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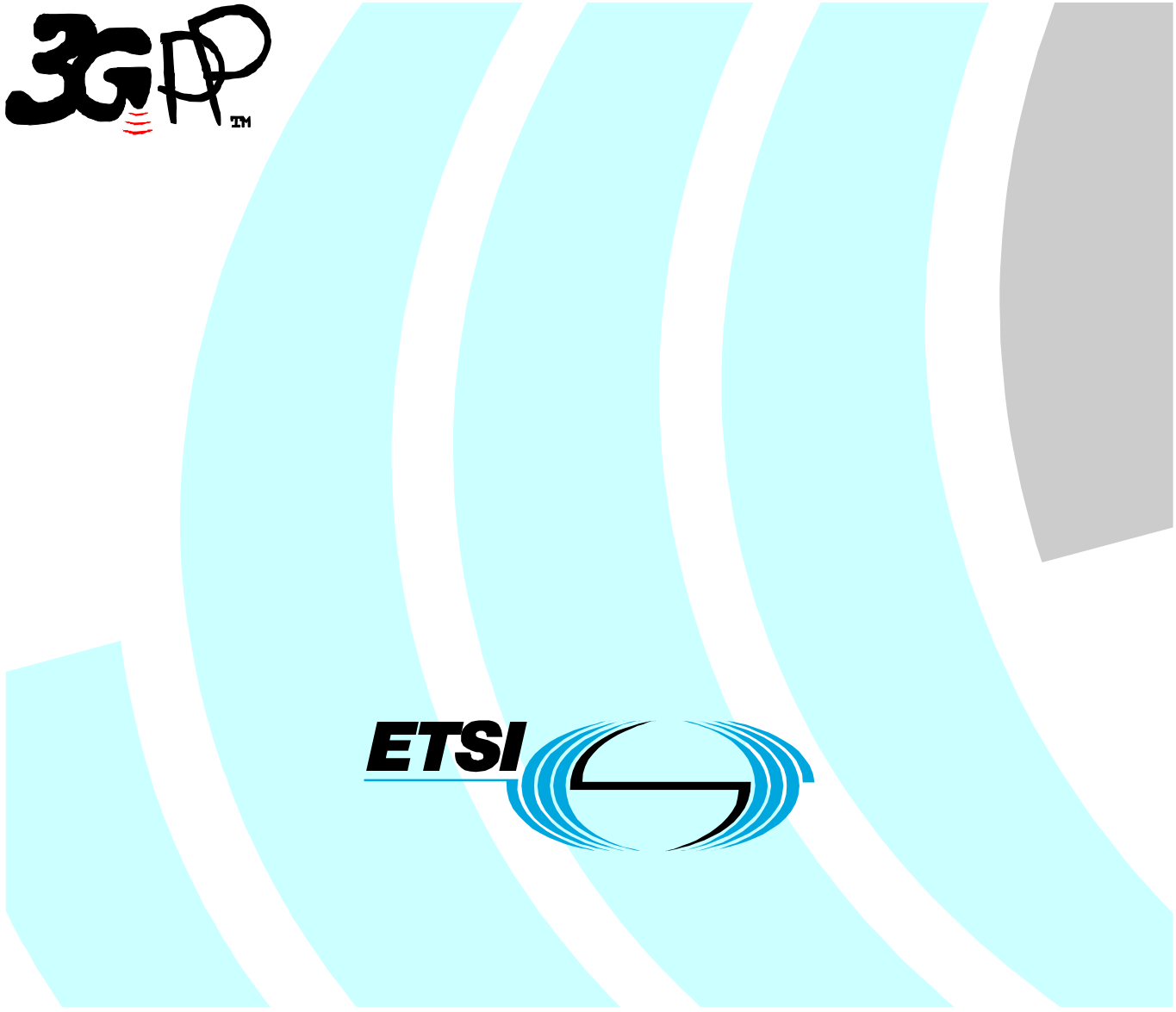
Technical Specification

**Universal Mobile Telecommunications System (UMTS);
Common test environments for User Equipment (UE)
conformance testing
(3GPP TS 34.108 version 6.0.0 Release 6)**



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Foreword

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Contents

Foreword

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

The contents of the present document are subject to continuing work within the TSG 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:

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Introduction

The definition of the Conformance Tests for UE in 3G will be a complex task as the complete test suite covers RF, EMC and Protocol aspects of the UE.

Each test requires a Test Environment to be defined in which the UE has to operate to defined standards, constraints and performance. The overall task can be simplified if there are a number of well defined and agreed Common Test Environments where every one can be used for a number of tests. Hence the present documents defines testing conditions that are common to several tests avoiding the need to duplicate the same information for every single test.

The present document defines default values for a variety of common areas. Where values are not specified in test cases, the defaults in the present document will apply. If specified, the test case values will take precedence.

The present document addresses the FDD mode as well as the TDD mode.

1 Scope

The present document contains definitions of reference conditions and test signals, default parameters, reference radio bearer configurations used in radio bearer interoperability testing, common radio bearer configurations for other test purposes, common requirements for test equipment and generic set-up procedures for use in UE conformance tests.

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 34.123-1: "User Equipment (UE) conformance specification; Part 1: Protocol conformance specification".

[2] 3GPP TS 34.121: "Terminal Conformance Specification; Radio Transmission and Reception (FDD)".

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

[4] 3GPP TS 34.124: "ElectroMagnetic Compatibility (EMC) requirements for Mobile terminals and ancillary equipment".

[5] 3GPP TS 34.122: "Terminal Conformance Specification; Radio Transmission and Reception (TDD)".

[6] 3GPP TS 34.109: "Terminal logical test interface; Special conformance testing functions".

[7] 3GPP TS 25.301 "Radio interface protocol architecture".

[8] 3GPP TS 25.214: "Physical layer procedures (FDD)".

[9] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".

[10] 3GPP TR 25.990: "Vocabulary".

[11] 3GPP TS 25.101: "User Equipment (UE) radio transmission and reception (FDD)".

[12] 3GPP TS 25.102: "User Equipment (UE) radio transmission and reception (TDD)".

[13] 3GPP TS 25.211: "Physical channels and mapping of transport channels onto physical channels (FDD)".

[14] 3GPP TS 25.212: "Multiplexing and channel coding (FDD)".

[15] 3GPP TS 23.107: "Quality of Service (QoS) concept and architecture".

[16] 3GPP TS 26.110: "Codec for circuit switched multimedia telephony service; General description".

[17] 3GPP TS 29.007: "General requirements on interworking between the Public Land Mobile Network (PLMN) and the Integrated Services Digital Network (ISDN) or Public Switched Telephone Network (PSTN)".

[18] 3GPP TR 23.910: "Circuit switched data bearer service".

[19] Void.

[20] 3GPP TS 25.104: "Base Station (BS) radio Transmission and Reception (FDD)".

[21] 3GPP TS 25.105: "Base Station (BS) radio Transmission and Reception (TDD)".

[22] 3GPP TS 31.101: "UICC-terminal interface; Physical and logical characteristics".

[23] 3GPP TS 31.102: "Characteristics of the USIM application".

[24] 3GPP TS 33.102: "3G security; Security architecture".

[25] 3GPP TS 33.103: "3G security; Integration guidelines".

[26] 3GPP TS 33.105: "Cryptographic algorithm requirements".

[27] 3GPP TS 25.224: "Physical layer procedures (TDD)".

[28] 3GPP TS 25.221: "Physical channels and mapping of transport channels onto physical channels (TDD)".

[29] 3GPP TS 25.222: "Multiplexing and channel coding (TDD)".

[30] 3GPP TS 25.133: "Requirements for support of radio resource management (FDD)".

[31] 3GPP TS 51.010-1: "Mobile Station (MS) conformance specification; Part 1: Conformance specification".

[32] 3GPP TS 24.008: "Mobile radio interface layer 3 specification; Core network protocols; Stage 3".

[33] 3GPP TS 25.171: "Requirements for support of Assisted Global Positioning System (A-GPS); Frequency Division Duplex (FDD)".

[34] 3GPP TS 25.331: "Radio Resource Control (RRC) protocol specification".

[35] 3GPP TS 25.223: "Spreading and modulation (TDD)".

[36] 3GPP TS 25.304: "User Equipment (UE) procedures in idle mode and procedures for cell reselection in connected mode".

[37] 3GPP TS 25.123: "Requirements for support of radio resource management (TDD)".

[38] 3GPP TS 25.321: "Medium Access Control (MAC) protocol specification".

[39] 3GPP TS 31.120: "UICC-terminal interface; Physical, electrical and logical test specification".

[40] 3GPP TS 31.121: "Base Station System (BSS) equipment specification; Radio aspects".

[41] 3GPP TS 34.171: "Terminal conformance specification; Assisted Global Positioning System (A-GPS); Frequency Division Duplex (FDD)".

[42] 3GPP TS 23.032: "Universal Geographical Area Description (GAD)".

[43] NATO Standard Agreement STANAG 4294 Issue 1

[44] 3GPP TS 43.020: "Security related network functions"

3 Definitions, abbreviations and symbols

3.1 Definitions

For the purposes of the present document, the terms and definitions given in 3GPP TR 21.905 [9], 3GPP TR 25.990 [10] and the following apply:

maximum average power: average transmitter output power obtained over any specified time interval, including periods with no transmission, when the transmit time slots are at the maximum power setting

3.2 Abbreviations

For the purposes of the present document, the abbreviations given in 3GPP TR 21.905 [9], 3GPP TR 25.990 [10] and the following apply:

AFC	Automatic Frequency Control
A-GPS	Assisted - Global Positioning System
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
GPS	Global Positioning System
GSS	GPS System Simulator
HYB	HYBrid
NAS	Non-Access Stratum
OBW	Occupied BandWidth
OCNS	Orthogonal Channel Noise Simulator

NOTE: A mechanism used to simulate the users or control signals on the other orthogonal channels of a downlink.

PRACH	Physical Randome Access CHannel
PS	Packet Switching
RAB	Radio Access Bearer
RB	Radio Bearer
RRC	Radio Resource Control

NOTE: (for sub-Layer of layer 3) but also Root-Raised Cosine (for Filter shape).

SCCPCH	Secondary Common Control Physical CHannel
SMS	Short Message Service
SRB	Signalling Radio Bearer
SS	System Simulator
SSD	Source Statistics Descriptor
TC	Turbo Coding
TLM	TeLeMetry word

NOTE: It contains an 8-bits preamble (10001011).

TM	Transparent Mode
TOW	Time Of Week
TTFF	Time To First Fix
UL	UpLink
UM	Unacknowledgement Mode

3.3 Symbols

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

I_{oc}	The power spectral density of a band limited white noise source (simulating interference from other cells) as measured at the UE antenna connector.

4 Common requirements of test equipment

Mobile conformance testing can be categorized into 3 distinct areas:

- RF Conformance Testing.
- EMC Conformance Testing.
- Signalling Conformance Testing.

The test equipment required for each category of testing may or not be different, depending on the supplier of the test equipment. However, there will be some generic requirements of the test equipment that are essential for all three categories of test, and these are specified in this clause.

In addition, there will be requirements to test operation in multi-system configurations (eg UTRA plus GSM/DCS1800). However, these would not form a common test equipment requirement for the three test areas and are not considered in the present document.

4.1 General Functional Requirements

NOTE: This clause has been written such that it does not constrain the implementation of different architectures and designs of test equipment.

All test equipment used to perform conformance testing on a UE shall provide a platform suitable for testing UE's that are either:

a) FDD Mode; or

b) TDD Mode; or

c) both FDD/TDD Modes.

All test equipment shall provide (for the mode(s) supported) the following minimum functionality.

- The capability of emulating a single UTRA cell with the appropriate channels to allow the UE to register on the cell.
- The capability to allow the UE to set up an RRC connection with the System Simulator, and to maintain the connection for the duration of the test.
- The capability (for the specific test):
  - to select and support an appropriate Radio Bearer for the downlink;
  - to set the appropriate downlink power levels;
  - to set up and support the appropriate Radio Bearer for the uplink;
  - to set and control the uplink power levels.

4.2 Minimum performance levels

4.2.1 Supported Cell Configuration

The System Simulator shall provide the capability to simulate a minimum number of cells (of the appropriate UTRA Mode) whose number and capabilities are governed by the test cases that need to be performed (test cases are defined in 3GPP TS 34.123-1 [1] (Signalling), 3GPP TS 34.121 [2] (RF-FDD) and 3GPP TS 34.122 [5] (RF-TDD)). For this purpose test cases can be split into two different categories: Tests that require only one cell and Tests that require several cells.

To perform test cases requiring one cell, the system simulator must provide a Cell offering the capabilities to perform all the test cases in this category.

To perform test cases requiring several cells, additional cells must be provided by the system simulator. The additional cells, however, need only provide a minimum set of capabilities so as to support the first cell in carrying out the multi-cell test cases.

The type and number of channels (especially physical channels) constitute an important set of capabilities for a cell. The following clauses list possible channels that may be supported by the SS. Each channel type, however, and the minimum number of channels needed are only mandatory if specific test cases require them.

The mapping between Logical and Transport channels is as described in 3GPP TS 25.301 [7]. Similarly the mapping between Transport channels and Physical channels is as described in 3GPP TS 25.211 [13] for the FDD mode, and 3GPP TS 25.221 [28] for the TDD mode. The reference measurement channels (mapping between Transport channels and Physical channels for DTCH/DCCH to be tested) are defined in 3GPP TS 34.121 [2] annex C for FDD and 3GPP TS 34.122 [5] annex C for TDD.

4.2.1.1 Supported Channels for FDD Mode

4.2.1.1.1 Logical channels

Logical channel	Minimum number	Comments
BCCH	1	
CCCH	1	
DCCH	4	2 for RRC testing, 2 for NAS testing
PCCH	1	
DTCH	n <FFS>	Depending on SS's support for RB service testing (See clause 14 of 3GPP TS 34.123-1 [1])

4.2.1.1.2 Transport channels

Transport channel	Minimum number	Comments
BCH	1	
FACH	1	
PCH	1	
DCH	n <FFS>	
DSCH	1	Release 99 and Release 4 only.
RACH	2	
CPCH	1	Release 99 and Release 4 only.
FAUSCH	N/A	Not in Release 1999

4.2.1.1.3 Physical channels

Physical channel	Minimum number	Comments
P-CCPCH	1	Primary Common Control Physical channel. This is used by the Cell to Broadcast System Information messages, it is transmitted using the Primary Scrambling Code for the Cell.
P-CPICH	1	Primary Common Pilot Channel using the Primary Scrambling Code for the Cell.
S-CPICH	1 (For RF Tests)	Secondary Common Pilot Channel. This signal is used as the phase reference for some RF tests.
SCH	1	Synchronization Channel (includes P-SCH and S-SCH)
S-CCPCH	2	Secondary Common Control Physical channel.
PICH	1	To identify when the UE should access the PCCH for Paging Messages.
AICH	1	General Acquisition Indicator Channel that can be used for: - Aquisition Indicator Channel, for PRACH - Access Preamble Acquisition Indicator Channel (AP-ICH), for PCPCH. (For release 99 and release 4 only) - Collision-Detection/Channel-Assignment Indicator Channel (CD/CA-ICH), for PCPCH. (For release 99 and release 4 only)
DPDCH	3	Downlink Physical Data Channel. There will be a single DPCCH associated with all the DPDCHs used for Layer 1 signalling. This number is for the First Cell. Additional Cells may define a lower number which should be at least 1.
PDSCH	1	Physical Downlink Shared Channel. Release 99 and Release 4 only.
DPCH	1	Uplink Dedicated Physical channel

Physical channel	Minimum number	Comments
PRACH	2	Physical Random Access Channel.
PCPCH	1	Physical Common Packet Channel. (For release 99 and release 4 only)
CSICH	1	CPCH Status Indicator Channel. (For release 99 and release 4 only)

4.2.1.2 Supported Channels for TDD Mode

4.2.1.2.1 Logical channels

Logical channel	Minimum number	Comments
Control channels		
BCCH	1	Broadcast Control Channel: DL channel for broadcasting system control information.
CCCH	1	Common Control Channel: Bi-directional channel for transmitting control information between network and UEs. This channel is commonly used by the UEs having no RRC connection with the network and by the UEs using common transport channels when accessing a new cell after cell reselection.
DCCH	4	Dedicated Control Channel: A point-to-point bi-directional channel that transmits dedicated control information between a UE and the network. This channel is established through RRC connection setup procedure. 2 channels for RRC testing and 2 channels for NAS testing estimated.
PCCH	1	Paging Control Channel: DL channel that transfers paging information. This channel is used when the network does not know the location cell of the UE, or, the UE is in the cell connected state
SHCCH	1	Shared Channel Control Channel: Bi-directional channel that transmits control information for uplink and downlink shared channels between network and UEs. This channel is for TDD only.
Traffic channels		
DTCH	1	Dedicated Traffic Channel is a point-to-point channel, dedicated to one UE, for the transfer of user information. A DTCH can exist in both UL and DL.
CTCH	1	Common Traffic Channel is a point-to-multipoint unidirectional channel for transfer of dedicated user information for all or a group of specified UEs.

4.2.1.2.2 Transport channels

Transport channel	Minimum number	Comments
BCH	1	Broadcast Channel: DL channel used to broadcast system and cell-specific information.
FACH	1	Forward Access Channel: DL channel used to carry control information to a mobile station when the system knows the location cell of the mobile station (may also carry short user packets).
PCH	1	Paging Channel: DL channel used to carry control information to a mobile station when the system does not know the location cell of the mobile station.
DCH	2	Dedicated Channel:UL or DL channel used to carry user or control information between the UTRAN and a UE
DSCH	1	DL shared channel: DL channel shared by several UEs carrying dedicated control or traffic data.
USCH	1	UL shared channel: UL channel shared by several UEs carrying dedicated control or traffic data.
RACH	1	Random Access Channel: UL channel used to carry control information from mobile station. The RACH may also carry short user packets.

4.2.1.2.3 Physical channels (3.84 Mcps option)

Physical channel	Minimum number	Comments
P-CCPCH	1	Primary Common Control Physical channel. . The BCH as described in clause 4.2.1 is mapped onto the P-CCPCH. The position (time slot / code) of the P-CCPCH is known from PSCH.

SCH	1	Synchronization Channel. Code group of a cell can be derived from the synchronization channel. In order not to limit the uplink/downlink asymmetry the SCH is mapped on one or two downlink slots per frame only.
S-CCPCH	2	Secondary Common Control Physical channel. PCH and FACH as described in clause 4.2.1 are mapped onto one or more S-CCPCH.
PICH		Paging Indicator Channel is a physical channel used to carry the paging indicators.
DPCH (DL)	3	Downlink Dedicated Physical channel. DCH channels are mapped onto DPCH
PDSCH	1	Physical Downlink Shared Channel. DSCH as desribed in clause 4.2.1 is mapped onto one or more PDSCH.
DPCH (UL)	1	Uplink Dedicated Physical channel. DCH channels are mapped onto DPCH.
PUSCH	1	Physical Uplink Shared Channel. The USCH as desribed in clause 4.2.1 is mapped onto one or more PUSCH. Timing advance, as described in 3GPP TS 25.224 [27], clause 4.3, is applied to the PUSCH.
PRACH	2	Physical Random Access Channel. The RACH as described in clause 4.2.1 is mapped onto PRACH
PNBSCH	1	Physical node B synchronization channel: In case cell sync bursts are used for Node B synchronization the PNBSCH shall be used for the transmission of the cell sync burst 3GPP TS 25.223 [35]. The PNBSCH shall be mapped on the same timeslot as the PRACH.

4.2.1.2.4 Physical channels (1.28 Mcps option)

Physical channel	Minimum number	Comments
P-CCPCH	2	Primary Common Control Physical channel.The BCH as described in clause 4.2.1 is mapped onto the P-CCPCH1 and P-CCPCH2. The position (time slot / code) of the P-CCPCHs is fixed in the 1.28 Mcps TDD. The P-CCPCHs are mapped onto the first two code channels of timeslot#0 with spreading factor of 16.
DwPCH	1	Synchronization Channel for DL. Present in each 5 ms subframe.
UpPCH	1	Synchronization Channel for UL. Present in each 5 ms subframe.
S-CCPCH	2	Secondary Common Control Physical channel. PCH and FACH as described in clause 4.2.1 are mapped onto one or more S-CCPCH.
PICH		Paging Indicator Channel is a physical channel used to carry the paging indicators.
DPCH (DL)	3	Downlink Dedicated Physical channel.DCH channels are mapped onto DPCH
PDSCH	1	Physical Downlink Shared Channel. PDSCH provides the possibility for transmission of TFCI, SS, and TPC in downlink.
DPCH (UL)	1	Uplink Dedicated Physical channel. DCH channels are mapped onto DPCH.
PUSCH	1	Physical Uplink Shared Channel. PUSCH provides the possibility for transmission of TFCI, SS, and TPC in uplink.
FPACH	1	Fast Physical Access Channel. FPACH is used by the Node B to carry, in a single burst, the acknowledgement of a detected signature with timing and power level adjustment indication to a user equipment.
PRACH	2	Physical Random Access Channel. The RACH as described in clause 4.2.1 is mapped onto one or more uplink Physical Random Access Channels (PRACH).

4.2.1.3 Support of T_{cell} timing offset

In test case parameter declarations, the parameter T_{cell} may be specified between 0 to 38 399, to allow for extensibility. However, the system simulator is required only to support a maximum T_{cell} value of 2 304, with a step resolution of 256. The SS may limit a T_{cell} value of greater than 2 304, and may round T_{cell} to the nearest multiple of 256.

4.2.2 RF Performance

4.2.2.1 Frequency of Operation

The System Simulator shall be capable of adjusting the Carrier Frequency of the DL channels to any frequency allowed in the DL frequency band. The DL frequency shall be accurate to the level of accuracy set by the core specications 3GPP TS 25.104 [20] for FDD and 3GPP TS 25.105 [21] for TDD.

For RF tests, the requirement of Test Equipment is described in 3GPP TS 34.121 [2] annex F for FDD and 3GPP TS 34.122 [5] annex F for TDD respectively.

4.2.2.2 Power Level Setting Accuracy

The system simulator shall be able to adjust the average power output of the DL Channels to meet the absolute accuracy of the system simulator DL power levels covered in clause 5.4.1 Downlink Signal Levels.

For RF tests, the requirement of Test Equipment is described in 3GPP TS 34.121 [2] annex F for FDD and 3GPP TS 34.122 [5] annex F for TDD respectively.

The system simulator shall be capable of altering the power of the DL Dedicated channels under control of the UE Layer 1 Signalling information.

4.2.2.3 Uplink Power Control

The system simulator shall be able to command the UE to transmit at the maximum level for its power class or a lower level required for specific tests. The system simulator shall also provide the capability of generating the Layer 1 Signalling information to set the power levels of the Uplink Dedicated Channels from the UE to lower levels if required.

4.2.2.4 Uplink Signal Handling

For FDD mode, the System Simulator shall not be damaged by a Power Class 1 UE transmitting at the maximum power level permitted in 3GPP TS 25.101 [11] and for TDD mode by a Power Class 2 UE transmitting at the maximum power level permitted in 3GPP TS 25.102 [12].

4.2.2.5 Uplink Sensitivity

The simulator shall be able to receive uplink transmissions from the UE when it is transmitting at the minimum power level defined in 3GPP TS 25.101 [11] for FDD mode, and 3GPP TS 25.102 [12] for TDD mode.

Editor's note: this is obviously a useful feature for the system simulator; however it is <ffs> if it should be an essential common requirement for a protocol test system.

4.2.3 Timers Tolerances

All the timers used during testing are within a tolerance margin given by the equation below. If for a specific test a different tolerance value is required then this should be specified in the relevant test document (i.e. the document where the test is described).

Timer tolerance = 10%, or $2 \times \text{TTI} + t_{delta}$, whichever value is the greater.

Where t_{delta} is 55 ms.

5 Reference test conditions

5.1 Test frequencies

The test frequencies are based the UMTS frequency bands defined in the core specifications.

To avoid interference with adjacent frequency bands the lowest test frequency (downlink and uplink) needs to be offset upwardly by at least 2.6 MHz since the channel's width is 5 MHz for FDD and 3.84 Mcps TDD option, and 0.8 MHz for 1.28 Mcps TDD option since the channel's width is 1.6 MHz. The raster spacing is 200KHz. Similarly the highest test frequency (downlink and uplink) needs to be offset downwardly by at least 2.6 MHz for FDD and 3.84 Mcps TDD option, and 0.8 MHz for 1.28 Mcps TDD option.

NOTE1: Additional regulations concerning interferences to frequency bands used by different systems may also exist. Those regulations are specific to the country where the test equipment is used and need to be taken into account if they require a higher offset than 2.6 MHz from the edge frequencies for FDD and 3.84 Mcps TDD option, and 0.8 MHz for 1.28 Mcps TDD option.

NOTE2: In Band VI, to avoid interference with adjacent frequency bands the lowest test frequency (downlink and uplink) needs to be offset upwardly by at least 2.5 MHz, highest test frequency (downlink and uplink) needs to be offset downwardly by at least 2.5 MHz from the edge frequencies since additional center frequencies are specified according to 3GPP TS 25.101 [11].

5.1.1 FDD Mode Test frequencies

UTRA/FDD is designed to operate in one of three paired bands 3GPP TS 25.101 [11]. The reference test frequencies for the common test environment for each of the 5 operating bands are defined in the following tables:

5.1.1.1 FDD reference test frequencies for Operating Band I

Test Frequency ID	UARFCN	Frequency of Uplink	UARFCN	Frequency of Downlink
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

5.1.1.2 FDD reference test frequencies for Operating Band II

Test Frequency ID	UARFCN	Frequency of Uplink	UARFCN	Frequency of Downlink
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

5.1.1.3 FDD reference test frequencies for Operating Band III

Test Frequency ID	UARFCN	Frequency of Uplink	UARFCN	Frequency of Downlink
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

5.1.1.4 Void

5.1.1.5 FDD reference test frequencies for Operating Band V

Test Frequency ID	UARFCN	Frequency of Uplink	UARFCN	Frequency of Downlink
Low Range	4 133	826.6 MHz	4 358	871.6 MHz
Mid Range	4 175	835 MHz	4 400	880 MHz
High Range	4 232	846.4 MHz	4 457	891.4 MHz

5.1.1.6 FDD reference test frequencies for Operating Band VI

Test Frequency ID	UARFCN	Frequency of Uplink	UARFCN	Frequency of Downlink
Low Range	4 163	832.6 MHz	4 388	877.6 MHz
Mid Range	4 175	835.0MHz	4 400	880.0 MHz
High Range	4 187	837.4 MHz	4 412	882.4 MHz

5.1.2 TDD Mode Test frequencies

UTRA/TDD is designed to operate in one of three unpaired bands (3GPP TS 25.102 [12]). The reference test frequencies for the common test environment for each of the 3 operating bands are defined in the following tables:

5.1.2.1 Standard TDD reference test frequencies (3.84 Mcps option)

Test Frequency ID	Band a		Band b		Band c	
	UARFCN	Frequency (UL and DL)	UARFCN	Frequency (UL and DL)	UARFCN	Frequency (UL and DL)
Low Range	9 513	1 902.6 MHz	9 263	1 852.6 MHz	9 563	1 912.6 MHz
Mid Range	9 550	1 910 MHz	9 400	1 880 MHz	9 600	1 920 MHz

High Range	9 587	1 917.4 MHz	9 537	1 907.4 MHz	9 637	1 927.4 MHz
Low Range	10 063	2 012.6 MHz	9 663	1 932.6 MHz		
Mid Range	10 087	2 017.4 MHz	9 800	1 960 MHz		
High Range	10 112	2 022.4 MHz	9 937	1 987.4 MHz		

5.1.2.2 Standard TDD reference test frequencies (1.28 Mcps option)

Test Frequency ID	Band a		Band b		Band c	
	UARFCN	Frequency (UL and DL)	UARFCN	Frequency (UL and DL)	UARFCN	Frequency (UL and DL)
Low Range	9 504	1 900.8 MHz	9 254	1 850.8 MHz	9 554	1 910.8 MHz
Mid Range	9 550	1 910 MHz	9 400	1 880 MHz	9 600	1 920 MHz
High Range	9 596	1 919.2 MHz	9 546	1 909.2 MHz	9 646	1 929.2 MHz
Low Range	10 054	2 010.8 MHz	9 654	1 930.8 MHz		
Mid Range	10 087	2 017.4 MHz	9 800	1 960 MHz		
High Range	10 121	2 024.2 MHz	9 946	1 989.2 MHz		

5.2 Radio conditions

There are a number of radio propagation conditions defined in 3GPP TS 34.121 [2] for FDD mode and 3GPP TS 34.122 [5] for TDD mode, which may be required for a number of tests and hence can be considered as Common Conditions for FDD mode and TDD mode respectively.

NOTE: The System Simulator is required to support at least the normal Propagation Condition; support of the other propagation conditions is optional, depending on the specific test supported by the simulator.

5.2.1 Normal propagation condition

This condition provides a connection between the System Simulator that is effectively free from Additive White Gaussian Noise, and where there are no fading or multipath effects. This condition will be used for Signalling tests.

5.2.2 Static propagation condition

See 3GPP TS 34.121 [2], annex D for FDD.

For TDD mode, the propagation for the static performance measurement is an Additive White Gaussian Noise (AWGN) environment. No fading and multi-paths exist for this propagation model.

5.2.3 Multi-path fading propagation conditions

See 3GPP TS 34.121 [2], annex D for FDD and 3GPP TS 34.122 [5], annex D for TDD.

5.2.4 Moving propagation conditions

See 3GPP TS 34.121 [2], annex D for FDD. There are no currently defined Moving propagation conditions for TDD.

5.2.5 Birth-Death propagation conditions

See 3GPP TS 34.121 [2], annex D for FDD. There are no currently defined Birth-Death propagation conditions for TDD.

5.3 Standard test signals

Reference 3GPP TS 25.101 [11] and 3GPP TS 25102 [12] for definitions of standard test signals.

5.4 Signal levels

The power levels given in clauses 5.4.1 and 5.4.2 apply for Signalling tests only. For RF tests power levels are given in 3GPP TS 34.121 [2], annex E for FDD and 3GPP TS 34.122 [5], annex E for TDD.

5.4.1 Downlink signal levels

<FFS>

5.4.2 Uplink signal levels

<FFS>

6 Reference system configurations

This clause defines a number of Reference System Configurations which can be used for different tests.

6.1 Simulated network environments

The UE will eventually have to operate in either single mode networks (FDD or TDD), dual mode networks (FDD+TDD), or inter-RAT networks (FDD or TDD + GSM).

The following tables list the default parameters for 1 to 8 cell environments for testing.

To simplify TTCN implementation the total number of simultaneous cells in intra-frequency, inter-frequency and inter-RAT cell information lists (SIB11) have been limited to 8 and a specific cell numbering scheme have been defined to associate cell identifiers with type of cell.

- Cell 1, Cell 2, Cell 3, Cell 7, Cell 8 and Cell 11 are associated with FDD/TDD cells using frequency f1;
- Cell 4, Cell 5 and Cell 6 are associated with FDD/TDD cells using frequency f2; and
- Cell 9 and Cell 10 are associated with GSM cells.

For protocol testing in FDD and TDD intra- and inter-frequency cell environment Cell 1 to Cell 8 are used.

For RF and RRM in FDD and TDD intra- and inter-frequency cell environment Cell 1 to Cell 8 and Cell 11 are used.

For FDD/GSM inter-RAT cell environment Cell 1 to Cell 6, Cell 9 and Cell 10 are used.

In this clause, decimal values are normally used. However, sometimes a hexadecimal value, indicated by an "H", or a binary value, indicated by a "B" is used.

6.1.0a Default Master Information Block and Scheduling Block messages

6.1.0a.1 Grouping SIBs for testing

Mandatory in 34.108	**Used in Idle Mode**	MIB, SB1, (SB2), SIB1, SIB2, SIB3, SIB5, SIB7, SIB11
	Used in Connected Mode	SIB4, SIB6, SIB12
Mandatory for FDD CPCH (R99 and Rel-4 only)		SIB8, SIB9
Mandatory for FDD DRAC		SIB10
Mandatory for TDD		SIB14, SIB17
Mandatory for LCS		SIB15, SIB15.1, SIB15.2, SIB15.3
Mandatory for ANSI-41 system		SIB13, SIB13.1, SIB13.2, SIB13.3, SIB13.4
Mandatory for InterSys HO from GERAN To UTRAN		SIB16
Mandatory for Cell reselection		SIB18

6.1.0a.2 SIB configurations

Currently three SIB configurations are used.

Configuration 1 is the default. It is used for the following test case scenarios:

- UTRAN/FDD only SYSTEM.
- UTRAN/FDD + GERAN SYSTEM (not involving inter-RAT handover from GERAN to UTRAN).
- UTRAN/TDD only SYSTEM.
- UTRAN/TDD + GERAN SYSTEM (not involving inter-RAT handover from GERAN to UTRAN).
- inter-RAT handover from GERAN to UTRAN test cases.

Configuration 2 is for test cases which need two S_CCPCH or two PRACH.

Configuration 3 is for inter-RAT handover from GERAN to UTRAN test cases.

Configuration 1	MIB, SB1, SIB1, SIB2, SIB3, SIB4, SIB5, SIB6, SIB7, SIB11, SIB12, SIB18
Configuration 2	MIB, SB1, SIB1, SIB2, SIB3, SIB4, SIB5, SIB7, SIB11, SIB12, SIB18
Configuration 3	MIB, SB1, SIB1, SIB2, SIB3, SIB4, SIB5, SIB7, SIB11, SIB16, SIB18

6.1.0a.3 SIB default schedule

Block Type	MIB	SB1	SIB1	SIB2	SIB3	SIB4	SIB5	SIB6	SIB7	SIB11	SIB12	SIB18
SIB_REP	8	16	64	64	64	64	64	64	16	64	64	64
SEG_ COUNT	1	1	1	1	1	1	4(FDD) 5(TDD)	4	1	3	3	1

Frame No / SIB_POS	0	2	4	6	8	10	12	14
Block Type	MIB	SB1	SIB7	SIB6	MIB	SIB6	SIB6	SIB6

Frame No / SIB_POS	16	18	20	22	24	26	28	30
Block Type	MIB	SB1	SIB7/SIB3	SIB1/SIB2	MIB	SIB12	SIB12	SIB12

Frame No / SIB_POS	32	34	36	38	40	42	44	46
Block Type	MIB	SB1	SIB7/SIB18	SIB5	MIB	SIB5	SIB5	SIB5

Frame No / SIB_POS	48	50	52	54	56	58	60	62
Block Type	MIB	SB1	SIB7/SIB4	- (FDD) SIB5(LCR TDD)	MIB	SIB11	SIB11	SIB11

The SEG_COUNT in the table specifies the maximum possible transport BCH blocks scheduled for broadcasting. The more contents a SIB has, the more transport BCH blocks are needed for broadcasting. In order to keep SIB repetition period, SIB_REP, unchanged in different test cases, each specific SIB in the individual test cases after the PER encoding shall not exceed the SEG_COUNT scheduled.

If the transport BCH blocks actually required for a SIB is less than the scheduled SEG_COUNT, the no_segment blocks shall be placed at the rest scheduled transport BCH blocks. In addition, the corresponding SEG_COUNT IE value in MIB or in SB1 shall be set to the number of transport BCH blocks actually required.

Contents of Master Information Block PLMN type is the case of GSM-MAP

- MIB value tag	A valid MIB value tag value as defined in TS 25.331 [34]
- Supported PLMN types	
- PLMN type	GSM-MAP
- PLMN identity	
- MCC digit	Set to the same Mobile Country Codes stored in the test USIM card (clause 8.3.2.2 EF IMSI(IMSI)).
- MNC digit	Set to the same Mobile Network Codesstored in the test USIM card (clause 8.3.2.2 EF IMSI(IMSI)).
- ANSI-41 Core Network information	Not Present
- References to other system information blocks and scheduling blocks	
- References to other system information blocks	
- Scheduling information	
- CHOICE Value tag	Cell Value Tag
- Cell Value tag	A valid Cell value tag value as defined in TS 25.331 [34]
- Scheduling	
- SEG_COUNT	1
- SIB_REP	16
- SIB_POS	2
- SIB_POS offset info	Not Present - use default
- SIB and SB type	Scheduling Block 1
- Scheduling information	
- CHOICE Value tag	PLMN Value tag
- PLMN Value tag	A valid PLMN value tag value as defined in TS 25.331 [34]

- SEG_COUNT	1
- SIB_REP	64
- SIB_POS	22
- SIB_POS offset info	Not Present - use default
- SIB and SB type	System Information Type 1
- Scheduling information	
- CHOICE Value tag	Cell Value tag
- Cell Value tag	A valid Cell value tag value as defined in TS 25.331 [34]
- SEG_COUNT	1
- SIB_REP	64
- SIB_POS	22
- SIB_POS offset info	Not Present - use default
- SIB and SB type	System Information Type 2
- Scheduling information	
- CHOICE Value tag	Cell Value tag
- Cell Value tag	1
- SEG_COUNT	1
- SIB_REP	64
- SIB_POS	20
- SIB_POS offset info	Not Present - use default
- SIB and SB type	System Information Type 3
- Scheduling information	
- CHOICE Value tag	Cell Value tag
- Cell Value tag	A valid Cell value tag value as defined in TS 25.331 [34]
- SEG_COUNT	1
- SIB_REP	64
- SIB_POS	52
- SIB_POS offset info	Not Present - use default
- SIB and SB type	System Information Type 4
- Scheduling information	
- CHOICE Value tag	Cell Value tag
- Cell Value tag	A valid Cell value tag value as defined in TS 25.331 [34]
- SEG_COUNT	4
- SIB_REP	64
- SIB_POS	38
- SIB_POS offset info	
- SIB_OFF	4
- SIB_OFF	2
- SIB_OFF	2
- SIB and SB type	System Information Type 5

Contents of Scheduling Block 1 (FDD and 1.28 Mcps TDD)

- References to other system information blocks	
- Scheduling information	
- CHOICE Value tag	Cell Value tag
- Cell Value tag	A valid Cell value tag value as defined in TS 25.331 [34]
- SEG_COUNT	4
- SIB_REP	64
- SIB_POS	6
- SIB_POS offset info	
- SIB_OFF	4
- SIB_OFF	2
- SIB_OFF	2
- SIB type SIBs only	System Information Type 6
- Scheduling information	
- CHOICE Value tag	Not Present
- SEG_COUNT	1
- SIB_REP	16
- SIB_POS	4
- SIB_POS offset info	Not Present
- SIB type SIBs only	System Information Type 7
- Scheduling information	
- CHOICE Value tag	Cell Value tag
- Cell Value tag	A valid Cell value tag value as defined in TS 25.331 [34]

- SEG_COUNT	3
- SIB_REP	64
- SIB_POS	58
- SIB_POS offset info	
- SIB_OFF	2
- SIB_OFF	2
- SIB type SIBs only	System Information Type 11
- Scheduling information	
- CHOICE Value tag	Cell Value tag
- Cell Value tag	A valid Cell value tag value as defined in TS 25.331 [34]
- SEG_COUNT	3
- SIB_REP	64
- SIB_POS	26
- SIB_POS offset info	
- SIB_OFF	2
- SIB_OFF	2
- SIB type SIBs only	System Information Type 12
- Scheduling information	
- CHOICE Value tag	Cell Value tag
Cell Value tag	A valid Cell value tag value as defined in TS 25.331 [34]
- SEG_COUNT	1
- SIB_REP	64
- SIB_POS	36
- SIB_POS offset info	Not Present
- SIB type SIBs only	System Information Type 18

Contents of Scheduling Block 1 (3.84 Mcps TDD)

- References to other system information blocks	
- Scheduling information	
- CHOICE Value tag	Cell Value tag
- Cell Value tag	A valid Cell value tag value as defined in TS 25.331 [34]
- SEG_COUNT	4
- SIB_REP	128
- SIB_POS	3
- SIB_POS offset info	
- SIB_OFF	4
- SIB_OFF	2
- SIB_OFF	2
- SIB type SIBs only	System Information Type 6
- Scheduling information	
- CHOICE Value tag	Not Present
- SEG_COUNT	1
- SIB_REP	16
- SIB_POS	2
- SIB_POS offset info	Not Present
- SIB type SIBs only	System Information Type 7
- Scheduling information	
- CHOICE Value tag	Cell Value tag
- Cell Value tag	A valid Cell value tag value as defined in TS 25.331 [34]
- SEG_COUNT	3
- SIB_REP	64
- SIB_POS	29
- SIB_POS offset info	
- SIB_OFF	2
- SIB_OFF	2
- SIB type SIBs only	System Information Type 11
- Scheduling information	
- CHOICE Value tag	Cell Value tag
- Cell Value tag	A valid Cell value tag value as defined in TS 25.331 [34]
- SEG_COUNT	3
- SIB_REP	64
- SIB_POS	13
- SIB_POS offset info	
- SIB_OFF	2

- SIB_OFF	2
- SIB type SIBs only	System Information Type 12
- Scheduling information	
- CHOICE Value tag	Cell Value tag
- Cell Value tag	A valid Cell value tag value as defined in TS 25.331 [34]
- SEG_COUNT	1
- SIB_REP	64
- SIB_POS	54
- SIB_POS offset info	Not Present - use default
- SIB type SIBs only	System Information Type 14
- Scheduling information	
- CHOICE Value tag	PLMN Value tag
- PLMN Value tag	A valid PLMN value tag value as defined in TS 25.331 [34]
- SEG_COUNT	1
- SIB_REP	64
- SIB_POS	6
- SIB_POS offset info	Not Present
- SIB type SIBs only	System Information Type 18

6.1.0a.4 SIB special schedules

6.1.0a.4.1 SIB schedule for two S-CCPCH or two PRACH (For FDD)

Table 1

Frame No.	0	2	4	6	8	10	12	14
REP-POS	0	1	2	3	4	5	6	7
Block Type	MIB	SB1	SB1		MIB	SIB1	SIB18	SIB2

Frame No.	16	18	20	22	24	26	28	30
REP-POS	8	9	10	11	12	13	14	15
Block Type	MIB	SB1	SB1	SIB7	MIB	SIB3		SIB4

Frame No.	32	34	36	38	40	42	44	46
REP-POS	16	17	18	19	20	21	22	23
Block Type	MIB	SB1	SB1	SIB5	MIB	SIB5	SIB5	SIB5

Frame No.	48	50	52	54	56	58	60	62
REP-POS	24	25	26	27	28	29	30	31
Block Type	MIB	SB1	SB1	SIB7	MIB	SIB11	SIB11	SIB11

Frame No.	64	66	68	70	72	74	76	78
REP-POS	32	33	34	35	36	37	38	39
Block Type	MIB	SB1	SB1	SIB5	MIB	SIB5	SIB5	SIB5

Frame No.	80	82	84	86	88	90	92	94
REP-POS	40	41	42	43	44	45	46	47
Block Type	MIB	SB1	SB1	SIB7	MIB	SIB3		SIB4

Frame No.	96	98	100	102	104	106	108	110
REP-POS	48	49	50	51	52	53	54	55
Block Type	MIB	SB1	SB1		MIB			

Frame No.	112	114	116	118	120	122	124	126
REP-POS	56	57	58	59	60	61	62	63
Block Type	MIB	SB1	SB1	SIB7	MIB	SIB12	SIB12	SIB12

SIB-repeat period (in frame)

Table 2

Block Type	MIB	SB1	SIB1	SIB2	SIB3	SIB4	SIB5	SIB7	SIB11	SIB12	SIB18
SIB Rep	8	16	128	128	64	64	128	32	128	128	128
Max. No of seg.	1	2	1	1	1	1	8	1	3	3	1

6.1.0a.4.2 SIB schedule for Idle Mode, Measurement and Inter RAT UTRAN to GERAN test cases

Frame No.	0	2	4	6	8	10	12	14
REP-POS	0	1	2	3	4	5	6	7
Block Type	MIB	SB1	SIB6	SIB6	MIB	SIB6	SIB6	SIB7/SIB 3

Frame No.	16	18	20	22	24	26	28	30
REP-POS	8	9	10	11	12	13	14	15
Block Type	MIB	SB1	SIB1/SIB2	SIB12	MIB	SIB12	SIB12	SIB7/SIB 12

Frame No.	32	34	36	38	40	42	44	46
REP-POS	16	17	18	19	20	21	22	23
Block Type	MIB	SB1	SIB5	SIB5	MIB	SIB5	SIB5	SIB7/SIB 18

Frame No.	48	50	52	54	56	58	60	62
REP-POS	24	25	26	27	28	29	30	31
Block Type	MIB	SB1	SIB11	SIB11	MIB	SIB11	SIB11	SIB7/SIB 4

SIB-repeat period (in frame)

Block Type	MIB	SB1	SIB1	SIB2	SIB3	SIB4	SIB5	SIB6	SIB7	SIB11	SIB12	SIB18
SIB Rep	8	16	64	64	64	64	64	64	16	64	64	64
Max. No of seg.	1	1	1	1	1	1	4	4	1	4	4	1

6.1.0a.4.3 SIB schedule for Inter RAT handover GERAN to UTRAN test cases

Frame No.	0	2	4	6	8	10	12	14
REP-POS	0	1	2	3	4	5	6	7
Block Type	MIB	SB1	SB1		MIB	SIB1	SIB18	SIB2

Frame No.	16	18	20	22	24	26	28	30
REP-POS	8	9	10	11	12	13	14	15
Block Type	MIB	SB1	SB1	SIB7	MIB	SIB3		SIB4

Frame No.	32	34	36	38	40	42	44	46
REP-POS	16	17	18	19	20	21	22	23
Block Type	MIB	SB1	SB1	SIB5	MIB	SIB5	SIB5	SIB5

Frame No.	48	50	52	54	56	58	60	62
REP-POS	24	25	26	27	28	29	30	31
Block Type	MIB	SB1	SB1	SIB7	MIB	SIB11	SIB11	SIB11

Frame No.	64	66	68	70	72	74	76	78
REP-POS	32	33	34	35	36	37	38	39
Block Type	MIB	SB1	SB1	SIB16	MIB	SIB16	SIB16	SIB16

Frame No.	80	82	84	86	88	90	92	94
REP-POS	40	41	42	43	44	45	46	47
Block Type	MIB	SB1	SB1	SIB7	MIB	SIB3		SIB4

Frame No.	96	98	100	102	104	106	108	110
REP-POS	48	49	50	51	52	53	54	55
Block Type	MIB	SB1	SB1	SIB16	MIB	SIB16	SIB16	SIB16

Frame No.	112	114	116	118	120	122	124	126
REP-POS	56	57	58	59	60	61	62	63
Block Type	MIB	SB1	SB1	SIB7	MIB			

SIB-repeat period (in frame)

Block Type	MIB	SB1	SIB1	SIB2	SIB3	SIB4	SIB5	SIB7	SIB11	SIB16	SIB18
SIB Rep	8	16	128	128	64	64	128	32	128	128	128
Max. No of seg.	1	2	1	1	1	1	4	1	3	8	1

6.1.0b Default System Information Block Messages

Contents of System Information Block type 1 (supported PLMN type is GSM-MAP)

- CN common GSM-MAP NAS system information	A1	
- GSM-MAP NAS system information		00 01H
- CN domain system information		
- CN domain identity		PS
- CHOICE CN Type		GSM-MAP
- CN domain specific NAS system information		
- GSM-MAP NAS system information		05 00H
- CN domain specific DRX cycle length coefficient		7
- CN domain identity		CS
- CHOICE CN Type		GSM-MAP
- CN domain specific NAS system information		
- GSM-MAP NAS system information		1E 01H
- CN domain specific DRX cycle length coefficient		7
- CN common GSM-MAP NAS system information	A2	
- GSM-MAP NAS system information		00 80H (see note)
- CN domain system information		
- CN domain identity		PS
- CHOICE CN Type		GSM-MAP

- CN domain specific NAS system information		
- GSM-MAP NAS system information		00 00H (see note)
- CN domain specific DRX cycle length coefficient		7
- CN domain identity		CS
- CHOICE CN Type		GSM-MAP
- CN domain specific NAS system information		
- GSM-MAP NAS system information		1E 01H
- CN domain specific DRX cycle length coefficient		7
- UE Timers and constants in idle mode	A1, A2	
-T300		4 000 milliseconds
-N300		3
-T312		10 seconds
- N312		1
- UE Timers and constants in connected mode		
- T301		Not Present (2 000 milliseconds: default value)
- N301		Not Present (2: default value)
- T302		Not Present (4 000 milliseconds: default value)
- N302		Not Present (3: default value)
- T304		Not Present (2 000 milliseconds: default value)
- N304		Not Present (2: default value)
- T305		Not Present (30 minutes: default value)
- T307		Not Present (30 seconds: default value)
- T308		Not Present (160 milliseconds: default value)
- T309		Not Present (5 seconds: default value)
- T310		Not Present (160 milliseconds: default value)
- N310		Not Present (4: default value)
- T311		Not Present (2 000 milliseconds: default value)
- T312		Not Present (1 seconds: default value)
- N312		Not Present (1: default value)
- T313		Not Present (3 seconds: default value)
- N313		Not Present (20: default value)
- T314		Not Present (12 seconds: default value)
- T315		Not Present (180 seconds: default value)
- N315		Not Present (1: default value)
- T316		Not Present (30 seconds: default value)
- T317		Not Present (180 seconds: default value)
NOTE: For Inter-RAT test cases GERAN and UTRAN cells use different LAC and RAC.		

Condition	Explanation
A1	UTRAN cell environment
A2	UTRAN/GSM inter-RAT cell environment

Contents of System Information Block type 2

- URA identity list	*Only 1 URA identity broadcasted*
- URA identity	0000 0000 0000 0001B

Contents of System Information Block type 3 (FDD)

- SIB4 indicator	TRUE
- Cell identity	0000 0000 0000 0000 0000 0000 0001B
- Cell selection and re-selection info	
- Mapping info	Not Present
- Cell selection and reselection quality measure	CPICH RSCP
- CHOICE mode	FDD
- $S_{intrasearch}$	16 dB
- $S_{intersearch}$	16 dB
- $S_{searchHCS}$	Not Present
- RAT List	This parameter is configurable
- RAT identifier	GSM
- $S_{search,RAT}$	-32 dB
- $S_{HCS,RAT}$	Not Present
- $S_{limit,SearchRAT}$	0
- Qqualmin	Reference to table 6.1.1
- Qrxlevmin	Reference to table 6.1.1

- $Qhyst1_S$	2 dB
- Qhyst2s	Not Present
- Treselections	0 seconds
- HCS Serving cell information	Not Present
- Maximum allowed UL TX power	Reference to table 6.1.1
- 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

Contents of System Information Block type 3 (3.84 Mcps TDD and 1.28 Mcps TDD)

- SIB4 Indicator	TRUE
- Cell identity	0000 0000 0000 0000 0000 0000 0001B
- Cell selection and re-selection info	
- Mapping info	Not present
- Cell selection and reselection quality measure	CPICH RSCP
- CHOICE mode	TDD
- Sintrasearch	11 dB
- Sintersearch	11 dB
- SsearchHCS	Not present
- RAT List	This parameter is configurable
- RAT identifier	GSM
- Ssearch,RAT	-32 dB
- SHCS,RAT	Not present
- $S_{limit,SearchRAT}$	Not Present
- Qrxlevmin	-103 dBm
- $Qhyst1_S$	0 dB
- Treselections	0 seconds
- HCS Serving cell information	Not present
- Maximum allowed UL TX power	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

Contents of System Information Block type 4 in connected mode (FDD)

- Cell identity	0000 0000 0000 0000 0000 0000 0001B
- Cell selection and re-selection info	
- Mapping Info	Not present
- Cell selection and reselection quality measure	CPICH RSCP
- CHOICE mode	FDD
- Sintrasearch	16 dB
- Sintersearch	16 dB
- SsearchHCS	Not present
- RAT List	This parameter is configurable
- RAT identifier	GSM
- Ssearch,RAT	-32 dB
- SHCS,RAT	Not Present
- $S_{limit,SearchRAT}$	0
- Qqualmin	Reference to table 6.1.1
- Qrxlevmin	Reference to table 6.1.1
- Qhyst1s	2 dB
- Qhyst2s	Not Present
- Treselections	0 seconds
- HCS Serving cell information	Not Present
- Maximum allowed UL TX power	Reference to table 6.1.1
- 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	Not present

Contents of System Information Block type 4 in connected mode (similar to SIB type3) (3.84 Mcps TDD and 1.28 Mcps TDD)

- Cell identity	0000 0000 0000 0000 0000 0000 0001B
- Cell selection and re-selection info	
- Mapping info	Not Present
- Cell selection and reselection quality measure	CPICH RSCP
- CHOICE mode	TDD
- Sintrasearch	11 dB
- Sintersearch	11dB
- SsearchHCS	Not present
- RAT List	This parameter is configurable
- RAT identifier	GSM
- Ssearch,RAT	-32 dB
- SHCS,RAT	Not present
- $S_{limit,ShearchRAT}$	Not Present
- Qrxlevmin	-103 dBm
- Qhyst1s	0 dB
- Treselections	0 seconds
- HCS Serving cell information	Not present
- Maximum allowed UL TX power	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	Not present

Contents of System Information Block type 5 (FDD)

- SIB6 indicator	TRUE
- PICH Power offset	-5 dB
- CHOICE Mode	FDD
- AICH Power offset	-5 dB
- Primary CCPCH info	Not present
- PRACH system information list	
- PRACH system information	
- PRACH info	
- CHOICE mode	FDD
- 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
- Transport channel Identity	15
- RACH TFS	
- CHOICE Transport channel type	Common transport channels
- Dynamic Transport format information	
- RLC size	168
- Number of TB and TTI List	
- Number of Transport blocks	1
- CHOICE Mode	FDD
- 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
- Type of channel coding	Convolutional
- Coding Rate	1/2
- Rate matching attribute	150
- CRC size	16
- RACH TFCS	
- 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	
- CHOICE mode	FDD
- 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.
- ASC Setting	Not Present
- ASC Setting	
- CHOICE mode	FDD
- 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.
- ASC Setting	Not Present
- ASC Setting	
- CHOICE mode	FDD
- 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.
- ASC Setting	Not Present
- ASC Setting	
- CHOICE mode	FDD
- 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.
- 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 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
- 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
- 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
- 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
- TFCS complete reconfiguration information	
- CHOICE CTFC Size	4 bit
- CTFC information	0
- Power offset information	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	Common transport channels
- Dynamic Transport format information	
- RLC Size	240
- 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	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	
- RLC Size	168
- Number of TB and TTI List	
- Number of Transport blocks	0
- Number of Transport blocks	1
- Number of Transport blocks	2
- CHOICE Logical channel List	ALL
- Semi-static Transport Format information	
- Transmission time interval	10 ms
- 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
- Channelisation code	2
- Number of PI per frame	18
- STTD indicator	FALSE
- CBS DRX Level 1 information	Not Present

Contents of System Information Block type 5 (3.84 Mcps TDD)

- SIB6 indicator	TRUE
- PICH Power offset	-5 dB
- CHOICE Mode	TDD
- PUSCH system information	Not Present
- PDSCH system information	Not Present
- TDD open loop power control	
- Primary CCPCH Tx Power	30 dbm
- CHOICE TDD option	3.84 Mcps TDD /REL-4/
- Alpha	(1/8)
- PRACH Constant Value	-10
- DPCH Constant Value	-10
- PUSCH Constant Value	-10
- UE positioning related parameters	Not Present /REL-4/
- Primary CCPCH info	
- CHOICE *mode*	TDD
- CHOICE TDD option	3.84 Mcps TDD /REL-4/
- CHOICE SyncCase	Sync Case 2
- Timeslot	0
- Cell parameters ID	Not Present
- SCTD indicator	FALSE
- PRACH system information list	
- PRACH system information	
- PRACH info	
- CHOICE mode	TDD
- CHOICE TDD option	3.84 Mcps TDD /REL-4/
- Timeslot number	14
- PRACH Channelisation Code List	
- CHOICE SF	SF8
- Channelisation Code List	
- Channelisation Code	8/1
- Channelisation Code	8/2
- Channelisation Code	8/3
- Channelisation Code	8/4
- PRACH Midamble	Direct
- PNBSCH allocation	Not Present /REL-4/
- Transport channel Identity	15
- RACH TFS	
- CHOICE Transport channel type	Common transport channels
- Dynamic Transport format information	
- RLC size	Reference clause 6.10 "Parameter Set"
- Number of TB and TTI List	Reference clause 6.10 "Parameter Set"
- Number of Transport blocks	Reference clause 6.10 "Parameter Set"
- CHOICE Mode	TDD
- Transmission Time Interval	Not Present
- CHOICE Logical channel List	Configured
- Semi-static Transport Format information	
- Transmission time interval	Reference clause 6.10 "Parameter Set"
- Type of channel coding	Reference clause 6.10 "Parameter Set"
- Coding Rate	Reference clause 6.10 "Parameter Set"
- Rate matching attribute	Reference clause 6.10 "Parameter Set"
- CRC size	Reference clause 6.10 "Parameter Set"
- RACH TFCS	Not present
- PRACH partitioning	
- Access Service Class	
- ASC Settings	(ASC#0)
- CHOICE mode	TDD
- CHOICE TDD option	3.84 Mcps TDD

- Available Channelisation codes indices	Not Present (Default all)
- CHOICE subchannel size	Size1
- Available Subchannels	null
- ASC Settings	(ASC#1)
- CHOICE mode	TDD
- CHOICE TDD option	3.84 Mcps TDD
- Available Channelisation codes indices	Not Present (Default all)
- CHOICE subchannel size	Size1
- Available Subchannels	null
- ASC Settings	(ASC#2)
- CHOICE mode	TDD
- CHOICE TDD option	3.84 Mcps TDD
- Available Channelisation codes indices	Not Present (Default all)
- CHOICE subchannel size	Size1
- Available Subchannels	null
- ASC Settings	(ASC#3)
- CHOICE mode	TDD
- CHOICE TDD option	3.84 Mcps TDD
- Available Channelisation codes indices	Not Present (Default all)
- CHOICE subchannel size	Size1
- Available Subchannels	null
- ASC Settings	(ASC#4)
- CHOICE mode	TDD
- CHOICE TDD option	3.84 Mcps TDD
- Available Channelisation codes indices	Not Present (Default all)
- CHOICE subchannel size	Size1
- Available Subchannels	null
- ASC Settings	(ASC#5)
- CHOICE mode	TDD
- CHOICE TDD option	3.84 Mcps TDD
- Available Channelisation codes indices	Not Present (Default all)
- CHOICE subchannel size	Size1
- Available Subchannels	null
- ASC Settings	(ASC#6)
- CHOICE mode	TDD
- CHOICE TDD option	3.84 Mcps TDD
- Available Channelisation codes indices	Not Present (Default all)
- CHOICE subchannel size	Size1
- Available Subchannels	null
- Persistence scaling factors	
- Access Service Class	
- 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)
- AC-to-ASC mapping	
- 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*	TDD (no data)
- Secondary CCPCH system information	
- Secondary CCPCH system information	
- Secondary CCPCH info	
- CHOICE *mode*	TDD
- Offset	0
- Common timeslot info	
- 2nd interleaving mode	Frame
- TFCI coding	Reference clause 6.10 "Parameter Set"
- Puncturing limit	Reference clause 6.10 "Parameter Set"
- Repetition period	Not Present (MD "1")
- Repetition length	Not present (empty)
- Individual timeslot info	

- CHOICE TDD option	3.84 Mcps TDD
- Timeslot number	1
- TFCI existence	Reference clause 6.10 "Parameter Set"
- Midamble Shift and burst type	
- CHOICE *TDD option*	3.84 Mcps TDD
- CHOICE Burst Type	Type 1
- Midamble Allocation Mode	Default midamble
- Midamble configuration burst type 1 and 3	4
- Midamble Shift	Not Present
- CHOICE *TDD option*	3.84 Mcps TDD
- no data	
- Code List	
- Channelisation Code	(This IE is repeated for Code number for PCH and FACH)
- 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
- TFCS complete information	
- CHOICE CTFC Size	Number of bits used must be enough to cover all combinations of CTFC from clause 6.10.
- CTFC information	Reference clause 6.10 "Parameter Set"
- Power offset information	Not Present
- FACH/PCH information	
- TFS	(PCH)
- CHOICE Transport channel type	Common transport channels
- Dynamic Transport format information	
- RLC Size	Reference clause 6.10 "Parameter Set"
- Number of TB and TTI List	Reference clause 6.10 "Parameter Set"
- Number of Transport blocks	Reference clause 6.10 "Parameter Set"
- CHOICE Mode	TDD
- Transmission Time Interval	Reference clause 6.10 "Parameter Set"
- CHOICE Logical channel List	ALL
- Semi-static Transport Format information	
- Transmission time interval	Reference clause 6.10 "Parameter Set"
- Type of channel coding	Reference clause 6.10 "Parameter Set"
- Coding Rate	Reference clause 6.10 "Parameter Set"
- Rate matching attribute	Reference clause 6.10 "Parameter Set"
- CRC size	Reference clause 6.10 "Parameter Set"
- Transport channel Identity	12 (for PCH)
- CTCH indicator	FALSE
- TFS	(FACH)
- CHOICE Transport channel type	Common transport channels
- Dynamic Transport format information	
- RLC Size	Reference clause 6.10 "Parameter Set"
- Number of TB and TTI List	Reference clause 6.10 "Parameter Set"
- Number of Transport blocks	Reference clause 6.10 "Parameter Set"
- CHOICE Mode	TDD
- Transmission Time Interval	Reference clause 6.10 "Parameter Set"
- CHOICE Logical channel List	ALL
- Semi-static Transport Format information	
- Transmission time interval	Reference clause 6.10 "Parameter Set"
- Type of channel coding	Reference clause 6.10 "Parameter Set"
- Coding Rate	Reference clause 6.10 "Parameter Set"
- Rate matching attribute	Reference clause 6.10 "Parameter Set"
- CRC size	Reference clause 6.10 "Parameter Set"
- Transport channel Identity	13 (for FACH)
- CTCH indicator	FALSE
- TFS	(FACH)
- CHOICE Transport channel type	Common transport channels
- Dynamic Transport format information	
- RLC Size	Reference clause 6.10 "Parameter Set"
- Number of TB and TTI List	Reference clause 6.10 "Parameter Set"
- Number of Transport blocks	Reference clause 6.10 "Parameter Set"
- CHOICE Mode	TDD
- CHOICE Logical channel List	ALL
- Semi-static Transport Format information	
- Transmission time interval	Reference clause 6.10 "Parameter Set"

- Type of channel coding	Reference clause 6.10 "Parameter Set"
- Coding Rate	Reference clause 6.10 "Parameter Set"
- Rate matching attribute	Reference clause 6.10 "Parameter Set"
- CRC size	Reference clause 6.10 "Parameter Set"
- Transport channel Identity	14 (for FACH)
- CTCH indicator	FALSE
- PICH info	
- CHOICE *mode*	TDD
- CHOICE TDD option	3.84 Mcps TDD
- Timeslot number	0
- Midamble shift and burst type	
- CHOICE Burst Type	Type 1
- Midamble Allocation Mode	Default midamble
- Midamble configuration burst type 1 and 3	8
- Midamble Shift	Not Present
- Channelisation code	16/16
- Repetition period/length	64/2
- Offset	0
- Paging indicator length	4
- N_{GAP}	4
- N_{PCH}	2
- CBS DRX Level 1 information	Not Present

Contents of System Information Block type 5 (1.28 Mcps TDD)

- SIB6 indicator	TRUE
- PICH Power offset	-5 dB
- CHOICE Mode	TDD
- PUSCH system information	Not Present
- PDSCH system information	Not Present
- TDD open loop power control	
- Primary CCPCH Tx Power	30 dbm
- CHOICE TDD option	1.28 Mcps TDD /REL-4/
- no data	
- Primary CCPCH info	
- 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	TDD
- 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
- RACH TFS	
- CHOICE Transport channel type	Common transport channels
- Dynamic Transport format information	
- RLC size	Reference clause 6.10 "Parameter Set"
- Number of TB and TTI List	Reference clause 6.10 "Parameter Set"
- Number of Transport blocks	Reference clause 6.10 "Parameter Set"
- CHOICE Mode	TDD
- Transmission Time Interval	Not Present
- CHOICE Logical channel List	Configured
- Semi-static Transport Format information	
- Transmission time interval	Reference clause 6.10 "Parameter Set"
- Type of channel coding	Reference clause 6.10 "Parameter Set"
- Coding Rate	Reference clause 6.10 "Parameter Set"
- Rate matching attribute	Reference clause 6.10 "Parameter Set"
- CRC size	Reference clause 6.10"Parameter Set"
- RACH TFCS	Not present
- PRACH partitioning	
- Access Service Class	
- ASC Settings	(ASC#0)
- 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#1)
- 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#2)
- 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#3)
- 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#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
- Access Service Class	
- 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)
- AC-to-ASC mapping	
- 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*	TDD (no data)
- Secondary CCPCH system information	
- Secondary CCPCH info	
- CHOICE *mode*	TDD
- Offset	0
- Common timeslot info	
- 2nd interleaving mode	Frame
- TFCI coding	Reference clause 6.10 "Parameter Set"
- Puncturing limit	Reference clause 6.10 "Parameter Set"
- Repetition period	1
- Repetition length	0
- Individual timeslot info	
- CHOICE *TDD option*	1.28 Mcps TDD
- Timeslot number	0
- TFCI existence	Reference clause 6.10 "Parameter Set"
- Midamble Shift and burst type	
- CHOICE *TDD option*	1.28 Mcps TDD
- Midamble Allocation Mode	Default midamble
- Midamble configuration	4
- Midamble Shift	Not Present
- CHOICE *TDD option*	1.28 Mcps TDD
- Modulation	Reference clause 6.10 "Parameter Set"
- SS-TPC Symbols	Reference clause 6.10 "Parameter Set"
- Code List	
- Channelisation Code	Reference clause 6.10 "Parameter Set"
- TFCS	Reference clause 6.10 "Parameter Set"
- CHOICE TFCI *signalling*	Normal
- TFCI Field 1 information	
- CHOICE TFCS representation	Addition
- TFCS addition information	
- CHOICE CTFC Size	Number of bits used must be enough to cover all combinations of CTFC from clause 6.10.
- CTFC information	Reference clause 6.10 "Parameter Set"
- Power offset information	Not Present
- FACH/PCH information	
- Transport channel Identity	12 (for PCH)
- TFS	(PCH)
- CHOICE Transport channel type	Common transport channels
- Dynamic Transport format information	(This IE is repeated for TFI number.)
- RLC Size	Reference clause 6.10 "Parameter Set"
- Number of TB and TTI List	Reference clause 6.10 "Parameter Set"
- Number of Transport blocks	Reference clause 6.10 "Parameter Set"
- CHOICE Mode	TDD
- Transmission Time Interval	Not Present
- CHOICE Logical channel List	ALL
- Semi-static Transport Format information	
- Transmission time interval	Reference clause 6.10 "Parameter Set"
- Type of channel coding	Reference clause 6.10 "Parameter Set"
- Coding Rate	Reference clause 6.10 "Parameter Set"
- Rate matching attribute	Reference clause 6.10 "Parameter Set"
- CRC size	Reference clause 6.10 "Parameter Set"
- Transport channel Identity	13 (for FACH)
- TFS	(FACH)
- CHOICE Transport channel type	Common transport channels
- Dynamic Transport format information	(This IE is repeated for TFI number.)

