without pending of	√	√		√		

	ciphering						
7.3.3.7	URA Update: Lossless SRNS relocation in CELL_FACH (without pending of ciphering)	√	√		√		
7.3.3.8	Radio Bearer Establishment for transition from CELL_DCH to CELL_DCH: Success (Lossless SRNS relocation) (without pending of ciphering)	√	√		√		
7.3.3.9	Radio Bearer Reconfiguration for transition from CELL_DCH to CELL_DCH: Success (Lossless SRNS relocation) (without pending of ciphering)	√	√		√		
7.3.3.10	Radio Bearer Release for transition from CELL_DCH to CELL_DCH: Success (Lossless SRNS relocation) (without pending of ciphering)	√	√		√		
7.3.3.11	Transport Channel Reconfiguration for transition from CELL_DCH to CELL_DCH: Success (Lossless SRNS relocation) (without pending of ciphering)	√	√		√		
7.3.5.3.2	UDP/IPv6 or ESP/IPv6 or IPv6 Unacknowledged - Normal U-mode Transmission (without ack)	√	√		√		
7.4.2.1	General BMC message reception / UE in Idle mode	√	√		√		
7.4.2.2	General BMC message reception / UE in RRC connected mode, state CELL_PCH	√	√		√		
7.4.2.3	General BMC message reception / UE in RRC connected mode, state URA_PCH	√	√		√		
7.4.2.4	General BMC message reception / UE in Idle mode (ANSI-41 CB data)	√	√		√		
7.4.2.5	General BMC message reception / UE in RRC connected mode, state CELL_PCH (ANSI-41 CB data)	√	√		√		
7.4.2.6	General BMC message reception / UE in RRC connected mode, state URA_PCH (ANSI-41 CB data)	√	√		√		
7.4.3.1	Reception of certain CBS message types	√	√		√		
RADIO RESOURCE CONTROL							
8.1.1.1	RRC / Paging for Connection in idle mode	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	
8.1.1.2	RRC / Paging for Connection in connected mode (CELL_PCH)	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.1.1.3	RRC / Paging for Connection in connected mode (URA_PCH)	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.1.1.4	RRC / Paging for notification of BCCH modification in idle mode	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps	

						TDD option or 1.28 Mcps TDD option.	
8.1.1.5	RRC / Paging for notification of BCCH modification in connected mode (CELL_PCH)	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.1.1.6	RRC / Paging for notification of BCCH modification in connected mode (URA_PCH)	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.1.1.7	RRC / Paging for Connection in connected mode (CELL_DCH)	√	√	√		for FDD: UEs supporting FDD and PS domain services and CS domain services; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and PS domain services and CS domain services.	
8.1.1.8	RRC / Paging for Connection in connected mode (CELL_FACH)	√	√	√		for FDD: UEs supporting FDD and PS domain services and CS domain services; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and PS domain services and CS domain services.	
8.1.1.9	RRC / Paging for Connection in idle mode (multiple paging records)	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	
8.1.1.10	RRC / Paging for Connection in connected mode (URA_PCH, multiple paging records)	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.1.2.1	RRC / RRC Connection Establishment in CELL_DCH state: Success	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	
8.1.2.2	RRC / RRC Connection Establishment: Success after T300 timeout	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	
8.1.2.3	RRC / RRC Connection Establishment: Failure (V300 is greater than N300)	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28	

						Mcps TDD option.	
8.1.2.4	RRC / RRC Connection Establishment: Reject ("wait time" is not equal to 0)	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	
8.1.2.5	RRC / RRC Connection Establishment: Reject ("wait time" is not equal to 0 and V300 is greater than N300)	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	
8.1.2.6	RRC / RRC Connection Establishment: Reject ("wait time" is set to 0)	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	
8.1.2.7	RRC / RRC Connection Establishment in CELL_FACH state: Success	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	
8.1.2.8	Void						
8.1.2.9	RRC / RRC Connection Establishment: Success after Physical channel failure and Invalid configuration	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	
8.1.2.10	RRC / RRC connection establishment in CELL_DCH on another frequency	√					
8.1.2.11	RRC Connection Establishment in FACH state (Frequency band modification): Success	√					
8.1.2.12	RRC Connection Establishment: Reject with interRATInfo is set to GSM	√	√	√		for FDD: UEs supporting FDD and GSM and supporting speech; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and GSM and supporting speech.	
8.1.2.13	RRC Connection Establishment: Reject with InterRATInfo is set to GSM and selection to the designated system fails	√	√	√		for FDD: UEs supporting FDD and GSM and supporting speech; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and GSM and supporting speech.	
8.1.3.1	RRC / RRC Connection Release in CELL_DCH state: Successful	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	
8.1.3.2	RRC / RRC Connection Release using on DCCH in CELL_FACH state: Successful	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	
8.1.3.3	RRC / RRC Connection Release using on CCCH in CELL_FACH state: Failure	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	

8.1.3.4	RRC / RRC Connection Release in CELL_FACH state: Failure	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	
8.1.3.5	RRC / RRC Connection Release in CELL_FACH state: Invalid message	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	
8.1.3.6	RRC / RRC Connection Release in CELL_DCH state (Frequency band modification): Success	√					
8.1.3.7	RRC Connection Release in CELL_FACH state (Frequency band modification): Success	√					
8.1.3.8	Void						
8.1.3.9	RRC Connection Release in CELL_DCH state (Network Authentication Failure): Success	√					
8.1.5.1	RRC / UE Capability in CELL_DCH state: Success	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	
8.1.5.2	RRC / UE Capability in CELL_DCH state: Success after T304 timeout	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	
8.1.5.3	RRC / UE Capability in CELL_DCH state: Failure (After N304 re-transmissions)	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	
8.1.5.4	RRC / UE Capability in CELL_FACH state: Success	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.1.5.5	RRC / UE Capability in CELL_FACH state: Success after T304 timeout	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.1.5.6	UE Capability Information/ Reporting Of InterRAT Specific UE RadioAccessCapability.	√					
8.1.6.1	Direct Transfer in CELL_DCH state (invalid message reception and no signalling connection exists)	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	
8.1.6.2	Direct Transfer in CELL_FACH state (invalid message reception and no signalling connection exists)	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	

8.1.6.3	Measurement Report on INITIAL DIRECTTRANSFER message and UPLINK DIRECT TRANSFER message	√					
8.1.6.4	UPLINK Direct Transfer (RLC re-establishment)	√					
8.1.7.1	RRC / Security mode control in CELL_DCH state	√	√	√		fot FDD: UEs supporting FDD and supporting CS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting CS bearer service.	
8.1.7.1b	Security mode command in CELL_DCH state (PS Domain)	√	√	√		fot FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.1.7.1c	Security mode control in CELL_DCH state (CN Domain switch and new keys at RRC message sequence number wrap around)	√	√	√		for FDD: UEs supporting FDD and PS domain services and CS domain services; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and PS domain services and CS domain services.	
8.1.7.1d	Security mode control in CELL_DCH state interrupted by a cell update	√	√	√		fot FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.1.7.2	RRC / Security mode control in CELL_FACH state	√	√	√		fot FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.1.8.1	Counter check in CELL_DCH state, with symmetrical RAB	√	√	√		fot FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.1.8.2	RRC / Counter check in CELL_FACH state	√	√	√		fot FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer	

						service.	
8.1.8.3	Counter check in CELL_DCH state, with asymmetric RAB	√					
8.1.9	RRC / Signalling Connection Release Indication	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	
8.1.9a	Signalling Connection Release Indication (RLC re-establishment): CS signalling connection release	√					
8.1.9b	Signalling Connection Release Indication (RLC re-establishment): PS signalling connection release	√					
8.1.10.1	Dynamic change of segmentation, concatenation & scheduling and handling of unsupported information blocks	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	
8.1.11	RRC / Signalling Connection Release (Invalid configuration)	√					
8.1.12	Integrity Protection	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	
8.2.1.1	RRC / Radio Bearer Establishment for transition from CELL_DCH to CELL_DCH: Success	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	
8.2.1.2	Void						
8.2.1.3	RRC / Radio Bearer Establishment for transition from CELL_DCH to CELL_DCH: Failure (Unsupported configuration)	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	
8.2.1.4	RRC / Radio Bearer Establishment for transition from CELL_DCH to CELL_DCH: Failure (Physical channel Failure and successful reversion to old configuration)	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	
8.2.1.5	Void						
8.2.1.6	Void						
8.2.1.7	RRC / Radio Bearer Establishment for transition from CELL_DCH to CELL_DCH: Failure (Invalid message reception and invalid configuration)	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	
8.2.1.8	RRC / Radio Bearer Establishment for transition from CELL_DCH to CELL_FACH: Success	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.2.1.9	RRC / Radio Bearer Establishment for transition from CELL_DCH to CELL_FACH: Success (Cell re-selection)	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	

8.2.1.10	RRC / Radio Bearer Establishment for transition from CELL_FACH to CELL_DCH: Success	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.2.1.11	RRC / Radio Bearer Establishment for transition from CELL_FACH to CELL_DCH: Failure (Unsupported configuration)	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.2.1.12	RRC / Radio Bearer Establishment for transition from CELL_FACH to CELL_DCH: Failure (Physical channel Failure and successful reversion to old configuration)	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.2.1.13	RRC / Radio Bearer Establishment for transition from CELL_FACH to CELL_DCH: Failure (Physical channel Failure and reversion failure)	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.2.1.14	RRC / Radio Bearer Establishment for transition from CELL_FACH to CELL_DCH: Failure (Incompatible simultaneous reconfiguration)	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.2.1.15	Void						
8.2.1.16	RRC / Radio Bearer Establishment for transition from CELL_FACH to CELL_FACH: Success	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.2.1.17	RRC / Radio Bearer Establishment for transition from CELL_DCH to CELL_DCH: Success (Subsequently received)	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	
8.2.1.18	RRC / Radio Bearer Establishment for transition from CELL_FACH to CELL_DCH: Success (Subsequently received)	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.2.1.19	Void						
8.2.1.20	Void						
8.2.1.21	Void						
8.2.1.22	RRC / Radio Bearer Establishment for transition from CELL_DCH to	√	√	√		for FDD: UEs supporting FDD and	

	CELL_FACH (Frequency band modification): Success					supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.2.1.23	RRC / Radio Bearer Establishment for transition from CELL_FACH to CELL_DCH (Frequency band modification): Success	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	
8.2.1.24	Radio Bearer Establishment for transition from CELL_DCH to CELL_DCH (Frequency band modification): Success	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	
8.2.1.25	Radio Bearer Establishment for transition from CELL_FACH to CELL_FACH (Frequency band modification): Success	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.2.1.26	Radio Bearer Establishment for transition from CELL_DCH to CELL_DCH: Success (Transparent mode with ciphering on)	√	√	√		for FDD: UEs supporting FDD and supporting CS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting CS bearer service.	
8.2.1.27	Radio Bearer Establishment for transition from CELL_DCH to CELL_DCH: Success (two radio links, start of HS-DSCH reception)	√					
8.2.1.28	Radio Bearer Establishment for transition from CELL_DCH to CELL_DCH: Success (RB mapping for both DL DCH and HS-DSCH in cell without HS-DSCH support)	√					
8.2.1.29	Radio Bearer Establishment for transition from CELL_DCH to CELL_DCH: Success (Uplink TFCS restriction, start of HS-DSCH reception)	√					
8.2.1.30	Radio Bearer Establishment for transition from CELL_DCH to CELL_DCH: Success (Timing re-initialised hard handover to another frequency, start of HS-DSCH reception)	√					
8.2.2.1	RRC / Radio Bearer Reconfiguration (Hard Handover) from CELL_DCH to CELL_DCH: Success	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	
8.2.2.2	RRC / Radio Bearer Reconfiguration from CELL_DCH to CELL_DCH: Failure (Unsupported configuration)	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	
8.2.2.3	Void						
8.2.2.4	RRC / Radio Bearer Reconfiguration from CELL_DCH to CELL_DCH: Failure (Physical channel failure and reversion failure)	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	

8.2.2.5	Void						
8.2.2.6	Void						
8.2.2.7	RRC / Radio Bearer Reconfiguration from CELL_DCH to CELL_DCH: Success (Continue and stop)	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	
8.2.2.8	RRC / Radio Bearer Reconfiguration from CELL_DCH to CELL_FACH: Success	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.2.2.9	RRC / Radio Bearer Reconfiguration from CELL_DCH to CELL_FACH: Success (Cell re-selection)	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.2.2.10	RRC / Radio Bearer Reconfiguration from CELL_FACH to CELL_DCH: Success	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.2.2.11	Radio Bearer Reconfiguration from CELL_FACH to CELL_DCH: Failure (Unsupported configuration)	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.2.2.12	Void						
8.2.2.13	Void						
8.2.2.14	Void						
8.2.2.15	Void						
8.2.2.16	Void						
8.2.2.17	RRC / Radio Bearer Reconfiguration from CELL_FACH to CELL_FACH: Success	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.2.2.18	RRC / Radio Bearer Reconfiguration from CELL_FACH to CELL_FACH: Success (Cell re-selection)	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.2.2.19	RRC / Radio Bearer Reconfiguration from CELL_DCH to CELL_DCH: Success (Subsequently received)	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	

8.2.2.20	RRC / Radio Bearer Reconfiguration from CELL_FACH to CELL_DCH: Success (Subsequently received)	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.2.2.21	Void						
8.2.2.22	Void						
8.2.2.23	RRC / Radio Bearer Reconfiguration from CELL_FACH to CELL_PCH: Success	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.2.2.24	Void						
8.2.2.25	RRC / Radio Bearer Reconfiguration for transition from CELL_FACH to CELL_DCH including modification of previously signalled CELL_DCH configuration	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.2.2.26	RRC / Radio Bearer Reconfiguration from CELL_DCH to CELL_DCH: Success (Incompatible Simultaneous Reconfiguration)	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	
8.2.2.27	Radio Bearer Reconfiguration for transition from CELL_DCH to CELL_DCH (Frequency band modification): Success	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	
8.2.2.28	Radio Bearer Reconfiguration for transition from CELL_DCH to CELL_FACH (Transport channel type switching with frequency band modification): Success	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.2.2.29	Void						
8.2.2.30	Void						
8.2.2.31	Radio Bearer Reconfiguration for transition from CELL_FACH to CELL_DCH (Frequency band modification): Success	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.2.2.32	Radio Bearer Reconfiguration for transition from CELL_FACH to CELL_FACH (Frequency band modification): Success	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.2.2.33	Void						
8.2.2.34	Radio Bearer Reconfiguration for	√	√	√		for FDD: UEs	

	transition from CELL_FACH to URA_PCH (Frequency band modification): Success					supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.2.2.35	Radio Bearer Reconfiguration from CELL_DCH to CELL_FACH: Successful channel switching with multiple PS RABs established	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.2.2.36	Radio Bearer Reconfiguration for transition from CELL_DCH to CELL_DCH: Success (Start and stop of HS-DSCH reception)	√					
8.2.2.37	Radio Bearer Reconfiguration for transition from CELL_FACH to CELL_DCH and from CELL_DCH to CELL_FACH: Success (start and stop of HS-DSCH reception)	√					
8.2.2.38	Radio Bearer Reconfiguration from CELL_DCH to CELL_DCH: Success (with active HS-DSCH reception)	√					
8.2.2.39	Radio Bearer Reconfiguration for transition from CELL_DCH to CELL_DCH: Success (Timing re-initialised hard handover to another frequency, start and stop of HS-DSCH reception)	√					
8.2.2.40	Radio Bearer Reconfiguration for transition from CELL_DCH to CELL_FACH and from CELL_FACH to CELL_DCH: Success (frequency band modification, start and stop of HS-DSCH reception)	√					
8.2.3.1	RRC / Radio Bearer Release for transition from CELL_DCH to CELL_DCH: Success	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	
8.2.3.2	Void						
8.2.3.3	Void						
8.2.3.4	Void						
8.2.3.5	Void						
8.2.3.6	Void						
8.2.6.45	Physical channel reconfiguration for transition from CELL_DCH to CELL_DCH (Compressed mode initiation, with active HS-DSCH reception): Success	√					
8.2.6.46	Physical channel reconfiguration for transition from CELL_DCH to CELL_DCH: Success (serving HS-DSCH cell change, timing re-initialized hard handover, compressed mode)	√					
8.2.3.7	RRC / Radio Bearer Release for transition from CELL_DCH to CELL_FACH: Success	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.2.3.8	RRC / Radio Bearer Release for transition from CELL_DCH to CELL_FACH: Success (Cell re-	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer	

	selection)					service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.2.3.9	RRC / Radio Bearer Release for transition from CELL_FACH to CELL_DCH: Success	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.2.3.10	Void						
8.2.3.11	RRC / Radio Bearer Release for transition from CELL_FACH to CELL_DCH: Failure (Physical channel failure and successful reversion to old configuration)						
8.2.3.12	Void						
8.2.3.13	Void						
8.2.3.14	Void						
8.2.3.15	RRC / Radio Bearer Release for transition from CELL_FACH to CELL_FACH: Success	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.2.3.16	RRC / Radio Bearer Release for transition from CELL_DCH to CELL_DCH: Success (Subsequently received)	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	
8.2.3.17	RRC / Radio Bearer Release for transition from CELL_FACH to CELL_DCH: Success (Subsequently received)	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.2.3.18	RRC / Radio Bearer Release from CELL_DCH to CELL_PCH: Success	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.2.3.19	RRC / Radio Bearer Release from CELL_DCH to URA_PCH: Success	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.2.3.20	RRC / Radio Bearer Release for transition from CELL_DCH to CELL_FACH (Frequency band modification): Success	√					
8.2.3.21	RRC / Radio Bearer Release from CELL_DCH to CELL_PCH (Frequency band modification): Success	√					
8.2.3.22	Radio Bearer Release for transition	√					

	from CELL_FACH to CELL_PCH: Success						
8.2.3.23	Radio Bearer Release for transition from CELL_FACH to URA_PCH: Success	√					
8.2.3.24	Radio Bearer Release for transition from CELL_DCH to CELL_DCH (Frequency band modification): Success	√					
8.2.3.25	Radio Bearer Release for transition from CELL_DCH to URA_PCH (Frequency band modification): Success	√					
8.2.3.26	Radio Bearer Release for transition from CELL_FACH to CELL_PCH (Frequency band modification): Success	√					
8.2.3.27	Radio Bearer Release for transition from CELL_FACH to URA_PCH (Frequency band modification): Success	√					
8.2.3.28	Radio Bearer Release for transition from CELL_FACH to CELL_FACH (Frequency band modification): Success	√					
8.2.3.29	Radio Bearer Release for transition from CELL_DCH to CELL_DCH: Associated with signalling connection release during multi call for PS and CS services	√					
8.2.3.30	Radio Bearer Release for transition from CELL_DCH to CELL_DCH: Success (stop of HS-DSCH reception)	√					
8.2.4.1	RRC / Transport channel reconfiguration (Timing re- initialised hard handover with transmission rate modification) from CELL_DCH to CELL_DCH (Hard handover to same radio frequency): Success	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	
8.2.4.1a	RRC / Transport channel reconfiguration (Transmission Rate Modification) from CELL_DCH to CELL_DCH of the same cell: Success	√					
8.2.4.2	Void						
8.2.4.3	RRC / Transport channel reconfiguration from CELL_DCH to CELL_DCH: Failure (Physical channel failure and reversion to old configuration)	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	
8.2.4.4	RRC / Transport channel reconfiguration from CELL_DCH to CELL_DCH: Failure (Physical channel failure and reversion failure)	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	
8.2.4.5	Void						
8.2.4.6	Void						
8.2.4.7	Void						
8.2.4.8	Void						
8.2.4.9	Void						
8.2.4.10	RRC / Transport channel reconfiguration from CELL_FACH to CELL_DCH: Success	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.2.4.11	Void						
8.2.4.12	Void						

8.2.4.13	Void						
8.2.4.14	Void						
8.2.4.15	Void						
8.2.4.16	Void						
8.2.4.17	Void						
8.2.4.18	RRC / Transport Channel Reconfiguration from CELL_DCH to CELL_DCH: Success (Subsequently received)	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	
8.2.4.19	RRC / Transport Channel Reconfiguration from CELL_FACH to CELL_DCH: Success (Subsequently received)	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	
8.2.4.20	Void						
8.2.4.21	Void						
8.2.4.22	Void						
8.2.4.23	Void						
8.2.4.24	RRC / Transport channel reconfiguration from CELL_DCH to CELL_DCH: Success with uplink transmission rate modification	√					
8.2.4.25	RRC / Transport channel reconfiguration from CELL_FACH to CELL_DCH (Frequency band modification): Success	√					
8.2.4.26	Void						
8.2.4.27	Void						
8.2.4.28	Void						
8.2.4.29	Transport Channel Reconfiguration for transition from CELL_DCH to CELL_DCH (Frequency band modification): Success	√					
8.2.4.30	Void						
8.2.4.31	Void						
8.2.4.32	Void						
8.2.4.33	Void						
8.2.4.34	Void						
8.2.4.35	Void						
8.2.5.1	Void						
8.2.5.2	Void						
8.2.5.3	Void						
8.2.5.4	RRC / Transport format combination Control in CELL_DCH: Failure (Invalid message reception and invalid configuration)	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	
8.2.6.1	RRC / Physical channel reconfiguration for transition from CELL_DCH to CELL_DCH (Hard handover for code modification): Success	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	
8.2.6.2	RRC / Physical channel reconfiguration for transition from CELL_DCH to CELL_DCH (Hard handover for code modification): Failure (Unsupported configuration)	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	
8.2.6.3	Void						
8.2.6.4	Void						

8.2.6.5	RRC / Physical channel reconfiguration for transition from CELL_DCH to CELL_DCH (Hard handover for code modification): Failure (Incompatible simultaneous reconfiguration)	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	
8.2.6.6	RRC / Physical channel reconfiguration for transition from CELL_DCH to CELL_DCH (Hard handover for code modification): Failure (Invalid message reception and invalid configuration)	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	
8.2.6.7	RRC / Physical channel reconfiguration for transition from CELL_DCH to CELL_FACH: Success	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.2.6.8	RRC / Physical channel reconfiguration for transition from CELL_DCH to CELL_FACH: Success (Cell re-selection)	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.2.6.9	RRC / Physical channel reconfiguration for transition from CELL_FACH to CELL_DCH: Success	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.2.6.10	Void						
8.2.6.11	RRC / Physical channel reconfiguration for transition from CELL_FACH to CELL_DCH: Failure (Physical channel failure and successful reversion to old configuration)	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.2.6.12	RRC / Physical channel reconfiguration for transition from CELL_FACH to CELL_DCH: Failure (Physical channel failure and cellupdate)	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.2.6.13	Void						
8.2.6.14	RRC / Physical channel reconfiguration for transition from CELL_FACH to CELL_DCH: Failure (Invalid message reception and invalid configuration)	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.2.6.15	Void						
8.2.6.16	Void						
8.2.6.17	RRC / Physical Channel Reconfiguration from CELL_DCH to CELL_DCH (Hard Handover for code modification): Success (Subsequently received)	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28	

						Mcps TDD option.	
8.2.6.18	RRC / Physical Channel Reconfiguration from CELL_FACH to CELL_DCH: Success (Subsequently received)	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.2.6.19	RRC / Physical channel from CELL_DCH to CELL_PCH: Success	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.2.6.20	RRC / Physical channel from CELL_DCH to URA_PCH: Success	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.2.6.21	RRC / Physical channel reconfiguration for transition from CELL_FACH to URA_PCH: Success	√					
8.2.6.22	RRC / Physical channel reconfiguration for transition from CELL_FACH to CELL_PCH: Success	√					
8.2.6.23	RRC / Physical channel reconfiguration for transition from CELL_DCH to CELL_DCH (Hard handover to another frequency with timing maintain): Success	√					
8.2.6.24	Void						
8.2.6.25	RRC / Physical channel reconfiguration for transition from CELL_DCH to CELL_FACH (Frequency band modification): Success	√					
8.2.6.26	RRC / Physical Channel Reconfiguration from CELL_DCH to CELL_PCH (Frequency band modification): Success	√					
8.2.6.27	RRC / Physical channel reconfiguration from CELL_FACH to CELL_PCH: Success	√					
8.2.6.28	RRC / Physical channel reconfiguration for transition from CELL_DCH to CELL_DCH (Downlink channelisation code modification): Success	√					
8.2.6.29	RRC / Physical channel reconfiguration for transition from CELL_DCH to CELL_DCH (Compressed mode initiation): Success	√					
8.2.6.30	RRC / Physical channel reconfiguration for transition from CELL_DCH to CELL_DCH (Modify active set cell): Success	√					
8.2.6.31	RRC / Physical channel reconfiguration transition from CELL_FACH to URA_PCH: Success	√					
8.2.6.32	RRC / Physical channel reconfiguration for transition from CELL_DCH to URA_PCH (Frequency band modification): Success	√					
8.2.6.33	RRC / Physical channel reconfiguration for transition from CELL_FACH to CELL_DCH (Frequency band	√					

	modification): Success						
8.2.6.34	RRC / Physical channel reconfiguration from CELL_FACH to CELL_PCH (Frequency band modification): Success	√					
8.2.6.35	RRC / Physical channel reconfiguration for transition from CELL_FACH to URA_PCH (Frequency band modification): Success	√					
8.2.6.36	Physical channel reconfiguration for transition from CELL_FACH to CELL FACH with frequency band modification	√					
8.2.6.37	RRC / Physical channel reconfiguration for transition from CELL_DCH to CELL_DCH (Hard handover to another frequency with timing re-initialised	√					
8.2.6.37a	RRC / Physical channel reconfiguration for transition from CELL_DCH to CELL_DCH (Hard handover to another frequency with timing re-initialised) (1.28 Mcps TDD)		√			UEs supporting 1.28 Mcps TDD (LCR TDD)	
8.2.6.38	Physical channel reconfiguration for transition from CELL_DCH to CELL_DCH (Hard handover to another frequency with timing re-initialised): Failure (Physical channel failure and reversion to old channel)	√					
8.2.6.39	RRC / Physical Channel Reconfiguration for transition from CELL_DCH to CELL_DCH (without pending of ciphering)	√					
8.2.6.39a	Physical Channel Reconfiguration for transition from CELL_DCH to CELL_DCH: Success (serving HS-DSCH cell change without MAC-hs reset)	√					
8.2.6.39b	Physical Channel Reconfiguration for transition from CELL_DCH to CELL_DCH: Success (serving HS-DSCH cell change with MAC-hs reset)	√					
8.2.6.40	Physical Channel Reconfiguration for transition from CELL_DCH to CELL_DCH: Success (Two radio links, change of HS-PDSCH configuration)	√					
8.2.6.41	Physical Channel Reconfiguration for transition from CELL_DCH to CELL_DCH: Success (Timing re-initialised hard handover to another frequency, signalling only)	√					
8.2.6.42	Physical Channel Reconfiguration for transition from CELL_DCH to CELL_DCH: Success (Timing re-initialized hard handover to another frequency, Serving HS-DSCH cell change)	√					
8.2.6.43	Physical Channel Reconfiguration for transition from CELL_DCH to CELL_DCH: Success (Seamless SRNS relocation with pending of ciphering)	√					
8.2.6.44	Physical Channel Reconfiguration for transition from CELL_DCH to CELL_DCH: Failure (Radio link failure in new configuration)	√					
8.2.6.45	Physical channel reconfiguration for transition from CELL_DCH to CELL_DCH (Hard handover to another frequency with timing re-initialised. Serving HS-DSCH cell change): Failure (Physical channel failure and reversion to old channel)	√					
8.2.7	RRC / Physical Shared Channel Allocation [TDD only]						
8.2.8	RRC / PUSCH capacity request [TDD only]						

8.3.1.1	RRC / Cell Update: cell reselection in CELL_FACH	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.3.1.2	RRC / Cell Update: cell reselection in CELL_PCH	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.3.1.3	RRC / Cell Update: periodical cell update in CELL_FACH	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.3.1.4	RRC / Cell Update: periodical cell update in CELL_PCH	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.3.1.5	RRC / Cell Update: UL data transmission in URA_PCH	√	√	√		for FDD: UEs supporting FDD and PS domain services and CS domain services; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.3.1.6	RRC / Cell Update: UL data transmission in CELL_PCH	√	√	√		for FDD: UEs supporting FDD and PS domain services and CS domain services; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.3.1.7	Void						
8.3.1.8	Void						
8.3.1.9	RRC / Cell Update: re-entering of service area after T305 expiry and being out of service area	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.3.1.10	RRC / Cell Update: expiry of T307 after T305 expiry and being out of service area	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option	

						and supporting PS bearer service.	
8.3.1.11	RRC / Cell Update: Success after T302 time-out	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.3.1.12	RRC / Cell Update: Failure (After Maximum Re-transmissions)	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.3.1.13	RRC / Cell Update: Reception of Invalid CELL UPDATE CONFIRM message	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.3.1.14	RRC / Cell Update: Incompatible simultaneous reconfiguration	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.3.1.15	RRC / Cell Update: Unrecoverable error in Acknowledged Mode RLC	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	
8.3.1.16	Void						
8.3.1.17	RRC / Cell Update: Failure (UTRAN initiate an RRC connection release procedure on CCCH)	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.3.1.18	RRC / Cell Update: Radio Link Failure (T314>0, T315=0), CS RAB established	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	
8.3.1.19	Void						
8.3.1.20	RRC / Cell Update: Reception of CELL UPDATE CONFIRM Message that causes invalid configuration	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.3.1.21	Cell Update: Cell reselection to cell of another PLMN belonging to the equivalent PLMN list	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	

8.3.1.22	Cell update: Restricted cell reselection to a cell belonging to forbidden LA list (Cell_FACH)	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.3.1.23	Cell Update: HCS cell reselection in CELL_FACH	√	√	√		for FDD: UEs supporting FDD; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	
8.3.1.24	Cell Update: HCS cell reselection in CELL_PCH	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.3.1.25	CELL UPDATE: Radio Link Failure (T314=0, T315=0)	√					
8.3.1.26	Cell Update: Radio Link Failure (T314>0, T315=0), PS RAB established	√					
8.3.1.27	Cell Update: Radio Link Failure (T314=0, T315>0), CS RAB	√					
8.3.1.28	Cell Update: Radio Link Failure (T314=0, T315>0), PS RAB	√					
8.3.1.29	Cell Update: Radio Link Failure (T314>0, T315>0), CS RAB	√					
8.3.1.30	Cell Update: Radio Link Failure (T314>0, T315>0), PS RAB	√					
8.3.1.31	Cell Update: re-entering of service area from URA_PCH after T316 expiry but before T317 expiry	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.3.1.32	Cell Update: Transition from URA_PCH to CELL_DCH, start of HS-DSCH reception	√					
8.3.1.33	Cell Update: Transition from CELL_PCH to CELL_DCH, start of HS-DSCH reception, frequency band modification	√					
8.3.2.1	RRC / URA Update: Change of URA	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.3.2.2	RRC / URA Update: Periodical URA update and Reception of Invalid message	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.3.2.3	Void						
8.3.2.4	RRC / URA Update: loss of service after expiry of timers T307 after T306	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD:	

						UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.3.2.5	RRC / URA Update: Success after Confirmation error of URA-ID list	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.3.2.6	RRC / URA Update: Failure (V303 is greater than N303: Confirmation error of URA-ID list)	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.3.2.7	RRC / URA Update: Success after T303 timeout	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.3.2.8	Void						
8.3.2.9	RRC / URA Update: Failure (UTRAN initiate an RRC connection release procedure on CCCH)	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.3.2.10	RRC / URA Update: Reception of URA UPDATE CONFIRM message that causes invalid configuration	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.3.2.11	URA Update: Cell reselection to cell of another PLMN belonging to the equivalent PLMN list	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.3.2.12	Restricted cell reselection to a cell belonging to forbidden LA list (URA_PCH)	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.3.2.13	URA Update: Change of URA due to HCS Cell Reselection	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option	

						and supporting PS bearer service.	
8.3.3.1	RRC / UTRAN Mobility Information: Success	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.3.3.2	RRC / UTRAN Mobility Information: Failure (Invalid message reception)	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.3.3.3	RRC / UTRAN Mobility Information: Seamless SRNS relocation in CELL_DCH (without pending of ciphering)	√					
8.3.4.1	RRC / Active set update in soft handover: Radio Link addition	√					
8.3.4.2	RRC / Active set update in soft handover: Radio Link removal	√					
8.3.4.3	RRC / Active set update in soft handover: Combined radio link addition and removal	√					
8.3.4.4	RRC / Active set update in soft handover: Invalid Configuration	√					
8.3.4.5	RRC / Active set update in soft handover: Reception of an ACTIVE SET UPDATE message in wrong state	√					
8.3.4.6	Void						
8.3.4.7	RRC / Active set update in soft handover: Invalid Message Reception	√					
8.3.4.8	RRC / Active set update in soft handover: Radio Link addition in multiple radio link environment	√					
8.3.4.9	Active set update in soft handover: Radio Link removal (stop of HS-DSCH reception)	√					
8.3.5.1	Void						
8.3.5.2	Void						
8.3.5.3	Void						
8.3.7.1	Inter system handover from UTRAN/To GSM/Speech/Success	√	√	√		for FDD: UEs supporting FDD and GSM and supporting speech; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and GSM and supporting speech.	
8.3.7.2	Inter system handover from UTRAN/To GSM/Data/Same data rate/Success	√	√	√		for FDD: UEs supporting FDD and GSM and one or more CS bearer services up to and including 14 400 bit/s; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and GSM.	
8.3.7.2a	Inter system handover from UTRAN/To GSM/Data/Same data rate/Extended Rates/Success	√	√	√		for FDD: UEs supporting FDD and GSM and one or more HSCSD bearer services equal to or	

						greater than 14 400 bit/s; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and GSM.	
8.3.7.3	Inter system handover from UTRAN/To GSM/Data/Data rate down grading/Success	√	√	√		for FDD: UEs supporting FDD and GSM and one or more CS bearer services up to and including 14 400 bit/s; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and GSM.	
8.3.7.3a	Inter system handover from UTRAN/To GSM/Data/Data rate down grading/Extended Rates/Success	√	√	√		for FDD: UEs supporting FDD and GSM and one or more HSCSD bearer services equal to or greater than 14 400 bit/s; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and GSM.	
8.3.7.4	Inter system handover from UTRAN/To GSM/Speech/Establishment/Success	√	√	√		for FDD: UEs supporting FDD and GSM and supporting speech; for LCRTDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and GSM and supporting speech.	
8.3.7.5	Inter system handover from UTRAN/To GSM/Speech/Failure	√	√	√		for FDD: UEs supporting FDD and GSM and supporting speech; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and GSM and supporting speech.	
8.3.7.6	Inter system handover from UTRAN/To GSM/Speech/Failure (L2 Establishment)	√	√	√		for FDD: UEs supporting FDD and GSM and supporting speech; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and GSM and supporting speech.	
8.3.7.7	Inter system handover from UTRAN/To GSM/Speech/Failure (L1 Synchronization)	√	√	√		for FDD: UEs supporting FDD and GSM and supporting speech; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and GSM and supporting speech.	
8.3.7.8	Inter system handover from UTRAN/To GSM/Speech/Failure (Invalid Inter-RAT message)	√	√	√		for FDD: UEs supporting FDD and GSM and supporting speech; for LCR TDD: UEs supporting 3.84 Mcps	

						TDD option or 1.28 Mcps TDD option and GSM and supporting speech.	
8.3.7.9	Inter system handover from UTRAN/To GSM/Speech/Failure (Unsupported configuration)	√	√	√		for FDD: UEs supporting FDD and GSM and supporting speech; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and GSM and supporting speech.	
8.3.7.10	Inter system handover from UTRAN/To GSM/Speech/Failure (Reception by UE in CELL_FACH)	√	√	√		for FDD: UEs supporting FDD and GSM and supporting speech; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and GSM and supporting speech.	
8.3.7.11	Inter system handover from UTRAN/To GSM/Speech/Failure (Invalid message reception)	√	√	√		for FDD: UEs supporting FDD and GSM and supporting speech; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and GSM and supporting speech.	
8.3.7.12	Inter system handover from UTRAN/To GSM/Speech/Failure (Physical channel Failure and Reversion Failure)	√	√	√		for FDD: UEs supporting FDD and GSM and supporting speech; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and GSM and supporting speech.	
8.3.7.13	Inter system handover from UTRAN/To GSM/ success / call under establishment	√	√	√		for FDD: UEs supporting FDD and GSM and supporting speech; for LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and GSM and supporting speech.	
8.3.7.14	Inter system handover from UTRAN/To GSM/Speech/Success (stop of HS-DSCH reception)	√					
8.3.7.15	Inter system handover from UTRAN/To GSM/Speech/Failure(stop of HS-DSCH reception)	√					
8.3.8	RRC / Inter system cell reselection to UTRAN						
8.3.9	RRC / Inter system cell reselection from UTRAN						
8.3.9.1	Cell reselection if cell becomes barred or S<0; UTRAN to GPRS (CELL_FACH)	√					
8.3.9.2	Cell reselection if cell becomes barred or S<0; UTRAN to GPRS (URA_PCH)	√					
8.3.9.3	Cell reselection if S<0; UTRAN to GPRS (UE in CELL_FACH fails to complete an inter-RAT cell reselection)	√					
8.3.9.4	Cell reselection if S<0; UTRAN to GPRS (UE in CELL_PCH fails to complete an inter-RAT cell reselection)	√					

8.3.9.5	Successful Cell Reselection with RAU – Q_{offset} value modification; UTRAN to GPRS (CELL_FACH)	√					
Inter-RAT cell change order from UTRAN							
8.3.11.1	Inter-RAT cell change order from UTRAN/To GPRS/CELL_DCH/Success	√					
8.3.11.2	Inter-RAT cell change order from UTRAN/To GPRS/CELL_FACH/Success	√					
8.3.11.3	Inter-RAT cell change order from UTRAN/To GPRS/CELL_DCH/Failure (T309 expiry)	√					
8.3.11.4	Inter-RAT cell change order from UTRAN/To GPRS/CELL_DCH/Failure (Physical channel Failure and Reversion Failure)	√					
8.3.11.5	Inter-RAT cell change order from UTRAN/To GPRS/CELL_FACH/Failure (T309 expiry)	√					
8.3.11.6	Inter-RAT cell change order from UTRAN/To GPRS/CELL_FACH/Failure (Physical channel Failure and Reversion Failure)	√					
8.3.11.7	Inter-RAT cell change order from UTRAN/To GPRS/ Failure (Unsupported configuration)	√					
8.3.11.8	Inter-RAT cell change order from UTRAN/To GPRS/ Failure (Invalid Inter-RAT message)	√					
8.3.11.9	Inter-RAT Cell Change Order from UTRAN to GPRS/CELL_DCH/Success (stop of HS-DSCH reception)	√					
8.3.11.10	Inter-RAT Cell Change Order from UTRAN/To GPRS/CELL_DCH/Failure (Physical channel Failure, stop of HS-DSCH reception)	√					
8.4.1.1	RRC / Measurement Control and Report: Intra-frequency measurement for transition from idle mode to CELL_DCH state (FDD)	√					
8.4.1.1A	RRC / Measurement Control and Report: Intra-frequency measurement for transition from idle mode to CELL_DCH state (TDD)		√			UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	
8.4.1.2	RRC / Measurement Control and Report: Inter-frequency measurement for transition from idle mode to CELL_DCH state (FDD)	√					
8.4.1.2A	RRC / Measurement Control and Report: Inter-frequency measurement for transition from idle mode to CELL_DCH state (TDD)		√			UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	
8.4.1.3	RRC / Measurement Control and Report: Intra-frequency measurement for transition from idle mode to CELL_FACH state (FDD)	√					
8.4.1.3A	RRC / Measurement Control and Report: Intra-frequency measurement for transition from idle mode to CELL_FACH state (TDD)		√			UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.4.1.4	RRC / Measurement Control and Report: Inter-frequency measurement for transition from idle mode to CELL_FACH state (FDD)	√					
8.4.1.4A	RRC / Measurement Control and Report: Inter-frequency measurement for transition from idle mode to CELL_FACH state (TDD)		√			UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.4.1.5	RRC / Measurement Control and Report: Intra-frequency measurement for transition from CELL_DCH to CELL_FACH state (FDD)	√					

8.4.1.5A	RRC / Measurement Control and Report: Intra-frequency measurement for transition from CELL_DCH to CELL_FACH state (TDD)		√			UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.4.1.6	RRC / Measurement Control and Report: Inter- frequency measurement for transition from CELL_DCH to CELL_FACH state (FDD)	√					
8.4.1.6A	RRC / Measurement Control and Report: Inter- frequency measurement for transition from CELL_DCH to CELL_FACH state (TDD)		√			UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.4.1.7	RRC / Measurement Control and Report: Intra- frequency measurement for transition from CELL_FACH to CELL_DCH state (FDD)	√					
8.4.1.7A	RRC / Measurement Control and Report: Intra- frequency measurement for transition from CELL_FACH to CELL_DCH state (TDD)		√			UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.4.1.8	RRC / Measurement Control and Report: Inter- frequency measurement for transition from CELL_FACH to CELL_DCH state (FDD)	√					
8.4.1.8A	RRC / Measurement Control and Report: Inter- frequency measurement for transition from CELL_FACH to CELL_DCH state (TDD)		√			UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.4.1.9	RRC / Measurement Control and Report: Unsupported measurement in the UE	√					
8.4.1.10	RRC / Measurement Control and Report: Failure (Invalid Message Reception)	√					
8.4.1.11	void						
8.4.1.12	void						
8.4.1.13	RRC / Measurement Control and Report: Compressed Mode Configuration Failure during physical channel reconfiguration procedure	√					
8.4.1.14	RRC / Measurement Control and Report: Cell forbidden to affect reporting range	√					
8.4.1.15	RRC / Measurement Control and Report Incomplete	√					
8.4.1.16	RRC / Measurement Control and Report: Traffic volume measurement for transition from idle mode to CELL_FACH state	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; fot LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	
8.4.1.17	RRC / Measurement Control and Report: Traffic volume measurement for transition from idle mode to CELL_DCH state	√	√	√		for FDD: UEs supporting FDD; fot LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	
8.4.1.18	RRC / Measurement Control and Report: Traffic volume measurement for transition from CELL_FACH state to CELL_DCH state	√	√	√		for FDD: UEs supporting FDD and supporting PS bearer service; fot LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.4.1.19	RRC / Measurement Control and Report: Traffic volume measurement	√	√	√		for FDD: UEs supporting FDD and	

	for transition from CELL_DCH to CELL_FACH state					supporting PS bearer service; fot LCR TDD: UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option and supporting PS bearer service.	
8.4.1.20	Void						
8.4.1.21	Void						
8.4.1.22	RRC / Measurement Control and Report: Quality measurements						
8.4.1.23	RRC / Measurement Control and Report: Intra-frequency measurement for events 1C and 1D	√					
8.4.1.24	RRC / Measurement Control and Report: Inter-frequency measurement for event 2A	√					
8.4.1.25	RRC / Measurement Control and Report: Inter-frequency measurement for events 2B and 2E	√					
8.4.1.26	RRC / Measurement Control and Report: Measurement for events 2D and 2F	√					
8.4.1.27	RRC / Measurement Control and Report: UE internal measurement for events 6A and 6B	√					
8.4.1.28	RRC / Measurement Control and Report: UE internal measurement for events 6F and 6G	√					
8.4.1.28a	RRC / Measurement Control and Report: UE internal measurement for events 6F (1.28 Mcps TDD)		√			UEs supporting 1.28 Mcps TDD (LCR TDD)	
8.4.1.29	RRC / Measurement Control and Report: Event based Traffic Volume measurement in CELL_FACH state	√					
8.4.1.30	RRC / Measurement Control and Report: Event based Traffic Volume measurement in CELL_DCH state	√					
8.4.1.31	RRC / Measurement Control and Report: Inter-RAT measurement in CELL_DCH state	√					
8.4.1.32	Void						
8.4.1.33	Measurement Control and Report: Inter-RAT measurement, event 3a	√					
8.4.1.34	Measurement Control and Report: Inter-RAT measurement, event 3b	√					
8.4.1.35	Measurement Control and Report: Inter-RAT measurement, event 3c	√					
8.4.1.36	Measurement Control and Report: Inter-RAT measurement, event 3d	√					
8.4.1.37	Measurement Control and Report: UE internal measurement, event 6c	√					
8.4.1.38	Measurement Control and Report: UE internal measurement, event 6d	√					
8.4.1.39	Measurement Control and Report: UE internal measurement, event 6e	√					
8.4.1.40	Measurement Control and Report: Inter-RAT measurement event 3C in CELL_DCH state using sparse compressed mode pattern	√					
8.4.1.41	Measurement Control and Report: Additional Measurements list	√					
8.4.1.42	Measurement Control and Report: Change of Compressed Mode Method	√					
8.4.1.43	Measurement Control and Report: Compressed Mode Reconfiguration	√					
8.4.1.44	RRC / Measurement Control and Report: Intra-frequency measurement for events 1H and 1I (TDD)		√			UEs supporting 3.84 Mcps TDD option or 1.28 Mcps TDD option.	