- RLC Size	Reference clause 6.10 "Parameter Set"
- Number of TB and TTI List	Reference clause 6.10 "Parameter Set"
- Number of Transport blocks	Reference clause 6.10 "Parameter Set"
- CHOICE Mode	TDD
- Transmission Time Interval	Not Present
- CHOICE Logical channel List	ALL
- Semi-static Transport Format information	
- Transmission time interval	Reference clause 6.10 "Parameter Set"
- Type of channel coding	Reference clause 6.10 "Parameter Set"
- Coding Rate	Reference clause 6.10 "Parameter Set"
- Rate matching attribute	Reference clause 6.10 "Parameter Set"
- CRC size	Reference clause 6.10 "Parameter Set"
- CTCH indicator	FALSE
- PICH info	
- CHOICE *mode*	TDD
- 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

Contents of System Information Block type 6 in connected mode (FDD)

- PICH power offset	-5 dB
- CHOICE Mode	FDD
- AICH power offset	-5 dB
- Primary CCPCH info	Not Present
- PRACH system information list	Not present
- Secondary CCPCH system info	Not Present
- CBS DRX Level 1 information	Not Present

Contents of System Information Block type 6 in connected mode (similar to SIB type 5) (3.84 Mcps TDD)

- PICH Power offset	-5 dB
- CHOICE Mode	TDD
- PUSCH system information	Not Present
- PDSCH system information	Not Present
- TDD open loop power control	
- Primary CCPCH Tx Power	30 dbm
- CHOICE TDD option	3.84 Mcps TDD /REL-4/
- Alpha	(1/8)
- PRACH Constant Value	-10
- DPCH Constant Value	-10
- PUSCH Constant Value	-10
- Primary CCPCH info	
- CHOICE *mode*	TDD
- CHOICE TDD option	3.84 Mcps TDD /REL-4/
- CHOICE SyncCase	Sync Case 2
- Timeslot	0
- Cell parameters ID	Not Present
- SCTD indicator	FALSE
- PRACH system information list	
- PRACH system information	
- PRACH info	
- CHOICE mode	TDD
- CHOICE TDD option	3.84 Mcps TDD /REL-4/

- Timeslot number	14
- PRACH Channelisation Code List	
- CHOICE SF	SF8
- Channelisation Code List	
- Channelisation Code	8/1
- Channelisation Code	8/2
- Channelisation Code	8/3
- Channelisation Code	8/4
- PRACH Midamble	Direct
- Transport channel Identity	15
- RACH TFS	
- CHOICE Transport channel type	Common transport channels
- Dynamic Transport format information	
- RLC size	Reference clause 6.10 "Parameter Set"
- Number of TB and TTI List	Reference clause 6.10 "Parameter Set"
- Number of Transport blocks	Reference clause 6.10 "Parameter Set"
- CHOICE Mode	TDD
- Transmission Time Interval	Not Present
- CHOICE Logical channel List	Configured
- Semi-static Transport Format information	
- Transmission time interval	Reference clause 6.10 "Parameter Set"
- Type of channel coding	Reference clause 6.10 "Parameter Set"
- Coding Rate	Reference clause 6.10 "Parameter Set"
- Rate matching attribute	Reference clause 6.10 "Parameter Set"
- CRC size	Reference clause 6.10 "Parameter Set"
- RACH TFCS	Not present
- PRACH partitioning	
- Access Service Class	
- ASC Settings	(ASC#0)
- CHOICE mode	TDD
- CHOICE TDD option	3.84 Mcps TDD /REL-4/
- Available Channelisation codes indices	Not Present (Default all)
- CHOICE subchannel size	Size1
- Available Subchannels	null
- ASC Settings	(ASC#1)
- CHOICE mode	TDD
- CHOICE TDD option	3.84 Mcps TDD /REL-4/
- Available Channelisation codes indices	Not Present (Default all)
- CHOICE subchannel size	Size1
- Available Subchannels	null
- ASC Settings	(ASC#2)
- CHOICE mode	TDD
- CHOICE TDD option	3.84 Mcps TDD /REL-4/
- Available Channelisation codes indices	Not Present (Default all)
- CHOICE subchannel size	Size1
- Available Subchannels	null
- ASC Settings	(ASC#3)
- CHOICE mode	TDD
- CHOICE TDD option	3.84 Mcps TDD /REL-4/
- Available Channelisation codes indices	Not Present (Default all)
- CHOICE subchannel size	Size1
- Available Subchannels	null
- ASC Settings	(ASC#4)
- CHOICE mode	TDD
- CHOICE TDD option	3.84 Mcps TDD /REL-4/
- Available Channelisation codes indices	Not Present (Default all)
- CHOICE subchannel size	Size1
- Available Subchannels	null
- ASC Settings	(ASC#5)
- CHOICE mode	TDD
- Available Channelisation codes indices	Not Present (Default all)
- CHOICE subchannel size	Size1
- Available Subchannels	null
- ASC Settings	(ASC#6)
- CHOICE mode	TDD
- CHOICE TDD option	3.84 Mcps TDD /REL-4/
- Available Channelisation codes indices	Not Present (Default all)
- CHOICE subchannel size	Size1

- Available Subchannels	null
- Persistence scaling factors	
- Access Service Class	
- 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)
- AC-to-ASC mapping	Not Present
- CHOICE *mode*	TDD (no data)
- Secondary CCPCH system information	
- Secondary CCPCH system information	
- Secondary CCPCH info	
- CHOICE *mode*	TDD
- Offset	0
- Common timeslot info	
- 2nd interleaving mode	Not Present (MD "Frame")
- TFCI coding	Reference clause 6.10 "Parameter Set"
- Puncturing limit	Reference clause 6.10 "Parameter Set"
- Repetition period	Not Present (MD "1")
- Repetition length	Not present
- Individual timeslot info	
- CHOICE TDD option	3.84 Mcps TDD /REL-4/
- Timeslot number	1
- TFCI existence	Reference clause 6.10 "Parameter Set"
- Midamble Shift and burst type	
- CHOICE Burst Type	Type 1
- Midamble Allocation Mode	Default midamble
- Midamble configuration burst type 1 and 3	4
- Midamble Shift	Not Present
- Code List	
- Channelisation Code	Reference clause 6.10 "Parameter Set"
- TFCS	(This IE is repeated for TFC number for PCH and FACH.)
- Normal	
- TFCI Field 1 information	
- CHOICE TFCS representation	Complete reconfiguration
- TFCS complete reconfiguration information	
- CHOICE CTFC Size	Number of bits used must be enough to cover all combinations of CTFC from clause 6.10.
- CTFC information	Reference clause 6.10 "Parameter Set"
- Power offset information	Not Present
- FACH/PCH information	
- TFS	(PCH)
- CHOICE Transport channel type	Common transport channels
- Dynamic Transport format information	
- RLC Size	Reference clause 6.10 "Parameter Set"
- Number of TB and TTI List	Reference clause 6.10 "Parameter Set"
- Number of Transport blocks	Reference clause 6.10 "Parameter Set"
- CHOICE Mode	TDD
- Transmission Time Interval	Reference clause 6.10 "Parameter Set"
- CHOICE Logical channel List	ALL
- Semi-static Transport Format information	
- Transmission time interval	Reference clause 6.10 "Parameter Set"
- Type of channel coding	Reference clause 6.10 "Parameter Set"
- Coding Rate	Reference clause 6.10 "Parameter Set"
- Rate matching attribute	Reference clause 6.10 "Parameter Set"
- CRC size	Reference clause 6.10 "Parameter Set"
- Transport channel Identity	12 (for PCH)
- CTCH indicator	FALSE
- TFS	(FACH)
- CHOICE Transport channel type	Common transport channels
- Dynamic Transport format information	
- RLC Size	Reference clause 6.10 "Parameter Set"
- Number of TB and TTI List	Reference clause 6.10 "Parameter Set"
- Number of Transport blocks	Reference clause 6.10 "Parameter Set"
- CHOICE Mode	TDD
- Transmission Time Interval	Reference clause 6.10 "Parameter Set"
- CHOICE Logical channel List	ALL

- Semi-static Transport Format information	
- Transmission time interval	Reference clause 6.10 "Parameter Set"
- Type of channel coding	Reference clause 6.10 "Parameter Set"
- Coding Rate	Reference clause 6.10 "Parameter Set"
- Rate matching attribute	Reference clause 6.10 "Parameter Set"
- CRC size	Reference clause 6.10 "Parameter Set"
- Transport channel Identity	13 (for FACH)
- TFS	(FACH)
- CHOICE Transport channel type	Common transport channels
- Dynamic Transport format information	(This IE is repeated for TFI number.)
- RLC Size	Reference clause 6.10 "Parameter Set"
- Number of TB and TTI List	Reference clause 6.10 "Parameter Set"
- Number of Transport blocks	Reference clause 6.10 "Parameter Set"
- CHOICE Mode	TDD
- CHOICE Logical channel List	ALL
- Semi-static Transport Format information	
- Transmission time interval	Reference clause 6.10 "Parameter Set"
- Type of channel coding	Reference clause 6.10 "Parameter Set"
- Coding Rate	Reference clause 6.10 "Parameter Set"
- Rate matching attribute	Reference clause 6.10 "Parameter Set"
- CRC size	Reference clause 6.10 "Parameter Set"
- Transport channel Identity	14 (for FACH)
- CTCH indicator	FALSE
- CTCH indicator	FALSE
- PICH info	
- CHOICE *mode*	TDD
- CHOICE TDD option	3.84 Mcps TDD
- Timeslot number	0
- Midamble shift and burst type	
- CHOICE Burst Type	Type 1
- Midamble Allocation Mode	Default midamble
- Midamble configuration burst type 1 and 3	8
- Midamble Shift	Not Present
- Channelisation code	16/16
- Repetition period/length	64/2
- Offset	0
- Paging indicator length	4
- N_{GAP}	4
- N_{PCH}	2
- CBS DRX Level 1 information	Not Present

Contents of System Information Block type6 In connected mode (similar to SIB type5) (1.28 Mcps TDD)

- SIB6 indicator	TRUE
- PICH Power offset	-5 dB
- CHOICE Mode	TDD
- PUSCH system information	Not Present
- PDSCH system information	Not Present
- TDD open loop power control	
- Primary CCPCH Tx Power	30 dbm
- CHOICE TDD option	1.28 Mcps TDD /REL-4/
- no data	
- Primary CCPCH info	
- 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	TDD
- 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 List	
- 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
- PNBSCH allocation	Not Present /REL-4/
- Transport channel Identity	15
- RACH TFS	
- CHOICE Transport channel type	Common transport channels
- Dynamic Transport format information	
- RLC size	Reference clause 6.10 "Parameter Set"
- Number of TB and TTI List	Reference clause 6.10 "Parameter Set"
- Number of Transport blocks	Reference clause 6.10 "Parameter Set"
- CHOICE Mode	TDD
- Transmission Time Interval	Not Present
- CHOICE Logical channel List	Configured
- Semi-static Transport Format information	
- Transmission time interval	Reference clause 6.10 "Parameter Set"
- Type of channel coding	Reference clause 6.10 "Parameter Set"
- Coding Rate	Reference clause 6.10 "Parameter Set"
- Rate matching attribute	Reference clause 6.10 "Parameter Set"
- CRC size	Reference clause 6.10 "Parameter Set"
- RACH TFCS	Not present
- PRACH partitioning	
- Access Service Class	
- ASC Settings	(ASC#0)
- CHOICE mode	TDD
- CHOICE TDD option	1.28 Mcps TDD
- Available SYNC_UL codes indices	"111111111"
- CHOICE subchannel size	Size1
- Available Subchannels	Null
- ASC Settings	(ASC#1)
- CHOICE mode	TDD
- CHOICE TDD option	1.28 Mcps TDD
- Available SYNC_UL codes indices	"111111111"
- CHOICE subchannel size	Size1
- Available Subchannels	Null
- ASC Settings	(ASC#2)
- CHOICE mode	TDD
- CHOICE TDD option	1.28 Mcps TDD
- Available SYNC_UL codes indices	"111111111"
- CHOICE subchannel size	Size1
- Available Subchannels	Null
- ASC Settings	(ASC#3)
- CHOICE mode	TDD
- CHOICE TDD option	1.28 Mcps TDD
- Available SYNC_UL codes indices	"111111111"
- 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	"111111111"
- 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	"111111111"
- 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	"111111111"
- CHOICE subchannel size	Size1
- Available Subchannels	Null
- Access Service Class	
- 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)
- AC-to-ASC mapping	Not Present
- CHOICE *mode*	TDD (no data)
- Secondary CCPCH system information	
- Secondary CCPCH system information	
- Secondary CCPCH info	
- CHOICE *mode*	TDD
- Offset	0
- Common timeslot info	
- 2nd interleaving mode	Frame
- TFCI coding	Reference clause 6.10 "Parameter Set"
- Puncturing limit	Reference clause 6.10 "Parameter Set"
- Repetition period	1
- Repetition length	0
- Individual timeslot info	
- CHOICE *TDD option*	1.28 Mcps TDD
- Timeslot number	0
- TFCI existence	Reference clause 6.10 "Parameter Set"
- Midamble Shift and burst type	
- CHOICE *TDD option*	1.28 Mcps TDD
- Midamble Allocation Mode	Default midamble
- Midamble configuration	4
- Midamble Shift	Not Present
- CHOICE *TDD option*	1.28 Mcps TDD
- Modulation	Reference clause 6.10 "Parameter Set"
- SS-TPC Symbols	Reference clause 6.10 "Parameter Set"
- Code List	
- Channelisation Code	Reference clause 6.10 "Parameter Set"
- TFCS	Reference clause 6.10 "Parameter Set"
- Normal	
- TFCI Field 1 information	
- CHOICE TFCS representation	Complete reconfiguration
- TFCS complete reconfiguration information	
- CHOICE CTFC Size	Number of bits used must be enough to cover all combinations of CTFC from clause 6.10.
- CTFC information	Reference clause 6.10 "Parameter Set"
- Power offset information	Not Present
- FACH/PCH information	
- Transport channel Identity	12 (for PCH)
- TFS	(PCH)
- CHOICE Transport channel type	Common transport channels
- Dynamic Transport format information	
- RLC Size	Reference clause 6.10 "Parameter Set"
- Number of TB and TTI List	Reference clause 6.10 "Parameter Set"
- Number of Transport blocks	Reference clause 6.10 "Parameter Set"
- CHOICE Mode	TDD
- Transmission Time Interval	Not Present

- CHOICE Logical channel List	ALL
- Semi-static Transport Format information	
- Transmission time interval	Reference clause 6.10 "Parameter Set"
- Type of channel coding	Reference clause 6.10 "Parameter Set"
- Coding Rate	Reference clause 6.10 "Parameter Set"
- Rate matching attribute	Reference clause 6.10 "Parameter Set"
- CRC size	Reference clause 6.10 "Parameter Set"
- Transport channel Identity	13 (for FACH)
- TFS	(FACH)
- CHOICE Transport channel type	Common transport channels
- Dynamic Transport format information	
- RLC Size	Reference clause 6.10 "Parameter Set"
- Number of TB and TTI List	Reference clause 6.10 "Parameter Set"
- Number of Transport blocks	Reference clause 6.10 "Parameter Set"
- CHOICE Mode	TDD
- Transmission Time Interval	Not Present
- CHOICE Logical channel List	ALL
- Semi-static Transport Format information	
- Transmission time interval	Reference clause 6.10 "Parameter Set"
- Type of channel coding	Reference clause 6.10 "Parameter Set"
- Coding Rate	Reference clause 6.10 "Parameter Set"
- Rate matching attribute	Reference clause 6.10 "Parameter Set"
- CRC size	Reference clause 6.10 "Parameter Set"
- CTCH indicator	FALSE
- PICH info	
- CHOICE *mode*	TDD
- 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

Contents of System Information Block type 7 (FDD)

CHOICE Mode	FDD
- UL interference	-100 dBm
- 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

Contents of System Information Block type 7 (TDD)

CHOICE Mode	TDD
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

Contents of System Information Block type 8, 9 (only for FDD R99 and Rel-4)

This information is used for static CPCH in the cell, so this is not present.

Contents of System Information Block type 10 (only for FDD R99 and Rel-4)

This information is used for DRAC, so this is not present.

Contents of System Information Block type 11 (FDD)

This is the default message content of SIB 11 for cell 1.

See clause 6.1.4 for the difference in message contents of System Information Block type 11 (FDD) for cell 2 to 8.

- SIB12 indicator	A1, A2, A3	TRUE
- FACH measurement occasion info		Not Present
- Measurement control system information		
- Use of HCS		Not used
- Cell selection and reselection quality measure		CPICH RSCP
- Intra-frequency measurement system information	A1, A2, A3	
- 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 0 dB
- Reference time difference to cell		Not Present
- Read SFN indicator		FALSE
- CHOICE mode		FDD
- Primary CPICH info		
- Primary scrambling code		Refer to clause titled "Default settings for cell No.1 (FDD)" in clause 6.1.4
- Primary CPICH TX power		Not Present
- TX Diversity indicator		FALSE
- 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
- CHOICE mode		FDD
- Primary CPICH info		
- Primary scrambling code		Refer to clause titled "Default settings for cell No.2 (FDD)" in clause 6.1.4
- Primary CPICH TX power		Not Present
- TX Diversity indicator		FALSE
- 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
- Cell info		Same content as specified for Intra-frequency cell id=2 with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.3 (FDD)" in clause 6.1.4
- Intra-frequency cell id	A1, A3	7
- Cell info		Same content as specified for Intra-frequency cell id=2 with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.7 (FDD)" in clause 6.1.4
- Intra-frequency cell id	A1, A3	8

- Cell info		Same content as specified for Intra-frequency cell id=2 with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.8 (FDD)" in clause 6.1.4
- Intra-frequency cell id	A3	11
- Cell info		Same content as specified for Intra-frequency cell id=2 with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.11 (FDD)" in clause 6.1.4
- Cells for measurement	A1, A2, A3	Not Present
- Intra-frequency measurement quantity	A1, A2, A3	
- Filter coefficient		Not present Absence of this IE is equivalent to the default value 0
- CHOICE mode		FDD
- Measurement quantity		CPICH 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 synchronization information reporting indicator		FALSE
- Cell identity reporting indicator		TRUE
- CHOICE mode		FDD
- CPICH Ec/N0 reporting indicator		FALSE
- CPICH RSCP reporting indicator		TRUE
- Pathloss reporting indicator		FALSE
- Reporting quantities for monitored set cells		
- Cell synchronization information reporting indicator		TRUE
- Cell identity reporting indicator		TRUE
- CHOICE mode		FDD
- CPICH Ec/N0 reporting indicator		FALSE
- CPICH 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
- Intra-frequency measurement reporting criteria		
- Parameters required for each event		3 kinds
- Intra-frequency event identity		1a
- Triggering condition 1		Not Present
- Triggering condition 2		Monitored set cells
- 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		2
- Replacement activation threshold		Not Present
- Time to trigger		640
- Amount of reporting		4
- Reporting interval		4 000
- 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		4 000
- 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	A1, A2	
- 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
- UARFCN uplink(Nu)		Not present Absence of this IE is equivalent to apply the default duplex distance defined for the operating frequency according to 3GPP TS 25.101 [11]
- UARFCN downlink(Nd)		Reference to table 6.1.2 for Cell 4
- Cell info		
- Cell individual offset		Not present Absence of this IE is equivalent to default value 0 dB
- Reference time difference to cell		Not present
- Read SFN indicator		FALSE
- CHOICE mode		FDD
- Primary CPICH info		
- Primary scrambling code		Refer to clause titled "Default settings for cell No.4 (FDD)" in clause 6.1.4
- Primary CPICH 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 shall be according to clause titled "Default settings for cell No.5 (FDD)" in clause 6.1.4
- 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 shall be according to clause titled "Default settings for cell No.6 (FDD)" in clause 6.1.4
- Cell for measurement		Not present
- Inter-RAT measurement system information	A1, A3	Not Present
- Inter-RAT measurement system information	A2	
- 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		
- Base transceiver Station Identity Code (BSIC)		Reference to table 6.1.10 for Cell 9
- Band indicator		According to PICS/PIXIT
- BCCH ARFCN		Reference to 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 table 6.1.10 for Cell 10
- Band indicator		According to PICS/PIXITs
- BCCH ARFCN		Reference to table 6.1.10 for Cell 10
- Cell for measurement		Not present
- Traffic volume measurement system information	A1, A2, A3	Not Present

Condition	Explanation
A1	FDD cell environment
A2	FDD/GSM inter-RAT cell environment
A3	FDD intra-frequency cell environment (6 intra-frequency cells without inter-frequency cells)

Contents of System Information Block type 11 (3.84 Mcps and 1.28 Mcps TDD)

This is the default message content of SIB 11 for cell 1.

See clause 6.1.4 for the difference in message contents of System Information Block type 11 (TDD) for cell 2 to 8.

- SIB 12 Indicator	A1, A2	TRUE
- FACH measurement occasion info		Not Present
- Measurement control system information		
- Use of HCS		Not used
- Cell selection and reselection quality measureCell		CPICH RSCP
- Intra-frequency measurement system information	A1, A2	
- 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		TDD
- Primary CCPCH info		
- Cell parameters ID		Reference clause 6.1.4 Default settings for cell

- Primary CCPCH TX power		Not Present
- Timeslot list		Not Present
- CHOICE TDD option		
- 3.84 Mcps TDD		
- Timeslot number		Not Present
- Burst type		Not Present
- 1.28 Mcps TDD		
- Timeslot number		Not Present
- 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		FALSE
- CHOICE mode		TDD
- Primary CCPCH info		
- Cell parameters ID		Refer to clause titled “Default setting for cell No.2 (TDD)” in clause 6.1.4
- Primary CCPCH TX power		Not Present
- Timeslot list		Not Present
- CHOICE TDD option		
- 3.84 Mcps TDD		
- Timeslot number		Not Present
- Burst type		Not Present
- 1.28 Mcps TDD		
- Timeslot number		Not Present
- Cell Selection and Re-selection info		Not Present
- Intra-frequency cell id		3
- Cell info		Same content as specified for intra-frequency cell id=2 with the exception that value for Cell Parameters ID shall be according to clause titled “Default settings for cell No.3(TDD)” in clause 6.1.4
- Intra-frequency cell id		7
- Cell info		Same content as specified for intra-frequency cell id=2 with the exception that value for Cell Parameters ID shall be according to clause titled “Default settings for cell No.7(TDD)” in clause 6.1.4
- Intra-frequency cell id		8
- Cell info		Same content as specified for intra-frequency cell id=2 with the exception that value for Cell Parameters ID shall be according to clause titled “Default settings for cell No.8(TDD)” in clause 6.1.4
- Cell for measurement	A1, A2	Not Present
- Intra-frequency measurement quantity	A1, A2	
- Filter coefficient		Not present Absence of this IE is equivalent to the default value 0
- CHOICE mode		TDD
- Measurement quantity list		
- Measurement quantity		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 synchronization information reporting indicator		TRUE
- Cell identity reporting indicator		TRUE
- CHOICE mode		TDD
- 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 synchronization information reporting indicator		FALSE

- Cell identity reporting indicator		TRUE
- CHOICE mode		TDD
- 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
- Periodical Reporting / Event Trigger Reporting Mode		Event trigger
-CHOICE report criteria		
- Intra-frequency measurement reporting criteria		
- Parameters required for each event		
- Intra-frequency event identity		1g
- Triggering condition1		Not Present
- Triggering condition2		Not Present
- Reporting Range Constant		Not Present
- cells forbidden to affect reporting range		Not Present
- W(optional in case of 1a,1b)		Not Present
- Hysteresis		0.0
- Threshold used frequency		Not Present
- Reporting deactivation threshold		3
- Replacement activation threshold		Not Present
- Time to trigger		640
- Amount of reporting		4
- Reporting interval		4000
- Reporting cell status		
- CHOICE reported cells		Report cell within active set and/or monitored cells on used frequency
- Maximum number of reported cells		3
- Inter-frequency measurement system information	A1, A2	
- 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		TDD
- UARFCN (Nt)		Reference to 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		TDD
- Primary CCPCH info		Refer to clause titled "Default settings for cell No.4 (TDD)" in clause 6.1.4
- 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 Cell parameters ID shall be according to clause titled "Default settings for cell No.5 (TDD)" in clause 6.1.4
- 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 Cell parameters ID shall be according to clause titled "Default settings for cell No.6 (TDD)" in clause 6.1.4
- Cell for measurement		Not present

- Inter-RAT measurement system information	A1	Not Present
- Inter-RAT measurement system information	A2	
- 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		
- Base transceiver Station Identity Code (BSIC)		Reference to table 6.1.10 for Cell 9
- Band indicator		According to PICS/PIXIT
- BCCH ARFCN		Reference to 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 table 6.1.10 for Cell 10
- Band indicator		According to PICS/PIXITs
- BCCH ARFCN		Reference to table 6.1.10 for Cell 10
- Cell for measurement		Not present
- Traffic volume measurement system information	A1, A2	Not Present

Condition	Explanation
A1	TDD cell environment
A2	TDD/GSM inter-RAT cell environment

Contents of System Information Block type 12 in connected mode (FDD)

This is the default message content of SIB 12 for cell 1.

See clause 6.1.4 for the difference in message contents of System Information Block type 12 (FDD) for cell 2 to 8.

- FACH measurement occasion info	Not Present
- Measurement control system information	
- Use of HCS	Not used
- Cell selection and reselection quality measure	CPICH RSCP
- Intra-frequency measurement system information	Not Present
- Inter-frequency measurement system information	Not Present
- Inter-RAT measurement system information	Not Present
- Traffic volume measurement system information	Not Present

Contents of System Information Block type 12 in connected mode (3.84 Mcps and 1.28 Mcps TDD)

This is the default message content of SIB 12 for cell 1.

See clause 6.1.4 for the difference in message contents of System Information Block type 12 (TDD) for cell 2 to 8.

- FACH measurement occasion info	Not Present
- Measurement control system information	
- Use of HCS	Not used
- Cell selection and reselection quality measure	CPICH RSCP
- Intra-frequency measurement system information	Not Present
- Inter-RAT measurement system information	Not Present
- Traffic volume measurement system information	Not Present

Contents of System Information Block type 13 (used when supported PLMN type is ANSI-41)

- CN Domain system information list	
- CN Domain system information	*For Packet-Switched domain*
- CN domain identity	PS
- CHOICE CN Type	ANSI-41
- CN domain specific NAS system information	
- NAS (ANSI-41) system information	T.B.D
- CN domain specific DRX cycle length coefficient	7
- CN Domain system information	*For Circuit-Switched domain*
- CN domain identity	CS
- CHOICE CN Type	ANSI-41
- CN domain specific NAS system information	
- NAS (ANSI-41) system information	T.B.D
- CN domain specific DRX cycle length coefficient	7
- UE timers and constants in idle mode	
- T300	400 milliseconds
- N300	3
- T312	10 seconds
- N312	200
- Capability update requirement	
- UE radio access FDD capability update requirement	TRUE
- UE radio access TDD capability update requirement	FALSE
- System specific capability update requirement list	Not Present

Contents of System Information Block type 14 (3.84 Mcps TDD)

- Individual Timeslot interference list	
- Individual Timeslot interference	
- Timeslot number	2
- UL Timeslot Interference	-90 dbm
- Individual Timeslot interference	
- Timeslot number	3
- UL Timeslot Interference	-90 dbm
- Individual Timeslot interference	
- Timeslot number	4
- UL Timeslot Interference	-90 dbm
- Individual Timeslot interference	
- Timeslot number	5
- UL Timeslot Interference	-90 dbm
- Individual Timeslot interference	
- Timeslot number	6
- UL Timeslot Interference	-90 dbm
- Individual Timeslot interference	
- Timeslot number	7
- UL Timeslot Interference	-90 dbm
- Individual Timeslot interference	
- Timeslot number	9
- UL Timeslot Interference	-90 dbm
- Individual Timeslot interference	
- Timeslot number	10
- UL Timeslot Interference	-90 dbm
- Individual Timeslot interference	
- Timeslot number	11
- UL Timeslot Interference	-90 dbm
- Individual Timeslot interference	
- Timeslot number	12
- UL Timeslot Interference	-90 dbm
- Individual Timeslot interference	
- Timeslot number	13
- UL Timeslot Interference	-90 dbm
- Individual Timeslot interference	
- Timeslot number	14
- UL Timeslot Interference	-90 dbm
- Expiration Time Factor	Not Present (MD "1")

Contents of System Information Block type 16 (FDD)

- Pre-Defined Radio Configuration	(12.2 KBPS AMR)
- Pre-defined RB configuration	
- Re-establishment timer	useT315
- SRB InformationList	
- Signalling RB information to setup	(UM DCCH for RRC)
- RB identity	1
- CHOICE RLC info type	
- RLC info	
- CHOICE Uplink RLC mode	UM RLC
- Transmission RLC discard	timerBasedNoExplicit : dt100
- CHOICE Downlink RLC mode	UM RLC
- RB mapping info	
- Information for each multiplexing option	
- RLC logical channel mapping indicator	Not Present
- Number of RLC logical channels	1
- Uplink transport channel type	DCH
- UL Transport channel identity	5
- Logical channel identity	1
- CHOICE RLC size list	Configured
- MAC logical channel priority	1
- Downlink RLC logical channel info	
- Number of RLC logical channels	1
- Downlink transport channel type	DCH
- DL DCH Transport channel identity	10
- DL DSCH Transport channel identity	Not Present
- Logical channel identity	1
- Signalling RB information to setup	(AM DCCH for RRC)
- RB identity	2
- CHOICE RLC info type	
- RLC info	
- CHOICE Uplink RLC mode	AM RLC
- Transmission RLC discard	
- SDU discard mode	Max DAT retransmissions
- MAX_DAT	4
- Timer_MRW	100
- MaxMRW	4
- Transmission window size	8
- Timer_RST	500
- Max_RST	4
- Polling info	
- Timer_poll_prohibit	200
- Timer_poll	200
- Poll_PDU	Not Present
- Poll_SDU	1
- Last transmission PDU poll	TRUE
- Last retransmission PDU poll	TRUE
- Poll_Window	99
- Timer_poll_periodic	Not Present
- CHOICE Downlink RLC mode	AM RLC
- In-sequence delivery	TRUE
- Receiving window size	8
- Downlink RLC status info	
- Timer_status_prohibit	200
- Timer_EPC	200
- Missing PDU indicator	TRUE
- Timer_STATUS_periodic	Not Present
- RB mapping info	
- Information for each multiplexing option	
- RLC logical channel mapping indicator	Not Present
- Number of RLC logical channels	1
- Uplink transport channel type	DCH
- UL Transport channel identity	5
- Logical channel identity	2
- CHOICE RLC size list	Configured
- MAC logical channel priority	2
- Downlink RLC logical channel info	
- Number of RLC logical channels	1
- Downlink transport channel type	DCH

- DL DCH Transport channel identity	10
- DL DSCH Transport channel identity	Not Present
- Logical channel identity	2
- Signalling RB information to setup	(AM DCCH for RRC)
- RB identity	3
- CHOICE RLC info type	
- RLC info	
- CHOICE Uplink RLC mode	AM RLC
- Transmission RLC discard	
- SDU discard mode	Max DAT retransmissions
- MAX_DAT	4
- Timer_MRW	100
- MaxMRW	4
- Transmission window size	8
- Timer_RST	500
- Max_RST	4
- Polling info	
- Timer_poll_prohibit	200
- Timer_poll	200
- Poll_PDU	Not Present
- Poll_SDU	1
- Last transmission PDU poll	TRUE
- Last retransmission PDU poll	TRUE
- Poll_Window	99
- Timer_poll_periodic	Not Present
- CHOICE Downlink RLC mode	AM RLC
- In-sequence delivery	TRUE
- Receiving window size	8
- Downlink RLC status info	
- Timer_status_prohibit	200
- Timer_EPC	200
- Missing PDU indicator	TRUE
- Timer_STATUS_periodic	Not Present
- RB mapping info	
- Information for each multiplexing option	
- RLC logical channel mapping indicator	Not Present
- Number of RLC logical channels	1
- Uplink transport channel type	DCH
- UL Transport channel identity	5
- Logical channel identity	3
- CHOICE RLC size list	Configured
- MAC logical channel priority	3
- Downlink RLC logical channel info	
- Number of RLC logical channels	1
- Downlink transport channel type	DCH
- DL DCH Transport channel identity	10
- DL DSCH Transport channel identity	Not Present
- Logical channel identity	3
- Signalling RB information to setup	(AM DCCH for RRC)
- RB identity	4
- CHOICE RLC info type	
- RLC info	
- CHOICE Uplink RLC mode	AM RLC
- Transmission RLC discard	
- SDU discard mode	Max DAT retransmissions
- MAX_DAT	4
- Timer_MRW	100
- MaxMRW	4
- Transmission window size	8
- Timer_RST	500
- Max_RST	4
- Polling info	
- Timer_poll_prohibit	200
- Timer_poll	200
- Poll_PDU	Not Present
- Poll_SDU	1
- Last transmission PDU poll	TRUE
- Last retransmission PDU poll	TRUE

- Poll_Window	99
- Timer_poll_periodic	Not Present
- CHOICE Downlink RLC mode	AM RLC
- In-sequence delivery	TRUE
- Receiving window size	8
- Downlink RLC status info	
- Timer_status_prohibit	200
- Timer_EPC	200
- Missing PDU indicator	TRUE
- Timer_STATUS_periodic	Not Present
- RB mapping info	
- Information for each multiplexing option	
- RLC logical channel mapping indicator	Not Present
- Number of RLC logical channels	1
- Uplink transport channel type	DCH
- UL Transport channel identity	5
- Logical channel identity	4
- CHOICE RLC size list	Configured
- MAC logical channel priority	4
- Downlink RLC logical channel info	
- Number of RLC logical channels	1
- Downlink transport channel type	DCH
- DL DCH Transport channel identity	10
- DL DSCH Transport channel identity	Not Present
- Logical channel identity	4
- RAB information for setup	
- RB information to setup	
- RB identity	10
- PDCP info	Not Present
- CHOICE RLC info type	RLC info
- CHOICE Uplink RLC mode	TM RLC
- Transmission RLC discard	Not Present
- Segmentation indication	TRUE
- CHOICE Downlink RLC mode	TM RLC
- Segmentation indication	TRUE
- RB mapping info	
- Information for each multiplexing option	
- RLC logical channel mapping indicator	Not Present
- Number of uplink RLC logical channels	1
- Uplink transport channel type	DCH
- UL Transport channel identity	1
- Logical channel identity	7
- CHOICE RLC size list	Configured
- MAC logical channel priority	6
- Downlink RLC logical channel info	
- Number of downlink RLC logical channels	1
- Downlink transport channel type	DCH
- DL DCH Transport channel identity	6
- DL DSCH Transport channel identity	Not Present
- Logical channel identity	7
- RB identity	11
- PDCP info	Not Present
- CHOICE RLC info type	RLC info
- CHOICE Uplink RLC mode	TM RLC
- Transmission RLC discard	Not Present
- Segmentation indication	TRUE
- CHOICE Downlink RLC mode	TM RLC
- Segmentation indication	TRUE
- RB mapping info	
- Information for each multiplexing option	
- RLC logical channel mapping indicator	Not Present
- Number of uplink RLC logical channels	1
- Uplink transport channel type	DCH
- UL Transport channel identity	2
- Logical channel identity	8
- CHOICE RLC size list	Configured
- MAC logical channel priority	6
- Downlink RLC logical channel info	

- Number of downlink RLC logical channels	1
- Downlink transport channel type	DCH
- DL DCH Transport channel identity	7
- DL DSCH Transport channel identity	Not Present
- Logical channel identity	8
- RB identity	12
- PDCP info	Not Present
- CHOICE RLC info type	RLC info
- CHOICE Uplink RLC mode	TM RLC
- Transmission RLC discard	Not Present
- Segmentation indication	TRUE
- CHOICE Downlink RLC mode	TM RLC
- Segmentation indication	TRUE
- RB mapping info	
- Information for each multiplexing option	
- RLC logical channel mapping indicator	Not Present
- Number of uplink RLC logical channels	1
- Uplink transport channel type	DCH
- UL Transport channel identity	3
- Logical channel identity	9
- CHOICE RLC size list	Configured
- MAC logical channel priority	6
- Downlink RLC logical channel info	
- Number of downlink RLC logical channels	1
- Downlink transport channel type	DCH
- DL DCH Transport channel identity	8
- DL DSCH Transport channel identity	Not Present
- Logical channel identity	9
- Pre-Defined Transport Channel Configuration	
- UL CommonTransChInfo	
- UL TFCS	
- TFC subset	Default value is the complete existing set of transport format combinations
- Allowed Transport Format combination	0,1,2,3,4,5
- PRACH TFCS	Not Present
- CHOICE mode	FDD
- CHOICE TFCI signalling	Normal
- TFCI Field 1 information	
- CHOICE TFCS representation	Addition
- TFCS addition configure information	
- CHOICE TFCS Size	Number of bits used must be enough to cover all combinations of CTFC from clause 6.10.2.4.1.4.1 Parameter Set.
- CTFC information	This IE is repeated for TFC numbers and reference to clause 6.10.2.4.1.4.1 Parameter Set
- Power offset information	
- CHOICE Gain Factors	Signalled Gain Factor
- CHOICE mode	FDD
- Gain factor ßc	0
- Gain factor ßd	0
- Reference TFC ID	0
- Power offset Pp-m	0 dB
- Reference TFC ID	0
- Power offset Pp-m	0 dB
- Added or Reconfigured UL TrCH information	4 TrCHs(DCH for DCCH and 3DCHs for DTCH)
- Uplink transport channel type	DCH
- UL Transport channel identity	1
- TFS	
- CHOICE Transport channel type	Dedicated transport channels
- Dynamic Transport format information	
- RLC Size	Reference to clause 6.10.2.4.1.4.1 Parameter Set
- Number of TBs and TTI List	(This IE is repeated for TFI number.)
- Transmission Time Interval	Not Present
- Number of Transport blocks	Reference to clause 6.10.2.4.1.4.1 Parameter Set
- CHOICE Logical channel list	All
- Semi-static Transport Format information	
- Transmission time interval	Reference to clause 6.10.2.4.1.4.1 Parameter Set
- Type of channel coding	Reference to clause 6.10.2.4.1.4.1 Parameter Set

- Coding Rate	Reference to clause 6.10.2.4.1.4.1 Parameter Set
- Rate matching attribute	Reference to clause 6.10.2.4.1.4.1 Parameter Set
- CRC size	Reference to clause 6.10.2.4.1.4.1 Parameter Set
- Uplink transport channel type	DCH
- UL Transport channel identity	2
- TFS	
- CHOICE Transport channel type	Dedicated transport channels
- Dynamic Transport format information	
- RLC Size	Reference to clause 6.10.2.4.1.4.1 Parameter Set
- Number of TBs and TTI List	(This IE is repeated for TFI number.)
- Transmission Time Interval	Not Present
- Number of Transport blocks	Reference to clause 6.10.2.4.1.4.1 Parameter Set
- CHOICE Logical channel list	All
- Semi-static Transport Format information	
- Transmission time interval	Reference to clause 6.10.2.4.1.4.1 Parameter Set
- Type of channel coding	Reference to clause 6.10.2.4.1.4.1 Parameter Set
- Coding Rate	Reference to clause 6.10.2.4.1.4.1 Parameter Set
- Rate matching attribute	Reference to clause 6.10.2.4.1.4.1 Parameter Set
- CRC size	Reference to clause 6.10.2.4.1.4.1 Parameter Set
- Uplink transport channel type	DCH
- UL Transport channel identity	3
- TFS	
- CHOICE Transport channel type	Dedicated transport channels
- Dynamic Transport format information	
- RLC Size	Reference to clause 6.10.2.4.1.4.1 Parameter Set
- Number of TBs and TTI List	(This IE is repeated for TFI number.)
- Transmission Time Interval	Not Present
- Number of Transport blocks	Reference to clause 6.10.2.4.1.4.1 Parameter Set
- CHOICE Logical channel list	All
- Semi-static Transport Format information	
- Transmission time interval	Reference to clause 6.10.2.4.1.4.1 Parameter Set
- Type of channel coding	Reference to clause 6.10.2.4.1.4.1 Parameter Set
- Coding Rate	Reference to clause 6.10.2.4.1.4.1 Parameter Set
- Rate matching attribute	Reference to clause 6.10.2.4.1.4.1 Parameter Set
- CRC size	Reference to clause 6.10.2.4.1.4.1 Parameter Set
- Uplink transport channel type	DCH
- UL Transport channel identity	5
- TFS	
- CHOICE Transport channel type	Dedicated transport channels
- Dynamic Transport format information	
- RLC Size	Reference to clause 6.10.2.4.1.2.1 Parameter Set
- Number of TBs and TTI List	(This IE is repeated for TFI number.)
- Transmission Time Interval	Not Present
- Number of Transport blocks	Reference to clause 6.10.2.4.1.2.1 Parameter Set
- CHOICE Logical channel list	All
- Semi-static Transport Format information	
- Transmission time interval	Reference to clause 6.10.2.4.1.2.1 Parameter Set
- Type of channel coding	Reference to clause 6.10.2.4.1.2.1 Parameter Set
- Coding Rate	Reference to clause 6.10.2.4.1.2.1 Parameter Set
- Rate matching attribute	Reference to clause 6.10.2.4.1.2.1 Parameter Set
- CRC size	Reference to clause 6.10.2.4.1.2.1 Parameter Set
- DL CommonTransChInfo	
- SCCPCH TFCS	Not Present
- CHOICE mode	FDD
- CHOICE DL parameters	SameasUL
- Added or Reconfigured DL TrCH information	4 TrCHs(DCH for DCCH and 3DCHs for DTCH)
- Downlink transport channel type	DCH
- DL Transport channel identity	6
- CHOICE DL parameters	Same as UL
- Uplink transport channel type	DCH
- UL TrCH identity	1
- DCH quality target	
- BLER Quality value	0
- Downlink transport channel type	DCH
- DL Transport channel identity	7
- CHOICE DL parameters	Same as UL
- Uplink transport channel type	DCH
- UL TrCH identity	2

- DCH quality target	
- BLER Quality value	0
- Downlink transport channel type	DCH
- DL Transport channel identity	8
- CHOICE DL parameters	Same as UL
- Uplink transport channel type	DCH
- UL TrCH identity	3
- DCH quality target	
- BLER Quality value	0
- Downlink transport channel type	DCH
- DL Transport channel identity	10
- CHOICE DL parameters	Same as UL
- Uplink transport channel type	DCH
- UL TrCH identity	5
- DCH quality target	
- BLER Quality value	0
- Pre-Defined Physical Channel Configuration	
- Uplink DPCH power control info Predef	
- CHOICE mode	FDD
- Power Control Algorithm	Algorithm1
- CHOICE mode	FDD
- TFCI existence	FALSE
- Puncturing Limit	0.88
- Downlink DPCH power control info Predef	
- CHOICE mode	FDD
- Spreading factor	128
- Fixed or Flexible Position	Fixed
- TFCI existence	FALSE

Contents of System Information Block type17 (3.84 Mcsps TDD and 1.28 Mcps TDD)

This system information block contains fast changing parameters for the configuration of the shared physical channels to be used in connected mode, so this is not present.

Contents of System Information Block type 18

- Idle mode PLMN identities	
- PLMNs of intra-frequency cells list	Not present
- PLMNs of inter-frequency cells list	Not present
- PLMNs of inter-RAT cells list	Not present
- Connected mode PLMN identities	Not present

6.1.1 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

Two SCCPCHs are used in this SYSTEM INFORMATION configuration. The first SCCPCH carries the PCH and the second SCCPCH carries the FACH for Interactive/Background 32 kbps PS RAB and the FACH for SRBs on CCCH/ DCCH/ BCCH.

This Reference System Configuration is the same as defined in clause 6.1, except for the following SIBs.

Contents of System Information Block type 5 (FDD)

- SIB6 indicator	TRUE
- PICH Power offset	-5 dB
- CHOICE Mode	FDD
- AICH Power offset	-5 dB
- Primary CCPCH info	Not Present
- PRACH system information list	
- PRACH system information	
- PRACH info	
- CHOICE mode	FDD
- 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
- Transport channel Identity	15
- RACH TFS	
- CHOICE Transport channel type	Common transport channels
- Dynamic Transport format information	
- RLC size	168
- Number of TB and TTI List	
- Number of Transport blocks	1
- CHOICE Mode	FDD
- 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
- Type of channel coding	Convolutional
- Coding Rate	1/2
- Rate matching attribute	150
- CRC size	16
- RACH TFCS	
- 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	
- CHOICE mode	FDD
- 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.
- ASC Setting	Not Present
- ASC Setting	
- CHOICE mode	FDD
- 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.
- ASC Setting	Not Present
- ASC Setting	
- CHOICE mode	FDD
- 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.
- ASC Setting	Not Present
- ASC Setting	
- CHOICE mode	FDD
- 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.
- 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 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
- 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	(For 2 SCCPCHs)
- Secondary CCPCH info	(SCCPCH for standalone PCH)
- CHOICE mode	FDD
- Secondary scrambling code	Not Present
- STTD indicator	FALSE
- Spreading factor	128
- Code number	4
- Pilot symbol existence	FALSE
- TFCI existence	FALSE
- Fixed or Flexible position	Fixed
- Timing offset	30
- TFCS	
- 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	Not Present
- CTFC information	1
- Power offset information	Not Present
- FACH/PCH information	
- TFS	(PCH)
- CHOICE Transport channel type	Common transport channels
- Dynamic Transport format information	
- RLC Size	240
- Number of TB and TTI List	
- Number of Transport blocks	0
- Number of Transport blocks	1

- CHOICE Mode	FDD
- CHOICE Logical channel List	ALL
- Semi-static Transport Format information	
- Transmission time interval	10 ms
- 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
- PICH info	
- CHOICE mode	FDD
- Channelisation code	2
- Number of PI per frame	18
- STTD indicator	FALSE
- Secondary CCPCH info	(SCCPCH including two FACHs)
- CHOICE mode	FDD
- 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
- TFCS	
- CHOICE TFCI signalling	Normal
- TFCI Field 1 information	
- CHOICE TFCS representation	Complete reconfiguration
- TFCS complete reconfiguration information	
- CHOICE CTFC Size	4 bit
- CTFC information	0
- Power offset information	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
- FACH/PCH information	
- TFS	(FACH)
- CHOICE Transport channel type	Common transport channels
- Dynamic Transport format information	
- RLC Size	168
- Number of TB and TTI List	
- Number of Transport blocks	0
- Number of Transport blocks	1
- Number of Transport blocks	2
- CHOICE Mode	FDD
- CHOICE Logical channel List	ALL
- Semi-static Transport Format information	
- Transmission time interval	10 ms
- 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 Mode	FDD
- 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
- CBS DRX Level 1 information	Not Present

Contents of System Information Block type 5 (3.84 Mcps TDD)

- SIB6 indicator	FALSE
- CHOICE Mode	TDD
- TDD open loop power control	
- PUSCH system information	Not Present
- PDSCH system information	Not Present
- TDD open loop power control	
- Primary CCPCH Tx Power	30 dbm
- CHOICE TDD option	3.84 Mcps TDD /REL-4/
- Alpha	(1/8)
- PRACH Constant Value	-10
- DPCH Constant Value	-10
- PUSCH Constant Value	-10
- UE positioning related parameters	Not Present /REL-4/
- Primary CCPCH info	
- CHOICE *mode*	TDD
- CHOICE TDD option	3.84 Mcps TDD /REL-4/
- CHOICE SyncCase	Sync Case 2
- Timeslot	0
- Cell parameters ID	Not Present
- SCTD indicator	FALSE
- PRACH system information list	
- PRACH system information	
- PRACH info	
- CHOICE mode	TDD
- CHOICE TDD option	3.84 Mcps TDD /REL-4/
- Timeslot number	14
- PRACH Channelisation Code List	
- CHOICE SF	SF8
- Channelisation Code List	
- Channelisation Code	8/1
- Channelisation Code	8/2
- Channelisation Code	8/3
- Channelisation Code	8/4
- PRACH Midamble	Direct
- PNBSCH allocation	Not Present /REL-4/
- Transport channel Identity	15
- RACH TFS	
- CHOICE Transport channel type	Common transport channels
- Dynamic Transport format information	
- RLC size	168
- Number of TB and TTI List	
- Number of Transport blocks	1
- CHOICE Mode	TDD
- CHOICE Logical channel List	Configured
- RLC size	360
- Number of TB and TTI List	
- Number of Transport blocks	1
- CHOICE Mode	TDD
- CHOICE Logical channel List	Configured
- Semi-static Transport Format information	
- Transmission time interval	20 ms
- Type of channel coding	Convolutional
- Coding Rate	1/2
- Rate matching attribute	150

- CRC size	16
- RACH TFCS	
- 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	TDD
- Power offset Pp-m	0 dB
- CTFC information	1
- Power offset information	
- CHOICE Gain Factors	Signalled Gain Factor
- CHOICE mode	TDD
- Gain factor ßc	11
- Gain factor ßd	15
- Reference TFC ID	0
- CHOICE Mode	TDD
- Power offset Pp-m	0 dB
- PRACH partitioning	
- Access Service Class	
- ASC Setting	Not Present
- ASC Setting	
- CHOICE mode	TDD
- CHOICE TDD option	3.84 Mcps TDD
- Available Channelisation codes indices	Not Present (Default all)
- CHOICE subchannel size	Size1
- Available Subchannels	null
- ASC Setting	Not Present
- ASC Setting	
- CHOICE mode	TDD
- CHOICE TDD option	3.84 Mcps TDD
- Available Channelisation codes indices	Not Present (Default all)
- CHOICE subchannel size	Size1
- Available Subchannels	null
- ASC Setting	Not Present
- ASC Setting	
- CHOICE mode	TDD
- CHOICE TDD option	3.84 Mcps TDD
- Available Channelisation codes indices	Not Present (Default all)
- CHOICE subchannel size	Size1
- Available Subchannels	null
- ASC Setting	Not Present
- ASC Setting	
- CHOICE mode	TDD
- CHOICE TDD option	3.84 Mcps TDD
- Available Channelisation codes indices	Not Present (Default all)
- 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 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	TDD (no data)

- Secondary CCPCH system information	(For 2 SCCPCHs)
- Secondary CCPCH info	(SCCPCH for standalone PCH)
- CHOICE mode	TDD
- Secondary scrambling code	Not Present
- STTD indicator	FALSE
- Spreading factor	128
- Code number	4
- Pilot symbol existence	FALSE
- TFCI existence	FALSE
- Fixed or Flexible position	Fixed
- Timing offset	30
- TFCS	
- 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	Not Present
- CTFC information	1
- Power offset information	Not Present
- FACH/PCH information	
- TFS	(PCH)
- CHOICE Transport channel type	Common transport channels
- Dynamic Transport format information	
- RLC Size	240
- Number of TB and TTI List	
- Number of Transport blocks	0
- Number of Transport blocks	1
- CHOICE Mode	TDD
- CHOICE Logical channel List	ALL
- Semi-static Transport Format information	
- Transmission time interval	10 ms
- 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
- PICH info	
- CHOICE mode	TDD
- CHOICE TDD option	3.84 Mcps TDD
- Timeslot number	0
- Midamble shift and burst type	4
- CHOICE Burst Type	Type 1
- Midamble Allocation Mode	Default midamble
- Midamble configuration burst type 1 and 3	8
- Midamble Shift	Not Present
- Channelisation code	16/16
- Repetition period/length	64/2
- Offset	0
- Paging indicator length	4
- NGAP	4
- NPCH	2
- Secondary CCPCH info	(SCCPCH including two FACHs)
- CHOICE mode	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

- TFCS	
- CHOICE TFCI signalling	Normal
- TFCI Field 1 information	
- CHOICE TFCS representation	Complete reconfiguration
- TFCS complete reconfiguration information	
- CHOICE CTFC Size	4 bit
- CTFC information	0
- Power offset information	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
- FACH/PCH information	
- TFS	(FACH)
- CHOICE Transport channel type	Common transport channels
- Dynamic Transport format information	
- RLC Size	168
- Number of TB and TTI List	
- Number of Transport blocks	0
- Number of Transport blocks	1
- Number of Transport blocks	2
- CHOICE Mode	TDD
- CHOICE Logical channel List	ALL
- Semi-static Transport Format information	
- Transmission time interval	10 ms
- 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 Mode	TDD
- 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
- CBS DRX Level 1 information	Not Present

Contents of System Information Block type 5 (1.28 Mcps TDD)

<FFS>

Contents of System Information Block type 6 in connected mode (FDD)

- PICH Power offset	-5 dB
- CHOICE Mode	FDD
- AICH Power offset	-5 dB
- Primary CCPCH info	Not Present
- PRACH system information list	Not Present
- Secondary CCPCH system information	Not Present
- CBS DRX Level 1 information	Not Present

Contents of System Information Block type 6 in connected mode (3.84 Mcps TDD)

None

Contents of System Information Block type 6 in connected mode (1.28 Mcps TDD)

<FFS>

6.1.2 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)

Three SCCPCHs are used in this SYSTEM INFORMATION configuration. The first SCCPCH carries the PCH. The second SCCPCH carries the FACH for CTCH (Cell Broadcast Service) and the FACH for SRBs on CCCH/ BCCH for idle mode UEs. The third SCCPCH carries the FACH for Interactive/Background 32 kbps PS RAB and the FACH for SRBs on CCCH/ DCCH/ BCCH for connected mode UEs.

This Reference System Configuration is the same as defined in clause 6.1, except for the following SIBs.

Contents of System Information Block type 5 (FDD)

- SIB6 indicator	TRUE
- PICH Power offset	-5 dB
- CHOICE Mode	FDD
- AICH Power offset	-5 dB
- Primary CCPCH info	Not Present
- PRACH system information list	
- PRACH system information	
- PRACH info	
- CHOICE mode	FDD
- 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
- Transport channel Identity	15
- RACH TFS	
- CHOICE Transport channel type	Common transport channels
- Dynamic Transport format information	
- RLC size	168
- Number of TB and TTI List	
- Number of Transport blocks	1
- CHOICE Mode	FDD
- 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
- Type of channel coding	Convolutional
- Coding Rate	1/2
- Rate matching attribute	150
- CRC size	16
- RACH TFCS	
- 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	
- CHOICE mode	FDD
- 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.
- ASC Setting	Not Present
- ASC Setting	
- CHOICE mode	FDD
- 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.
- ASC Setting	Not Present
- ASC Setting	
- CHOICE mode	FDD
- 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.
- ASC Setting	Not Present
- ASC Setting	
- CHOICE mode	FDD
- 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.
- 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 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
- 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	(For 2 SCCPCHs)
- Secondary CCPCH info	(SCCPCH for standalone PCH)
- CHOICE mode	FDD
- Secondary scrambling code	Not Present
- STTD indicator	FALSE
- Spreading factor	128
- Code number	4
- Pilot symbol existence	FALSE
- TFCI existence	FALSE
- Fixed or Flexible position	Fixed
- Timing offset	30
- TFCS	
- 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	Not Present
- CTFC information	1
- Power offset information	Not Present
- FACH/PCH information	
- TFS	(PCH)
- CHOICE Transport channel type	Common transport channels
- Dynamic Transport format information	
- RLC Size	240
- Number of TB and TTI List	
- Number of Transport blocks	0
- Number of Transport blocks	1
- CHOICE Mode	FDD
- CHOICE Logical channel List	ALL
- Semi-static Transport Format information	
- Transmission time interval	10 ms
- 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
- PICH info	
- CHOICE mode	FDD
- Channelisation code	2
- Number of PI per frame	18
- STTD indicator	FALSE
- Secondary CCPCH info	(SCCPCH including two FACHs)
- CHOICE mode	FDD
- Secondary scrambling code	Not Present
- STTD indicator	FALSE
- Spreading factor	128
- Code number	5
- 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
- TFCS	
- 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	Not Present
- CTFC information	1
- Power offset information	Not Present
- CTFC information	2
- Power offset information	Not Present
- FACH/PCH information	
- TFS	(FACH)
- CHOICE Transport channel type	Common transport channels
- Dynamic Transport format information	
- RLC Size	168
- Number of TB and TTI List	
- Number of Transport blocks	0
- Number of Transport blocks	1
- CHOICE Mode	FDD
- CHOICE Logical channel List	ALL
- Semi-static Transport Format information	
- Transmission time interval	10 ms
- Type of channel coding	Convolutional
- Coding Rate	1/3
- 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	168
- Number of TB and TTI List	
- Number of Transport blocks	0
- Number of Transport blocks	1
- CHOICE Mode	FDD
- CHOICE Logical channel List	ALL
- Semi-static Transport Format information	
- Transmission time interval	10 ms
- Type of channel coding	Convolutional
- Coding Rate	1/3
- Rate matching attribute	220
- CRC size	16bit
- Transport channel Identity	14 (for FACH)
- CTCH indicator	TRUE
- CBS DRX Level 1 information	
- Period of CTCH allocation (N)	2
- CBS frame offset (K)	0

Contents of System Information Block type 6 in connected mode (FDD)

- PICH Power offset	-5 dB
- CHOICE Mode	FDD
- AICH Power offset	-5 dB
- Primary CCPCH info	Not present
- PRACH system information list	Not Present
- Secondary CCPCH system information	
- Secondary CCPCH info	(SCCPCH including two FACHs)
- CHOICE mode	FDD
- 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	90
- TFCS	
- CHOICE TFCI signalling	Normal
- TFCI Field 1 information	

- CHOICE TFCS representation	Complete reconfiguration
- TFCS complete reconfiguration information	
- CHOICE CTFC Size	4 bit
- CTFC information	0
- Power offset information	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
- FACH/PCH information	
- TFS	(FACH)
- CHOICE Transport channel type	Common transport channels
- Dynamic Transport format information	
- RLC Size	168
- Number of TB and TTI List	
- Number of Transport blocks	0
- Number of Transport blocks	1
- Number of Transport blocks	2
- CHOICE Mode	FDD
- CHOICE Logical channel List	ALL
- Semi-static Transport Format information	
- Transmission time interval	10 ms
- Type of channel coding	Convolutional
- Coding Rate	1/2
- Rate matching attribute	220
- CRC size	16 bit
- Transport channel Identity	16 (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 Mode	FDD
- 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	17 (for FACH)
- CTCH indicator	FALSE
- CBS DRX Level 1 information	Not Present

6.1.3 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 and third SCCPCHs

Three SCCPCHs are used in this SYSTEM INFORMATION configuration. The first SCCPCH carries the PCH and both the second and third SCCPCHs carry the FACH for Interactive/Background 32 kbps PS RAB and the FACH for SRBs on CCCH/ DCCH/ BCCH.

This Reference System Configuration is the same as defined in clause 6.1, except for the following SIBs. (SIB6 is not used in this configuration.)

Contents of Scheduling Block 1 (FDD)

- References to other system information blocks	
- Scheduling information	
- CHOICE Value tag	Not Present

- SEG_COUNT	1
- SIB_REP	16
- SIB_POS	4
- SIB_POS offset info	Not Present
- SIB type SIBs only	System Information Type 7
- Scheduling information	
- CHOICE Value tag	Cell Value tag
- Cell Value tag	A valid Cell value tag value as defined in TS 25.331 [34]
- SEG_COUNT	3
- SIB_REP	64
- SIB_POS	58
- SIB_POS offset info	
- SIB_OFF	2
- SIB_OFF	2
- SIB type SIBs only	System Information Type 11
- Scheduling information	
- CHOICE Value tag	Cell Value tag
- Cell Value tag	A valid Cell value tag value as defined in TS 25.331 [34]
- SEG_COUNT	3
- SIB_REP	64
- SIB_POS	26
- SIB_POS offset info	
- SIB_OFF	2
- SIB_OFF	2
- SIB type SIBs only	System Information Type 12
- Scheduling information	
- CHOICE Value tag	PLMN Value tag
- PLMN Value tag	A valid PLMN value tag value as defined in TS 25.331 [34]
- SEG_COUNT	1
- SIB_REP	64
- SIB_POS	36
- SIB_POS offset info	Not Present
- SIB type SIBs only	System Information Type 18

Contents of System Information Block type 5 (FDD)

- SIB6 indicator	FALSE
- PICH Power offset	-5 dB
- CHOICE Mode	FDD
- AICH Power offset	-5 dB
- Primary CCPCH info	Not Present
- PRACH system information list	
- PRACH system information	
- PRACH info	
- CHOICE mode	FDD
- 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
- Transport channel Identity	15
- RACH TFS	
- CHOICE Transport channel type	Common transport channels
- Dynamic Transport format information	
- RLC size	168
- Number of TB and TTI List	
- Number of Transport blocks	1
- CHOICE Mode	FDD
- 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
- Type of channel coding	Convolutional
- Coding Rate	1/2
- Rate matching attribute	150
- CRC size	16
- RACH TFCS	
- 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	
- CHOICE mode	FDD
- 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.
- ASC Setting	Not Present
- ASC Setting	
- CHOICE mode	FDD
- 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.
- ASC Setting	Not Present
- ASC Setting	
- CHOICE mode	FDD
- 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.
- ASC Setting	Not Present
- ASC Setting	
- CHOICE mode	FDD
- 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.
- 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 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
- 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	(For 3 SCCPCHs)
- Secondary CCPCH info	(SCCPCH for standalone PCH)
- CHOICE mode	FDD
- Secondary scrambling code	Not Present
- STTD indicator	FALSE
- Spreading factor	128
- Code number	6
- Pilot symbol existence	FALSE
- TFCI existence	FALSE
- Fixed or Flexible position	Fixed
- Timing offset	30
- TFCS	
- 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	Not Present
- CTFC information	1
- Power offset information	Not Present
- FACH/PCH information	
- TFS	(PCH)
- CHOICE Transport channel type	Common transport channels
- Dynamic Transport format information	
- RLC Size	240
- Number of TB and TTI List	
- Number of Transport blocks	0
- Number of Transport blocks	1
- CHOICE Mode	FDD
- CHOICE Logical channel List	ALL
- Semi-static Transport Format information	
- Transmission time interval	10 ms
- 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
- PICH info	
- CHOICE mode	FDD
- Channelisation code	2

- Number of PI per frame	18
- STTD indicator	FALSE
- Secondary CCPCH info	(SCCPCH including two FACHs)
- CHOICE mode	FDD
- 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
- TFCS	
- CHOICE TFCI signalling	Normal
- TFCI Field 1 information	
- CHOICE TFCS representation	Complete reconfiguration
- TFCS complete reconfiguration information	
- CHOICE CTFC Size	4 bit
- CTFC information	0
- Power offset information	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
- FACH/PCH information	
- TFS	(FACH)
- CHOICE Transport channel type	Common transport channels
- Dynamic Transport format information	
- RLC Size	168
- Number of TB and TTI List	
- Number of Transport blocks	0
- Number of Transport blocks	1
- Number of Transport blocks	2
- CHOICE Mode	FDD
- CHOICE Logical channel List	ALL
- Semi-static Transport Format information	
- Transmission time interval	10 ms
- 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 Mode	FDD
- 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
- Secondary CCPCH info	(SCCPCH including two FACHs)
- CHOICE mode	FDD
- Secondary scrambling code	Not Present
- STTD indicator	FALSE

- Spreading factor	64
- Code number	2
- Pilot symbol existence	FALSE
- TFCI existence	TRUE (default value)
- Fixed or Flexible position	Flexible (default value)
- Timing offset	90
- TFCS	
- CHOICE TFCI signalling	Normal
- TFCI Field 1 information	
- CHOICE TFCS representation	Complete reconfiguration
- TFCS complete reconfiguration information	
- CHOICE CTFC Size	4 bit
- CTFC information	0
- Power offset information	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
- FACH/PCH information	
- TFS	(FACH)
- CHOICE Transport channel type	Common transport channels
- Dynamic Transport format information	
- RLC Size	168
- Number of TB and TTI List	
- Number of Transport blocks	0
- Number of Transport blocks	1
- Number of Transport blocks	2
- CHOICE Mode	FDD
- CHOICE Logical channel List	ALL
- Semi-static Transport Format information	
- Transmission time interval	10 ms
- Type of channel coding	Convolutional
- Coding Rate	1/2
- Rate matching attribute	220
- CRC size	16 bit
- Transport channel Identity	16 (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 Mode	FDD
- 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	17 (for FACH)
- CTCH indicator	FALSE
- CBS DRX Level 1 information	Not Present

Contents of System Information Block type 5 (3.84 Mcps TDD)

<FFS>

Contents of System Information Block type 5 (1.28 Mcps TDD)

<FFS>

6.1.4 Default parameters for 1 to 8 cell environments

Default settings for cell No.1 (FDD)

Downlink input level	Reference clause 6.10 "Parameter Set"
Uplink output power	Minimum supported by the UE's power class.
PCCPCH/PCPICH carrier number	Reference clause 6.10 "Parameter Set"
Cell Channel Description	
- Primary CPICH info	
- Primary scrambling code	100

Contents of System Information Block type 11 for cell No.1 (FDD)

See clause 6.1.0b for contents of System Information Block type 11 (FDD) for cell 1.

Contents of System Information Block type 12 in connected mode for cell No.1 (FDD)

See clause 6.1.0b for contents of System Information Block type 12 (FDD) for cell 1.

Default settings for cell No.1 (TDD)

Downlink input level	Reference clause 6 Parameter Set
Uplink output power	Minimum supported by the UE's power class.
PCCPCH/PCPICH carrier number	Reference clause 6 Parameter Set
Cell Channel Description	
- Primary CCPCH info	
- Cell parameters ID	0

Contents of System Information Block type 11 for cell No.1 (TDD)

See clause 6.1.0b for contents of System Information Block type 11 (TDD) for cell 1.

Contents of System Information Block type 12 in connected mode for cell No.1 (TDD)

See clause 6.1.0b for contents of System Information Block type 12 (TDD) for cell 1.

Cell No.2

The contents of SYSTEM INFORMATION BLOCK TYPE 1 to 16 messages for cell No.2 are identical to those of cell No.1 with the following exceptions.

Cell identity	0000 0000 0000 0000 0000 0000 0010B
URA identity	0000 0000 0000 0001B

Default settings for cell No.2 (FDD)

Downlink input level	Reference clause 6.10 "Parameter Set"
Uplink output power	Minimum supported by the UE's power class.
PCCPCH/PCPICH carrier number	Reference clause 6.10 "Parameter Set"
Cell Channel Description	
- Primary CPICH info	
- Primary scrambling code	150

Contents of System Information Block type 11 for cell No.2 (FDD)

- Intra-frequency measurement system information	A1, A2, A3	
….		
- 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 clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.2 (FDD)" in clause 6.1.4
- Intra-frequency cell id		1
- Cell info		Same content as specified for Intra-frequency cell id=2 in SIB11 for Cell 1 in clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.1 (FDD)" in clause 6.1.4
- Intra-frequency cell id		3
- Cell info		Same content as specified for Intra-frequency cell id=3 in SIB11 for Cell 1 in clause 6.1.0b
- Intra-frequency cell id	A1, A3	7
- Cell info		Same content as specified for Intra-frequency cell id=7 in SIB11 for Cell 1 in clause 6.1.0b
- Intra-frequency cell id		8
- Cell info		Same content as specified for Intra-frequency cell id=8 in SIB11 for Cell 1 in clause 6.1.0b
- Intra-frequency cell id	A3	11
- Cell info		Same content as specified for Intra-frequency cell id=2 with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.11 (FDD)" in clause 6.1.4
…..		
- Inter-frequency measurement system information	A1, A2	
…..		
- 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 clause 6.1.0b
- Cell info		Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in clause 6.1.0b
- Inter frequency cell id		5
- Frequency info		Same content as specified for Inter-frequency cell id=5 in SIB11 for Cell 1 in clause 6.1.0b
- Cell info		Same content as specified for Inter-frequency cell id=5 in SIB11 for Cell 1 in clause 6.1.0b
- Inter frequency cell id		6
- Frequency info		Same content as specified for Inter-frequency cell id=6 in SIB11 for Cell 1 in clause 6.1.0b
- Cell info		Same content as specified for Inter-frequency cell id=6 in SIB11 for Cell 1 in clause 6.1.0b
…..		
- Inter-RAT cell info list	A2	
….		
- 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 clause 6.1.0b
- 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 clause 6.1.0b

….		

Condition	Explanation
A1	FDD cell environment
A2	FDD/GSM inter-RAT cell environment
A3	FDD intra-frequency cell environment (6 intra-frequency cells without inter-frequency cells)

Default settings for cell No.2 (TDD)

Downlink input level	Reference clause 6 Parameter Set
Uplink output power	Minimum supported by the UE's power class.
PCCPCH/PCPICH carrier number	Reference clause 6 Parameter Set
Cell Channel Description	
- Primary CCPCH info	
- Cell parameters ID	4

Contents of System Information Block type 11 for cell No.2 (TDD)

- 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 clause 6.1.0b with the exception that value for Cell parameters ID shall be according to clause titled "Default settings for cell No.2 (TDD)" in clause 6.1.4
- Intra-frequency cell id	1
- Cell info	Same content as specified for Intra-frequency cell id=2 in SIB11 for Cell 1 in clause 6.1.0b with the exception that value for Cell parameters ID shall be according to clause titled "Default settings for cell No.1 (TDD)" in clause 6.1.4
- Intra-frequency cell id	3
- Cell info	Same content as specified for Intra-frequency cell id=3 in SIB11 for Cell 1 in clause 6.1.0b
- Intra-frequency cell id	7
- Cell info	Same content as specified for Intra-frequency cell id=7 in SIB11 for Cell 1 in clause 6.1.0b
- Intra-frequency cell id	8
- Cell info	Same content as specified for Intra-frequency cell id=8 in SIB11 for Cell 1 in clause 6.1.0b
…..	
- 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 clause 6.1.0b
- Cell info	Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in clause 6.1.0b
- Inter frequency cell id	5
- Frequency info	Same content as specified for Inter-frequency cell id=5 in SIB11 for Cell 1 in clause 6.1.0b
- Cell info	Same content as specified for Inter-frequency cell id=5 in SIB11 for Cell 1 in clause 6.1.0b
- Inter frequency cell id	6
- Frequency info	Same content as specified for Inter-frequency cell id=6 in SIB11 for Cell 1 in clause 6.1.0b
- Cell info	Same content as specified for Inter-frequency cell id=6 in SIB11 for Cell 1 in clause 6.1.0b
…..	

Cell No.3

The contents of SYSTEM INFORMATION BLOCK TYPE 1 to 16 messages for cell No.3 are identical to those of cell No.1 with the following exceptions.

Cell identity	0000 0000 0000 0000 0000 0000 0011B
URA identity	0000 0000 0000 0010B

Default settings for cell No.3 (FDD)

Downlink input level	Reference clause 6.10 "Parameter Set"
Uplink output power	Minimum supported by the UE's power class.
PCCPCH/PCPICH carrier number	Reference clause 6.10 "Parameter Set"
Cell Channel Description	
- Primary CPICH info	
- Primary scrambling code	200

Contents of System Information Block type 11 for cell No.3 (FDD)

- Intra-frequency measurement system information	A1, A2, A3	
….		
- 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 clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.3 (FDD)" in clause 6.1.4
- Intra-frequency cell id		1
- Cell info		Same content as specified for Intra-frequency cell id=2 (neigbour cell) in SIB11 for Cell 1 in clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.1 (FDD)" in clause 6.1.4
- Intra-frequency cell id		2
- Cell info		Same content as specified for Intra-frequency cell id=2 in SIB11 for Cell 1 in clause 6.1.0b
- Intra-frequency cell id	A1, A3	7
- Cell info		Same content as specified for Intra-frequency cell id=7 in SIB11 for Cell 1 in clause 6.1.0b
- Intra-frequency cell id		8
- Cell info		Same content as specified for Intra-frequency cell id=8 in SIB11 for Cell 1 in clause 6.1.0b
- Intra-frequency cell id	A3	11
- Cell info		Same content as specified for Intra-frequency cell id=11 in SIB11 for Cell 1 in clause 6.1.0b
…..		
- Inter-frequency measurement system information	A1, A2	
…..		
- 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 clause 6.1.0b
- Cell info		Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in clause 6.1.0b
- 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=5 in SIB11 for Cell 1 in clause 6.1.0b
- 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=6 in SIB11 for Cell 1 in clause 6.1.0b
…..		
- Inter-RAT cell info list	A2	
….		
- 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 clause 6.1.0b
- 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 clause 6.1.0b
….		

Condition	Explanation
A1	FDD cell environment
A2	FDD/GSM inter-RAT cell environment
A3	FDD intra-frequency cell environment (6 intra-frequency cells without inter-frequency cells)

Default settings for cell No.3 (TDD)

Downlink input level	Reference clause 6 Parameter Set
Uplink output power	Minimum supported by the UE's power class.
PCCPCH/PCPICH carrier number	Reference clause 6 Parameter Set
Cell Channel Description	
- Primary CCPCH info	
- Cell parameters ID	8

Contents of System Information Block type 11 for cell No.3 (TDD)

- 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 clause 6.1.0b with the exception that value for Cell parameters ID shall be according to clause titled "Default settings for cell No.3 (TDD)" in clause 6.1.4
- Intra-frequency cell id	1
- Cell info	Same content as specified for Intra-frequency cell id=2 (neigbour cell) in SIB11 for Cell 1 in clause 6.1.0b with the exception that value for Cell parameters ID shall be according to clause titled "Default settings for cell No.1 (TDD)" in clause 6.1.4
- Intra-frequency cell id	2
- Cell info	Same content as specified for Intra-frequency cell id=2 in SIB11 for Cell 1 in clause 6.1.0b
- Intra-frequency cell id	7
- Cell info	Same content as specified for Intra-frequency cell id=7 in SIB11 for Cell 1 in clause 6.1.0b
- Intra-frequency cell id	8
- Cell info	Same content as specified for Intra-frequency cell id=8 in SIB11 for Cell 1 in clause 6.1.0b
…..	
- 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 clause 6.1.0b
- Cell info	Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in clause 6.1.0b

- 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=5 in SIB11 for Cell 1 in clause 6.1.0b
- 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=6 in SIB11 for Cell 1 in clause 6.1.0b
…..	

Cell No.4

The contents of SYSTEM INFORMATION BLOCK TYPE 1 to 16 messages for cell No.4 are identical to those of cell No.1 with the following exceptions.

Cell identity	0000 0000 0000 0000 0000 0000 0100B
URA identity	0000 0000 0000 0010B

Default settings for cell No.4 (FDD)

Downlink input level	Reference clause 6.10 "Parameter Set"
Uplink output power	Minimum supported by the UE's power class.
PCCPCH/PCPICH carrier number	Reference clause 6.10 "Parameter Set"
Cell Channel Description	
- Primary CPICH info	
- Primary scrambling code	250

Contents of System Information Block type 11 for cell No.4 (FDD)

- Intra-frequency measurement system information	A1, A2	
….		
- 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 clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.4 (FDD)" in clause 6.1.4
- Intra-frequency cell id		5
- Cell info		Same content as specified for Intra-frequency cell id=2 in SIB11 for Cell 1 in clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.5 (FDD)" in clause 6.1.4
- Intra-frequency cell id		6
- Cell info		Same content as specified for Intra-frequency cell id=2 in SIB11 for Cell 1 in clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.6 (FDD)" in clause 6.1.4
…..		
- Inter-frequency measurement system information	A1, A2	
…..		
- New inter-frequency cells		
- Inter-frequency cell id		1
- Frequency info		

- 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
- Cell info		Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.1 (FDD)" in clause 6.1.4
- 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 clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.2 (FDD)" in clause 6.1.4
- 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 clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.3 (FDD)" in clause 6.1.4
- Inter-frequency cell id	A1	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 clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.7 (FDD)" in clause 6.1.4
- 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 clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.8 (FDD)" in clause 6.1.4
- Inter-RAT cell info list	A2	
….		
- 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 clause 6.1.0b
- 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 clause 6.1.0b
….		

Condition	Explanation
A1	FDD cell environment
A2	FDD/GSM inter-RAT cell environment

Default settings for cell No.4 (TDD)

Downlink input level	Reference clause 6 Parameter Set

Uplink output power	Minimum supported by the UE's power class.
PCCPCH/PCPICH carrier number	Reference clause 6 Parameter Set
Cell Channel Description	
- Primary CCPCH info	
- Cell parameters ID	12

Contents of System Information Block type 11 for cell No.4 (TDD)

- 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 clause 6.1.0b with the exception that value for Cell parameters ID shall be according to clause titled "Default settings for cell No.4 (TDD)" in clause 6.1.4
- Intra-frequency cell id	5
- Cell info	Same content as specified for Intra-frequency cell id=2 in SIB11 for Cell 1 in clause 6.1.0b with the exception that value for Cell parameters ID shall be according to clause titled "Default settings for cell No.5 (TDD)" in clause 6.1.4
- Intra-frequency cell id	6
- Cell info	Same content as specified for Intra-frequency cell id=2 in SIB11 for Cell 1 in clause 6.1.0b with the exception that value for Cell parameters ID shall be according to clause titled "Default settings for cell No.6 (TDD)" in clause 6.1.4
…..	
- Inter-frequency measurement system information	
…..	
- New inter-frequency cells	
- Inter-frequency cell id	1
- Frequency info	
- UARFCN downlink(Nt)	Reference to table 6.1.7 for Cell 1
- Cell info	Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in clause 6.1.0b with the exception that value for Cell parameters ID shall be according to clause titled "Default settings for cell No.1 (TDD)" in clause 6.1.4
- 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 clause 6.1.0b with the exception that value for Cell parameters ID shall be according to clause titled "Default settings for cell No.2 (TDD)" in clause 6.1.4
- 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 clause 6.1.0b with the exception that value for Cell parameters ID shall be according to clause titled "Default settings for cell No.3 (TDD)" in clause 6.1.4
- 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 clause 6.1.0b with the exception that value for Cell parameters ID shall be according to clause titled "Default settings for cell No.7 (TDD)" in clause 6.1.4
- 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 clause 6.1.0b with the exception that value for Cell parameters ID shall be according to clause titled "Default settings for cell No.8 (TDD)" in clause 6.1.4

Cell No.5

The contents of SYSTEM INFORMATION BLOCK TYPE 1 to 16 messages for cell No.5 are identical to those of cell No.4 with the following exceptions.