8.4.1.45	RRC / Measurement Control and Report: Intra-frequency measurement for events 1G (1.28 Mcps TDD)		√			UEs supporting 1.28 Mcps TDD (LCR TDD)	
MOBILITY MANAGEMENT							
9.1	TMSI reallocation	√	√		√		
9.2.1	Authentication accepted	√	√		√		
9.2.2	Authentication rejected	√	√		√		
9.2.3	Authentication rejected by the UE (MAC code failure)	√	√		√		
9.2.4	Authentication rejected by the UE (SQN failure)	√	√		√		
9.2.5	Authentication rejected by the UE / fraudulent network	√	√		√		
9.3.1	General Identification	√	√		√		
9.3.2	Handling of IMSI shorter than the maximum length	√	√		√		
9.4.1	Location updating / accepted	√	√		√		
9.4.2.1	Location updating / rejected / IMSI invalid	√	√		√		
9.4.2.2	Location updating / rejected / PLMN not allowed	√	√		√		
9.4.2.3	Location updating / rejected / location area not allowed	√	√		√		
9.4.2.4.1	Location updating / rejected / roaming not allowed in this location area / Procedure 1	√	√		√		
9.4.2.4.2	Location updating / rejected / roaming not allowed in this location area / Procedure 2	√	√		√		
9.4.2.4.3	Location updating / rejected / roaming not allowed in this location area / Procedure 3	√	√		√		
9.4.2.4.4	Location updating / rejected / roaming not allowed in this location area / Procedure 4	√	√		√		
9.4.2.4.5	Location updating / rejected / roaming not allowed in this location area / Procedure 5	√	√		√		
9.4.2.5	Location updating / rejected / No Suitable Cells In Location Area	√	√		√		
9.4.3.2	Location updating / abnormal cases / attempt counter less or equal to 4, LAI different	√	√		√		
9.4.3.3	Location updating / abnormal cases / attempt counter equal to 4	√	√		√		
9.4.3.4	Location updating / abnormal cases / attempt counter less or equal to 4, stored LAI equal to broadcast LAI	√	√		√		
9.4.3.5	Location updating / abnormal cases / Failure due to non-integrity protection	√	√		√		
9.4.4	Location updating / release / expiry of T3240	√	√		√		
9.4.5.1	Location updating / periodic spread	√	√		√		
9.4.5.2	Location updating / periodic normal / test 1	√	√		√		
9.4.5.3	Location updating / periodic normal / test 2	√	√		√		
9.4.5.4.1	Location updating / periodic search for HPLMN or higher priority PLMN / UE waits time T	√	√		√		
9.4.5.4.2	Location updating / periodic search for HPLMN or higher priority PLMN / UE in manual mode	√	√		√		
9.4.5.4.3	Location updating / periodic search for HPLMN or higher priority PLMN / UE waits at least two minutes and at most T minutes	√	√		√		
9.4.6	Location updating / interworking of attach and periodic	√	√		√		
9.4.7	Location Updating / accept with replacement or deletion of Equivalent PLMN list	√	√		√		

9.4.8	Location Updating after UE power off	√	√		√		
9.4.9	Location Updating/ Accept, Interaction between Equivalent PLMNs and Forbidden PLMNs	√	√		√		
9.5.2	MM connection / establishment in security mode	√	√		√		
9.5.3	Void						
9.5.4	MM connection / establishment rejected	√	√		√		
9.5.5	MM connection / establishment rejected cause 4	√	√		√		
9.5.6	MM connection / expiry T3230	√	√		√		
9.5.7.1	MM connection / abortion by the network / cause #6	√	√		√		
9.5.7.2	MM connection / abortion by the network / cause not equal to #6	√	√		√		
9.5.8.1	MM connection / follow-on request pending / test 1	√	√		√		
9.5.8.2	MM connection / follow-on request pending / test 2	√	√		√		
9.5.8.3	MM connection / follow-on request pending / test 3	√	√		√		
CALL CONTROL							
10.1.2.1.1	Outgoing call / U0 null state / MM connection requested	√	√		√		
10.1.2.2.1	Outgoing call / U0.1 MM connection pending / CM service rejected	√	√		√		
10.1.2.2.2	Outgoing call / U0.1 MM connection pending / CM service accepted	√	√		√		
10.1.2.2.3	Outgoing call / U0.1 MM connection pending / lower layer failure	√	√		√		
10.1.2.3.1	Outgoing call / U1 call initiated / receiving CALL PROCEEDING	√	√		√		
10.1.2.3.2	Outgoing call / U1 call initiated / rejecting with RELEASE COMPLETE	√	√		√		
10.1.2.3.3	Outgoing call / U1 call initiated / T303 expiry	√	√		√		
10.1.2.3.4	Outgoing call / U1 call initiated / lower layer failure	√	√		√		
10.1.2.3.5	Outgoing call / U1 call initiated / receiving ALERTING	√	√		√		
10.1.2.3.6	Outgoing call / U1 call initiated / entering state U10	√	√		√		
10.1.2.3.7	Outgoing call / U1 call initiated / unknown message received	√	√		√		
10.1.2.4.1	Outgoing call / U3 Mobile originating call proceeding / ALERTING received	√	√		√		
10.1.2.4.2	Outgoing call / U3 Mobile originating call proceeding / CONNECT received	√	√		√		
10.1.2.4.3	Outgoing call / U3 Mobile originating call proceeding / PROGRESS received without in band information	√	√		√		
10.1.2.4.4	Outgoing call / U3 Mobile originating call proceeding / PROGRESS with in band information	√	√		√		
10.1.2.4.5	Outgoing call / U3 Mobile originating call proceeding / DISCONNECT with in band tones	√	√		√		
10.1.2.4.6	Outgoing call / U3 Mobile originating call proceeding / DISCONNECT without in band tones	√	√		√		
10.1.2.4.7	Outgoing call / U3 Mobile originating call proceeding / RELEASE received	√	√		√		
10.1.2.4.8	Outgoing call / U3 Mobile originating call proceeding / termination requested by the user	√	√		√		
10.1.2.4.9	Outgoing call / U3 Mobile originating call proceeding / traffic channel allocation	√	√		√		
10.1.2.4.10	Outgoing call / U3 Mobile originating call proceeding / timer T310 time-out	√	√		√		
10.1.2.4.11	Outgoing call / U3 Mobile originating call proceeding / lower layer failure	√	√		√		

10.1.2.4.12	Outgoing call / U3 Mobile originating call proceeding / unknown message received	√	√		√		
10.1.2.4.13	Outgoing call / U3 Mobile originating call proceeding / Internal alerting indication	√	√		√		
10.1.2.5.1	Outgoing call / U4 call delivered / CONNECT received	√	√		√		
10.1.2.5.2	Outgoing call / U4 call delivered / termination requested by the user	√	√		√		
10.1.2.5.3	Outgoing call / U4 call delivered / DISCONNECT with in band tones	√	√		√		
10.1.2.5.4	Outgoing call / U4 call delivered / DISCONNECT without in band tones	√	√		√		
10.1.2.5.5	Outgoing call / U4 call delivered / RELEASE received	√	√		√		
10.1.2.5.6	Outgoing call / U4 call delivered / lower layer failure	√	√		√		
10.1.2.5.7	Outgoing call / U4 call delivered / traffic channel allocation	√	√		√		
10.1.2.5.8	Outgoing call / U4 call delivered / unknown message received	√	√		√		
10.1.2.6.1	U10 active / termination requested by the user	√	√		√		
10.1.2.6.2	U10 active / RELEASE received	√	√		√		
10.1.2.6.3	U10 active / DISCONNECT with in band tones	√	√		√		
10.1.2.6.4	U10 active / DISCONNECT without in band tones	√	√		√		
10.1.2.6.5	U10 active / RELEASE COMPLETE received	√	√		√		
10.1.2.6.6	U10 active / SETUP received	√	√		√		
10.1.2.7.1	U11 disconnect request / clear collision	√	√		√		
10.1.2.7.2	U11 disconnect request / RELEASE received	√	√		√		
10.1.2.7.3	U11 disconnect request / timer T305 time-out	√	√		√		
10.1.2.7.4	U11 disconnect request / lower layer failure	√	√		√		
10.1.2.7.5	U11 disconnect request / unknown message received	√	√		√		
10.1.2.8.1	U12 disconnect indication / call releasing requested by the user	√	√		√		
10.1.2.8.2	U12 disconnect indication / RELEASE received	√	√		√		
10.1.2.8.3	U12 disconnect indication / lower layer failure	√	√		√		
10.1.2.8.4	U12 disconnect indication / unknown message received	√	√		√		
10.1.2.9.1	Outgoing call / U19 release request / timer T308 time-out	√	√		√		
10.1.2.9.2	Outgoing call / U19 release request / 2nd timer T308 time-out	√	√		√		
10.1.2.9.3	Outgoing call / U19 release request / RELEASE received	√	√		√		
10.1.2.9.4	Outgoing call / U19 release request / RELEASE COMPLETE received	√	√		√		
10.1.2.9.5	Outgoing call / U19 release request / lower layer failure	√	√		√		
10.1.3.1.1	Incoming call / U0 null state / SETUP received with a non supported bearer capability	√	√		√		
10.1.3.2.1	Incoming call / U6 call present / automatic call rejection	√	√		√		
10.1.3.3.1	Incoming call / U9 mobile terminating call confirmed / alerting or immediate connecting	√	√		√		
10.1.3.3.2	Incoming call / U9 mobile terminating call confirmed / DTCH assignment	√	√		√		
10.1.3.3.3	Void						
10.1.3.3.4	Incoming call / U9 mobile terminating call confirmed / DISCONNECT received	√	√		√		

10.1.3.3.5	Incoming call / U9 mobile terminating call confirmed / RELEASE received	√	√		√		
10.1.3.3.6	Incoming call / U9 mobile terminating call confirmed / lower layer failure	√	√		√		
10.1.3.3.7	Incoming call / U9 mobile terminating call confirmed / unknown message received	√	√		√		
10.1.3.4.1	Incoming call / U7 call received / call accepted	√	√		√		
10.1.3.4.2	Incoming call / U7 call received / termination requested by the user	√	√		√		
10.1.3.4.3	Incoming call / U7 call received / DISCONNECT received	√	√		√		
10.1.3.4.4	Incoming call / U7 call received / RELEASE received	√	√		√		
10.1.3.4.5	Incoming call / U7 call received / lower layer failure	√	√		√		
10.1.3.4.6	Incoming call / U7 call received / unknown message received	√	√		√		
10.1.3.4.7	Incoming call / U7 call received / DTCH assignment	√	√		√		
10.1.3.4.8	Incoming call / U7 call received / RELEASE COMPLETE received	√	√		√		
10.1.3.5.1	Incoming call / U8 connect request / CONNECT acknowledged	√	√		√		
10.1.3.5.2	Incoming call / U8 connect request / timer T313 time-out	√	√		√		
10.1.3.5.3	Incoming call / U8 connect request / termination requested by the user	√	√		√		
10.1.3.5.4	Incoming call / U8 connect request / DISCONNECT received with in-band information	√	√		√		
10.1.3.5.5	Incoming call / U8 connect request / DISCONNECT received without in-band information	√	√		√		
10.1.3.5.6	Incoming call / U8 connect request / RELEASE received	√	√		√		
10.1.3.5.7	Incoming call / U8 connect request / lower layer failure	√	√		√		
10.1.3.5.8	Incoming call / U8 connect request / DTCH assignment	√	√		√		
10.1.3.5.9	Incoming call / U8 connect request / unknown message received	√	√		√		
10.1.4.1.1	In-call functions / DTMF information transfer / basic procedures	√	√		√		
10.1.4.2.1	In-call functions / User notification / UE terminated	√	√		√		
10.1.4.3.1	In-call functions / channel changes / a successful channel change in active state/ Handover and Assignment Command	√	√		√		
10.1.4.3.2	In-call functions / channel changes / an unsuccessful channel change in active mode/ Handover and Assignment Command	√	√		√		
10.3	User to user signalling	√	√		√		
SESSION MANAGEMENT							
11.1.1.1	Attach initiated by context activation/QoS Offered by Network is the QoS Requested	√	√		√		
11.1.1.1a	Attach initiated by context activation/QoS Offered by Network is the QoS Requested/Correct handling of QoS extensions for rates above 8640 kbps	√	√		√		
11.1.1.2.1	Void						
11.1.1.2.2	Void						
11.1.2	PDP context activation requested by the network, successful and unsuccessful	√	√		√		
11.1.3.1	Abnormal Cases / T3380 Expiry	√	√		√		
11.1.3.2	Abnormal Cases / Collision of UE initiated and network requested PDP	√	√		√		

	context activation						
11.1.3.3	Abnormal Cases / Network initiated PDP context activation request for an already activated PDP context (on the UE side)	√	√		√		
11.1.4.1.1	Successful secondary PDP context activation procedure initiated by the UE/QoS Offered by Network is the QoS Requested	√	√		√		
11.1.4.1.2.1	Void						
11.1.4.1.2.2	Void						
11.1.4.1.2.3	Successful secondary PDP context activation procedure Initiated by the UE/LLC SAPI rejected by UE	√	√		√		
11.1.4.2	Unsuccessful Secondary PDP Context Activation Procedure Initiated by the UE	√	√		√		
11.1.4.3.1	Abnormal cases/T3380 Expiry	√	√		√		
11.2.1	Network initiated PDP context modification	√	√		√		
11.2.2.1	UE initiated PDP context modification/UE initiated PDP context modification accepted by network	√	√		√		
11.2.2.2	UE initiated PDP context modification/UE initiated PDP context modification not accepted by network	√	√		√		
11.2.3.1	Abnormal Cases/T3381 Expiry	√	√		√		
11.2.3.2	Collision of UE and network initiated PDP context modification procedures	√	√		√		
11.3.1	PDP context deactivation initiated by the UE	√	√		√		
11.3.2	PDP context deactivation initiated by the network	√	√		√		
11.3.3.1	Abnormal cases / T3390 Expiry	√	√		√		
11.3.3.2	Abnormal cases / Collision of UE and network initiated PDP context deactivation requests	√	√		√		
11.4.1	Error cases	√	√		√		
PACKET SWITCHED MOBILITY MANAGEMENT							
12.2.1.1	PS attach / accepted	√	√		√		
12.2.1.2	PS attach / rejected / IMSI invalid / illegal UE	√	√		√		
12.2.1.3	PS attach / rejected / IMSI invalid / PS services not allowed	√	√		√		
12.2.1.4	PS attach / rejected / PLMN not allowed	√	√		√		
12.2.1.5a	PS attach / rejected / roaming not allowed in this location area	√	√		√		
12.2.1.5b	PS attach / rejected / No Suitable Cells In Location Area	√	√		√		
12.2.1.5c	PS attach / rejected / Location area not allowed	√	√		√		
12.2.1.5d	PS attach / rejected / PS services not allowed in this PLMN	√	√		√		
12.2.1.6	PS attach / abnormal cases / access barred due to access class control	√	√		√		
12.2.1.7	PS attach / abnormal cases / change of routing area	√	√		√		
12.2.1.8	PS attach / abnormal cases / power off	√	√		√		
12.2.1.9	PS attach / abnormal cases / PS detach procedure collision	√	√		√		
12.2.1.10	PS attach / abnormal cases / Failure due to non integrity protection	√	√		√		
12.2.2.1	Combined PS attach / PS and non-PS attach accepted	√	√		√		
12.2.2.2	Combined PS attach / PS only attach accepted	√	√		√		
12.2.2.3	Combined PS attach / PS attach while IMSI attach	√	√		√		

12.2.2.4	Combined PS attach / rejected / IMSI invalid / illegal ME	√	√		√		
12.2.2.5	Combined PS attach / rejected / PS services and non-PS services not allowed	√	√		√		
12.2.2.6	Combined PS attach / rejected / PS services not allowed	√	√		√		
12.2.2.7a	Combined PS attach / rejected / location area not allowed	√	√		√		
12.2.2.7b	Combined PS attach / rejected / No Suitable Cells In Location Area	√	√		√		
12.2.2.7c	Combined PS attach / rejected / Roaming not allowed in this location area	√	√		√		
12.2.2.7d	Combined PS attach / rejected / PS services not allowed in this PLMN	√	√		√		
12.2.2.8	Combined PS attach / abnormal cases / attempt counter check / miscellaneous reject causes	√	√		√		
12.2.2.9	Combined PS attach / abnormal cases / PS detach procedure collision	√	√		√		
12.3.1.1	PS detach / power off / accepted	√	√		√		
12.3.1.2	PS detach / accepted	√	√		√		
12.3.1.3	PS detach / abnormal cases / attempt counter check / procedure timeout	√	√		√		
12.3.1.4	PS detach / abnormal cases / GMM common procedure collision	√	√		√		
12.3.1.5	PS detach / power off / accepted / PS/IMSI detach	√	√		√		
12.3.1.6	PS detach / accepted / PS/IMSI detach	√	√		√		
12.3.1.7	PS detach / accepted / IMSI detach	√	√		√		
12.3.1.8	PS detach / abnormal cases / change of cell into new routing area	√	√		√		
12.3.1.9	PS detach / abnormal cases / PS detach procedure collision	√	√		√		
12.3.2.1	PS detach / re-attach not required / accepted	√	√		√		
12.3.2.2	PS detach / rejected / IMSI invalid / PS services not allowed	√	√		√		
12.3.2.3	PS detach / IMSI detach / accepted	√	√		√		
12.3.2.4	PS detach / re-attach requested / accepted	√	√		√		
12.3.2.5	PS detach / rejected / location area not allowed	√	√		√		
12.3.2.6	PS detach / rejected / No Suitable Cells In Location Area	√	√		√		
12.3.2.7	PS detach / rejected / Roaming not allowed in this location area	√	√		√		
12.3.2.8	PS detach / rejected / PS services not allowed in this PLMN	√	√		√		
12.4.1.1a	Routing area updating / accepted	√	√		√		
12.4.1.1b	Routing area updating / accepted / Signalling connection re-establishment	√	√		√		
12.4.1.1c	Void						
12.4.1.2	Routing area updating / rejected / IMSI invalid / illegal ME	√	√		√		
12.4.1.3a	Routing area updating / rejected / UE identity cannot be derived by the network	√	√		√		
12.4.1.4a	Routing area updating / rejected / location area not allowed	√	√		√		
12.4.1.4b	Routing area updating / rejected / No Suitable Cells In Location Area	√	√		√		
12.4.1.4c	Routing area updating / rejected / PS services not allowed in this PLMN	√	√		√		
12.4.1.4d	Routing area updating / rejected / Roaming not allowed in this location area	√	√		√		
12.4.1.5	Routing area updating / abnormal cases / attempt counter check / miscellaneous reject causes	√	√		√		

12.4.1.6	Routing area updating / abnormal cases / change of cell into new routing area	√	√		√		
12.4.1.7	Void						
12.4.1.8	Routing area updating / abnormal cases / P-TMSI reallocation procedure collision	√	√		√		
12.4.2.1	Combined routing area updating / combined RA/LA accepted	√	√		√		
12.4.2.2	Combined routing area updating / UE in CS operation at change of RA	√	√		√		
12.4.2.3	Combined routing area updating / RA only accepted	√	√		√		
12.4.2.3a	Void						
12.4.2.4	Combined routing area updating / rejected / PLMN not allowed	√	√		√		
12.4.2.5a	Combined routing area updating / rejected / roaming not allowed in this location area	√	√		√		
12.4.2.5b	Combined routing area updating / rejected / No Suitable Cells In Location Area	√	√		√		
12.4.2.5c	Combined routing area updating / rejected / Location area not allowed	√	√		√		
12.4.2.5d	Combined routing area updating / rejected / PS services not allowed in this PLMN	√	√		√		
12.4.2.6	Combined routing area updating / abnormal cases / access barred due to access class control	√	√		√		
12.4.2.7	Combined routing area updating / abnormal cases / attempt counter check / procedure timeout	√	√		√		
12.4.2.8	Combined routing area updating / abnormal cases / change of cell into new routing area	√	√		√		
12.4.2.9	Void						
12.4.2.10	Combined routing area updating / abnormal cases / PS detach procedure collision	√	√		√		
12.4.3.1	Periodic routing area updating / accepted	√	√		√		
12.4.3.2	Periodic routing area updating / accepted / T3312 default value	√	√		√		
12.4.3.3	Periodic routing area updating / no cell available / network mode I	√	√		√		
12.4.3.4	Periodic routing area updating / no cell available	√	√		√		
12.5	P-TMSI reallocation	√	√		√		
12.6.1.1	Authentication accepted	√	√		√		
12.6.1.2	Authentication rejected - by the network	√	√		√		
12.6.1.3.1	GMM cause ‘MAC failure’	√	√		√		
12.6.1.3.2	GMM cause ‘Synch failure’	√	√		√		
12.6.1.3.3	Authentication rejected by the UE / fraudulent network	√	√		√		
12.7.1	General Identification	√	√		√		
12.8	GMM READY timer handling	√	√		√		
12.9.1	Service Request Initiated by UE Procedure	√	√		√		
12.9.2	Service Request Initiated by Network Procedure	√	√		√		
12.9.3	Service Request / rejected / Illegal MS	√	√		√		
12.9.4	Service Request / rejected / PS services not allowed	√	√		√		
12.9.5	Service Request / rejected / MS identity cannot be derived by the network	√	√		√		
12.9.6	Service Request / rejected / PLMN not allowed	√	√		√		

12.9.7a	Service Request / rejected / No PDP context activated	√	√		√		
12.9.7b	Service Request / rejected / No Suitable Cells In Location Area	√	√		√		
12.9.7c	Service Request / rejected / Roaming not allowed in this location area	√	√		√		
12.9.8	Service Request / Abnormal cases / Access barred due to access class control	√	√		√		
12.9.9	Service Request / Abnormal cases / Routing area update procedure is triggered	√	√		√		
12.9.10	Service Request / Abnormal cases / Power off	√	√		√		
12.9.11	Service Request / Abnormal cases / Service request procedure collision	√	√		√		
12.9.12	Service Request / RAB re-establishment / UE initiated / Single PDP context	√	√		√		
12.9.13	Service Request / RAB re-establishment / UE initiated / multiple PDP contexts	√	√		√		
12.9.14	Service Request / RAB re-establishment / Network initiated / single PDP context	√	√		√		
GENERAL TESTS							
13.2.1.1	Emergency call / with USIM / accept case	√	√		√		
13.2.2.1	Emergency call / without USIM / accept case	√	√		√		
13.2.2.2	Emergency call / without USIM / reject case	√	√		√		
RADIO BEARER SERVICES							
	Combinations on DPCH						
14.2.1	Stand-alone UL:1.7 DL:1.7 kbps SRBs for DCCH	√					
14.2.2	Stand-alone UL:3.4 DL:3.4 kbps SRBs for DCCH	√					
14.2.3	Stand-alone UL:13.6 DL:13.6 kbps SRBs for DCCH	√					
14.2.4	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH	√					
14.2.4a	Conversational / speech / UL:(12.2 7.95 5.9 4.75) DL:(12.2 7.95 5.9 4.75) kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.	√					
14.2.5	Conversational / speech / UL:10.2 DL:10.2 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH	√					
14.2.5a	Conversational / speech / UL:(10.2, 6.7, 5.9, 4.75) DL:(10.2, 6.7, 5.9, 4.75) kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.	√					
14.2.6	Conversational / speech / UL:7.95 DL:7.95 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH	√					
14.2.7	Conversational / speech / UL:7.4 DL:7.4 kbps / CS RAB+ UL:3.4 DL:3.4 kbps SRBs for DCCH	√					
14.2.7a	Conversational / speech / UL:(7.4, 6.7, 5.9, 4.75) DL:(7.4, 6.7, 5.9, 4.75) kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.	√					
14.2.8	Conversational / speech / UL:6.7 DL:6.7 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH	√					
14.2.9	Conversational / speech / UL:5.9 DL:5.9 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH	√					
14.2.10	Conversational / speech / UL:5.15 DL:5.15 kbps / CS RAB + UL:1.7 DL:1.7 kbps SRBs for DCCH	√					

14.2.11	Conversational / speech / UL:4.75 DL:4.75 kbps / CS RAB + UL:1.7 DL:1.7 kbps SRBs for DCCH	√					
14.2.12	Conversational / unknown / UL:28.8 DL:28.8 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH	√					
14.2.13.1	Conversational / unknown / UL:64 DL:64 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 20 ms TTI	√					
14.2.13.2	Conversational / unknown / UL:64 DL:64 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 40 ms TTI	√					
14.2.14.1	Conversational / unknown / UL:32 DL:32 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 20 ms TTI	√					
14.2.14.2	Conversational / unknown / UL:32 DL:32 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 40 ms TTI	√					
14.2.15	Streaming / unknown / UL:14.4/DL:14.4 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH	√					
14.2.16	Streaming / unknown / UL:28.8/DL:28.8 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH	√					
14.2.17	Streaming / unknown / UL:57.6/DL:57.6 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH	√					
14.2.18	Void						
14.2.19	Void						
14.2.20	Void						
14.2.21	Void						
14.2.22	Void						
14.2.23.1	Interactive or background / UL:32 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / (TC, 10 ms TTI)	√					
14.2.23.2	Interactive or background / UL:32 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / (TC, 20 ms TTI)	√					
14.2.23.3	Interactive or background / UL:32 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / (CC, 10 ms TTI)	√					
14.2.23.4	Interactive or background / UL:32 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / (CC, 20 ms TTI)	√					
14.2.23a.1	Interactive or background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / (CC).	√					
14.2.23a.2	Interactive or background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / (TC).	√					
14.2.23b	Interactive or background / UL:16 DL:16 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.	√					
14.2.23c	Interactive or background / UL:32 DL:32 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.	√					
14.2.23d	Interactive or background / UL:32 DL:32 kbps / PS RAB (20 ms TTI) + UL:3.4 DL:3.4 kbps SRBs for DCCH.	√					
14.2.24.1	Void						
14.2.24.2	Void						
14.2.25.1	Interactive or background / UL:32 DL: 64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH/ (TC, 10 ms TTI)	√					
14.2.25.2	Interactive or background / UL:32 DL: 64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / (TC, 20 ms TTI)	√					
14.2.25.3	Interactive or background / UL:32 DL: 64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / (CC, 10 ms TTI)	√					
14.2.25.4	Interactive or background / UL:32 DL:	√					

	64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / (CC, 20 ms TTI)						

14.2.26	Interactive or background / UL:64 DL: 64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH	√					
14.2.27	Interactive or background / UL:64 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH	√					
14.2.28	Interactive or background / UL:128 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH	√					
14.2.29	Interactive or background / UL:64 DL:144 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH	√					
14.2.30	Interactive or background / UL:144 DL:144 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH	√					
14.2.31.1	Interactive or background / UL:64 DL:256 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH /10 ms TTI	√					
14.2.31.2	Interactive or background / UL:64 DL:256 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH /20 ms TTI	√					
14.2.32.1	Interactive or background / UL:64 DL:384 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH / 10 ms TTI	√					
14.2.32.2	Interactive or background / UL:64 DL:384 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH / 20 ms TTI	√					
14.2.33.1	Interactive or background / UL:128 DL:384 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 10 ms TTI	√					
14.2.33.2	Interactive or background / UL:128 DL:384 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 20 ms TTI	√					
14.2.34.1	Interactive or background / UL:384 DL:384 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 10 ms TTI	√					
14.2.34.2	Interactive or background / UL:384 DL:384 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 20 ms TTI	√					
14.2.35.1	Interactive or background / UL:64 DL:2048 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 10 ms TTI	√					
14.2.35.2	Interactive or background / UL:64 DL:2048 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 20 ms TTI	√					
14.2.36.1	Void						
14.2.36.2	Void						
14.2.37.1	Void						
14.2.37.2	Void						
14.2.38.1	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:32 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / (TC, 20 ms TTI)	√					
14.2.38.2	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:32 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / (TC, 10 ms TTI)	√					
14.2.38.3	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:32 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / (CC, 10 ms TTI)	√					
14.2.38.4	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:32 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / (CC, 20 ms TTI)	√					
14.2.38a	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:0 DL:0 kbps / PS RAB	√					

	+ UL:3.4 DL:3.4 kbps SRBs for DCCH.						

14.2.38b	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.	√					
14.2.38c	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:32 DL:32 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.	√					
14.2.38d	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:64 kbps / PS RAB + Interactive or background / UL:64 DL:64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.	√					
14.2.38e	Conversational / speech / UL:(12.2 7.95 5.9 4.75) DL:(12.2 7.95 5.9 4.75) kbps / CS RAB + Interactive or background / UL:0 DL:0 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.	√					
14.2.38f	Conversational / speech / UL:(12.2 7.95 5.9 4.75) DL:(12.2 7.95 5.9 4.75) kbps / CS RAB + Interactive or background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.	√					
14.2.38g	Conversational / speech / UL:(12.2 7.95 5.9 4.75) DL:(12.2 7.95 5.9 4.75) kbps / CS RAB + Interactive or background / UL:16 DL:16 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.	√					
14.2.38h	Conversational / speech / UL:(12.2 7.95 5.9 4.75) DL:(12.2 7.95 5.9 4.75) kbps / CS RAB + Interactive or background / UL:32 DL:32 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.	√					
14.2.38i	Conversational / speech / UL:(12.2 7.95 5.9 4.75) DL:(12.2 7.95 5.9 4.75) kbps / CS RAB + Interactive or background / UL:64 DL:64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.	√					
14.2.38j	Conversational / speech / UL:(12.2 7.95 5.9 4.75) DL:(12.2 7.95 5.9 4.75) kbps / CS RAB + Interactive or background / UL:64 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.	√					
14.2.39.1	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:32 DL:64 kbps / PS RAB+ UL:3.4 DL: 3.4 kbps SRBs for DCCH / (TC, 10 ms TTI)	√					
14.2.39.2	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:32 DL:64 kbps / PS RAB+ UL:3.4 DL: 3.4 kbps SRBs for DCCH / (TC, 20 ms TTI)	√					
14.2.39.3	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:32 DL:64 kbps / PS RAB+ UL:3.4 DL: 3.4 kbps SRBs for DCCH / (CC, 10 ms TTI)	√					
14.2.39.4	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:32 DL:64 kbps / PS RAB+ UL:3.4 DL: 3.4 kbps SRBs for DCCH / (CC, 20 ms TTI)	√					
14.2.40	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:64 kbps / PS RAB+ UL:3.4 DL: 3.4 kbps SRBs for DCCH	√					
14.2.41	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or	√					

	background / UL:64 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH						

14.2.42.1	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:256 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 10 ms TTI	√					
14.2.42.2	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:256 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 20 ms TTI	√					
14.2.43.1	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:384 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 10 ms TTI	√					
14.2.43.2	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:384 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 20 ms TTI	√					
14.2.44.1	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:128 DL:2048 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 10 ms TTI	√					
14.2.44.2	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:128 DL:2048 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 20 ms TTI	√					
14.2.45	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Streaming / unknown / UL:57.6 DL:57.6 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH	√					
14.2.46	Void						
14.2.47	Void						
14.2.48	Void						
14.2.49.1	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Conversational / unknown / UL:64 DL:64 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 20 ms TTI	√					
14.2.49.2	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Conversational / unknown / UL:64 DL:64 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 40 ms TTI	√					
14.2.50.1	Conversational / unknown / UL:64 DL:64 kbps / CS RAB + Conversational / unknown / UL:64 DL:64 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 20 ms TTI	√					
14.2.50.2	Conversational / unknown / UL:64 DL:64 kbps / CS RAB + Conversational / unknown / UL:64 DL:64 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 40 ms TTI	√					
14.2.51.1	Conversational / unknown / UL:64 DL:64 kbps / CS RAB / 20 ms TTI + Interactive or background / UL:64 DL:64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH	√					
14.2.51.2	Conversational / unknown / UL:64 DL:64 kbps / CS RAB / 40 ms TTI + Interactive or background / UL:64 DL:64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH	√					
14.2.51a	Conversational / unknown / UL:64 DL:64 kbps / CS RAB + Interactive or Background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.	√					
14.2.51b	Conversational / unknown / UL:64 DL:64 kbps / CS RAB + Interactive or	√					

	Background / UL:16 DL:64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.						

14.2.52.1	Conversational / unknown / UL:64 DL:64 kbps / CS RAB / 20 ms TTI + Interactive or background / UL:64 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH	√					
14.2.52.2	Conversational / unknown / UL:64 DL:64 kbps / CS RAB / 40 ms TTI + Interactive or background / UL:64 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH	√					
14.2.53.1	Conversational / unknown / UL:64 DL:64 kbps / CS RAB / 20 ms TTI + Interactive or background / UL:128 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH	√					
14.2.53.2	Conversational / unknown / UL:64 DL:64 kbps / CS RAB / 40 ms TTI + Interactive or background / UL:128 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH	√					
14.2.54	Void						
14.2.55	Void						
14.2.56	Interactive or background / UL:8 DL:8 kbps / PS RAB + Interactive or background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.	√					
14.2.57	Interactive or background / UL:64 DL:64 kbps / PS RAB + Interactive or background / UL:64 DL:64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.	√					
14.2.58	Streaming / unknown / UL:16 DL:64 kbps / PS RAB + Interactive or background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.	√					
14.2.59	Void						
14.2.60	Void						
14.2.61	Void						
14.2.62	Conversational / speech / UL:(12.65 8.85 6.6) DL:(12.65 8.85 6.6) kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH + DL:0.15 kbps SRB#5 for DCCH	√					
14.2.63.1	Interactive or background / UL:64 DL:768 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH/ 10 ms TTI	√					
14.2.63.2	Interactive or background / UL:64 DL:768 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH / 20 ms TTI	√					
	Combinations on PDSCH and DPCH						
14.3.1.1	Void						
14.3.1.2	Void						
14.3.2.1	Interactive or background / UL:64 DL:384 kbps / PS RAB / 10 ms TTI + UL:3.4 DL: 3.4 kbps SRBs for DCCH	√					
14.3.2.2	Interactive or background / UL:64 DL:384 kbps / PS RAB / 20 ms TTI + UL:3.4 DL: 3.4 kbps SRBs for DCCH	√					
14.3.3.1	Interactive or background / UL:64 DL:2048 kbps / PS RAB / 10 ms TTI + UL:3.4 DL: 3.4 kbps SRBs for DCCH	√					
14.3.3.2	Interactive or background / UL:64 DL:2048 kbps / PS RAB / 20 ms TTI + UL:3.4 DL: 3.4 kbps SRBs for DCCH	√					
14.3.4.1	Void						
14.3.4.2	Void						
14.3.5.1	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:384 kbps / PS RAB / 10 ms TTI + UL:3.4 DL:3.4 kbps SRBs for DCCH	√					

14.3.5.2	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:384 kbps / PS RAB / 20 ms TTI + UL:3.4 DL:3.4 kbps SRBs for DCCH	√					
14.3.6.1	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:2048 kbps / PS RAB / 10 ms TTI + UL:3.4 DL:3.4 kbps SRBs for DCCH	√					
14.3.6.2	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:2048 kbps / PS RAB / 20 ms TTI + UL:3.4 DL:3.4 kbps SRBs for DCCH	√					
	Combinations on SCCPCH						
14.4.1	Stand-alone signalling RB for PCCH	√					
14.4.2	Interactive/Background 32 kbps PS RAB + SRBs for CCCH + SRB for DCCH + SRB for BCCH	√					
14.4.2a	Interactive/Background 32 kbps PS RAB + Interactive/Background 32 kbps PS RAB + SRBs for CCCH + SRB for DCCH + SRB for BCCH	√					
14.4.3	Interactive/Background 32 kbps RAB + SRBs for PCCH + SRB for CCCH + SRB for DCCH + SRB for BCCH	√					
14.4.4	RB for CTCH + SRB for CCCH +SRB for BCCH.	√					
	Combinations on PRACH						
14.5.1	Interactive/Background 32 kbps PS RAB + SRB for CCCH + SRB for DCCH	√					
14.5.2	Interactive/Background 32 kbps PS RAB + Interactive/Background 32 kbps PS RAB + SRB for CCCH + SRB for DCCH	√					
	Combinations on DPCH and HS-PDSCH						
14.6.1	Interactive or background / UL:64 DL: [max bit rate depending on UE category] / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH	√					
14.6.2	Interactive or background / UL:384 DL: [max bit rate depending on UE category] / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH	√					
SMS							
16.1.1	SMS on CS mode / SMS mobile terminated	√	√		√		
16.1.2	SMS on CS mode / SMS mobile originated	√	√		√		
16.1.3	SMS on CS mode / Test of memory full condition and memory available notification	√	√		√		
16.1.4	SMS on CS mode / Test of the status report capabilities and of SMS-COMMAND	√	√		√		
16.1.5.1	SMS on CS mode / Short message class 0	√	√		√		
16.1.5.2	SMS on CS mode / Test of class 1 short messages	√	√		√		
16.1.5.3	SMS on CS mode / Test of class 2 short messages	√	√		√		
16.1.5.4	SMS on CS mode / Test of class 3 short messages						
16.1.6	SMS on CS mode / Test of short message type 0 (R99 and REL-4 UE)	√	√		√		
16.1.6a	SMS on CS mode / Test of short message type 0 (≥ REL-5 UE)	√	√		√		
16.1.7	SMS on CS mode / Test of the replace mechanism for SM type 1-7	√	√		√		

16.1.8	SMS on CS mode / Test of the reply path scheme	√	√		√		
16.1.9.1	SMS on CS mode / Multiple SMS mobile originated / UE in idle mode	√	√		√		
16.1.9.2	SMS on CS mode / Multiple SMS mobile originated / UE in active mode	√	√		√		
16.1.10	SMS on CS mode / Test of capabilities of simultaneously receiving a short message whilst sending a mobile originated short message	√	√		√		
16.2.1	SMS on PS mode / SMS mobile terminated	√	√		√		
16.2.2	SMS on PS mode / SMS mobile originated	√	√		√		
16.2.3	SMS on PS mode / Test of memory full condition and memory available notification	√	√		√		
16.2.4	SMS on PS mode / Test of the status report capabilities and of SMS-COMMAND	√	√		√		
16.2.5.1	Short message class 0	√	√		√		
16.2.5.2	SMS on PS mode / Test of class 1 short messages	√	√		√		
16.2.5.3	SMS on PS mode / Test of class 2 short messages	√	√		√		
16.2.5.4	SMS on PS mode / Test of class 3 short messages						
16.2.6	SMS on PS mode / Test of short message type 0 (R99 and REL-4 UE)	√	√		√		
16.2.6a	SMS on PS mode / Test of short message type 0 (≥ REL-5 UE)	√	√		√		
16.2.7	SMS on PS mode / Test of the replace mechanism for SM type 1-7	√	√		√		
16.2.8	SMS on PS mode / Test of the reply path scheme	√	√		√		
16.2.10	SMS on PS mode / Test of capabilities of simultaneously receiving a short message whilst sending a mobile originated short message	√	√		√		
16.3	Short message service cell broadcast	√	√		√		
SPECIFIC FEATURES							
	Test of autocalling restrictions						
17.1.2	Constraining the access to a single number	√	√		√		
17.1.3	Constraining the access to a single number	√	√		√		
17.1.4	Behaviour of the MS when its list of blacklisted numbers is full	√	√		√		
	Location services						
17.2.2.1	LCS Network Induced location request/ UE-Based GPS/ Emergency Call / with USIM	√					
17.2.2.2	LCS Network induced location request/ UE-Based GPS/ Emergency call/ Without USIM	√					
17.2.2.3	LCS Network induced location request/ UE-Assisted GPS/ Emergency call/ With USIM	√					
17.2.2.4	LCS Network induced location request/ UE-Assisted GPS/ Emergency call/ Without USIM	√					
17.2.3.1	Void						
17.2.3.2	LCS Mobile originated location request/ UE-Based GPS/ Position estimate request/ Success	√					
17.2.3.3	LCS Mobile originated location request/ UE-Based GPS/ Assistance data request/ Success	√					
17.2.3.4	LCS Mobile originated location request/ UE-Assisted GPS/ Position Estimate/ Success	√					
17.2.3.5	LCS Mobile originated location request/ UE-Based GPS/ Assistance Data Only/	√					

	Success						
17.2.4.1	LCS Mobile terminated location request/ UE-Based GPS	√					
17.2.4.2	LCS Mobile terminated location request/ UE-Based GPS/ Request of additional assistance data/ Success	√					
17.2.4.3	LCS Mobile terminated location request/ UE-Based GPS/ Request for additional assistance data/ Failure	√					
17.2.4.4	LCS Mobile terminated location request/ UE-Assisted GPS	√					
17.2.4.5	LCS Mobile terminated location request/ UE-Assisted GPS/ Request for additional assistance data/ Success	√					
Multi-Layer Functional Tests							
	RAB Tests for TDD (1.28 Mcps option) ***Combinations on DPCH***						
18.1.2.1	Stand-alone UL:1.7 DL:1.7 kbps SRBs for DCCH		√			UEs supporting LCRTDD and reference radio bearer configuration "Stand-alone UL:1.7 DL:1.7 kbps SRBs for DCCH"	
18.1.2.2	Stand-alone UL:3.4 DL:3.4 kbps SRBs for DCCH		√			UEs supporting LCRTDD and reference radio bearer configuration "Stand-alone UL:3.4 DL:3.4 kbps SRBs for DCCH"	
18.1.2.3	Stand-alone UL:13.6 DL:13.6 kbps SRBs for DCCH		√			UEs supporting LCRTDD and reference radio bearer configuration "Stand-alone UL:13.6 DL:13.6 kbps SRBs for DCCH"	
18.1.2.4	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH		√			UEs supporting LCRTDD and reference radio bearer configuration "Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH"	
18.1.2.5	Conversational / speech / UL:10.2 DL:10.2 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH		√			UE supporting LCRTDD and reference radio bearer configuration "Conversational / speech / UL:10.2 DL:10.2 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH"	
18.1.2.6	Conversational / speech / UL:7.95 DL:7.95 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH		√			UE supporting LCRTDD and reference radio bearer configuration "Conversational / speech / UL:7.95 DL:7.95 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH"	
18.1.2.7	Conversational / speech / UL:7.4 DL:7.4 kbps / CS RAB+ UL:3.4 DL:3.4 kbps SRBs for DCCH		√			UE supporting LCRTDD and reference radio bearer configuration "Conversational / speech / UL:7.4 DL:7.4 kbps / CS RAB+ UL:3.4 DL:3.4 kbps SRBs for DCCH"	

18.1.2.8	Conversational / speech / UL:6.7 DL:6.7 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH		√			UE supporting LCRTDD and reference radio bearer configuration "Conversational / speech / UL:6.7 DL:6.7 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH"	
18.1.2.9	Conversational / speech / UL:5.9 DL:5.9 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH		√			UE supporting LCRTDD and reference radio bearer configuration "Conversational / speech / UL:5.9 DL:5.9 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH"	
18.1.2.10	Conversational / speech / UL:5.15 DL:5.15 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH		√			UE supporting LCRTDD and reference radio bearer configuration "Conversational / speech / UL:5.15 DL:5.15 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH"	
18.1.2.11	Conversational / speech / UL:4.75 DL:4.75 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH		√			UE supporting LCRTDD and reference radio bearer configuration "Conversational / speech / UL:4.75 DL:4.75 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH"	
18.1.2.12	Conversational / unknown / UL:28.8 DL:28.8 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH		√			UE supporting LCRTDD and reference radio bearer configuration "Conversational / unknown / UL:28.8 DL:28.8 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH"	
18.1.2.13.1	Conversational / unknown / UL:64 DL:64 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH/ 20m TTI		√			UE supporting LCRTDD and reference radio bearer configuration "Conversational / unknown / UL:64 DL:64 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH/20m TTI"	
18.1.2.13.2	Conversational / unknown / UL:64 DL:64 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH/ 40m TTI		√			UE supporting LCRTDD and reference radio bearer configuration "Conversational / unknown / UL:64 DL:64 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH/ 40m TTI"	
18.1.2.14.1	Conversational / unknown / UL:32 DL:32 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH/20m TTI		√			UE supporting LCRTDD and reference radio bearer configuration "Conversational / unknown / UL:32 DL:32 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH/20m TTI"	
18.1.2.14.2	Conversational / unknown / UL:32 DL:32 kbps / CS RAB + UL:3.4 DL:3.4		√			UE supporting LCRTDD and reference	

	kbps SRBs for DCCH/40m TTI					radio bearer configuration "Conversational / unknown / UL:32 DL:32 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH/40m TTI"	

18.1.2.15	Streaming / unknown / UL:14.4/DL:14.4 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH		√			UE supporting LCRTDD and reference radio bearer configuration "Streaming / unknown / UL:14.4/DL:14.4 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH"	
18.1.2.16	Streaming / unknown / UL:28.8/DL:28.8 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH		√			UE supporting LCRTDD and reference radio bearer configuration "Streaming / unknown / UL:28.8/DL:28.8 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH"	
18.1.2.17	Streaming / unknown / UL:57.6/DL:57.6 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH		√			UE supporting LCRTDD and reference radio bearer configuration "Streaming / unknown / UL:57.6/DL:57.6 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH"	
18.1.2.18	Streaming / unknown / UL:0 DL:64 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH		√			UE supporting LCRTDD and reference radio bearer configuration "Streaming / unknown / UL:0 DL:64 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH"	
18.1.2.19	Streaming / unknown / UL:64 DL:0 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH		√			UE supporting LCRTDD and reference radio bearer configuration "Streaming / unknown / UL:64 DL:0 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH"	
18.1.2.20	Void						
18.1.2.21	Void						
18.1.2.22	Void						
18.1.2.23.1	Interactive or background / UL:32 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / (TC, 10 ms TTI)		√			UE supporting LCRTDD and reference radio bearer configuration "Interactive or background / UL:32 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / (TC, 10 ms TTI)"	
18.1.2.23.2	Interactive or background / UL:32 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / (TC, 20 ms TTI)		√			UE supporting LCRTDD and reference radio bearer configuration "Interactive or background / UL:32 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / (TC, 20 ms TTI)"	
18.1.2.23.3	Interactive or background / UL:32 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / (CC, 10 ms TTI)		√			UE supporting LCRTDD and reference radio bearer configuration "Interactive or background / UL:32 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / (CC,	

						10 ms TTI)"	
18.1.2.23.4	Interactive or background / UL:32 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / (CC, 20 ms TTI)		√			UE supporting LCRTDD and reference radio bearer configuration "Interactive or background / UL:32 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / (CC, 20 ms TTI)"	
18.1.2.24.1	Interactive or background / UL:64 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / TC		√			UE supporting LCRTDD and reference radio bearer configuration "Interactive or background / UL:64 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / TC"	
18.1.2.24.2	Interactive or background / UL:64 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / CC		√			UE supporting LCRTDD and reference radio bearer configuration "Interactive or background / UL:64 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / CC"	
18.1.2.25.1	Interactive or background / UL:32 DL: 64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH/ (TC, 10 ms TTI)		√			UE supporting LCRTDD and reference radio bearer configuration "Interactive or background / UL:32 DL: 64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH/ (TC, 10 ms TTI)"	
18.1.2.25.2	Interactive or background / UL:32 DL: 64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / (TC, 20 ms TTI)		√			UE supporting LCRTDD and reference radio bearer configuration "Interactive or background / UL:32 DL: 64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / (TC, 20 ms TTI)"	
18.1.2.25.3	Interactive or background / UL:32 DL: 64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / (CC, 10 ms TTI)		√			UE supporting LCRTDD and reference radio bearer configuration "Interactive or background / UL:32 DL: 64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / (TC, 20 ms TTI)"	
18.1.2.25.4	Interactive or background / UL:32 DL: 64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / (CC, 20 ms TTI)		√			UE supporting LCRTDD and reference radio bearer configuration "Interactive or background / UL:32 DL: 64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / (CC, 20 ms TTI)"	
18.1.2.26	Interactive or background / UL:64 DL: 64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH		√			UE supporting LCRTDD and reference radio bearer configuration "Interactive or background / UL:64 DL: 64 kbps / PS RAB +	

						UL:3.4 DL:3.4 kbps SRBs for DCCH"	
18.1.2.27	Interactive or background / UL:64 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH		√			UE supporting LCRTDD and reference radio bearer configuration "Interactive or background / UL:64 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH"	
18.1.2.28	Interactive or background / UL:128 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH		√			UE supporting LCRTDD and reference radio bearer configuration "Interactive or background / UL:128 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH"	
18.1.2.29	Interactive or background / UL:64 DL:144 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH		√			UE supporting LCRTDD and reference radio bearer configuration "Interactive or background / UL:64 DL:144 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH"	
18.1.2.30	Interactive or background / UL:144 DL:144 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH		√			UE supporting LCRTDD and reference radio bearer configuration "Interactive or background / UL:144 DL:144 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH"	
18.1.2.31.1	Interactive or background / UL:64 DL:256 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH /10 ms TTI		√			UE supporting LCRTDD and reference radio bearer configuration "Interactive or background / UL:64 DL:256 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH /10 ms TTI"	
18.1.2.31.2	Interactive or background / UL:64 DL:256 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH /20 ms TTI		√			UE supporting LCRTDD and reference radio bearer configuration "Interactive or background / UL:64 DL:256 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH /20 ms TTI"	
18.1.2.32.1	Interactive or background / UL:64 DL:384 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH / 10 ms TTI		√			UE supporting LCRTDD and reference radio bearer configuration "Interactive or background / UL:64 DL:384 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH / 10 ms TTI"	
18.1.2.32.2	Interactive or background / UL:64 DL:384 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH / 20 ms TTI		√			UE supporting LCRTDD and reference radio bearer configuration "Interactive or background / UL:64 DL:384 kbps / PS RAB	