Cell identity	0000 0000 0000 0000 0000 0000 0101B
URA identity	0000 0000 0000 0011B

Default settings for cell No.5 (FDD)

Downlink input level	Reference clause 6.10 "Parameter Set"
Uplink output power	Minimum supported by the UE's power class.
PCCPCH/PCPICH carrier number	Reference clause 6.10 "Parameter Set"
Cell Channel Description	
- Primary CPICH info	
- Primary scrambling code	300

Contents of System Information Block type 11 for cell No.5 (FDD)

- Intra-frequency measurement system information	A1, A2	
….		
- 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 clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.5 (FDD)" in clause 6.1.4
- Intra-frequency cell id		4
- Cell info		Same content as specified for Intra-frequency cell id=2 in SIB11 for Cell 1 in clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.4 (FDD)" in clause 6.1.4
- Intra-frequency cell id		6
- Cell info		Same content as specified for Intra-frequency cell id=2 in SIB11 for Cell 1 in clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.6 (FDD)" in clause 6.1.4
…..		
- Inter-frequency measurement system information	A1, A2	
…..		
- New inter-frequency cells		
- Inter-frequency cell id		1
- Frequency info		
- 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
- Cell info		Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.1 (FDD)" in clause 6.1.4
- 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 clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.2 (FDD)" in clause 6.1.4
- 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 clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.3 (FDD)" in clause 6.1.4
- Inter-frequency cell id	A1	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 clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.7 (FDD)" in clause 6.1.4
- 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 clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.8 (FDD)" in clause 6.1.4
…..		
- Inter-RAT cell info list	A2	
….		
- 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 clause 6.1.0b
- 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 clause 6.1.0b
….		

Condition	Explanation
A1	FDD cell environment
A2	FDD/GSM inter-RAT cell environment

Default settings for cell No.5 (TDD)

Downlink input level	Reference clause 6 Parameter Set
Uplink output power	Minimum supported by the UE's power class.
PCCPCH/PCPICH carrier number	Reference clause 6 Parameter Set
Cell Channel Description	
- Primary CCPCH info	
- Cell parameters ID	114

Contents of System Information Block type 11 for cell No.5 (TDD)

- 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 clause 6.1.0b with the exception that value for Cell parameters ID shall be according to clause titled "Default settings for cell No.5 (TDD)" in clause 6.1.4
- Intra-frequency cell id	4
- Cell info	Same content as specified for Intra-frequency cell id=2 in SIB11 for Cell 1 in clause 6.1.0b with the exception that value for Cell parameters ID shall be according to clause titled "Default settings for cell No.4 (TDD)" in clause 6.1.4
- Intra-frequency cell id	6
- Cell info	Same content as specified for Intra-frequency cell id=2 in SIB11 for Cell 1 in clause 6.1.0b with the exception that value for Cell parameters ID shall be according to clause titled "Default settings for cell No.6 (TDD)" in clause 6.1.4
…..	
- Inter-frequency measurement system information	
…..	
- New inter-frequency cells	
- Inter-frequency cell id	1
- Frequency info	
- UARFCN downlink(Nt)	Reference to table 6.1.7 for Cell 1
- Cell info	Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in clause 6.1.0b with the exception that value for Cell parameters ID shall be according to clause titled "Default settings for cell No.1 (TDD)" in clause 6.1.4
- 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 clause 6.1.0b with the exception that value for Cell parameters ID shall be according to clause titled "Default settings for cell No.2 (TDD)" in clause 6.1.4
- 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 clause 6.1.0b with the exception that value for Cell parameters ID shall be according to clause titled "Default settings for cell No.3 (TDD)" in clause 6.1.4
- 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 clause 6.1.0b with the exception that value for Cell parameters ID shall be according to clause titled "Default settings for cell No.7 (TDD)" in clause 6.1.4
- 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 clause 6.1.0b with the exception that value for Cell parameters ID shall be according to clause titled "Default settings for cell No.8 (TDD)" in clause 6.1.4

Cell No.6

The contents of SYSTEM INFORMATION BLOCK TYPE 1 to 16 messages for cell No.6 are identical to those of cell No.4 with the following exceptions:

Cell identity	0000 0000 0000 0000 0000 0000 0110B
URA identity	0000 0000 0000 0011B

Default settings for cell No.6 (FDD)

Downlink input level	Reference clause 6 Parameter Set
Uplink output power	Minimum supported by the UE's power class.
PCCPCH/PCPICH carrier number	Reference clause 6 Parameter Set
Cell Channel Description	
- Primary CPICH info	
- Primary scrambling code	350

Contents of System Information Block type 11 for cell No.6 (FDD)

- Intra-frequency measurement system information	A1, A2	
….		
- 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 clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.6 (FDD)" in clause 6.1.4
- Intra-frequency cell id		4
- Cell info		Same content as specified for Intra-frequency cell id=2 in SIB11 for Cell 1 in clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.4 (FDD)" in clause 6.1.4
- Intra-frequency cell id		5
- Cell info		Same content as specified for Intra-frequency cell id=2 in SIB11 for Cell 1 in clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.5 (FDD)" in clause 6.1.4
…..		
- Inter-frequency measurement system information	A1, A2	
…..		
- New inter-frequency cells		
- Inter-frequency cell id		1
- Frequency info		
- UARFCN uplink(Nu)		Not present Absence of this IE is equivalent to apply the default duplex distance defined for the operating frequency according to 3GPP TS 25.101 [11]
- UARFCN downlink(Nd)		Reference to table 6.1.2 for Cell 1
- Cell info		Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.1 (FDD)" in clause 6.1.4
- 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 clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.2 (FDD)" in clause 6.1.4
- 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 clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.3 (FDD)" in clause 6.1.4

- Inter-frequency cell id	A1	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 clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.7 (FDD)" in clause 6.1.4
- 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 clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.8 (FDD)" in clause 6.1.4
…..		
- Inter-RAT cell info list	A2	
….		
- 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 clause 6.1.0b
- 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 clause 6.1.0b
….		

Condition	Explanation
A1	FDD cell environment
A2	FDD/GSM inter-RAT cell environment

Default settings for cell No.6 (TDD)

Downlink input level	Reference clause 6 Parameter Set
Uplink output power	Minimum supported by the UE's power class.
PCCPCH/PCPICH carrier number	Reference clause 6 Parameter Set
Cell Channel Description	
- Primary CCPCH info	
- Cell parameters ID	119

Contents of System Information Block type 11 for cell No.6 (TDD)

- 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 clause 6.1.0b with the exception that value for Cell parameters ID shall be according to clause titled "Default settings for cell No.6 (TDD)" in clause 6.1.4
- Intra-frequency cell id	4
- Cell info	Same content as specified for Intra-frequency cell id=2 in SIB11 for Cell 1 in clause 6.1.0b with the exception that value for Cell parameters ID shall be according to clause titled "Default settings for cell No.4 (TDD)" in clause 6.1.4
- Intra-frequency cell id	5

- Cell info	Same content as specified for Intra-frequency cell id=2 in SIB11 for Cell 1 in clause 6.1.0b with the exception that value for Cell parameters ID shall be according to clause titled "Default settings for cell No.5 (TDD)" in clause 6.1.4
…..	
- Inter-frequency measurement system information	
…..	
- New inter-frequency cells	
- Inter-frequency cell id	1
- Frequency info	
- UARFCN downlink(Nt)	Reference to table 6.1.7 for Cell 1
- Cell info	Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in clause 6.1.0b with the exception that value for Cell parameters ID shall be according to clause titled "Default settings for cell No.1 (TDD)" in clause 6.1.4
- 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 clause 6.1.0b with the exception that value for Cell parameters ID shall be according to clause titled "Default settings for cell No.2 (TDD)" in clause 6.1.4
- 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 clause 6.1.0b with the exception that value for Cell parameters ID shall be according to clause titled "Default settings for cell No.3 (TDD)" in clause 6.1.4
- 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 clause 6.1.0b with the exception that value for Cell parameters ID shall be according to clause titled "Default settings for cell No.7 (TDD)" in clause 6.1.4
- 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 clause 6.1.0b with the exception that value for Cell parameters ID shall be according to clause titled "Default settings for cell No.8 (TDD)" in clause 6.1.4
…..	

Cell No.7

The contents of SYSTEM INFORMATION BLOCK TYPE 1 to 16 messages for cell No.7 are identical to those of cell No.1 with the following exceptions.

Cell identity	0000 0000 0000 0000 0000 0000 0111B
URA identity	0000 0000 0000 0100B

Default settings for cell No.7 (FDD)

Downlink input level	Reference clause 6.10 "Parameter Set"
Uplink output power	Minimum supported by the UE's power class.
PCCPCH/PCPICH carrier number	Reference clause 6.10 "Parameter Set"
Cell Channel Description	
- Primary CPICH info	
- Primary scrambling code	400

Contents of System Information Block type 11 for cell No.7 (FDD)

- Intra-frequency measurement system information	A1, A3	
….		
- 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 clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.7 (FDD)" in clause 6.1.4
- Intra-frequency cell id		1
- Cell info		Same content as specified for Intra-frequency cell id=2 (neigbour cell) in SIB11 for Cell 1 in clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.1 (FDD)" in clause 6.1.4
- Intra-frequency cell id		2
- Cell info		Same content as specified for Intra-frequency cell id=2 in SIB11 for Cell 1 in clause 6.1.0b
- Intra-frequency cell id		3
- Cell info		Same content as specified for Intra-frequency cell id=3 in SIB11 for Cell 1 in clause 6.1.0b
- Intra-frequency cell id		8
- Cell info		Same content as specified for Intra-frequency cell id=8 in SIB11 for Cell 1 in clause 6.1.0b
- Intra-frequency cell id	A3	11
- Cell info		Same content as specified for Intra-frequency cell id=11 in SIB11 for Cell 1 in clause 6.1.0b
…..		
- Inter-frequency measurement system information	A1	
…..		
- 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 clause 6.1.0b
- Cell info		Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in clause 6.1.0b
- Inter frequency cell id		5
- Frequency info		Same content as specified for Inter-frequency cell id=5 in SIB11 for Cell 1 in clause 6.1.0b
- Cell info		Same content as specified for Inter-frequency cell id=5 in SIB11 for Cell 1 in clause 6.1.0b
- Inter frequency cell id		6
- Frequency info		Same content as specified for Inter-frequency cell id=6 in SIB11 for Cell 1 in clause 6.1.0b
- Cell info		Same content as specified for Inter-frequency cell id=6 in SIB11 for Cell 1 in clause 6.1.0b
…..		

Condition	Explanation
A1	FDD cell environment
A2	FDD/GSM inter-RAT cell environment
A3	FDD intra-frequency cell environment (6 intra-frequency cells without inter-frequency cells)

Default settings for cell No.7 (TDD)

Downlink input level	Reference clause 6 Parameter Set
Uplink output power	Minimum supported by the UE's power class.
PCCPCH/PCPICH carrier number	Reference clause 6 Parameter Set
Cell Channel Description	
- Primary CCPCH info	
- Cell parameters ID	123

Contents of System Information Block type 11 for cell No.7 (TDD)

- 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 clause 6.1.0b with the exception that value for Cell parameters ID shall be according to clause titled "Default settings for cell No.7 (TDD)" in clause 6.1.4
- Intra-frequency cell id	1
- Cell info	Same content as specified for Intra-frequency cell id=2 (neigbour cell) in SIB11 for Cell 1 in clause 6.1.0b with the exception that value for Cell parameters ID shall be according to clause titled "Default settings for cell No.1 (TDD)" in clause 6.1.4
- Intra-frequency cell id	2
- Cell info	Same content as specified for Intra-frequency cell id=2 in SIB11 for Cell 1 in clause 6.1.0b
- Intra-frequency cell id	3
- Cell info	Same content as specified for Intra-frequency cell id=3 in SIB11 for Cell 1 in clause 6.1.0b
- Intra-frequency cell id	8
- Cell info	Same content as specified for Intra-frequency cell id=8 in SIB11 for Cell 1 in clause 6.1.0b
…..	
- 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 clause 6.1.0b
- Cell info	Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in clause 6.1.0b
- Inter frequency cell id	5
- Frequency info	Same content as specified for Inter-frequency cell id=5 in SIB11 for Cell 1 in clause 6.1.0b
- Cell info	Same content as specified for Inter-frequency cell id=5 in SIB11 for Cell 1 in clause 6.1.0b
- Inter frequency cell id	6
- Frequency info	Same content as specified for Inter-frequency cell id=6 in SIB11 for Cell 1 in clause 6.1.0b
- Cell info	Same content as specified for Inter-frequency cell id=6 in SIB11 for Cell 1 in clause 6.1.0b
…..	

Cell No.8

The contents of SYSTEM INFORMATION BLOCK TYPE 1 to 16 messages for cell No.8 are identical to those of cell No.1 with the following exceptions:

Cell identity	0000 0000 0000 0000 0000 0000 1000B
URA identity	0000 0000 0000 0100B

Default settings for cell No.8 (FDD)

Downlink input level	Reference clause 6.10 "Parameter Set"
Uplink output power	Minimum supported by the UE's power class.
PCCPCH/PCPICH carrier number	Reference clause 6.10 "Parameter Set"
Cell Channel Description	
- Primary CPICH info	
- Primary scrambling code	450

Contents of System Information Block type 11 for cell No.8 (FDD)

- Intra-frequency measurement system information	A1, A3	
….		
- 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 clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.8 (FDD)" in clause 6.1.4
- Intra-frequency cell id		1
- Cell info		Same content as specified for Intra-frequency cell id=2 (neigbour cell) in SIB11 for Cell 1 in clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.1 (FDD)" in clause 6.1.4
- Intra-frequency cell id		2
- Cell info		Same content as specified for Intra-frequency cell id=2 in SIB11 for Cell 1 in clause 6.1.0b
- Intra-frequency cell id		3
- Cell info		Same content as specified for Intra-frequency cell id=3 in SIB11 for Cell 1 in clause 6.1.0b
- Intra-frequency cell id		7
- Cell info		Same content as specified for Intra-frequency cell id=7 in SIB11 for Cell 1 in clause 6.1.0b
- Intra-frequency cell id	A3	11
- Cell info		Same content as specified for Intra-frequency cell id=11 in SIB11 for Cell 1 in clause 6.1.0b
…..		
- Inter-frequency measurement system information	A1	
…..		
- 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 clause 6.1.0b
- Cell info		Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in clause 6.1.0b
- Inter frequency cell id		5
- Frequency info		Same content as specified for Inter-frequency cell id=5 in SIB11 for Cell 1 in clause 6.1.0b
- Cell info		Same content as specified for Inter-frequency cell id=5 in SIB11 for Cell 1 in clause 6.1.0b
- Inter frequency cell id		
- Frequency info		Same content as specified for Inter-frequency cell id=6 in SIB11 for Cell 1 in clause 6.1.0b
- Cell info		Same content as specified for Inter-frequency cell id=6 in SIB11 for Cell 1 in clause 6.1.0b
…..		

Condition	Explanation
A1	FDD cell environment
A2	FDD/GSM inter-RAT cell environment
A3	FDD intra-frequency cell environment (6 intra-frequency cells without inter-frequency cells)

Default settings for cell No.8 (TDD)

Downlink input level	Reference clause 6 Parameter Set
Uplink output power	Minimum supported by the UE's power class.
PCCPCH/PCPICH carrier number	Reference clause 6 Parameter Set
Cell Channel Description	
- Primary CCPCH info	
- Cell parameters ID	127

Contents of System Information Block type 11 for cell No.8 (TDD)

- 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 clause 6.1.0b with the exception that value for Cell parameters ID shall be according to clause titled "Default settings for cell No.8 (TDD)" in clause 6.1.4
- Intra-frequency cell id	1
- Cell info	Same content as specified for Intra-frequency cell id=2 (neigbour cell) in SIB11 for Cell 1 in clause 6.1.0b with the exception that value for Cell parameters ID shall be according to clause titled "Default settings for cell No.1 (TDD)" in clause 6.1.4
- Intra-frequency cell id	2
- Cell info	Same content as specified for Intra-frequency cell id=2 in SIB11 for Cell 1 in clause 6.1.0b
- Intra-frequency cell id	3
- Cell info	Same content as specified for Intra-frequency cell id=3 in SIB11 for Cell 1 in clause 6.1.0b
- Intra-frequency cell id	7
- Cell info	Same content as specified for Intra-frequency cell id=7 in SIB11 for Cell 1 in clause 6.1.0b
…..	
- 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 clause 6.1.0b
- Cell info	Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in clause 6.1.0b
- Inter frequency cell id	5
- Frequency info	Same content as specified for Inter-frequency cell id=5 in SIB11 for Cell 1 in clause 6.1.0b
- Cell info	Same content as specified for Inter-frequency cell id=5 in SIB11 for Cell 1 in clause 6.1.0b
- Inter frequency cell id	6
- Frequency info	Same content as specified for Inter-frequency cell id=6 in SIB11 for Cell 1 in clause 6.1.0b
- Cell info	Same content as specified for Inter-frequency cell id=6 in SIB11 for Cell 1 in clause 6.1.0b
…..	

Cell No.9

Contents of System Information for cell No.9 (GSM)

See 3GPP TS 51.010-1 [31], clause 10.1.2.

Default settings for cell No.9 (GSM)

See table 6.1.10.

Cell No.10

Contents of System Information for cell No.10 (GSM)

See 3GPP TS 51.010-1 [31], clause 10.1.2.

Default settings for cell No.10 (GSM)

See table 6.1.10

Cell No.11

The contents of SYSTEM INFORMATION BLOCK TYPE 1 to 16 messages for cell No.11 are identical to those of cell No.1 with the following exceptions.

Cell identity	0000 0000 0000 0000 0000 0000 1011B
URA identity	0000 0000 0000 0010B

Default settings for cell No.11 (FDD)

Downlink input level	Reference clause 6.10 "Parameter Set"
Uplink output power	Minimum supported by the UE's power class.
PCCPCH/PCPICH carrier number	Reference clause 6.10 "Parameter Set"
Cell Channel Description	
- Primary CPICH info	
- Primary scrambling code	500

Contents of System Information Block type 11 for cell No.11 (FDD)

- Intra-frequency measurement system information	A3	
….		
- New intra-frequency cells		
- Intra-frequency cell id		11
- Cell info		Same content as specified for Intra-frequency cell id=1 (serving cell) in SIB11 for Cell 1 in clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.11 (FDD)" in clause 6.1.4
- Intra-frequency cell id		1
- Cell info		Same content as specified for Intra-frequency cell id=2 (neigbour cell) in SIB11 for Cell 1 in clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.1 (FDD)" in clause 6.1.4
- Intra-frequency cell id		2
- Cell info		Same content as specified for Intra-frequency cell id=2 in SIB11 for Cell 1 in clause 6.1.0b
- Intra-frequency cell id		3
- Cell info		Same content as specified for Intra-frequency cell id=3 in SIB11 for Cell 1 in clause 6.1.0b
- Intra-frequency cell id		7
- Cell info		Same content as specified for Intra-frequency cell id=7 in SIB11 for Cell 1 in clause 6.1.0b
- Intra-frequency cell id		8
- Cell info		Same content as specified for Intra-frequency cell id=8 in SIB11 for Cell 1 in clause 6.1.0b
…..		

Condition	Explanation
A1	FDD cell environment
A2	FDD/GSM inter-RAT cell environment
A3	FDD intra-frequency cell environment (6 intra-frequency cells without inter-frequency cells)

6.1.4.1 Default Cell parameters Two PLMN in UTRAN test scenario

In this scenario two cell groups belong to two different PLMN, Cell 1, 2, 3, 7, 8 (for PLMN1) and Cell 4,5,6 (for PLMN2) shall be configured on two different frequencies.

The contents of SYSTEM INFORMATION BLOCK TYPE 1 to 16 messages for cell No.1 to 8 are identical to those of cell No.1-8 in clause 6.1.4. Exceptions are found in SYSTEM INFORMATION BLOCK TYPE 11:

- SYSTEM INFORMATION BLOCK TYPE 11 for cell No.1, 2, 3, 7, 8 contains cell No.1, 2, 3, 7, 8 in Intra-frequency measurement system information, and cell No.4, 5, 6 in Inter-frequency measurement system information.

- SYSTEM INFORMATION BLOCK TYPE 11 for cell No.4,5,6 contains cell No.4,5,6 in Intra-frequency measurement system information, and cell No. 1, 2, 3, 7, 8 in Inter-frequency measurement system information.
- All other parameters in SYSTEM INFORMATION BLOCK TYPE 11 are set to identical to clause 6.1.4.

Contents of System Information Block type 18 for cell No.1, 2, 3, 7, 8

- Idle mode PLMN identities	
- PLMNs of intra-frequency cells list	Not Present
- PLMNs of inter-frequency cells list	
- PLMN identity	Set to PLMN2
- PLMNs of inter-RAT cells list	Not present
- Connected mode PLMN identities	Not present

Contents of System Information Block type 18 for cell No.4, 5, 6

- Idle mode PLMN identities	
- PLMNs of intra-frequency cells list	Not Present
- PLMNs of inter-frequency cells list	
- PLMN identity	Set to PLMN1
- PLMNs of inter-RAT cells list	Not present
- Connected mode PLMN identities	Not present

6.1.4.2 Default Cell parameters Three PLMN in UTRAN test scenario

In this scenario three cell groups belong to three different PLMN, Cell 1, 2, 3 (for PLMN1), Cell 4, 5, 6 (for PLMN2) and Cell 7, 8 (for PLMN3) shall be configured on three different frequencies.

The contents of SYSTEM INFORMATION BLOCK TYPE 1 to 16 messages for cell No.1 to 8 are identical to those of cell No.1-8 in clause 6.1.4. Exceptions are found in SYSTEM INFORMATION BLOCK TYPE 11:

- SYSTEM INFORMATION BLOCK TYPE 11 for cell No.1, 2, 3 contains cell No.1, 2, 3 in Intra-frequency measurement system information, and cell No.4, 5, 6, 7, 8 in Inter-frequency measurement system information.
- SYSTEM INFORMATION BLOCK TYPE 11 for cell No.4, 5, 6 contains cell No. 4, 5, 6 in Intra-frequency measurement system information, and cell No. 1, 2, 3, 7, 8 in Inter-frequency measurement system information.
- SYSTEM INFORMATION BLOCK TYPE 11 for cell No. 7, 8 contains cell No. 7, 8 in Intra-frequency measurement system information, and cell No. 1, 2, 3, 4, 5, 6 in Inter-frequency measurement system information.
- All other parameters in SYSTEM INFORMATION BLOCK TYPE 11 are set to identical to clause 6.1.4.

Contents of System Information Block type 18 for cell No.1, 2, 3

- Idle mode PLMN identities	
- PLMNs of intra-frequency cells list	Not Present
- PLMNs of inter-frequency cells list	
- PLMN identity	Set to PLMN2
- PLMN identity	Set to PLMN2
- PLMN identity	Set to PLMN2
- PLMN identity	Set to PLMN3
- PLMNs of inter-RAT cells list	Not present
- Connected mode PLMN identities	Not present

Contents of System Information Block type 18 for cell No.4, 5, 6

- Idle mode PLMN identities	
- PLMNs of intra-frequency cells list	Not Present
- PLMNs of inter-frequency cells list	
- PLMN identity	Set to PLMN1
- PLMN identity	Set to PLMN1
- PLMN identity	Set to PLMN1
- PLMN identity	Set to PLMN3

- PLMNs of inter-RAT cells list	Not present
- Connected mode PLMN identities	Not present

Contents of System Information Block type 18 for cell No.7, 8

- Idle mode PLMN identities	
- PLMNs of intra-frequency cells list	Not Present
- PLMNs of inter-frequency cells list	
- PLMN identity	Set to PLMN1
- PLMN identity	Set to PLMN1
- PLMN identity	Set to PLMN1
- PLMN identity	Set to PLMN2
- PLMNs of inter-RAT cells list	Not present
- Connected mode PLMN identities	Not present

6.1.5 Reference Radio Conditions (FDD)

The following transmission parameters shall be used unless otherwise stated in the description of the individual test case.

Table 6.1.3 are the default settings for a non-suitable cell which is configured and always present whereas table 6.1.4 is for a cell that is switched off. Cells configured according to table 6.1.3 are for test cases in which it is necessary to make a cell unsuitable, and then subsequently make it suitable. This could be achieved by switching the cell off and then reconfiguration as in table 6.1.4, but this takes a lot of time to do.

Table 6.1.1: Default settings for a serving cell in a single cell environment

Parameter	Unit	Cell 1
Cell type		Serving cell
UTRA RF Channel Number		Channel 1
Qqualmin	dB	-24
Qrxlevmin	dBm	-79
UE_TXPWR_MAX_RACH	dBm	21
CPICH Ec (see notes 1 and 2)	dBm/3.84 MHz	-60
NOTE 1: 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 fulfils 3GPP TS 25.304 [36], clause 5.2.3.1.2 and 3GPP TS 25.133 [30], clause 8.1.2.2.1.		

Table 6.1.2: Default settings for a serving cell and a suitable neighbour cell in a multi-cell environment

Parameter	Unit	Cell 1	Cell 2	Cell 4
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	
Qrxlevmin	dBm	-79	-79	
UE_TXPWR_MAX_RACH	dBm	21	21	
CPICH Ec (see notes 1 and 2)	dBm/3.84 MHz	-60	-70	
NOTE 1: 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: Both cells fulfil 3GPP TS 25.304 [36], clause 5.2.3.1.2 and 3GPP TS 25.133 [30], clause 8.1.2.2.1.				

Table 6.1.3: Default settings for a non-suitable cell

Parameter	Unit	Level
Qqualmin	dB	-24
Qrxlevmin	dBm	-79
UE_TXPWR_MAX_RACH	dBm	21
CPICH_Ec	dBm/3.84 MHz	-90

NOTE 1: 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 3GPP TS 25.304 [36], clause 5.2.3.1.2.

Table 6.1.4: Default settings for a non-suitable "Off" cell

Parameter	Unit	Level
Qqualmin	dB	-24
Qrxlevmin	dBm	-79
UE_TXPWR_MAX_RACH	dBm	21
CPICH_Ec	dBm/3.84 MHz	≤ -122
NOTE 1: 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 3GPP TS 25.304 [36], clause 5.2.3.1.2.		

Table 6.1.5: Default power levels of physical channels relative to CPICH_Ec

Parameter	Unit	Level Idle mode	Level Connected mode
DPCH_Ec	dB	(see note)	See table 6.1.6
PCCPCH_Ec	dB	-2	
SCCPCH_Ec	dB	-2	
AICH_Ec	dB	-5	
SCH_Ec	dB	-5	
PICH_Ec	dB	-5	
NOTE: This shall be less than -122 dBm to ensure the channel is considered as "off".			

Table 6.1.6: Default power levels of DPCH_Ec relative to CPICH_Ec

Data transmission rate	Level
12.2 kbps	-5
64 kbps	-2
144 kbps	+1
384 kbps	+5

6.1.6 Reference Radio Conditions (TDD)

The following transmission parameters shall be used for unless otherwise stated in the description of the individual test case.

Table 6.1.6a: Default settings for a serving cell in a single cell environment

Parameter	Unit	Cell 1
Cell type		Serving cell
UTRA RF Channel Number		Channel 1
Qrxlevmin	dBm	-81
UE_TXPWR_MAX_RACH	dBm	21
PCCPCH RSCP	dBm	-60
NOTE: The cell fulfils 3GPP TS 25.304 [36], clause 5.2.3.1.2 and 3GPP TS 25.123 [37].		

Table 6.1.7: Default settings for a serving cell and a suitable neighbour cell in a multi-cell environment

Parameter	Unit	Cell 1	Cell 2	Cell 4
Cell type		Serving cell	Suitable neighbour intra-frequency cell	Suitable neighbour inter-frequency cell
UTRA RF Channel Number		Channel 1	Channel 1	Channel 2
Qrxlevmin	dBm	-81	-81	
UE_TXPWR_MAX_RACH	dBm	21	21	
PCCPCH RSCP	dBm	-60	-70	

NOTE: Both cells fulfil 3GPP TS 25.304 [36], clause 5.2.3.1.2 and 3GPP TS 25.123 [37].

Table 6.1.8: Default settings for a non-suitable cell

Parameter	Unit	Level
Qrxlevmin	dBm	-81
UE_TXPWR_MAX_RACH	dBm	21
PCCPCH RSCP	dBm	-91
NOTE: The cell is not suitable according to 3GPP TS 25.304 [36], clause 5.2.3.1.2.		

Table 6.1.9: Default settings for a non-suitable "Off" cell

Parameter	Unit	Level
Qrxlevmin	dBm	-81
UE_TXPWR_MAX_RACH	dBm	21
PCCPCH RSCP	dBm	≤ -110
NOTE: The cell is not suitable according to 3GPP TS 25.304 [36], clause 5.2.3.1.2.		

6.1.7 Reference Radio Conditions (GSM)

The following transmission parameters shall be used unless otherwise stated in the description of the individual test case.

Table 6.1.10: Default settings for a serving cell and a suitable neighbour cell in a multi-cell environment

Parameter	Unit	Cell 9	Cell 10
Cell type		Serving cell	Suitable neighbour cell
BCCH ARFCN		As defined in the initial conditions in clause 26.6.5.1 of TS 51.010-1 [31] for cell A and the GSM band under test.	As defined in the initial conditions in clause 26.6.5.1 of TS 51.010-1 [31] for cell B and the GSM band under test.
Base transceiver Station Identity Code (BSIC)		BSIC1	BSIC2
Qrxlevmin	dBm	-81	-81
MS_TXPWR_MAX_CCH	dBm	According to maximum output power for the power class of the MS under test	
RF level	dBm	-48	-54
NOTE: Both cells fulfil 3GPP TS 25.304 [36], clause 5.2.6.1.4 and 3GPP TS 25.133 [37], clause 8.1.2.5.			

Table 6.1.11: Default settings for a non-suitable cell

Parameter	Unit	Level
Qrxlevmin	dBm	-81
MS_TXPWR_MAX_CCH	dBm	According to maximum output power for the power class of the MS under test
RF level	dBm	-90
NOTE: The cell is not suitable according to 3GPP TS 25.304 [36], clause 5.2.6.1.4		

6.2 Number of neighbour cells

The options for the number of neighbour cells (ie the total number of active cells in the simulated network) are given below. See clause 6.1 for cell configurations.

6.2.1 Basic Network

Number of Cells	Use of Network Configuration
1	Basic UE registration; RRC Connection Establishment and Release; operation of dedicated channels in non-handover modes; general RF and EMC testing

6.2.2 Soft Handover Network (FDD)

Number of Cells	Use of Network Configuration/Constraints
2	Can be used in place of basic network, plus offering operation of dedicated channels in 2 way soft handover or in 2 way SSDT (R99 and Rel-4 only) handover for RF or signalling tests; simple cell reselection tests

6.2.3 Hard Handover Network

Number of Cells	Use of Network Configuration
2	Can be used in place of basic network, plus offering operation in 2 cell hard handover (inter-frequency)

6.2.4 'Roaming' Network

Number of Cells	Use of Network Configuration
7	This configuration is intended to provide the capability for extensive cell selection and reselection testing, as defined under Idle Mode Testing. It is <ffs> if 7 is the correct number of cells and also <ffs> is the number of separate RF channels to be supported by the 'Roaming Network'

6.3 Cell/BS codes etc

See clause 6.1.

6.4 Routing/location area

See clause 6.1.

6.5 Network options settings

See clause 6.1.

6.6 Power control mode

6.6.1 Downlink Power Control

6.6.1.1 Outer Loop Power Control

This is used to set the SIR requirements from the given BER/BLER requirements for the dedicated channel - the reference configuration is for the BER/BLER and SIR requirements to be fixed, ie Outer Loop Power Control is disabled.

6.6.1.2 Inner Loop Power Control

The inner loop power control adjusts the power of the dedicated channel to meet the SIR requirements. The reference condition is for the Inner Loop Power Control to be disabled.

6.6.2 Uplink Power Control

6.6.2.1 Outer Loop Power Control

This is used to set the SIR requirements from the given BER/BLER requirements for the dedicated channel - the reference configuration is for the BER/BLER and SIR requirements to be fixed, ie Outer Loop Power Control is disabled.

6.6.2.2 Inner Loop Power Control (FDD)

The inner loop power control adjusts the power of the dedicated channel to meet the SIR requirements.

6.7 Tx Diversity modes

The reference settings for Tx Diversity Mode shall be:

6.7.1 Non-Diverse Operation

DL Transmit Diversity shall be disabled on all cells in the simulated network.

6.7.2 Diverse Operation

6.7.2.1 Diverse Operation (FDD mode)

The diversity options applied to the DL channels shall be as below for all cells in the simulated network.

Channel	Open loop mode		Closed loop Mode
	TSTD	STTD	
P-CCPCH	-	X	-
SCH	X	-	-
S-CCPCH	-	X	-
DPCH	-	X	-
PICH	-	X	-
AICH	-	X	-

6.7.2.2 Diverse Operation (TDD mode)

The diversity options applied to the DL channels shall be as below for all cells in the simulated network.

6.7.2.2.1 3.84 Mcps option

Table 6.7.1: Application of Tx diversity schemes on downlink physical channel types in 3.84 Mcps TDD "X" - can be applied, "-" - must not be applied

Physical channel type	Open loop TxDiversity		Closed loop TxDiversity
	TSTD	SCTD (see note)	
P-CCPCH	-	X	-
S-CCPCH	--	X	--
SCH	X	-	-
DPCH	-	-	X
PDSCH	-	X	X
PICH	-	X	-
NOTE: SCTD may only be applied to physical channels when they are allocated to beacon locations.			

6.7.2.2.2 1.28 Mcps option

Table 6.7.2: Application of Tx diversity schemes on downlink physical channel types in 1.28 Mcps TDD "X" - can be applied, "-" - must not be applied

Physical channel type	Open loop TxDiversity		Closed loop TxDiversity
	TSTD	SCTD (see note)	
P-CCPCH	X	X	-
S-CCPCH	X	X	-
DwPCH	X	-	-
DPCH	X	-	X
PDSCH	X	X	X
PICH	X	X	-
NOTE: SCTD may only be applied to physical channels when they are allocated to beacon locations.			

6.8 Compressed mode parameters

In this clause, Parameters for reference compressed mode patterns are defined which are used in signalling test cases such as inter frequency FDD measurement, inter frequency TDD measurement and inter RAT measurement in 3GPP TS 34.123-1 [1]. These parameters are defined in 3GPP TS 25.133 [30] for measurment performance tests.

Depending on UE capability, there are four methods constructed of three types using of compressed mode such as UL only, DL only and both UL and DL, and using without application of compressed for the above measurement purposes. As test requirement is the same even if the test methods are different, ICS/IXIT statement is applied to the test cases so that the test procedure and specific message contents specified in 3GPP TS 34.123-1 [1] can be distinguished.

6.8.1 Single compressed mode pattern

Configuration parameters in single compressed mode pattern for one type of measurement objects are described in the following clauses.

6.8.1.1 Inter Frequency FDD measurement

The configuration parameters for an inter frequency FDD measurement is shown in table 6.8.1.

Table 6.8.1: Compressed mode parameters (Inter Frequency FDD measurement)

Parameter	Value	Note
TGSN (Transmission Gap Starting Slot Number)	4	
TGL1 (Transmission Gap Length 1)	7	
TGL2 (Transmission Gap Length 2)	-	Only one gap in use.
TGD (Transmission Gap Distance)	undefined	
TGPL1 (Transmission Gap Pattern Length)	3	
TGPL2 (Transmission Gap Pattern Length)	-	R99 and Rel-4: Only one pattern in use. Rel-5 and onwards: Not applicable
TGCFN (Transmission Gap Connection Frame Number)	(Current CFN + (256 - TTI/10msec))mod 256	
UL/DL compressed mode selection	DL, UL or DL & UL	3 configurations possible. DL, UL or both DL and UL
UL compressed mode method	SF/2	
DL compressed mode method	SF/2	
Scrambling code change	No	
RPP (Recovery period power control mode)	0	
ITP (Initial transmission power control mode)	0	

6.8.1.2 Inter Frequency TDD measurement

The configuration parameters for an inter frequency TDD measurement is shown in table 6.8.2.

Table 6.8.2: Compressed mode parameters (Inter Frequency TDD measurement)

Parameter	Value	Note
TGSN (Transmission Gap Starting Slot Number)	10	
TGL1 (Transmission Gap Length 1)	10	
TGL2 (Transmission Gap Length 2)	-	Only one gap in use.
TGD (Transmission Gap Distance)	undefined	
TGPL1 (Transmission Gap Pattern Length)	11	
TGPL2 (Transmission Gap Pattern Length)	-	R99 and Rel-4: Only one pattern in use. Rel-5 and onwards: Not applicable
TGCFN (Transmission Gap Connection Frame Number)	(Current CFN + (256 - TTI/10msec))mod 256	
UL/DL compressed mode selection	DL, UL or DL & UL	3 configurations possible. DL, UL or both DL and UL
UL compressed mode method	SF/2	
DL compressed mode method	Puncturing	

Parameter	Value	Note
Scrambling code change	No	
RPP (Recovery period power control mode)	0	
ITP (Initial transmission power control mode)	0	

6.8.1.3 Inter RAT measurement (GSM - Carrier RSSI)

The configuration parameters for an Inter RAT measurement (GSM - Carrier RSSI) is shown in table 6.8.3.

Table 6.8.3: Compressed mode parameters (Inter RAT measurement - GSM Carrier RSSI)

Parameter	Value	Note
TGSN (Transmission Gap Starting Slot Number)	4	
TGL1 (Transmission Gap Length 1)	7	
TGL2 (Transmission Gap Length 2)	-	Only one gap in use.
TGD (Transmission Gap Distance)	undefined	
TGPL1 (Transmission Gap Pattern Length)	12	
TGPL2 (Transmission Gap Pattern Length)	-	R99 and Rel-4: Only one pattern in use. Rel-5 and onwards: Not applicable
TGCFN (Transmission Gap Connection Frame Number)	(Current CFN + (256 - TTI/10msec))mod 256	
UL/DL compressed mode selection	DL, UL or DL & UL	3 configurations possible. DL, UL or both DL and UL
UL compressed mode method	SF/2	
DL compressed mode method	SF/2	
Scrambling code change	No	
RPP (Recovery period power control mode)	0	
ITP (Initial transmission power control mode)	0	

6.8.1.4 Inter RAT measurement (GSM - Initial BSIC Identification)

The configuration parameters for an inter frequency RAT measurement (GSM - Initial BSIC Identification) is shown in table 6.8.4.

Table 6.8.4: Compressed mode parameters (Inter RAT measurement - GSM Initial BSIC Identification)

Parameter	Value	Note
TGSN (Transmission Gap Starting Slot Number)	4	
TGL1 (Transmission Gap Length 1)	7	
TGL2 (Transmission Gap Length 2)	-	Only one gap in use.
TGD (Transmission Gap Distance)	undefined	
TGPL1 (Transmission Gap Pattern Length)	8	
TGPL2 (Transmission Gap Pattern Length)	-	R99 and Rel-4: Only one pattern in use. Rel-5 and onwards: Not applicable
TGCFN (Transmission Gap Connection Frame Number)	(Current CFN + (256 - TTI/10msec))mod 256	
UL/DL compressed mode selection	DL, UL or DL & UL	3 configurations possible. DL, UL or both DL and UL
UL compressed mode method	SF/2	
DL compressed mode method	SF/2	
Scrambling code change	No	
RPP (Recovery period power control mode)	0	
ITP (Initial transmission power control mode)	0	

6.8.1.5 Inter RAT measurement (GSM - BSIC re-confirmation)

The configuration parameters for an inter RAT measurement (GSM - BSIC re-confirmation) is shown in table 6.8.5.

Table 6.8.5: Compressed mode parameters (Inter RAT measurement - GSM BSIC re-confirmation)

Parameter	Value	Note
TGSN (Transmission Gap Starting Slot Number)	4	
TGL1 (Transmission Gap Length 1)	7	
TGL2 (Transmission Gap Length 2)	-	Only one gap in use.
TGD (Transmission Gap Distance)	undefined	
TGPL1 (Transmission Gap Pattern Length)	8	
TGPL2 (Transmission Gap Pattern Length)	-	R99 and Rel-4: Only one pattern in use. Rel-5 and onwards: Not applicable
TGCFN (Transmission Gap Connection Frame Number)	(Current CFN + (256 - TTI/10msec))mod 256	
UL/DL compressed mode selection	DL, UL or DL & UL	3 configurations possible. DL, UL or both DL and UL
UL compressed mode method	SF/2	
DL compressed mode method	SF/2	
Scrambling code change	No	
RPP (Recovery period power control mode)	0	
ITP (Initial transmission power control mode)	0	

6.8.2 Multiple compressed mode patterns

Configuration parameters in multiple compressed mode patterns for several types of measurement objects are described in the following clauses.

6.8.2.1 Inter RAT measurement GSM

The configuration parameters for an inter RAT measurement (GSM - Carrier RSSI, Initial BSIC Identification and BSIC Re-confirmation) is shown in table 6.8.6.

Table 6.8.6: Compressed mode parameters (Inter RAT measurement - GSM Carrier RSSI and Initial BSIC identification and BSIC re-confirmation)

Parameter	GSM Carrier RSSI	GSM Initial BSIC identification	GSM BSIC re-confirmation	Note
TGSN (Transmission Gap Starting Slot Number)	4	4	4	
TGL1 (Transmission Gap Length 1)	7	7	7	
TGL2 (Transmission Gap Length 2)	-	-	-	Only one gap in use.
TGD (Transmission Gap Distance)	undefined	undefined	undefined	
TGPL1 (Transmission Gap Pattern Length)	12	8	8	
TGPL2 (Transmission Gap Pattern Length)	-	-	-	R99 and Rel-4: Only one pattern in use. Rel-5 and onwards: Not applicable.
TGCFN (Transmission Gap Connection Frame Number):	(Current CFN + (252 - TTI/10msec))mod 256	(Current CFN + (254 - TTI/10msec))mod 256	(Current CFN + (250 - TTI/10msec))mod 256	Defined by higher layers
UL/DL compressed mode selection	DL, UL or DL & UL	DL, UL or DL & UL	DL, UL or DL & UL	3 configurations possible. DL, UL or both DL and UL
UL compressed mode method	SF/2	SF/2	SF/2	
DL compressed mode method	SF/2	SF/2	SF/2	
Scrambling code change	No	No	No	

Parameter	GSM Carrier RSSI	GSM Initial BSIC identification	GSM BSIC re-confirmation	Note
RPP (Recovery period power control mode)	0	0	0	
ITP (Initial transmission power control mode)	0	0	0	

6.8.2.2 Inter Frequency FDD measurement & Inter RAT measurement GSM

The configuration parameters for Inter Frequency FDD measurement and Inter RAT measurement (GSM - Carrier RSSI, Initial BSIC Identification and BSIC Re-confirmation) is shown in table 6.8.7.

The pattern is illustrated by Figure 6.8.2.2.

Table 6.8.7: Compressed mode parameters (Inter Frequency and Inter RAT measurement - GSM Carrier RSSI and Initial BSIC identification and BSIC re-confirmation)

Parameter	Inter Frequency FDD	GSM Carrier RSSI	GSM Initial BSIC identification	GSM BSIC re-confirmation	Note
TGSN (Transmission Gap Starting Slot Number)	8	8	8	8	
TGL1 (Transmission Gap Length 1)	14	14	14	14	
TGL2 (Transmission Gap Length 2)	14	14	14	14	
TGD (Transmission Gap Distance)	0	60	45	0	
TGPL1 (Transmission Gap Pattern Length)	12	24	24	24	
TGPL2 (Transmission Gap Pattern Length)	-	-	-	-	R99 and Rel-4: Only one pattern in use. Rel-5 and onwards: Not applicable
TGCFN (Transmission Gap Connection Frame Number):	(Current CFN + (238 - TTI/10msec)) mod 256	(Current CFN + (242 - TTI/10msec)) mod 256	(Current CFN + (256 - TTI/10msec)) mod 256	(Current CFN + (253 - TTI/10msec)) mod 256	Defined by higher layers
UL/DL compressed mode selection	DL, UL or DL & UL	DL, UL or DL & UL	DL, UL or DL & UL	DL, UL or DL & UL	3 configurations possible. DL, UL or both DL and UL
UL compressed mode method	SF/2	SF/2	SF/2	SF/2	
DL compressed mode method	SF/2	SF/2	SF/2	SF/2	
Scrambling code change	No	No	No	No	
RPP (Recovery period power control mode)	0	0	0	0	
ITP (Initial transmission power control mode)	0	0	0	0	

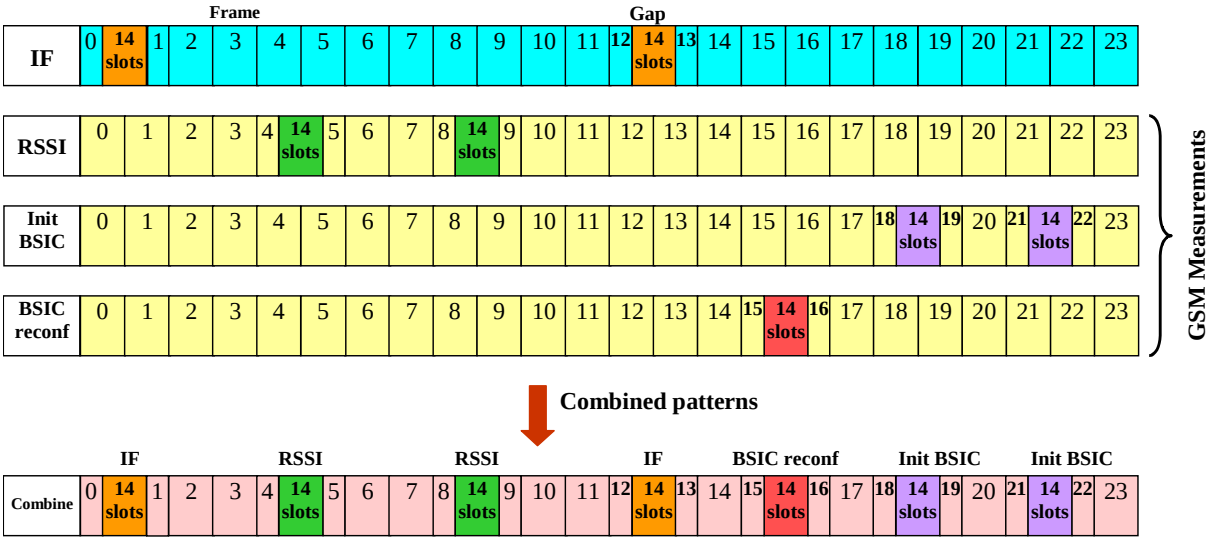

Figure 6.8.2.2: Inter-frequency (IF) and Inter-RAT (IRAT) measurement gaps during 24 frames cycle for the compressed mode pattern as specified in Table 6.8.7

6.8.2.3 Inter Frequency FDD measurement & Inter Frequency TDD measurement

FFS

6.8.2.4 Inter Frequency TDD measurement & Inter RAT measurement GSM

FFS

6.8.2.5 Inter Frequency FDD measurement & Inter Frequency TDD measurement & Inter RAT measurement GSM

FFS

6.9 BCCH parameters

See clause 6.1.

6.10 Reference Radio Bearer configurations used in Radio Bearer interoperability testing

The reference radio bearer configurations are typical configurations of the radio interface. This sub-set of the mandatory set of radio bearer configurations supported by the UE is intended to be used as test configurations for testing of the UE. The purpose of the reference radio bearer configurations is to ensure interoperability of UE's in different regions and networks.

The reference radio bearer configurations are used in the radio bearer interoperability test cases, clause 14 of 3GPP TS 34.123-1 [1]. The reference radio bearer configurations are also intended to be the first choice for other test cases where a radio bearer configuration is needed. For test cases requiring alternative configurations not provided by the reference radio bearer configurations then these specific radio bearer configurations are either specified in the actual test case itself; or in case the configurations are used by more than one test case then these common radio bearer configurations are specified in clause 6.11 of the present document.

NOTE If not specifically specified then the mid-value of the RM attribute value range as specified by the actual reference radio bearer configuration shall be applied for testing. However, in the case of UL and DL:3.4 kbps SRBs for DCCH and where the Choice "Same As UL" is used for the IE "DL Transport channel information common for all transport channel", the RM attribute for the "DL:3.4 kbps SRBs for DCCH" shall be set to the same value as that used in the Uplink.

6.10.1 QoS Architecture and RAB attributes

From a user point-of-view services are considered end-to-end, this means from a Terminal Equipment (TE) to another TE. An End-to-End Service may have a certain Quality of Service (QoS) which is provided for the user through the different networks. In UMTS, it is the UMTS Bearer Service that provides the requested QoS through the use of different QoS classes as defined in 3GPP TS 23.107 [15].

The UMTS Bearer Service consists of two parts, the Radio Access Bearer Service, RAB, and the Core Network Bearer Service. The Radio Access Bearer Service is realized by a Radio Bearer Service and an Iu-Bearer Service. The relationship between the services is illustrated in figure 6.10.1.1.

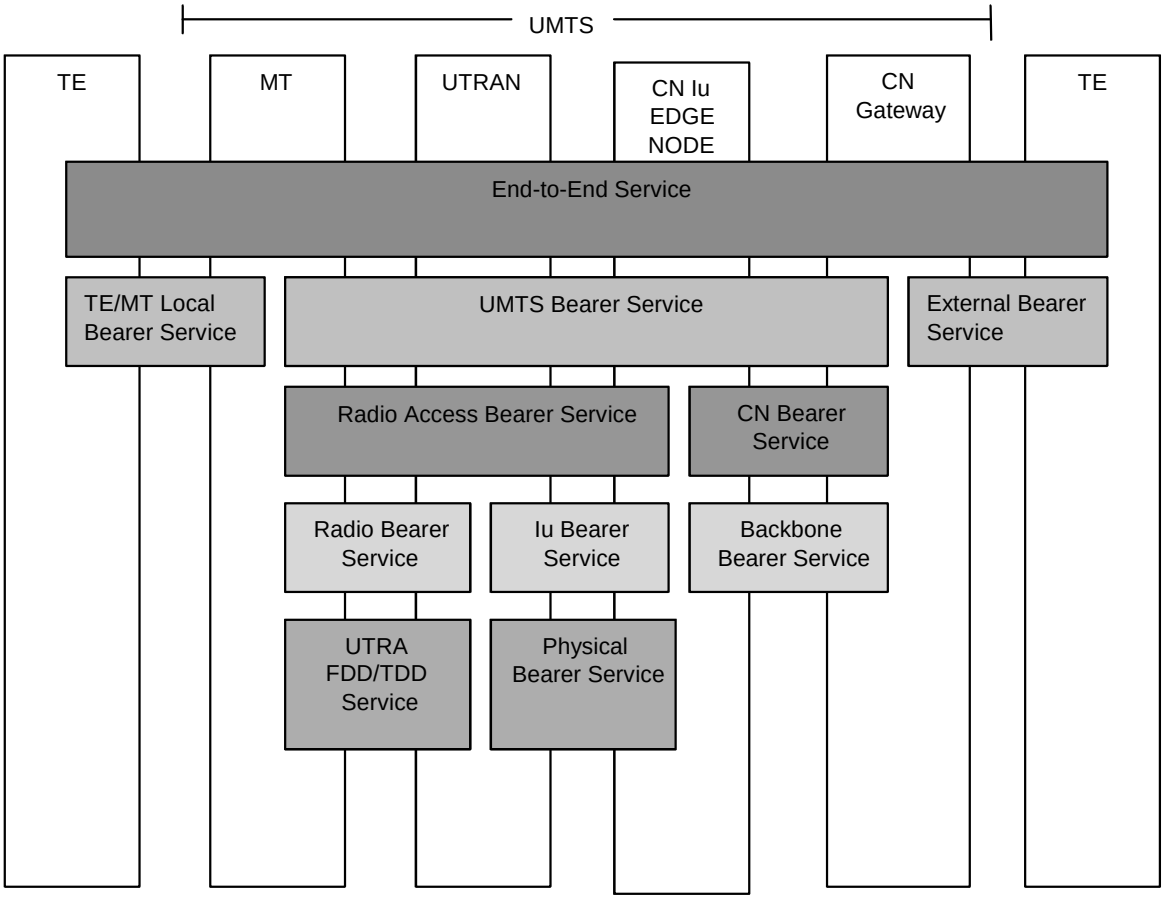

Figure 6.10.1.1: UMTS QoS Architecture

The Radio Access Bearer Service is characterized by a number of attributes such as Traffic class, Maximum bit rate, Guaranteed bit rate, SDU error ratio, Residual BER, Transfer Delay etc. As a first approach the four following attributes have been considered to come up with the parameter settings in clause 6.10.2.4 for FDD mode and clause 6.10.3.4 for TDD mode:

- Traffic class;
- SSD;
- Maximum bit rate;
- Residual BER.

The Traffic classes are explained in table 6.10.1.1. The Maximum bit rate has been considered at RLC layer and Physical Layer for the acknowledged and unacknowledged modes respectively. The Residual BER is understood as BER at RLC layer and Transport BLER for the acknowledged and unacknowledged modes respectively.

NOTE: The maximum bit rate in clause 6.10.2.4 for FDD mode and clause 6.10.3.4 for TDD mode is one of the RAB attribute as described above. For Interactive/Background PS RABs, however, the maximum bit rate of Radio Bearer can be lower than the maximum bit rate of RAB attributes due to radio resource

management. Bit rates of Interactive/Background PS RABs described in 6.10.2.4 for FDD mode and clause 6.10.3.4 for TDD mode may represent the maximum bit rate of Radio Bearer taking account into this management.

Table 6.10.1.1: Traffic classes

Traffic class	Conversational class conversational RT	Streaming class streaming RT	Interactive class Interactive best effort	Background Background best effort
Fundamental characteristics	- Preserve time relation (variation) between information entities of the stream Conversational pattern (stringent and low delay)	- Preserve time relation (variation) between information entities of the stream (i.e. some but constant delay)	Request response pattern Preserve payload content	Destination is not expecting the data within a certain time Preserve payload content
Example of the application	- speech, video, etc.	- facsimile (NT) - streaming audio and video	- Web browsing	- background download of emails

6.10.2 RAB and signalling RB for FDD

6.10.2.1 RABs and signalling RBs

In the following clauses, the typical parameter sets are presented for reference RABs, signalling RBs and important combinations of them. The data rate given for each RAB is the maximum data rate that can be supported by that RAB.

NOTE: The granularity for each RAB needs to be clarified.

Table 6.10.2.1.1: Prioritized RABs

#	Traffic class 3GPP TS 23.107 [15]	SSD 3GPP TS 23.107 [15]	Max. rate, kbps	CS/PS	Version
1	Conversational	Speech	UL:12.2 DL:12.2	CS	R99
1a	Conversational	Speech	UL:(12.2 7.95 5.9 4.75) DL:(12.2 7.95 5.9 4.75)	CS	R99
2	Conversational	Speech	UL:10.2 DL:10.2	CS	R99
2a	Conversational	Speech	UL:(10.2, 6.7, 5.9, 4.75) DL:(10.2, 6.7, 5.9, 4.75)	CS	R99
3	Conversational	Speech	UL:7.95 DL:7.95	CS	R99
4	Conversational	Speech	UL:7.4 DL:7.4	CS	R99
4a	Conversational	Speech	UL:(7.4, 6.7, 5.9, 4.75) DL:(7.4, 6.7, 5.9, 4.75)	CS	R99
5	Conversational	Speech	UL:6.7 DL:6.7	CS	R99
6	Conversational	Speech	UL:5.9 DL:5.9	CS	R99
7	Conversational	Speech	UL:5.15 DL:5.15	CS	R99
8	Conversational	Speech	UL:4.75 DL:4.75	CS	R99
9	Conversational	Unknown	UL:28.8 DL:28.8	CS	R99
10	Conversational	Unknown	UL:64 DL:64	CS	R99
11	Conversational	Unknown	UL:32 DL:32	CS	R99
11a	Conversational	Unknown	UL:8 DL:8	PS	R99
12	Streaming	Unknown	UL:14.4 DL:14.4	CS	R99
13	Streaming	Unknown	UL:28.8 DL:28.8	CS	R99
14	Streaming	Unknown	UL:57.6 DL:57.6	CS	R99
15	Void				
15a	Streaming	Unknown	UL:16 DL:64	PS	R99
15b	Streaming	Unknown	UL:16 DL:128	PS	R99
16	Void				
17	Void				
18	Void				
19	Void				
20	Interactive or Background	N/A	UL:32 DL:8	PS	R99
20a	Interactive or Background	N/A	UL:8 DL:8	PS	R99
20b	Interactive or Background	N/A	UL:16 DL:16	PS	R99
20c	Interactive or Background	N/A	UL:32 DL:32	PS	R99
21	Void				
22	Interactive or Background	N/A	UL:32 DL:64	PS	R99

#	Traffic class 3GPP TS 23.107 [15]	SSD 3GPP TS 23.107 [15]	Max. rate, kbps	CS/PS	Version
23	Interactive or Background	N/A	UL:64 DL:64	PS	R99
24	Interactive or Background	N/A	UL:64 DL:128	PS	R99
25	Interactive or Background	N/A	UL:128 DL:128	PS	R99
26	Interactive or Background	N/A	UL:64 DL:384	PS	R99
27	Interactive or Background	N/A	UL:128 DL:384	PS	R99
28	Interactive or Background	N/A	UL:384 DL:384	PS	R99
29	Interactive or Background	N/A	UL:64 DL:2048	PS	R99
30	Interactive or Background	N/A	UL:128 DL:2048	PS	R99
31	Void				
32	Interactive or Background	N/A	UL:64 DL:256	PS	R99
33	Interactive or Background	N/A	UL:0 DL:32	PS	R99
34	Interactive or Background	N/A	UL:32 DL: 0	PS	R99
35	Interactive or Background	N/A	UL:64 DL:144	PS	R99
36	Interactive or Background	N/A	UL:144 DL:144	PS	R99
37	Conversational	N/A	UL:42.8 DL:42.8	PS	REL-5
38	Conversational	Speech	UL:(12.65 8.85 6.6) DL:(12.65 8.85 6.6)	CS	REL-5
39	Interactive or Background	N/A	UL:64 DL:768	PS	REL-5

Table 6.10.2.1.2: Signalling RBs

#	Maximum rate, kbps	Logical channel	PhyCh onto which SRBs are mapped	Version
1	UL:1.7 DL:1.7	DCCH	DPCH	R99 and Rel-4 only
2	UL:3.4 DL:3.4	DCCH	DPCH	R99
3	UL:13.6 DL:13.6	DCCH	DPCH	R99
4	DL:27.2 (alt. 40.8)	DCCH	SCCPCH	R99
5	UL:16.6	CCCH	PRACH	R99
6	DL:30.4 (alt. 45.6)	CCCH	SCCPCH	R99
7	DL:33.2 (alt. 49.8)	BCCH	SCCPCH	R99
8	DL:24 (alt. 6.4)	PCCH	SCCPCH	R99
9	DL: 0.15	DCCH	DPCH	REL-5

6.10.2.2 Combinations of RABs and Signalling RBs

In the present document, physical channel parameters for following combinations of RABs and signalling RBs on a CCTrCH are described.

NOTE: It is understood that for speech service the AMR mode may be operated asymmetrically for the uplink and downlink.

Combinations on DPCH

1) Stand-alone UL:1.7 DL:1.7 kbps SRBs for DCCH (R99 and Rel-4 only).

2) Stand-alone UL:3.4 DL:3.4 kbps SRBs for DCCH.

3) Stand-alone UL:13.6 DL:13.6 kbps SRBs for DCCH.

4) Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.

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.

5) Conversational / speech / UL:10.2 DL:10.2 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.

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.

6) Conversational / speech / UL:7.95 DL:7.95 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.

7) Conversational / speech / UL:7.4 DL:7.4 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.

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.

8) Conversational / speech / UL:6.7 DL:6.7 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.

9) Conversational / speech / UL:5.9 DL:5.9 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.

10) Conversational / speech / UL:5.15 DL:5.15 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.

11) Conversational / speech / UL:4.75 DL:4.75 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.

12) Conversational / unknown / UL:28.8 DL:28.8 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.

13) Conversational / unknown / UL:64 DL:64 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.

14) Conversational / unknown / UL:32 DL:32 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.

15) Streaming / unknown / UL:14.4/DL:14.4 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.

16) Streaming / unknown / UL:28.8/DL:28.8 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.

17) Streaming / unknown / UL:57.6/DL:57.6 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.

18) Void

19) Void.

20) Void.

21) Void.

22) Void.

23) Interactive or background / UL:32 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.

23a) Interactive or background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.

23b) Interactive or background / UL:16 DL:16 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.

23c) Interactive or background / UL:32 DL:32 kbps / PS RAB + UL:3.4 DL:3.4 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.

24) Void

25) Interactive or background / UL:32 DL: 64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.

26) Interactive or background / UL:64 DL: 64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.

27) Interactive or background / UL:64 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.

28) Interactive or background / UL:128 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.

29) Interactive or background / UL:64 DL:144 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.

30) Interactive or background / UL:144 DL:144 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.

31) Interactive or background / UL:64 DL:256 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH.

32) Interactive or background / UL:64 DL:384 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH.

33) Interactive or background / UL:128 DL:384 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.

34) Interactive or background / UL:384 DL:384 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.

35) Interactive or background / UL:64 DL:2 048 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.

36) Void

37) Void

38) 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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

38k) Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB
+ Interactive or background / UL:32 DL:32 kbps / PS RAB
+ Interactive or background / UL:32 DL:32 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH (L1 multiplexing).

39) 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.

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.

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.

42) 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.

43) 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.

44) Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB
+ Interactive or background / UL:128 DL:2 048 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

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.

46) Void

47) Void.

48) Void.

49) 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.

49a) Conversational / speech / UL:(12.2 7.95 5.9 4.75) DL:(12.2 7.95 5.9 4.75) kbps / CS RAB
+ Conversational / unknown / UL:64 DL:64 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

50) 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.

51) Conversational / unknown / UL:64 DL:64 kbps / CS RAB
+ Interactive or background / UL:64 DL:64 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

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.

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.

52) Conversational / unknown / UL:64 DL:64 kbps / CS RAB
+ Interactive or background / UL:64 DL:128 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

53) Conversational / unknown / UL:64 DL:64 kbps / CS RAB
+ Interactive or background / UL:128 DL:128 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

54) Void

55) Void.

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.

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.

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.

58a) Streaming / unknown / UL:16 DL:128 kbps / PS RAB + Interactive or background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

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).

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).

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).

Combinations on DSCH and DPCH

1) Void

2) Interactive or background / UL:64 DL:384 kbps / PS RAB
+ UL:3.4 DL: 3.4 kbps SRBs for DCCH (R99 and Rel-4 only).

3) Interactive or background / UL:64 DL:2 048 kbps / PS RAB
+ UL:3.4 DL: 3.4 kbps SRBs for DCCH (R99 and Rel-4 only).

4) Void

5) 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 (R99 and Rel-4 only).

6) Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB
+ Interactive or background / UL:64 DL:2 048 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH (R99 and Rel-4 only).

Combinations on SCCPCH

1) Stand-alone 24 kbps SRB for PCCH.

2) Interactive or background / DL:32 kbps / PS RAB
+ SRB for CCCH
+ SRBs 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

Combinations on PRACH

1) Interactive or background / UL:32 kbps / PS RAB
+ SRB for CCCH
+ SRBs for DCCH.

Combinations on DPCH and HS-PDSCH

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 (REL-5)

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 (REL-5)

3) Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:384 DL:[Bit rate depending on the UE category] / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH (REL-5)

3a) Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:[Bit rate depending on the UE category] / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH (REL-5)

4) Conversational / unknown / UL:64 DL:64 kbps / CS RAB + Interactive or background / UL:384 DL:[Bit rate depending on the UE category] / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH (REL-5)

4a) Conversational / unknown / UL:64 DL:64 kbps / CS RAB + Interactive or background / UL:64 DL:[Bit rate depending on the UE category] / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH (REL-5)

5) Interactive or background / UL:384 DL:[Bit rate depending on the UE category] / PS RAB + Interactive or background / UL:384 DL:[Bit rate depending on the UE category] / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH (REL-5)

5a) Interactive or background / UL:64 DL:[Bit rate depending on the UE category] / PS RAB + Interactive or background / UL:64 DL:[Bit rate depending on the UE category] / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH (REL-5)

6) Streaming / unknown / UL:128 DL: [guaranteed 128, max bit rate depending on UE category] kbps / PS RAB + Interactive or background / UL:128 DL: [max bit rate depending on UE category] / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH (REL-5)

7) Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Streaming / unknown / UL:128 DL: [guaranteed 128, max bit rate depending on UE category] kbps / PS RAB + Interactive or background / UL:128 DL: [max bit rate depending on UE category] / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH (REL-5)

6.10.2.3 Example of linkage between RABs and services

RABs, which are included in the present document, can provide the services as shown in table 6.10.1.1. Furthermore, the required BER for each RAB, which is assumed in the present document, is shown in table 6.10.2.3.1.

Table 6.10.2.3.1: Example of linkage between RABs and services

RAB				Residual BER [15]	Services
Traffic class [15]	**SSD [15]**	**Max. rate, kbps**	**CS/PS**		
Conversational	Speech	UL:4.75-12.2 DL:4.75-12.2	CS	$5x10^{-4}$, $1x10^{-3}$, $5x10^{-3}$	AMR speech
Conversational	Unknown	UL:64 DL:64	CS	$1x10^{-4}$ or $1x10^{-6}$	UDI 1B, 64k 3G-324M [15]
Conversational	Unknown	UL:32 DL:32	CS	$1x10^{-4}$ or $1x10^{-6}$	32k 3G-324M [15]
Conversational	Unknown	UL:28.8 DL:28.8	CS	$1x10^{-3}$	Transparent modem
Streaming	Unknown	UL:14.4 DL:14.4	CS	$1x10^{-3}$	FAX[6]
Streaming	Unknown	UL:28.8 DL:28.8	CS	$1x10^{-3}$	FAX [18] PIAFS 32 kbps
Streaming	Unknown	UL:57.6 DL:57.6	CS	$1x10^{-3}$	Modem [18], FTM [17] PIAFS 64 kbps
Streaming	Unknown	UL:64-128 or DL:64-384	CS	$1x10^{-3}$ or $1x10^{-4}$	Streaming video, uni-directional

Interactive or Background	N/A	UL:32-384 DL:8-2048	PS	$1x10^{-3}$ or $1x10^{-4}$	Packet

NOTE 1: SMS can be provided via the signalling RB (DCCH) on DPCH or SCCPCH.

NOTE 2: CBS can be provided via the signalling RB (CTCH) on SCCPCH.

NOTE 3: UDI *n*B can be provided via *n* RABs of conversational 64 kbps.

6.10.2.4 Typical radio parameter sets

6.10.2.4.1 Combinations on DPCH

6.10.2.4.1.1 Stand-alone UL:1.7 DL:1.7 kbps SRBs for DCCH

6.10.2.4.1.1.1 Uplink

6.10.2.4.1.1.1.1 Transport channel parameters

6.10.2.4.1.1.1.1.1 Transport channel parameters for UL:1.7 kbps SRBs for DCCH

Higher layer	RAB/signalling RB		SRB#1	SRB#2	SRB#3	SRB#4
	User of Radio Bearer		RRC	RRC	NAS_DT High prio	NAS_DT Low prio
RLC	Logical channel type		DCCH	DCCH	DCCH	DCCH
	RLC mode		UM	AM	AM	AM
	Payload sizes, bit		136	128	128	128
	Max data rate, bps		1 700	1 600	1 600	1 600
	AMD/UMD PDU header, bit		8	16	16	16
MAC	MAC header, bit		4	4	4	4
	MAC multiplexing		4 logical channel multiplexing			
Layer 1	TrCH type		DCH			
	TB sizes, bit		148 (alt 0, 148)			
	TFS	TF0, bits	0x148 (alt 1x0)			
		TF1, bits	1x148			
	TTI, ms		80			
	Coding type		CC 1/3			
	CRC, bit		16			
	Max number of bits/TTI before rate matching		516			
	Uplink: Max number of bits/radio frame before rate matching		65			
	RM attribute		155 to 185			

6.10.2.4.1.1.1.1.2 TFCS

TFCS size	2
TFCS	SRBs for DCCH = TF0, TF1

6.10.2.4.1.1.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	256
	Max number of DPDCH data bits/radio frame	150
	Puncturing Limit	1

6.10.2.4.1.1.2 Downlink

6.10.2.4.1.1.2.1 Transport channel parameters

6.10.2.4.1.1.2.1.1 Transport channel parameters for DL:1.7 kbps SRBs for DCCH

Higher layer	RAB/signalling RB	SRB#1	SRB#2	SRB#3	SRB#4

	User of Radio Bearer		RRC	RRC	NAS_DT High prio	NAS_DT Low prio
RLC	Logical channel type		DCCH	DCCH	DCCH	DCCH
	RLC mode		UM	AM	AM	AM
	Payload sizes, bit		136	128	128	128
	Max data rate, bps		1 700	1 600	1 600	1 600
	AMD/UMD PDU header, bit		8	16	16	16
MAC	MAC header, bit		4	4	4	4
	MAC multiplexing		4 logical channel multiplexing			
Layer 1	TrCH type		DCH			
	TB sizes, bit		148 (alt 0, 148) (note)			
	TFS	TF0, bits	0 x148 (alt 1x0) (note)			
		TF1, bits	1x148			
	TTI, ms		80			
	Coding type		CC 1/3			
	CRC, bit		16			
	Max number of bits/TTI before rate matching		516			
	RM attribute		155 to 185			
NOTE: Alternative parameters enable the measurement "transport channel BLER" in the UE.						

6.10.2.4.1.1.2.1.2 TFCS

TFCS size	2
TFCS	SRBs for DCCH = TF0, TF1

6.10.2.4.1.1.2.2 Physical channel parameters

DPCH Downlink	DTX position		Fixed
	Spreading factor		512
	DPCCH	Number of TFCI bits/slot	0
		Number of TPC bits/slot	2
		Number of Pilot bits/slot	4
	DPDCH	Number of data bits/slot	4
		Number of data bits/frame	60

6.10.2.4.1.2 Stand-alone UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.2.4.1.2.1 Uplink

6.10.2.4.1.2.1.1 Transport channel parameters

6.10.2.4.1.2.1.1.1 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

Higher layer	RAB/signalling RB		SRB#1	SRB#2	SRB#3	SRB#4
	User of Radio Bearer		RRC	RRC	NAS_DT High prio	NAS_DT Low prio
RLC	Logical channel type		DCCH	DCCH	DCCH	DCCH
	RLC mode		UM	AM	AM	AM
	Payload sizes, bit		136	128	128	128
	Max data rate, bps		3 400	3 200	3 200	3 200
	AMD/UMD PDU header, bit		8	16	16	16
MAC	MAC header, bit		4	4	4	4
	MAC multiplexing		4 logical channel multiplexing			
Layer 1	TrCH type		DCH			
	TB sizes, bit		148 (alt 0, 148)			
	TFS	TF0, bits	0x148 (alt 1x0)			
		TF1, bits	1x148			
	TTI, ms		40			
	Coding type		CC 1/3			
	CRC, bit		16			
	Max number of bits/TTI before rate matching		516			

	Uplink: Max number of bits/radio frame before rate matching	129
	RM attribute	155 to 185

6.10.2.4.1.2.1.1.2 TFCS

TFCS size	2
TFCS	SRBs for DCCH = TF0, TF1

6.10.2.4.1.2.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	256
	Max number of DPDCH data bits/radio frame	150
	Puncturing Limit	1

6.10.2.4.1.2.2 Downlink

6.10.2.4.1.2.2.1 Transport channel parameters

6.10.2.4.1.2.2.1.1 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

Higher layer	RAB/signalling RB		SRB#1	SRB#2	SRB#3	SRB#4
	User of Radio Bearer		RRC	RRC	NAS_DT High prio	NAS_DT Low prio
RLC	Logical channel type		DCCH	DCCH	DCCH	DCCH
	RLC mode		UM	AM	AM	AM
	Payload sizes, bit		136	128	128	128
	Max data rate, bps		3 400	3 200	3 200	3 200
	AMD/UMD PDU header, bit		8	16	16	16
MAC	MAC header, bit		4	4	4	4
	MAC multiplexing		4 logical channel multiplexing			
Layer 1	TrCH type		DCH			
	TB sizes, bit		148 (alt 0, 148) (note)			
	TFS	TF0, bits	0x148 (alt 1x0) (note)			
		TF1, bits	1x148			
	TTI, ms		40			
	Coding type		CC 1/3			
	CRC, bit		16			
	Max number of bits/TTI before rate matching		516			
	RM attribute		155 to 230			
NOTE: Alternative parameters enable the measurement "transport channel BLER" in the UE.						