						+ UL:3.4 DL: 3.4 kbps SRBs for DCCH / 20 ms TTI"	
18.1.2.33.1	Interactive or background / UL:128 DL:384 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 10 ms TTI		√			UE supporting LCRTDD and reference radio bearer configuration "Interactive or background / UL:128 DL:384 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 10 ms TTI"	
18.1.2.33.2	Interactive or background / UL:128 DL:384 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 20 ms TTI		√			UE supporting LCRTDD and reference radio bearer configuration "Interactive or background / UL:128 DL:384 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 20 ms TTI"	
18.1.2.34.1	Interactive or background / UL:384 DL:384 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 10 ms TTI		√			UEs supporting LCRTDD and reference radio bearer configuration "Interactive or background / UL:384 DL:384 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 10 ms TTI"	
18.1.2.34.2	Interactive or background / UL:384 DL:384 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 20 ms TTI		√			UE supporting LCRTDD and reference radio bearer configuration "Interactive or background / UL:384 DL:384 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 20 ms TTI"	
18.1.2.35.1	Interactive or background / UL:64 DL:2048 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 10 ms TTI		√			UE supporting LCRTDD and reference radio bearer configuration "Interactive or background / UL:64 DL:2048 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 10 ms TTI"	
18.1.2.35.2	Interactive or background / UL:64 DL:2048 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 20 ms TTI		√			UE supporting LCRTDD and reference radio bearer configuration "Interactive or background / UL:64 DL:2048 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 20 ms TTI"	
18.1.2.36.1	Interactive or background / UL:128 DL:2048 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 10 ms TTI		√			UE supporting LCRTDD and reference radio bearer configuration "Interactive or background / UL:128 DL:2048 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 10 ms TTI"	
18.1.2.36.2	Interactive or background / UL:128 DL:2048 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 20 ms TTI		√			UE supporting LCRTDD and reference radio bearer configuration	

						"Interactive or background / UL:128 DL:2048 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 20 ms TTI"	
18.1.2.37.1	Interactive or background / UL:384 DL:2048 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 10 ms TTI		√			UE supporting LCRTDD and reference radio bearer configuration "Interactive or background / UL:384 DL:2048 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 10 ms TTI"	
18.1.2.37.2	Interactive or background / UL:384 DL:2048 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 20 ms TTI		√			UE supporting LCRTDD and reference radio bearer configuration "Interactive or background / UL:384 DL:2048 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 20 ms TTI"	
18.1.2.38.1	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:32 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / (TC, 20 ms TTI)		√			UE supporting LCRTDD and reference radio bearer configuration "Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:32 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / (TC, 20 ms TTI)"	
18.1.2.38.2	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:32 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / (TC, 10 ms TTI)		√			UE supporting LCRTDD and reference radio bearer configuration "Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:32 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / (TC, 10 ms TTI)"	
18.1.2.38.3	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:32 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / (CC, 10 ms TTI)		√			UE supporting LCRTDD and reference radio bearer configuration "Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:32 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / (CC, 10 ms TTI)"	
18.1.2.38.4	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:32 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / (CC, 20 ms TTI)		√			UE supporting LCRTDD and reference radio bearer configuration "Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:32 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / (CC,	

						20 ms TTI)"	
18.1.2.39.1	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:32 DL:64 kbps / PS RAB+ UL:3.4 DL: 3.4 kbps SRBs for DCCH / (TC, 10 ms TTI)		√			UE supporting LCRTDD and reference radio bearer configuration "Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:32 DL:64 kbps / PS RAB+ UL:3.4 DL: 3.4 kbps SRBs for DCCH / (TC, 10 ms TTI)"	
18.1.2.39.2	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:32 DL:64 kbps / PS RAB+ UL:3.4 DL: 3.4 kbps SRBs for DCCH / (TC, 20 ms TTI)		√			UE supporting LCRTDD and reference radio bearer configuration "Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:32 DL:64 kbps / PS RAB+ UL:3.4 DL: 3.4 kbps SRBs for DCCH / (TC, 20 ms TTI)"	
18.1.2.39.3	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:32 DL:64 kbps / PS RAB+ UL:3.4 DL: 3.4 kbps SRBs for DCCH / (CC, 10 ms TTI)		√			UE supporting LCRTDD and reference radio bearer configuration "Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:32 DL:64 kbps / PS RAB+ UL:3.4 DL: 3.4 kbps SRBs for DCCH / (CC, 10 ms TTI)"	
18.1.2.39.4	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:32 DL:64 kbps / PS RAB+ UL:3.4 DL: 3.4 kbps SRBs for DCCH / (CC, 20 ms TTI)		√			UE supporting LCRTDD and reference radio bearer configuration "Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:32 DL:64 kbps / PS RAB+ UL:3.4 DL: 3.4 kbps SRBs for DCCH / (CC, 20 ms TTI)"	
18.1.2.40	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:64 kbps / PS RAB+ UL:3.4 DL: 3.4 kbps SRBs for DCCH		√			UE supporting LCRTDD and reference radio bearer configuration "Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:64 kbps / PS RAB+ UL:3.4 DL: 3.4 kbps SRBs for DCCH"	
18.1.2.41	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH		√			UE supporting LCRTDD and reference radio bearer configuration "Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps	

						SRBs for DCCH"	
18.1.2.42.1	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:256 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 10 ms TTI		√			UE supporting LCRTDD and reference radio bearer configuration "Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:256 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 10 ms TTI"	
18.1.2.42.2	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:256 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 20 ms TTI		√			UE supporting LCRTDD and reference radio bearer configuration "Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:256 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 20 ms TTI"	
18.1.2.43.1	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:384 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 10 ms TTI		√			UE supporting LCRTDD and reference radio bearer configuration "Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:384 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 10 ms TTI"	
18.1.2.43.2	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:384 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 20 ms TTI		√			UE supporting LCRTDD and reference radio bearer configuration "Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:384 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 20 ms TTI"	
18.1.2.44.1	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:128 DL:2048 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 10 ms TTI		√			UE supporting LCRTDD and reference radio bearer configuration "Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:128 DL:2048 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 10 ms TTI"	
18.1.2.44.2	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:128 DL:2048 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 20 ms TTI		√			UE supporting LCRTDD and reference radio bearer configuration "Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:128 DL:2048 kbps / PS	

						RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 20 ms TTI"	
18.1.2.45	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Streaming / unknown / UL:57.6 DL:57.6 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH		√			UE supporting LCRTDD and reference radio bearer configuration "Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Streaming / unknown / UL:57.6 DL:57.6 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH"	
18.1.2.46	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Streaming / unknown / UL:0 DL:64 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH		√			UE supporting LCRTDD and reference radio bearer configuration "Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Streaming / unknown / UL:0 DL:64 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH"	
18.1.2.47	Void						
18.1.2.48	Void						
18.1.2.49.1	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Conversational / unknown / UL:64 DL:64 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 20 ms TTI		√			UE supporting LCRTDD and reference radio bearer configuration "Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Conversational / unknown / UL:64 DL:64 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 20 ms TTI"	
18.1.2.49.2	Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Conversational / unknown / UL:64 DL:64 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 40 ms TTI		√			UE supporting LCRTDD and reference radio bearer configuration "Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Conversational / unknown / UL:64 DL:64 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 40 ms TTI"	
18.1.2.50.1	Conversational / unknown / UL:64 DL:64 kbps / CS RAB + Conversational / unknown / UL:64 DL:64 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 20 ms TTI		√			UE supporting LCRTDD and reference radio bearer configuration "Conversational / unknown / UL:64 DL:64 kbps / CS RAB + Conversational / unknown / UL:64 DL:64 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 20 ms TTI"	
18.1.2.50.2	Conversational / unknown / UL:64 DL:64 kbps / CS RAB + Conversational / unknown / UL:64 DL:64 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 40 ms TTI		√			UE supporting LCRTDD and reference radio bearer configuration "Conversational / unknown / UL:64 DL:64 kbps / CS RAB + Conversational / unknown / UL:64 DL:64	

						kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / 40 ms TTI"	
18.1.2.51.1	Conversational / unknown / UL:64 DL:64 kbps / CS RAB / 20 ms TTI + Interactive or background / UL:64 DL:64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH		√			UE supporting LCRTDD and reference radio bearer configuration "Conversational / unknown / UL:64 DL:64 kbps / CS RAB / 20 ms TTI + Interactive or background / UL:64 DL:64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH"	
18.1.2.51.2	Conversational / unknown / UL:64 DL:64 kbps / CS RAB / 40 ms TTI + Interactive or background / UL:64 DL:64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH		√			UE supporting LCRTDD and reference radio bearer configuration "Conversational / unknown / UL:64 DL:64 kbps / CS RAB / 40 ms TTI + Interactive or background / UL:64 DL:64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH"	
18.1.2.52.1	Conversational / unknown / UL:64 DL:64 kbps / CS RAB / 20 ms TTI + Interactive or background / UL:64 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH		√			UE supporting LCRTDD and reference radio bearer configuration "Conversational / unknown / UL:64 DL:64 kbps / CS RAB / 20 ms TTI + Interactive or background / UL:64 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH"	
18.1.2.52.2	Conversational / unknown / UL:64 DL:64 kbps / CS RAB / 40 ms TTI + Interactive or background / UL:64 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH		√			UE supporting LCRTDD and reference radio bearer configuration "Conversational / unknown / UL:64 DL:64 kbps / CS RAB / 40 ms TTI + Interactive or background / UL:64 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH"	
18.1.2.53.1	Conversational / unknown / UL:64 DL:64 kbps / CS RAB / 20 ms TTI + Interactive or background / UL:128 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH		√			UE supporting LCRTDD and reference radio bearer configuration "Conversational / unknown / UL:64 DL:64 kbps / CS RAB / 20 ms TTI + Interactive or background / UL:128 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH"	
18.1.2.53.2	Conversational / unknown / UL:64 DL:64 kbps / CS RAB / 40 ms TTI + Interactive or background / UL:128 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH		√			UE supporting LCRTDD and reference radio bearer configuration "Conversational / unknown / UL:64 DL:64 kbps / CS RAB / 40 ms TTI + Interactive or background / UL:128 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH"	

18.1.2.54	Interactive or background / UL:64 DL:128 kbps / PS RAB + Streaming / unknown / UL:0 DL:64 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH		√			UE supporting LCRTDD and reference radio bearer configuration "Interactive or background / UL:64 DL:128 kbps / PS RAB + Streaming / unknown / UL:0 DL:64 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH"	
	Combinations on SCCPCH						
18.1.3.1	Stand-alone signalling RB for PCCH		√			UE supporting LCRTDD and reference radio bearer configuration "Stand-alone signalling RB for PCCH"	
18.1.3.2	Interactive/Background 32 kbps PS RAB + SRBs for CCCH + SRB for DCCH + SRB for BCCH		√			UE supporting TDD 1.28 Mcps option and reference radio bearer configuration "Interactive/Background 32 kbps PS RAB + SRBs for CCCH + SRB for DCCH + SRB for BCCH"	
18.1.3.3	Interactive/Background 32 kbps RAB + SRBs for PCCH + SRB for CCCH + SRB for DCCH + SRB for BCCH		√			UE supporting TDD 1.28 Mcps option and reference radio bearer configuration "Interactive/Background 32 kbps RAB + SRBs for PCCH + SRB for CCCH + SRB for DCCH + SRB for BCCH"	
18.1.4.1	Interactive/Background 32 kbps PS RAB + SRB for CCCH + SRB for DCCH		√			UE supporting FDD and reference radio bearer configuration "Interactive/Background 32 kbps PS RAB + SRB for CCCH + SRB for DCCH"	

7 Effect to 3GPP TS 34.123-3

7.1 Effect to ATS structure

7.1.1 Modularity

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
5.1.1	Module structure	√	√		√		
5.1.2	Contents of the modules	√	√		√		
5.1.3	Example of a working platform	√	√		√		

7.2 Effect to Test method and testing architecture

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
6.1	Test method	√	√		√		
6.2	Testing architecture	√	√		√		
6.3	NAS test method and architecture	√	√		√		
6.4	RRC and RAB test method and architecture	√	√		√		
6.5	RLC test method and architecture	√	√		√		
6.6	SMS test method and architecture	√	√		√		
6.7	MAC test method and architecture	√	√		√		
6.8	BMC test method and architecture	√	√		√		
6.9	PDCP test	√	√		√		
6.10	Multi-RAT Handover Test Model	√	√		√		
6.11	DCH-DSCH model	√	√		√		

7.3 Effect to PCO and ASP definitions

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
7.1	Module structure	√	√		√		
7.2	Ut PCO and ASP definitions	√	√		√		
7.3	**RRC PCO and ASP definitions**						
7.3.1	AM/UM/TM PCO and ASP definitions	√	√		√		
7.3.2	**Control PCO and ASP**						
7.3.2.1	SAP and PCO for control primitives transmission and reception	√	√		√		
7.3.2.2	**Control ASP Type Definition**						
7.3.2.2.1	CPHY_AICH_AckModeSet	√				This Channel is used for FDD only	4.2.6.7
7.3.2.2.2	CPHY_Cell_Config	√	√	√		Basic cell parameters are different	4.2.2
7.3.2.2.3	CPHY_Cell_Release	√	√		√		
7.3.2.2.4	CPHY_Ini	√	√		√		
7.3.2.2.5	CPHY_Cell_TxPower_Modify	√	√		√		
7.3.2.2.6	CPHY_Frame_Number	√	√		√		
7.3.2.2.7	CPHY_Out_of_Sync	√	√		√		
7.3.2.2.8	CPHY_PRACH_Measurement	√	√		√		
7.3.2.2.9	CPHY_RL_Modify	√	√	√		Physical Channel parameters are different	4.2.6 -
7.3.2.2.10	CPHY_RL_Release	√	√		√		
7.3.2.2.11	CPHY_RL_Setup	√	√	√		Physical Channel parameters are different	4.2.6
7.3.2.2.12	CPHY_Sync						
7.3.2.2.13	CPHY_TrCH_Config	√	√	√		Descriptions of TFS are different	-
7.3.2.2.14a	CPHY_ UL_PowerModify	√				For TDD is FFS.	
7.3.2.2.14	CPHY_TrCH_Release	√	√		√		
7.3.2.2.15	CMAC_BMC_Scheduling	√	√		√		
7.3.2.2.16	CMAC_Ciphering_Activate	√	√		√		
7.3.2.2.17	CMAC_Config	√	√	√		CPCH is not used for TDD	4.2.6.8
7.3.2.2.18	CMAC_PAGING_Config	√	√		√		
7.3.2.2.19	CMAC_Restriction	√	√		√		
7.3.2.2.20	CMAC_SecurityMode_Config	√	√		√		
7.3.2.2.21	CMAC_SequenceNumber	√	√		√		
7.3.2.2.22	CMAC_SYSINFO_Config	√	√		√		
7.3.2.2.22a	CRLC_Bind_TestData_TTI	√	√		√		
7.3.2.2.23	CRLC_Ciphering_Activate	√	√		√		
7.3.2.2.24	CRLC_Config	√	√		√		
7.3.2.2.25	CRLC_Integrity_Activate	√	√		√		
7.3.2.2.26	CRLC_Integrity_Failure	√	√		√		
7.3.2.2.26a	CRLC_MAC_I_Mode	√	√		√		
7.3.2.2.27	CRLC_Resume	√	√		√		
7.3.2.2.27a	CRLC_RRC_MessageSN	√	√		√		
7.3.2.2.28	CRLC_SecurityMode_Config	√	√		√		
7.3.2.2.28a	CRLC_SetRRC_Messag	√	√		√		

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
	eSN						
7.3.2.2.29	CRLC_SequenceNumber	√	√		√		
7.3.2.2.29a	CRLC_SendContinuousData_TTI	√	√		√		
7.3.2.2.30	CRLC_Status	√	√		√		
7.3.2.2.31	CRLC_Suspend	√	√		√		
7.3.2.2.32	CBMC_Config	√	√		√		
7.3.2.2.33	RLC_TR_DATA	√	√		√		
7.3.2.2.34	RLC_AM_DATA	√	√		√		
7.3.2.2.35	RLC_UM_DATA	√	√		√		
7.3.3	**TTCN primitives**						
7.3.3.1	UTRAN TTCN primitives	√	√		√		
7.3.4	**GERAN PCO and ASP definitions**						
7.3.4.1	PCO Type definitions	√	√		√		
7.3.4.2	PCO definitions	√	√		√		
7.3.4.3	GERAN ASP Definitions	√	√		√		

7.4 Effect to Design Considerations

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
8.1	Channel mapping	√	√	√			4.2.6
8.2	**Channel and RB identity**						
8.2.1	Physical channels	√	√	√		Some physical channels are unique for FDD or TDD	4.2.6
8.2.2	Transport channels	√	√	√		Some transport channels are unique for FDD or TDD	4.2.6
8.2.3	Logical Channels	√	√	√		BCCH_FACH is unique for FDD	
8.2.4	Radio bearers	√	√		√		
8.2.5	Scrambling and channelization codes	√	√	√		Descriptions of physical channels are different	
8.2.6	MAC-d	√	√		√		
8.2.7	Configuration of compressed mode	√					
8.2.8	Use of U-RNTI and C-RNTI	√	√		√		
8.3	**Channels configurations**						
8.3.1	Configuration of Cell_FACH	√	√	√			
8.3.2	Configuration of Cell_DCH_StandAloneSRB	√	√	√			
8.3.3	Configuration of Cell_DCH_Speech	√	√	√			
8.3.4	Configuration of Cell_DCH_64kCS_RAB_SRB	√	√	√			
8.3.5	Configuration of Cell_DCH_57_6kCS_RAB_SRB	√	√	√			
8.3.6	Configuration of Cell_RLC_DCH_ RAB	√	√	√			
8.3.7	Configuration of Cell_FACH_BMC	√				For FDD only	
8.3.8	Configuration of PS Cell_DCH_64kPS_RAB_SRB and Cell_PDCP_AM_RAB	√	√	√			
8.3.9	Configuration of Cell_Two_DTCH	√	√	√			
8.3.10	Configuration of Cell_Single_DTCH (CS)	√	√	√			
8.3.11	Configuration of PS Cell_PDCP_UM_RAB	√	√	√			
8.3.12	Configuration of PS Cell_PDCP_AM_UM_RAB	√	√	√			
8.3.13	Configuration of Cell_2SCCPCH_BMC	√				For FDD only	
8.3.14	Configuration of Cell_Four_DTCH_CS_PS,	√	√	√			

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
	Cell_Four_DTCH_PS_CS						
8.3.15	Configuration of Cell_Two_DTCH_CS_PS, Cell_Two_DTCH_PS_CS	√	√	√			
8.3.16	Configuration of Cell_Four_DTCH_CS	√	√	√			
8.3.17	Configuration of Cell_DCH_MAC_SRB	√	√	√			
8.3.18	Configuration of Cell_FACH_MAC_SRB	√	√	√			
8.3.19	Configuration of Cell_FACH_MAC_SRB0	√	√	√			
8.3.20	Configuration of Cell_FACH_2_SCCPCH_StandAlonePCH	√				For FDD only	
8.3.21	Configuration of PS Cell_DCH_ 2AM_PS	√	√	√			
8.3.22	Configuration of PS Cell_DCH_2_PS_Call	√	√	√			
8.3.23	Configuration of Cell_FACH_3_SCCPCH_4_FACH_Cnfg1	√				For FDD only	
8.3.24	Configuration of Cell_FACH_3_SCCPCH_4_FACH_Cnfg2	√				For FDD only	
8.3.25	Configuration of Cell_FACH_3_SCCPCH_3_FACH_CTCH	√				For FDD only	
8.3.26	Configuration of PS Cell_DCH_DSCH_PS_RAB	√	√	√			
8.3.27	Configuration of Cell_DCH_DSCH_CS_PS	√	√	√			
8.3.28	Configuration of Cell_FACH_2_SCCPCH_StandAlonePCH_2a	√				For FDD only	
8.3.29	Configuration of Cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg1	√				For FDD only	
8.3.30	Configuration of Cell_FACH_3_SCCPCH_4_FACH_2a_Cnfg2	√				For FDD only	
8.3.31	Configuration of Cell_FACH_3_SCCPCH_3_FACH_CTCH_2a	√				For FDD only	
8.4	**System information blocks scheduling**						
8.4.1	Grouping SIBs for testing	√	√		√		
8.4.2	SIB configurations	√	√		√		
8.4.3	Test SIB default schedule	√	√	√		Schedules for LCR TDD and FDD are different	
8.4.3.1	Test SIB schedule for idle mode and measurment	√	√	√		Schedules for LCR TDD and FDD are different	
8.4.4	**Test SIB special schedule**						
8.4.4.1	Test SIB schedule for two S-CCPCH or two PRACH	√	√	√			
8.4.4.2	Test SIB schedule for Inter-Rat Handover Test	√	√	√			
8.5	**Security in testing**						
8.5.1	Authentication	√	√		√		
8.5.2	Ciphering	√	√		√		
8.5.3	Integrity	√	√		√		
8.5.4	Test security scenarios	√	√		√		
8.5.5	Test USIM configurations	√	√		√		
8.6	Downlink power setting in SS	√	√	√			
8.7	**Test suite operation definitions**						
8.7.1	Test suite operation definitions in the module BasicM	√	√		√		
8.7.2	Specific test suite operation definitions for Multi RAT Handover testing	√	√		√		
8.7.3	Specific test suite operation for Multi RAB testing	√	√		√		
8.7.4	Specific test suite operation for InterSystem Handover testing	√	√		√		
8.8	AT commands	√	√		√		
8.9	**Bit padding**						
8.9.1	Requirements for implementation	√	√		√		
8.10	Test PDP contexts	√	√		√		
8.11	DCH-DSCH Configurations	√	√	√			

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
8.12	Pre- & postambles for GERAN to UTRAN tests	√	√		√		

8 Effect to 3GPP TS 34.108

8.1 Effect to Common requirements of test equipment

8.1.1 General Functional Requirements

Void.

8.1.2 Minimum performance levels

8.1.2.1 Supported Cell Configuration

8.1.2.1.1 Supported Channels

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
4.2.1.1.1 4.2.1.2.1	Logical Channels	√	√	√			
4.2.1.1.2 4.2.1.2.2	Transport Channels	√	√	√			4.2.9
4.2.1.1.3 4.2.1.2.4	Physical Channels	√	√	√			4.2.9
4.2.1.3	Support of T_{cell} timing offset						

8.1.2.2 RF Performance

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
4.2.2.1	Frequency of Operation	√	√	√			
4.2.2.2	Power Level Setting Accuracy	√	√	√			
4.2.2.3	Uplink Power Control	√	√	√			
4.2.2.4	Uplink Signal Handling	√	√	√			
4.2.2.5	Uplink Sensitivity	√	√	√			

8.1.2.3 Timers Tolerances

Void.

8.2 Reference Test Conditions

8.2.1 Test frequencies

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
5.1.1.1 5.1.1.2 5.1.1.3 5.1.1.4 5.1.2.2	reference test frequencies	√	√	√			Table 8.2.1(a) Table 8.2.1(b)

Table 8.2.1(a): FDD reference test frequencies

Operating Band	Test Frequency ID	UARFCN	Frequency of Uplink	UARFCN	Frequency of Downlink
I	Low Range	9 613	1 922.6 MHz	10 563	2 112.6 MHz
	Mid Range	9 750	1 950.0 MHz	10 700	2 140.0 MHz
	High Range	9 887	1 977.4 MHz	10 837	2 167.4 MHz
II	Low Range	9 263	1 852.6 MHz	9 663	1 932.6 MHz
	Mid Range	9 400	1 880 MHz	9 800	1 960 MHz
	High Range	9 537	1 907.4 MHz	9 937	1 987.4 MHz
III	Low Range	8 563	1 712.6 MHz	9 038	1 807.6 MHz
	Mid Range	8 737	1 747.4 MHz	9 212	1 842.4 MHz
	High Range	8 912	1 782.4 MHz	9 387	1 877.4 MHz
IV	Low Range	812	832.5 MHz	1 037	877.5 MHz
	Mid Range	825	835.1MHz	1 050	880.1 MHz
	High Range	837	837.5 MHz	1 062	882.5 MHz

Table 8.2.1(b): 1.28Mcps TDD reference test frequencies

	Band a		Band b		Band c	
Test Frequency ID	UARFCN	Frequency (UL and DL)	UARFCN	Frequency (UL and DL)	UARFCN	Frequency (UL and DL)
Low Range	9504	1 900.8 MHz	9254	1850.8 MHz	9554	1910.8 MHz
Mid Range	9550	1 910 MHz	9400	1880 MHz	9600	1920 MHz
High Range	9596	1 919.2 MHz	9546	1909.2 MHz	9646	1929.2 MHz
Low Range	10 054	2 010.8 MHz	9654	1930.8 MHz		
Mid Range	10 087	2 017.4 MHz	9800	1960 MHz		
High Range	10 121	2 024.2 MHz	9946	1989.2 MHz		

8.2.2 Radio conditions

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
5.2.2	Static Propagation Condition	√	√	√			
5.2.3	Multi-Path Fading Propagation Conditions	√	√	√			
5.2.4	Moving Propagation Conditions	√	√	√			
5.2.5	Birth-Death propagation conditions	√	√	√			

8.2.3 Standard test signals

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
5.3	Standard test signals	√	√	√			

8.2.4 Signal levels

Clause	Title	FDD	1.28 Mcps	To be Different	To be Same	Brief Description	Reference

			TDD				
5.4.1	Downlink Signal Levels	√	√	√			
5.4.2	Uplink Signal Levels	√	√	√			

8.3 Reference System Configurations

8.3.1 Simulated network environment

8.3.1.1 Default Master Information Block and scheduling Block messages

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
6.1.0a.1	Grouping SIBs for testing	√	√		√		
6.1.0a.2	SIB configurations	√	√		√		
6.1.0a.3	SIB default schedule						
	Contents of Master Information Block PLMN type is the case of GSM-MAP	√	√		√		
	Contents of Scheduling Block 1	√	√		√		
6.1.0a.4	SIB special schedules						
6.1.0a.4.1	SIB schedule for two S-CCPCH or two PRACH	√	√	√			
6.1.0a.4.2	SIB schedule for Inter-Rat Handover Test	√	√	√		FFS	

8.3.1.2 Default System Information Block Messages

8.3.1.2.1 System Information Block type 1

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
	Contents of System Information Block type 1 (supported PLMN type is GSM-MAP)	√	√		√		

8.3.1.2.2 System Information Block type 2

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
	Contents of System Information Block type 2	√	√		√		

8.3.1.2.3 System Information Block type 3

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
	Contents of System Information Block type 3	√	√	√			Table: 8.3.1.2.3

Table: 8.3.1.2.3: Contents of System Information Block type 3

IE	Parameter	
	FDD	1.28Mcps TDD
- SIB4 indicator	TRUE	
……	……	
- Cell selection and reselection quality measure	CPICH RSCP	(no data)
- CHOICE mode	FDD	TDD
- Sintrasearch	16 dB	10 dB
- Sintersearch	16 dB	10 dB
- SsearchHCS	Not Present	
- Slimit,SearchRAT	0	Not Present
- Qqualmin	-24dB	-
- Qrxlevmin	-81dBm	-103 dBm
- Qhyst1s	2 dB	0 dB
- Qhyst2s	Not Present	-
- Treselections	0 seconds	
- HCS Serving cell information	Not Present	
- Maximum allowed UL TX power	21dBm	30dBm
- Cell Access Restriction		
- Cell barred	Not barred	
- Intra-frequency cell re-selection indicator	Not present	
- T_{barred}	Not present	
- Cell Reserved for operator use	Not reserved	
- Cell Reservation Extension	Not reserved	
- Access Class Barred List		
- Access Class Barred0	Not barred	
- Access Class Barred1	Not barred	
- Access Class Barred2	Not barred	
- Access Class Barred3	Not barred	
- Access Class Barred4	Not barred	
- Access Class Barred5	Not barred	
- Access Class Barred6	Not barred	
- Access Class Barred7	Not barred	
- Access Class Barred8	Not barred	
- Access Class Barred9	Not barred	
- Access Class Barred10	Not barred	
- Access Class Barred11	Not barred	
- Access Class Barred12	Not barred	
- Access Class Barred13	Not barred	
- Access Class Barred14	Not barred	
- Access Class Barred15	Not barred	

8.3.1.2.4 System Information Block type 4

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
	Contents of System Information Block type 4 in connected mode	√	√	√			similar to SIB3

8.3.1.2.5 System Information Block type 5

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
	Contents of System Information Block type 5	√	√	√			Table: 8.3.1.2.5

Table: 8.3.1.2.5 : Contents of System Information Block type 5

IE	Parameter	
	FDD	1.28Mcps TDD
- SIB6 indicator	TRUE	
- PICH Power offset	-5 dB	
- CHOICE Mode	FDD	TDD
- AICH Power offset	-5 dB	-
- PUSCH system information	-	Not Present
- PDSCH system information	-	Not Present
- TDD open loop power control	-	
- Primary CCPCH Tx Power	-	30 dbm
- CHOICE TDD option	-	
-1.28Mcps TDD	-	(no data)
- Primary CCPCH info	Not Present	
- CHOICE *mode*	-	TDD
- CHOICE TDD option	-	1.28 Mcps TDD /REL-4/
- TSTD indicator	-	FALSE
- Cell parameters ID	-	Not Present
- Block SCTD indicator	-	FALSE
- PRACH system information list		
- PRACH system information		
- PRACH info		
- CHOICE mode	FDD	TDD
- Available Signature	'0000 0000 1111 1111'B	-
- Available SF	64	-
- Preamble scrambling code number	0	-
- Puncturing Limit	1.00	-
- Available Sub Channel number	'1111 1111 1111'B	-
- CHOICE TDD option	-	1.28 Mcps TDD /REL-4/
- SYNC_UL info	-	
- SYNC_UL codes bitmap	-	"11111111"
- UL Target SIR	-	10 dB
- Power Ramping Step	-	3 dB
- Max SYNC_UL Transmissions	-	8
- Mmax	-	32
- PRACH definition	-	
- Timeslot number	-	
- CHOICE TDD option	-	1.28 Mcps TDD /REL-4/
- Timeslot number	-	1
- PRACH Channelisation Code	-	
- Channelisation Code List	-	
- Channelisation Code	-	(8/1)
- Midamble Shift and burst type	-	
- CHOICE TDD option	-	1.28 Mcps TDD /REL-4/
- Midamble Allocation Mode	-	Default midamble
- Midamble configuration	-	8
- Midamble Shift	-	Not present
- FPACH info	-	
- Timeslot number	-	6
- Channelisation code	-	(16/16)
- Midamble Shift and burst type	-	
- CHOICE TDD option	-	1.28 Mcps TDD /REL-4/
- Midamble Allocation Mode	-	Common Midamble
- Midamble configuration	-	8
- Midamble Shift	-	Not present
- WT	-	4
- Transport Channel Identity	15	15
- RACH TFS		
- CHOICE Transport channel type	Common transport channels	
- Dynamic Transport format information		
- RLC size	168	170
- Number of TB and TTI List		

- Number of Transport blocks	1	1
- CHOICE Mode	FDD	TDD
- Transmission Time Interval	-	Not Present
- CHOICE Logical Channel List	Configured	
- RLC size	360	-
- Number of TB and TTI List		-
- Number of Transport blocks	1	-
- CHOICE Mode	FDD	-
- CHOICE Logical Channel List	Configured	-
- Semi-static Transport Format information		
- Transmission time interval	20 ms	10ms
- Type of channel coding	Convolutional	
- Coding Rate	1/2	
- Rate matching attribute	150	
- CRC size	16	
- RACH TFCS		Not present
- CHOICE TFCI signalling	Normal	-
- TFCI Field 1 information		-
- CHOICE TFCS representation	Complete reconfiguration	-
- TFCS complete reconfiguration information		-
- CHOICE CTFC Size	2 bit	-
- CTFC information	0	-
- Power offset information		-
- CHOICE Gain Factors	Computed Gain Factor	-
- Reference TFC ID	0	-
- CHOICE Mode	FDD	-
- Power offset Pp-m	0 dB	-
- CTFC information	1	-
- Power offset information		-
- CHOICE Gain Factors	Signalled Gain Factor	-
- CHOICE mode	FDD	-
- Gain factor ßc	11	-
- Gain factor ßd	15	-
- Reference TFC ID	0	-
- CHOICE Mode	FDD	-
- Power offset Pp-m	0 dB	-
- PRACH partitioning		
- Access Service Class		
- ASC Setting	Not Present	-
- ASC Setting		(ASC#0)
- CHOICE mode	FDD	TDD
- Available signature Start Index	0 (ASC#1)	-
- Available signature End Index	7 (ASC#1)	-
- Assigned Sub-Channel Number	'1111'B The first/ leftmost bit of the bit string contains the most significant bit of the Assigned Sub-Channel Number.	-
- CHOICE TDD option	-	1.28 Mcps TDD
- Available SYNC_UL codes indices	-	"11111111"
- CHOICE subchannel size	-	Size1
- Available Subchannels	-	Null
- ASC Setting	Not Present	-
- ASC Setting		(ASC#1)
- CHOICE mode	FDD	TDD
- Available signature Start Index	0 (ASC#3)	-
- Available signature End Index	7 (ASC#3)	-
- Assigned Sub-Channel Number	'1111'B The first/ leftmost bit of the bit string contains the most significant bit of the Assigned Sub-Channel Number.	-
- CHOICE TDD option	-	1.28 Mcps TDD
- Available SYNC_UL codes indices	-	"11111111"
- CHOICE subchannel size	-	Size1
- Available Subchannels	-	Null

- ASC Setting	Not Present	-
- ASC Setting		(ASC#2)
- CHOICE mode	FDD	TDD
- Available signature Start Index	0 (ASC#5)	-
- Available signature End Index	7 (ASC#5)	-
- Assigned Sub-Channel Number	'1111'B The first/ leftmost bit of the bit string contains the most significant bit of the Assigned Sub-Channel Number.	-
- CHOICE TDD option	-	1.28 Mcps TDD
- Available SYNC_UL codes indices	-	"11111111"
- CHOICE subchannel size	-	Size1
- Available Subchannels	-	Null
- ASC Setting	Not Present	-
- ASC Setting		(ASC#3)
- CHOICE mode	FDD	TDD
- Available signature Start Index	0 (ASC#7)	-
- Available signature End Index	7 (ASC#7)	-
- Assigned Sub-Channel Number	'1111'B The first/ leftmost bit of the bit string contains the most significant bit of the Assigned Sub-Channel Number.	-
- CHOICE TDD option	-	1.28 Mcps TDD
- Available SYNC_UL codes indices	-	"11111111"
- CHOICE subchannel size	-	Size1
- Available Subchannels	-	Null
- ASC Settings	-	(ASC#4)
- CHOICE mode	-	TDD
- CHOICE TDD option	-	1.28 Mcps TDD
- Available SYNC_UL codes indices	-	"11111111"
- CHOICE subchannel size	-	Size1
- Available Subchannels	-	Null
- ASC Settings	-	(ASC#5)
- CHOICE mode	-	TDD
- CHOICE TDD option	-	1.28 Mcps TDD
- Available SYNC_UL codes indices	-	"11111111"
- CHOICE subchannel size	-	Size1
- Available Subchannels	-	Null
- ASC Settings	-	(ASC#6)
- CHOICE mode	-	TDD
- CHOICE TDD option	-	1.28 Mcps TDD
- Available SYNC_UL codes indices	-	"11111111"
- CHOICE subchannel size	-	Size1
- Available Subchannels	-	Null
- Persistence scaling factor		
- Persistence scaling factor	0.9 (for ASC#2)	
- Persistence scaling factor	0.9 (for ASC#3)	
- Persistence scaling factor	0.9 (for ASC#4)	
- Persistence scaling factor	0.9 (for ASC#5)	
- Persistence scaling factor	0.9 (for ASC#6)	
- Persistence scaling factor	0.9 (for ASC#7)	-
- AC-to-ASC mapping		Not Present
- AC-to-ASC mapping table		-
- AC-to-ASC mapping	6 (AC0-9)	-
- AC-to-ASC mapping	5 (AC10)	-
- AC-to-ASC mapping	4 (AC11)	-
- AC-to-ASC mapping	3 (AC12)	-
- AC-to-ASC mapping	2 (AC13)	-
- AC-to-ASC mapping	1 (AC14)	-
- AC-to-ASC mapping	0 (AC15)	-
- CHOICE mode	FDD	TDD (no data)
- Primary CPICH TX power	31	-
- Constant value	-10	-
- PRACH power offset		-
- Power Ramp Step	3dB	-

- Preamble Retrans Max	4	-
- RACH transmission parameters		-
- Mmax	2	-
- NB01min	3 slot	-
- NB01max	10 slot	-
- AICH info		-
- Channelisation code	3	-
- STTD indicator	FALSE	-
- AICH transmission timing	0	-
- Secondary CCPCH system information		
- Secondary CCPCH info		
- CHOICE mode	FDD	TDD
- Secondary scrambling code	Not Present	-
- STTD indicator	FALSE	-
- Spreading factor	64	-
- Code number	1	-
- Pilot symbol existence	FALSE	-
- TFCI existence	TRUE (default value)	-
- Fixed or Flexible position	Flexible (default value)	-
- Timing offset	Not Present Absence of this IE is equivalent to default value 0	-
- Offset	-	0
- Common timeslot info	-	
- 2nd interleaving mode	-	Frame
- TFCI coding	-	8bits
- Puncturing limit	-	0.64
- Repetition period	-	1
- Repetition length	-	0
- Individual timeslot info	-	
- CHOICE TDD option	-	*1.28 Mcps TDD*
- Timeslot number	-	0
- TFCI existence	-	TRUE (default value)
- Midamble Shift and burst type	-	
- CHOICE TDD option	-	1.28 Mcps TDD
- Modulation	-	QPSK
- SS-TPC Symbols	-	0bits
- Code List	-	
- Channelisation Code	-	SF16 x 2 codes x 2 time slots
- TFCS	(This IE is repeated for TFC number for PCH and FACH.)	
- CHOICE TFCI signalling	Normal	
- TFCI Field 1 information		
- CHOICE TFCS representation	Complete reconfiguration	Addition
- TFCS complete reconfiguration information		
- CHOICE CTFC Size	4 bit	2 (alt. 3)
- CTFC information	0	SRBs for PCCH = (TF0), (TF1) (alt. (TF0), (TF1), (TF2))
- Power offset information	Not Present	Not Present
- CTFC information	1	-
- Power offset information	Not Present	-
- CTFC information	2	-
- Power offset information	Not Present	-
- CTFC information	3	-
- Power offset information	Not Present	-
- CTFC information	4	-
- Power offset information	Not Present	-
- CTFC information	5	-
- Power offset information	Not Present	-
- CTFC information	6	-
- Power offset information	Not Present	-
- CTFC information	8	-
- Power offset information	Not Present	-
- FACH/PCH information		
- TFS	(PCH)	

- CHOICE Transport channel type - Dynamic Transport format information - RLC Size - Number of TB and TTI List - Number of Transport blocks - Number of Transport blocks - CHOICE Mode - Transmission Time Interval	Common transport channels (This IE is repeated for TFI number.) 240 0 1 FDD(no data) -	 - TDD Not Present
- CHOICE Logical Channel List	ALL	
- Semi-static Transport Format information		
- Transmission time interval	10 ms	20ms
- Type of channel coding	Convolutional	
- Coding Rate	1/2	
- Rate matching attribute	230	
- CRC size	16 bit	
- Transport Channel Identity	12 (for PCH)	
- CTCH indicator	FALSE	
- TFS	(FACH)	
- CHOICE Transport channel type	Common transport channels	
- Dynamic Transport format information	(This IE is repeated for TFI number.)	
- RLC Size	168	171
- Number of TB and TTI List		
- Number of Transport blocks	0	0
- Number of Transport blocks	1	-
- Number of Transport blocks	2	-
- CHOICE Mode	FDD(no data)	TDD
- Transmission Time Interval	-	Not Present
- CHOICE Logical Channel List	ALL	ALL
- Semi-static Transport Format information		
- Transmission time interval	10 ms	20ms
- Type of channel coding	Convolutional	
- Coding Rate	1/2	
- Rate matching attribute	220	
- CRC size	16 bit	
- Transport Channel Identity	13 (for FACH)	
- CTCH indicator	FALSE	
- TFS	(FACH)	-
- CHOICE Transport channel type	Common transport channels	-
- Dynamic Transport format information		-
- RLC Size	360	-
- Number of TB and TTI List		-
- Number of Transport blocks	0	-
- Number of Transport blocks	1	-
- CHOICE Logical Channel List	ALL	-
- Semi-static Transport Format information		-
- Transmission time interval	10 ms	-
- Type of channel coding	Turbo	-
- Rate matching attribute	130	-
- CRC size	16bit	-
- Transport Channel Identity	14 (for FACH)	-
- CTCH indicator	FALSE	-
- PICH info		
- CHOICE mode	FDD	TDD
- Channelisation code	2	-
- Number of PI per frame	18	-
- STTD indicator	FALSE	-
- CHOICE *TDD option*	-	1.28 Mcps TDD
- Timeslot number	-	0
- Midamble shift and burst type	-	
- Midamble Allocation Mode	-	Default midamble
- Midamble configuration	-	8
- Midamble Shift	-	Not Present
- Channelisation code list	-	

- Channelisation code	-	(16/1)
- Channelisation code	-	(16/2)
- Repetition period/length	-	64/2
- Offset	-	0
- Paging indicator length	-	4
- N_{GAP}	-	4
- N_{PCH}	-	2
- CBS DRX Level 1 information	Not Present	

8.3.1.2.6 System Information Block type 6

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
	Contents of System Information Block type 6 in connected mode	√	√	√			similar to SIB5

8.3.1.2.7 System Information Block type 7

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
	Contents of System Information Block type 7	√	√	√			Table:8.3.1.2.7

Table: 8.3.1.2.7 : Contents of System Information Block type 7

IE	Parameter	
		FDD
- SIB4 indicator	TRUE	
……	……	
CHOICE Mode	FDD	TDD
- UL interference	-100dBm	-
- PRACHs listed in system information block type5		
- Dynamic persistence level	2	
- PRACHs listed in system information block type6		
- Dynamic persistence level	2	
- Expiration Time Factor	Not Present – use default value of 1	

8.3.1.2.8 System Information Block type 8, 9, 10

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
	Contents of System Information Block type 8, 9	√	-				
	Note: This information is used for static CPCH in the cell, so this is not present.						
	Contents of System Information Block type 10	√	-				
	Note: This information is used for DRAC, so this is not present.						

8.3.1.2.9 System Information Block type 11

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
	Contents of System Information Block type 11	√	√	√			Table:8.3.1.2.9
	Note:This is the default message content of SIB 11 for cell 1						

Table: 8.3.1.2.9 : Contents of System Information Block type 11

IE	Parameter	
	FDD	1.28Mcps TDD
- SIB12 indicator	TRUE	
- FACH measurement occasion info	Not Present	
- Measurement control system information		
- Use of HCS	Not used	
- Cell selection and reselection quality measure	CPICH RSCP	(no data)
- Intra-frequency measurement system information		
- Intra-frequency measurement identity	Not Present Absence of this IE is equivalent to default value 1	
- Intra-frequency cell info list		
- CHOICE intra-frequency cell removal	Not present (This IE shall be ignored by the UE for SIB11)	
- New intra-frequency cells		
- Intra-frequency cell id	1	
- Cell info		
- Cell individual offset	Not present Absence of this IE is equivalent to default value 0dB	
- Reference time difference to cell	Not Present	
- Read SFN indicator	FALSE	
- CHOICE mode	FDD	TDD
- Primary CPICH info		-
- Primary scrambling code	100	-
- Primary CPICH TX power	Not Present	-
- TX Diversity indicator	FALSE	-
- Primary CCPCH info	-	
- Cell parameters ID	-	0
- Primary CCPCH TX power	-	Not Present
- Timeslot list	-	Not Present
- CHOICE TDD option	-	
- 1.28 Mcps TDD	-	
- Timeslot number	-	
- Cell Selection and Re-selection info	Not Present (The IE shall be absent as this is the serving cell)	
- Intra-frequency cell id	2	
- Cell info		
- Cell individual offset	Not present Absence of this IE is equivalent to default value 0dB	
- Reference time difference to cell	Not present	
- Read SFN indicator	TRUE	FALSE
- CHOICE mode	FDD	TDD
- Primary CPICH info		-
- Primary scrambling code	150	-
- Primary CPICH TX power	Not Present	-
- TX Diversity indicator	FALSE	-
- Primary CCPCH info	-	
- Cell parameters ID	-	4
- Primary CCPCH TX power	-	Not Present
- Timeslot list	-	Not Present
- CHOICE TDD option	-	
- 1.28 Mcps TDD	-	
- Timeslot number	-	Not Present
- Cell Selection and Re-selection info	Not present For neigbouring cell, if HCS is not used and all the parameters in cell selection and re-selection info are Default value, this IE is absent.	
- Intra-frequency cell id	3	

IE	Parameter	
	FDD	1.28Mcps TDD
- Cell info	Same content as specified for Intra-frequency cell id=2 with the exception that value for Primary scrambling code as 200(FDD) and Cell parameters Id as 8(TDD)	
- Intra-frequency cell id	7	
- Cell info	Same content as specified for Intra-frequency cell id=2 with the exception that value for Primary scrambling code as 400(FDD) and Cell parameters Id as 123(TDD)	
- Intra-frequency cell id	8	
- Cell info	Same content as specified for Intra-frequency cell id=2 with the exception that value for Primary scrambling code as 450(FDD) and Cell parameters Id as 127(TDD)	
- Cells for measurement	Not Present	
- Intra-frequency measurement quantity		
- Filter coefficient	Not present Absence of this IE is equivalent to the default value 0	
- CHOICE mode	FDD	TDD
- Measurement quantity list	-	
- Measurement quantity	CPICH RSCP	P-CCPCH RSCP
- Intra-frequency reporting quantity for RACH Reporting	Not Present	
- Maximum number of reported cells on RACH	Not Present	
- Reporting information for state CELL_DCH		
- Intra-frequency reporting quantity		
- Reporting quantities for active set cells		
- Cell synchronisation information reporting indicator	FALSE	TRUE
- Cell identity reporting indicator	TRUE	
- CHOICE mode	FDD	TDD
- CPICH Ec/N0 reporting indicator	FALSE	-
- CPICH RSCP reporting indicator	TRUE	-
- Timeslot ISCP reporting indicator	-	FALSE
- Proposed TSGN reporting required	-	FALSE
- P-CCPCH RSCP reporting indicator	-	TRUE
- Pathloss reporting indicator	FALSE	
- Reporting quantities for monitored set cells		
- Cell synchronisation information reporting indicator	TRUE	FALSE
- Cell identity reporting indicator	TRUE	
- CHOICE mode	FDD	TDD
- CPICH Ec/N0 reporting indicator	FALSE	-
- CPICH RSCP reporting indicator	TRUE	-
- Timeslot ISCP reporting indicator	-	FALSE
- Proposed TSGN reporting required	-	FALSE
- P-CCPCH RSCP reporting indicator	-	TRUE
- Pathloss reporting indicator	FALSE	
- Reporting quantities for detected set cells	Not Present	
- Measurement reporting mode		
- Measurement Report Transfer Mode	Acknowledged mode RLC	
- Periodic Reporting/Event Trigger Reporting Mode	Event trigger	
- CHOICE report criteria		
- Intra-frequency measurement reporting criteria		
- Parameters required for each event	3 kinds	
- Intra-frequency event identity	1a	1g
- Triggering condition 1	Not Present	
- Triggering condition 2	Monitored set cells	-
- Reporting Range Constant	5dB	Not Present
- Cells forbidden to affect Reporting range	Not Present	
- W	1.0	Not Present
- Hysteresis	0.0	
- Threshold Used Frequency	Not Present	