6.10.2.4.1.2.2.1.2 TFCS

TFCS size	2
TFCS	SRBs for DCCH = TF0, TF1

6.10.2.4.1.2.2.2 Physical channel parameters

DPCH Downlink	DTX position		Fixed
	Spreading factor		256
	DPCCH	Number of TFCI bits/slot	0
		Number of TPC bits/slot	2
		Number of Pilot bits/slot	4
	DPDCH	Number of data bits/slot	14
		Number of data bits/frame	210

6.10.2.4.1.3 Stand-alone UL:13.6 DL:13.6 kbps SRBs for DCCH

6.10.2.4.1.3.1 Uplink

6.10.2.4.1.3.1.1 Transport channel parameters

6.10.2.4.1.3.1.1.1 Transport channel parameters for UL:13.6 kbps SRBs for DCCH

Higher layer	RAB/signalling RB		SRB#1	SRB#2	SRB#3	SRB#4
	User of Radio Bearer		RRC	RRC	NAS_DT High prio	NAS_DT Low prio
RLC	Logical channel type		DCCH	DCCH	DCCH	DCCH
	RLC mode		UM	AM	AM	AM
	Payload sizes, bit		136	128	128	128
	Max data rate, bps		13 600	12 800	12 800	12 800
	AMD/UMD PDU header, bit		8	16	16	16
MAC	MAC header, bit		4	4	4	4
	MAC multiplexing		4 logical channel multiplexing			
Layer 1	TrCH type		DCH			
	TB sizes, bit		148 (alt 0, 148)			
	TFS	TF0, bits	0x148 (alt 1x0)			
		TF1, bits	1x148			
	TTI, ms		10			
	Coding type		CC 1/3			
	CRC, bit		16			
	Max number of bits/TTI before rate matching		516			
	Uplink: Max number of bits/radio frame before rate matching		516			

6.10.2.4.1.3.1.1.2 TFCS

TFCS size	2
TFCS	SRBs for DCCH = TF0, TF1

6.10.2.4.1.3.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	64
	Max number of DPDCH data bits/radio frame	600
	Puncturing Limit	1

6.10.2.4.1.3.2 Downlink

6.10.2.4.1.3.2.1 Transport channel parameters

6.10.2.4.1.3.2.1.1 Transport channel parameters for DL:13.6 kbps SRBs for DCCH

Higher layer	RAB/signalling RB		SRB#1	SRB#2	SRB#3	SRB#4
	User of Radio Bearer		RRC	RRC	NAS_DT High prio	NAS_DT Low prio
RLC	Logical channel type		DCCH	DCCH	DCCH	DCCH
	RLC mode		UM	AM	AM	AM
	Payload sizes, bit		136	128	128	128
	Max data rate, bps		13 600	12 800	12 800	12 800
	AMD/UMD PDU header, bit		8	16	16	16
MAC	MAC header, bit		4	4	4	4
	MAC multiplexing		4 logical channel multiplexing			
Layer 1	TrCH type		DCH			
	TB sizes, bit		148 (alt 0, 148) (note)			
	TFS	TF0, bits	0x148 (alt 1x0) (note)			
		TF1, bits	1x148			
	TTI, ms		10			
	Coding type		CC 1/3			
	CRC, bit		16			

	Max number of bits/TTI before rate matching	516
NOTE: alternative parameters enable the measurement "transport channel BLER" in the UE.		

6.10.2.4.1.3.2.1.2 TFCS

TFCS size	2
TFCS	SRBs for DCCH = TF0, TF1

6.10.2.4.1.3.2.2 Physical channel parameters

DPCH Downlink	DTX position		Fixed
	Spreading factor		128
	DPCCH	Number of TFCI bits/slot	0
		Number of TPC bits/slot	2
		Number of Pilot bits/slot	4
	DPDCH	Number of data bits/slot	34
		Number of data bits/frame	510

6.10.2.4.1.4 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.2.4.1.4.1 Uplink

6.10.2.4.1.4.1.1 Transport channel parameters

6.10.2.4.1.4.1.1.1 Transport channel parameters for Conversational / speech / UL:12.2 kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB subflow #1	RAB subflow #2	RAB subflow #3
RLC	Logical channel type		DTCH		
	RLC mode		TM	TM	TM
	Payload sizes, bit		39, 81 (alt. 0, 39, 81)	103	60
	Max data rate, bps		12 200		
	TrD PDU header, bit		0		
MAC	MAC header, bit		0		
	MAC multiplexing		N/A		
Layer 1	TrCH type		DCH	DCH	DCH
	TB sizes, bit		39, 81 (alt. 0, 39, 81)	103	60
	TFS	TF0, bits	0x81(alt. 1x0) (note)	0x103	0x60
		TF1, bits	1x39	1x103	1x60
		TF2, bits	1x81	N/A	N/A
	TTI, ms		20	20	20
	Coding type		CC 1/3	CC 1/3	CC 1/2
	CRC, bit		12	N/A	N/A
	Max number of bits/TTI after channel coding		303	333	136
	Uplink: Max number of bits/radio frame before rate matching		152	167	68
	RM attribute		180 to 220	170 to 210	215 to 256
NOTE: In case of using this alternative, CRC parity bits are to be attached to RAB subflow#1 any time since number of TrBlks are 1 even if there is no data on RAB subflow#1 (see clause 4.2.1.1 in 3GPP TS 25.212 [14]).					

6.10.2.4.1.4.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.

6.10.2.4.1.4.1.1.3 TFCS

TFCS size	6
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3,DCCH)=

	(TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0), (TF2, TF1, TF1, TF0), (TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF1), (TF2, TF1, TF1, TF1)

6.10.2.4.1.4.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	64
	Max number of DPDCH data bits/radio frame	600
	Puncturing Limit	0.84

6.10.2.4.1.4.2 Downlink

6.10.2.4.1.4.2.1 Transport channel parameters

6.10.2.4.1.4.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB subflow #1	RAB subflow #2	RAB subflow #3
RLC	Logical channel type		DTCH		
	RLC mode		TM	TM	TM
	Payload sizes, bit		0 39 81	103	60
	Max data rate, bps		12 200		
	TrD PDU header, bit		0		
MAC	MAC header, bit		0		
	MAC multiplexing		N/A		
Layer 1	TrCH type		DCH	DCH	DCH
	TB sizes, bit		0 39 81	103	60
	TFS (note 1)	TF0, bits	1x0 (note 2)	0x103	0x60
		TF1, bits	1x39	1x103	1x60
		TF2, bits	1x81	N/A	N/A
	TTI, ms		20	20	20
	Coding type		CC 1/3	CC 1/3	CC 1/2
	CRC, bit		12	N/A	N/A
	Max number of bits/TTI after channel coding		303	333	136
	RM attribute		180 to 220	170 to 210	215 to 256

NOTE 1: The TrCH corresponding to RAB subflow #1 should be used as the guiding TrCH, (see clause 4.3 in 3GPP TS 25.212 [14]).
NOTE 2: CRC parity bits are to be attached to RAB subflow#1 any time since number of TrBlks are 1 even if there is no data on RAB subflow#1 (see clause 4.2.1.1 in 3GPP TS 25.212 [14]).

6.10.2.4.1.4.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.1.4.2.1.3 TFCS

TFCS size	6
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3,DCCH)= (TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0), (TF2, TF1, TF1, TF0), (TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF1), (TF2, TF1, TF1, TF1)

6.10.2.4.1.4.2.2 Physical channel parameters

DPCH Downlink	DTX position		Fixed
	Spreading factor		128
	DPCCH	Number of TFCI bits/slot	0
		Number of TPC bits/slot	2
		Number of Pilot bits/slot	4
	DPDCH	Number of data bits/slot	34
		Number of data bits/frame	510

6.10.2.4.1.4a 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

6.10.2.4.1.4a.1.1 Transport channel parameters

6.10.2.4.1.4a.1.1.1 Transport channel parameters for Conversational / speech / UL: (12.2 7.95 5.9 4.75) kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB subflow #1	RAB subflow #2	RAB subflow #3
RLC	Logical channel type		DTCH		
	RLC mode		TM	TM	TM
	Payload sizes, bit		39, 42, 55, 75, 81 (alt. 0, 39, 81)	53, 63, 84, 103	60
	Max data rate, bps		12 200		
	TrD PDU header, bit		0		
MAC	MAC header, bit		0		
	MAC multiplexing		N/A		
Layer 1	TrCH type		DCH	DCH	DCH
	TB sizes, bit		39, 42, 55, 75, 81 (alt. 0, 39, 42, 55, 75, 81)	53, 63, 84, 103	60
	TFS	TF0, bits	0x81(alt. 1x0) (note)	0x103	0x60
		TF1, bits	1x39	1x53	1x60
		TF2 bits	1x42	1x63	N/A
		TF3, bits	1x55	1x84	N/A
		TF4, bits	1x75	1x103	N/A
		TF5, bits	1x81	N/A	N/A
	TTI, ms		20	20	20
	Coding type		CC 1/3	CC 1/3	CC 1/2
	CRC, bit		12	N/A	N/A
	Max number of bits/TTI after channel coding		303	333	136
	Uplink: Max number of bits/radio frame before rate matching		152	167	68
	RM attribute		180 to 220	170 to 210	215 to 256
NOTE: In case of using this alternative, CRC parity bits are to be attached to RAB subflow#1 any time since number of TrBlks are 1 even if there is no data on RAB subflow#1 (see clause 4.2.1.1 in 3GPP TS 25.212 [14]).					

6.10.2.4.1.4a.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.4a.1.1.3 TFCS

TFCS size	12
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, DCCH)= (TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0), (TF2,TF1,TF0,TF0), (TF3,TF2,TF0,TF0), (TF4,TF3,TF0,TF0), (TF5,TF4,TF1,TF0), (TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF1), (TF2,TF1,TF0,TF1), (TF3,TF2,TF0,TF1), (TF4,TF3,TF0,TF1), (TF5,TF4,TF1,TF1)

6.10.2.4.1.4a.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	64
	Max number of DPDCH data bits/radio frame	600
	Puncturing Limit	0.84

6.10.2.4.1.4a.2 Downlink

6.10.2.4.1.4a.2.1 Transport channel parameters

6.10.2.4.1.4a.2.1.1 Transport channel parameters for Conversational / speech / DL: (12.2 7.95 5.9 4.75) kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB subflow #1	RAB subflow #2	RAB subflow #3
RLC	Logical channel type		DTCH		
	RLC mode		TM	TM	TM
	Payload sizes, bit		0, 39, 42, 55, 75, 81	53, 63, 84, 103	60
	Max data rate, bps		12 200		
	TrD PDU header, bit		0		
MAC	MAC header, bit		0		
	MAC multiplexing		N/A		
Layer 1	TrCH type		DCH	DCH	DCH
	TB sizes, bit		0, 39, 42, 55, 75, 81	53, 63, 84, 103	60
	TFS (note 1)	TF0, bits	1x0 (note 2)	0x103	0x60
		TF1, bits	1x39	1x53	1x60
		TF2, bits	1x42	1x63	N/A
		TF3, bits	1x55	1x84	N/A
		TF4, bits	1x75	1x103	N/A
		TF5, bits	1x81	N/A	N/A
	TTI, ms		20	20	20
	Coding type		CC 1/3	CC 1/3	CC 1/2
	CRC, bit		12	N/A	N/A
	Max number of bits/TTI after channel coding		303	333	136
	RM attribute		180 to 220	170 to 210	215 to 256

NOTE 1: The TrCH corresponding to RAB subflow #1 should be used as the guiding TrCH, (see clause 4.3 in 3GPP TS 25.212 [14]).
NOTE 2: CRC parity bits are to be attached to RAB subflow#1 any time since number of TrBlks are 1 even if there is no data on RAB subflow#1 (see clause 4.2.1.1 in 3GPP TS 25.212 [14]).

6.10.2.4.1.4a.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1

6.10.2.4.1.4a.2.1.3 TFCS

TFCS size	12
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, DCCH)= (TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0), (TF2,TF1,TF0,TF0), (TF3,TF2,TF0,TF0), (TF4,TF3,TF0,TF0), (TF5,TF4,TF1,TF0), (TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF1), (TF2,TF1,TF0,TF1), (TF3,TF2,TF0,TF1), (TF4,TF3,TF0,TF1), (TF5,TF4,TF1,TF1)

6.10.2.4.1.4a.2.2 Physical channel parameters

DPCH Downlink	DTX position		Fixed
	Spreading factor		128
	DPCCH	Number of TFCI bits/slot	0
		Number of TPC bits/slot	2
		Number of Pilot bits/slot	4
	DPDCH	Number of data bits/slot	34
		Number of data bits/frame	510

6.10.2.4.1.5 Conversational / speech / UL:10.2 DL:10.2 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.2.4.1.5.1 Uplink

6.10.2.4.1.5.1.1 Transport channel parameters

6.10.2.4.1.5.1.1.1 Transport channel parameters for Conversational / speech / UL:10.2 kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB subflow #1	RAB subflow #2	RAB subflow #3
RLC	Logical channel type		DTCH		
	RLC mode		TM	TM	TM
	Payload sizes, bit		39, 65 (alt. 0, 39, 65)	99	40
	Max data rate, bps		10 200		
	TrD PDU header, bit		0		
MAC	MAC header, bit		0		
	MAC multiplexing		N/A		
Layer 1	TrCH type		DCH	DCH	DCH
	TB sizes, bit		39, 65 (alt. 0, 39, 65)	99	40
	TFS	TF0, bits	0x65 (alt. 1x0) (note)	0x99	0x40
		TF1, bits	1x39	1x99	1x40
		TF2, bits	1x65	N/A	N/A
	TTI, ms		20	20	20
	Coding type		CC 1/3	CC 1/3	CC 1/2
	CRC, bit		12	N/A	N/A
	Max number of bits/TTI after channel coding		255	321	96
	Uplink: Max number of bits/radio frame before rate matching		128	161	48
	RM attribute		180 to 220	170 to 210	215 to 256
NOTE: In case of using this alternative, CRC parity bits are to be attached to RAB subflow#1 any time since number of TrBlks are 1 even if there is no data on RAB subflow#1 (see clause 4.2.1.1 in 3GPP TS 25.212 [14]).					

6.10.2.4.1.5.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.5.1.1.3 TFCS

TFCS size	6
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3,DCCH)= (TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0), (TF2, TF1, TF1, TF0), (TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF1), (TF2, TF1, TF1, TF1)

6.10.2.4.1.5.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	64
	Max number of DPDCH data bits/radio frame	600
	Puncturing Limit	0.96

6.10.2.4.1.5.2 Downlink

6.10.2.4.1.5.2.1 Transport channel parameters

6.10.2.4.1.5.2.1.1 Transport channel parameters for Conversational / speech / DL:10.2 kbps / CS RAB

Higher layer	RAB/Signalling RB	RAB subflow #1	RAB subflow #2	RAB subflow #3
RLC	Logical channel type	DTCH		
	RLC mode	TM	TM	TM
	Payload sizes, bit	0 39 65	99	40
	Max data rate, bps	10 200		
	TrD PDU header, bit	0		
MAC	MAC header, bit	0		
	MAC multiplexing	N/A		
Layer 1	TrCH type	DCH	DCH	DCH

	TB sizes, bit		0 39 65	99	40
	TFS (note 1)	TF0, bits	1x0 (note 2)	0x99	0x40
		TF1, bits	1x39	1x99	1x40
		TF2, bits	1x65	N/A	N/A
	TTI, ms		20	20	20
	Coding type		CC 1/3	CC 1/3	CC 1/2
	CRC, bit		12	N/A	N/A
	Max number of bits/TTI after channel coding		255	321	96
	RM attribute		180 to 220	170 to 210	215 to 256
NOTE 1: The TrCH corresponding to RAB subflow #1 should be used as the guiding TrCH, (see clause 4.3 in 3GPP TS 25.212 [14]). NOTE 2: CRC parity bits are to be attached to RAB subflow#1 any time since number of TrBlks are 1 even if there is no data on RAB subflow#1 (see clause 4.2.1.1 in 3GPP TS 25.212 [14]).					

6.10.2.4.1.5.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.1.5.2.1.3 TFCS

TFCS size	6
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3,DCCH)= (TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0), (TF2, TF1, TF1, TF0), (TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF1), (TF2, TF1, TF1, TF1)

6.10.2.4.1.5.2.2 Physical channel parameters

DPCH Downlink	DTX position		Fixed
	Spreading factor		128
	DPCCH	Number of TFCI bits/slot	0
		Number of TPC bits/slot	2
		Number of Pilot bits/slot	4
	DPDCH	Number of data bits/slot	34
		Number of data bits/frame	510

6.10.2.4.1.5a 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

6.10.2.4.1.5a.1 Uplink

6.10.2.4.1.5a.1.1 Transport channel parameters

6.10.2.4.1.5a.1.1.1 Transport channel parameters for Conversational / speech / UL:(10.2, 6.7, 5.9, 4.75) kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB subflow #1	RAB subflow #2	RAB subflow #3
RLC	Logical channel type		DTCH		
	RLC mode		TM	TM	TM
	Payload sizes, bit		39, 42, 55, 58, 65 (alt. 0, 39, 42, 55, 58, 65)	53, 63, 76, 99	40
	Max data rate, bps		10 200		
	TrD PDU header, bit		0		
MAC	MAC header, bit		0		
	MAC multiplexing		N/A		
Layer 1	TrCH type		DCH	DCH	DCH
	TB sizes, bit		39, 42, 55, 58, 65 (alt. 0, 39, 42, 55, 58, 65)	53, 63, 76, 99	40
	TFS	TF0, bits	0x65 (alt. 1x0) (note)	0x99	0x40
		TF1, bits	1x39	1x53	1x40
		TF2, bits	1x42	1x63	N/A
		TF3, bits	1x55	1x76	N/A

		TF4, bits	1x58	1x99	N/A
		TF5, bits	1x65	N/A	N/A
	TTI, ms		20	20	20
	Coding type		CC 1/3	CC 1/3	CC 1/2
	CRC, bit		12	N/A	N/A
	Max number of bits/TTI after channel coding		255	321	96
	Uplink: Max number of bits/radio frame before rate matching		128	161	48
	RM attribute		180 to 220	170 to 210	215 to 256
NOTE: In case of using this alternative, CRC parity bits are to be attached to RAB subflow#1 any time since number of TrBlks are 1 even if there is no data on RAB subflow#1 (see clause 4.2.1.1 in 3GPP TS 25.212 [14]).					

6.10.2.4.1.5a.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.5a.1.1.3 TFCS

TFCS size	12
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3,DCCH)= (TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0), (TF2,TF1,TF0,TF0), (TF3,TF2,TF0,TF0), (TF4,TF3,TF0,TF0), (TF5,TF4,TF1,TF0), (TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF1), (TF2,TF1,TF0,TF1), (TF3,TF2,TF0,TF1), (TF4,TF3,TF0,TF1), (TF5,TF4,TF1,TF1)

6.10.2.4.1.5a.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	64
	Max number of DPDCH data bits/radio frame	600
	Puncturing Limit	0.96

6.10.2.4.1.5a.2 Downlink

6.10.2.4.1.5a.2.1 Transport channel parameters

6.10.2.4.1.5a.2.1.1 Transport channel parameters for Conversational / speech / DL: DL:(10.2, 6.7, 5.9, 4.75) kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB subflow #1	RAB subflow #2	RAB subflow #3
RLC	Logical channel type		DTCH		
	RLC mode		TM	TM	TM
	Payload sizes, bit		0, 39, 42, 55, 58, 65	0, 53, 63, 76, 99	40
	Max data rate, bps		10 200		
	TrD PDU header, bit		0		
MAC	MAC header, bit		0		
	MAC multiplexing		N/A		
Layer 1	TrCH type		DCH	DCH	DCH
	TB sizes, bit		0, 39, 42, 55, 58, 65	0, 53, 63, 76, 99	40
	TFS (note 1)	TF0, bits	1x0 (note 2)	0x99	0x40
		TF1, bits	1x39	1x53	1x40
		TF2, bits	1x42	1x63	N/A
		TF3, bits	1x55	1x76	N/A
		TF4, bits	1x58	1x99	N/A
		TF5, bits	1x65	N/A	N/A
	TTI, ms		20	20	20
	Coding type		CC 1/3	CC 1/3	CC 1/2
	CRC, bit		12	N/A	N/A
	Max number of bits/TTI after channel coding		255	321	96
	RM attribute		180 to 220	170 to 210	215 to 256

NOTE 1: The TrCH corresponding to RAB subflow #1 should be used as the guiding TrCH, (see clause 4.3 in 3GPP TS 25.212 [14]). NOTE 2: CRC parity bits are to be attached to RAB subflow#1 any time since number of TrBlks are 1 even if there is no data on RAB subflow#1 (see clause 4.2.1.1 in 3GPP TS 25.212 [14]).

6.10.2.4.1.5a.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.1.5a.2.1.3 TFCS

TFCS size	12
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3,DCCH)= (TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0), (TF2,TF1,TF0,TF0), (TF3,TF2,TF0,TF0), (TF4,TF3,TF0,TF0), (TF5,TF4,TF1,TF0), (TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF1), (TF2,TF1,TF0,TF1), (TF3,TF2,TF0,TF1), (TF4,TF3,TF0,TF1), (TF5,TF4,TF1,TF1)

6.10.2.4.1.5a.2.2 Physical channel parameters

DPCH Downlink	DTX position		Fixed
	Spreading factor		128
	DPCCH	Number of TFCI bits/slot	0
		Number of TPC bits/slot	2
		Number of Pilot bits/slot	4
	DPDCH	Number of data bits/slot	34
		Number of data bits/frame	510

6.10.2.4.1.6 Conversational / speech / UL:7.95 DL:7.95 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.2.4.1.6.1 Uplink

6.10.2.4.1.6.1.1 Transport channel parameters

6.10.2.4.1.6.1.1.1 Transport channel parameters for Conversational / speech / UL:7.95 kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB subflow #1	RAB subflow #2	RAB subflow #3
RLC	Logical channel type		DTCH		
	RLC mode		TM	TM	TM
	Payload sizes, bit		39,75 (alt. 0, 39, 75)	84	60
	Max data rate, bps		7950		
	TrD PDU header, bit		0		
MAC	MAC header, bit		0		
	MAC multiplexing		N/A		
Layer 1	TrCH type		DCH	DCH	DCH
	TB sizes, bit		39,75 (alt. 0, 39, 75)	84	60
	TFS (note 1)	TF0, bits	0x75 (alt. 1x0) (note)	0x84	0x60
		TF1, bits	1x39	1x84	N/A
		TF2, bits	1x75	N/A	N/A
	TTI, ms		20	20	20
	Coding type		CC 1/3	CC 1/3	CC 1/2
	CRC, bit		12	N/A	N/A
	Max number of bits/TTI after channel coding		285	276	0
	Uplink: Max number of bits/radio frame before rate matching		143	138	0
	RM attribute		180 to 220	170 to 210	215 to 256
NOTE: In case of using this alternative, CRC parity bits are to be attached to RAB subflow#1 any time since number of TrBlks are 1 even if there is no data on RAB subflow#1 (see clauses 4.2.1.1 in 3GPP TS 25.212 [14]).					

6.10.2.4.1.6.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.6.1.1.3 TFCS

TFCS size	6
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow #3, DCCH)= (TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0), (TF2, TF1, TF0, TF0), (TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF1), (TF2, TF1, TF0, TF1)

6.10.2.4.1.6.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	64
	Max number of DPDCH data bits/radio frame	600
	Puncturing Limit	0.96

6.10.2.4.1.6.2 Downlink

6.10.2.4.1.6.2.1 Transport channel parameters

6.10.2.4.1.6.2.1.1 Transport channel parameters for Conversational / speech / DL:7.95 kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB subflow #1	RAB subflow #2	RAB subflow #3
RLC	Logical channel type		DTCH		
	RLC mode		TM	TM	TM
	Payload sizes, bit		0, 39, 75	84	60
	Max data rate, bps		7950		
	TrD PDU header, bit		0		
MAC	MAC header, bit		0		
	MAC multiplexing		N/A		
Layer 1	TrCH type		DCH	DCH	DCH
	TB sizes, bit		0 39 75	84	60
	TFS (note 1)	TF0, bits	1x0 (note 2)	0x84	0x60
		TF1, bits	1x39	1x84	N/A
		TF2, bits	1x75	N/A	N/A
	TTI, ms		20	20	20
	Coding type		CC 1/3	CC 1/3	CC 1/2
	CRC, bit		12	N/A	N/A
	Max number of bits/TTI after channel coding		285	276	0
	RM attribute		180 to 220	170 to 210	215 to 256

NOTE 1: The TrCH corresponding to RAB subflow #1 should be used as the guiding TrCH, (see clause 4.3 in 3GPP TS 25.212 [14]).
NOTE 2: CRC parity bits are to be attached to RAB subflow#1 any time since number of TrBlks are 1 even if there is no data on RAB subflow#1 (see clause 4.2.1.1 in 3GPP TS 25.212 [14]).

6.10.2.4.1.6.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.1.6.2.1.3 TFCS

TFCS size	6
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, DCCH)= (TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0), (TF2, TF1, TF0, TF0), (TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF1), (TF2, TF1, TF0, TF1)

6.10.2.4.1.6.2.2 Physical channel parameters

DPCH Downlink	DTX position		Fixed
	Spreading factor		128
	DPCCH	Number of TFCI bits/slot	0
		Number of TPC bits/slot	2

		Number of Pilot bits/slot	4
	DPDCH	Number of data bits/slot	34
		Number of data bits/frame	510

6.10.2.4.1.7 Conversational / speech / UL:7.4 DL:7.4 kbps / CS RAB+ UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.2.4.1.7.1 Uplink

6.10.2.4.1.7.1.1 Transport channel parameters

6.10.2.4.1.7.1.1.1 Transport channel parameters for Conversational / speech / UL:7.4 kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB subflow #1	RAB subflow #2	RAB subflow #3
RLC	Logical channel type		DTCH		
	RLC mode		TM	TM	TM
	Payload sizes, bit		39, 61 (alt. 0, 39, 61)	87	60
	Max data rate, bps		7400		
	TrD PDU header, bit		0		
MAC	MAC header, bit		0		
	MAC multiplexing		N/A		
Layer 1	TrCH type		DCH	DCH	DCH
	TB sizes, bit		39, 61 (alt. 0, 39, 61)	87	60
	TFS (note 1)	TF0, bits	0x61 (alt. 1x0) (note)	0x87	0x60
		TF1, bits	1x39	1x87	N/A
		TF2, bits	1x61	N/A	N/A
	TTI, ms		20	20	20
	Coding type		CC 1/3	CC 1/3	CC 1/2
	CRC, bit		12	N/A	N/A
	Max number of bits/TTI after channel coding		243	285	0
	Uplink: Max number of bits/radio frame before rate matching		122	143	0
	RM attribute		180 to 220	170 to 210	215 to 256
NOTE: In case of using this alternative, CRC parity bits are to be attached to RAB subflow#1 any time since number of TrBlks are 1 even if there is no data on RAB subflow#1 (see clauses 4.2.1.1 in 3GPP TS 25.212 [14]).					

6.10.2.4.1.7.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.7.1.1.3 TFCS

TFCS size	6
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, DCCH)= (TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0), (TF2, TF1, TF0, TF0), (TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF1), (TF2, TF1, TF0, TF1)

6.10.2.4.1.7.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	64
	Max number of DPDCH data bits/radio frame	600
	Puncturing Limit	0.96

6.10.2.4.1.7.2 Downlink

6.10.2.4.1.7.2.1 Transport channel parameters

6.10.2.4.1.7.2.1.1 Transport channel parameters for Conversational / speech / DL:7.4 kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB subflow #1	RAB subflow #2	RAB subflow #3
RLC	Logical channel type		DTCH		
	RLC mode		TM	TM	TM
	Payload sizes, bit		0 39 61	87	60
	Max data rate, bps		7400		
	TrD PDU header, bit		0		
MAC	MAC header, bit		0		
	MAC multiplexing		N/A		
Layer 1	TrCH type		DCH	DCH	DCH
	TB sizes, bit		0 39 61	87	60
	TFS (note 1)	TF0, bits	1x0 (note 2)	0x87	0x60
		TF1, bits	1x39	1x87	N/A
		TF2, bits	1x61	N/A	N/A
	TTI, ms		20	20	20
	Coding type		CC 1/3	CC 1/3	CC 1/2
	CRC, bit		12	N/A	N/A
	Max number of bits/TTI after channel coding		243	285	0
	RM attribute		180 to 220	170 to 210	215 to 256

NOTE 1: The TrCH corresponding to RAB subflow #1 should be used as the guiding TrCH, (see clause 4.3 in 3GPP TS 25.212 [14]).
NOTE 2: CRC parity bits are to be attached to RAB subflow#1 any time since number of TrBlks are 1 even if there is no data on RAB subflow#1 (see clause 4.2.1.1 in 3GPP TS 25.212 [14]).

6.10.2.4.1.7.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.1.7.2.1.3 TFCS

TFCS size	6
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, DCCH)= (TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0), (TF2, TF1, TF0, TF0), (TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF1), (TF2, TF1, TF0, TF1)

6.10.2.4.1.7.2.2 Physical channel parameters

DPCH Downlink	DTX position		Fixed
	Spreading factor		128
	DPCCH	Number of TFCI bits/slot	0
		Number of TPC bits/slot	2
		Number of Pilot bits/slot	4
	DPDCH	Number of data bits/slot	34
		Number of data bits/frame	510

6.10.2.4.1.7a 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

6.10.2.4.1.7a.1 Uplink

6.10.2.4.1.7a.1.1 Transport channel parameters

6.10.2.4.1.7a.1.1.1 Transport channel parameters for Conversational / speech / UL:(7.4, 6.7, 5.9, 4.75) kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB subflow #1	RAB subflow #2
RLC	Logical channel type		DTCH	
	RLC mode		TM	TM
	Payload sizes, bit		39, 42, 55, 58, 61 (alt. 0, 39, 42, 55, 58, 61)	53, 63, 76, 87
	Max data rate, bps		7 400	
	TrD PDU header, bit		0	
MAC	MAC header, bit		0	
	MAC multiplexing		N/A	
Layer 1	TrCH type		DCH	DCH
	TB sizes, bit		39, 42, 55, 58, 61 (alt. 0, 39, 42, 55, 58, 61)	53, 63, 76, 87
	TFS	TF0, bits	0x61 (alt. 1x0) (note)	0x87
		TF1, bits	1x39	1x53
		TF2, bits	1x42	1x63
		TF3, bits	1x55	1x76
		TF4, bits	1x58	1x87
		TF5, bits	1x61	N/A
	TTI, ms		20	20
	Coding type		CC 1/3	CC 1/3
	CRC, bit		12	N/A
	Max number of bits/TTI after channel coding		243	285
	Uplink: Max number of bits/radio frame before rate matching		122	143
	RM attribute		180 to 220	170 to 210
NOTE: In case of using this alternative, CRC parity bits are to be attached to RAB subflow#1 any time since number of TrBlks are 1 even if there is no data on RAB subflow#1 (see clause 4.2.1.1 in 3GPP TS 25.212 [14]).				

6.10.2.4.1.7a.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.7a.1.1.3 TFCS

TFCS size	12
TFCS	(RAB subflow#1, RAB subflow#2, DCCH)= (TF0, TF0, TF0), (TF1, TF0, TF0), (TF2, TF1, TF0), (TF3, TF2, TF0), (TF4, TF3, TF0), (TF5, TF4, TF0), (TF0, TF0, TF1), (TF1, TF0, TF1), (TF2, TF1, TF1), (TF3, TF2, TF1), (TF4, TF3, TF1), (TF5, TF4, TF1)

6.10.2.4.1.7a.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	64
	Max number of DPDCH data bits/radio frame	600
	Puncturing Limit	0.96

6.10.2.4.1.7a.2 Downlink

6.10.2.4.1.7a.2.1 Transport channel parameters

6.10.2.4.1.7a.2.1.1 Transport channel parameters for Conversational / speech / DL:(7.4, 6.7, 5.9, 4.75) kbps / CS RAB

Higher layer	RAB/Signalling RB	RAB subflow #1	RAB subflow #2
RLC	Logical channel type	DTCH	
	RLC mode	TM	TM
	Payload sizes, bit	0, 39, 42, 55, 58, 61	53, 63, 76, 87
	Max data rate, bps	7 400	
	TrD PDU header, bit	0	
MAC	MAC header, bit	0	
	MAC multiplexing	N/A	
Layer 1	TrCH type	DCH	DCH
	TB sizes, bit	0, 39, 42, 55, 58, 61	53, 63, 76, 87

	TFS (note 1)	TF0, bits	1x0 (note 2)	0x87
		TF1, bits	1x39	1x53
		TF2, bits	1x42	1x63
		TF3, bits	1x55	1x76
		TF4, bits	1x58	1x87
		TF5, bits	1x61	N/A
	TTI, ms		20	20
	Coding type		CC 1/3	CC 1/3
	CRC, bit		12	N/A
	Max number of bits/TTI after channel coding		243	285
	RM attribute		180 to 220	170 to 210
NOTE 1: The TrCH corresponding to RAB subflow #1 should be used as the guiding TrCH, (see clause 4.3 in 3GPP TS 25.212 [14]).				
NOTE 2: CRC parity bits are to be attached to RAB subflow#1 any time since number of TrBlks are 1 even if there is no data on RAB #1 (see clause 4.2.1.1 in 3GPP TS 25.212 [14]).				

6.10.2.4.1.7a.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.1.7a.2.1.3 TFCS

TFCS size	12
TFCS	(RAB subflow#1, RAB subflow#2, DCCH)= (TF0, TF0, TF0), (TF1, TF0, TF0), (TF2, TF1, TF0), (TF3, TF2, TF0), (TF4, TF3, TF0), (TF5, TF4, TF0), (TF0, TF0, TF1), (TF1, TF0, TF1), (TF2, TF1, TF1), (TF3, TF2, TF1), (TF4, TF3, TF1), (TF5, TF4, TF1)

6.10.2.4.1.7a.2.2 Physical channel parameters

DPCH Downlink	DTX position		Fixed
	Spreading factor		128
	DPCCH	Number of TFCI bits/slot	0
		Number of TPC bits/slot	2
		Number of Pilot bits/slot	4
	DPDCH	Number of data bits/slot	34
		Number of data bits/frame	510

6.10.2.4.1.8 Conversational / speech / UL:6.7 DL:6.7 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.2.4.1.8.1 Uplink

6.10.2.4.1.8.1.1 Transport channel parameters

6.10.2.4.1.8.1.1.1 Transport channel parameters for Conversational / speech / UL:6.7 kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB subflow #1	RAB subflow #2	RAB subflow #3
RLC	Logical channel type		DTCH		
	RLC mode		TM	TM	TM
	Payload sizes, bit		39, 58 (alt. 0, 39, 58)	76	60
	Max data rate, bps		6700		
	TrD PDU header, bit		0		
MAC	MAC header, bit		0		
	MAC multiplexing		N/A		
Layer 1	TrCH type		DCH	DCH	DCH
	TB sizes, bit		39, 58 (alt. 0, 39, 58)	76	60
	TFS (note 1)	TF0, bits	0x58 (alt. 1x0) (note)	0x76	0x60
		TF1, bits	1x39	1x76	N/A
		TF2, bits	1x58	N/A	N/A

	TTI, ms	20	20	20
	Coding type	CC 1/3	CC 1/3	CC 1/2
	CRC, bit	12	N/A	N/A
	Max number of bits/TTI after channel coding	234	252	0
	Uplink: Max number of bits/radio frame before rate matching	117	126	0
	RM attribute	180 to 220	170 to 210	215 to 256
NOTE: In case of using this alternative, CRC parity bits are to be attached to RAB subflow#1 any time since number of TrBlks are 1 even if there is no data on RAB subflow#1 (see clauses 4.2.1.1 in 3GPP TS 25.212 [14]).				

6.10.2.4.1.8.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.8.1.1.3 TFCS

TFCS size	6
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, DCCH)= (TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0), (TF2, TF1, TF0, TF0), (TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF1), (TF2, TF1, TF0, TF1)

6.10.2.4.1.8.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	64
	Max number of DPDCH data bits/radio frame	600
	Puncturing Limit	0.96

6.10.2.4.1.8.2 Downlink

6.10.2.4.1.8.2.1 Transport channel parameters

6.10.2.4.1.8.2.1.1 Transport channel parameters for Conversational / speech / DL:6.7 kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB subflow #1	RAB subflow #2	RAB subflow #3
RLC	Logical channel type		DTCH		
	RLC mode		TM	TM	TM
	Payload sizes, bit		0 39 58	76	60
	Max data rate, bps		6700		
	TrD PDU header, bit		0		
MAC	MAC header, bit		0		
	MAC multiplexing		N/A		
Layer 1	TrCH type		DCH	DCH	DCH
	TB sizes, bit		0 39 58	76	60
	TFS (note 1)	TF0, bits	1x0 (note 2)	0x76	0x60
		TF1, bits	1x39	1x76	N/A
		TF2, bits	1x58	N/A	N/A
	TTI, ms		20	20	20
	Coding type		CC 1/3	CC 1/3	CC 1/2
	CRC, bit		12	N/A	N/A
	Max number of bits/TTI after channel coding		234	252	0
	RM attribute		180 to 220	170 to 210	215 to 256
NOTE 1: The TrCH corresponding to RAB subflow #1 should be used as the guiding TrCH, (see clause 4.3 in 3GPP TS 25.212 [14]). NOTE 2: CRC parity bits are to be attached to RAB subflow#1 any time since number of TrBlks are 1 even if there is no data on RAB subflow#1 (see clause 4.2.1.1 in 3GPP TS 25.212 [14]).					

6.10.2.4.1.8.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1

6.10.2.4.1.8.2.1.3 TFCS

TFCS size	6
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, DCCH)= (TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0), (TF2, TF1, TF0, TF0), (TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF1), (TF2, TF1, TF0, TF1)

6.10.2.4.1.8.2.2 Physical channel parameters

DPCH Downlink	DTX position		Fixed
	Spreading factor		128
	DPCCH	Number of TFCI bits/slot	0
		Number of TPC bits/slot	2
		Number of Pilot bits/slot	4
	DPDCH	Number of data bits/slot	34
		Number of data bits/frame	510

6.10.2.4.1.9 Conversational / speech / UL:5.9 DL:5.9 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.2.4.1.9.1 Uplink

6.10.2.4.1.9.1.1 Transport channel parameters

6.10.2.4.1.9.1.1.1 Transport channel parameters for Conversational / speech / UL:5.9 kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB subflow #1	RAB subflow #2	RAB subflow #3
RLC	Logical channel type		DTCH		
	RLC mode		TM	TM	TM
	Payload sizes, bit		39, 55 (alt. 0, 39, 55)	63	60
	Max data rate, bps		5900		
	TrD PDU header, bit		0		
MAC	MAC header, bit		0		
	MAC multiplexing		N/A		
Layer 1	TrCH type		DCH	DCH	DCH
	TB sizes, bit		39, 55 (alt. 0, 39, 55)	63	60
	TFS	TF0, bits	0x55 (alt. 1x0) (note)	0x63	0x60
		TF1, bits	1x39	1x63	N/A
		TF2, bits	1x55	N/A	N/A
	TTI, ms		20	20	20
	Coding type		CC 1/3	CC 1/3	CC 1/2
	CRC, bit		12	N/A	N/A
	Max number of bits/TTI after channel coding		225	213	0
	Uplink: Max number of bits/radio frame before rate matching		113	107	0
	RM attribute		180 to 220	170 to 210	215 to 256
NOTE: In case of using this alternative, CRC parity bits are to be attached to RAB subflow#1 any time since number of TrBlks are 1 even if there is no data on RAB subflow#1 (see clause 4.2.1.1 in 3GPP TS 25.212 [14]).					

6.10.2.4.1.9.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.9.1.1.3 TFCS

TFCS size	6
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, DCCH)=

	(TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0), (TF2, TF1, TF0, TF0), (TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF1), (TF2, TF1, TF0, TF1)

6.10.2.4.1.9.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	64
	Max number of DPDCH data bits/radio frame	600
	Puncturing Limit	0.96

6.10.2.4.1.9.2 Downlink

6.10.2.4.1.9.2.1 Transport channel parameters

6.10.2.4.1.9.2.1.1 Transport channel parameters for Conversational / speech / DL:5.9 kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB subflow #1	RAB subflow #2	RAB subflow #3
RLC	Logical channel type		DTCH		
	RLC mode		TM	TM	TM
	Payload sizes, bit		0 39 55	63	60
	Max data rate, bps		5900		
	TrD PDU header, bit		0		
MAC	MAC header, bit		0		
	MAC multiplexing		N/A		
Layer 1	TrCH type		DCH	DCH	DCH
	TB sizes, bit		0 39 55	63	60
	TFS (note 1)	TF0, bits	1x0 (note 2)	0x63	0x60
		TF1, bits	1x39	1x63	N/A
		TF2, bits	1x55	N/A	N/A
	TTI, ms		20	20	20
	Coding type		CC 1/3	CC 1/3	CC ½
	CRC, bit		12	N/A	N/A
	Max number of bits/TTI after channel coding		225	213	0
	RM attribute		180 to 220	170 to 210	215 to 256

NOTE 1: The TrCH corresponding to RAB subflow #1 should be used as the guiding TrCH, (see clause 4.3 in 3GPP TS 25.212 [14]).
NOTE 2: CRC parity bits are to be attached to RAB subflow#1 any time since number of TrBlks are 1 even if there is no data on RAB subflow#1 (see clause 4.2.1.1 in 3GPP TS 25.212 [14]).

6.10.2.4.1.9.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.1.9.2.1.3 TFCS

TFCS size	6
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, DCCH)= (TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0), (TF2, TF1, TF0, TF0), (TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF1), (TF2, TF1, TF0, TF1)

6.10.2.4.1.9.2.2 Physical channel parameters

DPCH Downlink	DTX position		Fixed
	Spreading factor		256
	DPCCH	Number of TFCI bits/slot	0
		Number of TPC bits/slot	2
		Number of Pilot bits/slot	4
	DPDCH	Number of data bits/slot	14
		Number of data bits/frame	210

6.10.2.4.1.10 Conversational / speech / UL:5.15 DL:5.15 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.2.4.1.10.1 Uplink

6.10.2.4.1.10.1.1 Transport channel parameters

6.10.2.4.1.10.1.1 Transport channel parameters for Conversational / speech / UL:5.15 kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB subflow #1	RAB subflow #2	RAB subflow #3
RLC	Logical channel type		DTCH		
	RLC mode		TM	TM	TM
	Payload sizes, bit		39, 49 (alt. 0, 39, 49)	54	60
	Max data rate, bps		4750		
	TrD PDU header, bit		0		
MAC	MAC header, bit		0		
	MAC multiplexing		N/A		
Layer 1	TrCH type		DCH	DCH	DCH
	TB sizes, bit		39, 49 (alt. 0, 39, 49)	54	60
	TFS	TF0, bits	0x49 (alt. 1x0) (note)	0x54	0x60
		TF1, bits	1x39	1x54	N/A
		TF2, bits	1x49	N/A	N/A
	TTI, ms		20	20	20
	Coding type		CC 1/3	CC 1/3	CC 1/2
	CRC, bit		12	12	N/A
	Max number of bits/TTI after channel coding		207	186	0
	Uplink: Max number of bits/radio frame before rate matching		104	93	0
	RM attribute		180 to 220	170 to 210	215 to 256
NOTE: In case of usign this alternative, CRC parity bits are to be attached to RAB subflow#1 any time since number of TrBlks are 1 even if there is no data on RAB subflow#1 (see clause 4.2.1.1 in 3GPP TS 25.212 [14]).					

6.10.2.4.1.10.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.10.1.1.3 TFCS

TFCS size	6
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, DCCH)= (TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0), (TF2, TF1, TF0, TF0), (TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF1), (TF2, TF1, TF0, TF1)

6.10.2.4.1.10.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	128
	Max number of DPDCH data bits/radio frame	300
	Puncturing Limit	0.72

6.10.2.4.1.10.2 Downlink

6.10.2.4.1.10.2.1 Transport channel parameters

6.10.2.4.1.10.2.1.1 Transport channel parameters for Conversational / speech / DL:5.15 kbps / CS RAB

Higher layer	RAB/Signalling RB	RAB subflow #1	RAB subflow #2	RAB subflow #3
RLC	Logical channel type	DTCH		
	RLC mode	TM	TM	TM

	Payload sizes, bit		0 39 49	54	60
	Max data rate, bps		5150		
	TrD PDU header, bit		0		
MAC	MAC header, bit		0		
	MAC multiplexing		N/A		
Layer 1	TrCH type		DCH	DCH	DCH
	TB sizes, bit		0 39 49	54	60
	TFS (note 1)	TF0, bits	1x0 (note 2)	0x54	0x60
		TF1, bits	1x39	1x54	N/A
		TF2, bits	1x49	N/A	N/A
	TTI, ms		20	20	20
	Coding type		CC 1/3	CC 1/3	CC 1/2
	CRC, bit		12	N/A	N/A
	Max number of bits/TTI after channel coding		207	186	0
	RM attribute		180 to 220	170 to 210	215 to 256
NOTE 1: The TrCH corresponding to RAB subflow #1 should be used as the guiding TrCH, (see clause 4.3 in 3GPP TS 25.212 [14]). NOTE 2: CRC parity bits are to be attached to RAB subflow#1 any time since number of TrBlks are 1 even if there is no data on RAB subflow#1 (see clause 4.2.1.1 in 3GPP TS 25.212 [14]).					

6.10.2.4.1.10.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.1.10.2.1.3 TFCS

TFCS size	6
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, DCCH)= (TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0), (TF2, TF1, TF0, TF0), (TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF1), (TF2, TF1, TF0, TF1)

6.10.2.4.1.10.2.2 Physical channel parameters

DPCH Downlink	DTX position		Fixed
	Spreading factor		256
	DPCCH	Number of TFCI bits/slot	0
		Number of TPC bits/slot	2
		Number of Pilot bits/slot	4
	DPDCH	Number of data bits/slot	14
		Number of data bits/frame	210

6.10.2.4.1.11 Conversational / speech / UL:4.75 DL:4.75 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.2.4.1.11.1 Uplink

6.10.2.4.1.11.1.1 Transport channel parameters

6.10.2.4.1.11.1.1.1 Transport channel parameters for Conversational / speech / UL:4.75 kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB subflow #1	RAB subflow #2	RAB subflow #3
RLC	Logical channel type		DTCH		
	RLC mode		TM	TM	TM
	Payload sizes, bit		39, 42 (alt. 0, 39, 42)	53	60
	Max data rate, bps		4750		
	TrD PDU header, bit		0		
MAC	MAC header, bit		0		
	MAC multiplexing		N/A		
Layer 1	TrCH type		DCH	DCH	DCH

	TB sizes, bit		39, 42 (alt. 0, 39, 42)	53	60
	TFS	TF0, bits	0x42 (alt. 1x0) (note)	0x53	0x60
		TF1, bits	1x39	1x53	N/A
		TF2, bits	1x42	N/A	N/A
	TTI, ms		20	20	20
	Coding type		CC 1/3	CC 1/3	CC 1/2
	CRC, bit		12	N/A	N/A
	Max number of bits/TTI after channel coding		186	183	0
	Uplink: Max number of bits/radio frame before rate matching		93	92	0
	RM attribute		180 to 220	170 to 210	215 to 256
NOTE: In case of usign this alternative, CRC parity bits are to be attached to RAB subflow#1 any time since number of TrBlks are 1 even if there is no data on RAB subflow#1 (see clause 4.2.1.1 in 3GPP TS 25.212 [14]).					

6.10.2.4.1.11.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.11.1.1.3 TFCS

TFCS size	6
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, DCCH)= (TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0), (TF2, TF1, TF0, TF0), (TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF1), (TF2, TF1, TF0, TF1)

6.10.2.4.1.11.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	128
	Max number of DPDCH data bits/radio frame	300
	Puncturing Limit	0.76

6.10.2.4.1.11.2 Downlink

6.10.2.4.1.11.2.1 Transport channel parameters

6.10.2.4.1.11.2.1.1 Transport channel parameters for Conversational / speech / DL:4.75 kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB subflow #1	RAB subflow #2	RAB subflow #3
RLC	Logical channel type		DTCH		
	RLC mode		TM	TM	TM
	Payload sizes, bit		0 39 42	53	60
	Max data rate, bps		4750		
	TrD PDU header, bit		0		
MAC	MAC header, bit		0		
	MAC multiplexing		N/A		
Layer 1	TrCH type		DCH	DCH	DCH
	TB sizes, bit		0 39 42	53	60
	TFS (note 1)	TF0, bits	1x0 (note 2)	0x53	0x60
		TF1, bits	1x39	1x53	N/A
		TF2, bits	1x42	N/A	N/A
	TTI, ms		20	20	20
	Coding type		CC 1/3	CC 1/3	CC 1/2
	CRC, bit		12	N/A	N/A
	Max number of bits/TTI after channel coding		186	183	0

	RM attribute	180 to 220	170 to 210	215 to 256
NOTE 1: The TrCH corresponding to RAB subflow #1 should be used as the guiding TrCH, (see clause 4.3 in 3GPP TS 25.212 [14]).				
NOTE 2: CRC parity bits are to be attached to RAB subflow#1 any time since number of TrBlks are 1 even if there is no data on RAB subflow#1 (see clause 4.2.1.1 in 3GPP TS 25.212 [14]).				

6.10.2.4.1.11.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.1.11.2.1.3 TFCS

TFCS size	6
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, DCCH)= (TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0), (TF2, TF1, TF0, TF0), (TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF1), (TF2, TF1, TF0, TF1)

6.10.2.4.1.11.2.2 Physical channel parameters

DPCH Downlink	DTX position		Fixed
	Spreading factor		256
	DPCCH	Number of TFCI bits/slot	0
		Number of TPC bits/slot	2
		Number of Pilot bits/slot	4
	DPDCH	Number of data bits/slot	14
		Number of data bits/frame	210

6.10.2.4.1.12 Conversational / unknown / UL:28.8/DL:28.8 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.2.4.1.12.1 Uplink

6.10.2.4.1.12.1.1 Transport channel parameters

6.10.2.4.1.12.1.1.1 Transport channel parameters for conversational / unknown / UL:28.8 kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		TM
	Payload sizes, bit		576
	Max data rate, bps		28 800
	TrD PDU header, bit		0
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		576
	TFS	TF0, bits	0x576
		TF1, bits	1x576
		TF2, bits	2x576
	TTI, ms		40
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		3 564
	Uplink: Max number of bits/radio frame before rate matching		891
	RM attribute		160 to 200

6.10.2.4.1.12.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.12.1.1.3 TFCS

TFCS size	6
TFCS	(28.8 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF0, TF1), (TF1, TF1), (TF2, TF1)

6.10.2.4.1.12.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	32
	Max number of DPDCH data bits/radio frame	1 200
	Puncturing Limit	0.92

6.10.2.4.1.12.2 Downlink

6.10.2.4.1.12.2.1 Transport channel parameters

6.10.2.4.1.12.2.1.1 Transport channel parameters for conversational / unknown / DL:28.8 kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		TM
	Payload sizes, bit		576
	Max data rate, bps		28 800
	TrD PDU header, bit		0
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		576
	TFS	TF0, bits	0x576
		TF1, bits	1x576
		TF2, bits	2x576
	TTI, ms		40
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		3 564
	RM attribute		160 to 200

6.10.2.4.1.12.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.1.12.2.1.3 TFCS

TFCS size	6
TFCS	(28.8 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF0, TF1), (TF1, TF1), (TF2, TF1)

6.10.2.4.1.12.2.2 Physical channel parameters

DPCH Downlink	DTX position		Flexible
	Spreading factor		64
	DPCCH	Number of TFCI bits/slot	8
		Number of TPC bits/slot	4
		Number of Pilot bits/slot	8
	DPDCH	Number of data bits/slot	60
		Number of data bits/frame	900

6.10.2.4.1.13 Conversational / unknown / UL:64 DL:64 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.2.4.1.13.1 Uplink

6.10.2.4.1.13.1.1 Transport channel parameters

6.10.2.4.1.13.1.1.1 Transport channel parameters for Conversational / unknown / UL:64 kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		TM
	Payload sizes, bit		640
	Max data rate, bps		64 000
	TrD PDU header, bit		0
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		640
	TFS	TF0, bits	0x640
		TF1, bits	2x640(alt. 4x640)
	TTI, ms		20(alt. 40)
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		3 948(alt. 7 884)
	Uplink: Max number of bits/radio frame before rate matching		1 974(alt. 1 971)
	RM attribute		150 to 195

6.10.2.4.1.13.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.13.1.1.3 TFCS

TFCS size	4
TFCS	(64 kbps RAB, DCCH)=(TF0, TF0), (TF1, TF0), (TF0, TF1), (TF1, TF1)

6.10.2.4.1.13.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	16
	Max number of DPDCH data bits/radio frame	2 400
	Puncturing Limit	0.88

6.10.2.4.1.13.2 Downlink

6.10.2.4.1.13.2.1 Transport channel parameters

6.10.2.4.1.13.2.1.1 Transport channel parameters for Conversational / unknown / DL:64 kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		TM
	Payload sizes, bit		640
	Max data rate, bps		64 000
	TrD PDU header, bit		0
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		640
	TFS	TF0, bits	0x640
		TF1, bits	2x640(alt. 4x640)
	TTI, ms		20(alt. 40)
	Coding type		TC
	CRC, bit		16

	Max number of bits/TTI after channel coding	3 948(alt. 7 884)
	RM attribute	150 to 195

6.10.2.4.1.13.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.1.13.2.1.3 TFCS

TFCS size	4
TFCS	(64 kbps RAB, DCCH)=(TF0, TF0), (TF1, TF0), (TF0, TF1), (TF1, TF1)

6.10.2.4.1.13.2.2 Physical channel parameters

DPCH Downlink	DTX position		Flexible
	Spreading factor		32
	DPCCH	Number of TFCI bits/slot	8
		Number of TPC bits/slot	4
		Number of Pilot bits/slot	8
	DPDCH	Number of data bits/slot	140
		Number of data bits/frame	2 100

6.10.2.4.1.14 Conversational / unknown / UL:32 DL:32 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.2.4.1.14.1 Uplink

6.10.2.4.1.14.1.1 Transport channel parameters

6.10.2.4.1.14.1.1.1 Transport channel parameters for Conversational / unknown / UL:32 kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		TM
	Payload sizes, bit		640
	Max data rate, bps		32 000
	TrD PDU header, bit		0
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		640
	TFS	TF0, bits	0x640
		TF1, bits	1x640(alt. 2x640)
	TTI, ms		20(alt. 40)
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		1 980 (alt. 3 948)
	Uplink: Max number of bits/radio frame before rate matching		990 (alt. 987)
	RM attribute		165 to 210

6.10.2.4.1.14.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.13.1.1.3 TFCS

TFCS size	4
TFCS	(32 kbps RAB, DCCH)=(TF0, TF0), (TF1, TF0), (TF0, TF1), (TF1, TF1)

6.10.2.4.1.14.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	32

	Max number of DPDCH data bits/radio frame	1 200
	Puncturing Limit	0.80

6.10.2.4.1.14.2 Downlink

6.10.2.4.1.14.2.1 Transport channel parameters

6.10.2.4.1.14.2.1.1 Transport channel parameters for Conversational / unknown / DL:32 kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		TM
	Payload sizes, bit		640
	Max data rate, bps		32 000
	TrD PDU header, bit		0
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		640
	TFS	TF0, bits	0x640
		TF1, bits	1x640(alt. 2x640)
	TTI, ms		20(alt. 40)
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		1 980(alt. 3 948)
	RM attribute		165 to 210

6.10.2.4.1.14.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.1.14.2.1.3 TFCS

TFCS size	4
TFCS	(32 kbps RAB, DCCH)=(TF0, TF0), (TF1, TF0), (TF0, TF1), (TF1, TF1)

6.10.2.4.1.14.2.2 Physical channel parameters

DPCH Downlink	DTX position		Flexible
	Spreading factor		64
	DPCCH	Number of TFCI bits/slot	8
		Number of TPC bits/slot	4
		Number of Pilot bits/slot	8
	DPDCH	Number of data bits/slot	60
		Number of data bits/frame	900

6.10.2.4.1.15 Streaming / unknown / UL:14.4/DL:14.4 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.2.4.1.15.1 Uplink

6.10.2.4.1.15.1.1 Transport channel parameters

6.10.2.4.1.15.1.1.1 Transport channel parameters for Streaming / unknown / UL: 14.4 kbps / CS RAB

Higher layer	RAB/Signalling RB	RAB
RLC	Logical channel type	DTCH
	RLC mode	TM
	Payload sizes, bit	576
	Max data rate, bps	14 400
	TrD PDU header, bit	0
MAC	MAC header, bit	0
	MAC multiplexing	N/A

Layer 1	TrCH type		DCH
	TB sizes, bit		576
	TFS	TF0, bits	0x576
		TF1, bits	1x576
	TTI, ms		40
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		1 788
	Uplink: Max number of bits/radio frame before rate matching		447
	RM attribute		145 to 185

6.10.2.4.1.15.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.15.1.1.3 TFCS

TFCS size	4
TFCS	(14.4 kbps RAB, DCCH)=(TF0, TF0), (TF1, TF0), (TF0, TF1), (TF1, TF1)

6.10.2.4.1.15.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	64
	Max number of DPDCH data bits/radio frame	600
	Puncturing Limit	0.88

6.10.2.4.1.15.2 Downlink

6.10.2.4.1.15.2.1 Transport channel parameters

6.10.2.4.1.15.2.1.1 Transport channel parameters for Streaming / unknown / DL:14.4 kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		TM
	Payload sizes, bit		576
	Max data rate, bps		14 400
	TrD PDU header, bit		0
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		576
	TFS	TF0, bits	0x576
		TF1, bits	1x576
	TTI, ms		40
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		1 788
	RM attribute		145 to 185

6.10.2.4.1.15.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.1.15.2.1.3 TFCS

TFCS size	4
TFCS	(14.4 kbps RAB, DCCH)=(TF0, TF0), (TF1, TF0), (TF0, TF1), (TF1, TF1)

6.10.2.4.1.15.2.2 Physical channel parameters

DPCH Downlink	DTX position	Flexible

	Spreading factor		128
	DPCCH	Number of TFCI bits/slot	2
		Number of TPC bits/slot	2
		Number of Pilot bits/slot	8
	DPDCH	Number of data bits/slot	28
		Number of data bits/frame	420

6.10.2.4.1.16 Streaming / unknown / UL:28.8/DL:28.8 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.2.4.1.16.1 Uplink

6.10.2.4.1.16.1.1 Transport channel parameters

6.10.2.4.1.16.1.1.1 Transport channel parameters for Streaming / unknown / UL:28.8 kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		TM
	Payload sizes, bit		576
	Max data rate, bps		28 800
	TrD PDU header, bit		0
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		576
	TFS	TF0, bits	0x576
		TF1, bits	1x576
		TF2, bits	2x576
	TTI, ms		40
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		3 564
	Uplink: Max number of bits/radio frame before rate matching		891
	RM attribute		135 to 175

6.10.2.4.1.16.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.16.1.1.3 TFCS

TFCS size	6
TFCS	(28.8 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF0, TF1), (TF1, TF1), (TF2, TF1)

6.10.2.4.1.16.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	32
	Max number of DPDCH data bits/radio frame	1 200
	Puncturing Limit	0.96

6.10.2.4.1.16.2 Downlink

6.10.2.4.1.16.2.1 Transport channel parameters

6.10.2.4.1.16.2.1.1 Transport channel parameters for Streaming / unknown / DL:28.8 kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		TM
	Payload sizes, bit		576
	Max data rate, bps		28 800
	TrD PDU header, bit		0
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		576
	TFS	TF0, bits	0x576 (alt. 1x0) (note)
		TF1, bits	1x576
		TF2, bits	2x576
	TTI, ms		40
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		3 564
	RM attribute		135 to 175
NOTE: Alternative 1x0 is used to have CRC present in all transport formats.			

6.10.2.4.1.16.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.1.16.2.1.3 TFCS

TFCS size	6
TFCS	(28.8 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF0, TF1), (TF1, TF1), (TF2, TF1)

6.10.2.4.1.16.2.2 Physical channel parameters

DPCH Downlink	DTX position		Flexible
	Spreading factor		64
	DPCCH	Number of TFCI bits/slot	8
		Number of TPC bits/slot	4
		Number of Pilot bits/slot	8
	DPDCH	Number of data bits/slot	60
		Number of data bits/frame	900

6.10.2.4.1.17 Streaming / unknown / UL:57.6/DL:57.6 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.2.4.1.17.1 Uplink

6.10.2.4.1.17.1.1 Transport channel parameters

6.10.2.4.1.17.1.1.1 Transport channel parameters for Streaming / unknown / UL:57.6 kbps / CS RAB

Higher layer	RAB/Signalling RB	RAB
RLC	Logical channel type	DTCH
	RLC mode	TM
	Payload sizes, bit	576
	Max data rate, bps	57 600
	TrD PDU header, bit	0
MAC	MAC header, bit	0
	MAC multiplexing	N/A
Layer 1	TrCH type	DCH

	TB sizes, bit		576
	TFS	TF0, bits	0x576
		TF1, bits	1x576
		TF2, bits	2x576
		TF3, bits	3x576
		TF4, bits	4x576
	TTI, ms		40
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		7 116
	Uplink: Max number of bits/radio frame before rate matching		1 779

6.10.2.4.1.17.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.17.1.1.3 TFCS

TFCS size	10
TFCS	(57.6 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF3, TF0), (TF4, TF0), (TF0, TF1), (TF1, TF1), (TF2, TF1), (TF3, TF1), (TF4, TF1)

6.10.2.4.1.17.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	16
	Max number of DPDCH data bits/radio frame	2 400
	Puncturing Limit	0.96

6.10.2.4.1.17.2 Downlink

6.10.2.4.1.17.2.1 Transport channel parameters

6.10.2.4.1.17.2.1.1 Transport channel parameters for Streaming / unknown / DL:57.6 kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		TM
	Payload sizes, bit		576
	Max data rate, bps		57 600
	TrD PDU header, bit		0
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		576
	TFS	TF0, bits	0x576
		TF1, bits	1x576
		TF2, bits	2x576
		TF3, bits	3x576
		TF4, bits	4x576
	TTI, ms		40
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		7 116
	RM attribute		125 to 165

6.10.2.4.1.17.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.1.17.2.1.3 TFCS

TFCS size	10

TFCS	(57.6 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF3, TF0), (TF4, TF0), (TF0, TF1), (TF1, TF1), (TF2, TF1), (TF3, TF1), (TF4, TF1)

6.10.2.4.1.17.2.2 Physical channel parameters

DPCH Downlink	DTX position		Flexible
	Spreading factor		32
	DPCCH	Number of TFCI bits/slot	8
		Number of TPC bits/slot	4
		Number of Pilot bits/slot	8
	DPDCH	Number of data bits/slot	140
		Number of data bits/frame	2 100

6.10.2.4.1.18 Void

6.10.2.4.1.19 Void

6.10.2.4.1.20 Void

6.10.2.4.1.21 Void

6.10.2.4.1.22 Void

6.10.2.4.1.23 Interactive or background / UL:32 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.2.4.1.23.1 Uplink

6.10.2.4.1.23.1.1 Transport channel parameters

6.10.2.4.1.23.1.1.1 Transport channel parameters for Interactive or background / UL:32 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		320
	Max data rate, bps		32 000
	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		336
	TFS	TF0, bits	0x336
		TF1, bits	1x336
		TF2, bits	2x336 (alt. N/A)
	TTI, ms		20 (alt. 10)
	Coding type		TC (alt. CC 1/3)
	CRC, bit		16
	Max number of bits/TTI after channel coding		2 124 (alt. 1 080)
	Uplink: Max number of bits/radio frame before rate matching		1 062 (alt. 1 080)
	RM attribute		135 to 175

6.10.2.4.1.23.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.23.1.1.3 TFCS

TFCS size	6 (alt. 4)
TFCS	(32 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF0, TF1), (TF1, TF1), (TF2, TF1) (alt. (TF0, TF0), (TF1, TF0), (TF0, TF1), (TF1, TF1))

6.10.2.4.1.23.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	32
	Max number of DPDCH data bits/radio frame	1 200
	Puncturing Limit	0.88

6.10.2.4.1.23.2 Downlink

6.10.2.4.1.23.2.1 Transport channel parameters

6.10.2.4.1.23.2.1.1 Transport channel parameters for Interactive or background / DL:8 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		320
	Max data rate, bps		8 000
	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		336
	TFS	TF0, bits	0x336
		TF1, bits	1x336
	TTI, ms		40
	Coding type		TC (alt. CC 1/3)
	CRC, bit		16
	Max number of bits/TTI after channel coding		1 068 (alt. 1 080)
	RM attribute		135 to 175

6.10.2.4.1.23.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.1.23.2.1.3 TFCS

TFCS size	4
TFCS	(8 kbps RAB, DCCH)=(TF0, TF0), (TF1, TF0), (TF0, TF1), (TF1, TF1)

6.10.2.4.1.23.2.2 Physical channel parameters

DPCH Downlink	DTX position		Flexible
	Spreading factor		128
	DPCCH	Number of TFCI bits/slot	2
		Number of TPC bits/slot	2
		Number of Pilot bits/slot	4
	DPDCH	Number of data bits/slot	32
		Number of data bits/frame	480

6.10.2.4.1.23a Interactive or background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.2.4.1.23a.1 Uplink

6.10.2.4.1.23a.1.1 Transport channel parameters

6.10.2.4.1.23a.1.1.1 Transport channel parameters for Interactive or background / UL:8 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		320
	Max data rate, bps		8 000
	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		336
	TFS	TF0, bits	0x336
		TF1, bits	1x336
	TTI, ms		40
	Coding type		CC 1/3 (alt. TC)
	CRC, bit		16
	Max number of bits/TTI after channel coding		1 080 (alt. 1 068)
	Uplink: Max number of bits/radio frame before rate matching		270 (alt. 267)
	RM attribute		135 to 175

6.10.2.4.1.23a.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.23a.1.1.3 TFCS

TFCS size	4
TFCS	(8 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF0, TF1), (TF1, TF1)

6.10.2.4.1.23a.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	64
	Max number of DPDCH data bits/radio frame	600
	Puncturing Limit	1.0

6.10.2.4.1.23a.2 Downlink

6.10.2.4.1.23a.2.1 Transport channel parameters

6.10.2.4.1.23a.2.1.1 Transport channel parameters for Interactive or background / DL:8 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		320
	Max data rate, bps		8 000
	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		336
	TFS	TF0, bits	0x336
		TF1, bits	1x336
	TTI, ms		40
	Coding type		CC 1/3 (alt. TC)

	CRC, bit	16
	Max number of bits/TTI after channel coding	1 080 (alt. 1 068)
	RM attribute	135 to 175

6.10.2.4.1.23a.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.1.23a.2.1.3 TFCS

TFCS size	4
TFCS	(8 kbps RAB, DCCH)=(TF0, TF0), (TF1, TF0), (TF0, TF1), (TF1, TF1)

6.10.2.4.1.23a.2.2 Physical channel parameters

DPCH Downlink	DTX position		Flexible
	Spreading factor		128
	DPCCH	Number of TFCI bits/slot	2
		Number of TPC bits/slot	2
		Number of Pilot bits/slot	4
	DPDCH	Number of data bits/slot	32
		Number of data bits/frame	480

6.10.2.4.1.23b Interactive or background / UL:16 DL:16 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.2.4.1.23b.1 Uplink

6.10.2.4.1.23b.1.1 Transport channel parameters

6.10.2.4.1.23b.1.1.1 Transport channel parameters for Interactive or background / UL:16 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		320
	Max data rate, bps		16 000
	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		336
	TFS	TF0, bits	0x336
		TF1, bits	1x336
		TF2, bits	2x336
	TTI, ms		40
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		2 124
	Uplink: Max number of bits/radio frame before rate matching		531
	RM attribute		135 to 175

6.10.2.4.1.23b.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.23b.1.1.3 TFCS

TFCS size	6
TFCS	(16 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF0, TF1), (TF1, TF1), (TF2, TF1)

6.10.2.4.1.23b.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	32
	Max number of DPDCH data bits/radio frame	1 200
	Puncturing Limit	1.0

6.10.2.4.1.23b.2 Downlink

6.10.2.4.1.23b.2.1 Transport channel parameters

6.10.2.4.1.23b.2.1.1 Transport channel parameters for Interactive or background / DL:16 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		320
	Max data rate, bps		16 000
	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		336
	TFS	TF0, bits	0x336
		TF1, bits	1x336
		TF2, bits	2x336
	TTI, ms		40
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		2 124
	RM attribute		135 to 175

6.10.2.4.1.23b.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.1.23b.2.1.3 TFCS

TFCS size	6
TFCS	(16 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF0, TF1), (TF1, TF1), (TF2, TF1)

6.10.2.4.1.23b.2.2 Physical channel parameters

DPCH Downlink	DTX position		Flexible
	Spreading factor		128
	DPCCH	Number of TFCI bits/slot	2
		Number of TPC bits/slot	2
		Number of Pilot bits/slot	4
	DPDCH	Number of data bits/slot	32
		Number of data bits/frame	480

6.10.2.4.1.23c Interactive or background / UL:32 DL:32 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.2.4.1.23c.1 Uplink

6.10.2.4.1.23c.1.1 Transport channel parameters

6.10.2.4.1.23c.1.1.1 Transport channel parameters for Interactive or background / UL:32 kbps / PS RAB

Higher layer	RAB/Signalling RB	RAB
RLC	Logical channel type	DTCH
	RLC mode	AM

	Payload sizes, bit		320
	Max data rate, bps		32 000
	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		336
	TFS	TF0, bits	0x336
		TF1, bits	1x336
		TF2, bits	2x336
		TF3, bits	3x336
		TF4, bits	4x336
	TTI, ms		40
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		4 236
	Uplink: Max number of bits/radio frame before rate matching		1 059
	RM attribute		135 to 175

6.10.2.4.1.23c.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.23c.1.1.3 TFCS

TFCS size	10
TFCS	(32 kbps RAB, DCCH)= (TF0,TF0), (TF1,TF0), (TF2,TF0), (TF3,TF0), (TF4,TF0), (TF0,TF1), (TF1,TF1), (TF2,TF1), (TF3,TF1), (TF4,TF1)

6.10.2.4.1.23c.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	32
	Max number of DPDCH data bits/radio frame	1 200
	Puncturing Limit	0.88

6.10.2.4.1.23c.2 Downlink

6.10.2.4.1.23c.2.1 Transport channel parameters

6.10.2.4.1.23c.2.1.1 Transport channel parameters for Interactive or background / DL:32 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		320
	Max data rate, bps		32 000
	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		336
	TFS	TF0, bits	0x336
		TF1, bits	1x336
		TF2, bits	2x336
		TF3, bits	3x336
		TF4, bits	4x336
	TTI, ms		40
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		4 236
	RM attribute		135 to 175

6.10.2.4.1.23c.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.1.23c.2.1.3 TFCS

TFCS size	10
TFCS	(32 kbps RAB, DCCH)= (TF0,TF0), (TF1,TF0), (TF2,TF0), (TF3,TF0), (TF4,TF0), (TF0,TF1), (TF1,TF1), (TF2,TF1), (TF3,TF1), (TF4,TF1)

6.10.2.4.1.23c.2.2 Physical channel parameters

DPCH Downlink	DTX position		Flexible
	Spreading factor		64
	DPCCH	Number of TFCI bits/slot	8
		Number of TPC bits/slot	4
		Number of Pilot bits/slot	8
	DPDCH	Number of data bits/slot	60
		Number of data bits/frame	900

6.10.2.4.1.23d Interactive or background / UL:32 DL:32 kbps / PS RAB (20 ms TTI)+ UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.2.4.1.23d.1 Uplink

6.10.2.4.1.23d.1.1 Transport channel parameters

6.10.2.4.1.23d.1.1.1 Transport channel parameters for Interactive or background / UL:32 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		320
	Max data rate, bps		32 000
	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		336
	TFS	TF0, bits	0x336
		TF1, bits	1x336
		TF2, bits	2x336
	TTI, ms		20
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		2 124
	Uplink: Max number of bits/radio frame before rate matching		1 062
	RM attribute		135 to 175

6.10.2.4.1.23d.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.23d.1.1.3 TFCS

TFCS size	6
TFCS	(32 kbps RAB, DCCH)= (TF0,TF0), (TF1,TF0), (TF2,TF0), (TF0,TF1), (TF1,TF1), (TF2,TF1)

6.10.2.4.1.23d.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	32

	Max number of DPDCH data bits/radio frame	1 200
	Puncturing Limit	0.88

6.10.2.4.1.23d.2 Downlink

6.10.2.4.1.23d.2.1 Transport channel parameters

6.10.2.4.1.23d.2.1.1 Transport channel parameters for Interactive or background / DL:32 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		320
	Max data rate, bps		32 000
	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		336
	TFS	TF0, bits	0x336
		TF1, bits	1x336
		TF2, bits	2x336
	TTI, ms		20
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		2 124
	RM attribute		135 to 175

6.10.2.4.1.23d.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.1.23d.2.1.3 TFCS

TFCS size	6
TFCS	(32 kbps RAB, DCCH)= (TF0,TF0), (TF1,TF0), (TF2,TF0), (TF0,TF1), (TF1,TF1), (TF2,TF1)

6.10.2.4.1.23d.2.2 Physical channel parameters

DPCH Downlink	DTX position		Flexible
	Spreading factor		64
	DPCCH	Number of TFCI bits/slot	8
		Number of TPC bits/slot	4
		Number of Pilot bits/slot	8
	DPDCH	Number of data bits/slot	60
		Number of data bits/frame	900

6.10.2.4.1.24 Void

6.10.2.4.1.25 Interactive or background / UL:32 DL: 64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.2.4.1.25.1 Uplink

See clause 6.10.2.4.1.23.1.

6.10.2.4.1.25.2 Downlink

6.10.2.4.1.25.2.1 Transport channel parameters

6.10.2.4.1.25.2.1.1 Transport channel parameters for Interactive or background / DL:64 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		320
	Max data rate, bps		64 000
	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		336
	TFS	TF0, bits	0x336
		TF1, bits	1x336
		TF2, bits	2x336
		TF3, bits	3x336
		TF4, bits	4x336
	TTI, ms		20
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		4 236
	RM attribute		130 to 170

6.10.2.4.1.25.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.1.25.2.1.3 TFCS

TFCS size	10
TFCS	(64 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF3, TF0), (TF4, TF0), (TF0, TF1), (TF1, TF1), (TF2, TF1), (TF3, TF1), (TF4, TF1)

6.10.2.4.1.25.2.2 Physical channel parameters

DPCH Downlink	DTX position		Flexible
	Spreading factor		32
	DPCCH	Number of TFCI bits/slot	8
		Number of TPC bits/slot	4
		Number of Pilot bits/slot	8
	DPDCH	Number of data bits/slot	140
		Number of data bits/frame	2 100

6.10.2.4.1.26 Interactive or background / UL:64 DL: 64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.2.4.1.26.1 Uplink

6.10.2.4.1.26.1.1 Transport channel parameters

6.10.2.4.1.26.1.1.1 Transport channel parameters for Interactive or background / UL:64 kbps / PS RAB

Higher layer	RAB/Signalling RB	RAB
RLC	Logical channel type	DTCH
	RLC mode	AM
	Payload sizes, bit	320
	Max data rate, bps	64 000
	AMD PDU header, bit	16
MAC	MAC header, bit	0
	MAC multiplexing	N/A

Layer 1	TrCH type		DCH
	TB sizes, bit		336
	TFS	TF0, bits	0x336
		TF1, bits	1x336
		TF2, bits	2x336
		TF3, bits	3x336
		TF4, bits	4x336
	TTI, ms		20
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		4 236
	Uplink: Max number of bits/radio frame before rate matching		2 118
	RM attribute		130 to 170

6.10.2.4.1.26.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.26.1.1.3 TFCS

TFCS size	10
TFCS	(64 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF3, TF0), (TF4, TF0), (TF0, TF1), (TF1, TF1), (TF2, TF1), (TF3, TF1), (TF4, TF1)

6.10.2.4.1.26.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	16
	Max number of DPDCH data bits/radio frame	2 400
	Puncturing Limit	0.96

6.10.2.4.1.26.2 Downlink

See clause 6.10.2.4.1.25.2.

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

6.10.2.4.1.27.1 Uplink

See clause 6.10.2.4.1.26.1.

6.10.2.4.1.27.2 Downlink

6.10.2.4.1.27.2.1 Transport channel parameters

6.10.2.4.1.27.2.1.1 Transport channel parameters for Interactive or background / DL:128 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		320
	Max data rate, bps		128 000
	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		336
	TFS	TF0, bits	0x336
		TF1, bits	1x336
		TF2, bits	2x336
		TF3, bits	4x336
		TF4, bits	8x336
	TTI, ms		20

	Coding type	TC
	CRC, bit	16
	Max number of bits/TTI after channel coding	8 460
	RM attribute	120 to 160

6.10.2.4.1.27.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.1.27.2.1.3 TFCS

TFCS size	10
TFCS	(128 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF3, TF0), (TF4, TF0), (TF0, TF1), (TF1, TF1), (TF2, TF1), (TF3, TF1), (TF4, TF1)

6.10.2.4.1.27.2.2 Physical channel parameters

DPCH Downlink	DTX position		Flexible
	Spreading factor		16
	DPCCH	Number of TFCI bits/slot	8
		Number of TPC bits/slot	8
		Number of Pilot bits/slot	16
	DPDCH	Number of data bits/slot	288
		Number of data bits/frame	4 320

6.10.2.4.1.28 Interactive or background / UL:128 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.2.4.1.28.1 Uplink

6.10.2.4.1.28.1.1 Transport channel parameters

6.10.2.4.1.28.1.1.1 Transport channel parameters for Interactive or background / UL:128 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		320
	Max data rate, bps		128 000
	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		336
	TFS	TF0, bits	0x336
		TF1, bits	1x336
		TF2, bits	2x336
		TF3, bits	4x336
		TF4, bits	8x336
	TTI, ms		20
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		8 460
	Uplink: Max number of bits/radio frame before rate matching		4 230
	RM attribute		120 to 160

6.10.2.4.1.28.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.28.1.1.3 TFCS

TFCS size	10
TFCS	(128 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF3, TF0), (TF4, TF0), (TF0, TF1), (TF1, TF1), (TF2, TF1), (TF3, TF1), (TF4, TF1)

6.10.2.4.1.28.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	8
	Max number of DPDCH data bits/radio frame	4 800
	Puncturing Limit	0.96

6.10.2.4.1.28.2 Downlink

See clause 6.10.2.4.1.27.2.

6.10.2.4.1.29 Interactive or background / UL:64 DL:144 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH

6.10.2.4.1.29.1 Uplink

See clause 6.10.2.4.1.26.1.

6.10.2.4.1.29.2 Downlink

6.10.2.4.1.29.2.1 Transport channel parameters

6.10.2.4.1.29.2.1.1 Transport channel parameters for Interactive or background / DL:144 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		320
	Max data rate, bps		144 000
	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		336
	TFS	TF0, bits	0x336
		TF1, bits	1x336
		TF2, bits	2x336
		TF3, bits	4x336
		TF4, bits	8x336
		TF5, bits	9x336
	TTI, ms		20
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		9 516
	RM attribute		140 to 180

6.10.2.4.1.29.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.1.29.2.1.3 TFCS

TFCS size	12
TFCS	(144 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF3, TF0), (TF4, TF0), (TF5, TF0) (TF0, TF1), (TF1, TF1), (TF2, TF1), (TF3, TF1), (TF4, TF1), (TF5, TF1)

6.10.2.4.1.29.2.2 Physical channel parameters

DPCH Downlink	DTX position		Flexible
	Spreading factor		16
	DPCCH	Number of TFCI bits/slot	8
		Number of TPC bits/slot	8
		Number of Pilot bits/slot	16
	DPDCH	Number of data bits/slot	288
		Number of data bits/frame	4 320

6.10.2.4.1.30 Interactive or background / UL:144 DL:144 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH

6.10.2.4.1.30.1 Uplink

6.10.2.4.1.30.1.1 Transport channel parameters

6.10.2.4.1.30.1.1.1 Transport channel parameters for Interactive or background / UL:144 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		320
	Max data rate, bps		144 000
	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		336
	TFS	TF0, bits	0x336
		TF1, bits	1x336
		TF2, bits	2x336
		TF3, bits	4x336
		TF4, bits	8x336
		TF5, bits	9x336
	TTI, ms		20
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		9 516
	Uplink: Max number of bits/radio frame before rate matching		4 758
	RM attribute		140 to 180

6.10.2.4.1.30.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.30.1.1.3 TFCS

TFCS size	12
TFCS	(144 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF3, TF0), (TF4, TF0), (TF5, TF0) (TF0, TF1), (TF1, TF1), (TF2, TF1), (TF3, TF1), (TF4, TF1), (TF5, TF1)

6.10.2.4.1.30.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	8
	Max number of DPDCH data bits/radio frame	4 800
	Puncturing Limit	0.84

6.10.2.4.1.30.2 Downlink

See clause 6.10.2.4.1.29.2.

6.10.2.4.1.31 Interactive or background / UL:64 DL:256 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH

6.10.2.4.1.31.1 Uplink

See clause 6.10.2.4.1.26.1.

6.10.2.4.1.31.2 Downlink

6.10.2.4.1.31.2.1 Transport channel parameters

6.10.2.4.1.31.2.1.1 Transport channel parameters for Interactive or background / DL:256 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		320
	Max data rate, bps		256 000
	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		336
	TFS	TF0, bits	0x336
		TF1, bits	1x336
		TF2, bits	2x336
		TF3, bits	4x336
		TF4, bits	8x336
		TF5, bits	N/A (alt. 12x336)
		TF6, bits	N/A (alt. 16x336)
	TTI, ms		10 (alt. 20)
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		8 460 (alt. 16 920)
	RM attribute		135 to 175

6.10.2.4.1.31.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.1.31.2.1.3 TFCS

TFCS size	10 (alt.14)
TFCS	(256 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF3, TF0), (TF4, TF0), (TF0, TF1), (TF1, TF1), (TF2, TF1), (TF3, TF1), (TF4, TF1) (alt. (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF3, TF0), (TF4, TF0), (TF5, TF0), (TF6, TF0) (TF0, TF1), (TF1, TF1), (TF2, TF1), (TF3, TF1), (TF4, TF1), (TF5, TF1), (TF6, TF1))

6.10.2.4.1.31.2.2 Physical channel parameters

DPCH Downlink	DTX position		Flexible
	Spreading factor		8
	Number od DPDCH		1
	DPCCH	Number of TFCI bits/slot	8
		Number of TPC bits/slot	8
		Number of Pilot bits/slot	16
	DPDCH	Number of data bits/slot	608
		Number of data bits/frame	9 120

6.10.2.4.1.32 Interactive or background / UL:64 DL:384 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH

6.10.2.4.1.32.1 Uplink

See clause 6.10.2.4.1.26.1.

6.10.2.4.1.32.2 Downlink

6.10.2.4.1.32.2.1 Transport channel parameters

6.10.2.4.1.32.2.1.1 Transport channel parameters for Interactive or background / DL:384 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		320
	Max data rate, bps		384 000
	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		336
	TFS	TF0, bits	0x336
		TF1, bits	1x336
		TF2, bits	2x336
		TF3, bits	4x336
		TF4, bits	8x336
		TF5, bits	12x336
		TF6, bits	N/A (alt. 16x336)
		TF7, bits	N/A (alt. 20x336)
		TF8, bits	N/A (alt. 24x336)
	TTI, ms		10 (alt. 20)
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		12 684 (alt. 25 368)
	RM attribute		110 to 150

6.10.2.4.1.32.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.1.32.2.1.3 TFCS

TFCS size	12 (alt.18)
TFCS	(384 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF3, TF0), (TF4, TF0), (TF5, TF0) (TF0, TF1), (TF1, TF1), (TF2, TF1), (TF3, TF1), (TF4, TF1), (TF5, TF1) (alt. (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF3, TF0), (TF4, TF0), (TF5, TF0), (TF6, TF0), (TF7, TF0), (TF8, TF0), (TF0, TF1), (TF1, TF1), (TF2, TF1), (TF3, TF1), (TF4, TF1), (TF5, TF1), (TF6, TF1), (TF7, TF1), (TF8, TF1))

6.10.2.4.1.32.2.2 Physical channel parameters

DPCH Downlink	DTX position		Flexible
	Spreading factor		8
	Number of DPDCH		1
	DPCCH	Number of TFCI bits/slot	8
		Number of TPC bits/slot	8
		Number of Pilot bits/slot	16
	DPDCH	Number of data bits/slot	608
		Number of data bits/frame	9 120

6.10.2.4.1.33 Interactive or background / UL:128 DL:384 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.2.4.1.33.1 Uplink

See clause 6.10.2.4.1.28.1.

6.10.2.4.1.33.2 Downlink

See clause 6.10.2.4.1.32.2.

6.10.2.4.1.34 Interactive or background / UL:384 DL:384 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.2.4.1.34.1 Uplink

6.10.2.4.1.34.1.1 Transport channel parameters

6.10.2.4.1.34.1.1.1 Transport channel parameters for Interactive or background / UL:384 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		320
	Max data rate, bps		384 000
	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		336
	TFS	TF0, bits	0x336
		TF1, bits	1x336
		TF2, bits	2x336
		TF3, bits	4x336
		TF4, bits	8x336
		TF5, bits	12x336
		TF6, bits	16x336(alt. N/A)
		TF7, bits	20x336(alt. N/A)
		TF8, bits	24x336 (alt. N/A)
	TTI, ms		20 (alt. 10)
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		25 368
	Uplink: Max number of bits/radio frame before rate matching		12 684
	RM attribute		110-180

6.10.2.4.1.34.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.34.1.1.3 TFCS

TFCS size	18 (alt.12)
TFCS	(384 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF3, TF0), (TF4, TF0), (TF5, TF0), (TF6, TF0), (TF7, TF0), (TF8, TF0), (TF0, TF1), (TF1, TF1), (TF2, TF1), (TF3, TF1), (TF4, TF1), (TF5, TF1), (TF6, TF1), (TF7, TF1), (TF8, TF1) (alt. (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF3, TF0), (TF4, TF0), (TF5, TF0) (TF0, TF1), (TF1, TF1), (TF2, TF1), (TF3, TF1), (TF4, TF1), (TF5, TF1))

6.10.2.4.1.34.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	4
	Max number of DPDCH data bits/radio frame	9 600
	Number of DPDCH	1
	Puncturing Limit	0.64

6.10.2.4.1.34.2 Downlink

See clause 6.10.2.4.1.32.2.

6.10.2.4.1.35 Interactive or background / UL:64 DL:2 048 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.2.4.1.35.1 Uplink

See clause 6.10.2.4.1.26.1.

6.10.2.4.1.35.2 Downlink

6.10.2.4.1.35.2.1 Transport channel parameters

6.10.2.4.1.35.2.1.1 Transport channel parameters for Interactive or background / DL:2 048 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		640
	Max data rate, bps		2 048 000
	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		656
	TFS	TF0, bits	0x656
		TF1, bits	1x656
		TF2, bits	2x656
		TF3, bits	4x656
		TF4, bits	8x656
		TF5, bits	12x656
		TF6, bits	16x656
		TF7, bits	20x656
		TF8, bits	24x656
		TF9, bits	28x656
		TF10, bits	32x656
		TF11, bits	N/A (alt. 36x656)
		TF12, bits	N/A (alt. 40x656)
		TF13, bits	N/A (alt. 44x656)
		TF14, bits	N/A (alt. 48x656)
		TF15, bits	N/A (alt. 52x656)
		TF16, bits	N/A (alt. 56x656)
		TF17, bits	N/A (alt. 60x656)
		TF18, bits	N/A (alt. 64x656)
	TTI, ms		10 (alt. 20)
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		64 575 (alt. 129 141)
	RM attribute		130 to 170

6.10.2.4.1.35.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.1.35.2.1.3 TFCS

TFCS size	22 (alt.38)
TFCS	(2 048 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF3, TF0), (TF4, TF0), (TF5, TF0), (TF6, TF0), (TF7, TF0), (TF8, TF0), (TF9, TF0), (TF10, TF0), (TF0, TF1), (TF1, TF1), (TF2, TF1), (TF3, TF1), (TF4, TF1), (TF5, TF1), (TF6, TF1), (TF7, TF1), (TF8, TF1), (TF9, TF1), (TF10, TF1) (alt. TF0, TF0), (TF1, TF0), (TF2, TF0), (TF3, TF0), (TF4, TF0), (TF5, TF0), (TF6, TF0), (TF7, TF0), (TF8, TF0), (TF9, TF0), (TF10, TF0),(TF11, TF0), (TF12, TF0), (TF13, TF0), (TF14, TF0), (TF15, TF0), (TF16, TF0), (TF17, TF0), (TF18, TF0), (TF0, TF1), (TF1, TF1), (TF2, TF1), (TF3, TF1), (TF4, TF1), (TF5, TF1), (TF6, TF1), (TF7, TF1), (TF8, TF1), (TF9, TF1), (TF10, TF1),(TF11, TF0), (TF12, TF0), (TF13, TF0), (TF14, TF0), (TF15, TF0), (TF16, TF0), (TF17, TF0), (TF18, TF0))

6.10.2.4.1.35.2.2 Physical channel parameters

DPCH Downlink	DTX position		Flexible
	Spreading factor		4
	Number of DPCH		3
	DPCCH	Number of TFCI bits/slot	8
		Number of TPC bits/slot	8
		Number of Pilot bits/slot	16
	DPDCH	Number of data bits/slot	1 248
		Number of data bits/frame	18 720

6.10.2.4.1.36 Void

6.10.2.4.1.37 Void

6.10.2.4.1.38 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

6.10.2.4.1.38.1 Uplink

6.10.2.4.1.38.1.1 Transport channel parameters

6.10.2.4.1.38.1.1.1 Transport channel parameters for Conversational / speech / UL:12.2 kbps / CS RAB

See clause 6.10.2.4.1.4.1.1.1.

6.10.2.4.1.38.1.1.2 Transport channel parameters for Interactive or background / UL:32 kbps / PS RAB

See clause 6.10.2.4.1.23.1.1.1.

6.10.2.4.1.38.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.38.1.1.4 TFCS

TFCS size	18 (alt. 12)
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 32kbps RAB , DCCH)= (TF0, TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0, TF0), (TF2, TF1, TF1, TF0, TF0), (TF0, TF0, TF0, TF1, TF0), (TF1, TF0, TF0, TF1, TF0), (TF2, TF1, TF1, TF1, TF0), (TF0, TF0, TF0, TF2, TF0), (TF1, TF0, TF0, TF2, TF0), (TF2, TF1, TF1, TF2, TF0), (TF0, TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1), (TF0, TF0, TF0, TF1, TF1), (TF1, TF0, TF0, TF1, TF1), (TF2, TF1, TF1, TF1, TF1), (TF0, TF0, TF0, TF2, TF1), (TF1, TF0, TF0, TF2, TF1), (TF2, TF1, TF1, TF2, TF1) (alt. (TF0, TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0, TF0), (TF2, TF1, TF1, TF0, TF0), (TF0, TF0, TF0, TF1, TF0), (TF1, TF0, TF0, TF1, TF0), (TF2, TF1, TF1, TF1, TF0), (TF0, TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1), (TF0, TF0, TF0, TF1, TF1), (TF1, TF0, TF0, TF1, TF1), (TF2, TF1, TF1, TF1, TF1))

6.10.2.4.1.38.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	16
	Max number of DPDCH data bits/radio frame	2 400
	Puncturing Limit	0.96

6.10.2.4.1.38.2 Downlink

6.10.2.4.1.38.2.1 Transport channel parameters

6.10.2.4.1.38.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 kbps / CS RAB

See clause 6.10.2.4.1.4.2.1.1.

6.10.2.4.1.38.2.1.2 Transport channel parameters for Interactive or background / DL:8 kbps / PS RAB

See clause 6.10.2.4.1.23.2.1.1.

6.10.2.4.1.38.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.

6.10.2.4.1.38.2.1.4 TFCS

TFCS size	12
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3,8kbps RAB, DCCH)= (TF0, TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0, TF0), (TF2, TF1, TF1, TF0, TF0), (TF0, TF0, TF0, TF1, TF0), (TF1, TF0, TF0, TF1, TF0), (TF2, TF1, TF1, TF1, TF0), (TF0, TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1), (TF0, TF0, TF0, TF1, TF1), (TF1, TF0, TF0, TF1, TF1), (TF2, TF1, TF1, TF1, TF1)

6.10.2.4.1.38.2.2 Physical channel parameters

DPCH Downlink	DTX position		Flexible
	Spreading factor		64
	DPCCH	Number of TFCI bits/slot	8
		Number of TPC bits/slot	4
		Number of Pilot bits/slot	8
	DPDCH	Number of data bits/slot	60
		Number of data bits/frame	900

6.10.2.4.1.38a Conversational / speech / 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

6.10.2.4.1.38a.1 Uplink

6.10.2.4.1.38a.1.1 Transport channel parameters

6.10.2.4.1.38a.1.1.1 Transport channel parameters for Conversational / speech / UL:12.2 kbps / CS RAB

See clause 6.10.2.4.1.4.1.1.1.

6.10.2.4.1.38a.1.1.2 Transport channel parameters for Interactive or background / UL:0 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		320
	Max data rate, bps		0
	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		336
	TFS	TF0, bits	0x336
	TTI, ms		20

	Coding type	CC
	CRC, bit	16
	Max number of bits/TTI after channel coding	0
	Uplink: Max number of bits/radio frame before rate matching	0
	RM attribute	130 to 170

6.10.2.4.1.38a.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.38a.1.1.4 TFCS

TFCS size	6
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 0kbps RAB, DCCH)= (TF0,TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0,TF0), (TF2,TF1,TF1,TF0,TF0), (TF0,TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF0,TF1), (TF2,TF1,TF1,TF0,TF1)

6.10.2.4.1.38a.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	64
	Max number of DPDCH data bits/radio frame	600
	Puncturing Limit	0.84

6.10.2.4.1.38a.2 Downlink

6.10.2.4.1.38a.2.1 Transport channel parameters

6.10.2.4.1.38a.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 kbps / CS RAB

See clause 6.10.2.4.1.4.2.1.1.

6.10.2.4.1.38a.2.1.2 Transport channel parameters for Interactive or background / DL:0 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		320
	Max data rate, bps		0
	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		336
	TFS	TF0, bits	0x336
	TTI, ms		20
	Coding type		CC
	CRC, bit		16
	Max number of bits/TTI after channel coding		0
	RM attribute		130 to 170

6.10.2.4.1.38a.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1

6.10.2.4.1.38a.2.1.4 TFCS

TFCS size	6
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 0kbps RAB, DCCH)= (TF0,TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0,TF0), (TF2,TF1,TF1,TF0,TF0), (TF0,TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF0,TF1), (TF2,TF1,TF1,TF0,TF1)

6.10.2.4.1.38a.2.2 Physical channel parameters

DPCH Downlink	DTX position		Fixed
	Spreading factor		128
	DPCCH	Number of TFCI bits/slot	0
		Number of TPC bits/slot	2
		Number of Pilot bits/slot	4
	DPDCH	Number of data bits/slot	34
		Number of data bits/frame	510

6.10.2.4.1.38b 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

6.10.2.4.1.38b.1 Uplink

6.10.2.4.1.38b.1.1 Transport channel parameters

6.10.2.4.1.38b.1.1.1 Transport channel parameters for Conversational / speech / UL:12.2 kbps / CS RAB

See clause 6.10.2.4.1.4.1.1.1.

6.10.2.4.1.38b.1.1.2 Transport channel parameters for Interactive or background / UL:8 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		320
	Max data rate, bps		8 000
	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		336
	TFS	TF0, bits	0x336
		TF1, bits	1x336
	TTI, ms		40
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		1 068
	Uplink: Max number of bits/radio frame before rate matching		267
	RM attribute		135 to 175

6.10.2.4.1.38b.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.38b.1.1.4 TFCS

TFCS size	12
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 8 kbps RAB, DCCH)= (TF0,TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0,TF0), (TF2,TF1,TF1,TF0,TF0), (TF0,TF0,TF0,TF1,TF0), (TF1,TF0,TF0,TF1,TF0), (TF2,TF1,TF1,TF1,TF0), (TF0,TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF0,TF1), (TF2,TF1,TF1,TF0,TF1), (TF0,TF0,TF0,TF1,TF1), (TF1,TF0,TF0,TF1,TF1), (TF2,TF1,TF1,TF1,TF1)

6.10.2.4.1.38b.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	32
	Max number of DPDCH data bits/radio frame	1 200
	Puncturing Limit	1.0

6.10.2.4.1.38b.2 Downlink

6.10.2.4.1.38b.2.1 Transport channel parameters

6.10.2.4.1.38b.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 kbps / CS RAB

See clause 6.10.2.4.1.4.2.1.1.

6.10.2.4.1.38b.2.1.2 Transport channel parameters for Interactive or background / DL:8 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		320
	Max data rate, bps		8 000
	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		336
	TFS	TF0, bits	0x336
		TF1, bits	1x336
	TTI, ms		40
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		1 068
	RM attribute		135 to 175

6.10.2.4.1.38b.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.1.38b.2.1.4 TFCS

TFCS size	12
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 8 kbps RAB, DCCH)= (TF0,TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0,TF0), (TF2,TF1,TF1,TF0,TF0), (TF0,TF0,TF0,TF1,TF0), (TF1,TF0,TF0,TF1,TF0), (TF2,TF1,TF1,TF1,TF0), (TF0,TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF0,TF1), (TF2,TF1,TF1,TF0,TF1), (TF0,TF0,TF0,TF1,TF1), (TF1,TF0,TF0,TF1,TF1), (TF2,TF1,TF1,TF1,TF1)

6.10.2.4.1.38b.2.2 Physical channel parameters

DPCH Downlink	DTX position		Flexible
	Spreading factor		64
	DPCCH	Number of TFCI bits/slot	8
		Number of TPC bits/slot	4
		Number of Pilot bits/slot	8
	DPDCH	Number of data bits/slot	60
		Number of data bits/frame	900

6.10.2.4.1.38c 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

6.10.2.4.1.38c.1 Uplink

6.10.2.4.1.38c.1.1 Transport channel parameters

6.10.2.4.1.38c.1.1.1 Transport channel parameters for Conversational / speech / UL:12.2 kbps / CS RAB

See clause 6.10.2.4.1.4.1.1.1.

6.10.2.4.1.38c.1.1.2 Transport channel parameters for Interactive or background / UL:32 kbps / PS RAB

See clause 6.2.4.1.23c.1.1.1.

6.10.2.4.1.38c.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.38c.1.1.4 TFCS

TFCS size	30
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 32 kbps RAB, DCCH)= (TF0,TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0,TF0), (TF2,TF1,TF1,TF0,TF0), (TF0,TF0,TF0,TF1,TF0), (TF1,TF0,TF0,TF1,TF0), (TF2,TF1,TF1,TF1,TF0), (TF0,TF0,TF0,TF2,TF0), (TF1,TF0,TF0,TF2,TF0), (TF2,TF1,TF1,TF2,TF0), (TF0,TF0,TF0,TF3,TF0), (TF1,TF0,TF0,TF3,TF0), (TF2,TF1,TF1,TF3,TF0), (TF0,TF0,TF0,TF4,TF0), (TF1,TF0,TF0,TF4,TF0), (TF2,TF1,TF1,TF4,TF0), (TF0,TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF0,TF1), (TF2,TF1,TF1,TF0,TF1), (TF0,TF0,TF0,TF1,TF1), (TF1,TF0,TF0,TF1,TF1), (TF2,TF1,TF1,TF1,TF1), (TF0,TF0,TF0,TF2,TF1), (TF1,TF0,TF0,TF2,TF1), (TF2,TF1,TF1,TF2,TF1), (TF0,TF0,TF0,TF3,TF1), (TF1,TF0,TF0,TF3,TF1), (TF2,TF1,TF1,TF3,TF1), (TF0,TF0,TF0,TF4,TF1), (TF1,TF0,TF0,TF4,TF1), (TF2,TF1,TF1,TF4,TF1)

6.10.2.4.1.38c.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	16
	Max number of DPDCH data bits/radio frame	2 400
	Puncturing Limit	1.0

6.10.2.4.1.38c.2 Downlink

6.10.2.4.1.38c.2.1 Transport channel parameters

6.10.2.4.1.38c.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 kbps / CS RAB

See clause 6.10.2.4.1.4.2.1.1.

6.10.2.4.1.38c.2.1.2 Transport channel parameters for Interactive or background / DL:32 kbps / PS RAB

See clause 6.2.4.1.23c.2.1.1.

6.10.2.4.1.38c.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.1.38c.2.1.4 TFCS

TFCS size	30
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 32 kbps RAB, DCCH)= (TF0,TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0,TF0), (TF2,TF1,TF1,TF0,TF0), (TF0,TF0,TF0,TF1,TF0), (TF1,TF0,TF0,TF1,TF0), (TF2,TF1,TF1,TF1,TF0), (TF0,TF0,TF0,TF2,TF0), (TF1,TF0,TF0,TF2,TF0), (TF2,TF1,TF1,TF2,TF0), (TF0,TF0,TF0,TF3,TF0), (TF1,TF0,TF0,TF3,TF0), (TF2,TF1,TF1,TF3,TF0), (TF0,TF0,TF0,TF4,TF0), (TF1,TF0,TF0,TF4,TF0), (TF2,TF1,TF1,TF4,TF0), (TF0,TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF0,TF1), (TF2,TF1,TF1,TF0,TF1), (TF0,TF0,TF0,TF1,TF1), (TF1,TF0,TF0,TF1,TF1), (TF2,TF1,TF1,TF1,TF1), (TF0,TF0,TF0,TF2,TF1), (TF1,TF0,TF0,TF2,TF1), (TF2,TF1,TF1,TF2,TF1), (TF0,TF0,TF0,TF3,TF1), (TF1,TF0,TF0,TF3,TF1), (TF2,TF1,TF1,TF3,TF1), (TF0,TF0,TF0,TF4,TF1), (TF1,TF0,TF0,TF4,TF1), (TF2,TF1,TF1,TF4,TF1)

6.10.2.4.1.38c.2.2 Physical channel parameters

DPCH Downlink	DTX position		Flexible
	Spreading factor		32
	DPCCH	Number of TFCI bits/slot	8
		Number of TPC bits/slot	4
		Number of Pilot bits/slot	8
	DPDCH	Number of data bits/slot	140
		Number of data bits/frame	2 100

6.10.2.4.1.38d 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

6.10.2.4.1.38d.1 Uplink

6.10.2.4.1.38d.1.1 Transport channel parameters

6.10.2.4.1.38d.1.1.1 Transport channel parameters for Conversational / speech / UL:12.2 kbps / CS RAB

See clause 6.10.2.4.1.4.1.1.1.

6.10.2.4.1.38d.1.1.2 Transport channel parameters for Interactive or background / UL:64 kbps / PS RAB + UL:64 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB	RAB
RLC	Logical channel type		DTCH	DTCH
	RLC mode		AM	AM
	Payload sizes, bit		320	320
	Max data rate, bps		64 000	64 000
	AMD PDU header, bit		16	16
MAC	MAC header, bit		4	4
	MAC multiplexing		2 logical channel multiplexing	
Layer 1	TrCH type		DCH	
	TB sizes, bit		340	
	TFS	TF0, bits	0x340	
		TF1, bits	1x340	
		TF2, bits	2x340	
		TF3, bits	3x340	
		TF4, bits	4x340	
	TTI, ms		20	
	Coding type		TC	
	CRC, bit		16	
	Max number of bits/TTI after channel coding		4 284	
	Uplink: Max number of bits/radio frame before rate matching		2 142	
	RM attribute		130 to 170	

6.10.2.4.1.38d.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.38d.1.1.4 TFCS

TFCS size	30
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 64 kbps RAB + 64 kbps RAB, DCCH)= (TF0,TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0,TF0),(TF2,TF1,TF1,TF0,TF0), (TF0,TF0,TF0,TF1,TF0), (TF1,TF0,TF0,TF1,TF0),(TF2,TF1,TF1,TF1,TF0), (TF0,TF0,TF0,TF2,TF0), (TF1,TF0,TF0,TF2,TF0),(TF2,TF1,TF1,TF2,TF0), (TF0,TF0,TF0,TF3,TF0), (TF1,TF0,TF0,TF3,TF0),(TF2,TF1,TF1,TF3,TF0), (TF0,TF0,TF0,TF4,TF0), (TF1,TF0,TF0,TF4,TF0),(TF2,TF1,TF1,TF4,TF0), (TF0,TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF0,TF1),(TF2,TF1,TF1,TF0,TF1), (TF0,TF0,TF0,TF1,TF1), (TF1,TF0,TF0,TF1,TF1),(TF2,TF1,TF1,TF1,TF1), (TF0,TF0,TF0,TF2,TF1), (TF1,TF0,TF0,TF2,TF1),(TF2,TF1,TF1,TF2,TF1), (TF0,TF0,TF0,TF3,TF1), (TF1,TF0,TF0,TF3,TF1),(TF2,TF1,TF1,TF3,TF1), (TF0,TF0,TF0,TF4,TF1), (TF1,TF0,TF0,TF4,TF1),(TF2,TF1,TF1,TF4,TF1)

6.10.2.4.1.38d.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	16
	Max number of DPDCH data bits/radio frame	2 400
	Puncturing Limit	0.76

6.10.2.4.1.38d.2 Downlink

6.10.2.4.1.38d.2.1 Transport channel parameters

6.10.2.4.1.38d.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 kbps / CS RAB

See clause 6.10.2.4.1.4.2.1.1.

6.10.2.4.1.38d.2.1.2 Transport channel parameters for Interactive or background / DL:64 kbps / PS RAB + DL:64 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB	RAB
RLC	Logical channel type		DTCH	DTCH
	RLC mode		AM	AM
	Payload sizes, bit		320	320
	Max data rate, bps		64 000	64 000
	AMD PDU header, bit		16	16
MAC	MAC header, bit		4	4
	MAC multiplexing		2 logical channel multiplexing	
Layer 1	TrCH type		DCH	
	TB sizes, bit		340	
	TFS	0x340	0x340	
		1x340	1x340	
		2x340	2x340	
		3x340	3x340	
		4x340	4x340	
	TTI, ms		20	
	Coding type		TC	
	CRC, bit		16	
	Max number of bits/TTI after channel coding		4 284	
	RM attribute		130 to 170	

6.10.2.4.1.38d.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.1.38d.2.1.4 TFCS

TFCS size	30
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 64 kbps RAB + 64 kbps RAB, DCCH)= (TF0,TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0,TF0),(TF2,TF1,TF1,TF0,TF0), (TF0,TF0,TF0,TF1,TF0), (TF1,TF0,TF0,TF1,TF0),(TF2,TF1,TF1,TF1,TF0), (TF0,TF0,TF0,TF2,TF0), (TF1,TF0,TF0,TF2,TF0),(TF2,TF1,TF1,TF2,TF0), (TF0,TF0,TF0,TF3,TF0), (TF1,TF0,TF0,TF3,TF0),(TF2,TF1,TF1,TF3,TF0), (TF0,TF0,TF0,TF4,TF0), (TF1,TF0,TF0,TF4,TF0),(TF2,TF1,TF1,TF4,TF0), (TF0,TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF0,TF1),(TF2,TF1,TF1,TF0,TF1), (TF0,TF0,TF0,TF1,TF1), (TF1,TF0,TF0,TF1,TF1),(TF2,TF1,TF1,TF1,TF1), (TF0,TF0,TF0,TF2,TF1), (TF1,TF0,TF0,TF2,TF1),(TF2,TF1,TF1,TF2,TF1), (TF0,TF0,TF0,TF3,TF1), (TF1,TF0,TF0,TF3,TF1),(TF2,TF1,TF1,TF3,TF1), (TF0,TF0,TF0,TF4,TF1), (TF1,TF0,TF0,TF4,TF1),(TF2,TF1,TF1,TF4,TF1)

6.10.2.4.1.38d.2.2 Physical channel parameters

DPCH Downlink	DTX position		Flexible
	Spreading factor		32
	DPCCH	Number of TFCI bits/slot	8
		Number of TPC bits/slot	4
		Number of Pilot bits/slot	8
	DPDCH	Number of data bits/slot	140
		Number of data bits/frame	2 100

6.10.2.4.1.38e Conversational / speech / (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

6.10.2.4.1.38e.1 Uplink

6.10.2.4.1.38e.1.1 Transport channel parameters

6.10.2.4.1.38e.1.1.1 Transport channel parameters for Conversational / speech / UL: (12.2 7.95 5.9 4.75) kbps / CS RAB

See clause 6.10.2.4.1.4a.1.1.1.

6.10.2.4.1.38e.1.1.2 Transport channel parameters for Interactive or background / UL:0 kbps / PS RAB

See clause 6.10.2.4.1.38a.1.1.2.

6.10.2.4.1.38e.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.38e.1.1.4 TFCS

TFCS size	12
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 0 kbps RAB, DCCH)= (TF0,TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0,TF0), (TF2,TF1,TF0,TF0,TF0), (TF3,TF2,TF0,TF0,TF0), (TF4,TF3,TF0,TF0,TF0), (TF5,TF4,TF1,TF0,TF0), (TF0,TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF0,TF1), (TF2,TF1,TF0,TF0,TF1), (TF3,TF2,TF0,TF0,TF1), (TF4,TF3,TF0,TF0,TF1), (TF5,TF4,TF1,TF0,TF1)

6.10.2.4.1.38e.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	64
	Max number of DPDCH data bits/radio frame	600
	Puncturing Limit	0.84

6.10.2.4.1.38e.2 Downlink

6.10.2.4.1.38e.2.1 Transport channel parameters

6.10.2.4.1.38e.2.1.1 Transport channel parameters for Conversational / speech / DL: (12.2 7.95 5.9 4.75) kbps / CS RAB

See clause 6.10.2.4.1.4a.2.1.1.

6.10.2.4.1.38e.2.1.2 Transport channel parameters for Interactive or background / DL:0 kbps / PS RAB

See clause 6.10.2.4.1.38a.2.1.2

6.10.2.4.1.38e.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1

6.10.2.4.1.38e.2.1.4 TFCS

TFCS size	12
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 0 kbps RAB, DCCH)= (TF0,TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0,TF0), (TF2,TF1,TF0,TF0,TF0), (TF3,TF2,TF0,TF0,TF0), (TF4,TF3,TF0,TF0,TF0), (TF5,TF4,TF1,TF0,TF0), (TF0,TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF0,TF1), (TF2,TF1,TF0,TF0,TF1), (TF3,TF2,TF0,TF0,TF1), (TF4,TF3,TF0,TF0,TF1), (TF5,TF4,TF1,TF0,TF1),

6.10.2.4.1.38e.2.2 Physical channel parameters

DPCH Downlink	DTX position		Fixed
	Spreading factor		128
	DPCCH	Number of TFCI bits/slot	0
		Number of TPC bits/slot	2
		Number of Pilot bits/slot	4
	DPDCH	Number of data bits/slot	34
		Number of data bits/frame	510

6.10.2.4.1.38f Conversational / speech / (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

6.10.2.4.1.38f.1 Uplink

6.10.2.4.1.38f.1.1 Transport channel parameters

6.10.2.4.1.38f.1.1.1 Transport channel parameters for Conversational / speech / UL: (12.2 7.95 5.9 4.75) kbps / CS RAB

See clause 6.10.2.4.1.4a.1.1.1.

6.10.2.4.1.38f.1.1.2 Transport channel parameters for Interactive or background / UL:8 kbps / PS RAB

See clause 6.10.2.4.1.38b.1.1.2.

6.10.2.4.1.38f.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.38f.1.1.4 TFCS

TFCS size	24
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 8 kbps RAB, DCCH)= (TF0,TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0,TF0), (TF2,TF1,TF0,TF0,TF0), (TF3,TF2,TF0,TF0,TF0), (TF4,TF3,TF0,TF0,TF0), (TF5,TF4,TF1,TF0,TF0), (TF0,TF0,TF0,TF1,TF0), (TF1,TF0,TF0,TF1,TF0), (TF2,TF1,TF0,TF1,TF0), (TF3,TF2,TF0,TF1,TF0), (TF4,TF3,TF0,TF1,TF0), (TF5,TF4,TF1,TF1,TF0), (TF0,TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF0,TF1), (TF2,TF1,TF0,TF0,TF1), (TF3,TF2,TF0,TF0,TF1), (TF4,TF3,TF0,TF0,TF1), (TF5,TF4,TF1,TF0,TF1), (TF0,TF0,TF0,TF1,TF1), (TF1,TF0,TF0,TF1,TF1), (TF2,TF1,TF0,TF1,TF1), (TF3,TF2,TF0,TF1,TF1), (TF4,TF3,TF0,TF1,TF1), (TF5,TF4,TF1,TF1,TF1)

6.10.2.4.1.38f.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	32
	Max number of DPDCH data bits/radio frame	1 200
	Puncturing Limit	1.0

6.10.2.4.1.38f.2 Downlink

6.10.2.4.1.38f.2.1 Transport channel parameters

6.10.2.4.1.38f.2.1.1 Transport channel parameters for Conversational / speech / DL: (12.2 7.95 5.9 4.75) kbps / CS RAB

See clause 6.10.2.4.1.4a.2.1.1.

6.10.2.4.1.38f.2.1.2 Transport channel parameters for Interactive or background / DL:8 kbps / PS RAB

See clause 6.10.2.4.1.38b.2.1.2

6.10.2.4.1.38f.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1

6.10.2.4.1.38f.2.1.4 TFCS

TFCS size	24
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 8 kbps RAB, DCCH)= (TF0,TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0,TF0), (TF2,TF1,TF0,TF0,TF0), (TF3,TF2,TF0,TF0,TF0), (TF4,TF3,TF0,TF0,TF0), (TF5,TF4,TF1,TF0,TF0), (TF0,TF0,TF0,TF1,TF0), (TF1,TF0,TF0,TF1,TF0), (TF2,TF1,TF0,TF1,TF0), (TF3,TF2,TF0,TF1,TF0), (TF4,TF3,TF0,TF1,TF0), (TF5,TF4,TF1,TF1,TF0),

	(TF0,TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF0,TF1), (TF2,TF1,TF0,TF0,TF1), (TF3,TF2,TF0,TF0,TF1), (TF4,TF3,TF0,TF0,TF1), (TF5,TF4,TF1,TF0,TF1), (TF0,TF0,TF0,TF1,TF1), (TF1,TF0,TF0,TF1,TF1), (TF2,TF1,TF0,TF1,TF1), (TF3,TF2,TF0,TF1,TF1), (TF4,TF3,TF0,TF1,TF1), (TF5,TF4,TF1,TF1,TF1)

6.10.2.4.1.38f.2.2 Physical channel parameters

DPCH Downlink	DTX position		Flexible
	Spreading factor		64
	DPCCH	Number of TFCI bits/slot	8
		Number of TPC bits/slot	4
		Number of Pilot bits/slot	8
	DPDCH	Number of data bits/slot	60
		Number of data bits/frame	900

6.10.2.4.1.38g Conversational / speech / (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

6.10.2.4.1.38g.1 Uplink

6.10.2.4.1.38g.1.1 Transport channel parameters

6.10.2.4.1.38g.1.1.1 Transport channel parameters for Conversational / speech / UL: (12.2 7.95 5.9 4.75) kbps / CS RAB

See clause 6.10.2.4.1.4a.1.1.1.

6.10.2.4.1.38g.1.1.2 Transport channel parameters for Interactive or background / UL:16 kbps / PS RAB

See clause 6.10.2.4.1.23b.1.1.1.

6.10.2.4.1.38g.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.38g.1.1.4 TFCS

TFCS size	32
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 16 kbps RAB, DCCH)= (TF0,TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0,TF0), (TF2,TF1,TF0,TF0,TF0), (TF3,TF2,TF0,TF0,TF0), (TF4,TF3,TF0,TF0,TF0), (TF5,TF4,TF1,TF0,TF0), (TF0,TF0,TF0,TF1,TF0), (TF1,TF0,TF0,TF1,TF0), (TF3,TF2,TF0,TF1,TF0), (TF4,TF3,TF0,TF1,TF0), (TF5,TF4,TF1,TF1,TF0), (TF0,TF0,TF0,TF2,TF0), (TF1,TF0,TF0,TF2,TF0), (TF3,TF2,TF0,TF2,TF0), (TF4,TF3,TF0,TF2,TF0), (TF5,TF4,TF1,TF2,TF0), (TF0,TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF0,TF1), (TF2,TF1,TF0,TF0,TF1), (TF3,TF2,TF0,TF0,TF1), (TF4,TF3,TF0,TF0,TF1), (TF5,TF4,TF1,TF0,TF1), (TF0,TF0,TF0,TF1,TF1), (TF1,TF0,TF0,TF1,TF1), (TF3,TF2,TF0,TF1,TF1), (TF4,TF3,TF0,TF1,TF1), (TF5,TF4,TF1,TF1,TF1), (TF0,TF0,TF0,TF2,TF1), (TF1,TF0,TF0,TF2,TF1), (TF3,TF2,TF0,TF2,TF1), (TF4,TF3,TF0,TF2,TF1), (TF5,TF4,TF1,TF2,TF1)

6.10.2.4.1.38g.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	32
	Max number of DPDCH data bits/radio frame	1 200
	Puncturing Limit	0.88

6.10.2.4.1.38g.2 Downlink

6.10.2.4.1.38g.2.1 Transport channel parameters

6.10.2.4.1.38g.2.1.1 Transport channel parameters for Conversational / speech / DL: (12.2 7.95 5.9 4.75) kbps / CS RAB

See clause 6.10.2.4.1.4a.2.1.1.

6.10.2.4.1.38g.2.1.2 Transport channel parameters for Interactive or background / DL:16 kbps / PS RAB

See clause 6.10.2.4.1.23b.2.1.1.

6.10.2.4.1.38g.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1

6.10.2.4.1.38g.2.1.4 TFCS

TFCS size	36
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 16 kbps RAB, DCCH)= (TF0,TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0,TF0), (TF2,TF1,TF0,TF0,TF0), (TF3,TF2,TF0,TF0,TF0), (TF4,TF3,TF0,TF0,TF0), (TF5,TF4,TF1,TF0,TF0), (TF0,TF0,TF0,TF1,TF0), (TF1,TF0,TF0,TF1,TF0), (TF2,TF1,TF0,TF1,TF0), (TF3,TF2,TF0,TF1,TF0), (TF4,TF3,TF0,TF1,TF0), (TF5,TF4,TF1,TF1,TF0), (TF0,TF0,TF0,TF2,TF0), (TF1,TF0,TF0,TF2,TF0), (TF2,TF1,TF0,TF2,TF0), (TF3,TF2,TF0,TF2,TF0), (TF4,TF3,TF0,TF2,TF0), (TF5,TF4,TF1,TF2,TF0), (TF0,TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF0,TF1), (TF2,TF1,TF0,TF0,TF1), (TF3,TF2,TF0,TF0,TF1), (TF4,TF3,TF0,TF0,TF1), (TF5,TF4,TF1,TF0,TF1), (TF0,TF0,TF0,TF1,TF1), (TF1,TF0,TF0,TF1,TF1), (TF2,TF1,TF0,TF1,TF1), (TF3,TF2,TF0,TF1,TF1), (TF4,TF3,TF0,TF1,TF1), (TF5,TF4,TF1,TF1,TF1), (TF0,TF0,TF0,TF2,TF1), (TF1,TF0,TF0,TF2,TF1), (TF2,TF1,TF0,TF2,TF1), (TF3,TF2,TF0,TF2,TF1), (TF4,TF3,TF0,TF2,TF1), (TF5,TF4,TF1,TF2,TF1)

6.10.2.4.1.38g.2.2 Physical channel parameters

DPCH Downlink	DTX position		Flexible
	Spreading factor		64
	DPCCH	Number of TFCI bits/slot	8
		Number of TPC bits/slot	4
		Number of Pilot bits/slot	8
	DPDCH	Number of data bits/slot	60
		Number of data bits/frame	900

6.10.2.4.1.38h Conversational / speech / (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

6.10.2.4.1.38h.1 Uplink

6.10.2.4.1.38h.1.1 Transport channel parameters

6.10.2.4.1.38h.1.1.1 Transport channel parameters for Conversational / speech / UL: (12.2 7.95 5.9 4.75) kbps / CS RAB

See clause 6.10.2.4.1.4a.1.1.1.

6.10.2.4.1.38h.1.1.2 Transport channel parameters for Interactive or background / UL:32 kbps / PS RAB

See clause 6.10.2.4.1.23c.1.1.1.

6.10.2.4.1.38h.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.38h.1.1.4 TFCS

TFCS size	32
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 32 kbps RAB, DCCH)= (TF0,TF0,TF0,TF0,TF0), (TF0,TF0,TF0,TF1,TF0), (TF0,TF0,TF0,TF2,TF0), (TF0,TF0,TF0,TF4,TF0), (TF5,TF4,TF1,TF0,TF0), (TF5,TF4,TF1,TF1,TF0), (TF5,TF4,TF1,TF2,TF0), (TF5,TF4,TF1,TF4,TF0), (TF4,TF3,TF0,TF0,TF0), (TF4,TF3,TF0,TF1,TF0), (TF3,TF2,TF0,TF0,TF0), (TF2,TF1,TF0,TF0,TF0), (TF1,TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF1,TF0), (TF1,TF0,TF0,TF2,TF0), (TF1,TF0,TF0,TF4,TF0), (TF0,TF0,TF0,TF0,TF1), (TF0,TF0,TF0,TF1,TF1), (TF0,TF0,TF0,TF2,TF1), (TF0,TF0,TF0,TF4,TF1), (TF5,TF4,TF1,TF0,TF1), (TF5,TF4,TF1,TF1,TF1), (TF5,TF4,TF1,TF2,TF1), (TF5,TF4,TF1,TF4,TF1), (TF4,TF3,TF0,TF0,TF1), (TF4,TF3,TF0,TF1,TF1), (TF3,TF2,TF0,TF0,TF1), (TF2,TF1,TF0,TF0,TF1), (TF1,TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF1,TF1), (TF1,TF0,TF0,TF2,TF1), (TF1,TF0,TF0,TF4,TF1)

6.10.2.4.1.38h.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	16
	Max number of DPDCH data bits/radio frame	2 400
	Puncturing Limit	1.0

6.10.2.4.1.38h.2 Downlink

6.10.2.4.1.38h.2.1 Transport channel parameters

6.10.2.4.1.38h.2.1.1 Transport channel parameters for Conversational / speech / DL: (12.2 7.95 5.9 4.75) kbps / CS RAB

See clause 6.10.2.4.1.4a.2.1.1.

6.10.2.4.1.38h.2.1.2 Transport channel parameters for Interactive or background / DL:32 kbps / PS RAB

See clause 6.10.2.4.1.23c.2.1.1.

6.10.2.4.1.38h.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1

6.10.2.4.1.38h.2.1.4 TFCS

TFCS size	48
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 32 kbps RAB, DCCH)= (TF0,TF0,TF0,TF0,TF0), (TF0,TF0,TF0,TF1,TF0), (TF0,TF0,TF0,TF2,TF0), (TF0,TF0,TF0,TF4,TF0), (TF5,TF4,TF1,TF0,TF0), (TF5,TF4,TF1,TF1,TF0), (TF5,TF4,TF1,TF2,TF0), (TF5,TF4,TF1,TF4,TF0), (TF4,TF3,TF0,TF0,TF0), (TF4,TF3,TF0,TF1,TF0), (TF4,TF3,TF0,TF2,TF0), (TF4,TF3,TF0,TF4,TF0), (TF3,TF2,TF0,TF0,TF0), (TF3,TF2,TF0,TF1,TF0), (TF3,TF2,TF0,TF2,TF0), (TF3,TF2,TF0,TF4,TF0), (TF2,TF1,TF0,TF0,TF0), (TF2,TF1,TF0,TF1,TF0), (TF2,TF1,TF0,TF2,TF0), (TF2,TF1,TF0,TF4,TF0), (TF1,TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF1,TF0), (TF1,TF0,TF0,TF2,TF0), (TF1,TF0,TF0,TF4,TF0), (TF0,TF0,TF0,TF0,TF1), (TF0,TF0,TF0,TF1,TF1), (TF0,TF0,TF0,TF2,TF1), (TF0,TF0,TF0,TF4,TF1), (TF5,TF4,TF1,TF0,TF1), (TF5,TF4,TF1,TF1,TF1), (TF5,TF4,TF1,TF2,TF1), (TF5,TF4,TF1,TF4,TF1), (TF4,TF3,TF0,TF0,TF1), (TF4,TF3,TF0,TF1,TF1), (TF4,TF3,TF0,TF2,TF1), (TF4,TF3,TF0,TF4,TF1), (TF3,TF2,TF0,TF0,TF1), (TF3,TF2,TF0,TF1,TF1), (TF3,TF2,TF0,TF2,TF1), (TF3,TF2,TF0,TF4,TF1), (TF2,TF1,TF0,TF0,TF1), (TF2,TF1,TF0,TF1,TF1), (TF2,TF1,TF0,TF2,TF1), (TF2,TF1,TF0,TF4,TF1), (TF1,TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF1,TF1), (TF1,TF0,TF0,TF2,TF1), (TF1,TF0,TF0,TF4,TF1)

6.10.2.4.1.38h.2.2 Physical channel parameters

DPCH Downlink	DTX position		Flexible
	Spreading factor		32
	DPCCH	Number of TFCI bits/slot	8
		Number of TPC bits/slot	4
		Number of Pilot bits/slot	8

	DPDCH	Number of data bits/slot	140
		Number of data bits/frame	2 100

6.10.2.4.1.38i Conversational / speech / (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

6.10.2.4.1.38i.1 Uplink

6.10.2.4.1.38i.1.1 Transport channel parameters

6.10.2.4.1.38i.1.1.1 Transport channel parameters for Conversational / speech / UL: (12.2 7.95 5.9 4.75) kbps / CS RAB

See clause 6.10.2.4.1.4a.1.1.1.

6.10.2.4.1.38i.1.1.2 Transport channel parameters for Interactive or background / UL:64 kbps / PS RAB

See clause 6.10.2.4.1.26.1.1.1.

6.10.2.4.1.38i.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.38i.1.1.4 TFCS

TFCS size	48
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 64 kbps RAB, DCCH)= (TF0,TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0,TF0), (TF2,TF1,TF0,TF0,TF0), (TF3,TF2,TF0,TF0,TF0), (TF4,TF3,TF0,TF0,TF0), (TF5,TF4,TF1,TF0,TF0), (TF0,TF0,TF0,TF1,TF0), (TF1,TF0,TF0,TF1,TF0), (TF2,TF1,TF0,TF1,TF0), (TF3,TF2,TF0,TF1,TF0), (TF4,TF3,TF0,TF1,TF0), (TF5,TF4,TF1,TF1,TF0), (TF0,TF0,TF0,TF2,TF0), (TF1,TF0,TF0,TF2,TF0), (TF2,TF1,TF0,TF2,TF0), (TF3,TF2,TF0,TF2,TF0), (TF4,TF3,TF0,TF2,TF0), (TF5,TF4,TF1,TF2,TF0), (TF0,TF0,TF0,TF4,TF0), (TF1,TF0,TF0,TF4,TF0), (TF2,TF1,TF0,TF4,TF0), (TF3,TF2,TF0,TF4,TF0), (TF4,TF3,TF0,TF4,TF0), (TF5,TF4,TF1,TF4,TF0), (TF0,TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF0,TF1), (TF2,TF1,TF0,TF0,TF1), (TF3,TF2,TF0,TF0,TF1), (TF4,TF3,TF0,TF0,TF1), (TF5,TF4,TF1,TF0,TF1), (TF0,TF0,TF0,TF1,TF1), (TF1,TF0,TF0,TF1,TF1), (TF2,TF1,TF0,TF1,TF1), (TF3,TF2,TF0,TF1,TF1), (TF4,TF3,TF0,TF1,TF1), (TF5,TF4,TF1,TF1,TF1), (TF0,TF0,TF0,TF2,TF1), (TF1,TF0,TF0,TF2,TF1), (TF2,TF1,TF0,TF2,TF1), (TF3,TF2,TF0,TF2,TF1), (TF4,TF3,TF0,TF2,TF1), (TF5,TF4,TF1,TF2,TF1), (TF0,TF0,TF0,TF4,TF1), (TF1,TF0,TF0,TF4,TF1), (TF2,TF1,TF0,TF4,TF1), (TF3,TF2,TF0,TF4,TF1), (TF4,TF3,TF0,TF4,TF1), (TF5,TF4,TF1,TF4,TF1)

6.10.2.4.1.38i.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	16
	Max number of DPDCH data bits/radio frame	2 400
	Puncturing Limit	0.76

6.10.2.4.1.38i.2 Downlink

6.10.2.4.1.38i.2.1 Transport channel parameters

6.10.2.4.1.38i.2.1.1 Transport channel parameters for Conversational / speech / DL: (12.2 7.95 5.9 4.75) kbps / CS RAB

See clause 6.10.2.4.1.4a.2.1.1.

6.10.2.4.1.38i.2.1.2 Transport channel parameters for Interactive or background / DL:64 kbps / PS RAB

See clause 6.10.2.4.1.25.2.1.1.

6.10.2.4.1.38i.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1

6.10.2.4.1.38i.2.1.4 TFCS

TFCS size	60
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 64 kbps RAB, DCCH)= (TF0,TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0,TF0), (TF2,TF1,TF0,TF0,TF0), (TF3,TF2,TF0,TF0,TF0), (TF4,TF3,TF0,TF0,TF0), (TF5,TF4,TF1,TF0,TF0), (TF0,TF0,TF0,TF1,TF0), (TF1,TF0,TF0,TF1,TF0), (TF2,TF1,TF0,TF1,TF0), (TF3,TF2,TF0,TF1,TF0), (TF4,TF3,TF0,TF1,TF0), (TF5,TF4,TF1,TF1,TF0), (TF0,TF0,TF0,TF2,TF0), (TF1,TF0,TF0,TF2,TF0), (TF2,TF1,TF0,TF2,TF0), (TF3,TF2,TF0,TF2,TF0), (TF4,TF3,TF0,TF2,TF0), (TF5,TF4,TF1,TF2,TF0), (TF0,TF0,TF0,TF3,TF0), (TF1,TF0,TF0,TF3,TF0), (TF2,TF1,TF0,TF3,TF0), (TF3,TF2,TF0,TF3,TF0), (TF4,TF3,TF0,TF3,TF0), (TF5,TF4,TF1,TF3,TF0), (TF0,TF0,TF0,TF4,TF0), (TF1,TF0,TF0,TF4,TF0), (TF2,TF1,TF0,TF4,TF0), (TF3,TF2,TF0,TF4,TF0), (TF4,TF3,TF0,TF4,TF0), (TF5,TF4,TF1,TF4,TF0), (TF0,TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF0,TF1), (TF2,TF1,TF0,TF0,TF1), (TF3,TF2,TF0,TF0,TF1), (TF4,TF3,TF0,TF0,TF1), (TF5,TF4,TF1,TF0,TF1), (TF0,TF0,TF0,TF1,TF1), (TF1,TF0,TF0,TF1,TF1), (TF2,TF1,TF0,TF1,TF1), (TF3,TF2,TF0,TF1,TF1), (TF4,TF3,TF0,TF1,TF1), (TF5,TF4,TF1,TF1,TF1), (TF0,TF0,TF0,TF2,TF1), (TF1,TF0,TF0,TF2,TF1), (TF2,TF1,TF0,TF2,TF1), (TF3,TF2,TF0,TF2,TF1), (TF4,TF3,TF0,TF2,TF1), (TF5,TF4,TF1,TF2,TF1), (TF0,TF0,TF0,TF3,TF1), (TF1,TF0,TF0,TF3,TF1), (TF2,TF1,TF0,TF3,TF1), (TF3,TF2,TF0,TF3,TF1), (TF4,TF3,TF0,TF3,TF1), (TF5,TF4,TF1,TF3,TF1), (TF0,TF0,TF0,TF4,TF1), (TF1,TF0,TF0,TF4,TF1), (TF2,TF1,TF0,TF4,TF1), (TF3,TF2,TF0,TF4,TF1), (TF4,TF3,TF0,TF4,TF1), (TF5,TF4,TF1,TF4,TF1)

6.10.2.4.1.38i.2.2 Physical channel parameters

DPCH Downlink	DTX position		Flexible
	Spreading factor		32
	DPCCH	Number of TFCI bits/slot	8
		Number of TPC bits/slot	4
		Number of Pilot bits/slot	8
	DPDCH	Number of data bits/slot	140
		Number of data bits/frame	2 100

6.10.2.4.1.38j Conversational / speech / (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

6.10.2.4.1.38j.1 Uplink

6.10.2.4.1.38j.1.1 Transport channel parameters

See clause 6.10.2.4.1.38i.1.1

6.10.2.4.1.38j.2 Downlink

6.10.2.4.1.38j.2.1 Transport channel parameters

6.10.2.4.1.38j.2.1.1 Transport channel parameters for Conversational / speech / DL: (12.2 7.95 5.9 4.75) kbps / CS RAB

See clause 6.10.2.4.1.4a.2.1.1.

6.10.2.4.1.38j.2.1.2 Transport channel parameters for Interactive or background / DL:128 kbps / PS RAB

See clause 6.10.2.4.1.27.2.1.1.

6.10.2.4.1.38j.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1

6.10.2.4.1.38j.2.1.4 TFCS

TFCS size	60

TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 128 kbps RAB, DCCH)= (TF0,TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0,TF0), (TF2,TF1,TF0,TF0,TF0), (TF3,TF2,TF0,TF0,TF0), (TF4,TF3,TF0,TF0,TF0), (TF5,TF4,TF1,TF0,TF0), (TF0,TF0,TF0,TF1,TF0), (TF1,TF0,TF0,TF1,TF0), (TF2,TF1,TF0,TF1,TF0), (TF3,TF2,TF0,TF1,TF0), (TF4,TF3,TF0,TF1,TF0), (TF5,TF4,TF1,TF1,TF0), (TF0,TF0,TF0,TF2,TF0), (TF1,TF0,TF0,TF2,TF0), (TF2,TF1,TF0,TF2,TF0), (TF3,TF2,TF0,TF2,TF0), (TF4,TF3,TF0,TF2,TF0), (TF5,TF4,TF1,TF2,TF0), (TF0,TF0,TF0,TF3,TF0), (TF1,TF0,TF0,TF3,TF0), (TF2,TF1,TF0,TF3,TF0), (TF3,TF2,TF0,TF3,TF0), (TF4,TF3,TF0,TF3,TF0), (TF5,TF4,TF1,TF3,TF0), (TF0,TF0,TF0,TF4,TF0), (TF1,TF0,TF0,TF4,TF0), (TF2,TF1,TF0,TF4,TF0), (TF3,TF2,TF0,TF4,TF0), (TF4,TF3,TF0,TF4,TF0), (TF5,TF4,TF1,TF4,TF0), (TF0,TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF0,TF1), (TF2,TF1,TF0,TF0,TF1), (TF3,TF2,TF0,TF0,TF1), (TF4,TF3,TF0,TF0,TF1), (TF5,TF4,TF1,TF0,TF1), (TF0,TF0,TF0,TF1,TF1), (TF1,TF0,TF0,TF1,TF1), (TF2,TF1,TF0,TF1,TF1), (TF3,TF2,TF0,TF1,TF1), (TF4,TF3,TF0,TF1,TF1), (TF5,TF4,TF1,TF1,TF1), (TF0,TF0,TF0,TF2,TF1), (TF1,TF0,TF0,TF2,TF1), (TF2,TF1,TF0,TF2,TF1), (TF3,TF2,TF0,TF2,TF1), (TF4,TF3,TF0,TF2,TF1), (TF5,TF4,TF1,TF2,TF1), (TF0,TF0,TF0,TF3,TF1), (TF1,TF0,TF0,TF3,TF1), (TF2,TF1,TF0,TF3,TF1), (TF3,TF2,TF0,TF3,TF1), (TF4,TF3,TF0,TF3,TF1), (TF5,TF4,TF1,TF3,TF1), (TF0,TF0,TF0,TF4,TF1), (TF1,TF0,TF0,TF4,TF1), (TF2,TF1,TF0,TF4,TF1), (TF3,TF2,TF0,TF4,TF1), (TF4,TF3,TF0,TF4,TF1), (TF5,TF4,TF1,TF4,TF1)

6.10.2.4.1.38j.2.2 Physical channel parameters

DPCH Downlink	DTX position		Flexible
	Spreading factor		16
	DPCCH	Number of TFCI bits/slot	8
		Number of TPC bits/slot	8
		Number of Pilot bits/slot	16
	DPDCH	Number of data bits/slot	288
		Number of data bits/frame	4 320

6.10.2.4.1.38k Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:32 DL:32 kbps / PS RAB + Interactive or background / UL:32 DL:32 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH (L1 multiplexing)

6.10.2.4.1.38k.1 Uplink

6.10.2.4.1.38k.1.1 Transport channel parameters

6.10.2.4.1.38k.1.1.1 Transport channel parameters for Conversational / speech / UL:12.2 kbps / CS RAB

See clause 6.10.2.4.1.4.1.1.1.

6.10.2.4.1.38k.1.1.2 Transport channel parameters for Interactive or background / UL:32 kbps / PS RAB

See clause 6.10.2.4.1.23.1.1.1.

6.10.2.4.1.38k.1.1.3 Transport channel parameters for Interactive or background / UL:32 kbps / PS RAB

See clause 6.10.2.4.1.23.1.1.1.

6.10.2.4.1.38k.1.1.4 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.38k.1.1.5 TFCS

TFCS size	54 (alt. 24)
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 32kbps RAB, 32kbps RAB, DCCH)= (TF0, TF0, TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0, TF0, TF0), (TF2, TF1, TF1, TF0, TF0, TF0), (TF0, TF0, TF0, TF1, TF0, TF0), (TF1, TF0, TF0, TF1, TF0, TF0), (TF2, TF1, TF1, TF1, TF0, TF0), (TF0, TF0, TF0, TF2, TF0, TF0), (TF1, TF0, TF0, TF2, TF0, TF0), (TF2, TF1, TF1, TF2, TF0, TF0), (TF0, TF0, TF0, TF0, TF1, TF0), (TF1, TF0, TF0, TF0, TF1, TF0), (TF2, TF1, TF1, TF0, TF1, TF0),

	(TF0, TF0, TF0, TF1, TF1, TF0), (TF1, TF0, TF0, TF1, TF1, TF0), (TF2, TF1, TF1, TF1, TF1, TF0), (TF0, TF0, TF0, TF2, TF1, TF0), (TF1, TF0, TF0, TF2, TF1, TF0), (TF2, TF1, TF1, TF2, TF1, TF0), (TF0, TF0, TF0, TF0, TF2, TF0), (TF1, TF0, TF0, TF0, TF2, TF0), (TF2, TF1, TF1, TF0, TF2, TF0), (TF0, TF0, TF0, TF1, TF2, TF0), (TF1, TF0, TF0, TF1, TF2, TF0), (TF2, TF1, TF1, TF1, TF2, TF0), (TF0, TF0, TF0, TF2, TF2, TF0), (TF1, TF0, TF0, TF2, TF2, TF0), (TF2, TF1, TF1, TF2, TF2, TF0), (TF0, TF0, TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF0, TF1), (TF0, TF0, TF0, TF1, TF0, TF1), (TF1, TF0, TF0, TF1, TF0, TF1), (TF2, TF1, TF1, TF1, TF0, TF1), (TF0, TF0, TF0, TF2, TF0, TF1), (TF1, TF0, TF0, TF2, TF0, TF1), (TF2, TF1, TF1, TF2, TF0, TF1), (TF0, TF0, TF0, TF0, TF1, TF1), (TF1, TF0, TF0, TF0, TF1, TF1), (TF2, TF1, TF1, TF0, TF1, TF1), (TF0, TF0, TF0, TF1, TF1, TF1), (TF1, TF0, TF0, TF1, TF1, TF1), (TF2, TF1, TF1, TF1, TF1, TF1), (TF0, TF0, TF0, TF2, TF1, TF1), (TF1, TF0, TF0, TF2, TF1, TF1), (TF2, TF1, TF1, TF2, TF1, TF1), (TF0, TF0, TF0, TF0, TF2, TF1), (TF1, TF0, TF0, TF0, TF2, TF1), (TF2, TF1, TF1, TF0, TF2, TF1), (TF0, TF0, TF0, TF1, TF2, TF1), (TF1, TF0, TF0, TF1, TF2, TF1), (TF2, TF1, TF1, TF1, TF2, TF1), (TF0, TF0, TF0, TF2, TF2, TF1), (TF1, TF0, TF0, TF2, TF2, TF1), (TF2, TF1, TF1, TF2, TF2, TF1) (alt. (TF0, TF0, TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0, TF0, TF0), (TF2, TF1, TF1, TF0, TF0, TF0), (TF0, TF0, TF0, TF1, TF0, TF0), (TF1, TF0, TF0, TF1, TF0, TF0), (TF2, TF1, TF1, TF1, TF0, TF0), (TF0, TF0, TF0, TF0, TF1, TF0), (TF1, TF0, TF0, TF0, TF1, TF0), (TF2, TF1, TF1, TF0, TF1, TF0), (TF0, TF0, TF0, TF1, TF1, TF0), (TF1, TF0, TF0, TF1, TF1, TF0), (TF2, TF1, TF1, TF1, TF1, TF0), (TF0, TF0, TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF0, TF1), (TF0, TF0, TF0, TF1, TF0, TF1), (TF1, TF0, TF0, TF1, TF0, TF1), (TF2, TF1, TF1, TF1, TF0, TF1), (TF0, TF0, TF0, TF0, TF1, TF1), (TF1, TF0, TF0, TF0, TF1, TF1), (TF2, TF1, TF1, TF0, TF1, TF1), (TF0, TF0, TF0, TF1, TF1, TF1), (TF1, TF0, TF0, TF1, TF1, TF1), (TF2, TF1, TF1, TF1, TF1, TF1))

6.10.2.4.1.38k.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	16
	Max number of DPDCH data bits/radio frame	2 400
	Puncturing Limit	0.8

6.10.2.4.1.38k.2 Downlink

6.10.2.4.1.38k.2.1 Transport channel parameters

6.10.2.4.1.38k.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 kbps / CS RAB

See clause 6.10.2.4.1.4.2.1.1.

6.10.2.4.1.38k.2.1.2 Transport channel parameters for Interactive or background / DL:32 kbps / PS RAB

See clause 6.10.2.4.1.23d.2.1.1.

6.10.2.4.1.38k.2.1.3 Transport channel parameters for Interactive or background / DL:32 kbps / PS RAB

See clause 6.10.2.4.1.23d.2.1.1.

6.10.2.4.1.38k.2.1.4 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.

6.10.2.4.1.38k.2.1.5 TFCS

TFCS size	54
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 32kbps RAB, 32kbps RAB, DCCH)= (TF0, TF0, TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0, TF0, TF0), (TF2, TF1, TF1, TF0, TF0, TF0), (TF0, TF0, TF0, TF1, TF0, TF0),

	(TF1, TF0, TF0, TF1, TF0, TF0), (TF2, TF1, TF1, TF1, TF0, TF0), (TF0, TF0, TF0, TF2, TF0, TF0), (TF1, TF0, TF0, TF2, TF0, TF0), (TF2, TF1, TF1, TF2, TF0, TF0), (TF0, TF0, TF0, TF0, TF1, TF0), (TF1, TF0, TF0, TF0, TF1, TF0), (TF2, TF1, TF1, TF0, TF1, TF0), (TF0, TF0, TF0, TF1, TF1, TF0), (TF1, TF0, TF0, TF1, TF1, TF0), (TF2, TF1, TF1, TF1, TF1, TF0), (TF0, TF0, TF0, TF2, TF1, TF0), (TF1, TF0, TF0, TF2, TF1, TF0), (TF2, TF1, TF1, TF2, TF1, TF0), (TF0, TF0, TF0, TF0, TF2, TF0), (TF1, TF0, TF0, TF0, TF2, TF0), (TF2, TF1, TF1, TF0, TF2, TF0), (TF0, TF0, TF0, TF1, TF2, TF0), (TF1, TF0, TF0, TF1, TF2, TF0), (TF2, TF1, TF1, TF1, TF2, TF0), (TF0, TF0, TF0, TF2, TF2, TF0), (TF1, TF0, TF0, TF2, TF2, TF0), (TF2, TF1, TF1, TF2, TF2, TF0), (TF0, TF0, TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF0, TF1), (TF0, TF0, TF0, TF1, TF0, TF1), (TF1, TF0, TF0, TF1, TF0, TF1), (TF2, TF1, TF1, TF1, TF0, TF1), (TF0, TF0, TF0, TF2, TF0, TF1), (TF1, TF0, TF0, TF2, TF0, TF1), (TF2, TF1, TF1, TF2, TF0, TF1), (TF0, TF0, TF0, TF0, TF1, TF1), (TF1, TF0, TF0, TF0, TF1, TF1), (TF2, TF1, TF1, TF0, TF1, TF1), (TF0, TF0, TF0, TF1, TF1, TF1), (TF1, TF0, TF0, TF1, TF1, TF1), (TF2, TF1, TF1, TF1, TF1, TF1), (TF0, TF0, TF0, TF2, TF1, TF1), (TF1, TF0, TF0, TF2, TF1, TF1), (TF2, TF1, TF1, TF2, TF1, TF1), (TF0, TF0, TF0, TF0, TF2, TF1), (TF1, TF0, TF0, TF0, TF2, TF1), (TF2, TF1, TF1, TF0, TF2, TF1), (TF0, TF0, TF0, TF1, TF2, TF1), (TF1, TF0, TF0, TF1, TF2, TF1), (TF2, TF1, TF1, TF1, TF2, TF1), (TF0, TF0, TF0, TF2, TF2, TF1), (TF1, TF0, TF0, TF2, TF2, TF1), (TF2, TF1, TF1, TF2, TF2, TF1)

6.10.2.4.1.38k.2.2 Physical channel parameters

DPCH Downlink	DTX position		Flexible
	Spreading factor		32
	DPCCH	Number of TFCI bits/slot	8
		Number of TPC bits/slot	4
		Number of Pilot bits/slot	8
	DPDCH	Number of data bits/slot	140
		Number of data bits/frame	2 100

6.10.2.4.1.39 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

6.10.2.4.1.39.1 Uplink

See clause 6.10.2.4.1.38.1.