IE	Parameter	
	FDD	1.28Mcps TDD
- Reporting deactivation threshold	2	3
- Replacement activation threshold	Not Present	
- Time to trigger	640	
- Amount of reporting	4	
- Reporting interval	4000	
- Reporting cell status		
- CHOICE reported cell	Report cell within active set and/or monitored set cells on used frequency	
- Maximum number of reported cells	3	
- Intra-frequency event identity	1b	-
- Triggering condition 1	Active set cells	-
- Triggering condition 2	Not Present	-
- Reporting Range Constant	5dB	-
- Cells forbidden to affect Reporting range	Not Present	-
- W	1.0	-
- Hysteresis	0.0	-
- Threshold Used Frequency	Not Present	-
- Reporting deactivation threshold	Not Present	-
- Replacement activation threshold	Not Present	-
- Time to trigger	640	-
- Amount of reporting	Not Present	-
- Reporting interval	Not Present	-
- Reporting cell status		-
- CHOICE reported cell	Report cell within active set and/or monitored set cells on used frequency	-
- Maximum number of reported cells	3	-
- Intra-frequency event identity	1c	-
- Triggering condition 1	Not Present	-
- Triggering condition 2	Not Present	-
- Reporting Range Constant	Not Present	-
- Cells forbidden to affect Reporting range	Not Present	-
- W	Not Present	-
- Hysteresis	0.0	-
- Threshold Used Frequency	Not Present	-
- Reporting deactivation threshold	Not Present	-
- Replacement activation threshold	3	-
- Time to trigger	640	-
- Amount of reporting	4	-
- Reporting interval	4000	-
- Reporting cell status		-
- CHOICE reported cell	Report cell within active set and/or monitored set cells on used frequency	-
- Maximum number of reported cells	3	-
- Inter-frequency measurement system information		
- Inter-frequency cell info list		
- CHOICE Inter-frequency cell removal	Not present (This IE shall be ignored by the UE for SIB11)	
- New inter-frequency cells		
- Inter frequency cell id	4	
- Frequency info		
- CHOICE mode	FDD	TDD

IE	Parameter	
	FDD	1.28Mcps TDD
- UARFCN uplink(Nu)	Not present Absence of this IE is equivalent to apply the default duplex distance defined for the operating frequency according to 25.101	-
- UARFCN downlink(Nd)	Reference to TS 34.108 table 6.1.2 for Cell 4	-
- UARFCN (Nt)	-	Reference to TS 34.108 table 6.1.7 for Cell 4
- Cell info		
- Cell individual offset	Not present Absence of this IE is equivalent to default value 0dB	
- Reference time difference to cell	Not present	
- Read SFN indicator	FALSE	
- CHOICE mode	FDD	TDD
- Primary CPICH info		-
- Primary scrambling code	250	-
- Primary CPICH Tx power	Not present	-
- Primary CCPCH info	-	Cell parameter ID =12
- Primary CCPCH Tx power	-	Not present
- TX Diversity Indicator	FALSE	
- Cell Selection and Re-selection Info	Not present (same values as for serving cell applies)	
- Inter frequency cell id	5	
- Frequency info	Not Present Absence of this IE is equivalent to value of the previous "frequency info" in the list.	
- Cell info	Same content as specified for Inter-frequency cell id=4 with the exception that value for Primary scrambling code as 300(FDD) and Cell parameter ID as 114(TDD)	
- Inter frequency cell id	6	
- Frequency info	Not Present Absence of this IE is equivalent to value of the previous "frequency info" in the list.	
- Cell info	Same content as specified for Inter-frequency cell id=4 with the exception that value for Primary scrambling code as 350(FDD) and Cell parameter ID as 119(TDD)	
- Cell for measurement	Not present	
- Inter-RAT measurement system information	Not Present	
- Inter-RAT measurement system information		
- Inter-RAT cell info list		
- CHOICE *Inter-RAT cell removal*	Not Present (This IE shall be ignored by the UE for SIB11)	
- New inter-RAT cells		
- Inter-RAT cell id	9	
- CHOICE *Radio Access Technology*	GSM	
- GSM		
- Cell individual offset	0	
- Cell selection and re-selection info	Not Present	
- BSIC		

IE	Parameter	
	FDD	1.28Mcps TDD
- Base transceiver Station Identity Code (BSIC)	Reference to TS 34.108 table 6.1.10 for Cell 9	
- Band indicator	According to PICS/PIXIT	
- BCCH ARFCN	Reference to TS 34.108 table 6.1.10 for Cell 9	
- Inter-RAT cell id	10	
- CHOICE *Radio Access Technology*	GSM	
- GSM		
- Cell individual offset	0	
- Cell selection and re-selection info	Not Present	
- BSIC		
- Base transceiver Station Identity Code (BSIC)	Reference to TS 34.108 table 6.1.10 for Cell 10	
- Band indicator	According to PICS/PIXITs	
- BCCH ARFCN	Reference to TS 34.108 table 6.1.10 for Cell 10	
- Cell for measurement	Not present	
- Traffic volume measurement system information	Not Present	

8.3.1.2.10 System Information Block type 12

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
	Contents of System Information Block type 12 in connected mode	√	√	√			Similar to SIB 11

8.3.1.2.11 System Information Block type 13

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
	Contents of System Information Block type 13	√	√		√	Used when supported PLMN type is ANSI-41	

8.3.1.2.12 System Information Block type 16

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
	Contents of System Information Block type 16	√	√	√			

8.3.1.2.13 System Information Block type 17

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
	Contents of System Information Block type17	-	√				

8.3.1.2.14 System Information Block type 18

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
	Contents of System Information Block type 18	√	√	√			

8.3.1.3 SCCPCH configuration with Stand-alone SRB for PCCH in the first SCCPCH and Interactive/Background 32 kbps PS RAB + SRBs for CCCH/DCCH/BCCH in the second SCCPCH

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
6.1.1	Contents of System Information Block type 5	√	√	√			
6.1.1	Contents of System Information Block type 6 in connected mode	√	√	√			

8.3.1.4 SCCPCH configuration with Stand-alone SRB for PCCH in the first SCCPCH, RB for CTCH + SRBs for CCCH/BCCH in the second SCCPCH and Interactive/Background 32 kbps PS RAB + SRBs for CCCH/DCCH/BCCH in the third SCCPCH (FDD only)

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
6.1.2	Contents of System Information Block type 5	√	-				
6.1.2	Contents of System Information Block type 6 in connected mode	√	-				

8.3.1.5 SCCPCH configuration with Stand-alone SRB for PCCH in the first SCCPCH and Interactive/Background 32 kbps PS RAB + SRBs for CCCH/DCCH/BCCH in the second and third SCCPCHs

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
	Contents of Scheduling Block 1	√	√		√		
	Contents of System Information Block type 5	√	√	√			

8.3.1.6 Default parameters for 1 to 8 cell environments

8.3.6.1 Default parameters for cell No.1 environments

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference

6.1.4	Default settings for cell No.1	√	√	√			
6.1.4	Contents of System Information Block type 11 for cell No.1	√	√	√			Table: 8.3.1.2.9

8.3.6.2 Default parameters for cell No.2 environments

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
6.1.4	Default settings for cell No.2	√	√	√			
6.1.4	Contents of System Information Block type 11 for cell No.2	√	√	√			Table: 8.3.1.6a

Table: 8.3.1.6a : Contents of System Information Block type 11

IE	Parameter	
	1.28Mcps TDD	FDD
- Intra-frequency measurement system information		
….		
- New intra-frequency cells		
- Intra-frequency cell id	2	
- Cell info	Same content as specified for Intra-frequency cell id=1 (serving cell) in SIB11 for Cell 1 in table 8.3.1.2.9 with the exception that value for Primary scrambling code as 150 and cell parameter ID as 4	
- Intra-frequency cell id	1	
- Cell info	Same content as specified for Intra-frequency cell id=2 in SIB11 for Cell 1 in table 8.3.1.2.9 with the exception that value for Primary scrambling code as 100 and cell parameter ID as 0	
- Intra-frequency cell id	3	
- Cell info	Same content as specified for Intra-frequency cell id=3 in SIB11 for Cell 1 in table 8.3.1.2.9	
- Intra-frequency cell id	7	
- Cell info	Same content as specified for Intra-frequency cell id=7 in SIB11 for Cell 1 in table 8.3.1.2.9	
- Intra-frequency cell id	8	
- Cell info	Same content as specified for Intra-frequency cell id=8 in SIB11 for Cell 1 in table 8.3.1.2.9	
- Intra-frequency cell id	11	-
- Cell info	Same content as specified for Intra-frequency cell id=2 with the exception that value for Primary scrambling code as 500	-
…..		
- Inter-frequency measurement system information		
…..		
- New inter-frequency cells		
- Inter frequency cell id	4	
- Frequency info	Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in table 8.3.1.2.9	
- Cell info	Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in table 8.3.1.2.9	
- Inter frequency cell id	5	
- Frequency info	Same content as specified for Inter-frequency cell id=5 in SIB11 for Cell 1 in table 8.3.1.2.9	
- Cell info	Same content as specified for Inter-frequency cell id=5 in SIB11 for Cell 1 in table 8.3.1.2.9	
- Inter frequency cell id	6	
- Frequency info	Same content as specified for Inter-frequency cell id=6 in SIB11 for Cell 1 in table 8.3.1.2.9	
- Cell info	Same content as specified for Inter-frequency cell id=6 in SIB11 for Cell 1 in table 8.3.1.2.9	
…..		
- Inter-RAT cell info list		-
….		-
- New inter-RAT cells		-
- Inter-RAT cell id	9	-
- CHOICE *Radio Access Technology*	GSM	-
- GSM	Same content as specified for inter-RAT cell id=9 in SIB11 for Cell 1 in table 8.3.1.2.9	-
- Inter-RAT cell id	10	-
- CHOICE *Radio Access Technology*	GSM	-
- GSM	Same content as specified for inter-RAT cell id=10 in SIB11 for Cell 1 in table 8.3.1.2.9	-

….	

8.3.6.3 Default parameters for cell No.3 environments

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
6.1.4	Default settings for cell No.3	√	√	√			
6.1.4	Contents of System Information Block type 11 for cell No.3	√	√	√			Table: 8.3.1.6b

Table: 8.3.1.6b : Contents of System Information Block type 11

IE	Parameter	
	1.28Mcps TDD	FDD
- Intra-frequency measurement system information		
….		
- New intra-frequency cells		
- Intra-frequency cell id	3	
- Cell info	Same content as specified for Intra-frequency cell id=1 (serving cell) in SIB11 for Cell 1 in table 8.3.1.2.9 with the exception that value for Primary scrambling code as 200 and cell parameter ID as 8	
- Intra-frequency cell id	1	
- Cell info	Same content as specified for Intra-frequency cell id=2 in SIB11 for Cell 1 in table 8.3.1.2.9 with the exception that value for Primary scrambling code as 100 and cell parameter ID as 0	
- Intra-frequency cell id	2	
- Cell info	Same content as specified for Intra-frequency cell id=2 in SIB11 for Cell 1 in table 8.3.1.2.9	
- Intra-frequency cell id	7	
- Cell info	Same content as specified for Intra-frequency cell id=7 in SIB11 for Cell 1 in table 8.3.1.2.9	
- Intra-frequency cell id	8	
- Cell info	Same content as specified for Intra-frequency cell id=8 in SIB11 for Cell 1 in table 8.3.1.2.9	
- Intra-frequency cell id	11	-
- Cell info	Same content as specified for Intra-frequency cell id=2 with the exception that value for Primary scrambling code as 500	-
…..		
- Inter-frequency measurement system information		
…..		
- New inter-frequency cells		
- Inter frequency cell id	4	
- Frequency info	Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in table 8.3.1.2.9	
- Cell info	Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in table 8.3.1.2.9	
- Inter frequency cell id	5	
- Frequency info	Same content as specified for Inter-frequency cell id=5 in SIB11 for Cell 1 in table 8.3.1.2.9	
- Cell info	Same content as specified for Inter-frequency cell id=5 in SIB11 for Cell 1 in table 8.3.1.2.9	
- Inter frequency cell id	6	
- Frequency info	Same content as specified for Inter-frequency cell id=6 in SIB11 for Cell 1 in table 8.3.1.2.9	
- Cell info	Same content as specified for Inter-frequency cell id=6 in SIB11 for Cell 1 in table 8.3.1.2.9	
…..		
- Inter-RAT cell info list		-
….		-
- New inter-RAT cells		-
- Inter-RAT cell id	9	-
- CHOICE *Radio Access Technology*	GSM	-
- GSM	Same content as specified for inter-RAT cell id=9 in SIB11 for Cell 1 in table 8.3.1.2.9	-
- Inter-RAT cell id	10	-
- CHOICE *Radio Access Technology*	GSM	-
- GSM	Same content as specified for inter-RAT cell id=10 in SIB11 for Cell 1 in table 8.3.1.2.9	-

….	

8.3.6.4 Default parameters for cell No.4 environments

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
6.1.4	Default settings for cell No.4	√	√	√			
6.1.4	Contents of System Information Block type 11 for cell No.4	√	√	√			Table: 8.3.1.6c

Table: 8.3.1.6c : Contents of System Information Block type 11

IE	Parameter	
	1.28Mcps TDD	FDD
- Intra-frequency measurement system information		
….		
- New intra-frequency cells		
- Intra-frequency cell id	4	
- Cell info	Same content as specified for Intra-frequency cell id=1 (serving cell) in SIB11 for Cell 1 in table 8.3.1.2.9 with the exception that value for Primary scrambling code(FDD) as 250 and cell parameter ID(TDD) as 12	
- Intra-frequency cell id	5	
- Cell info	Same content as specified for Intra-frequency cell id=2 in SIB11 for Cell 1 in table 8.3.1.2.9 with the exception that value for Primary scrambling code(FDD) as 300 and cell parameter ID(TDD) as 114	
- Intra-frequency cell id	6	
- Cell info	Same content as specified for Intra-frequency cell id=2 in SIB11 for Cell 1 in table 8.3.1.2.9 with the exception that value for Primary scrambling code(FDD) as 350 and cell parameter ID(TDD) as 119	
…..		
- Inter-frequency measurement system information		
…..		
- New inter-frequency cells		
- Inter frequency cell id	1	
- Frequency info		
-CHOICE mode	FDD	TDD
- UARFCN uplink(Nu)	Not present Absence of this IE is equivalent to apply the default duplex distance defined for the operating frequency according to 25.101	-
- UARFCN downlink(Nd)	Reference to table 6.1.2 for Cell 1	-
- UARFCN(Nt)	-	Reference to table 6.1.7 for Cell 4
- Cell info	Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 table 8.3.1.2.9 with the exception that value for Primary scrambling code(FDD) as 100 and cell parameter ID(TDD) as 0	
- Inter frequency cell id	2	
- Frequency info	Not Present Absence of this IE is equivalent to value of the previous "frequency info" in the list.	
- Cell info	Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in table 8.3.1.2.9 with the exception that value for Primary scrambling code(FDD) as 150 and cell parameter ID(TDD) as 4.	
- Inter frequency cell id	3	
- Frequency info	Not Present Absence of this IE is equivalent to value of the previous "frequency info" in the list	
- Cell info	Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in table 8.3.1.2.9 with the exception that value for Primary scrambling code(FDD) as 200 and cell parameter ID(TDD) as.8	
- Inter frequency cell id	7	
- Frequency info	Not Present Absence of this IE is equivalent to value of the previous "frequency info" in the list	
- Cell info	Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in table 8.3.1.2.9 with the exception that value for Primary scrambling code (FDD) as 400 and cell parameter ID (TDD) as 123 .	
- Inter frequency cell id	8	

- Frequency info	Not Present Absence of this IE is equivalent to value of the previous "frequency info" in the list	
- Cell info	Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in sub-clause 6.1.0b with the exception that value for Primary scrambling code(FDD) as 450 and cell parameter ID (TDD) as 127.	
…..		
- Inter-RAT cell info list		-
….		-
- New inter-RAT cells		-
- Inter-RAT cell id	9	-
- CHOICE *Radio Access Technology*	GSM	-
- GSM	Same content as specified for inter-RAT cell id=9 in SIB11 for Cell 1 in table 8.3.1.2.9	-
- Inter-RAT cell id	10	-
- CHOICE *Radio Access Technology*	GSM	-
- GSM	Same content as specified for inter-RAT cell id=10 in SIB11 for Cell 1 in table 8.3.1.2.9	-
….		

8.3.6.5 Default parameters for cell No.5 environments

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
6.1.4	Default settings for cell No.5	√	√	√			
6.1.4	Contents of System Information Block type 11 for cell No.5	√	√	√			Table: 8.3.1.6d

Table: 8.3.1.6d : Contents of System Information Block type 11

IE	Parameter	
	1.28Mcps TDD	FDD
- Intra-frequency measurement system information		
….		
- New intra-frequency cells		
- Intra-frequency cell id	5	
- Cell info	Same content as specified for Intra-frequency cell id=1 (serving cell) in SIB11 for Cell 1 in table 8.3.1.2.9 with the exception that value for Primary scrambling code(FDD) as 300 and cell parameter ID(TDD) as 114	
- Intra-frequency cell id	4	
- Cell info	Same content as specified for Intra-frequency cell id=2 in SIB11 for Cell 1 in table 8.3.1.2.9 with the exception that value for Primary scrambling code(FDD) as 250 and cell parameter ID(TDD) as 12	
- Intra-frequency cell id	6	
- Cell info	Same content as specified for Intra-frequency cell id=2 in SIB11 for Cell 1 in table 8.3.1.2.9 with the exception that value for Primary scrambling code(FDD) as 350 and cell parameter ID(TDD) as 119	
…..		
- Inter-frequency measurement system information		
…..		
- New inter-frequency cells		
- Inter frequency cell id	1	
- Frequency info		
-CHOICE mode	FDD	TDD
- UARFCN uplink(Nu)	Not present Absence of this IE is equivalent to apply the default duplex distance defined for the operating frequency according to 25.101	-
- UARFCN downlink(Nd)	Reference to table 6.1.2 for Cell 1	-
- UARFCN(Nt)	-	Reference to table 6.1.7 for Cell 4
- Cell info	Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 table 8.3.1.2.9 with the exception that value for Primary scrambling code(FDD) as 100 and cell parameter ID(TDD) as 0	
- Inter frequency cell id	2	
- Frequency info	Not Present Absence of this IE is equivalent to value of the previous "frequency info" in the list.	
- Cell info	Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in table 8.3.1.2.9 with the exception that value for Primary scrambling code(FDD) as 150 and cell parameter ID(TDD) as 4.	
- Inter frequency cell id	3	
- Frequency info	Not Present Absence of this IE is equivalent to value of the previous "frequency info" in the list	
- Cell info	Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in table 8.3.1.2.9 with the exception that value for Primary scrambling code(FDD) as 200 and cell parameter ID(TDD) as.8	
- Inter frequency cell id	7	
- Frequency info	Not Present Absence of this IE is equivalent to value of the previous "frequency info" in the list	
- Cell info	Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in table 8.3.1.2.9 with the exception that value for Primary scrambling code (FDD) as 400 and cell parameter ID (TDD) as 123 .	
- Inter frequency cell id	8	

- Frequency info	Not Present Absence of this IE is equivalent to value of the previous "frequency info" in the list	
- Cell info	Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in sub-clause 6.1.0b with the exception that value for Primary scrambling code(FDD) as 450 and cell parameter ID (TDD) as 127.	
…..		
- Inter-RAT cell info list		-
….		-
- New inter-RAT cells		-
- Inter-RAT cell id	9	-
- CHOICE *Radio Access Technology*	GSM	-
- GSM	Same content as specified for inter-RAT cell id=9 in SIB11 for Cell 1 in table 8.3.1.2.9	-
- Inter-RAT cell id	10	-
- CHOICE *Radio Access Technology*	GSM	-
- GSM	Same content as specified for inter-RAT cell id=10 in SIB11 for Cell 1 in table 8.3.1.2.9	-
….		

8.3.6.6 Default parameters for cell No.6 environments

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
6.1.4	Default settings for cell No.6	√	√	√			
6.1.4	Contents of System Information Block type 11 for cell No.6	√	√	√			Table: 8.3.1.6e

Table: 8.3.1.6e : Contents of System Information Block type 11

IE	Parameter	
	1.28Mcps TDD	FDD
- Intra-frequency measurement system information		
….		
- New intra-frequency cells		
- Intra-frequency cell id	6	
- Cell info	Same content as specified for Intra-frequency cell id=1 (serving cell) in SIB11 for Cell 1 in table 8.3.1.2.9 with the exception that value for Primary scrambling code(FDD) as 350 and cell parameter ID(TDD) as 119	
- Intra-frequency cell id	4	
- Cell info	Same content as specified for Intra-frequency cell id=2 in SIB11 for Cell 1 in table 8.3.1.2.9 with the exception that value for Primary scrambling code(FDD) as 250 and cell parameter ID(TDD) as 12	
- Intra-frequency cell id	5	
- Cell info	Same content as specified for Intra-frequency cell id=2 in SIB11 for Cell 1 in table 8.3.1.2.9 with the exception that value for Primary scrambling code(FDD) as 300 and cell parameter ID(TDD) as 114	
…..		
- Inter-frequency measurement system information		
…..		
- New inter-frequency cells		
- Inter frequency cell id	1	
- Frequency info		
-CHOICE mode	FDD	TDD
- UARFCN uplink(Nu)	Not present Absence of this IE is equivalent to apply the default duplex distance defined for the operating frequency according to 25.101	-
- UARFCN downlink(Nd)	Reference to table 6.1.2 for Cell 1	-
- UARFCN(Nt)	-	Reference to table 6.1.7 for Cell 4
- Cell info	Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 table 8.3.1.2.9 with the exception that value for Primary scrambling code(FDD) as 100 and cell parameter ID(TDD) as 0	
- Inter frequency cell id	2	
- Frequency info	Not Present Absence of this IE is equivalent to value of the previous "frequency info" in the list.	
- Cell info	Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in table 8.3.1.2.9 with the exception that value for Primary scrambling code(FDD) as 150 and cell parameter ID(TDD) as 4.	
- Inter frequency cell id	3	
- Frequency info	Not Present Absence of this IE is equivalent to value of the previous "frequency info" in the list	
- Cell info	Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in table 8.3.1.2.9 with the exception that value for Primary scrambling code(FDD) as 200 and cell parameter ID(TDD) as.8	
- Inter frequency cell id	7	
- Frequency info	Not Present Absence of this IE is equivalent to value of the previous "frequency info" in the list	
- Cell info	Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in table 8.3.1.2.9 with the exception that value for Primary scrambling code (FDD) as 400 and cell parameter ID (TDD) as 123 .	
- Inter frequency cell id	8	

- Frequency info	Not Present Absence of this IE is equivalent to value of the previous "frequency info" in the list	
- Cell info	Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in sub-clause 6.1.0b with the exception that value for Primary scrambling code(FDD) as 450 and cell parameter ID (TDD) as 127.	
…..		
- Inter-RAT cell info list		-
….		-
- New inter-RAT cells		-
- Inter-RAT cell id	9	-
- CHOICE *Radio Access Technology*	GSM	-
- GSM	Same content as specified for inter-RAT cell id=9 in SIB11 for Cell 1 in table 8.3.1.2.9	-
- Inter-RAT cell id	10	-
- CHOICE *Radio Access Technology*	GSM	-
- GSM	Same content as specified for inter-RAT cell id=10 in SIB11 for Cell 1 in table 8.3.1.2.9	-
….		

8.3.6.7 Default parameters for cell No.7 environments

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
6.1.4	Default settings for cell No.7	√	√	√			
6.1.4	Contents of System Information Block type 11 for cell No.7	√	√	√			Table: 8.3.1.6f

Table: 8.3.1.6f : Contents of System Information Block type 11

IE	Parameter	
	1.28Mcps TDD	FDD
- Intra-frequency measurement system information		
….		
- New intra-frequency cells		
- Intra-frequency cell id	7	
- Cell info	Same content as specified for Intra-frequency cell id=1 (serving cell) in SIB11 for Cell 1 in table 8.3.1.2.9 with the exception that value for Primary scrambling code as 400 and cell parameter ID as 123	
- Intra-frequency cell id	1	
- Cell info	Same content as specified for Intra-frequency cell id=2 in SIB11 for Cell 1 in table 8.3.1.2.9 with the exception that value for Primary scrambling code as 100 and cell parameter ID as 0	
- Intra-frequency cell id	2	
- Cell info	Same content as specified for Intra-frequency cell id=3 in SIB11 for Cell 1 in table 8.3.1.2.9	
- Intra-frequency cell id	3	
- Cell info	Same content as specified for Intra-frequency cell id=7 in SIB11 for Cell 1 in table 8.3.1.2.9	
- Intra-frequency cell id	8	
- Cell info	Same content as specified for Intra-frequency cell id=8 in SIB11 for Cell 1 in table 8.3.1.2.9	
- Intra-frequency cell id	11	-
- Cell info	Same content as specified for Intra-frequency cell id=2 with the exception that value for Primary scrambling code as 500	-
…..		
- Inter-frequency measurement system information		
…..		
- New inter-frequency cells		
- Inter frequency cell id	4	
- Frequency info	Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in table 8.3.1.2.9	
- Cell info	Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in table 8.3.1.2.9	
- Inter frequency cell id	5	
- Frequency info	Same content as specified for Inter-frequency cell id=5 in SIB11 for Cell 1 in table 8.3.1.2.9	
- Cell info	Same content as specified for Inter-frequency cell id=5 in SIB11 for Cell 1 in table 8.3.1.2.9	
- Inter frequency cell id	6	
- Frequency info	Same content as specified for Inter-frequency cell id=6 in SIB11 for Cell 1 in table 8.3.1.2.9	
- Cell info	Same content as specified for Inter-frequency cell id=6 in SIB11 for Cell 1 in table 8.3.1.2.9	
…..		