6.10.2.4.1.39.2 Downlink

6.10.2.4.1.39.2.1 Transport channel parameters

6.10.2.4.1.39.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 kbps / CS RAB

See clause 6.10.2.4.1.4.2.1.1.

6.10.2.4.1.39.2.1.2 Transport channel parameters for Interactive or background / DL:64 kbps / PS RAB

See clause 6.10.2.4.1.25.2.1.1.

6.10.2.4.1.39.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.1.39.2.1.4 TFCS

TFCS size	30
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 64 kbps RAB , DCCH)= (TF0, TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0, TF0), (TF2, TF1, TF1, TF0, TF0), (TF0, TF0, TF0, TF1, TF0), (TF1, TF0, TF0, TF1, TF0), (TF2, TF1, TF1, TF1, TF0), (TF0, TF0, TF0, TF2, TF0), (TF1, TF0, TF0, TF2, TF0), (TF2, TF1, TF1, TF2, TF0),

	(TF0, TF0, TF0, TF3, TF0), (TF1, TF0, TF0, TF3, TF0), (TF2, TF1, TF1, TF3, TF0), (TF0, TF0, TF0, TF4, TF0), (TF1, TF0, TF0, TF4, TF0), (TF2, TF1, TF1, TF4, TF0), (TF0, TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1), (TF0, TF0, TF0, TF1, TF1), (TF1, TF0, TF0, TF1, TF1), (TF2, TF1, TF1, TF1, TF1), (TF0, TF0, TF0, TF2, TF1), (TF1, TF0, TF0, TF2, TF1), (TF2, TF1, TF1, TF2, TF1), (TF0, TF0, TF0, TF3, TF1), (TF1, TF0, TF0, TF3, TF1), (TF2, TF1, TF1, TF3, TF1), (TF0, TF0, TF0, TF4, TF1), (TF1, TF0, TF0, TF4, TF1), (TF2, TF1, TF1, TF4, TF1)

6.10.2.4.1.39.2.2 Physical channel parameters

DPCH Downlink	DTX position		Flexible
	Spreading factor		32
	DPCCH	Number of TFCI bits/slot	8
		Number of TPC bits/slot	4
		Number of Pilot bits/slot	8
	DPDCH	Number of data bits/slot	140
		Number of data bits/frame	2 100

6.10.2.4.1.40 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

6.10.2.4.1.40.1 Uplink

6.10.2.4.1.40.1.1 Transport channel parameters

6.10.2.4.1.40.1.1.1 Transport channel parameters for Conversational / speech / UL:12.2 kbps / CS RAB

See clause 6.10.2.4.1.4.1.1.1.

6.10.2.4.1.40.1.1.2 Transport channel parameters for Interactive or background / UL:64 kbps / PS RAB

See clause 6.10.2.4.1.26.1.1.1.

6.10.2.4.1.40.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.40.1.1.4 TFCS

TFCS size	30
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 64 kbps RAB , DCCH)= (TF0, TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0, TF0), (TF2, TF1, TF1, TF0, TF0), (TF0, TF0, TF0, TF1, TF0), (TF1, TF0, TF0, TF1, TF0), (TF2, TF1, TF1, TF1, TF0), (TF0, TF0, TF0, TF2, TF0), (TF1, TF0, TF0, TF2, TF0), (TF2, TF1, TF1, TF2, TF0), (TF0, TF0, TF0, TF3, TF0), (TF1, TF0, TF0, TF3, TF0), (TF2, TF1, TF1, TF3, TF0), (TF0, TF0, TF0, TF4, TF0), (TF1, TF0, TF0, TF4, TF0), (TF2, TF1, TF1, TF4, TF0), (TF0, TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1), (TF0, TF0, TF0, TF1, TF1), (TF1, TF0, TF0, TF1, TF1), (TF2, TF1, TF1, TF1, TF1), (TF0, TF0, TF0, TF2, TF1), (TF1, TF0, TF0, TF2, TF1), (TF2, TF1, TF1, TF2, TF1), (TF0, TF0, TF0, TF3, TF1), (TF1, TF0, TF0, TF3, TF1), (TF2, TF1, TF1, TF3, TF1), (TF0, TF0, TF0, TF4, TF1), (TF1, TF0, TF0, TF4, TF1), (TF2, TF1, TF1, TF4, TF1)

6.10.2.4.1.40.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	16
	Max number of DPDCH data bits/radio frame	2 400
	Puncturing Limit	0.76

6.10.2.4.1.40.2 Downlink

See clause 6.10.2.4.1.39.2.

6.10.2.4.1.41 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

6.10.2.4.1.41.1 Uplink

See clause 6.10.2.4.1.40.1.

6.10.2.4.1.41.2 Downlink

6.10.2.4.1.41.2.1 Transport channel parameters

6.10.2.4.1.41.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 kbps / CS RAB

See clause 6.10.2.4.1.4.2.1.1.

6.10.2.4.1.41.2.1.2 Transport channel parameters for Interactive or background / DL:128 kbps / PS RAB

See clause 6.10.2.4.1.27.2.1.1.

6.10.2.4.1.41.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.1.41.2.1.4 TFCS

TFCS size	30
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 128 kbps RAB , DCCH)= (TF0, TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0, TF0), (TF2, TF1, TF1, TF0, TF0), (TF0, TF0, TF0, TF1, TF0), (TF1, TF0, TF0, TF1, TF0), (TF2, TF1, TF1, TF1, TF0), (TF0, TF0, TF0, TF2, TF0), (TF1, TF0, TF0, TF2, TF0), (TF2, TF1, TF1, TF2, TF0), (TF0, TF0, TF0, TF3, TF0), (TF1, TF0, TF0, TF3, TF0), (TF2, TF1, TF1, TF3, TF0), (TF0, TF0, TF0, TF4, TF0), (TF1, TF0, TF0, TF4, TF0), (TF2, TF1, TF1, TF4, TF0), (TF0, TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1), (TF0, TF0, TF0, TF1, TF1), (TF1, TF0, TF0, TF1, TF1), (TF2, TF1, TF1, TF1, TF1), (TF0, TF0, TF0, TF2, TF1), (TF1, TF0, TF0, TF2, TF1), (TF2, TF1, TF1, TF2, TF1), (TF0, TF0, TF0, TF3, TF1), (TF1, TF0, TF0, TF3, TF1), (TF2, TF1, TF1, TF3, TF1), (TF0, TF0, TF0, TF4, TF1), (TF1, TF0, TF0, TF4, TF1), (TF2, TF1, TF1, TF4, TF1)

6.10.2.4.1.41.2.2 Physical channel parameters

DPCH Downlink	DTX position		Flexible
	Spreading factor		16
	DPCCH	Number of TFCI bits/slot	8
		Number of TPC bits/slot	8
		Number of Pilot bits/slot	16
	DPDCH	Number of data bits/slot	288
		Number of data bits/frame	4 320

6.10.2.4.1.42 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

6.10.2.4.1.42.1 Uplink

See clause 6.10.2.4.1.40.1.

6.10.2.4.1.42.2 Downlink

6.10.2.4.1.42.2.1 Transport channel parameters

6.10.2.4.1.42.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 kbps / CS RAB

See clause 6.10.2.4.1.4.2.1.1.

6.10.2.4.1.42.2.1.2 Transport channel parameters for Interactive or background / DL:256 kbps / PS RAB

See clause 6.10.2.4.1.31.2.1.1.

6.10.2.4.1.42.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.1.42.2.1.4 TFCS

TFCS size	30 (alt. 42)
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 256 kbps RAB , DCCH)= (TF0, TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0, TF0), (TF2, TF1, TF1, TF0, TF0), (TF0, TF0, TF0, TF1, TF0), (TF1, TF0, TF0, TF1, TF0), (TF2, TF1, TF1, TF1, TF0), (TF0, TF0, TF0, TF2, TF0), (TF1, TF0, TF0, TF2, TF0), (TF2, TF1, TF1, TF2, TF0), (TF0, TF0, TF0, TF3, TF0), (TF1, TF0, TF0, TF3, TF0), (TF2, TF1, TF1, TF3, TF0), (TF0, TF0, TF0, TF4, TF0), (TF1, TF0, TF0, TF4, TF0), (TF2, TF1, TF1, TF4, TF0), (TF0, TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1), (TF0, TF0, TF0, TF1, TF1), (TF1, TF0, TF0, TF1, TF1), (TF2, TF1, TF1, TF1, TF1), (TF0, TF0, TF0, TF2, TF1), (TF1, TF0, TF0, TF2, TF1), (TF2, TF1, TF1, TF2, TF1), (TF0, TF0, TF0, TF3, TF1), (TF1, TF0, TF0, TF3, TF1), (TF2, TF1, TF1, TF3, TF1), (TF0, TF0, TF0, TF4, TF1), (TF1, TF0, TF0, TF4, TF1), (TF2, TF1, TF1, TF4, TF1) (alt. (TF0, TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0, TF0), (TF2, TF1, TF1, TF0, TF0), (TF0, TF0, TF0, TF1, TF0), (TF1, TF0, TF0, TF1, TF0), (TF2, TF1, TF1, TF1, TF0), (TF0, TF0, TF0, TF2, TF0), (TF1, TF0, TF0, TF2, TF0), (TF2, TF1, TF1, TF2, TF0), (TF0, TF0, TF0, TF3, TF0), (TF1, TF0, TF0, TF3, TF0), (TF2, TF1, TF1, TF3, TF0), (TF0, TF0, TF0, TF4, TF0), (TF1, TF0, TF0, TF4, TF0), (TF2, TF1, TF1, TF4, TF0), (TF0, TF0, TF0, TF5, TF0), (TF1, TF0, TF0, TF5, TF0), (TF2, TF1, TF1, TF5, TF0), (TF0, TF0, TF0, TF6, TF0), (TF1, TF0, TF0, TF6, TF0), (TF2, TF1, TF1, TF6, TF0), (TF0, TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1), (TF0, TF0, TF0, TF1, TF1), (TF1, TF0, TF0, TF1, TF1), (TF2, TF1, TF1, TF1, TF1), (TF0, TF0, TF0, TF2, TF1), (TF1, TF0, TF0, TF2, TF1), (TF2, TF1, TF1, TF2, TF1), (TF0, TF0, TF0, TF3, TF1), (TF1, TF0, TF0, TF3, TF1), (TF2, TF1, TF1, TF3, TF1), (TF0, TF0, TF0, TF4, TF1), (TF1, TF0, TF0, TF4, TF1), (TF2, TF1, TF1, TF4, TF1) (TF0, TF0, TF0, TF5, TF1), (TF1, TF0, TF0, TF5, TF1), (TF2, TF1, TF1, TF5, TF1), (TF0, TF0, TF0, TF6, TF1), (TF1, TF0, TF0, TF6, TF1), (TF2, TF1, TF1, TF6, TF1))

6.10.2.4.1.42.2.2 Physical channel parameters

DPCH Downlink	DTX position		Flexible
	Spreading factor		8
	Number of DPDCH		1
	DPCCH	Number of TFCI bits/slot	8
		Number of TPC bits/slot	8
		Number of Pilot bits/slot	16
	DPDCH	Number of data bits/slot	608
		Number of data bits/frame	9 120

6.10.2.4.1.43 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

6.10.2.4.1.43.1 Uplink

See clause 6.10.2.4.1.40.1.

6.10.2.4.1.43.2 Downlink

6.10.2.4.1.43.2.1 Transport channel parameters

6.10.2.4.1.43.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 kbps / CS RAB

See clause 6.10.2.4.1.4.2.1.1.

6.10.2.4.1.43.2.1.2 Transport channel parameters for Interactive or background / DL:384 kbps / PS RAB

See clause 6.10.2.4.1.32.2.1.1.

6.10.2.4.1.43.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.1.43.2.1.4 TFCS

TFCS size	36 (alt. 54)
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 384 kbps RAB , DCCH)= (TF0, TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0, TF0), (TF2, TF1, TF1, TF0, TF0), (TF0, TF0, TF0, TF1, TF0), (TF1, TF0, TF0, TF1, TF0), (TF2, TF1, TF1, TF1, TF0), (TF0, TF0, TF0, TF2, TF0), (TF1, TF0, TF0, TF2, TF0), (TF2, TF1, TF1, TF2, TF0), (TF0, TF0, TF0, TF3, TF0), (TF1, TF0, TF0, TF3, TF0), (TF2, TF1, TF1, TF3, TF0), (TF0, TF0, TF0, TF4, TF0), (TF1, TF0, TF0, TF4, TF0), (TF2, TF1, TF1, TF4, TF0), (TF0, TF0, TF0, TF5, TF0), (TF1, TF0, TF0, TF5, TF0), (TF2, TF1, TF1, TF5, TF0), (TF0, TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1), (TF0, TF0, TF0, TF1, TF1), (TF1, TF0, TF0, TF1, TF1), (TF2, TF1, TF1, TF1, TF1), (TF0, TF0, TF0, TF2, TF1), (TF1, TF0, TF0, TF2, TF1), (TF2, TF1, TF1, TF2, TF1), (TF0, TF0, TF0, TF3, TF1), (TF1, TF0, TF0, TF3, TF1), (TF2, TF1, TF1, TF3, TF1), (TF0, TF0, TF0, TF4, TF1), (TF1, TF0, TF0, TF4, TF1), (TF2, TF1, TF1, TF4, TF1) (TF0, TF0, TF0, TF5, TF1), (TF1, TF0, TF0, TF5, TF1), (TF2, TF1, TF1, TF5, TF1), (alt. (TF0, TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0, TF0), (TF2, TF1, TF1, TF0, TF0), (TF0, TF0, TF0, TF1, TF0), (TF1, TF0, TF0, TF1, TF0), (TF2, TF1, TF1, TF1, TF0), (TF0, TF0, TF0, TF2, TF0), (TF1, TF0, TF0, TF2, TF0), (TF2, TF1, TF1, TF2, TF0), (TF0, TF0, TF0, TF3, TF0), (TF1, TF0, TF0, TF3, TF0), (TF2, TF1, TF1, TF3, TF0), (TF0, TF0, TF0, TF4, TF0), (TF1, TF0, TF0, TF4, TF0), (TF2, TF1, TF1, TF4, TF0), (TF0, TF0, TF0, TF5, TF0), (TF1, TF0, TF0, TF5, TF0), (TF2, TF1, TF1, TF5, TF0), (TF0, TF0, TF0, TF6, TF0), (TF1, TF0, TF0, TF6, TF0), (TF2, TF1, TF1, TF6, TF0), (TF0, TF0, TF0, TF7, TF0), (TF1, TF0, TF0, TF7, TF0), (TF2, TF1, TF1, TF7, TF0), (TF0, TF0, TF0, TF8, TF0), (TF1, TF0, TF0, TF8, TF0), (TF2, TF1, TF1, TF8, TF0), (TF0, TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1), (TF0, TF0, TF0, TF1, TF1), (TF1, TF0, TF0, TF1, TF1), (TF2, TF1, TF1, TF1, TF1), (TF0, TF0, TF0, TF2, TF1), (TF1, TF0, TF0, TF2, TF1), (TF2, TF1, TF1, TF2, TF1), (TF0, TF0, TF0, TF3, TF1), (TF1, TF0, TF0, TF3, TF1), (TF2, TF1, TF1, TF3, TF1), (TF0, TF0, TF0, TF4, TF1), (TF1, TF0, TF0, TF4, TF1), (TF2, TF1, TF1, TF4, TF1) (TF0, TF0, TF0, TF5, TF1), (TF1, TF0, TF0, TF5, TF1), (TF2, TF1, TF1, TF5, TF1) (TF0, TF0, TF0, TF6, TF1), (TF1, TF0, TF0, TF6, TF1), (TF2, TF1, TF1, TF6, TF1), (TF0, TF0, TF0, TF7, TF1), (TF1, TF0, TF0, TF7, TF1), (TF2, TF1, TF1, TF7, TF1) (TF0, TF0, TF0, TF8, TF1), (TF1, TF0, TF0, TF8, TF1), (TF2, TF1, TF1, TF8, TF1))

6.10.2.4.1.43.2.2 Physical channel parameters

DPCH Downlink	DTX position		Flexible
	Spreading factor		8
	Number of DPDCH		1
	DPCCH	Number of TFCI bits/slot	8
		Number of TPC bits/slot	8
		Number of Pilot bits/slot	16
	DPDCH	Number of data bits/slot	608
		Number of data bits/frame	9 120

6.10.2.4.1.44 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:128 DL:2 048 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.2.4.1.44.1 Uplink

6.10.2.4.1.44.1.1 Transport channel parameters

6.10.2.4.1.44.1.1.1 Transport channel parameters for Conversational / speech / UL:12.2 kbps / CS RAB

See clause 6.10.2.4.1.4.1.1.1.

6.10.2.4.1.44.1.1.2 Transport channel parameters for Interactive or background / UL:128 kbps / PS RAB

See clause 6.10.2.4.1.28.1.1.1.

6.10.2.4.1.44.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.44.1.1.4 TFCS

TFCS size	30

TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 128 kbps RAB , DCCH)= (TF0, TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0, TF0), (TF2, TF1, TF1, TF0, TF0), (TF0, TF0, TF0, TF1, TF0), (TF1, TF0, TF0, TF1, TF0), (TF2, TF1, TF1, TF1, TF0), (TF0, TF0, TF0, TF2, TF0), (TF1, TF0, TF0, TF2, TF0), (TF2, TF1, TF1, TF2, TF0), (TF0, TF0, TF0, TF3, TF0), (TF1, TF0, TF0, TF3, TF0), (TF2, TF1, TF1, TF3, TF0), (TF0, TF0, TF0, TF4, TF0), (TF1, TF0, TF0, TF4, TF0), (TF2, TF1, TF1, TF4, TF0), (TF0, TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1), (TF0, TF0, TF0, TF1, TF1), (TF1, TF0, TF0, TF1, TF1), (TF2, TF1, TF1, TF1, TF1), (TF0, TF0, TF0, TF2, TF1), (TF1, TF0, TF0, TF2, TF1), (TF2, TF1, TF1, TF2, TF1), (TF0, TF0, TF0, TF3, TF1), (TF1, TF0, TF0, TF3, TF1), (TF2, TF1, TF1, TF3, TF1), (TF0, TF0, TF0, TF4, TF1), (TF1, TF0, TF0, TF4, TF1), (TF2, TF1, TF1, TF4, TF1)

6.10.2.4.1.44.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	8
	Max number of DPDCH data bits/radio frame	4 800
	Puncturing Limit	0.92

6.10.2.4.1.44.2 Downlink

6.10.2.4.1.44.2.1 Transport channel parameters

6.10.2.4.1.44.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 kbps / CS RAB

See clause 6.10.2.4.1.4.2.1.1.

6.10.2.4.1.44.2.1.2 Transport channel parameters for Interactive or background / DL:2 048 kbps / PS RAB

See clause 6.10.2.4.1.35.2.1.1.

6.10.2.4.1.44.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.1.44.2.1.4 TFCS

TFCS size	66 (alt. 114)
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 2 048 kbps RAB , DCCH)= (TF0, TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0, TF0), (TF2, TF1, TF1, TF0, TF0), (TF0, TF0, TF0, TF1, TF0), (TF1, TF0, TF0, TF1, TF0), (TF2, TF1, TF1, TF1, TF0), (TF0, TF0, TF0, TF2, TF0), (TF1, TF0, TF0, TF2, TF0), (TF2, TF1, TF1, TF2, TF0), (TF0, TF0, TF0, TF3, TF0), (TF1, TF0, TF0, TF3, TF0), (TF2, TF1, TF1, TF3, TF0), (TF0, TF0, TF0, TF4, TF0), (TF1, TF0, TF0, TF4, TF0), (TF2, TF1, TF1, TF4, TF0), (TF0, TF0, TF0, TF5, TF0), (TF1, TF0, TF0, TF5, TF0), (TF2, TF1, TF1, TF5, TF0), (TF0, TF0, TF0, TF6, TF0), (TF1, TF0, TF0, TF6, TF0), (TF2, TF1, TF1, TF6, TF0), (TF0, TF0, TF0, TF7, TF0), (TF1, TF0, TF0, TF7, TF0), (TF2, TF1, TF1, TF7, TF0), (TF0, TF0, TF0, TF8, TF0), (TF1, TF0, TF0, TF8, TF0), (TF2, TF1, TF1, TF8, TF0), (TF0, TF0, TF0, TF9, TF0), (TF1, TF0, TF0, TF9, TF0), (TF2, TF1, TF1, TF9, TF0), (TF0, TF0, TF0, TF10, TF0), (TF1, TF0, TF0, TF10, TF0), (TF2, TF1, TF1, TF10, TF0), (TF0, TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1), (TF0, TF0, TF0, TF1, TF1), (TF1, TF0, TF0, TF1, TF1), (TF2, TF1, TF1, TF1, TF1), (TF0, TF0, TF0, TF2, TF1), (TF1, TF0, TF0, TF2, TF1), (TF2, TF1, TF1, TF2, TF1), (TF0, TF0, TF0, TF3, TF1), (TF1, TF0, TF0, TF3, TF1), (TF2, TF1, TF1, TF3, TF1), (TF0, TF0, TF0, TF4, TF1), (TF1, TF0, TF0, TF4, TF1), (TF2, TF1, TF1, TF4, TF1) (TF0, TF0, TF0, TF5, TF1), (TF1, TF0, TF0, TF5, TF1), (TF2, TF1, TF1, TF5, TF1), TF0, TF0, TF0, TF6, TF1), (TF1, TF0, TF0, TF6, TF1), (TF2, TF1, TF1, TF6, TF1), (TF0, TF0, TF0, TF7, TF1), (TF1, TF0, TF0, TF7, TF1), (TF2, TF1, TF1, TF7, TF1), (TF0, TF0, TF0, TF8, TF1), (TF1, TF0, TF0, TF8, TF1), (TF2, TF1, TF1, TF8, TF1), (TF0, TF0, TF0, TF9, TF1), (TF1, TF0, TF0, TF9, TF1), (TF2, TF1, TF1, TF9, TF1) (TF0, TF0, TF0, TF10, TF1), (TF1, TF0, TF0, TF10, TF1), (TF2, TF1, TF1, TF10, TF1) (alt. (TF0, TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0, TF0), (TF2, TF1, TF1, TF0, TF0), (TF0, TF0, TF0, TF1, TF0), (TF1, TF0, TF0, TF1, TF0), (TF2, TF1, TF1, TF1, TF0), (TF0, TF0, TF0, TF2, TF0), (TF1, TF0, TF0, TF2, TF0), (TF2, TF1, TF1, TF2, TF0), (TF0, TF0, TF0, TF3, TF0), (TF1, TF0, TF0, TF3, TF0), (TF2, TF1, TF1, TF3, TF0), (TF0, TF0, TF0, TF4, TF0), (TF1, TF0, TF0, TF4, TF0), (TF2, TF1, TF1, TF4, TF0), (TF0, TF0, TF0, TF5, TF0), (TF1, TF0, TF0, TF5, TF0), (TF2, TF1, TF1, TF5, TF0), (TF0, TF0, TF0, TF6, TF0), (TF1, TF0, TF0, TF6, TF0), (TF2, TF1, TF1, TF6, TF0), (TF0, TF0, TF0, TF7, TF0), (TF1, TF0, TF0, TF7, TF0), (TF2, TF1, TF1, TF7, TF0), (TF0, TF0, TF0, TF8, TF0), (TF1, TF0, TF0, TF8, TF0), (TF2, TF1, TF1, TF8, TF0), (TF0, TF0, TF0, TF9, TF0), (TF1, TF0, TF0, TF9, TF0), (TF2, TF1, TF1, TF9, TF0), (TF0, TF0, TF0, TF10, TF0), (TF1, TF0, TF0, TF10, TF0), (TF2, TF1, TF1, TF10, TF0), (TF0, TF0, TF0, TF11, TF0), (TF1, TF0, TF0, TF11, TF0), (TF2, TF1, TF1, TF11, TF0), (TF0, TF0, TF0, TF12, TF0), (TF1, TF0, TF0, TF12, TF0), (TF2, TF1, TF1, TF12, TF0), (TF0, TF0, TF0, TF13, TF0), (TF1, TF0, TF0, TF13, TF0), (TF2, TF1, TF1, TF13, TF0), (TF0, TF0, TF0, TF14, TF0), (TF1, TF0, TF0, TF14, TF0), (TF2, TF1, TF1, TF14, TF0), (TF0, TF0, TF0, TF15, TF0), (TF1, TF0, TF0, TF15, TF0), (TF2, TF1, TF1, TF15, TF0), (TF0, TF0, TF0, TF16, TF0), (TF1, TF0, TF0, TF16, TF0), (TF2, TF1, TF1, TF16, TF0), (TF0, TF0, TF0, TF17, TF0), (TF1, TF0, TF0, TF17, TF0), (TF2, TF1, TF1, TF17, TF0), (TF0, TF0, TF0, TF18, TF0), (TF1, TF0, TF0, TF18, TF0), (TF2, TF1, TF1, TF18, TF0), (TF0, TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1), (TF0, TF0, TF0, TF1, TF1), (TF1, TF0, TF0, TF1, TF1), (TF2, TF1, TF1, TF1, TF1), (TF0, TF0, TF0, TF2, TF1), (TF1, TF0, TF0, TF2, TF1), (TF2, TF1, TF1, TF2, TF1), (TF0, TF0, TF0, TF3, TF1), (TF1, TF0, TF0, TF3, TF1), (TF2, TF1, TF1, TF3, TF1), (TF0, TF0, TF0, TF4, TF1), (TF1, TF0, TF0, TF4, TF1), (TF2, TF1, TF1, TF4, TF1), (TF0, TF0, TF0, TF5, TF1), (TF1, TF0, TF0, TF5, TF1), (TF2, TF1, TF1, TF5, TF1), (TF0, TF0, TF0, TF6, TF1), (TF1, TF0, TF0, TF6, TF1), (TF2, TF1, TF1, TF6, TF1), (TF0, TF0, TF0, TF7, TF1), (TF1, TF0, TF0, TF7, TF1), (TF2, TF1, TF1, TF7, TF1), (TF0, TF0, TF0, TF8, TF1), (TF1, TF0, TF0, TF8, TF1), (TF2, TF1, TF1, TF8, TF1), (TF0, TF0, TF0, TF9, TF1), (TF1, TF0, TF0, TF9, TF1), (TF2, TF1, TF1, TF9, TF1), (TF0, TF0, TF0, TF10, TF1), (TF1, TF0, TF0, TF10, TF1), (TF2, TF1, TF1, TF10, TF1), (TF0, TF0, TF0, TF11, TF1), (TF1, TF0, TF0, TF11, TF1), (TF2, TF1, TF1, TF11, TF1), (TF0, TF0, TF0, TF12, TF1), (TF1, TF0, TF0, TF12, TF1), (TF2, TF1, TF1, TF12, TF1), (TF0, TF0, TF0, TF13, TF1), (TF1, TF0, TF0, TF13, TF1), (TF2, TF1, TF1, TF13, TF1), (TF0, TF0, TF0, TF14, TF1), (TF1, TF0, TF0, TF14, TF1), (TF2, TF1, TF1, TF14, TF1), (TF0, TF0, TF0, TF15, TF1), (TF1, TF0, TF0, TF15, TF1), (TF2, TF1, TF1, TF15, TF1), (TF0, TF0, TF0, TF16, TF1), (TF1, TF0, TF0, TF16, TF1), (TF2, TF1, TF1, TF16, TF1), (TF0, TF0, TF0, TF17, TF1), (TF1, TF0, TF0, TF17, TF1), (TF2, TF1, TF1, TF17, TF1), (TF0, TF0, TF0, TF18, TF1), (TF1, TF0, TF0, TF18, TF1), (TF2, TF1, TF1, TF18, TF1))

6.10.2.4.1.44.2.2 Physical channel parameters

DPCH Downlink	DTX position		Flexible
	Spreading factor		4
	Number of DPDCH		3
	DPCCH	Number of TFCI bits/slot	8
		Number of TPC bits/slot	8
		Number of Pilot bits/slot	16
	DPDCH	Number of data bits/slot	1 248
		Number of data bits/frame	18 720

6.10.2.4.1.45 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

6.10.2.4.1.45.1 Uplink

6.10.2.4.1.45.1.1 Transport channel parameters

6.10.2.4.1.45.1.1.1 Transport channel parameters for Conversational / speech / UL:12.2 kbps / CS RAB

See clause 6.10.2.4.1.4.1.1.1.

6.10.2.4.1.45.1.1.2 Transport channel parameters for Streaming / unknown / UL:57.6 kbps / CS RAB

See clause 6.10.2.4.1.17.1.1.1.

6.10.2.4.1.45.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.45.1.1.4 TFCS

TFCS size	30
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 57.6 kbps RAB , DCCH)= (TF0, TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0, TF0), (TF2, TF1, TF1, TF0, TF0), (TF0, TF0, TF0, TF1, TF0), (TF1, TF0, TF0, TF1, TF0), (TF2, TF1, TF1, TF1, TF0), (TF0, TF0, TF0, TF2, TF0), (TF1, TF0, TF0, TF2, TF0), (TF2, TF1, TF1, TF2, TF0), (TF0, TF0, TF0, TF3, TF0), (TF1, TF0, TF0, TF3, TF0), (TF2, TF1, TF1, TF3, TF0), (TF0, TF0, TF0, TF4, TF0), (TF1, TF0, TF0, TF4, TF0), (TF2, TF1, TF1, TF4, TF0), (TF0, TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1), (TF0, TF0, TF0, TF1, TF1), (TF1, TF0, TF0, TF1, TF1), (TF2, TF1, TF1, TF1, TF1), (TF0, TF0, TF0, TF2, TF1), (TF1, TF0, TF0, TF2, TF1), (TF2, TF1, TF1, TF2, TF1), (TF0, TF0, TF0, TF3, TF1), (TF1, TF0, TF0, TF3, TF1), (TF2, TF1, TF1, TF3, TF1), (TF0, TF0, TF0, TF4, TF1), (TF1, TF0, TF0, TF4, TF1), (TF2, TF1, TF1, TF4, TF1)

6.10.2.4.1.45.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	16
	Max number of DPDCH data bits/radio frame	2 400
	Puncturing Limit	0.88

6.10.2.4.1.45.2 Downlink

6.10.2.4.1.45.2.1 Transport channel parameters

6.10.2.4.1.45.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 kbps / CS RAB

See clause 6.10.2.4.1.4.2.1.1.

6.10.2.4.1.45.2.1.2 Transport channel parameters for Streaming / unknown / DL:57.6 kbps / CS RAB

See clause 6.10.2.4.1.17.2.1.1.

6.10.2.4.1.45.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.1.45.2.1.4 TFCS

TFCS size	30
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 57.6 kbps RAB , DCCH)= (TF0, TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0, TF0), (TF2, TF1, TF1, TF0, TF0), (TF0, TF0, TF0, TF1, TF0), (TF1, TF0, TF0, TF1, TF0), (TF2, TF1, TF1, TF1, TF0), (TF0, TF0, TF0, TF2, TF0), (TF1, TF0, TF0, TF2, TF0), (TF2, TF1, TF1, TF2, TF0), (TF0, TF0, TF0, TF3, TF0), (TF1, TF0, TF0, TF3, TF0), (TF2, TF1, TF1, TF3, TF0), (TF0, TF0, TF0, TF4, TF0), (TF1, TF0, TF0, TF4, TF0), (TF2, TF1, TF1, TF4, TF0), (TF0, TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1), (TF0, TF0, TF0, TF1, TF1), (TF1, TF0, TF0, TF1, TF1), (TF2, TF1, TF1, TF1, TF1), (TF0, TF0, TF0, TF2, TF1), (TF1, TF0, TF0, TF2, TF1), (TF2, TF1, TF1, TF2, TF1), (TF0, TF0, TF0, TF3, TF1), (TF1, TF0, TF0, TF3, TF1), (TF2, TF1, TF1, TF3, TF1), (TF0, TF0, TF0, TF4, TF1), (TF1, TF0, TF0, TF4, TF1), (TF2, TF1, TF1, TF4, TF1)

6.10.2.4.1.45.2.2 Physical channel parameters

DPCH Downlink	DTX position		Flexible
	Spreading factor		32
	DPCCH	Number of TFCI bits/slot	8
		Number of TPC bits/slot	4
		Number of Pilot bits/slot	8
	DPDCH	Number of data bits/slot	140
		Number of data bits/frame	2 100

6.10.2.4.1.46 Void

6.10.2.4.1.47 Void

6.10.2.4.1.48 Void

6.10.2.4.1.49 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

6.10.2.4.1.49.1 Uplink

6.10.2.4.1.49.1.1 Transport channel parameters

6.10.2.4.1.49.1.1.1 Transport channel parameters for Conversational / speech / UL:12.2 kbps / CS RAB

See clause 6.10.2.4.1.4.1.1.1.

6.10.2.4.1.49.1.1.2 Transport channel parameters for Conversational / unknown / UL:64 kbps / CS RAB

See clause 6.10.2.4.1.13.1.1.1.

6.10.2.4.1.49.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.49.1.1.4 TFCS

TFCS size	12
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 64 kbps RAB , DCCH)= (TF0, TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0, TF0), (TF2, TF1, TF1, TF0, TF0), (TF0, TF0, TF0, TF1, TF0), (TF1, TF0, TF0, TF1, TF0), (TF2, TF1, TF1, TF1, TF0), (TF0, TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1), (TF0, TF0, TF0, TF1, TF1), (TF1, TF0, TF0, TF1, TF1), (TF2, TF1, TF1, TF1, TF1)

6.10.2.4.1.49.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	16
	Max number of DPDCH data bits/radio frame	2 400

	Puncturing Limit	0.72

6.10.2.4.1.49.2 Downlink

6.10.2.4.1.49.2.1 Transport channel parameters

6.10.2.4.1.49.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 kbps / CS RAB

See clause 6.10.2.4.1.4.2.1.1.

6.10.2.4.1.49.2.1.2 Transport channel parameters for Conversational / unknown / DL:64 kbps / CS RAB

See clause 6.10.2.4.1.13.2.1.1.

6.10.2.4.1.49.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.11.

6.10.2.4.1.49.2.1.4 TFCS

TFCS size	12
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 64 kbps RAB , DCCH)= (TF0, TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0, TF0), (TF2, TF1, TF1, TF0, TF0), (TF0, TF0, TF0, TF1, TF0), (TF1, TF0, TF0, TF1, TF0), (TF2, TF1, TF1, TF1, TF0), (TF0, TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1), (TF0, TF0, TF0, TF1, TF1), (TF1, TF0, TF0, TF1, TF1), (TF2, TF1, TF1, TF1, TF1)

6.10.2.4.1.49.2.2 Physical channel parameters

DPCH Downlink	DTX position		Flexible
	Spreading factor		32
	DPCCH	Number of TFCI bits/slot	8
		Number of TPC bits/slot	4
		Number of Pilot bits/slot	8
	DPDCH	Number of data bits/slot	140
		Number of data bits/frame	2 100

6.10.2.4.1.49a Conversational / speech / UL:(12.2 7.95 5.9 4.75) DL:(12.2 7.95 5.9 4.75) kbps / CS RAB + Conversational / unknown / UL:64 DL:64 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.2.4.1.49a.1 Uplink

6.10.2.4.1.49a.1.1 Transport channel parameters

6.10.2.4.1.49a.1.1.1 Transport channel parameters for Conversational / speech / UL: (12.2 7.95 5.9 4.75) kbps / CS RAB

See clause 6.10.2.4.1.4a.1.1.1.

6.10.2.4.1.49a.1.1.2 Transport channel parameters for Conversational / unknown / UL:64 kbps / CS RAB

See clause 6.10.2.4.1.13.1.1.1.

6.10.2.4.1.49a.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.49a.1.1.4 TFCS

TFCS size	24
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 64 kbps RAB, DCCH)= (TF0,TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0,TF0), (TF2,TF1,TF0,TF0,TF0), (TF3,TF2,TF0,TF0,TF0), (TF4,TF3,TF0,TF0,TF0), (TF5,TF4,TF1,TF0,TF0), (TF0,TF0,TF0,TF1,TF0), (TF1,TF0,TF0,TF1,TF0), (TF2,TF1,TF0,TF1,TF0),

	(TF3,TF2,TF0,TF1,TF0), (TF4,TF3,TF0,TF1,TF0), (TF5,TF4,TF1,TF1,TF0), (TF0,TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF0,TF1), (TF2,TF1,TF0,TF0,TF1), (TF3,TF2,TF0,TF0,TF1), (TF4,TF3,TF0,TF0,TF1), (TF5,TF4,TF1,TF0,TF1), (TF0,TF0,TF0,TF1,TF1), (TF1,TF0,TF0,TF1,TF1), (TF2,TF1,TF0,TF1,TF1), (TF3,TF2,TF0,TF1,TF1), (TF4,TF3,TF0,TF1,TF1), (TF5,TF4,TF1,TF1,TF1)

6.10.2.4.1.49a.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	16
	Max number of DPDCH data bits/radio frame	2 400
	Puncturing Limit	0.72

6.10.2.4.1.49a.2 Downlink

6.10.2.4.1.49a.2.1 Transport channel parameters

6.10.2.4.1.49a.2.1.1 Transport channel parameters for Conversational / speech / DL: (12.2 7.95 5.9 4.75) kbps / CS RAB

See clause 6.10.2.4.1.4a.2.1.1.

6.10.2.4.1.49a.2.1.2 Transport channel parameters for Conversational / unknown / DL:64 kbps / CS RAB

See clause 6.10.2.4.1.13.2.1.1.

6.10.2.4.1.49a.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1

6.10.2.4.1.49a.2.1.4 TFCS

TFCS size	24
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 64 kbps RAB, DCCH)= (TF0,TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0,TF0), (TF2,TF1,TF0,TF0,TF0), (TF3,TF2,TF0,TF0,TF0), (TF4,TF3,TF0,TF0,TF0), (TF5,TF4,TF1,TF0,TF0), (TF0,TF0,TF0,TF1,TF0), (TF1,TF0,TF0,TF1,TF0), (TF2,TF1,TF0,TF1,TF0), (TF3,TF2,TF0,TF1,TF0), (TF4,TF3,TF0,TF1,TF0), (TF5,TF4,TF1,TF1,TF0), (TF0,TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF0,TF1), (TF2,TF1,TF0,TF0,TF1), (TF3,TF2,TF0,TF0,TF1), (TF4,TF3,TF0,TF0,TF1), (TF5,TF4,TF1,TF0,TF1), (TF0,TF0,TF0,TF1,TF1), (TF1,TF0,TF0,TF1,TF1), (TF2,TF1,TF0,TF1,TF1), (TF3,TF2,TF0,TF1,TF1), (TF4,TF3,TF0,TF1,TF1), (TF5,TF4,TF1,TF1,TF1)

6.10.2.4.1.49a.2.2 Physical channel parameters

DPCH Downlink	DTX position		Flexible
	Spreading factor		32
	DPCCH	Number of TFCI bits/slot	8
		Number of TPC bits/slot	4
		Number of Pilot bits/slot	8
	DPDCH	Number of data bits/slot	140
		Number of data bits/frame	2 100

6.10.2.4.1.50 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

6.10.2.4.1.50.1 Uplink

6.10.2.4.1.50.1.1 Transport channel parameters

6.10.2.4.1.50.1.1.1 Transport channel parameters for Conversational / unknown / UL:64 kbps / CS RAB

See clause 6.10.2.4.1.13.1.1.1.

6.10.2.4.1.50.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.50.1.1.3 TFCS

TFCS size	8
TFCS	(64 kbps RAB, 64 kbps RAB, DCCH)= (TF0, TF0, TF0), (TF1, TF0, TF0), (TF0, TF1, TF0), (TF1, TF1, TF0) (TF0, TF0, TF1), (TF1, TF0, TF1), (TF0, TF1, TF1), (TF1, TF1, TF1)

6.10.2.4.1.50.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	8
	Max number of DPDCH data bits/radio frame	4 800
	Puncturing Limit	0.92

6.10.2.4.1.50.2 Downlink

6.10.2.4.1.50.2.1 Transport channel parameters

6.10.2.4.1.50.2.1.1 Transport channel parameters for Conversational / unknown / DL:64 kbps / CS RAB

See clause 6.10.2.4.1.13.2.1.1.

6.10.2.4.1.50.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.1.50.2.1.3 TFCS

TFCS size	8
TFCS	(64 kbps RAB, 64 kbps RAB, DCCH)= (TF0, TF0, TF0), (TF1, TF0, TF0), (TF0, TF1, TF0), (TF1, TF1, TF0) (TF0, TF0, TF1), (TF1, TF0, TF1), (TF0, TF1, TF1), (TF1, TF1, TF1)

6.10.2.4.1.50.2.2 Physical channel parameters

DPCH Downlink	DTX position		Flexible
	Spreading factor		16
	DPCCH	Number of TFCI bits/slot	8
		Number of TPC bits/slot	8
		Number of Pilot bits/slot	16
	DPDCH	Number of data bits/slot	288
		Number of data bits/frame	4 320

6.10.2.4.1.51 Conversational / unknown / UL:64 DL:64 kbps / CS RAB + Interactive or background / UL:64 DL:64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.2.4.1.51.1 Uplink

6.10.2.4.1.51.1.1 Transport channel parameters

6.10.2.4.1.51.1.1.1 Transport channel parameters for Conversational / unknown / UL:64 kbps / CS RAB

See clause 6.10.2.4.1.13.1.1.1.

6.10.2.4.1.51.1.1.2 Transport channel parameters for Interactive or background / UL:64 kbps / PS RAB

See clause 6.10.2.4.1.26.1.1.1.

6.10.2.4.1.51.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.51.1.1.4 TFCS

TFCS size	20
TFCS	(Conv. 64 kbps RAB, I/B 64 kbps RAB, DCCH)= (TF0, TF0, TF0), (TF0, TF1, TF0), (TF0, TF2, TF0), (TF0, TF3, TF0), (TF0, TF4, TF0), (TF1, TF0, TF0), (TF1, TF1, TF0), (TF1, TF2, TF0), (TF1, TF3, TF0), (TF1, TF4, TF0), (TF0, TF0, TF1), (TF0, TF1, TF1), (TF0, TF2, TF1), (TF0, TF3, TF1), (TF0, TF4, TF1), (TF1, TF0, TF1), (TF1, TF1, TF1), (TF1, TF2, TF1), (TF1, TF3, TF1), (TF1, TF4, TF1)

6.10.2.4.1.51.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	8
	Max number of DPDCH data bits/radio frame	4 800
	Puncturing Limit	0.88

6.10.2.4.1.51.2 Downlink

6.10.2.4.1.51.2.1 Transport channel parameters

6.10.2.4.1.51.2.1.1 Transport channel parameters for Conversational / unknown / DL:64 kbps / CS RAB

See clause 6.10.2.4.1.13.2.1.1.

6.10.2.4.1.51.2.1.2 Transport channel parameters for Interactive or background / DL:64 kbps / PS RAB

See clause 6.10.2.4.1.25.2.1.1.

6.10.2.4.1.51.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.1.51.2.1.4 TFCS

TFCS size	20
TFCS	(Conv. 64 kbps RAB, I/B 64 kbps RAB, DCCH)= (TF0, TF0, TF0), (TF0, TF1, TF0), (TF0, TF2, TF0), (TF0, TF3, TF0), (TF0, TF4, TF0), (TF1, TF0, TF0), (TF1, TF1, TF0), (TF1, TF2, TF0), (TF1, TF3, TF0), (TF1, TF4, TF0), (TF0, TF0, TF1), (TF0, TF1, TF1), (TF0, TF2, TF1), (TF0, TF3, TF1), (TF0, TF4, TF1), (TF1, TF0, TF1), (TF1, TF1, TF1), (TF1, TF2, TF1), (TF1, TF3, TF1), (TF1, TF4, TF1)

6.10.2.4.1.51.2.2 Physical channel parameters

DPCH Downlink	DTX position		Flexible
	Spreading factor		16
	DPCCH	Number of TFCI bits/slot	8
		Number of TPC bits/slot	8
		Number of Pilot bits/slot	16
	DPDCH	Number of data bits/slot	288
		Number of data bits/frame	4 320

6.10.2.4.1.51a 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

6.10.2.4.1.51a.1 Uplink

6.10.2.4.1.51a.1.1 Transport channel parameters

6.10.2.4.1.51a.1.1.1 Transport channel parameters for Conversational / unknown / UL:64 kbps / CS RAB

See clause 6.10.2.4.1.13.2.1.1.

6.10.2.4.1.51a.1.1.2 Transport channel parameters for Interactive or Background / UL:8 kbps / PS RAB

See clause 6.10.2.4.1.38b.1.1.2.

6.10.2.4.1.51a.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.51a.1.1.4 TFCS

TFCS size	8
TFCS	(64 kbps Conversational RAB, 8 kbps I/B RAB, DCCH)= (TF0, TF0, TF0), (TF1, TF0, TF0), (TF0, TF1, TF0), (TF1, TF1, TF0), (TF0, TF0, TF1), (TF1, TF0, TF1), (TF0, TF1, TF1), (TF1, TF1, TF1)

6.10.2.4.1.51a.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	16
	Max number of DPDCH data bits/radio frame	2 400
	Puncturing Limit	0.72

6.10.2.4.1.51a.2 Downlink

6.10.2.4.1.51a.2.1 Transport channel parameters

6.10.2.4.1.51a.2.1.1 Transport channel parameters for Conversational / unknown / DL:64 kbps / PS RAB

See clause 6.10.2.4.1.13.2.1.1.

6.10.2.4.1.51a.2.1.2 Transport channel parameters for Interactive or Background / DL:8 kbps / PS RAB

See clause 6.10.2.4.1.38b.2.1.2.

6.10.2.4.1.51a.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.1.51a.2.1.4 TFCS

TFCS size	8
TFCS	(64 kbps Conversational RAB, 8 kbps I/B RAB, DCCH)= (TF0, TF0, TF0), (TF1, TF0, TF0), (TF0, TF1, TF0), (TF1, TF1, TF0), (TF0, TF0, TF1), (TF1, TF0, TF1), (TF0, TF1, TF1), (TF1, TF1, TF1)

6.10.2.4.1.51a.2.2 Physical channel parameters

DPCH Downlink	DTX position		Flexible
	Spreading factor		32
	DPCCH	Number of TFCI bits/slot	8
		Number of TPC bits/slot	4
		Number of Pilot bits/slot	8
	DPDCH	Number of data bits/slot	140
		Number of data bits/frame	2 100

6.10.2.4.1.51b 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

6.10.2.4.1.51b.1 Uplink

6.10.2.4.1.51b.1.1 Transport channel parameters

6.10.2.4.1.51b.1.1.1 Transport channel parameters for Conversational / unknown / UL:64 kbps / CS RAB

See clause 6.10.2.4.1.13.1.1.1.

6.10.2.4.1.51b.1.1.2 Transport channel parameters for Interactive or Background / UL:16 kbps / PS RAB

Higher layer	RAB/Signalling RB	RAB

RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		320
	Max data rate, bps		16 000
	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		336
	TFS	TF0, bits	0x336
		TF1, bits	1x336
		TF2, bits	2x336
	TTI, ms		40
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		2 124
	Uplink: Max number of bits/radio frame before rate matching		531
	RM attribute		135 to 175

6.10.2.4.1.51b.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.51b.1.1.4 TFCS

TFCS size	12
TFCS	(64 kbps Conversational RAB, 16 kbps I/B RAB, DCCH)= (TF0, TF0, TF0), (TF0, TF1, TF0), (TF0, TF2, TF0), (TF1, TF0, TF0), (TF1, TF1, TF0), (TF1, TF2, TF0), (TF0, TF0, TF1), (TF0, TF1, TF1), (TF0, TF2, TF1), (TF1, TF0, TF1), (TF1, TF1, TF1), (TF1, TF2, TF1)

6.10.2.4.1.51b.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	16
	Max number of DPDCH data bits/radio frame	2 400
	Puncturing Limit	0.64

6.10.2.4.1.51b.2 Downlink

See clause 6.10.2.4.1.51.2.

6.10.2.4.1.52 Conversational / unknown / UL:64 DL:64 kbps / CS RAB + Interactive or background / UL:64 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.2.4.1.52.1 Uplink

See clause 6.10.2.4.1.51.1.

6.10.2.4.1.52.2 Downlink

6.10.2.4.1.52.2.1 Transport channel parameters

6.10.2.4.1.52.2.1.1 Transport channel parameters for Conversational / unknown / DL:64 kbps / CS RAB

See clause 6.10.2.4.1.13.2.1.1.

6.10.2.4.1.52.2.1.2 Transport channel parameters for Interactive or background / DL:128 kbps / PS RAB

See clause 6.10.2.4.1.27.2.1.1.

6.10.2.4.1.52.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.1.52.2.1.4 TFCS

TFCS size	20
TFCS	(Conv. 64 kbps RAB, I/B 128 kbps RAB, DCCH)= (TF0, TF0, TF0), (TF0, TF1, TF0), (TF0, TF2, TF0), (TF0, TF3, TF0), (TF0, TF4, TF0), (TF1, TF0, TF0), (TF1, TF1, TF0), (TF1, TF2, TF0), (TF1, TF3, TF0), (TF1, TF4, TF0), (TF0, TF0, TF1), (TF0, TF1, TF1), (TF0, TF2, TF1), (TF0, TF3, TF1), (TF0, TF4, TF1), (TF1, TF0, TF1), (TF1, TF1, TF1), (TF1, TF2, TF1), (TF1, TF3, TF1), (TF1, TF4, TF1)

6.10.2.4.1.52.2.2 Physical channel parameters

DPCH Downlink	DTX position		Flexible
	Spreading factor		8
	DPCCH	Number of TFCI bits/slot	8
		Number of TPC bits/slot	8
		Number of Pilot bits/slot	16
	DPDCH	Number of data bits/slot	608
		Number of data bits/frame	9 120

6.10.2.4.1.53 Conversational / unknown / UL:64 DL:64 kbps / CS RAB + Interactive or background / UL:128 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.2.4.1.53.1 Uplink

6.10.2.4.1.53.1.1 Transport channel parameters

6.10.2.4.1.53.1.1.1 Transport channel parameters for Conversational / unknown / UL:64 kbps / CS RAB

See clause 6.10.2.4.1.13.1.1.1.

6.10.2.4.1.53.1.1.2 Transport channel parameters for Interactive or background / UL:128 kbps / PS RAB

See clause 6.10.2.4.1.28.1.1.1.

6.10.2.4.1.53.1.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.53.1.1.4 TFCS

TFCS size	20
TFCS	(Conv. 64 kbps RAB, I/B 128kbps RAB, DCCH)= (TF0, TF0, TF0), (TF0, TF1, TF0), (TF0, TF2, TF0), (TF0, TF3, TF0), (TF0, TF4, TF0), (TF1, TF0, TF0), (TF1, TF1, TF0), (TF1, TF2, TF0), (TF1, TF3, TF0), (TF1, TF4, TF0), (TF0, TF0, TF1), (TF0, TF1, TF1), (TF0, TF2, TF1), (TF0, TF3, TF1), (TF0, TF4, TF1), (TF1, TF0, TF1), (TF1, TF1, TF1), (TF1, TF2, TF1), (TF1, TF3, TF1), (TF1, TF4, TF1)

6.10.2.4.1.53.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	4
	Max number of DPDCH data bits/radio frame	9 600
	Puncturing Limit	0.96

6.10.2.4.1.53.2 Downlink

See clause 6.10.2.4.1.52.2.

6.10.2.4.1.54 Void

6.10.2.4.1.55 Void

6.10.2.4.1.56 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

6.10.2.4.1.56.1 Uplink

6.10.2.4.1.56.1.1 Transport channel parameters

6.10.2.4.1.56.1.1.1 Transport channel parameters for Interactive or background / UL:8 kbps / PS RAB + UL:8 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB	RAB
RLC	Logical channel type		DTCH	DTCH
	RLC mode		AM	AM
	Payload sizes, bit		320	320
	Max data rate, bps		8 000	8 000
	AMD PDU header, bit		16	16
MAC	MAC header, bit		4	4
	MAC multiplexing		2 logical channel multiplexing	
Layer 1	TrCH type		DCH	
	TB sizes, bit		340	
	TFS	TF0, bits	0x340	
		TF1, bits	1x340	
	TTI, ms		40	
	Coding type		TC	
	CRC, bit		16	
	Max number of bits/TTI after channel coding		1 080	
	Uplink: Max number of bits/radio frame before rate matching		270	
	RM attribute		135 to 175	

6.10.2.4.1.56.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.56.1.1.3 TFCS

TFCS size	4
TFCS	(8 kbps RAB + 8 kbps RAB, DCCH)= (TF0,TF0), (TF1,TF0), (TF0,TF1), (TF1,TF1)

6.10.2.4.1.56.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	64
	Max number of DPDCH data bits/radio frame	600
	Puncturing Limit	1.0

6.10.2.4.1.56.2 Downlink

6.10.2.4.1.56.2.1 Transport channel parameters

6.10.2.4.1.56.2.1.1 Transport channel parameters for Interactive or background / DL:8 kbps / PS RAB + DL:8 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB	RAB
RLC	Logical channel type		DTCH	DTCH
	RLC mode		AM	AM
	Payload sizes, bit		320	320
	Max data rate, bps		8 000	8 000
	AMD PDU header, bit		16	16
MAC	MAC header, bit		4	4
	MAC multiplexing		2 logical channel multiplexing	
Layer 1	TrCH type		DCH	
	TB sizes, bit		340	
	TFS	TF0, bits	0x340	
		TF1, bits	1x340	
	TTI, ms		40	
	Coding type		TC	
	CRC, bit		16	

	Max number of bits/TTI after channel coding	1 080
	RM attribute	135 to 175

6.10.2.4.1.56.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.1.56.2.1.3 TFCS

TFCS size	4
TFCS	(8 kbps RAB + 8 kbps RAB, DCCH)= (TF0,TF0), (TF1,TF0), (TF0,TF1), (TF1,TF1)

6.10.2.4.1.56.2.2 Physical channel parameters

DPCH Downlink	DTX position		Flexible
	Spreading factor		128
	DPCCH	Number of TFCI bits/slot	2
		Number of TPC bits/slot	2
		Number of Pilot bits/slot	4
	DPDCH	Number of data bits/slot	32
		Number of data bits/frame	480

6.10.2.4.1.57 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

6.10.2.4.1.57.1 Uplink

6.10.2.4.1.57.1.1 Transport channel parameters

6.10.2.4.1.57.1.1.1 Transport channel parameters for Interactive or background / UL:64 kbps / PS RAB + UL:64 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB	RAB
RLC	Logical channel type		DTCH	DTCH
	RLC mode		AM	AM
	Payload sizes, bit		320	320
	Max data rate, bps		64 000	64 000
	AMD PDU header, bit		16	16
MAC	MAC header, bit		4	4
	MAC multiplexing		2 logical channel multiplexing	
Layer 1	TrCH type		DCH	
	TB sizes, bit		340	
	TFS	TF0, bits	0x340	
		TF1, bits	1x340	
		TF2, bits	2x340	
		TF3, bits	3x340	
		TF4, bits	4x340	
	TTI, ms		20	
	Coding type		TC	
	CRC, bit		16	
	Max number of bits/TTI after channel coding		4 284	
	Uplink: Max number of bits/radio frame before rate matching		2 142	
	RM attribute		130 to 170	

6.10.2.4.1.57.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.57.1.1.3 TFCS

TFCS size	10
TFCS	(64 kbps RAB + 64 kbps RAB, DCCH)=

	(TF0,TF0), (TF1,TF0), (TF2,TF0), (TF3,TF0), (TF4,TF0), (TF0,TF1), (TF1,TF1), (TF2,TF1), (TF3,TF1), (TF4,TF1)

6.10.2.4.1.57.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	16
	Max number of DPDCH data bits/radio frame	2 400
	Puncturing Limit	0.92

6.10.2.4.1.57.2 Downlink

6.10.2.4.1.57.2.1 Transport channel parameters

6.10.2.4.1.57.2.1.1 Transport channel parameters for Interactive or background / DL:64 kbps / PS RAB + DL:64 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB	RAB
RLC	Logical channel type		DTCH	DTCH
	RLC mode		AM	AM
	Payload sizes, bit		320	320
	Max data rate, bps		64 000	64 000
	AMD PDU header, bit		16	16
MAC	MAC header, bit		4	4
	MAC multiplexing		2 logical channel multiplexing	
Layer 1	TrCH type		DCH	
	TB sizes, bit		340	
	TFS	0x340	0x340	
		1x340	1x340	
		2x340	2x340	
		3x340	3x340	
		4x340	4x340	
	TTI, ms		20	
	Coding type		TC	
	CRC, bit		16	
	Max number of bits/TTI after channel coding		4 284	
	RM attribute		130 to 170	

6.10.2.4.1.57.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.1.57.2.1.3 TFCS

TFCS size	10
TFCS	(64 kbps RAB + 64 kbps RAB, DCCH)= (TF0,TF0), (TF1,TF0), (TF2,TF0), (TF3,TF0), (TF4,TF0), (TF0,TF1), (TF1,TF1), (TF2,TF1), (TF3,TF1), (TF4,TF1)

6.10.2.4.1.57.2.2 Physical channel parameters

DPCH Downlink	DTX position		Flexible
	Spreading factor		32
	DPCCH	Number of TFCI bits/slot	8
		Number of TPC bits/slot	4
		Number of Pilot bits/slot	8
	DPDCH	Number of data bits/slot	140
		Number of data bits/frame	2 100

6.10.2.4.1.58 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

6.10.2.4.1.58.1 Uplink

6.10.2.4.1.58.1.1 Transport channel parameters

6.10.2.4.1.58.1.1.1 Transport channel parameters for Streaming / unknown / UL:16 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		320
	Max data rate, bps		16 000
	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		336
	TFS	TF0, bits	0x336
		TF1, bits	1x336
	TTI, ms		20
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		1 068
	Uplink: Max number of bits/radio frame before rate matching		534
	RM attribute		135 to 175

6.10.2.4.1.58.1.1.2 Transport channel parameters for Interactive or background / UL:8 kbps / PS RAB

See clause 6.10.2.4.1.38b.1.1.2.

6.10.2.4.1.58.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.58.1.1.4 TFCS

TFCS size	8
TFCS	(16 kbps RAB, 8 kbps RAB, DCCH)= (TF0,TF0,TF0), (TF1,TF0,TF0), (TF0,TF1,TF0), (TF1,TF1,TF0), (TF0,TF0,TF1), (TF1,TF0,TF1), (TF0,TF1,TF1), (TF1,TF1,TF1)

6.10.2.4.1.58.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	32
	Max number of DPDCH data bits/radio frame	1 200
	Puncturing Limit	1.0

6.10.2.4.1.58.2 Downlink

6.10.2.4.1.58.2.1 Transport channel parameters

6.10.2.4.1.58.2.1.1 Transport channel parameters for Streaming / unknown / DL:64 kbps / PS RAB

Higher layer	RAB/Signalling RB	RAB
RLC	Logical channel type	DTCH
	RLC mode	AM
	Payload sizes, bit	640
	Max data rate, bps	64 000
	AM PDU header, bit	16
MAC	MAC header, bit	0
	MAC multiplexing	N/A
Layer 1	TrCH type	DCH

	TB sizes, bit		656
	TFS	TF0, bits	0x656
		TF1, bits	1x656
		TF2, bits	2x656
		TF3, bits	4x656
	TTI, ms		40
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		8 076
	RM attribute		125 to 165

6.10.2.4.1.58.2.1.2 Transport channel parameters for Interactive or background / DL:8 kbps / PS RAB

See clause 6.10.2.4.1.38b.2.1.2.

6.10.2.4.1.58.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.1.58.2.1.4 TFCS

TFCS size	16
TFCS	(64 kbps RAB, 8 kbps RAB, DCCH)= (TF0,TF0,TF0), (TF1,TF0,TF0), (TF2,TF0,TF0), (TF3,TF0,TF0), (TF0,TF1,TF0), (TF1,TF1,TF0), (TF2,TF1,TF0), (TF3,TF1,TF0), (TF0,TF0,TF1), (TF1,TF0,TF1), (TF2,TF0,TF1), (TF3,TF0,TF1), (TF0,TF1,TF1), (TF1,TF1,TF1), (TF2,TF1,TF1), (TF3,TF1,TF1)

6.10.2.4.1.58.2.2 Physical channel parameters

DPCH Downlink	DTX position		Flexible
	Spreading factor		32
	DPCCH	Number of TFCI bits/slot	8
		Number of TPC bits/slot	4
		Number of Pilot bits/slot	8
	DPDCH	Number of data bits/slot	140
		Number of data bits/frame	2 100

6.10.2.4.1.58a Streaming / unknown / UL:16 DL:128 kbps / PS RAB + Interactive or background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.2.4.1.58a.1 Uplink

6.10.2.4.1.58a.1.1 Transport channel parameters

6.10.2.4.1.58a.1.1.1 Transport channel parameters for Streaming / unknown / UL:16 kbps / PS RAB

See clause 6.10.2.4.1.58.1.1.1.

6.10.2.4.1.58a.1.1.2 Transport channel parameters for Interactive or background / UL:8 kbps / PS RAB

See clause 6.10.2.4.1.38b.1.1.1.

6.10.2.4.1.58a.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.58a.1.1.4 TFCS

See clause 6.10.2.4.1.58.1.1.4.

6.10.2.4.1.58a.1.2 Physical channel parameters

See clause 6.10.2.4.1.58.1.2.

6.10.2.4.1.58a.2 Downlink

6.10.2.4.1.58a.2.1 Transport channel parameters

6.10.2.4.1.58a.2.1.1 Transport channel parameters for Streaming / unknown / DL:128 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		640
	Max data rate, bps		128 000
	AM PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		656
	TFS	TF0, bits	0x656
		TF1, bits	1x656
		TF2, bits	2x656
		TF3, bits	3x656
		TF4, bits	4x656
	TTI, ms		20
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		8 076
	RM attribute		125 to 165

6.10.2.4.1.58a.2.1.2 Transport channel parameters for Interactive or background / DL:8 kbps / PS RAB

See clause 6.10.2.4.1.38b.2.1.1.

6.10.2.4.1.58a.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.1.58a.2.1.4 TFCS

TFCS size	20
TFCS	(128 kbps RAB, 8 kbps RAB, DCCH)= (TF0,TF0,TF0), (TF1,TF0,TF0), (TF2,TF0,TF0), (TF3,TF0,TF0), (TF4,TF0,TF0), (TF0,TF1,TF0), (TF1,TF1,TF0), (TF2,TF1,TF0), (TF3,TF1,TF0), (TF4,TF1,TF0), (TF0,TF0,TF1), (TF1,TF0,TF1), (TF2,TF0,TF1), (TF3,TF0,TF1), (TF4,TF0,TF1), (TF0,TF1,TF1), (TF1,TF1,TF1), (TF2,TF1,TF1), (TF3,TF1,TF1), (TF4,TF1,TF1),

6.10.2.4.1.58a.2.2 Physical channel parameters

DPCH Downlink	DTX position		Flexible
	Spreading factor		16
	DPCCH	Number of TFCI bits/slot	8
		Number of TPC bits/slot	8
		Number of Pilot bits/slot	16
	DPDCH	Number of data bits/slot	288
		Number of data bits/frame	4 320

6.10.2.4.1.59 Conversational / speech / UL:42.8 DL:42.8 kbps / PS RAB + Interactive / UL:16 DL:16 kbps / PS RAB + Interactive / UL:16 DL:16 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.2.4.1.59.1 Uplink

6.10.2.4.1.59.1.1 Transport channel parameters

6.10.2.4.1.59.1.1.1 Transport channel parameters for Conversational / speech / UL:42.8 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
PDCP	PDCP header size, bit		8
RLC	Logical channel type		DTCH
	RLC mode		UM
	Payload sizes, bit		920, 304, 96
	Max data rate, bps		46 000
	UMD PDU header, bit		8
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		928, 312, 104
	TFS	TF0, bits	0x928
		TF1, bits	1x104
		TF2, bits	1x312
		TF3, bits	1x928
	TTI, ms		20
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		2 844
	Uplink: Max number of bits/radio frame before rate matching		1 422
	RM attribute		180 to 220

6.10.2.4.1.59.1.1.2 Transport channel parameters for Interactive / UL:16kbps / PS RAB + UL:16 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB	RAB
RLC	Logical channel type		DTCH	DTCH
	RLC mode		AM	AM
	Payload sizes, bit		320	320
	Max data rate, bps		16 000	16 000
	AMD PDU header, bit		16	16
MAC	MAC header, bit		4	4
	MAC multiplexing		2 logical channel multiplexing	
Layer 1	TrCH type		DCH	
	TB sizes, bit		340	
	TFS	TF0, bits	0x340	
		TF1, bits	1x340	
		TF2, bits	2X340	
	TTI, ms		40	
	Coding type		TC	
	CRC, bit		16	
	Max number of bits/TTI after channel coding		2 148	
	Uplink: Max number of bits/radio frame before rate matching		537	
	RM attribute		135 to 175	

6.10.2.4.1.59.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1

6.10.2.4.1.59.1.1.4 TFCS

TFCS size	24
TFCS	(42.8 kbps Conversational RAB, Interactive 16kbps+16kbps RAB, DCCH)= (TF0, TF0, TF0), (TF0, TF0, TF1), (TF0,TF1, TF0),(TF0, TF1,TF1), (TF0,TF2, TF0), (TF0,TF2, TF1) (TF1, TF0, TF0), (TF1, TF0, TF1), (TF1,TF1, TF0), (TF1, TF1,TF1), (TF1,TF2, TF0), (TF1,TF2, TF1) (TF2, TF0, TF0), (TF2, TF0, TF1), (TF2,TF1, TF0), (TF2, TF1,TF1), (TF2,TF2, TF0), (TF2,TF2, TF1) (TF3, TF0, TF0), (TF3, TF0, TF1), (TF3,TF1, TF0), (TF3, TF1,TF1), (TF3,TF2, TF0), (TF3,TF2, TF1)

6.10.2.4.1.59.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	16
	Max number of DPDCH data bits/radio frame	2 400
	Puncturing Limit	0.76

6.10.2.4.1.59.2 Downlink

6.10.2.4.1.59.2.1 Transport channel parameters

6.10.2.4.1.59.2.1.1 Transport channel parameters for Conversational / speech / DL:42.8 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
PDCP	PDCP header size, bit		8
RLC	Logical channel type		DTCH
	RLC mode		UM
	Payload sizes, bit		920, 304, 96
	Max data rate, bps		46 000
	UMD PDU header, bit		8
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		928, 312, 104
	TFS	TF0, bits	0x928
		TF1, bits	1x104
		TF2, bits	1x312
		TF3, bits	1x928
	TTI, ms		20
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		2 844
	RM attribute		180 to 220

6.10.2.4.1.59.2.1.2 Transport channel parameters for Interactive / DL:16kbps / PS RAB + DL:16 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB	RAB
RLC	Logical channel type		DTCH	DTCH
	RLC mode		AM	AM
	Payload sizes, bit		320	320
	Max data rate, bps		16 000	16 000
	AMD PDU header, bit		16	16
MAC	MAC header, bit		4	4
	MAC multiplexing		2 logical channel multiplexing	
Layer 1	TrCH type		DCH	
	TB sizes, bit		340	
	TFS	TF0, bits	0x340	
		TF1, bits	1x340	
		TF2, bits	2x340	
	TTI, ms		40	
	Coding type		TC	
	CRC, bit		16	
	Max number of bits/TTI after channel coding		2 148	
	RM attribute		135 to 175	

6.10.2.4.1.59.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1

6.10.2.4.1.59.2.1.4 TFCS

TFCS size	24
TFCS	(42.8 kbps Conversational RAB, Interactive 16kbps+16kbps RAB, DCCH)= (TF0, TF0, TF0), (TF0, TF0, TF1), (TF0,TF1, TF0),(TF0, TF1,TF1), (TF0,TF2, TF0), (TF0,TF2, TF1) (TF1, TF0, TF0), (TF1, TF0, TF1), (TF1,TF1, TF0), (TF1, TF1,TF1), (TF1,TF2, TF0), (TF1,TF2, TF1) (TF2, TF0, TF0), (TF2, TF0, TF1), (TF2,TF1, TF0), (TF2, TF1,TF1), (TF2,TF2, TF0), (TF2,TF2, TF1) (TF3, TF0, TF0), (TF3, TF0, TF1), (TF3,TF1, TF0), (TF3, TF1,TF1), (TF3,TF2, TF0), (TF3,TF2, TF1)

6.10.2.4.1.59.2.2 Physical channel parameters

DPCH Downlink	DTX position		Flexible
	Spreading factor		32
	DPCCH	Number of TFCI bits/slot	8
		Number of TPC bits/slot	4
		Number of Pilot bits/slot	8
	DPDCH	Number of data bits/slot	140
		Number of data bits/frame	2 100

6.10.2.4.1.60 Conversational / speech / UL:42.8 DL:42.8 kbps / PS RAB + Interactive / UL:16 DL:16 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.2.4.1.60.1 Uplink

6.10.2.4.1.60.1.1 Transport channel parameters

6.10.2.4.1.60.1.1.1 Transport channel parameters for Conversational / speech / UL:42.8 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
PDCP	PDCP header size, bit		8
RLC	Logical channel type		DTCH
	RLC mode		UM
	Payload sizes, bit		920, 304, 96
	Max data rate, bps		46 000
	UMD PDU header, bit		8
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		928, 312, 104
	TFS	TF0, bits	0x928
		TF1, bits	1x104
		TF2, bits	1x312
		TF3, bits	1x928
	TTI, ms		20
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		2 844
	Uplink: Max number of bits/radio frame before rate matching		1 422
	RM attribute		180 to 220

6.10.2.4.1.60.1.1.2 Transport channel parameters for Interactive / UL:16kbps / PS RAB

See clause 6.10.2.4.1.23b.1.1.1

6.10.2.4.1.60.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1

6.10.2.4.1.60.1.1.4 TFCS

TFCS size	24
TFCS	(42.8 kbps Conversational RAB, Interactive 16kbps RAB, DCCH)= (TF0, TF0, TF0), (TF0, TF0, TF1), (TF0,TF1, TF0),(TF0, TF1,TF1), (TF0,TF2, TF0), (TF0,TF2, TF1) (TF1, TF0, TF0), (TF1, TF0, TF1), (TF1,TF1, TF0), (TF1, TF1,TF1), (TF1,TF2, TF0), (TF1,TF2, TF1) (TF2, TF0, TF0), (TF2, TF0, TF1), (TF2,TF1, TF0), (TF2, TF1,TF1), (TF2,TF2, TF0), (TF2,TF2, TF1) (TF3, TF0, TF0), (TF3, TF0, TF1), (TF3,TF1, TF0), (TF3, TF1,TF1), (TF3,TF2, TF0), (TF3,TF2, TF1)

6.10.2.4.1.60.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	16
	Max number of DPDCH data bits/radio frame	2 400
	Puncturing Limit	0.76

6.10.2.4.1.60.2 Downlink

6.10.2.4.1.60.2.1 Transport channel parameters

6.10.2.4.1.60.2.1.1 Transport channel parameters for Conversational / speech / DL:42.8 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
PDCP	PDCP header size, bit		8
RLC	Logical channel type		DTCH
	RLC mode		UM
	Payload sizes, bit		920, 304, 96
	Max data rate, bps		46 000
	UMD PDU header, bit		8
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		928, 312, 104
	TFS	TF0, bits	0x928
		TF1, bits	1x104
		TF2, bits	1x312
		TF3, bits	1x928
	TTI, ms		20
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		2 844
	RM attribute		180 to 220

6.10.2.4.1.60.2.1.2 Transport channel parameters for Interactive / DL:16kbps PS RAB

See clause 6.10.2.4.1.23b.2.1.1

6.10.2.4.1.60.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1

6.10.2.4.1.60.2.1.4 TFCS

TFCS size	24
TFCS	(42.8 kbps Conversational RAB, Interactive 16kbps RAB, DCCH)= (TF0, TF0, TF0), (TF0, TF0, TF1), (TF0,TF1, TF0),(TF0, TF1,TF1), (TF0,TF2, TF0), (TF0,TF2, TF1) (TF1, TF0, TF0), (TF1, TF0, TF1), (TF1,TF1, TF0), (TF1, TF1,TF1), (TF1,TF2, TF0), (TF1,TF2, TF1) (TF2, TF0, TF0), (TF2, TF0, TF1), (TF2,TF1, TF0), (TF2, TF1,TF1), (TF2,TF2, TF0), (TF2,TF2, TF1) (TF3, TF0, TF0), (TF3, TF0, TF1), (TF3,TF1, TF0), (TF3, TF1,TF1), (TF3,TF2, TF0), (TF3,TF2, TF1)

6.10.2.4.1.60.2.2 Physical channel parameters

DPCH Downlink	DTX position		Flexible
	Spreading factor		32
	DPCCH	Number of TFCI bits/slot	8
		Number of TPC bits/slot	4
		Number of Pilot bits/slot	8
	DPDCH	Number of data bits/slot	140
		Number of data bits/frame	2 100

6.10.2.4.1.61 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

6.10.2.4.1.61.1 Uplink

6.10.2.4.1.61.1.1 Transport channel parameters

6.10.2.4.1.61.1.1.1 Transport channel parameters for Conversational / unknown / UL:8 kbps / PS RAB

Higher layer	RAB/Signalling RB	RAB

RLC	Logical channel type		DTCH
	RLC mode		UM
	Payload sizes, bit		320
	Max data rate, bps		8 000
	UMD PDU header, bit		8
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		328 (alt 0, 328) (note)
	TFS	TF0, bits	0x328 (alt 1x0) (note)
		TF1, bits	1x328
	TTI, ms		40
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		1 044
	Uplink: Max number of bits/radio frame before rate matching		261
	RM attribute		135 to 175
NOTE: In case of using this alternative, CRC parity bits are to be attached any time since number of TrBlks are 1 even if there is no data on the RAB (see clause 4.2.1.1 in 3GPP TS 25.212 [14]).			

6.10.2.4.1.61.1.1.2 Transport channel parameters for Interactive or Background / UL:8 kbps / PS RAB

See clause 6.10.2.4.1.38b.1.1.2

6.10.2.4.1.61.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1

6.10.2.4.1.61.1.1.4 TFCS

TFCS size	8
TFCS	(8 kbps Conversational RAB, 8 kbps I/B RAB, DCCH)= (TF0, TF0, TF0), (TF0, TF1, TF0), (TF0, TF0, TF1), (TF0, TF1, TF1), (TF1, TF0, TF0), (TF1, TF1, TF0), (TF1, TF0, TF1), (TF1, TF1, TF1)

6.10.2.4.1.61.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	32
	Max number of DPDCH data bits/radio frame	1 200
	Puncturing Limit	1.0

6.10.2.4.1.61.2 Downlink

6.10.2.4.1.61.2.1 Transport channel parameters

6.10.2.4.1.61.2.1.1 Transport channel parameters for Conversational / unknown / DL:8 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		UM
	Payload sizes, bit		320
	Max data rate, bps		8 000
	AMD PDU header, bit		8
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		328 (alt 0, 328) (note)
	TFS	TF0, bits	0x328 (alt 1x0) (note)
		TF1, bits	1x328
	TTI, ms		40
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		1 044
	RM attribute		135 to 175

NOTE: In case of using this alternative, CRC parity bits are to be attached any time since number of TrBlks are 1 even if there is no data on the RAB (see clause 4.2.1.1 in 3GPP TS 25.212 [14]).

6.10.2.4.1.61.2.1.2 Transport channel parameters for Interactive or Background / DL:8 kbps / PS RAB

See clause 6.10.2.4.1.38b.2.1.2.

6.10.2.4.1.61.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.1.61.2.1.4 TFCS

TFCS size	8
TFCS	(8 kbps Conversational RAB, 8 kbps I/B RAB, DCCH)= (TF0, TF0, TF0), (TF0, TF1, TF0), (TF0, TF0, TF1), (TF0, TF1, TF1), (TF1, TF0, TF0), (TF1, TF1, TF0), (TF1, TF0, TF1), (TF1, TF1, TF1)

6.10.2.4.1.61.2.2 Physical channel parameters

DPCH Downlink	DTX position		Flexible
	Spreading factor		64
	DPCCH	Number of TFCI bits/slot	8
		Number of TPC bits/slot	4
		Number of Pilot bits/slot	8
	DPDCH	Number of data bits/slot	60
		Number of data bits/frame	900

6.10.2.4.1.62 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

6.10.2.4.1.62.1 Uplink

6.10.2.4.1.62.1.1 Transport channel parameters

6.10.2.4.1.62.1.1.1 Transport channel parameters for Conversational / speech / UL: (12.65 8.85 6.6) kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB subflow #1	RAB subflow #2
RLC	Logical channel type		DTCH	
	RLC mode		TM	TM
	Payload sizes, bit		40, 54, 64, 72 (alt. 0, 40, 54, 64, 72)	78, 113, 181
	Max data rate, bps		12 650	
	TrD PDU header, bit		0	
MAC	MAC header, bit		0	
	MAC multiplexing		N/A	
Layer 1	TrCH type		DCH	DCH
	TB sizes, bit		40, 54, 64, 72 (alt. 0, 40, 54, 64, 72)	78, 113, 181
	TFS	TF0, bits	0x72(alt. 1x0) (note)	0x181
		TF1, bits	1x40	1x78
		TF2 bits	1x54	1x113
		TF3, bits	1x64	1x181
		TF4, bits	1x72	N/A
	TTI, ms		20	20
	Coding type		CC 1/3	CC 1/3
	CRC, bit		12	N/A
	Max number of bits/TTI after channel coding		276	567
	Uplink: Max number of bits/radio frame before rate matching		138	284
	RM attribute		180 to 220	170 to 210

NOTE:	In case of using this alternative, CRC parity bits are to be attached to RAB subflow#1 any time since number of TrBlks are 1 even if there is no data on RAB subflow#1 (see clause 4.2.1.1 in 3GPP TS 25.212 [14]).

6.10.2.4.1.62.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.62.1.1.3 TFCS

TFCS size	10
TFCS	(RAB subflow#1, RAB subflow#2, DCCH)= (TF0,TF0,TF0), (TF1,TF0,TF0), (TF2,TF1,TF0), (TF3,TF2,TF0), (TF4,TF3,TF0), (TF0,TF0,TF1), (TF1,TF0,TF1), (TF2,TF1,TF1), (TF3,TF2,TF1), (TF4,TF3,TF1)

6.10.2.4.1.62.1.1.4 TFC subset list

TFC subset list size	3
TFC subset list	0 = {(TF0,TF0,TF0), (TF1,TF0,TF0), (TF2,TF1,TF0), (TF0,TF0,TF1), (TF1,TF0,TF1), (TF2,TF1,TF1)}, 1 = {(TF0,TF0,TF0), (TF1,TF0,TF0), (TF2,TF1,TF0), (TF3,TF2,TF0), (TF0,TF0,TF1), (TF1,TF0,TF1), (TF2,TF1,TF1), (TF3,TF2,TF1)}, 2 = {(TF0,TF0,TF0), (TF1,TF0,TF0), (TF2,TF1,TF0), (TF3,TF2,TF0), (TF4,TF3,TF0), (TF0,TF0,TF1), (TF1,TF0,TF1), (TF2,TF1,TF1), (TF3,TF2,TF1), (TF4,TF3,TF1)}

6.10.2.4.1.62.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	64
	Max number of DPDCH data bits/radio frame	600
	Puncturing Limit	0.84

6.10.2.4.1.62.2 Downlink

6.10.2.4.1.62.2.1 Transport channel parameters

6.10.2.4.1.62.2.1.1 Transport channel parameters for Conversational / speech / DL: (12.65 8.85 6.6) kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB subflow #1	RAB subflow #2
RLC	Logical channel type		DTCH	
	RLC mode		TM	TM
	Payload sizes, bit		0, 40, 54, 64, 72	78, 113, 181
	Max data rate, bps		12 650	
	TrD PDU header, bit		0	
MAC	MAC header, bit		0	
	MAC multiplexing		N/A	
Layer 1	TrCH type		DCH	DCH
	TB sizes, bit		0, 40, 54, 64, 72	78, 113, 181
	TFS (note 1)	TF0, bits	1x0 (note 2)	0x181
		TF1, bits	1x40	1x78
		TF2, bits	1x54	1x113
		TF3, bits	1x64	1x181
		TF4, bits	1x72	N/A
	TTI, ms		20	20
	Coding type		CC 1/3	CC 1/3
	CRC, bit		12	N/A
	Max number of bits/TTI after channel coding		276	567
	RM attribute		180 to 220	170 to 210

NOTE 1: The TrCH corresponding to RAB subflow #1 should be used as the guiding TrCH, (see clause 4.3 in 3GPP TS 25.212 [14]).

NOTE 2: CRC parity bits are to be attached to RAB subflow#1 any time since number of TrBlks are 1 even if there is no data on RAB subflow#1 (see clause 4.2.1.1 in 3GPP TS 25.212 [14]).

6.10.2.4.1.62.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1

6.10.2.4.1.62.2.1.3 Transport channel parameters for DL:0.15 kbps SRB#5 for DCCH

Higher layer	RAB/signalling RB		SRB#5
	User of Radio Bearer		RRC
RLC	Logical channel type		DCCH
	RLC mode		TM
	Payload sizes, bit		3
	Max data rate, bps		150
	TrD PDU header, bit		0
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		3 (alt 0, 3) (note)
	TFS	TF0, bits	0x3 (alt 1x0) (note)
		TF1, bits	1x3
	TTI, ms		20
	Coding type		CC 1/3
	CRC, bit		8
	Max number of bits/TTI before rate matching		57
	RM attribute		155 to 256
NOTE: Alternative parameters enable the measurement "transport channel BLER" in the UE.			

6.10.2.4.1.62.2.1.4 TFCS

TFCS size	20
TFCS	(RAB subflow#1, RAB subflow#2, DCCH 3.4, DCCH 0.15)= (TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0), (TF2,TF1,TF0,TF0), (TF3,TF2,TF0,TF0), (TF4,TF3,TF0,TF0), (TF0,TF0,TF1,TF0), (TF1,TF0,TF1,TF0), (TF2,TF1,TF1,TF0), (TF3,TF2,TF1,TF0), (TF4,TF3,TF1,TF0), (TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF1), (TF2,TF1,TF0,TF1), (TF3,TF2,TF0,TF1), (TF4,TF3,TF0,TF1), (TF0,TF0,TF1,TF1), (TF1,TF0,TF1,TF1), (TF2,TF1,TF1,TF1), (TF3,TF2,TF1,TF1), (TF4,TF3,TF1,TF1)

6.10.2.4.1.62.2.2 Physical channel parameters

DPCH Downlink	DTX position		Fixed
	Spreading factor		128
	DPCCH	Number of TFCI bits/slot	0
		Number of TPC bits/slot	2
		Number of Pilot bits/slot	4
	DPDCH	Number of data bits/slot	34
		Number of data bits/frame	510

6.10.2.4.1.63 Interactive or background / UL:64 DL:768 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH

6.10.2.4.1.63.1 Uplink

See clause 6.10.2.4.1.26.1.

6.10.2.4.1.63.2 Downlink

6.10.2.4.1.63.2.1 Transport channel parameters

6.10.2.4.1.63.2.1.1 Transport channel parameters for Interactive or background / DL:768 kbps / PS RAB

Higher layer	RAB/Signalling RB	RAB
RLC	Logical channel type	DTCH
	RLC mode	AM
	Payload sizes, bit	320
	Max data rate, bps	768 000

	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		336
	TFS	TF0, bits	0x336
		TF1, bits	1x336
		TF2, bits	2x336
		TF3, bits	4x336
		TF4, bits	8x336
		TF5, bits	12x336
		TF6, bits	16x336
		TF7, bits	20x336
		TF8, bits	24x336
		TF9, bits	N/A (alt 28x336)
		TF10, bits	N/A (alt 32x336)
		TF11, bits	N/A (alt 36x336)
		TF12, bits	N/A (alt 40x336)
		TF13, bits	N/A (alt 44x336)
		TF14, bits	N/A (alt 48x336)
	TTI, ms		10 (alt 20)
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		25 368 (alt 50 736)
	RM attribute		110 to 150

6.10.2.4.1.63.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.1.63.2.1.3 TFCS

TFCS size	18 (alt. 30)
TFCS	(768 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF3, TF0), (TF4, TF0), (TF5, TF0), (TF6, TF0), (TF7, TF0), (TF8, TF0), (TF0, TF1), (TF1, TF1), (TF2, TF1), (TF3, TF1), (TF4, TF1), (TF5, TF1), (TF6, TF1), (TF7, TF1), (TF8, TF1) (alt . (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF3, TF0), (TF4, TF0), (TF5, TF0), (TF6, TF0), (TF7, TF0), (TF8, TF0), (TF9, TF0), (TF10, TF0), (TF11, TF0), (TF12, TF0), (TF13, TF0), (TF14, TF0) (TF0, TF1), (TF1, TF1), (TF2, TF1), (TF3, TF1), (TF4, TF1), (TF5, TF1), (TF6, TF1), (TF7, TF1), (TF8, TF1) (TF9, TF1), (TF10, TF1), (TF11, TF1), (TF12, TF1), (TF13, TF1), (TF14, TF1))

6.10.2.4.1.63.2.2 Physical channel parameters

DPCH Downlink	DTX position		Flexible
	Spreading factor		8
	Number of DPCH		2
	DPCCH	Number of TFCI bits/slot	8
		Number of TPC bits/slot	8
		Number of Pilot bits/slot	16
	DPDCH	Number of data bits/slot	608
		Number of data bits/frame	9 120

6.10.2.4.2 Combinations on PDSCH and DPCH

6.10.2.4.2.1 Void

6.10.2.4.2.2 Interactive or background / UL:64 DL:384 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH

6.10.2.4.2.2.1 Uplink

See clause 6.10.2.4.1.26.1.

6.10.2.4.2.2.2 Downlink

6.10.2.4.2.2.2.1 Transport channel parameters

6.10.2.4.2.2.2.1.1 Transport channel parameters for Interactive or background / DL:384 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		320
	Max data rate, bps		384 000
	AMD PDU header, bit		16
MAC	MAC header, bit		18
	MAC multiplexing		Logical channel multiplexing on a frame by frame basis
Layer 1	TrCH type		DSCH
	TB sizes, bit		354
	TFS	TF0, bits	0x354
		TF1, bits	1x354
		TF2, bits	2x354
		TF3, bits	4 x354
		TF4, bits	8 x354
		TF5, bits	12 x354
		TF6, bits	N/A (alt. 16x354)
		TF7, bits	N/A (alt. 20x354)
		TF8, bits	N/A (alt. 24x354)
	TTI, ms		10 (alt. 20)
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		13 332 (alt. 26 664)
	RM attribute		110 to 150

6.10.2.4.2.2.2.1.2 Transport channel parameters for DL: 3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.2.2.2.1.3 TFCS

PDSCH	TFCS size	6 (alt.9)
	TFCS	384 kbps RAB = TF0, TF1, TF2, TF3, TF4, TF5 (alt. TF0, TF1, TF2, TF3, TF4, TF5, TF6, TF7, TF8)
DPCH Downlink associated with PDSCH	TFCS size	2
	TFCS	SRBs for DCCH = TF0, TF1

6.10.2.4.2.2.2 Physical channel parameters

PDSCH	RAB or SRB, TrCh		**Interactive or background / 384 kbps / PS RAB, DSCH**
	DTX position		N/A (SingleTrCH)
	Minimum spreading factor		8
DPCH Downlink associated with PDSCH	RAB or SRB, TrCh		**3.4 kbps SRB for DCCH, DCH**
	DTX position		N/A (SingleTrCH)
	Spreading factor		256
	DPCCH	Number of TFCI bits/slot	2
		Number of TPC bits/slot	2
		Number of Pilot bits/slot	4
	DPDCH	Number of data bits/slot	12
		Number of data bits/frame	180

6.10.2.4.2.3 Interactive or background / UL:64 DL:2 048 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH

6.10.2.4.2.3.1 Uplink

See clause 6.10.2.4.1.26.1.

6.10.2.4.2.3.2 Downlink

6.10.2.4.2.3.2.1 Transport channel parameters

6.10.2.4.2.3.2.1.1 Transport channel parameters for Interactive or background / DL:2 048 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		640
	Max data rate, bps		2 048 000
	AMD PDU header, bit		16
MAC	MAC header, bit		18
	MAC multiplexing		Logical channel multiplexing on a frame by frame basis
Layer 1	TrCH type		DSCH
	TB sizes, bit		674
	TFS	TF0, bits	0x674
		TF1, bits	1x674
		TF2, bits	2x674
		TF3, bits	4 x674
		TF4, bits	8 x674
		TF5, bits	12x674
		TF6, bits	16x674
		TF7, bits	20x674
		TF8, bits	24x674
		TF9, bits	28x674
		TF10, bits	32x674
		TF11, bits	N/A (alt. 36x674)
		TF12, bits	N/A (alt. 40x674)
		TF13, bits	N/A (alt. 44x674)
		TF14, bits	N/A (alt. 48x674)
		TF15, bits	N/A (alt. 52x674)
		TF16, bits	N/A (alt. 56x674)
		TF17, bits	N/A (alt. 60x674)
		TF18, bits	N/A (alt. 64x674)
	TTI, ms		10 (alt. 20)
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		66 300 (alt. 132 588)
	RM attribute		130 to 170

6.10.2.4.2.3.2.1.2 Transport channel parameters for DL: 3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1

6.10.2.4.2.3.2.1.3 TFCS

PDSCH	TFCS size	11 (alt.19)
	TFCS	2 048 kbps RAB = TF0, TF1, TF2, TF3, TF4, TF5, TF6, TF7, TF8, TF9, TF10 (alt. TF0, TF1, TF2, TF3, TF4, TF5, TF6, TF7, TF8, TF9, TF10, TF11, TF12, TF13, TF14, TF15, TF16, TF17, TF18)
DPCH Downlink associated with PDSCH	TFCS size	2
	TFCS	SRBs for DCCH = TF0, TF1

6.10.2.4.2.3.2.2 Physical channel parameters

PDSCH	RAB or SRB, TrCh	**Interactive or background / 2 048 kbps / PS RAB, DSCH**
	DTX position	N/A (SingleTrCH)
	Minimum spreading factor	4
DPCH Downlink associated	RAB or SRB, TrCh	3.4 kbps SRB for DCCH, DCH
	DTX position	N/A (SingleTrCH)
	Spreading factor	256

with PDSCH	DPCCH	Number of TFCI bits/slot	2
		Number of TPC bits/slot	2
		Number of Pilot bits/slot	4
	DPDCH	Number of data bits/slot	12
		Number of data bits/frame	180

6.10.2.4.2.4 Void

6.10.2.4.2.5 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

6.10.2.4.2.5.1 Uplink

See clause 6.10.2.4.1.40.1.

6.10.2.4.2.5.2 Downlink

6.10.2.4.2.5.2.1 Transport channel parameters

6.10.2.4.2.5.2.1.1 Transport channel parameters for Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB

See clause 6.10.2.4.1.4.2.1.1.

6.10.2.4.2.5.2.1.2 Transport channel parameters for Interactive or background / DL:384 kbps / PS RAB

See clause 6.10.2.4.2.2.1.1.

6.10.2.4.2.5.2.1.3 Transport channel parameters for DL: 3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.2.5.2.1.4 TFCS

PDSCH	TFCS size	6 (alt.9)
	TFCS	384 kbps RAB = TF0, TF1, TF2, TF3, TF4, TF5 (alt. TF0, TF1, TF2, TF3, TF4, TF5, TF6, TF7, TF8)
DPCH Downlink associated with PDSCH	TFCS size	6
	TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, DCCH) = (TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0), (TF2, TF1, TF1, TF0), (TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF1), (TF2, TF1, TF1, TF1)

6.10.2.4.2.5.2.2 Physical channel parameters

PDSCH	RAB or SRB, TrCh		**Interactive or background / 384 kbps / PS RAB, DSCH**
	DTX position		N/A (SingleTrCH)
	Minimum spreading factor		8
DPCH Downlink associated with PDSCH	RAB or SRB, TrCh		Conversational / speech / 12.2 kbps / CS RAB, DCH **+ 3.4 kbps SRBs for DCCH. DCH**
	DTX position		Fixed
	Spreading factor		128
	DPCCH	Number of TFCI bits/slot	2
		Number of TPC bits/slot	2
		Number of Pilot bits/slot	4
	DPDCH	Number of data bits/slot	32
		Number of data bits/frame	480

6.10.2.4.2.6 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:2 048 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.2.4.2.6.1 Uplink

See clause 6.10.2.4.1.40.1.

6.10.2.4.2.6.2 Downlink

6.10.2.4.2.6.2.1 Transport channel parameters

6.10.2.4.2.6.2.1.1 Transport channel parameters for Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB

See clause 6.10.2.4.1.4.2.1.1.

6.10.2.4.2.6.2.1.2 Transport channel parameters for Interactive or background / DL:2 048 kbps / PS RAB

See clause 6.10.2.4.2.3.2.1.1.

6.10.2.4.2.6.2.1.3 Transport channel parameters for DL: 3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.2.6.2.1.4 TFCS

PDSCH	TFCS size	11 (alt.19)
	TFCS	2 048 kbps RAB =TF0, TF1, TF2, TF3, TF4, TF5, TF6, TF7, TF8, TF9, TF10 (alt. TF0, TF1, TF2, TF3, TF4, TF5, TF6, TF7, TF8, TF9, TF10, TF11, TF12, TF13, TF14, TF15, TF16, TF17, TF18)
DPCH Downlink associated with PDSCH	TFCS size	6
	TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, DCCH) = (TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0), (TF2, TF1, TF1, TF0), (TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF1), (TF2, TF1, TF1, TF1)

6.10.2.4.2.6.2.2 Physical channel parameters

PDSCH	RAB or SRB, TrCh		**Interactive or background / 2 048 kbps / PS RAB, DSCH**
	DTX position		N/A (SingleTrCH)
	Minimum spreading factor		4
DPCH Downlink associated with PDSCH	RAB or SRB, TrCh		Conversational / speech / 12.2 kbps / CS RAB, DCH **+ 3.4 kbps SRBs for DCCH. DCH**
	DTX position		Fixed
	Spreading factor		128
	DPCCH	Number of TFCI bits/slot	2
		Number of TPC bits/slot	2
		Number of Pilot bits/slot	4
	DPDCH	Number of data bits/slot	32
		Number of data bits/frame	480

6.10.2.4.3 Combinations on SCCPCH

6.10.2.4.3.1 Stand-alone signalling RB for PCCH

6.10.2.4.3.1.1 Transport channel parameters

6.10.2.4.3.1.1.1 Transport channel parameter of SRB for PCCH

Higher layer	RAB/signalling RB		SRB
	User of Radio Bearer		RRC
RLC	Logical channel type		PCCH
	RLC mode		TM
	Payload sizes, bit		240 (alt. 80)
	Max data rate, bps		24 000 (alt. 8 000)
	TrD PDU header, bit		0
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		PCH
	TB sizes, bit		240 (alt. 80)
	TFS	TF0, bts	0x240 (alt. 0x80)
		TF1, bits	1x240 (alt. 1x80)
	TTI, ms		10

	Coding type	CC 1/2
	CRC, bit	16
	Max number of bits/TTI before rate matching	528 (alt. 208)
	RM attribute	210 to 250

6.10.2.4.3.1.1.2 TFCS

TFCS size	2
TFCS	SRBs for PCCH = TF0, TF1

6.10.2.4.3.1.2 Physical channel parameters

SCCPCH	TFCS size	2
	DTX position	Fixed
	Spreading factor	128 (alt. 256)
	Number of TFCI bits/slot	0
	Number of Pilot bits/slot	0
	Number of data bits/slot	40 (alt. 20)
	Number of data bits/frame	600 (alt. 300)

6.10.2.4.3.2 Interactive/Background 32 kbps PS RAB + SRBs for CCCH + SRB for DCCH + SRB for BCCH

6.10.2.4.3.2.1 Transport channel parameters

6.10.2.4.3.2.1.1 Transport channel parameters for Interactive/Background 32 kbps PS RAB

Higher layer	RAB/signalling RB		RAB
	User of Radio Bearer		Interactive/ Background RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		320
	Max data rate, bps		32 000
	AMD PDU header, bit		16
MAC	MAC header, bit		24
	MAC multiplexing		N/A
Layer 1	TrCH type		FACH
	TB sizes, bit		360
	TFS	TF0, bits	0x360
		TF1, bits	1x360
	TTI, ms		10
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI before rate matching		1 140
	RM attribute		110 to 150

6.10.2.4.3.2.1.2 Transport channel parameters of SRBs for CCCH, SRB for DCCH, and SRB for BCCH

Higher layer	RAB/signalling RB	SRB#0	SRB#1	SRB#2	SRB#3	SRB#4	SRB#5
	User of Radio Bearer	RRC	RRC	RRC	NAS_DT High prio	NAS_DT Low prio	RRC
RLC	Logical channel type	CCCH	DCCH	DCCH	DCCH	DCCH	BCCH
	RLC mode	UM	UM	AM	AM	AM	TM
	Payload sizes, bit	152	136 or 120 (note)	128	128	128	166
	Max data rate, bps	30 400 (alt. 45 600)	27 200 or 24 000 (alt. 40 800 or 36 000)	25 600 (alt. 38 400)	25 600 (alt. 38 400)	25 600 (alt. 38 400)	33 200 (alt. 49 800)

Higher layer	RAB/signalling RB	SRB#0	SRB#1	SRB#2	SRB#3	SRB#4	SRB#5
	User of Radio Bearer	RRC	RRC	RRC	NAS_DT High prio	NAS_DT Low prio	RRC
	AMD/UMD/TrD PDU header, bit	8	8	16	16	16	0
MAC	MAC header, bit	8	24 or 40	24	24	24	2
	MAC multiplexing	6 logical channel multiplexing					
Layer 1	TrCH type	FACH					
	TB sizes, bit	168					
	TFS TF0, bits	0x168					
	TFS TF1, bits	1x168					
	TFS TF2, bits	2x168					
	TFS TF3, bits	N/A (alt. 3x168)					
	TTI, ms	10					
	Coding type	CC 1/2					
	CRC, bit	16					
	Max number of bits/TTI before rate matching	752 (alt. 1 136)					
	RM attribute	200 to 240					
NOTE: MAC header size and PLC payload size depend on use of U-RNTI or C-RNTI.							

6.10.2.4.3.2.1.3 TFCS

TFCS size	4 or 5, (alt. 4, 5 or 6)
TFCS	(SRBs for CCCH/DCCH/BCCH, 32kbps RAB) = (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF0, TF1), [TF1, TF1] (note) (alt. (TF0, TF0), (TF1, TF0), (TF2, TF0), [TF3, TF0] (note), (TF0, TF1), [TF1, TF1] (note))
NOTE: These TFCs are available only if SCCPCH can be allocated bigger Tx power than required Tx power for TFC of (TF2, TF0).	

6.10.2.4.3.2.2 Physical channel parameters

SCCPCH	DTX position	Flexible
	Spreading factor	64
	Number of TFCI bits/slot	8
	Number of Pilot bits/slot	0
	Number of data bits/slot	72
	Number of data bits/frame	1 080

6.10.2.4.3.2a Interactive/Background 32 kbps PS RAB + Interactive/Background 32 kbps PS RAB + SRBs for CCCH + SRB for DCCH + SRB for BCCH

6.10.2.4.3.2a.1 Transport channel parameters

6.10.2.4.3.2a.1.1 Transport channel parameters for Interactive or background / 32 kbps / PS RAB + 32 kbps / PS RAB

Higher layer	RAB/Signalling RB	RAB	RAB
RLC	Logical channel type	DTCH	DTCH
	RLC mode	AM	AM
	Payload sizes, bit	320	320
	Max data rate, bps	32 000	32 000
	AMD PDU header, bit	16	16
MAC	MAC header, bit	24	24
	MAC multiplexing	2 logical channel multiplexing	
Layer 1	TrCH type	FACH	
	TB sizes, bit	360	
	TFS TF0, bits	0x360	
	TFS TF1, bits	1x360	
	TTI, ms	10	
	Coding type	TC	
	CRC, bit	16	
	Max number of bits/TTI after channel coding	1 140	

	RM attribute	110 to 150

6.10.2.4.3.2a.1.2 Transport channel parameters of SRBs for CCCH, SRB for DCCH, and SRB for BCCH

See clause 6.10.2.4.3.2.1.2

6.10.2.4.3.2a.1.3 TFCS

TFCS size	4 or 5 (alt. 4, 5 or 6)
TFCS	(SRBs for CCCH/DCCH/BCCH, 32kbps RAB + 32kbps RAB) = (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF0, TF1), [TF1, TF1] (note) (alt. (TF0, TF0), (TF1, TF0), (TF2, TF0), [TF3, TF0] (note), (TF0, TF1), [TF1, TF1] (note))
NOTE: These TFCs are available only if SCCPCH can be allocated bigger Tx power than required Tx power for TFC of (TF2, TF0).	

6.10.2.4.3.2a.2 Physical channel parameters

SCCPCH	DTX position	Flexible
	Spreading factor	64
	Number of TFCI bits/slot	8
	Number of Pilot bits/slot	0
	Number of data bits/slot	72
	Number of data bits/frame	1 080

6.10.2.4.3.3 Interactive/Background 32 kbps RAB + SRB for PCCH + SRB for CCCH + SRB for DCCH + SRB for BCCH

6.10.2.4.3.3.1 Transport channel parameters

6.10.2.4.3.3.1.1 Transport channel parameters of SRB for Interactive/Background 32 kbps RAB

See clause 6.10.2.4.3.2.1.

6.10.2.4.3.3.1.2 Transport channel parameters of SRB for PCCH

See clause 6.10.2.4.3.1.1.

6.10.2.4.3.3.1.3 Transport channel parameters of SRBs for CCCH, SRB for DCCH, and SRB for BCCH

See clause 6.10.2.4.3.2.1.2

6.10.2.4.3.3.1.4 TFCS

TFCS size	6, 7 or 8 for 240 bits PCH TrBlk size and TF3 not used (alt 6, 7, 8 or 9 for 80 bits PCH TrBlk size and TF3 not used) (alt 6, 7, 8 or 9 for 240 bits PCH TrBlk size and TF3 used) (alt. 6, 7, 8, 9, 10, or 11 for 80 bits PCH TrBlk size and TF3 used)
TFCS	(SRB for PCCH, SRBs for CCCH/ DCCH/ BCCH, 32 kbps RAB) = (TF0, TF0, TF0), (TF1, TF0, TF0), (TF0, TF1, TF0), (TF1, TF1, TF0), (TF0, TF2, TF0), [TF1, TF2, TF0] (see note), (TF0, TF0, TF1), [TF0, TF1, TF1] (see note) for 240 bits PCH TrBlk size and TF3 not used (alt. (TF0, TF0, TF0), (TF1, TF0, TF0), (TF0, TF1, TF0), (TF1, TF1, TF0), (TF0, TF2, TF0), [TF1, TF2, TF0] (see note), (TF0, TF0, TF1), [TF1, TF0, TF1] (see note), [TF0, TF1, TF1] (see note) for 80 bits PCH TrBlk size and TF3 not used) (alt. (TF0, TF0, TF0), (TF1, TF0, TF0), (TF0, TF1, TF0), (TF1, TF1, TF0), (TF0, TF2, TF0), [TF1, TF2, TF0] (see note), [TF0, TF3, TF0] (see note), (TF0, TF0, TF1), [TF0, TF1, TF1] (see note) for 240 bits PCH TrBlk size and TF3 used) (alt. (TF0, TF0, TF0), (TF1, TF0, TF0), (TF0, TF1, TF0), (TF1, TF1, TF0), (TF0, TF2, TF0), [TF1, TF2, TF0] (see note), [TF0, TF3, TF0] (see note), [TF1, TF3, TF0] (see note), (TF0, TF0, TF1), [TF1, TF0, TF1] (see note), [TF0, TF1, TF1] (see note) for 80 bits PCH TrBlk size and TF3 used)
NOTE: These TFCs are available only if SCCPCH can be allocated bigger Tx power than required Tx power for TFC of (TF0, TF2, TF0).	

6.10.2.4.3.3.2 Physical channel parameters

SCCPCH	DTX position	Flexible
	Spreading factor	64
	Number of TFCI bits/slot	8
	Number of Pilot bits/slot	0
	Number of data bits/slot	72
	Number of data bits/frame	1 080

6.10.2.4.3.4 RB for CTCH + SRB for CCCH + SRB for BCCH

6.10.2.4.3.4.1 Transport channel parameters

6.10.2.4.3.4.1.1 Transport channel parameters of RB for CTCH

Higher layer	RAB/signalling RB		N/A
	User of Radio Bearer		BMC
RLC	Logical channel type		CTCH
	RLC mode		UM
	Payload sizes, bit		152
	Max data rate, bps		15 200
	UMD PDU header, bit		8
MAC	MAC header, bit		8
	MAC multiplexing		N/A
Layer 1	TrCH type		FACH
	TB sizes, bit		168
	TFS	TF0, bts	0x168
		TF1, bits	1x168
	TTI, ms		10
	Coding type		CC 1/3
	CRC, bit		16
	Max number of bits/TTI before rate matching		576
	RM attribute		200 to 240

6.10.2.4.3.4.1.2 Transport channel parameters of SRB for CCCH and SRB for BCCH

Higher layer	RAB/signalling RB		SRB#0	SRB#5
	User of Radio Bearer		RRC	RRC
RLC	Logical channel type		CCCH	BCCH
	RLC mode		UM	TM
	Payload sizes, bit		152	166
	Max data rate, bps		15 200	16 600
	AMD/UMD/TrD PDU header, bit		8	0
MAC	MAC header, bit		8	2
	MAC multiplexing		2 logical channel multiplexing	
Layer 1	TrCH type		FACH	
	TB sizes, bit		168	
	TFS	TF0, bits	0x168	
		TF1, bits	1x168	
	TTI, ms		10	
	Coding type		CC 1/3	
	CRC, bit		16	
	Max number of bits/TTI before rate matching		576	
	RM attribute		200 to 240	

6.10.2.4.3.4.1.3 TFCS

TFCS size	3
TFCS	(SRBs for CCCH/ BCCH, RB for CTCH) = (TF0, TF0), (TF1, TF0), (TF0, TF1)

6.10.2.4.3.4.2 Physical channel parameters

SCCPCH	DTX position	Flexible
	Spreading factor	128
	Number of TFCI bits/slot	2
	Number of Pilot bits/slot	0
	Number of data bits/slot	38
	Number of data bits/frame	570

6.10.2.4.4 Combinations on PRACH

6.10.2.4.4.1 Interactive/Background 32 kbps PS RAB + SRB for CCCH + SRB for DCCH

6.10.2.4.4.1.1 Transport channel parameters

6.10.2.4.4.1.1.1 Transport channel parameter for Interactive/Background 32 kbps PS RAB, SRB for CCCH, SRB for DCCH

Higher layer	RAB/signalling RB	RAB	SRB#0	SRB#1	SRB#2	SRB#3	SRB#4
	User of Radio Bearer	Interactive/ Background RAB	RRC	RRC	RRC	NAS_DT High prio	NAS_DT Low prio
RLC	Logical channel type	DTCH	CCCH	DCCH	DCCH	DCCH	DCCH
	RLC mode	AM	TM	UM	AM	AM	AM
	Payload sizes, bit	320	166	136	128	128	128
	Max data rate, bps	32 000	16 600	13 600	12 800	12 800	12 800
	AMD/UMD/TrD PDU header, bit	16	0	8	16	16	16
MAC	MAC header, bit	24	2	24	24	24	24
	MAC multiplexing	6 logical channel multiplexing					
Layer 1	TrCH type	RACH					
	TB sizes, bit	360	168	168	168	168	168
	TFS TF0, bits	1x168					
	TFS TF1, bits	1x360					
	TTI, ms	20 (alt. 10)					
	Coding type	CC 1/2					
	CRC, bit	16					
	Max number of bits/TTI after channel coding	768	384	384	384	384	384
	Max number of bits/ Radio frame before rate matching	384 (alt. 768)	192 (alt. 384)	192 (alt. 384)	192 (alt. 384)	192 (alt. 384)	192 (alt. 384)

6.10.2.4.4.1.1.2 TFCS

TFCS size	2
TFCS	32 kbps + SRBs for CCCH/ DCCH = TF0, TF1

6.10.2.4.4.1.2 Physical channel parameters

PRACH	Minimum Spreading factor	64 (alt. 32)
	Max number of data bits/radio frame	600 (alt. 1 200)
	Puncturing Limit	1

6.10.2.4.4.2 Interactive/Background 32 kbps PS RAB + Interactive/Background 32 kbps PS RAB + SRB for CCCH + SRB for DCCH

6.10.2.4.4.2.1 Transport channel parameters

6.10.2.4.4.2.1.1 Transport channel parameters for Interactive/Background 32 kbps PS RAB, Interactive/Background 32 kbps PS RAB, SRB for CCCH, SRB for DCCH

Higher	RAB/signalling RB	RAB	RAB	SRB#0	SRB#1	SRB#2	SRB#3	SRB#4

	User of Radio Bearer	Interactive/ Background RAB	Interactive/ Background RAB	RRC	RRC	RRC	NAS_DT High prio	NAS_DT Low prio
RLC	Logical channel type	DTCH	DTCH	CCCH	DCCH	DCCH	DCCH	DCCH
	RLC mode	AM	AM	TM	UM	AM	AM	AM
	Payload sizes, bit	320	320	166	136	128	128	128
	Max data rate, bps	32 000	32 000	16 600	13 600	12 800	12 800	12 800
	AMD/UMD/TrD PDU header, bit	16	16	0	8	16	16	16
MAC	MAC header, bit	24	24	2	24	24	24	24
	MAC multiplexing	7 logical channel multiplexing						
Layer 1	TrCH type	RACH						
	TB sizes, bit	360	360	168	168	168	168	168
	TFS TF0, bits	1x168						
	TFS TF1, bits	1x360						
	TTI, ms	20 (alt. 10)						
	Coding type	CC 1/2						
	CRC, bit	16						
	Max number of bits/TTI after channel coding	768	768	384	384	384	384	384
	Max number of bits/ Radio frame before rate matching	384 (alt. 768)	384 (alt 768)	192 (alt. 384)	192 (alt. 384)	192 (alt. 384)	192 (alt. 384)	192 (alt. 384)

6.10.2.4.4.2.1.2 TFCS

TFCS size	2
TFCS	32 kbps RAB+ 32 kbps RAB + SRBs for CCCH/ DCCH = TF0, TF1

6.10.2.4.4.2.2 Physical channel parameters

PRACH	Minimum Spreading factor	64 (alt. 32)
	Max number of data bits/radio frame	600 (alt. 1 200)
	Puncturing Limit	1

6.10.2.4.5 Combinations on DPCH and HS-PDSCH

6.10.2.4.5.1 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

6.10.2.4.5.1.1 Uplink

See clause 6.10.2.4.1.26.1.

6.10.2.4.5.1.2 Downlink

6.10.2.4.5.1.2.1 Transport channel parameters

6.10.2.4.5.1.2.1.1 Transport channel parameters for HS-DSCH

####### 6.10.2.4.5.1.2.1.1.1 MAC-d flow parameters for Interactive or background / DL: [max bit rate depending on UE category] / PS RAB

Higher layer	RAB/Signalling RB	RAB
RLC	Logical channel type	DTCH
	RLC mode	AM
	Payload sizes, bit	320 (alt. 640)
	Max data rate, bps	depends on UE category NOTE1
	AMD PDU header, bit	16

MAC	MAC-d header, bit	0
	MAC multiplexing	N/A
	MAC-d PDU size, bit	336 (alt. 656)
	MAC-hs header fixed part, bit	21
Layer 1	TrCH type	HS-DSCH
	TTI	2 ms
	Coding type	TC
	CRC, bit	24
NOTE: The peak throughput may be limited by the maximum number of MAC-d PDUs that can be included in a single MAC-hs PDU (see 3GPP TS 25.321 [38]).		

6.10.2.4.5.1.2.1.2 Transport channel parameters for DCH

6.10.2.4.5.1.2.1.2.1 Transport channel parameters for UL:3.4 DL: 3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.5.1.2.1.2.2 TFCS

See clause 6.10.2.4.1.2.2.1.2.

6.10.2.4.5.1.2.2 Physical channel parameters

6.10.2.4.5.1.2.2.1 Physical channel parameters on DPCH

See clause 6.10.2.4.1.2.2.2.

6.10.2.4.5.1.2.2.2 Physical channel parameters on HS-PDSCH

Note that each alternative configuration in physical channel parameters is stand-alone and can be associated with any of the RAB alternatives in the transport channel parameters.

UE HS-DSCH Physical Layer category 1:

HS-PDSCH	Number of processes	2, (alt. 8)
	Process memory size	Split equally among all processes
	Max Data Rate	1.2 Mbps, (alt. 400 kbps)

UE HS-DSCH Physical Layer category 2:

HS-PDSCH	Number of processes	2, (alt. 8)
	Process memory size	Split equally among all processes
	Max Data Rate	1.2 Mbps, (alt. 600 kbps)]

UE HS-DSCH Physical Layer category 3:

HS-PDSCH	Number of processes	3, (alt. 8)
	Process memory size	Split equally among all processes
	Max Data Rate	1.8 Mbps, (alt. 900 kbps)

UE HS-DSCH Physical Layer category 4:

HS-PDSCH	Number of processes	3, (alt. 8)
	Process memory size	Split equally among all processes
	Max Data Rate	1.8 Mbps, (alt. 1.2 Mbps)

UE HS-DSCH Physical Layer category 5:

HS-PDSCH	Number of processes	6, (alt. 8)
	Process memory size	Split equally among all processes
	Max Data Rate	3.65 Mbps, (alt. 3.6 Mbps)

UE HS-DSCH Physical Layer category 6:

HS-PDSCH	Number of processes	6, (alt. 8)
	Process memory size	Split equally among all processes
	Max Data Rate	3.65 Mbps, (alt. 3.65 Mbps)

UE HS-DSCH Physical Layer category 7:

HS-PDSCH	Number of processes	6, (alt. 8)
	Process memory size	Split equally among all processes
	Max Data Rate	7.2 Mbps, (alt. 7.2 Mbps)

UE HS-DSCH Physical Layer category 8:

HS-PDSCH	Number of processes	6, (alt. 8)
	Process memory size	Split equally among all processes
	Max Data Rate	7.2 Mbps, (alt. 7.2 Mbps)

UE HS-DSCH Physical Layer category 9:

HS-PDSCH	Number of processes	6, (alt. 8)
	Process memory size	Split equally among all processes
	Max Data Rate	10.1 Mbps, (alt. 10.1 Mbps)

UE HS-DSCH Physical Layer category 10:

HS-PDSCH	Number of processes	6, (alt. 8)
	Process memory size	Split equally among all processes
	Max Data Rate	14.0 Mbps, (alt. 10.8 Mbps)

UE HS-DSCH Physical Layer category 11:

HS-PDSCH	Number of processes	3, (alt. 8)
	Process memory size	Split equally among all processes
	Max Data Rate	900 kbps, (alt. 450 kbps)

UE HS-DSCH Physical Layer category 12:

HS-PDSCH	Number of processes	6, (alt. 8)
	Process memory size	Split equally among all processes
	Max Data Rate	1.8 Mbps, (alt. 1.8 Mbps)

6.10.2.4.5.2 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

6.10.2.4.5.2.1 Uplink

See clause 6.10.2.4.1.34.1.

6.10.2.4.5.2.2 Downlink

6.10.2.4.5.2.2.1 Transport channel parameters

6.10.2.4.5.2.2.1.1 Transport channel parameters for HS-DSCH

6.10.2.4.5.2.2.1.1.1 MAC-d flow parameters for Interactive or background / DL: [max bit rate depending on UE category] / PS RAB

See clause 6.10.2.4.5.1.2.1.1.1.

6.10.2.4.5.2.2.1.2 Transport channel parameters for DCH

6.10.2.4.5.2.2.1.2.1 Transport channel parameters for DL: 3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.5.2.2.1.2.2 TFCS

See clause 6.10.2.4.1.2.2.1.2.

6.10.2.4.5.2.2.2 Physical channel parameters

6.10.2.4.5.2.2.2.1 Physical channel parameters on DPCH

See clause 6.10.2.4.1.2.2.2.

6.10.2.4.5.2.2.2.2 Physical channel parameters on HS-PDSCH

See clause 6.10.2.4.5.1.2.2.2.

Note that each alternative configuration in physical channel parameters is stand-alone and can be associated with any of the RAB alternatives in the transport channel parameters.

6.10.2.4.5.3 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:384 DL:[Bit rate depending on the UE category] / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.2.4.5.3.1 Uplink

6.10.2.4.5.3.1.1 Transport channel parameters

6.10.2.4.5.3.1.1.1 Transport channel parameters for Conversational / speech / UL:12.2 kbps / CS RAB

See clause 6.10.2.4.1.4.1.1.1.

6.10.2.4.5.3.1.1.2 Transport channel parameters for Interactive or background / UL:384 kbps / PS RAB

See clause 6.10.2.4.1.34.1.1.1.

6.10.2.4.5.3.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.5.3.1.1.4 TFCS

TFCS size	54 (alt. 36)
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 384 kbps RAB , DCCH)= (TF0, TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0, TF0), (TF2, TF1, TF1, TF0, TF0), (TF0, TF0, TF0, TF1, TF0), (TF1, TF0, TF0, TF1, TF0), (TF2, TF1, TF1, TF1, TF0), (TF0, TF0, TF0, TF2, TF0), (TF1, TF0, TF0, TF2, TF0), (TF2, TF1, TF1, TF2, TF0), (TF0, TF0, TF0, TF3, TF0), (TF1, TF0, TF0, TF3, TF0), (TF2, TF1, TF1, TF3, TF0), (TF0, TF0, TF0, TF4, TF0), (TF1, TF0, TF0, TF4, TF0), (TF2, TF1, TF1, TF4, TF0), (TF0, TF0, TF0, TF5, TF0), (TF1, TF0, TF0, TF5, TF0), (TF2, TF1, TF1, TF5, TF0), (TF0, TF0, TF0, TF6, TF0), (TF1, TF0, TF0, TF6, TF0), (TF2, TF1, TF1, TF6, TF0), (TF0, TF0, TF0, TF7, TF0), (TF1, TF0, TF0, TF7, TF0), (TF2, TF1, TF1, TF7, TF0), (TF0, TF0, TF0, TF8, TF0), (TF1, TF0, TF0, TF8, TF0), (TF2, TF1, TF1, TF8, TF0), (TF0, TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1), (TF0, TF0, TF0, TF1, TF1), (TF1, TF0, TF0, TF1, TF1), (TF2, TF1, TF1, TF1, TF1), (TF0, TF0, TF0, TF2, TF1), (TF1, TF0, TF0, TF2, TF1), (TF2, TF1, TF1, TF2, TF1), (TF0, TF0, TF0, TF3, TF1), (TF1, TF0, TF0, TF3, TF1), (TF2, TF1, TF1, TF3, TF1), (TF0, TF0, TF0, TF4, TF1), (TF1, TF0, TF0, TF4, TF1), (TF2, TF1, TF1, TF4, TF1), (TF0, TF0, TF0, TF5, TF1), (TF1, TF0, TF0, TF5, TF1), (TF2, TF1, TF1, TF5, TF1), (TF0, TF0, TF0, TF6, TF1), (TF1, TF0, TF0, TF6, TF1), (TF2, TF1, TF1, TF6, TF1), (TF0, TF0, TF0, TF7, TF1), (TF1, TF0, TF0, TF7, TF1), (TF2, TF1, TF1, TF7, TF1), (TF0, TF0, TF0, TF8, TF1), (TF1, TF0, TF0, TF8, TF1), (TF2, TF1, TF1, TF8, TF1) (alt. (TF0, TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0, TF0), (TF2, TF1, TF1, TF0, TF0), (TF0, TF0, TF0, TF1, TF0), (TF1, TF0, TF0, TF1, TF0), (TF2, TF1, TF1, TF1, TF0), (TF0, TF0, TF0, TF2, TF0), (TF1, TF0, TF0, TF2, TF0), (TF2, TF1, TF1, TF2, TF0),

	(TF0, TF0, TF0, TF3, TF0), (TF1, TF0, TF0, TF3, TF0), (TF2, TF1, TF1, TF3, TF0), (TF0, TF0, TF0, TF4, TF0), (TF1, TF0, TF0, TF4, TF0), (TF2, TF1, TF1, TF4, TF0), (TF0, TF0, TF0, TF5, TF0), (TF1, TF0, TF0, TF5, TF0), (TF2, TF1, TF1, TF5, TF0), (TF0, TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1), (TF0, TF0, TF0, TF1, TF1), (TF1, TF0, TF0, TF1, TF1), (TF2, TF1, TF1, TF1, TF1), (TF0, TF0, TF0, TF2, TF1), (TF1, TF0, TF0, TF2, TF1), (TF2, TF1, TF1, TF2, TF1), (TF0, TF0, TF0, TF3, TF1), (TF1, TF0, TF0, TF3, TF1), (TF2, TF1, TF1, TF3, TF1), (TF0, TF0, TF0, TF4, TF1), (TF1, TF0, TF0, TF4, TF1), (TF2, TF1, TF1, TF4, TF1), (TF0, TF0, TF0, TF5, TF1), (TF1, TF0, TF0, TF5, TF1), (TF2, TF1, TF1, TF5, TF1))

6.10.2.4.5.3.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	4
	Max number of DPDCH data bits/radio frame	9 600
	Number of DPDCH	1
	Puncturing Limit	0.60

6.10.2.4.5.3.2 Downlink

6.10.2.4.5.3.2.1 Transport channel parameters

6.10.2.4.5.3.2.1.1 Transport channel parameters for HS-DSCH

See clause 6.10.2.4.5.1.2.1.1.1.

6.10.2.4.5.3.2.1.2 Transport channel parameters for DCH

6.10.2.4.5.3.2.1.2.1 Transport channel parameters for Conversational / speech / DL:12.2 kbps / CS RAB

See clause 6.10.2.4.1.4.2.1.1.

6.10.2.4.5.3.2.1.2.2 Transport channel parameters for UL:3.4 DL: 3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.5.3.2.1.2.3 TFCS

See clause 6.10.2.4.1.4.2.1.3.

6.10.2.4.5.3.2.2 Physical channel parameters

6.10.2.4.5.3.2.2.1 Physical channel parameters on DPCH

See clause 6.10.2.4.1.4.2.2.

6.10.2.4.5.3.2.2.2 Physical channel parameters on HS-PDSCH

See clause 6.10.2.4.5.1.2.2.2.

6.10.2.4.5.3a Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:[Bit rate depending on the UE category] / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.2.4.5.3a.1 Uplink

See clause 6.10.2.4.1.40.1.

6.10.2.4.5.3a.2 Downlink

6.10.2.4.5.3a.2.1 Transport channel parameters

6.10.2.4.5.3a.2.1.1 Transport channel parameters for HS-DSCH

See clause 6.10.2.4.5.1.2.1.1.

6.10.2.4.5.3a.2.1.2 Transport channel parameters for DCH

6.10.2.4.5.3a.2.1.2.1 Transport channel parameters for Conversational / speech / DL:12.2 kbps / CS RAB

See clause 6.10.2.4.1.4.2.1.1.

6.10.2.4.5.3a.2.1.2.2 Transport channel parameters for DL: 3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.5.3a.2.1.2.3 TFCS

See clause 6.10.2.4.1.4.2.1.3.

6.10.2.4.5.3a.2.2 Physical channel parameters

6.10.2.4.5.3a.2.2.1 Physical channel parameters on DPCH

See clause 6.10.2.4.1.4.2.2.

6.10.2.4.5.3a.2.2.2 Physical channel parameters on HS-PDSCH

See clause 6.10.2.4.5.1.2.2.2.

6.10.2.4.5.4 Conversational / unknown / UL:64 DL:64 kbps / CS RAB + Interactive or background / UL:384 DL:[Bit rate depending on the UE category] / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.2.4.5.4.1 Uplink

6.10.2.4.5.4.1.1 Transport channel parameters

6.10.2.4.5.4.1.1.1 Transport channel parameters for Conversational / unknown / UL:64 kbps / CS RAB

See clause 6.10.2.4.1.13.1.1.1.

6.10.2.4.5.4.1.1.2 Transport channel parameters for Interactive or background / UL:384 kbps / PS RAB

See clause 6.10.2.4.1.34.1.1.1.

6.10.2.4.5.4.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.5.4.1.1.4 TFCS

TFCS size	36 (alt. 24)
TFCS	(64 kbps RAB, 384 kbps RAB , DCCH)= (TF0, TF0, TF0), (TF1, TF0, TF0), (TF0, TF1, TF0), (TF1, TF1, TF0), (TF0, TF2, TF0), (TF1, TF2, TF0), (TF0, TF3, TF0), (TF1, TF3, TF0), (TF0, TF4, TF0), (TF1, TF4, TF0), (TF0, TF5, TF0), (TF1, TF5, TF0), (TF0, TF6, TF0), (TF1, TF6, TF0), (TF0, TF7, TF0), (TF1, TF7, TF0), (TF0, TF8, TF0), (TF1, TF8, TF0), (TF0, TF0, TF1), (TF1, TF0, TF1), (TF0, TF1, TF1), (TF1, TF1, TF1), (TF0, TF2, TF1), (TF1, TF2, TF1), (TF0, TF3, TF1), (TF1, TF3, TF1), (TF0, TF4, TF1), (TF1, TF4, TF1), (TF0, TF5, TF1), (TF1, TF5, TF1), (TF0, TF6, TF1), (TF1, TF6, TF1), (TF0, TF7, TF1), (TF1, TF7, TF1), (TF0, TF8, TF1), (TF1, TF8, TF1) (alt. (TF0, TF0, TF0), (TF1, TF0, TF0), (TF0, TF1, TF0), (TF1, TF1, TF0), (TF0, TF2, TF0), (TF1, TF2, TF0), (TF0, TF3, TF0), (TF1, TF3, TF0), (TF0, TF4, TF0), (TF1, TF4, TF0), (TF0, TF5, TF0), (TF1, TF5, TF0), (TF0, TF0, TF1), (TF1, TF0, TF1), (TF0, TF1, TF1), (TF1, TF1, TF1), (TF0, TF2, TF1), (TF1, TF2, TF1), (TF0, TF3, TF1), (TF1, TF3, TF1), (TF0, TF4, TF1), (TF1, TF4, TF1), (TF0, TF5, TF1), (TF1, TF5, TF1))

6.10.2.4.5.4.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	4
	Max number of DPDCH data bits/radio frame	9 600
	Number of DPDCH	1

	Puncturing Limit	0.52

6.10.2.4.5.4.2 Downlink

6.10.2.4.5.4.2.1 Transport channel parameters

6.10.2.4.5.4.2.1.1 Transport channel parameters for HS-DSCH

See clause 6.10.2.4.5.1.2.1.1.1.

6.10.2.4.5.4.2.1.2 Transport channel parameters for DCH

6.10.2.4.5.4.2.1.2.1 Transport channel parameters for Conversational / unknown / DL:64 kbps / CS RAB

See clause 6.10.2.4.1.13.2.1.1.

6.10.2.4.5.4.2.1.2.2 Transport channel parameters for UL:3.4 DL: 3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.5.4.2.1.2.3 TFCS

See clause 6.10.2.4.1.13.2.1.3.

6.10.2.4.5.4.2.2 Physical channel parameters

6.10.2.4.5.4.2.2.1 Physical channel parameters on DPCH

See clause 6.10.2.4.1.13.2.2.

6.10.2.4.5.4.2.2.2 Physical channel parameters on HS-PDSCH

See clause 6.10.2.4.5.1.2.2.2.

6.10.2.4.5.4a Conversational / unknown / UL:64 DL:64 kbps / CS RAB + Interactive or background / UL:64 DL:[Bit rate depending on the UE category] / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.2.4.5.4a.1 Uplink

See clause 6.10.2.4.1.51.1.

6.10.2.4.5.4a.2 Downlink

6.10.2.4.5.4a.2.1 Transport channel parameters

6.10.2.4.5.4a.2.1.1 Transport channel parameters for HS-DSCH

See clause 6.10.2.4.5.1.2.1.1.

6.10.2.4.5.4a.2.1.2 Transport channel parameters for DCH

6.10.2.4.5.4a.2.1.2.1 Transport channel parameters for Conversational / unknown / DL:64 kbps / CS RAB

See clause 6.10.2.4.1.13.2.1.1.

6.10.2.4.5.4a.2.1.2.2 Transport channel parameters for DL: 3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.5.4a.2.1.2.3 TFCS

See clause 6.10.2.4.1.13.2.1.3.

6.10.2.4.5.4a.2.2 Physical channel parameters

6.10.2.4.5.4a.2.2.1 Physical channel parameters on DPCH

See clause 6.10.2.4.1.13.2.2.

6.10.2.4.5.4a.2.2.2 Physical channel parameters on HS-PDSCH

See clause 6.10.2.4.5.1.2.2.2.

6.10.2.4.5.5 Interactive or background / UL:384 DL:[Bit rate depending on the UE category] / PS RAB + Interactive or background / UL:384 DL:[Bit rate depending on the UE category] / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH6.10.2.4.5.5.1 Uplink

6.10.2.4.5.5.1.1 Transport channel parameters

6.10.2.4.5.5.1.1.1 Transport channel parameters for Interactive or background / UL:384 kbps / PS RAB + UL:384 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB	RAB
RLC	Logical channel type		DTCH	DTCH
	RLC mode		AM	AM
	Payload sizes, bit		320	320
	Max data rate, bps		384 000	384 000
	AMD PDU header, bit		16	16
MAC	MAC header, bit		4	4
	MAC multiplexing		2 logical channel multiplexing	
Layer 1	TrCH type		DCH	
	TB sizes, bit		340	
	TFS	TF0, bits	0x340	
		TF1, bits	1x340	
		TF2, bits	2x340	
		TF3, bits	4x340	
		TF4, bits	8x340	
		TF5, bits	12x340	
	TTI, ms		10	
	Coding type		TC	
	CRC, bit		16	
	Max number of bits/TTI after channel coding		12 828	
	Uplink: Max number of bits/radio frame before rate matching		12 828	
	RM attribute		110-180	

6.10.2.4.5.5.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.5.5.1.1.3 TFCS

TFCS size	12
TFCS	(384 kbps RAB + 384 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF3, TF0), (TF4, TF0), (TF5, TF0), (TF0, TF1), (TF1, TF1), (TF2, TF1), (TF3, TF1), (TF4, TF1), (TF5, TF1)

6.10.2.4.5.5.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	4
	Max number of DPDCH data bits/radio frame	9 600
	Number of DPDCH	1
	Puncturing Limit	0.64

6.10.2.4.5.5.2 Downlink

6.10.2.4.5.5.2.1 Transport channel parameters

6.10.2.4.5.5.2.1.1 Transport channel parameters for HS-DSCH

6.10.2.4.5.5.2.1.1.1 MAC-d flow parameters for Interactive or background / DL: [max bit rate depending on UE category] / PS RAB

See clause 6.10.2.4.5.1.2.1.1.1.

6.10.2.4.5.5.2.1.1.2 MAC-d flow parameters for Interactive or background / DL: [max bit rate depending on UE category] / PS RAB

See clause 6.10.2.4.5.1.2.1.1.1.

6.10.2.4.5.5.2.1.2 Transport channel parameters for DCH

6.10.2.4.5.5.2.1.2.1 Transport channel parameters for UL:3.4 DL: 3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.5.5.2.1.2.2 TFCS

See clause 6.10.2.4.1.2.2.1.2.

6.10.2.4.5.5.2.2 Physical channel parameters

6.10.2.4.5.5.2.2.1 Physical channel parameters on DPCH

See clause 6.10.2.4.1.2.2.2.

6.10.2.4.5.5.2.2.2 Physical channel parameters on HS-PDSCH

See clause 6.10.2.4.5.1.2.2.2.

6.10.2.4.5.5a Interactive or background / UL:64 DL:[Bit rate depending on the UE category] / PS RAB + Interactive or background / UL:64 DL:[Bit rate depending on the UE category] / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.2.4.5.5a.1 Uplink

See clause 6.10.2.4.1.57.1.

6.10.2.4.5.5a.2 Downlink

6.10.2.4.5.5a.2.1 Transport channel parameters

6.10.2.4.5.5a.2.1.1 Transport channel parameters for HS-DSCH

6.10.2.4.5.5a.2.1.1.1 MAC-d flow parameters for Interactive or background / DL: [max bit rate depending on UE category] / PS RAB

See clause 6.10.2.4.5.1.2.1.1.1.

6.10.2.4.5.5a.2.1.1.2 MAC-d flow parameters for Interactive or background / DL: [max bit rate depending on UE category] / PS RAB

See clause 6.10.2.4.5.1.2.1.1.1.

6.10.2.4.5.5a.2.1.2 Transport channel parameters for DCH

6.10.2.4.5.5a.2.1.2.1 Transport channel parameters for DL: 3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.5.5a.2.1.2.2 TFCS

See clause 6.10.2.4.1.2.2.1.2.

6.10.2.4.5.5a.2.2 Physical channel parameters

6.10.2.4.5.5a.2.2.1 Physical channel parameters on DPCH

See clause 6.10.2.4.1.2.2.2.

6.10.2.4.5.5a.2.2.2 Physical channel parameters on HS-PDSCH

See clause 6.10.2.4.5.1.2.2.2.

6.10.2.4.5.6 Streaming / unknown / UL:128 DL: [guaranteed 128, max bit rate depending on UE category] kbps / PS RAB + Interactive or background / UL:128 DL: [max bit rate depending on UE category] / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.2.4.5.6.1 Uplink

6.10.2.4.5.6.1.1 Transport channel parameters

6.10.2.4.5.6.1.1.1 Transport channel parameters for Streaming / unknown / UL:128 kbps / PS RAB

Higher Layer	RAB/Signalling RB		**RAB**
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		640
	Max data rate, bps		128000
	AM PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		656
	TFS	TF0, bits	0x656
		TF1, bits	1x656
		TF2, bits	2x656
		TF3, bits	4x656
	TTI, ms		20
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		8076
	Uplink: Max number of bits/radio frame before rate matching		4038
	RM attribute		125-165

6.10.2.4.1.6.1.1.2 Transport channel parameters for Interactive or background / UL:128 kbps / PS RAB

See clause 6.10.2.4.1.28.1.1.1.

6.10.2.4.1.6.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.6.1.1.4 TFCS

TFCS size	40
TFCS	(128 kbps RAB, 128 kbps RAB, DCCH)= (TF0, TF0, TF0), (TF1, TF0, TF0), (TF2, TF0, TF0), (TF3, TF0, TF0), (TF0, TF1, TF0), (TF1, TF1, TF0), (TF2, TF1, TF0), (TF3, TF1, TF0), (TF0, TF2, TF0), (TF1, TF2, TF0), (TF2, TF2, TF0), (TF3, TF2, TF0), (TF0, TF3, TF0), (TF1, TF3, TF0), (TF2, TF3, TF0), (TF3, TF3, TF0), (TF0, TF4, TF0), (TF1, TF4, TF0), (TF2, TF4, TF0), (TF3, TF4, TF0), (TF0, TF0, TF1), (TF1, TF0, TF1), (TF2, TF0, TF1), (TF3, TF0, TF1), (TF0, TF1, TF1), (TF1, TF1, TF1), (TF2, TF1, TF1), (TF3, TF1, TF1), (TF0, TF2, TF1), (TF1, TF2, TF1), (TF2, TF2, TF1), (TF3, TF2, TF1), (TF0, TF3, TF1), (TF1, TF3, TF1), (TF2, TF3, TF1), (TF3, TF3, TF1), (TF0, TF4, TF1), (TF1, TF4, TF1), (TF2, TF4, TF1), (TF3, TF4, TF1)

6.10.2.4.1.6.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	4
	Max number of DPDCH data bits/radio frame	9600
	Puncturing Limit	0.96

6.10.2.4.5.6.2 Downlink

6.10.2.4.5.6.2.1 Transport channel parameters

6.10.2.4.5.6.2.1.1 Transport channel parameters for HS-DSCH

6.10.2.4.5.6.2.1.1.1 MAC-d flow parameters for Streaming / unknown / DL: [max bit rate depending on UE category] kbps / PS RAB

Higher Layer	RAB/Signalling RB	**RAB**
RLC	Logical channel type	DTCH
	RLC mode	AM
	Payload sizes, bit	640 (alt. 320)
	Max data rate, bps	depends on UE category NOTE1
	AMD PDU header, bit	16
MAC	MAC-d header, bit	0
	MAC multiplexing	N/A
	MAC-d PDU size, bit	656 (alt. 336)
	MAC-hs header fixed part, bit	21
Layer 1	TrCH type	HS-DSCH
	TTI	2 ms
	Coding type	TC
	CRC, bit	24

NOTE1: The peak throughput may be limited by the maximum number of MAC-d PDUs that can be included in a single MAC-hs PDU (see [25.321]).

6.10.2.4.5.6.2.1.1.2 MAC-d flow parameters for Interactive or background / DL: [max bit rate depending on UE category] / PS RAB

See clause 6.10.2.4.5.1.2.1.1.1.

6.10.2.4.5.6.2.1.2 Transport channel parameters for DCH

6.10.2.4.5.6.2.1.2.1 Transport channel parameters for DL: 3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.5.6.2.1.2.2 TFCS

See clause 6.10.2.4.1.2.2.1.2.

6.10.2.4.5.6.2.2 Physical channel parameters

6.10.2.4.5.6.2.2.1 Physical channel parameters on DPCH

See clause 6.10.2.4.1.2.2.2.

6.10.2.4.5.6.2.2.2 Physical channel parameters on HS-PDSCH

See clause 6.10.2.4.5.1.2.2.2.

6.10.2.4.5.7 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Streaming / unknown / UL:128 DL: [guaranteed 128, max bit rate depending on UE category] kbps / PS RAB + Interactive or background / UL:128 DL: [max bit rate depending on UE category] / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.2.4.5.7.1 Uplink

6.10.2.4.5.7.1.1 Transport channel parameters

6.10.2.4.5.7.1.1.1 Transport channel parameters for Conversational / speech / UL:12.2 kbps / CS RAB

See clause 6.10.2.4.1.4.1.1.1.

6.10.2.4.5.7.1.1.2 Transport channel parameters for Streaming / unknown / UL:128 kbps / PS RAB

See clause 6.10.2.4.5.6.1.1.1.

6.10.2.4.1.7.1.1.3 Transport channel parameters for Interactive or background / UL:128 kbps / PS RAB

See clause 6.10.2.4.1.28.1.1.1.

6.10.2.4.1.7.1.1.4 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.7.1.1.5 TFCS

TFCS size	62
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 128 kbps RAB, 128 kbps RAB, DCCH)= (TF0,TF0,TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0,TF0,TF0), (TF2,TF1,TF1,TF0,TF0,TF0), (TF0,TF0,TF0,TF1,TF0,TF0), (TF0,TF0,TF0,TF0,TF1,TF0), (TF0,TF0,TF0,TF2,TF1,TF0), (TF1,TF0,TF0,TF2,TF1,TF0), (TF2,TF1,TF1,TF2,TF1,TF0), (TF0,TF0,TF0,TF3,TF1,TF0), (TF1,TF0,TF0,TF3,TF1,TF0), (TF2,TF1,TF1,TF3,TF1,TF0), (TF0,TF0,TF0,TF2,TF2,TF0), (TF1,TF0,TF0,TF2,TF2,TF0), (TF2,TF1,TF1,TF2,TF2,TF0), (TF0,TF0,TF0,TF3,TF2,TF0), (TF1,TF0,TF0,TF3,TF2,TF0), (TF2,TF1,TF1,TF3,TF2,TF0), (TF0,TF0,TF0,TF1,TF3,TF0), (TF1,TF0,TF0,TF1,TF3,TF0), (TF2,TF1,TF1,TF1,TF3,TF0), (TF0,TF0,TF0,TF2,TF3,TF0), (TF1,TF0,TF0,TF2,TF3,TF0), (TF2,TF1,TF1,TF2,TF3,TF0), (TF0,TF0,TF0,TF3,TF3,TF0), (TF1,TF0,TF0,TF3,TF3,TF0), (TF2,TF1,TF1,TF3,TF3,TF0), (TF0,TF0,TF0,TF2,TF4,TF0), (TF1,TF0,TF0,TF2,TF4,TF0), (TF2,TF1,TF1,TF2,TF4,TF0), (TF0,TF0,TF0,TF3,TF4,TF0), (TF1,TF0,TF0,TF3,TF4,TF0), (TF2,TF1,TF1,TF3,TF4,TF0), (TF0,TF0,TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF0,TF0,TF1), (TF2,TF1,TF1,TF0,TF0,TF1), (TF0,TF0,TF0,TF2,TF1,TF1), (TF1,TF0,TF0,TF2,TF1,TF1), (TF2,TF1,TF1,TF2,TF1,TF1), (TF0,TF0,TF0,TF3,TF1,TF1), (TF1,TF0,TF0,TF3,TF1,TF1), (TF2,TF1,TF1,TF3,TF1,TF1), (TF0,TF0,TF0,TF2,TF2,TF1), (TF1,TF0,TF0,TF2,TF2,TF1), (TF2,TF1,TF1,TF2,TF2,TF1), (TF0,TF0,TF0,TF3,TF2,TF1), (TF1,TF0,TF0,TF3,TF2,TF1), (TF2,TF1,TF1,TF3,TF2,TF1), (TF0,TF0,TF0,TF1,TF3,TF1), (TF1,TF0,TF0,TF1,TF3,TF1), (TF2,TF1,TF1,TF1,TF3,TF1), (TF0,TF0,TF0,TF2,TF3,TF1), (TF1,TF0,TF0,TF2,TF3,TF1), (TF2,TF1,TF1,TF2,TF3,TF1), (TF0,TF0,TF0,TF3,TF3,TF1), (TF1,TF0,TF0,TF3,TF3,TF1), (TF2,TF1,TF1,TF3,TF3,TF1), (TF0,TF0,TF0,TF2,TF4,TF1), (TF1,TF0,TF0,TF2,TF4,TF1), (TF2,TF1,TF1,TF2,TF4,TF1), (TF0,TF0,TF0,TF3,TF4,TF1), (TF1,TF0,TF0,TF3,TF4,TF1), (TF2,TF1,TF1,TF3,TF4,TF1)

6.10.2.4.1.7.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	4
	Max number of DPDCH data bits/radio frame	9600
	Puncturing Limit	0.88

6.10.2.4.5.7.2 Downlink

6.10.2.4.5.7.2.1 Transport channel parameters

6.10.2.4.5.7.2.1.1 Transport channel parameters for HS-DSCH

6.10.2.4.5.7.2.1.1.1 MAC-d flow parameters for Streaming / unknown / DL: [max bit rate depending on UE category] kbps / PS RAB

See clause 6.10.2.4.5.6.2.1.1.1.

6.10.2.4.5.7.2.1.1.2 MAC-d flow parameters for Interactive or background / DL: [max bit rate depending on UE category] / PS RAB

See clause 6.10.2.4.5.1.2.1.1.1.

6.10.2.4.5.7.2.1.2 Transport channel parameters for DCH

6.10.2.4.5.7.2.1.2.1 Transport channel parameters for Conversational / speech / DL:12.2 kbps / CS RAB

See clause 6.10.2.4.1.4.2.1.1.

6.10.2.4.5.7.2.1.2.2 Transport channel parameters for DL: 3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.5.7.2.1.2.3 TFCS

See clause 6.10.2.4.1.4.2.1.3.

6.10.2.4.5.7.2.2 Physical channel parameters

6.10.2.4.5.7.2.2.1 Physical channel parameters on DPCH

See clause 6.10.2.4.1.2.2.2.

6.10.2.4.5.7.2.2.2 Physical channel parameters on HS-PDSCH

See clause 6.10.2.4.5.1.2.2.2.