8.3.6.8 Default parameters for cell No.8 environments

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
6.1.4	Default settings for cell No.8	√	√	√			
6.1.4	Contents of System Information Block type 11 for cell No.8	√	√	√			Table: 8.3.1.6g

Table: 8.3.1.6g: Contents of System Information Block type 11

IE	Parameter	
	1.28Mcps TDD	FDD
- Intra-frequency measurement system information		
….		
- New intra-frequency cells		
- Intra-frequency cell id	8	
- Cell info	Same content as specified for Intra-frequency cell id=1 (serving cell) in SIB11 for Cell 1 in table 8.3.1.2.9 with the exception that value for Primary scrambling code as 450 and cell parameter ID as 127	
- Intra-frequency cell id	1	
- Cell info	Same content as specified for Intra-frequency cell id=2 in SIB11 for Cell 1 in table 8.3.1.2.9 with the exception that value for Primary scrambling code as 100 and cell parameter ID as 0	
- Intra-frequency cell id	2	
- Cell info	Same content as specified for Intra-frequency cell id=3 in SIB11 for Cell 1 in table 8.3.1.2.9	
- Intra-frequency cell id	3	
- Cell info	Same content as specified for Intra-frequency cell id=7 in SIB11 for Cell 1 in table 8.3.1.2.9	
- Intra-frequency cell id	7	
- Cell info	Same content as specified for Intra-frequency cell id=8 in SIB11 for Cell 1 in table 8.3.1.2.9	
- Intra-frequency cell id	11	-
- Cell info	Same content as specified for Intra-frequency cell id=2 with the exception that value for Primary scrambling code as 500	-
…..		
- Inter-frequency measurement system information		
…..		
- New inter-frequency cells		
- Inter frequency cell id	4	
- Frequency info	Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in table 8.3.1.2.9	
- Cell info	Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in table 8.3.1.2.9	
- Inter frequency cell id	5	
- Frequency info	Same content as specified for Inter-frequency cell id=5 in SIB11 for Cell 1 in table 8.3.1.2.9	
- Cell info	Same content as specified for Inter-frequency cell id=5 in SIB11 for Cell 1 in table 8.3.1.2.9	
- Inter frequency cell id	6	
- Frequency info	Same content as specified for Inter-frequency cell id=6 in SIB11 for Cell 1 in table 8.3.1.2.9	
- Cell info	Same content as specified for Inter-frequency cell id=6 in SIB11 for Cell 1 in table 8.3.1.2.9	
…..		

8.3.6.9 Default parameters for cell No.9 environments

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
6.1.4	Default settings for cell No.9	√	√		√		
6.1.4	Contents of System Information Block type 11 for cell No.9	√	√		√		

8.3.6.10 Default parameters for cell No.10 environments

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
6.1.4	Default settings for cell No.10	√	√		√		
6.1.4	Contents of System Information Block type 11 for cell No.10	√	√		√		

8.3.6.11 Default parameters for cell No.environments

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
6.1.4	Default settings for cell No.11	√	-				
6.1.4	Contents of System Information Block type 11 for cell No.11	√	-				

8.3.6.12 Default Cell parameters Two PLMN in UTRAN test scenario

Void.

8.3.1.7 Reference Radio Conditions for signalling test cases

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
	Default settings for a serving cell in a single cell environment	√	√	√			Table 8.3.1.7a
	Default settings for a serving cell and a suitable neighbour cell in a multi-cell environment	√	√	√			Table 8.3.1.7b
	Default settings for a non-suitable cell	√	√	√			Table 8.3.1.7c
	Default settings for a non-suitable "Off" cell	√	√	√			Table 8.3.1.7d

Table 8.3.1.7a: Default settings for a serving cell in a single cell environment

Parameter	Unit	FDD	TDD
		Cell 1	
Cell type		Serving cell	
UTRA RF Channel Number		Channel 1	
Qqualmin	dB	-24	-
Qrxlevmin	dBm	-81	
UE_TXPWR_MAX_RACH	dBm	21	
PCCPCH RSCP	dBm	-60	

Table 8.3.1.7b: Default settings for a serving cell and a suitable neighbour cell in a multi-cell enviromemt

Parameter	Unit	Cell 1		Cell 2		Cell 4	
		FDD	1.28Mcps TDD	FDD	1.28Mcps TDD	FDD	1.28Mcps TDD
Cell type		Serving cell		Suitable neighbour intra-frequency cell		Suitable neighbour inter-frequency cell	
UTRA RF Channel Number		Channel 1		Channel 1		Channel 2	
Qqualmin	dB	-24	-	-24	-	-24	-
Qrxlevmin	dBm	-81		-81			
UE_TXPWR_MAX_RACH	dBm	21		21			
CPICH Ec (see notes 1 and 2)	dBm/3.84 MHz	-60	-	-70	-	-70	-
PCCPCH RSCP	dBm	-	-60	-	-70	-	-70
NOTE 1(FDD): The power level is specified in terms of CPICH_Ec instead of CPICH_RSCP as RSCP is a receiver measurement and only CPICH_Ec can be directly controlled by the SS. NOTE 2(FDD): Both cells fulfil TS 25.304, 5.2.3.1.2 and TS 25.133, 8.1.2.2.1. NOTE3(TDD): Both cells fulfil TS 25.304, 5.2.3.1.2 and TS 25.123.							

Table 8.3.1.7c: Default settings for a non-suitable cell

Parameter	Unit	Level	
		FDD	1.28Mcps TDD
Qqualmin	dB	-24	-
Qrxlevmin	dBm	-81	
UE_TXPWR_MAX_RACH	dBm	21	
CPICH_Ec	dBm/3.84 MHz	-90	-
PCCPCH RSCP	dBm	-	-91
NOTE 1(FDD): The power level is specified in terms of CPICH_Ec instead of CPICH_RSCP as RSCP is a receiver measurement and only CPICH_Ec can be directly controlled by the SS NOTE 2: The cell is not suitable according to TS 25.304, 5.2.3.1.2			

Table 8.3.1.7d: Default settings for a non-suitable "Off" cell

Parameter	Unit	Level	
		FDD	1.28Mcps TDD
Qqualmin	dB	-24	-
Qrxlevmin	dBm	-81	
UE_TXPWR_MAX_RACH	dBm	21	
CPICH_Ec	dBm/3.84 MHz	≤ -122	-
PCCPCH RSCP	dBm	-	≤ -110
NOTE 1(FDD): The power level is specified in terms of CPICH_Ec instead of CPICH_RSCP as RSCP is a receiver measurement and only CPICH_Ec can be directly controlled by the SS. NOTE 2: The cell is not suitable according to TS 25.304, 5.2.3.1.2.			

8.3.2 Number of neighbour cells

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference

6.2.1	Basic Network	√	√	√			
6.2.2	Soft Handover Network (FDD)	√	-				
6.2.3	Hard Handover Network	√	√	√			
6.2.4	'Roaming' Network	√	√	√			

8.3.3 Cell/BS codes etc

Void.

8.3.4 Routing/location area

Void.

8.3.5 Network options settings

Void.

8.3.6 Power control mode

8.3.6.1 Downlink Power Control

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
6.6.1.1	Outer Loop Power Control	√	√	√			
6.6.1.2	Inner Loop Power Control	√	√	√			

8.3.6.2 Uplink Power Control

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
6.6.2.1	Outer Loop Power Control	√	√	√			
6.6.2.2	Inner Loop Power Control (FDD)	√	-				

8.3.7 Tx Diversity modes

6.7.1	Non-Diverse Operation	√	√		√		
6.7.2	Diverse Operation						Table 8.3.7

Table 8.3.7: Tx diversity

Tx diversity mode		FDD	1.28Mcps TDD
Open loop	TSTD	SCH	P-CCPCH, S-CCPCH, DwPCH, DPCH, PDSCH, PICH
	STTD	P-CCPCH, S-CCPCH, DPCH, PICH, AICH	-
	SCTD	-	P-CCPCH, S-CCPCH, PDSCH, PICH
Closed loop		-	DPCH, PDSCH

8.3.8 Compressed Mode Parameters

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference

6.8.1	Single compressed mode pattern	√	-				
6.8.2	Multiple compressed mode patterns	√	-				

8.3.9 BCCH parameters

Void.

8.3.10 Reference Radio Bearer configurations used in Radio Bearer interoperability testing

8.3.10.1 QoS Architecture and RAB attributes

Void.

8.3.10.2 RAB and signalling RB

8.3.10.2.1 RABs and signalling RBs

Table 8.3.10.2.1a: Prioritised RABs

#	Traffic class[3]	SSD[3]	Max. rate, kbps	CS/PS	Note
1	Conversational	Speech	UL:12.2 DL:12.2	CS	Both FDD and TDD
…	…	…	…	…	…
36	Interactive or Background	N/A	UL:144 DL:144	PS	Both FDD and TDD
37	Conversational	N/A	UL:42.8 DL:42.8	PS	FDD onlY
38	Conversational	Speech	UL:(12.65 8.85 6.6) DL:(12.65 8.85 6.6)	CS	FDD onlY
39	Interactive or Background	N/A	UL:64 DL:768	PS	FDD onlY

Table 8.3.10.2.1b: Signalling RBs

#	Maximum rate, kbps		Logical channel		PhyCh onto which SRBs are mapped	
	FDD	1.28Mcps TDD	FDD	1.28Mcps TDD	FDD	1.28Mcps TDD
1	UL:1.7 DL:1.7		DCCH		DPCH	
2	UL:3.4 DL:3.4		DCCH		DPCH	
3	UL:13.6 DL:13.6		DCCH		DPCH	
4	DL:27.2 (alt. 40.8)	DL:27.2 (alt. 13.6)	DCCH		SCCPCH	
5	UL:16.6	UL:16.8	CCCH		PRACH	
6	DL:30.4 (alt. 45.6)	DL:32 (alt. 16)	CCCH		SCCPCH	
7	DL:33.2 (alt. 49.8)	DL:33.6 (alt. 16.8)	BCCH:		SCCPCH	
8	DL:24 (alt. 6.4)	DL:12 (alt. 8)	PCCH		SCCPCH	
9	DL: 0.15	UL:16.8	DCCH	SHCCH	DPCH	PRACH
10	-	UL:16.8	-	SHCCH	-	PRACH or PUSCH
11	-	DL:32 (alt. 16)	-	SHCCH	-	SCCPCH
12	-	DL:16	-	SHCCH	-	SCCPCH or PDSCH

8.3.10.2.2 Combinations of RABs and Signalling RBs

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
6.10.2.2	Combinations on DPCH	√	√	√			Table : 8.3.10.2.2a
6.10.2.2	Combinations on DSCH and DPCH	√	-				
6.10.2.2	Combinations on SCCPCH	√	√	√			Table : 8.3.10.2.2b
6.10.2.2	Combinations on PRACH	√	√	√			Table : 8.3.10.2.2c
6.10.2.2	Combinations on DPCH and HS-PDSCH	√	-				
6.10.2.2	Combinations on PDSCH, SCCPCH, PUSCH and PRACH	-	√				
6.10.2.2	Combinations on PDSCH, SCCPCH, DPCH, PUSCH and PRACH	-	√				
6.10.2.3 6.11.5.3	Example of linkage between RABs and services	√	√		√		
6.10.2.4 6.11.5.4	Typical radio parameter sets						
6.10.2.4.1 6.11.5.4.1	Combinations on DPCH	√	√	√			
6.10.2.4.2	Combinations on PDSCH and DPCH	√	-				
6.10.2.4.3 6.11.5.4.4	Combinations on SCCPCH	√	√	√			
6.10.2.4.4 6.11.5.4.5	Combinations on PRACH	√	√	√			
6.10.2.4.5	Combinations on DPCH and HS-PDSCH	√	-				
6.11.5.4.2	Combinations on PDSCH, SCCPCH, PUSCH and PRACH	-	√				
6.11.5.4.3	Combinations on PDSCH, SCCPCH, DPCH, PUSCH and PRACH	-	√	√			

Table 8.3.10.2.2a: Combined on DPCH

FDD	1.28Mcps TDD
1)Stand-alone UL:1.7 DL:1.7 kbps SRBs for DCCH.	
…….	…….
23d) Interactive or background / UL:32 DL:32 kbps / PS RAB (20 ms TTI) + UL:3.4 DL:3.4 kbps SRBs for DCCH.	23d)Interactive or background / UL:32 DL:32 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.(20 msTTI)
……	……
59) Conversational / Speech / UL:42.8 DL:42.8 kbps / PS RAB + Interactive or background / UL:16 DL:16 kbps / PS RAB + Interactive or background / UL:16 DL:16 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH (REL-5).	59) Reserved for future use
60) Conversational / Speech / UL:42.8 DL:42.8 kbps / PS RAB + Interactive or background / UL:16 DL:16 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH (REL-5).	60) Reserved for future use
61) Conversational / unknown / UL:8 DL:8 kbps / PS RAB + Interactive or Background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH	
62) Conversational / speech / UL:(12.65 8.85 6.6) DL:(12.65 8.85 6.6) kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH + DL:0.15 kbps SRB#5 for DCCH (REL-5).	-
63) Interactive or background / UL:64 DL:768 kbps / PS RAB+ UL:3.4 DL: 3.4 kbps SRBs for DCCH (REL-5).	-

Table 8.3.10.2.2b: Combined SCCPCH

FDD	1.28Mcps TDD
1) Stand-alone 24 kbps SRB for PCCH	1) Stand-alone 12 kbps SRB for PCCH
2) Interactive or background / DL:32 kbps / PS RAB+ SRB for CCCH+ SRBs for DCCH+ SRB for BCCH	
-	2a) Interactive/Background 32 kbps PS RAB + Interactive/Background 32 kbps PS RAB+ SRBs for CCCH + SRB for DCCH + SRB for BCCH
-	2b) SRBs for CCCH + SRB for DCCH+ SRB for BCCH
3) Interactive or background / DL:32 kbps / PS RAB + SRB for PCCH + SRB for CCCH+ SRBs for DCCH+ SRB for BCCH	
4) RB for CTCH+ SRB for CCCH+SRB for BCCH	

Table 8.3.10.2.2c: Combined PRACH

FDD	1.28Mcps TDD
1)Interactive or background / UL:32 kbps / PS RAB + SRB for CCCH+ SRBs for DCCH	1) Interactive or background / UL:12.8 kbps / PS RAB + SRB for CCCH + SRBs for DCCH

8.4 Generic setup procedures

8.4.1 Basic Generic Procedures

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
7.1.1	UE Test States for Basic Generic Procedures	√	√		√		
7.1.2	Mobile terminated establishment of Radio Resource Connection	√	√		√		
7.1.3	Radio Bearer Setup Procedure	√	√		√		

8.4.2 Generic setup procedures

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
7.2.1	UE Test States for Generic setup procedures	√	√		√		
7.2.2	Registration of UE	√	√		√		
7.2.3	Call setup	√	√		√		

8.4.3 Test procedures for RF test

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
7.3.1	UE Test States for RF testing	√	√		√		
7.3.2	Test procedure for TX, RX and Performance Requirement (without handover)						
7.3.2.1	Initial conditions	√	√		√		
7.3.2.2	Definition of system information messages	√	√	√			
7.3.2.3	Procedure	√	√		√		
7.3.2.4	Specific message contents	√	√	√			
7.3.3	Test procedure for test cases using Cell_PCH or URA_PCH state						
7.3.3.1	Initial conditions	√	√		√		
7.3.3.2	Definition of system information messages	√	√	√			
7.3.3.3	Procedure	√	√		√		
7.3.3.4	Specific message contents	√	√	√			
7.3.4	Test procedure for Handover						
7.3.4.1	Initial conditions	√	√		√		
7.3.4.2	Definition of system information messages	√	√	√			
7.3.4.3	Procedure	√	√		√		
7.3.4.4	Specific message contents	√	√	√			
7.2.5	Session setup						
7.3.5	Test procedure for test cases using CELL_FACH state						
7.3.5.1	Initial conditions	√	√		√		
7.3.5.2	Definition of system information messages	√	√	√			
7.3.5.3	Procedure	√	√		√		
7.3.5.4	Specific message contents	√	√	√			
7.3.6	Test procedure for HSDPA RF Performance Requirement						
7.3.6.1	Initial conditions	√	√		√		
7.3.6.2	Definition of system information messages	√	√	√			
7.3.6.3	Procedure	√	√		√		
7.3.6.4	Specific message contents	√	√	√			

8.4.4 Common generic procedures for AS testing

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
7.4.1	UE RRC Test States for common procedures	√	√	√			
7.4.2	Generic Setup Procedure for RRC test cases	√	√	√			

8.5 Default Message Contents

8.5.1 Default Message Contents for Signalling

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
	Contents of ACTIVE SET UPDATE message: AM	√	-				
	Contents of ACTIVE SET UPDATE COMPLETE message: AM	√	-				
	Contents of ACTIVE SET UPDATE FAILURE message: AM	√	-				
	Contents of CELL UPDATE message: TM	√	√	√			
	Contents of CELL UPDATE CONFIRM message: UM	√	√	√			
	Contents of UPLINK DIRECT TRANSFER message: AM	√	√	√			
	Contents of DOWNLINK DIRECT TRANSFER message: AM	√	√		√		
	Contents of HANDOVER FROM UTRAN COMMAND-GSM message: AM	√	√	√			
	Contents of HANDOVER FROM UTRAN FAILURE message: AM	√	√	√			
	Contents of INITIAL DIRECT TRANSFER message: AM	√	√	√			
	Contents of MEASUREMENT CONTROL message: AM	√	√	√			
	Contents of MEASUREMENT CONTROL FAILURE message: AM	√	√		√		
	Contents of MEASUREMENT REPORT message: AM	√	√	√			
	Contents of PAGING TYPE 1 message: TM (Speech in CS)	√	√		√		
	Contents of PAGING TYPE 1 message: TM (The others of speech in CS)	√	√		√		
	Contents of PAGING TYPE 1 message: TM (Packet in PS)	√	√		√		
	Contents of PAGING TYPE 1 message: TM (SMS in CS)	√	√		√		
	Contents of PAGING TYPE 1 message: TM (SMS in PS)	√	√		√		
	Contents of PAGING TYPE 2 message: AM (Speech in CS)	√	√		√		
	Contents of PHYSICAL CHANNEL RECONFIGURATION message: AM	√	√	√			

	or UM						
	Contents of PHYSICAL CHANNEL RECONFIGURATION COMPLETE message: AM	√	√	√			
	Contents of PHYSICAL CHANNEL RECONFIGURATION FAILURE message: AM	√	√	√			
	Contents of RADIO BEARER SETUP message: AM or UM	√	√	√			
	Contents of RADIO BEARER SETUP COMPLETE message: AM	√	√	√			
	Contents of RADIO BEARER SETUP FAILURE message: AM	√	√	√			
	Contents of RADIO BEARER RECONFIGURATION message: AM or UM	√	√	√			
	Contents of RADIO BEARER RECONFIGURATION FAILURE message: AM	√	√	√			
	Contents of RADIO BEARER RECONFIGURATION COMPLETE message: AM	√	√	√			
	Contents of RADIO BEARER RELEASE message: AM or UM	√	√	√			
	Contents of RADIO BEARER RELEASE COMPLETE message: AM	√	√		√		
	Contents of RADIO BEARER RELEASE FAILURE message: AM	√	√		√		
	Contents of RRC CONNECTION REQUEST message: TM	√	√	√			
	Contents of RRC CONNECTION REJECT message: UM	√	√		√		
	Contents of RRC CONNECTION RELEASE message: UM	√	√		√		
	Contents of RRC CONNECTION RELEASE COMPLETE message: AM or UM	√	√		√		
	Contents of RRC CONNECTION SETUP message: UM (Transition to CELL_DCH)	√	√	√			
	Contents of RRC CONNECTION SETUP message: UM (Transition to CELL_FACH)	√	√	√			
	Contents of RRC CONNECTION SETUP COMPLETE message: AM	√	√		√		
	Contents of RRC STATUS message: AM	√	√		√		
	Contents of SECURITY MODE COMMAND message: AM	√	√		√		
	Contents of SECURITY MODE COMPLETE message: AM	√	√		√		
	Contents of SECURITY MODE FAILURE message: AM	√	√		√		
	Contents of TRANSPORT CHANNEL RECONFIGURATION message: AM or UM	√	√	√			
	Contents of TRANSPORT CHANNEL RECONFIGURATION COMPLETE message: AM	√	√	√			
	Contents of TRANSPORT CHANNEL	√	√	√			

	RECONFIGURATION FAILURE message: AM						
	Contents of TRANSPORT FORMAT COMBINATION CONTROL message: AM or UM (in CELL_DCH)	√	√	√			
	Contents of TRANSPORT FORMAT COMBINATION CONTROL FAILURE message: AM	√	√		√		
	Contents of UE CAPABILITY ENQUIRY message: AM or UM	√	√	√			
	Contents of UE CAPABILITY INFORMATION message: AM	√	√	√			
	Contents of UE CAPABILITY INFORMATION CONFIRM message: UM	√	√		√		
	Contents of URA UPDATE message: TM	√	√		√		
	Contents of URA UPDATE CONFIRM message: UM	√	√		√		
	Contents of UTRAN MOBILITY INFORMATION message: AM or UM	√	√		√		
	Contents of UTRAN MOBILITY INFORMATION CONFIRM message: AM	√	√		√		
	Contents of UTRAN MOBILITY INFORMATION FAILURE message: AM	√	√		√		
	Contents of RRC STATUS message: AM	√	√		√		
	Contents of HANDOVER FROM UTRAN COMMAND-GSM message: AM	√	√		√		
	Contents of HANDOVER FROM UTRAN FAILURE message: AM	√	√		√		
	Contents of PHYSICAL CHANNEL RECONFIGURATION message: AM or UM	√	√	√			
	Contents of PHYSICAL CHANNEL RECONFIGURATION COMPLETE message: AM	√	√	√			
	Contents of PHYSICAL CHANNEL RECONFIGURATION FAILURE message: AM	√	√		√		

8.5.2 Default Message Contents for RF

Clause	Title	FDD	1.28 Mcps TDD	To be Different	To be Same	Brief Description	Reference
	Contents of Activate RB Test Mode message	√	√		√		
	Contents of Close UE Test Loop message	√	√	√			
	Contents of Open UE Test Loop message	√	√		√		
	Contents of PAGING TYPE 1 message: TM (CS)	√	√		√		

	Contents of PAGING TYPE 1 message: TM (PS)	√	√		√		
	Contents of RADIO BEARER SETUP message: AM or UM	√	√	√			
	Contents of RADIO BEARER SETUP message: AM or UM (HSDPA)	√	-				
	Contents of RADIO BEARER SETUP message: BTFD RMC	√	-				
	Contents of RRC CONNECTION RELEASE message: UM	√	-				
	Contents of RRC CONNECTION SETUP message: UM	√	√	√			
	Contents of SECURITY MODE COMMAND message: AM	√	√		√		

Annex A:
Change history

Change history							
Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New