6.10.2.4.5.8 Conversational / speech / UL:(12.65 8.85 6.6) DL:(12.65 8.85 6.6) kbps / CS RAB + Interactive or Background / UL:384 DL:[Bit rate depending on the UE category] / PS RAB+ UL:3.4 DL:3.4 kbps SRBs for DCCH + DL:0.15 kbps SRB#5 for DCCH

6.10.2.4.5.8.1 Uplink

6.10.2.4.5.8.1.1 Transport channel parameters

6.10.2.4.5.8.1.1.1 Transport channel parameters for Conversational / speech / UL: (12.65 8.85 6.6) kbps / CS RAB

See clause 6.10.2.4.1.62.1.1.1

6.10.2.4.5.8.1.1.2 Transport Channel parameters for Interactive or background / UL: 384 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		320
	Max data rate, bps		384 000
	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		336
	TFS	TF0, bits	0x336
		TF1, bits	1x336
		TF2, bits	2x336

		TF3, bits	4x336
		TF4, bits	8x336
		TF5, bits	12x336
	TTI, ms		10
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		12 684
	Uplink: Max number of bits/radio frame before rate matching		12 684
	RM attribute		110 to 180

6.10.2.4.5.8.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.5.8.1.1.4 TFCS

TFCS size	60
TFCS	((RAB subflow#1, RAB subflow#2, 384 kbps RAB, DCCH)= (TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0), (TF2,TF1,TF0,TF0), (TF3,TF2,TF0,TF0), (TF4,TF3,TF0,TF0), (TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF1), (TF2,TF1,TF0,TF1), (TF3,TF2,TF0,TF1), (TF4,TF3,TF0,TF1), (TF0,TF0,TF1,TF0), (TF1,TF0,TF1,TF0), (TF2,TF1,TF1,TF0), (TF3,TF2,TF1,TF0), (TF4,TF3,TF1,TF0), (TF0,TF0,TF1,TF1), (TF1,TF0,TF1,TF1), (TF2,TF1,TF1,TF1), (TF3,TF2,TF1,TF1), (TF4,TF3,TF1,TF1), (TF0,TF0,TF2,TF0), (TF1,TF0,TF2,TF0), (TF2,TF1,TF2,TF0), (TF3,TF2,TF2,TF0), (TF4,TF3,TF2,TF0), (TF0,TF0,TF2,TF1), (TF1,TF0,TF2,TF1), (TF2,TF1,TF2,TF1), (TF3,TF2,TF2,TF1), (TF4,TF3,TF2,TF1), (TF0,TF0,TF3,TF0), (TF1,TF0,TF3,TF0), (TF2,TF1,TF3,TF0), (TF3,TF2,TF3,TF0), (TF4,TF3,TF3,TF0), (TF0,TF0,TF3,TF1), (TF1,TF0,TF3,TF1), (TF2,TF1,TF3,TF1), (TF3,TF2,TF3,TF1), (TF4,TF3,TF3,TF1), (TF0,TF0,TF4,TF0), (TF1,TF0,TF4,TF0), (TF2,TF1,TF4,TF0), (TF3,TF2,TF4,TF0), (TF4,TF3,TF4,TF0), (TF0,TF0,TF4,TF1), (TF1,TF0,TF4,TF1), (TF2,TF1,TF4,TF1), (TF3,TF2,TF4,TF1), (TF4,TF3,TF4,TF1), (TF0,TF0,TF5,TF0), (TF1,TF0,TF5,TF0), (TF2,TF1,TF5,TF0), (TF3,TF2,TF5,TF0), (TF4,TF3,TF5,TF0), (TF0,TF0,TF5,TF1), (TF1,TF0,TF5,TF1), (TF2,TF1,TF5,TF1), (TF3,TF2,TF5,TF1), (TF4,TF3,TF5,TF1)

6.10.2.4.5.8.1.1.5 TFC subset list

TFC subset list size	3
TFC subset list	0 = {(TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0), (TF2,TF1,TF0,TF0), (TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF1), (TF2,TF1,TF0,TF1),(TF0,TF0,TF1,TF0), (TF1,TF0,TF1,TF0), (TF2,TF1,TF1,TF0), (TF0,TF0,TF1,TF1), (TF1,TF0,TF1,TF1), (TF2,TF1,TF1,TF1), (TF0,TF0,TF2,TF0), (TF1,TF0,TF2,TF0), (TF2,TF1,TF2,TF0), (TF0,TF0,TF2,TF1), (TF1,TF0,TF2,TF1), (TF2,TF1,TF2,TF1),(TF0,TF0,TF3,TF0), (TF1,TF0,TF3,TF0), (TF2,TF1,TF3,TF0), (TF0,TF0,TF3,TF1), (TF1,TF0,TF3,TF1), (TF2,TF1,TF3,TF1), (TF0,TF0,TF4,TF0), (TF1,TF0,TF4,TF0), (TF2,TF1,TF4,TF0), (TF0,TF0,TF4,TF1), (TF1,TF0,TF4,TF1), (TF2,TF1,TF4,TF1),(TF0,TF0,TF5,TF0), (TF1,TF0,TF5,TF0), (TF2,TF1,TF5,TF0), (TF0,TF0,TF5,TF1), (TF1,TF0,TF5,TF1), (TF2,TF1,TF5,TF1),}, 1 = {(TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0), (TF2,TF1,TF0,TF0), (TF3,TF2,TF0,TF0), (TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF1), (TF2,TF1,TF0,TF1), (TF3,TF2,TF0,TF1), (TF0,TF0,TF1,TF0), (TF1,TF0,TF1,TF0), (TF2,TF1,TF1,TF0), (TF3,TF2,TF1,TF0), (TF0,TF0,TF1,TF1), (TF1,TF0,TF1,TF1), (TF2,TF1,TF1,TF1), (TF3,TF2,TF1,TF1), (TF0,TF0,TF2,TF0), (TF1,TF0,TF2,TF0), (TF2,TF1,TF2,TF0), (TF3,TF2,TF2,TF0), (TF0,TF0,TF2,TF1), (TF1,TF0,TF2,TF1), (TF2,TF1,TF2,TF1), (TF3,TF2,TF2,TF1), (TF0,TF0,TF3,TF0), (TF1,TF0,TF3,TF0), (TF2,TF1,TF3,TF0), (TF3,TF2,TF3,TF0), (TF0,TF0,TF3,TF1), (TF1,TF0,TF3,TF1), (TF2,TF1,TF3,TF1), (TF3,TF2,TF3,TF1), (TF0,TF0,TF4,TF0), (TF1,TF0,TF4,TF0), (TF2,TF1,TF4,TF0),

	(TF3,TF2,TF4,TF0), (TF0,TF0,TF4,TF1), (TF1,TF0,TF4,TF1), (TF2,TF1,TF4,TF1), (TF3,TF2,TF4,TF1), (TF0,TF0,TF5,TF0), (TF1,TF0,TF5,TF0), (TF2,TF1,TF5,TF0), (TF3,TF2,TF5,TF0), (TF0,TF0,TF5,TF1), (TF1,TF0,TF5,TF1), (TF2,TF1,TF5,TF1), (TF3,TF2,TF5,TF1)}, 2 = {(TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0), (TF2,TF1,TF0,TF0), (TF3,TF2,TF0,TF0), (TF4,TF3,TF0,TF0),(TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF1), (TF2,TF1,TF0,TF1), (TF3,TF2,TF0,TF1), (TF4,TF3,TF0,TF1), (TF0,TF0,TF1,TF0), (TF1,TF0,TF1,TF0), (TF2,TF1,TF1,TF0), (TF3,TF2,TF1,TF0), (TF4,TF3,TF1,TF0), (TF0,TF0,TF1,TF1), (TF1,TF0,TF1,TF1), (TF2,TF1,TF1,TF1), (TF3,TF2,TF1,TF1), (TF4,TF3,TF1,TF1), (TF0,TF0,TF2,TF0), (TF1,TF0,TF2,TF0), (TF2,TF1,TF2,TF0), (TF3,TF2,TF2,TF0), (TF4,TF3,TF2,TF0), (TF0,TF0,TF2,TF1), (TF1,TF0,TF2,TF1), (TF2,TF1,TF2,TF1), (TF3,TF2,TF2,TF1), (TF4,TF3,TF2,TF1), (TF0,TF0,TF3,TF0), (TF1,TF0,TF3,TF0), (TF2,TF1,TF3,TF0), (TF3,TF2,TF3,TF0), (TF4,TF3,TF3,TF0), (TF0,TF0,TF3,TF1), (TF1,TF0,TF3,TF1), (TF2,TF1,TF3,TF1), (TF3,TF2,TF3,TF1), (TF4,TF3,TF3,TF1), (TF0,TF0,TF4,TF0), (TF1,TF0,TF4,TF0), (TF2,TF1,TF4,TF0), (TF3,TF2,TF4,TF0), (TF4,TF3,TF4,TF0), (TF0,TF0,TF4,TF1), (TF1,TF0,TF4,TF1), (TF2,TF1,TF4,TF1), (TF3,TF2,TF4,TF1), (TF4,TF3,TF4,TF1), (TF0,TF0,TF5,TF0), (TF1,TF0,TF5,TF0), (TF2,TF1,TF5,TF0), (TF3,TF2,TF5,TF0), (TF4,TF3,TF5,TF0), (TF0,TF0,TF5,TF1), (TF1,TF0,TF5,TF1), (TF2,TF1,TF5,TF1), (TF3,TF2,TF5,TF1), (TF4,TF3,TF5,TF1)}

6.10.2.4.5.8.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	4
	Max number of DPDCH data bits/radio frame	9 600
	Number of DPDCH	1
	Puncturing Limit	0.60

6.10.2.4.5.8.2 Downlink

6.10.2.4.5.8.2.1 Transport channel parameters

6.10.2.4.5.8.2.1.1 Transport channel parameters for HS-DSCH

See clause 6.10.2.4.5.1.2.1.1

6.10.2.4.5.8.2.1.2 Transport channel parameters for DCH

6.10.2.4.5.8.2.1.2.1 Transport channel parameters for Conversational / speech / DL: (12.65 8.85 6.6) kbps / CS RAB

See clause 6.10.2.4.1.62.2.1.1

6.10.2.4.5.8.2.1.2.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1

6.10.2.4.5.8.2.1.2.3 Transport channel parameters for DL:0.15 kbps SRB#5 for DCCH

See clause 6.10.2.4.1.62.2.1.3

6.10.2.4.5.8.2.1.2.4 TFCS

See clause 6.10.2.4.1.62.2.1.4

6.10.2.4.5.8.2.2 Physical channel parameters

6.10.2.4.5.8.2.2.1 Physical channel parameters on DPCH

See clause 6.10.2.4.1.62.2.2

6.10.2.4.5.8.2.2.2 Physical Channel parameters on HS-PDSCH

See clause 6.10.2.4.5.1.2.2.1

6.10.3 RAB and signalling RB for TDD

6.10.3.1 RABs and signalling RBs

In the following clauses, the typical parameter sets are presented for reference RABs, signalling RBs and important combinations of them. The data rate given for each RAB is the maximum data rate that can be supported by that RAB.

NOTE: The granularity for each RAB needs to be clarified.

Table 6.10.3.1.1: Prioritized RABs

#	Traffic class[3]	SSD[3]	Max. rate, kbps	CS/PS
1	Conversational	Speech	UL:12.2 DL:12.2	CS
1a	Conversational	Speech	UL: (12.2 7.95 5.9 4.75) DL(12.2 7.95 5.9 4.75)	CS
2	Conversational	Speech	UL:10.2 DL:10.2	CS
2a	Conversational	Speech	UL:(10.2 , 6.7, 5.9, 4.75) DL:10.2, 6.7, 5.9, 4.75)	CS
3	Conversational	Speech	UL:7.95 DL:7.95	CS
4	Conversational	Speech	UL:7.4 DL:7.4	CS
4a	Conversational	Speech	UL:(12.2 7.95 5.9 4.75, DL:(12.2 7.95 5.9 4.75)	CS
5	Conversational	Speech	UL:6.7 DL:6.7	CS
6	Conversational	Speech	UL:5.9 DL:5.9	CS
7	Conversational	Speech	UL:5.15 DL:5.15	CS
8	Conversational	Speech	UL:4.75 DL:4.75	CS
9	Conversational	Unknown	UL:28.8 DL:28.8	CS
10	Conversational	Unknown	UL:64 DL:64	CS
11	Conversational	Unknown	UL:32 DL:32	CS
11a	Conversational	Unknown	UL:8 DL:8	CS
12	Streaming	Unknown	UL:14.4 DL:14.4	CS
13	Streaming	Unknown	UL:28.8 DL:28.8	CS
14	Streaming	Unknown	UL:57.6 DL:57.6	CS
15	Void			
15a	Streaming	Unknown	UL:16 DL:64	PS
16	Void			
17	Void			
18	Void			
19	Void			
20	Interactive or Background	N/A	UL:32 DL:8	PS
20a	Interactive or Background	N/A	UL:8 DL:8	PS
20b	Interactive or Background	N/A	UL:16 DL:16	PS
20c	Interactive or Background	N/A	UL:32 DL:32	PS
21	Void			
22	Interactive or Background	N/A	UL:32 DL:64	PS
23	Interactive or Background	N/A	UL:64 DL:64	PS
24	Interactive or Background	N/A	UL:64 DL:128	PS
25	Interactive or Background	N/A	UL:128 DL:128	PS
26	Interactive or Background	N/A	UL:64 DL:384	PS
27	Interactive or Background	N/A	UL:128 DL:384	PS
28	Interactive or Background	N/A	UL:384 DL:384	PS
29	Interactive or Background	N/A	UL:64 DL:2048	PS
30	Interactive or Background	N/A	UL:128 DL:2048	PS
31	Void			
32	Interactive or Background	N/A	UL:64 DL:256	PS
33	Interactive or Background	N/A	UL:0 DL:32	PS
34	Interactive or Background	N/A	UL:32 DL:0	PS
35	Interactive or Background	N/A	UL:64 DL:144	PS
36	Interactive or Background	N/A	UL:144 DL:144	PS

Table 6.10.3.1.2: Signalling RBs

#	Maximum rate, kbps	Logical channel	PhyCh onto which SRBs are mapped
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. 13.6)	DCCH	SCCPCH

5	UL:16.8	CCCH	PRACH
6	DL:32 (alt. 16)	CCCH	SCCPCH
7	DL:33.6 (alt. 16.8)	BCCH	SCCPCH
8	DL:12 (alt. 8)	PCCH	SCCPCH
9	UL:16.8	SHCCH	PRACH
10	UL:16.8	SHCCH	PRACH or PUSCH
11	DL:32 (alt. 16)	SHCCH	SCCPCH
12	DL:16	SHCCH	SCCPCH or PDSCH

6.10.3.2 Combinations of RABs and Signalling RBs

In the present document, physical channel parameters for following combinations of RABs and signalling RBs on a CCTrCH are described.

NOTE: It is understood that for speech service the AMR mode may be operated asymmetrically for the uplink and downlink.

Combinations on DPCH

1) Stand-alone UL:1.7 DL:1.7 kbps SRBs for DCCH.

1a) Stand-alone UL:1.7 DL:1.7 kbps SRBs for DCCH (multiframe).

2) Stand-alone UL:3.4 DL:3.4 kbps SRBs for DCCH.

3) Stand-alone UL:13.6 DL:13.6 kbps SRBs for DCCH.

4) Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

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

5) Conversational / speech / UL:10.2 DL:10.2 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

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

6) Conversational / speech / UL:7.95 DL:7.95 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

7) Conversational / speech / UL:7.4 DL:7.4 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

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 DCCH8) Conversational / speech / UL:6.7 DL:6.7 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

9) Conversational / speech / UL:5.9 DL:5.9 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

10) Conversational / speech / UL:5.15 DL:5.15 kbps / CS RAB
+ UL:1.7 DL:1.7 kbps SRBs for DCCH.

11) Conversational / speech / UL:4.75 DL:4.75 kbps / CS RAB
+ UL:1.7 DL:1.7 kbps SRBs for DCCH.

12) Conversational / unknown / UL:28.8 DL:28.8 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

13) Conversational / unknown / UL:64 DL:64 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

14) Conversational / unknown / UL:32 DL:32 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

15) Streaming / unknown / UL:14.4/DL:14.4 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

16) Streaming / unknown / UL:28.8/DL:28.8 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

17) Streaming / unknown / UL:57.6/DL:57.6 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

18) Void.

19) Void.

20) Void.

21) Void.

22) Void..

23) Interactive or background / UL:32 DL:8 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

23a) Interactive or background / UL:8 DL:8 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH

23b) Interactive or background / UL:16 DL:16 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH

23c) Interactive or background / UL:32 DL:32 kbps / PS RAB
+ UL:3.4 DL:3.4 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

24) Void..

25) Interactive or background / UL:32 DL: 64 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

26) Interactive or background / UL:64 DL: 64 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

27) Interactive or background / UL:64 DL:128 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

28) Interactive or background / UL:128 DL:128 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

29) Interactive or background / UL:64 DL:144 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

30) Interactive or background / UL:144 DL:144 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

31) Interactive or background / UL:64 DL:256 kbps / PS RAB
+ UL:3.4 DL: 3.4 kbps SRBs for DCCH.

32) Interactive or background / UL:64 DL:384 kbps / PS RAB
+ UL:3.4 DL: 3.4 kbps SRBs for DCCH.

33) Interactive or background / UL:128 DL:384 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

34) Interactive or background / UL:384 DL:384 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

35) Interactive or background / UL:64 DL:2 048 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

36) Interactive or background / UL:128 DL:2 048 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

37) Interactive or background / UL:384 DL:2 048 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

38) 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.

38a) Conversational / speech / 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

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

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

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

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

38f) Conversational / speech / (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

38g) Conversational / speech / (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

38h) Conversational / speech / (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

38i) Conversational / speech / (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

38j) Conversational / speech / (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

39) 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.

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.

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.

42) 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.

43) 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.

44) Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB
+ Interactive or background / UL:128 DL:2 048 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

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.

46) Void

47) Void

48) Void

49) 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.

49a) Conversational / speech / UL:(12.2 7.95 5.9 4.75) DL:(12.2 7.95 5.9 4.75) kbps / CS RAB
+ Conversational / unknown / UL:64 DL:64 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH

50) 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.

51) Conversational / unknown / UL:64 DL:64 kbps / CS RAB
+ Interactive or background / UL:64 DL:64 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

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

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

52) Conversational / unknown / UL:64 DL:64 kbps / CS RAB
+ Interactive or background / UL:64 DL:128 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

53) Conversational / unknown / UL:64 DL:64 kbps / CS RAB
+ Interactive or background / UL:128 DL:128 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

54) Void.

55) Void

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

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

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

59) Reserved for future use

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

Combinations on PDSCH, SCCPCH, PUSCH and PRACH

1) Interactive or background / UL:64 DL:256 kbps / PS RAB
+ UL: 3.4/16.8 DL:3.4/ 33.6 kbps SRBs for DCCH, CCCH and BCCH
+ UL:16.8 DL: 16 kbps SRBs for SHCCH.

2) Interactive or background / UL:64 DL:384 kbps / PS RAB
+ UL: 3.4/16.8 DL: 3.4/33.6 kbps SRBs for DCCH, CCCH and BCCH
+ UL: 16.8 DL: 16 kbps SRBs for SHCCH.

3) Interactive or background / UL:64 DL:2 048 kbps / PS RAB
+ UL:3.4/16.8 DL: 3.4/33.6 kbps SRBs for DCCH, CCCH and BCCH
+ UL: 16.8 DL: 16 kbps SRBs for SHCCH.

4) Interactive or background / UL:384 DL:2 048 kbps / PS RAB
+ UL:3.4/16.8 DL: 3.4/33.6 kbps SRBs for DCCH, CCCH and BCCH
+ UL: 16.8 DL: 16 kbps SRBs for SHCCH.

Combinations on PDSCH, SCCPCH, DPCH, PUSCH and PRACH

1) Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH
+ Interactive or background / UL:64 DL:256 kbps / PS RAB
+ UL:16.8 kbps SRBs for CCCH and SHCCH
+ DL: 33.6 kbps SRBs for CCCH, SHCCH and BCCH.

2) Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH
+ Interactive or background / UL:64 DL:384 kbps / PS RAB
+ UL:16.8 kbps SRBs for CCCH and SHCCH
+ DL: 33.6 kbps SRBs for CCCH, SHCCH and BCCH.

3) Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH
+ Interactive or background / UL:64 DL:2 048 kbps / PS RAB
+ UL:16.8 kbps SRBs for CCCH and SHCCH
+ DL: 33.6 kbps SRBs for CCCH, SHCCH and BCCH.

Combinations on SCCPCH

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.

3a) SRB for PCCH
+ SRB for CCCH
+ SRB for DCCH
+ SRB for BCCH

4) RB for CTCH
+ SRB for CCCH
+ SRB for BCCH

Combinations on PRACH

1) Interactive or background / UL:12.8 kbps / PS RAB
+ SRB for CCCH
+ SRBs for DCCH.

6.10.3.3 Example of linkage between RABs and services

RABs, which are included in the present document, can provide the services as shown in table 6.10.1.1: Traffic classes. Furthermore, the required BER for each RAB, which is assumed in the present document, is shown in table 6.10.3.3.1.

Table 6.10.3.3.1: Example of linkage between RABs and services

RAB				Residual BER[3]	Services
Traffic class[3]	SSD[3]	Max. rate, kbps	CS/PS		
Conversational	Speech	UL:4.75-12.2 DL:4.75-12.2	CS	$5x10^{-4}$, $1x10^{-3}$, $5x10^{-3}$	AMR speech
Conversational	Unknown	UL:64 DL:64	CS	$1x10^{-4}$ or $1x10^{-6}$	UDI 1B, 64k 3G-324M[4]
Conversational	Unknown	UL:32 DL:32	CS	$1x10^{-4}$ or $1x10^{-6}$	32k 3G-324M[4]
Conversational	Unknown	UL:28.8 DL:28.8	CS	$1x10^{-3}$	Transparent modem
Streaming	Unknown	UL:14.4 DL:14.4	CS	$1x10^{-3}$	FAX[6]
Streaming	Unknown	UL:28.8 DL:28.8	CS	$1x10^{-3}$	FAX[6] PIAFS 32 kbps
Streaming	Unknown	UL:57.6 DL:57.6	CS	$1x10^{-3}$	Modem[6], FTM[5], PIAFS 64 kbps
Streaming	Unknown	UL:64-128 or DL:64-384	CS	$1x10^{-3}$ or $1x10^{-4}$	Streaming video, uni-directional
Interactive or Background	N/A	UL:32-384 DL:8-2048	PS	$1x10^{-3}$ or $1x10^{-4}$	Packet

NOTE 1: SMS can be provided via the signalling RB (DCCH) on DPCH or SCCPCH.

NOTE 2: CBS can be provided via the signalling RB (CTCH) on SCCPCH

NOTE 3: UDI *n*B can be provided via *n* RABs of conversational 64 kbps.

6.10.3.4 Typical radio parameter sets

6.10.3.4.1 Combinations on DPCH

6.10.3.4.1.1 Stand-alone UL:1.7 DL:1.7 kbps SRBs for DCCH

6.10.3.4.1.1.1 Uplink

####### 6.10.3.4.1.1.1.1 Transport channel parameters

6.10.3.4.1.1.1.1 Transport channel parameters for UL:1.7 kbps SRBs for DCCH

Higher layer	RAB/signalling RB		SRB#1	SRB#2	SRB#3	SRB#4
	User of Radio Bearer		RRC	RRC	NAS_DT High priority	NAS_DT Low priority
RLC	Logical channel type		DCCH	DCCH	DCCH	DCCH
	RLC mode		UM	AM	AM	AM
	Payload sizes, bit		136	128	128	128
	Max data rate, bps		1 700	1 600	1 600	1 600
	AMD/UMD PDU header, bit		8	16	16	16
MAC	MAC header, bit		4	4	4	4
	MAC multiplexing		4 logical channel multiplexing			
Layer 1	TrCH type		DCH			
	TB sizes, bit		148 (alt. 0,148) (note)			
	TFS	TF0, bits	0x148 (alt 1x0) (note)			
		TF1, bits	1x148			
	TTI, ms		80			
	Coding type		CC 1/3			
	CRC, bit		16			
	Max number of bits/TTI before rate matching		516			
	Max number of bits/radio frame before rate matching		65			
	RM attribute		155 to 185			
NOTE: Alternative parameters enable the measurement "transport channel BLER" in the UTRAN.						

6.10.3.4.1.1.1.2 TFCS

TFCS size	2
TFCS	SRBs for DCCH = (TF0), (TF1)
NOTE: The first TFC is required for the alt. case, optional otherwise.	

6.10.3.4.1.1.2 Physical channel parameters

DPCH Uplink	Midamble	512 chips
	Codes and time slots	SF16 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	234
	TFCI code word	8 bits
	TPC	2 bits
	Puncturing Limit	1
NOTE: In case the first TFC in the TFCS is not configured, the TFCI code word will be 4 bits.		

6.10.3.4.1.2 Downlink

6.10.3.4.1.2.1 Transport channel parameters

6.10.3.4.1.2.1.1 Transport channel parameters for DL:1.7 kbps SRBs for DCCH

Higher layer	RAB/signalling RB		SRB#1	SRB#2	SRB#3	SRB#4
	User of Radio Bearer		RRC	RRC	NAS_DT High priority	NAS_DT Low priority
RLC	Logical channel type		DCCH	DCCH	DCCH	DCCH
	RLC mode		UM	AM	AM	AM
	Payload sizes, bit		136	128	128	128
	Max data rate, bps		1 700	1 600	1 600	1 600
	AMD/UMD PDU header, bit		8	16	16	16
MAC	MAC header, bit		4	4	4	4
	MAC multiplexing		4 logical channel multiplexing			
Layer 1	TrCH type		DCH			
	TB sizes, bit		148 (alt. 0,148) (note)			
	TFS	TF0, bits	0 x148 (alt. 1x0) (note)			
		TF1, bits	1x148			
	TTI, ms		80			

	Coding type	CC 1/3
	CRC, bit	16
	Max number of bits/TTI before rate matching	516
	Max number of bits/radio frame before rate matching	65
	RM attribute	155 to 185
NOTE: Alternative parameters enable the measurement "transport channel BLER" in the UE.		

6.10.3.4.1.1.2.1.2 TFCS

TFCS size	2
TFCS	SRBs for DCCH = (TF0), (TF1)
NOTE: The first TFC is required for the alt. case, optional otherwise.	

6.10.3.4.1.1.2.2 Physical channel parameters

DPCH Downlink	Midamble	512 chips
	Codes and time slots	SF16 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	236 bits
	TFCI code word	8 bits
	Puncturing limit	1
NOTE: In case the first TFC in the TFCS is not configured, the TFCI code word will be 4 bits.		

6.10.3.4.1.1a Stand-alone UL:1.7 DL:1.7 kbps SRBs for DCCH (multiframe)

6.10.3.4.1.1a.1 Uplink

6.10.3.4.1.1a.1.1 Transport channel parameters

6.10.3.4.1.1a.1.1.1 Transport channel parameters for UL:1.7 kbps SRBs for DCCH

Higher layer	RAB/signalling RB		SRB#1	SRB#2	SRB#3	SRB#4
	User of Radio Bearer		RRC	RRC	NAS_DT High priority	NAS_DT Low priority
RLC	Logical channel type		DCCH	DCCH	DCCH	DCCH
	RLC mode		UM	AM	AM	AM
	Payload sizes, bit		136	128	128	128
	Max data rate, bps		1 700	1 600	1 600	1 600
	AMD/UMD PDU header, bit		8	16	16	16
MAC	MAC header, bit		4	4	4	4
	MAC multiplexing		4 logical channel multiplexing			
Layer 1	TrCH type		DCH			
	TB sizes, bit		148			
	TFS	TF0, bits	0x148			
		TF1, bits	1x148			
	TTI, ms		20			
	Coding type		CC 1/3			
	CRC, bit		16			
	Max number of bits/TTI before rate matching		516			
	Max number of bits/radio frame before rate matching		258			

6.10.3.4.1.1a.1.1.2 TFCS

TFCS size	2
TFCS	SRBs for DCCH = (TF0), (TF1)

6.10.3.4.1.1a.1.2 Physical channel parameters

DPCH Uplink	Midamble	256 chips
	Codes and time slots	SF16 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	266
	TFCI code word	8 bits
	TPC	2 bits
	Puncturing Limit	1
	Repetition period	8
	Repetition length	2
NOTE: In case the first TFC in the TFCS is not configured, the TFCI code word will be 4 bits.		

6.10.3.4.1.1a.2 Downlink

6.10.3.4.1.1a.2.1 Transport channel parameters

6.10.3.4.1.1a.2.1.1 Transport channel parameters for DL:1.7 kbps SRBs for DCCH

Higher layer	RAB/signalling RB		SRB#1	SRB#2	SRB#3	SRB#4
	User of Radio Bearer		RRC	RRC	NAS_DT High priority	NAS_DT Low priority
RLC	Logical channel type		DCCH	DCCH	DCCH	DCCH
	RLC mode		UM	AM	AM	AM
	Payload sizes, bit		136	128	128	128
	Max data rate, bps		1 700	1 600	1 600	1 600
	AMD/UMD PDU header, bit		8	16	16	16
MAC	MAC header, bit		4	4	4	4
	MAC multiplexing		4 logical channel multiplexing			
Layer 1	TrCH type		DCH			
	TB sizes, bit		148			
	TFS	TF0, bits	0 x148			
		TF1, bits	1x148			
	TTI, ms		20			
	Coding type		CC 1/3			
	CRC, bit		16			
	Max number of bits/TTI before rate matching		516			
	Max number of bits/radio frame before rate matching		258			

6.10.3.4.1.1a.2.1.2 TFCS

TFCS size	2
TFCS	SRBs for DCCH = (TF0), (TF1)
NOTE: The first TFC is optional.	

6.10.3.4.1.1a.2.2 Physical channel parameters

DPCH Downlink	Midamble	256 chips
	Codes and time slots	SF16 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	268 bits
	TFCI code word	8 bits
	Puncturing limit	1
	Repetition period	8
	Repetition length	2
NOTE: In case the first TFC in the TFCS is not configured, the TFCI code word will be 4 bits.		

6.10.3.4.1.2 Stand-alone UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.3.4.1.2.1 Uplink

6.10.3.4.1.2.1.1 Transport channel parameters

6.10.3.4.1.2.1.1.1 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

Higher layer	RAB/signalling RB		SRB#1	SRB#2	SRB#3	SRB#4
	User of Radio Bearer		RRC	RRC	NAS_DT High priority	NAS_DT Low priority
RLC	Logical channel type		DCCH	DCCH	DCCH	DCCH
	RLC mode		UM	AM	AM	AM
	Payload sizes, bit		136	128	128	128
	Max data rate, bps		3 400	3 200	3 200	3 200
	AMD/UMD PDU header, bit		8	16	16	16
MAC	MAC header, bit		4	4	4	4
	MAC multiplexing		4 logical channel multiplexing			
Layer 1	TrCH type		DCH			
	TB sizes, bit		148 (alt. 0,148) (note)			
	TFS	TF0, bits	0x148 (alt. 1x0) (note)			
		TF1, bits	1x148			
	TTI, ms		40			
	Coding type		CC 1/3			
	CRC, bit		16			
	Max number of bits/TTI before rate matching		516			
	Max number of bits/radio frame before rate matching		129			
	RM attribute		155 to 165			
NOTE: Alternative parameters enable the measurement "transport channel BLER" in the UTRAN.						

6.10.3.4.1.2.1.1.2 TFCS

TFCS size	2
TFCS	SRBs for DCCH = (TF0), (TF1)
NOTE: The first TFC is required for the alt. case, optional otherwise.	

6.10.3.4.1.2.1.2 Physical channel parameters

DPCH Uplink	Midamble	512 chips
	Codes and time slots	SF16 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	234 bits
	TFCI code word	8 bits
	TPC	2 bit
	Puncturing Limit	1
NOTE: In case the first TFC in the TFCS is not configured, the TFCI code word will be 4 bits.		

6.10.3.4.1.2.2 Downlink

6.10.3.4.1.2.2.1 Transport channel parameters

6.10.3.4.1.2.2.1.1 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

Higher layer	RAB/signalling RB		SRB#1	SRB#2	SRB#3	SRB#4
	User of Radio Bearer		RRC	RRC	NAS_DT High priority	NAS_DT Low priority
RLC	Logical channel type		DCCH	DCCH	DCCH	DCCH
	RLC mode		UM	AM	AM	AM
	Payload sizes, bit		136	128	128	128
	Max data rate, bps		3 400	3 200	3 200	3 200
	AMD/UMD PDU header, bit		8	16	16	16
MAC	MAC header, bit		4	4	4	4
	MAC multiplexing		4 logical channel multiplexing			
Layer 1	TrCH type		DCH			
	TB sizes, bit		148 (alt. 0, 148) (note)			
	TFS	TF0, bits	0x148 (alt. 1x0) (note)			
		TF1, bits	1x148			
	TTI, ms		40			

	Coding type	CC 1/3
	CRC, bit	16
	Max number of bits/TTI before rate matching	516
	Max number of bits/radio frame before rate matching	129
	RM attribute	155 to 165
NOTE: Alternative parameters enable the measurement "transport channel BLER" in the UE.		

6.10.3.4.1.2.2.1.2 TFCS

TFCS size	2
TFCS	SRBs for DCCH = (TF0), (TF1)
NOTE: The first TFC is required for the alt. case, optional otherwise.	

6.10.3.4.1.2.2.2 Physical channel parameters

DPCH Downlink	Midamble	512 chips
	Codes and time slots	SF16 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	236
	TFCI code word	8 bits
	Puncturing limit	1
NOTE: In case the first TFC in the TFCS is not configured, the TFCI code word will be 4 bits.		

6.10.3.4.1.3 Stand-alone UL:13.6 DL:13.6 kbps SRBs for DCCH

6.10.3.4.1.3.1 Uplink

6.10.3.4.1.3.1.1 Transport channel parameters

6.10.3.4.1.3.1.1.1 Transport channel parameters for UL:13.6 kbps SRBs for DCCH

Higher layer	RAB/signalling RB		SRB#1	SRB#2	SRB#3	SRB#4
	User of Radio Bearer		RRC	RRC	NAS_DT High priority	NAS_DT Low priority
RLC	Logical channel type		DCCH	DCCH	DCCH	DCCH
	RLC mode		UM	AM	AM	AM
	Payload sizes, bit		136	128	128	128
	Max data rate, bps		13 600	12 800	12 800	12 800
	AMD/UMD PDU header, bit		8	16	16	16
MAC	MAC header, bit		4	4	4	4
	MAC multiplexing		4 logical channel multiplexing			
Layer 1	TrCH type		DCH			
	TB sizes, bit		148 (alt. 0,148) (note)			
	TFS	TF0, bits	0x148 (alt. 1x0) (note)			
		TF1, bits	1x148			
	TTI, ms		10			
	Coding type		CC 1/3			
	CRC, bit		16			
	Max number of bits/TTI before rate matching		516			
	Max number of bits/radio frame before rate matching		516			
NOTE: Alternative parameters enable the measurement "transport channel BLER" in the UTRAN.						

6.10.3.4.1.3.1.1.2 TFCS

TFCS size	2
TFCS	SRBs for DCCH = (TF0), (TF1)
NOTE: The first TFC is required for the alt. case, optional otherwise.	

6.10.3.4.1.3.1.2 Physical channel parameters

DPCH Uplink	Midamble	512 chips
	Codes and time slots	SF8 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	468 bits
	TFCI code word	8 bits
	TPC	2 bits
	Puncturing Limit	0.88
NOTE: In case the first TFC in the TFCS is not configured, the TFCI code word will be 4 bits.		

6.10.3.4.1.3.2 Downlink

6.10.3.4.1.3.2.1 Transport channel parameters

6.10.3.4.1.3.2.1.1 Transport channel parameters for DL:13.6 kbps SRBs for DCCH

Higher layer	RAB/signalling RB		SRB#1	SRB#2	SRB#3	SRB#4
	User of Radio Bearer		RRC	RRC	NAS_DT High priority	NAS_DT Low priority
RLC	Logical channel type		DCCH	DCCH	DCCH	DCCH
	RLC mode		UM	AM	AM	AM
	Payload sizes, bit		136	128	128	128
	Max data rate, bps		13 600	12 800	12 800	12 800
	AMD/UMD PDU header, bit		8	16	16	16
MAC	MAC header, bit		4	4	4	4
	MAC multiplexing		4 logical channel multiplexing			
Layer 1	TrCH type		DCH			
	TB sizes, bit		148 (alt. 0,148) (note)			
	TFS	TF0, bits	0x148 (alt. 1x0) (note)			
		TF1, bits	1x148			
	TTI, ms		10			
	Coding type		CC 1/3			
	CRC, bit		16			
	Max number of bits/TTI before rate matching		516			
	Max number of bits/radio frame before rate matching		516			
NOTE: Alternative parameters enable the measurement "transport channel BLER" in the UE.						

6.10.3.4.1.3.2.1.2 TFCS

TFCS size	2
TFCS	SRBs for DCCH = (TF0), (TF1)
NOTE: The first TFC is required for the alt. case, optional otherwise.	

6.10.3.4.1.3.2.2 Physical channel parameters

DPCH Downlink	Midamble	512 chips
	Codes and time slots	SF16 x 2 codes x 1 time slot
	Max. Number of data bits/radio frame	480 bits
	TFCI code word	8 bits
	Puncturing limit	0.92
NOTE: In case the first TFC in the TFCS is not configured, the TFCI code word will be 4 bits.		

6.10.3.4.1.4 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.3.4.1.4.1 Uplink

6.10.3.4.1.4.1.1 Transport channel parameters

6.10.3.4.1.4.1.1.1 Transport channel parameters for Conversational / speech / UL:12.2 kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB subflow #1	RAB subflow #2	RAB subflow #3
RLC	Logical channel type		DTCH		
	RLC mode		TM	TM	TM
	Payload sizes, bit		39, 81 (alt. 0, 39, 81)	103	60
	Max data rate, bps		12 200		
	TrD PDU header, bit		0		
MAC	MAC header, bit		0		
	MAC multiplexing		N/A		
Layer 1	TrCH type		DCH	DCH	DCH
	TB sizes, bit		39, 81 (alt. 0, 39, 81)	103	60
	TFS	TF0, bits	0x81(alt. 1x0) (note)	0x103	0x60
		TF1, bits	1x39	1x103	1x60
		TF2, bits	1x81	N/A	N/A
	TTI, ms		20	20	20
	Coding type		CC 1/3	CC 1/3	CC 1/2
	CRC, bit		12	N/A	N/A
	Max number of bits/TTI after channel coding		303	333	136
	Max number of bits/radio frame before rate matching		152	167	68
	RM attribute		180 to 220	170 to 210	215 to 256
NOTE: In case of using this alternative, CRC parity bits are to be attached to RAB subflow#1 any time since number of TrBlks are 1 even if there is no data on RAB subflow#1 (see clause 4.2.1.1 in 3GPP TS 25.222 [29]).					

6.10.3.4.1.4.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.4.1.1.3 TFCS

TFCS size	6
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3,DCCH)= (TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0), (TF2, TF1, TF1, TF0), (TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF1), (TF2, TF1, TF1, TF1)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.4.1.2 Physical channel parameters

DPCH Uplink	Midamble	512 chips
	Codes and time slots	SF8 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	452 bits
	TFCI code word	16 bits
	TPC	2 bit
	Puncturing Limit	0.72

6.10.3.4.1.4.2 Downlink

6.10.3.4.1.4.2.1 Transport channel parameters

6.10.3.4.1.4.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 kbps / CS RAB

Higher layer	RAB/Signalling RB	RAB subflow #1	RAB subflow #2	RAB subflow #3

RLC	Logical channel type		DTCH		
	RLC mode		TM	TM	TM
	Payload sizes, bit		39,81 (alt. 0, 39, 81)	103	60
	Max data rate, bps		12 200		
	TrD PDU header, bit		0		
MAC	MAC header, bit		0		
	MAC multiplexing		N/A		
Layer 1	TrCH type		DCH	DCH	DCH
	TB sizes, bit		39,81 (alt. 0,39,81)	103	60
	TFS	TF0, bits	0x81 (alt. 1x0) (note)	0x103	0x60
		TF1, bits	1x39	1x103	1x60
		TF2, bits	1x81	N/A	N/A
	TTI, ms		20	20	20
	Coding type		CC 1/3	CC 1/3	CC 1/2
	CRC, bit		12	N/A	N/A
	Max number of bits/TTI after channel coding		303	333	136
	Max number of bits/radio frame before rate matching		152	167	68
	RM attribute		180 to 220	170 to 210	215 to 256
NOTE: CRC parity bits are to be attached to RAB subflow#1 any time since number of TrBlks are 1 even if there is no data on RAB subflow#1 (see clause 4.2.1.1 in 3GPP TS 25.222 [29]).					

6.10.3.4.1.4.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.4.2.1.3 TFCS

TFCS size	6
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3,DCCH)= (TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0), (TF2, TF1, TF1, TF0), (TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF1), (TF2, TF1, TF1, TF1)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.4.2.2 Physical channel parameters

DPCH Downlink	Midamble	512 chips
	Codes and time slots	SF16 x 2 codes x 1 time slot
	Max. Number of data bits/radio frame	472 bits
	TFCI code word	16 bits
	Puncturing limit	0.76

6.10.3.4.1.4a 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

6.10.3.4.1.4a.1 Uplink

6.10.3.4.1.4a.1.1 Transport channel parameters

6.10.3.4.1.4a.1.1.1 Transport channel parameters for Conversational / speech / UL: (12.2, 7.95, 5.9, 4.75) kbps / CS RAB

Higher layer	RAB/Signalling RB	RAB subflow #1	RAB subflow #2	RAB subflow #3
RLC	Logical channel type	DTCH		
	RLC mode	TM	TM	TM
	Payload sizes, bit	39, 42, 55, 75, 81 (alt. 0, 39, 42, 55, 75, 81)	53, 63, 84, 103	60
	Max data rate, bps	12 200		
	TrD PDU header, bit	0		
MAC	MAC header, bit	0		
	MAC multiplexing	N/A		
Layer 1	TrCH type	DCH	DCH	DCH

	TB sizes, bit		39, 42, 55, 75, 81 (alt. 0, 39, 42, 55, 75, 81)	53, 63, 84, 103	60
	TFS	TF0, bits	0x81(alt. 1x0) (note)	0x103	0x60
		TF1, bits	1x39	1x53	1x60
		TF2 bits	1x42	1x63	N/A
		TF3, bits	1x55	1x84	N/A
		TF4, bits	1x75	1x103	N/A
		TF5, bits	1x81	N/A	N/A
	TTI, ms		20	20	20
	Coding type		CC 1/3	CC 1/3	CC 1/2
	CRC, bit		12	N/A	N/A
	Max number of bits/TTI after channel coding		303	333	136
	Max number of bits/radio frame before rate matching		152	167	68
	RM attribute		180 to 220	170 to 210	215 to 256
NOTE: In case of using this alternative, CRC parity bits are to be attached to RAB subflow#1 any time since number of TrBlks are 1 even if there is no data on RAB subflow#1 (see clause 4.2.1.1 in 3GPP TS 25.222 [29]).					

6.10.3.4.1.4a.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.4a.1.1.3 TFCS

TFCS size	12
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, DCCH)= (TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0), (TF2,TF1,TF0,TF0), (TF3,TF2,TF0,TF0), (TF4,TF3,TF0,TF0), (TF5,TF4,TF1,TF0), (TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF1), (TF2,TF1,TF0,TF1), (TF3,TF2,TF0,TF1), (TF4,TF3,TF0,TF1), (TF5,TF4,TF1,TF1)
NOTE: In case TB size zero is configured for any transport channel the first TFC is required; it is optional otherwise.	

6.10.3.4.1.4a.1.2 Physical channel parameters

DPCH Uplink	Midamble	512 chips
	Codes and time slots	SF8 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	452 bits
	TFCI code word	16 bits
	TPC	2 bit
	Puncturing Limit	0.72

6.10.3.4.1.4a.2 Downlink

6.10.3.4.1.4a.2.1 Transport channel parameters

6.10.3.4.1.4a.2.1.1 Transport channel parameters for Conversational / speech / DL: (12.2, 7.95, 5.9, 4.75) kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB subflow #1	RAB subflow #2	RAB subflow #3
RLC	Logical channel type		DTCH		
	RLC mode		TM	TM	TM
	Payload sizes, bit		39, 42, 55, 75, 81 (alt. 0, 39, 42, 55, 75, 81)	53, 63, 84, 103	60
	Max data rate, bps		12 200		
	TrD PDU header, bit		0		
MAC	MAC header, bit		0		
	MAC multiplexing		N/A		
Layer 1	TrCH type		DCH	DCH	DCH
	TB sizes, bit		39, 42, 55, 75, 81 (alt. 0, 39, 42, 55, 75, 81)	53, 63, 84, 103	60
	TFS	TF0, bits	0x81(alt. 1x0) (note)	0x103	0x60
		TF1, bits	1x39	1x53	1x60
		TF2, bits	1x42	1x63	N/A

		TF3, bits	1x55	1x84	N/A
		TF4, bits	1x75	1x103	N/A
		TF5, bits	1x81	N/A	N/A
	TTI, ms		20	20	20
	Coding type		CC 1/3	CC 1/3	CC 1/2
	CRC, bit		12	N/A	N/A
	Max number of bits/TTI after channel coding		303	333	136
	Max number of bits/radio frame before rate matching		152	167	68
	RM attribute		180 to 220	170 to 210	215 to 256
NOTE: In case of using this alternative, CRC parity bits are to be attached to RAB subflow#1 any time since number of TrBlks are 1 even if there is no data on RAB subflow#1 (see clause 4.2.1.1 in 3GPP TS 25.222 [29]).					

6.10.3.4.1.4a.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.4a.2.1.3 TFCS

TFCS size	12
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, DCCH)= (TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0), (TF2,TF1,TF0,TF0), (TF3,TF2,TF0,TF0), (TF4,TF3,TF0,TF0), (TF5,TF4,TF1,TF0), (TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF1), (TF2,TF1,TF0,TF1), (TF3,TF2,TF0,TF1), (TF4,TF3,TF0,TF1), (TF5,TF4,TF1,TF1)
NOTE: In case TB size zero is configured for any transport channel the first TFC is required; it is optional otherwise.	

6.10.3.4.1.4a.2.2 Physical channel parameters

DPCH Downlink	Midamble	512 chips
	Codes and time slots	SF16 x 2 codes x 1 time slot
	Max. Number of data bits/radio frame	472 bits
	TFCI code word	16 bits
	Puncturing limit	0.76

6.10.3.4.1.5 Conversational / speech / UL:10.2 DL:10.2 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.3.4.1.5.1 Uplink

6.10.3.4.1.5.1.1 Transport channel parameters

6.10.3.4.1.5.1.1.1 Transport channel parameters for Conversational / speech / UL:10.2 kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB subflow #1	RAB subflow #2	RAB subflow #3
RLC	Logical channel type		DTCH		
	RLC mode		TM	TM	TM
	Payload sizes, bit		39, 65 (alt. 0, 39, 65)	99	40
	Max data rate, bps		10 200		
	TrD PDU header, bit		0		
MAC	MAC header, bit		0		
	MAC multiplexing		N/A		
Layer 1	TrCH type		DCH	DCH	DCH
	TB sizes, bit		39, 65 (alt. 0, 39, 65)	99	40
	TFS	TF0, bits	0x65 (alt. 1x0) (note)	0x99	0x40
		TF1, bits	1x39	1x99	1x40
		TF2, bits	1x65	N/A	N/A
	TTI, ms		20	20	20
	Coding type		CC 1/3	CC 1/3	CC 1/2
	CRC, bit		12	N/A	N/A

	Max number of bits/TTI after channel coding	255	321	96
	Max number of bits/radio frame before rate matching	128	161	48
	RM attribute	180 to 220	170 to 210	215 to 256
NOTE: In case of using this alternative, CRC parity bits are to be attached to RAB subflow#1 any time since number of TrBlks are 1 even if there is no data on RAB subflow#1 (see clause 4.2.1.1 in 3GPP TS 25.222 [29]).				

6.10.3.4.1.5.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.5.1.1.3 TFCS

TFCS size	6
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3,DCCH)= (TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0), (TF2, TF1, TF1, TF0), (TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF1), (TF2, TF1, TF1, TF1)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.5.1.2 Physical channel parameters

DPCH Uplink	Midamble	512 chips
	Codes and time slots	SF16 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	226 bits
	TFCI code word	16 bits
	TPC	2 bit
	Puncturing Limit	0.40

6.10.3.4.1.5.2 Downlink

6.10.3.4.1.5.2.1 Transport channel parameters

6.10.3.4.1.5.2.1.1 Transport channel parameters for Conversational / speech / DL:10.2 kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB subflow #1	RAB subflow #2	RAB subflow #3
RLC	Logical channel type		DTCH		
	RLC mode		TM	TM	TM
	Payload sizes, bit		39,65 (alt. 0, 39, 65)	99	40
	Max data rate, bps		10 200		
	TrD PDU header, bit		0		
MAC	MAC header, bit		0		
	MAC multiplexing		N/A		
Layer 1	TrCH type		DCH	DCH	DCH
	TB sizes, bit		39, 65 (alt.0,39,65)	99	40
	TFS	TF0, bits	0x65 (alt,1x0) (note)	0x99	0x40
		TF1, bits	1x39	1x99	1x40
		TF2, bits	1x65	N/A	N/A
	TTI, ms		20	20	20
	Coding type		CC 1/3	CC 1/3	CC 1/2
	CRC, bit		12	N/A	N/A
	Max number of bits/TTI after channel coding		255	321	96
	Max number of bits/radio frame before rate matching		128	161	48
	RM attribute		180 to 220	170 to 210	215 to 256
NOTE: CRC parity bits are to be attached to RAB subflow#1 any time since number of TrBlks are 1 even if there is no data on RAB subflow#1 (see clause 4.2.1.1 in 3GPP TS 25.222 [29]).					

6.10.3.4.1.5.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.5.2.1.3 TFCS

TFCS size	6
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3,DCCH)= (TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0), (TF2, TF1, TF1, TF0), (TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF1), (TF2, TF1, TF1, TF1)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.5.2.2 Physical channel parameters

DPCH Downlink	Midamble	512 chips
	Codes and time slots	SF16 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	228 bits
	TFCI code word	16 bits
	Puncturing limit	0.40

6.10.3.4.1.5a 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

6.10.3.4.1.5a.1 Uplink

6.10.3.4.1.5a.1.1 Transport channel parameters

6.10.3.4.1.5a.1.1.1 Transport channel parameters for Conversational / speech / UL:(10.2, 6.7, 5.9, 4.75) kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB subflow #1	RAB subflow #2	RAB subflow #3
RLC	Logical channel type		DTCH		
	RLC mode		TM	TM	TM
	Payload sizes, bit		39, 42, 55, 58, 65 (alt. 0, 39, 42, 55, 58, 65)	53, 63, 76, 99	40
	Max data rate, bps		10 200		
	TrD PDU header, bit		0		
MAC	MAC header, bit		0		
	MAC multiplexing		N/A		
Layer 1	TrCH type		DCH	DCH	DCH
	TB sizes, bit		39, 42, 55, 58, 65 (alt. 0, 39, 42, 55, 58, 65)	53, 63, 76, 99	40
	TFS	TF0, bits	0x65 (alt. 1x0) (note)	0x99	0x40
		TF1, bits	1x39	1x53	1x40
		TF2, bits	1x42	1x63	N/A
		TF3, bits	1x55	1x76	N/A
		TF4, bits	1x58	1x99	N/A
		TF5, bits	1x65	N/A	N/A
	TTI, ms		20	20	20
	Coding type		CC 1/3	CC 1/3	CC 1/2
	CRC, bit		12	N/A	N/A
	Max number of bits/TTI after channel coding		255	321	96
	Max number of bits/radio frame before rate matching		128	161	48
	RM attribute		180 to 220	170 to 210	215 to 256
NOTE: In case of using this alternative, CRC parity bits are to be attached to RAB subflow#1 any time since number of TrBlks are 1 even if there is no data on RAB subflow#1 (see clause 4.2.1.1 in TS 25.222).					

6.10.3.4.1.5a.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.5a.1.1.3 TFCS

TFCS size	12
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3,DCCH)= (TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0), (TF2,TF1,TF0,TF0), (TF3,TF2,TF0,TF0),

	(TF4,TF3,TF0,TF0), (TF5,TF4,TF1,TF0), (TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF1), (TF2,TF1,TF0,TF1), (TF3,TF2,TF0,TF1), (TF4,TF3,TF0,TF1), (TF5,TF4,TF1,TF1)
NOTE: In case TB size zero is configured for any transport channel the first TFC is required; it is optional otherwise.	

6.10.3.4.1.5a.1.2 Physical channel parameters

DPCH Uplink	Midamble	512 chips
	Codes and time slots	SF16 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	226 bits
	TFCI code word	16 bits
	TPC	2 bit
	Puncturing Limit	0.40

6.10.3.4.1.5a.2 Downlink

6.10.3.4.1.5a.2.1 Transport channel parameters

6.10.3.4.1.5a.2.1.1 Transport channel parameters for Conversational / speech / DL: DL:(10.2, 6.7, 5.9, 4.75) kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB subflow #1	RAB subflow #2	RAB subflow #3
RLC	Logical channel type		DTCH		
	RLC mode		TM	TM	TM
	Payload sizes, bit		39, 42, 55, 58, 65 (alt. 0, 39, 42, 55, 58, 65)	0, 53, 63, 76, 99	40
	Max data rate, bps		10 200		
	TrD PDU header, bit		0		
MAC	MAC header, bit		0		
	MAC multiplexing		N/A		
Layer 1	TrCH type		DCH	DCH	DCH
	TB sizes, bit		39, 42, 55, 58, 65 (alt. 0, 39, 42, 55, 58, 65)	0, 53, 63, 76, 99	40
	TFS	TF0, bits	0x65 (alt. 1x0) (note)	0x99	0x40
		TF1, bits	1x39	1x53	1x40
		TF2, bits	1x42	1x63	N/A
		TF3, bits	1x55	1x76	N/A
		TF4, bits	1x58	1x99	N/A
		TF5, bits	1x65	N/A	N/A
	TTI, ms		20	20	20
	Coding type		CC 1/3	CC 1/3	CC 1/2
	CRC, bit		12	N/A	N/A
	Max number of bits/TTI after channel coding		255	321	96
	Max number of bits/radio frame before rate matching		128	161	48
	RM attribute		180 to 220	170 to 210	215 to 256
NOTE: In case of using this alternative, CRC parity bits are to be attached to RAB subflow#1 any time since number of TrBlks are 1 even if there is no data on RAB subflow#1 (see clause 4.2.1.1 in 3GPP TS 25.222 [29]).					

6.10.3.4.1.5a.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.5a.2.1.3 TFCS

TFCS size	12
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3,DCCH)= (TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0), (TF2,TF1,TF0,TF0), (TF3,TF2,TF0,TF0), (TF4,TF3,TF0,TF0), (TF5,TF4,TF1,TF0), (TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF1), (TF2,TF1,TF0,TF1), (TF3,TF2,TF0,TF1), (TF4,TF3,TF0,TF1), (TF5,TF4,TF1,TF1)
NOTE: In case TB size zero is configured for any transport channel the first TFC is required; it is optional otherwise.	

6.10.3.4.1.5a.2.2 Physical channel parameters

DPCH Downlink	Midamble	512 chips
	Codes and time slots	SF16 x 1 codes x 1 time slot
	Max. Number of data bits/radio frame	228 bits
	TFCI code word	16 bits
	Puncturing limit	0.40

6.10.3.4.1.6 Conversational / speech / UL:7.95 DL:7.95 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.3.4.1.6.1 Uplink

6.10.3.4.1.6.1.1 Transport channel parameters

6.10.3.4.1.6.1.1.1 Transport channel parameters for Conversational / speech / UL:7.95 kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB subflow #1	RAB subflow #2
RLC	Logical channel type		DTCH	
	RLC mode		TM	TM
	Payload sizes, bit		39, 75 (alt. 0, 39, 75)	84
	Max data rate, bps		7 950	
	TrD PDU header, bit		0	
MAC	MAC header, bit		0	
	MAC multiplexing		N/A	
Layer 1	TrCH type		DCH	DCH
	TB sizes, bit		39, 75 (alt. 0, 39, 75)	84
	TFS	TF0, bits	0x75 (alt. 1x0) (note)	0x84
		TF1, bits	1x39	1x84
		TF2, bits	1x75	N/A
	TTI, ms		20	20
	Coding type		CC 1/3	CC 1/3
	CRC, bit		12	N/A
	Max number of bits/TTI after channel coding		285	276
	Max number of bits/radio frame before rate matching		143	138
	RM attribute		180 to 220	170 to 210
NOTE: In case of using this alternative, CRC parity bits are to be attached to RAB subflow#1 any time since number of TrBlks are 1 even if there is no data on RAB subflow#1 (see clauses 4.2.1.1 in 3GPP TS 25.222 [29]).				

6.10.3.4.1.6.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.6.1.1.3 TFCS

TFCS size	6
TFCS	(RAB subflow#1, RAB subflow#2, DCCH)= (TF0, TF0, TF0), (TF1, TF0, TF0), (TF2, TF1, TF0), (TF0, TF0, TF1), (TF1, TF0, TF1), (TF2, TF1, TF1)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.6.1.2 Physical channel parameters

DPCH Uplink	Midamble	512 chips
	Codes and time slots	SF16 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	226 bits
	TFCI code word	16 bits
	TPC	2 bits
	Puncturing Limit	0.44

6.10.3.4.1.6.2 Downlink

6.10.3.4.1.6.2.1 Transport channel parameters

6.10.3.4.1.6.2.1.1 Transport channel parameters for Conversational / speech / DL:7.95 kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB subflow #1	RAB subflow #2
RLC	Logical channel type		DTCH	
	RLC mode		TM	TM
	Payload sizes, bit		39, 75 (alt. 0, 39, 75)	84
	Max data rate, bps		7 950	
	TrD PDU header, bit		0	
MAC	MAC header, bit		0	
	MAC multiplexing		N/A	
Layer 1	TrCH type		DCH	DCH
	TB sizes, bit		39, 75 (alt. 0, 39, 75)	84
	TFS	TF0, bits	0x75 (alt. 1x0) (note)	0x84
		TF1, bits	1x39	1x84
		TF2, bits	1x75	N/A
	TTI, ms		20	20
	Coding type		CC 1/3	CC 1/3
	CRC, bit		12	N/A
	Max number of bits/TTI after channel coding		285	276
	Max number of bits/radio frame before rate matching		143	138
	RM attribute		180 to 220	170 to 210
NOTE: CRC parity bits are to be attached to RAB subflow#1 any time since number of TrBlks are 1 even if there is no data on RAB subflow#1 (see clause 4.2.1.1 in 3GPP TS 25.222 [29]).				

6.10.3.4.1.6.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.6.2.1.3 TFCS

TFCS size	6
TFCS	(RAB subflow#1, RAB subflow#2, DCCH)= (TF0, TF0, TF0), (TF1, TF0, TF0), (TF2, TF1, TF0), (TF0, TF0, TF1), (TF1, TF0, TF1), (TF2, TF1, TF1)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.6.2.2 Physical channel parameters

DPCH Downlink	Midamble	512 chips
	Codes and time slots	SF16 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	228 bits
	TFCI code word	16 bits
	Puncturing limit	0.48

6.10.3.4.1.7 Conversational / speech / UL:7.4 DL:7.4 kbps / CS RAB+ UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.3.4.1.7.1 Uplink

6.10.3.4.1.7.1.1 Transport channel parameters

6.10.3.4.1.7.1.1.1 Transport channel parameters for Conversational / speech / UL:7.4 kbps / CS RAB

Higher layer	RAB/Signalling RB	RAB subflow #1	RAB subflow #2
RLC	Logical channel type	DTCH	
	RLC mode	TM	TM
	Payload sizes, bit	39, 61 (alt. 0, 39, 61)	87
	Max data rate, bps	7 400	
	TrD PDU header, bit	0	

MAC	MAC header, bit		0	
	MAC multiplexing		N/A	
Layer 1	TrCH type		DCH	DCH
	TB sizes, bit		39, 61 (alt. 0, 39, 61)	87
	TFS	TF0, bits	0x61 (alt. 1x0) (note)	0x87
		TF1, bits	1x39	1x87
		TF2, bits	1x61	N/A
	TTI, ms		20	20
	Coding type		CC 1/3	CC 1/3
	CRC, bit		12	N/A
	Max number of bits/TTI after channel coding		243	285
	Max number of bits/radio frame before rate matching		122	143
	RM attribute		180 to 220	170 to 210
NOTE: CRC parity bits are to be attached to RAB subflow#1 any time since number of TrBlks are 1 even if there is no data on RAB subflow#1 (see clause 4.2.1.1 in 3GPP TS 25.222 [29]).				

6.10.3.4.1.7.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.7.1.1.3 TFCS

TFCS size	6
TFCS	(RAB subflow#1, RAB subflow#2, DCCH)= (TF0, TF0, TF0), (TF1, TF0, TF0), (TF2, TF1, TF0), (TF0, TF0, TF1), (TF1, TF0, TF1), (TF2, TF1, TF1)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.7.1.2 Physical channel parameters

DPCH Uplink	Midamble	512 chips
	Codes and time slots	SF16 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	226 bits
	TFCI code word	16 bits
	TPC	2 bits
	Puncturing Limit	0.48

6.10.3.4.1.7.2 Downlink

6.10.3.4.1.7.2.1 Transport channel parameters

6.10.3.4.1.7.2.1.1 Transport channel parameters for Conversational / speech / DL:7.4 kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB subflow #1	RAB subflow #2
RLC	Logical channel type		DTCH	
	RLC mode		TM	TM
	Payload sizes, bit		39, 61 (alt. 0, 39, 61)	87
	Max data rate, bps		7 400	
	TrD PDU header, bit		0	
MAC	MAC header, bit		0	
	MAC multiplexing		N/A	
Layer 1	TrCH type		DCH	DCH
	TB sizes, bit		39, 61 (alt. 0, 39, 61)	87
	TFS	TF0, bits	0x61(alt. 1x0) (note)	0x87
		TF1, bits	1x39	1x87
		TF2, bits	1x61	N/A
	TTI, ms		20	20
	Coding type		CC 1/3	CC 1/3
	CRC, bit		12	N/A
	Max number of bits/TTI after channel coding		243	285
	Max number of bits/radio frame before rate matching		122	143
	RM attribute		180 to 220	170 to 210

NOTE:	CRC parity bits are to be attached to RAB subflow#1 any time since number of TrBlks are 1 even if there is no data on RAB #1 (see clause 4.2.1.1 in 3GPP TS 25.222 [29]).

6.10.3.4.1.7.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.7.2.1.3 TFCS

TFCS size	6
TFCS	(RAB subflow#1, RAB subflow#2, DCCH)= (TF0, TF0, TF0), (TF1, TF0, TF0), (TF2, TF1, TF0), (TF0, TF0, TF1), (TF1, TF0, TF1), (TF2, TF1, TF1)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; optional otherwise.	

6.10.3.4.1.7.2.2 Physical channel parameters

DPCH Downlink	Midamble	512 chips
	Codes and time slots	SF16 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	228 bits
	TFCI code word	16 bits
	Puncturing limit	0.48

6.10.3.4.1.7a 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

6.10.3.4.1.7a.1 Uplink

6.10.3.4.1.7a.1.1 Transport channel parameters

6.10.3.4.1.7a.1.1.1 Transport channel parameters for Conversational / speech / UL:(7.4, 6.7, 5.9, 4.75) kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB subflow #1	RAB subflow #2
RLC	Logical channel type		DTCH	
	RLC mode		TM	TM
	Payload sizes, bit		39, 42, 55, 58, 61 (alt. 0, 39, 42, 55, 58, 61)	53, 63, 76, 87
	Max data rate, bps		7 400	
	TrD PDU header, bit		0	
MAC	MAC header, bit		0	
	MAC multiplexing		N/A	
Layer 1	TrCH type		DCH	DCH
	TB sizes, bit		39, 42, 55, 58, 61 (alt. 0, 39, 42, 55, 58, 61)	53, 63, 76, 87
	TFS	TF0, bits	0x61 (alt. 1x0) (note)	0x87
		TF1, bits	1x39	1x53
		TF2, bits	1x42	1x63
		TF3, bits	1x55	1x76
		TF4, bits	1x58	1x87
		TF5, bits	1x61	N/A
	TTI, ms		20	20
	Coding type		CC 1/3	CC 1/3
	CRC, bit		12	N/A
	Max number of bits/TTI after channel coding		243	285
	Max number of bits/radio frame before rate matching		122	143
	RM attribute		180 to 220	170 to 210
NOTE: In case of using this alternative, CRC parity bits are to be attached to RAB subflow#1 any time since number of TrBlks are 1 even if there is no data on RAB subflow#1 (see clause 4.2.1.1 in 3GPP TS 25.222 [29]).				

6.10.3.4.1.7a.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.7a.1.1.3 TFCS

TFCS size	12
TFCS	(RAB subflow#1, RAB subflow#2, DCCH)= (TF0, TF0, TF0), (TF1, TF0, TF0), (TF2, TF1, TF0), (TF3, TF2, TF0), (TF4, TF3, TF0), (TF5, TF4, TF0), (TF0, TF0, TF1), (TF1, TF0, TF1), (TF2, TF1, TF1), (TF3, TF2, TF1), (TF4, TF3, TF1), (TF5, TF4, TF1)
NOTE: In case TB size zero is configured for any transport channel the first TFC is required; it is optional otherwise.	

6.10.3.4.1.7a.1.2 Physical channel parameters

DPCH Uplink	Midamble	512 chips
	Codes and time slots	SF16 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	226 bits
	TFCI code word	16 bits
	TPC	2 bits
	Puncturing Limit	0.48

6.10.3.4.1.7a.2 Downlink

6.10.3.4.1.7a.2.1 Transport channel parameters

6.10.3.4.1.7a.2.1.1 Transport channel parameters for Conversational / speech / DL:(7.4, 6.7, 5.9, 4.75) kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB subflow #1	RAB subflow #2
RLC	Logical channel type		DTCH	
	RLC mode		TM	TM
	Payload sizes, bit		39, 42, 55, 58, 61 (alt. 0, 39, 42, 55, 58, 61)	53, 63, 76, 87
	Max data rate, bps		7 400	
	TrD PDU header, bit		0	
MAC	MAC header, bit		0	
	MAC multiplexing		N/A	
Layer 1	TrCH type		DCH	DCH
	TB sizes, bit		39, 42, 55, 58, 61 (alt. 0, 39, 42, 55, 58, 61)	53, 63, 76, 87
	TFS	TF0, bits	0x61 (alt. 1x0) (note)	0x87
		TF1, bits	1x39	1x53
		TF2, bits	1x42	1x63
		TF3, bits	1x55	1x76
		TF4, bits	1x58	1x87
		TF5, bits	1x61	N/A
	TTI, ms		20	20
	Coding type		CC 1/3	CC 1/3
	CRC, bit		12	N/A
	Max number of bits/TTI after channel coding		243	285
	Max number of bits/radio frame before rate matching		122	143
	RM attribute		180 to 220	170 to 210
NOTE: In case of using this alternative, CRC parity bits are to be attached to RAB subflow#1 any time since number of TrBlks are 1 even if there is no data on RAB subflow#1 (see clause 4.2.1.1 in 3GPP TS 25.222 [29]).				

6.10.3.4.1.7a.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.7a.2.1.3 TFCS

TFCS size	12
TFCS	(RAB subflow#1, RAB subflow#2, DCCH)= (TF0, TF0, TF0), (TF1, TF0, TF0), (TF2, TF1, TF0), (TF3, TF2, TF0), (TF4, TF3, TF0), (TF5, TF4, TF0),

	(TF0, TF0, TF1), (TF1, TF0, TF1), (TF2, TF1, TF1), (TF3, TF2, TF1), (TF4, TF3, TF1), (TF5, TF4, TF1)
NOTE:	In case TB size zero is configured for any transport channel the first TFC is required; it is optional otherwise.

6.10.3.4.1.7a.2.2 Physical channel parameters

DPCH Downlink	Midamble	512 chips
	Codes and time slots	SF16 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	228 bits
	TFCI code word	16 bits
	Puncturing limit	0.48

6.10.3.4.1.8 Conversational / speech / UL:6.7 DL:6.7 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.3.4.1.8.1 Uplink

6.10.3.4.1.8.1.1 Transport channel parameters

6.10.3.4.1.8.1.1.1 Transport channel parameters for Conversational / speech / UL:6.7 kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB subflow #1	RAB subflow #2
RLC	Logical channel type		DTCH	
	RLC mode		TM	TM
	Payload sizes, bit		39, 58 (alt. 0, 39, 58)	76
	Max data rate, bps		6 700	
	TrD PDU header, bit		0	
MAC	MAC header, bit		0	
	MAC multiplexing		N/A	
Layer 1	TrCH type		DCH	DCH
	TB sizes, bit		39, 58 (alt. 0, 39, 58)	76
	TFS	TF0, bits	0x58 (alt. 1x0) (note)	0x76
		TF1, bits	1x39	1x76
		TF2, bits	1x58	N/A
	TTI, ms		20	20
	Coding type		CC 1/3	CC 1/3
	CRC, bit		12	N/A
	Max number of bits/TTI after channel coding		234	252
	Max number of bits/radio frame before rate matching		117	126
	RM attribute		180 to 220	170 to 210
NOTE:	In case of using this alternative, CRC parity bits are to be attached to RAB subflow#1 any time since number of TrBlks are 1 even if there is no data on RAB subflow#1 (see clause 4.2.1.1 in 3GPP TS 25.222 [29]).			

6.10.3.4.1.8.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.8.1.1.3 TFCS

TFCS size	6
TFCS	(RAB subflow#1, RAB subflow#2, DCCH)= (TF0, TF0, TF0), (TF1, TF0, TF0), (TF2, TF1, TF0), (TF0, TF0, TF1), (TF1, TF0, TF1), (TF2, TF1, TF1)
NOTE:	In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.

6.10.3.4.1.8.1.2 Physical channel parameters

DPCH Uplink	Midamble	512 chips
	Codes and time slots	SF16 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	226 bits
	TFCI code word	16 bits
	TPC	2 bits
	Puncturing Limit	0.52

6.10.3.4.1.8.2 Downlink

6.10.3.4.1.8.2.1 Transport channel parameters

6.10.3.4.1.8.2.1.1 Transport channel parameters for Conversational / speech / DL:6.7 kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB subflow #1	RAB subflow #2
RLC	Logical channel type		DTCH	
	RLC mode		TM	TM
	Payload sizes, bit		39, 58 (alt. 0, 39, 58)	76
	Max data rate, bps		6 700	
	TrD PDU header, bit		0	
MAC	MAC header, bit		0	
	MAC multiplexing		N/A	
Layer 1	TrCH type		DCH	DCH
	TB sizes, bit		39, 58 (alt. 0,39,58)	76
	TFS	TF0, bits	0x58 (alt.1x0) (note)	0x76
		TF1, bits	1x39	1x76
		TF2, bits	1x58	N/A
	TTI, ms		20	20
	Coding type		CC 1/3	CC 1/3
	CRC, bit		12	N/A
	Max number of bits/TTI after channel coding		234	252
	Max number of bits/radio frame before rate matching		117	126
	RM attribute		180 to 220	170 to 210
NOTE : CRC parity bits are to be attached to RAB subflow#1 any time since number of TrBlks are 1 even if there is no data on RAB subflow#1 (see clause 4.2.1.1 in 3GPP TS 25.222 [29]).				

6.10.3.4.1.8.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.8.2.1.3 TFCS

TFCS size	6
TFCS	(RAB subflow#1, RAB subflow#2, DCCH)= (TF0, TF0, TF0), (TF1, TF0, TF0), (TF2, TF1, TF0), (TF0, TF0, TF1), (TF1, TF0, TF1), (TF2, TF1, TF1)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.8.2.2 Physical channel parameters

DPCH Downlink	Midamble	512 chips
	Codes and time slots	SF16 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	228 bits
	TFCI code word	16 bits
	Puncturing limit	0.52

6.10.3.4.1.9 Conversational / speech / UL:5.9 DL:5.9 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.3.4.1.9.1 Uplink

6.10.3.4.1.9.1.1 Transport channel parameters

6.10.3.4.1.9.1.1.1 Transport channel parameters for Conversational / speech / UL:5.9 kbps / CS RAB

Higher layer	RAB/Signalling RB	RAB subflow #1	RAB subflow #2
RLC	Logical channel type	DTCH	
	RLC mode	TM	TM

	Payload sizes, bit		39, 55 (alt. 0, 39, 55)	63
	Max data rate, bps		5 900	
	TrD PDU header, bit		0	
MAC	MAC header, bit		0	
	MAC multiplexing		N/A	
Layer 1	TrCH type		DCH	DCH
	TB sizes, bit		39, 55 (alt. 0, 39, 55)	63
	TFS	TF0, bits	0x55 (alt. 1x0) (note)	0x63
		TF1, bits	1x39	1x63
		TF2, bits	1x55	N/A
	TTI, ms		20	20
	Coding type		CC 1/3	CC 1/3
	CRC, bit		12	N/A
	Max number of bits/TTI after channel coding		225	213
	Max number of bits/radio frame before rate matching		113	107
	RM attribute		180 to 220	170 to 210
NOTE: In case of using this alternative, CRC parity bits are to be attached to RAB subflow#1 any time since number of TrBlks are 1 even if there is no data on RAB subflow#1 (see clause 4.2.1.1 in 3GPP TS 25.222 [29]).				

6.10.3.4.1.9.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.9.1.1.3 TFCS

TFCS size	6
TFCS	(RAB subflow#1, RAB subflow#2, DCCH)= (TF0, TF0, TF0), (TF1, TF0, TF0), (TF2, TF1, TF0), (TF0, TF0, TF1), (TF1, TF0, TF1), (TF2, TF1, TF1)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.9.1.2 Physical channel parameters

DPCH Uplink	Midamble	512 chips
	Codes and time slots	SF16 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	226 bits
	TFCI code word	16 bits
	TPC	2 bits
	Puncturing Limit	0.56

6.10.3.4.1.9.2 Downlink

6.10.3.4.1.9.2.1 Transport channel parameters

6.10.3.4.1.9.2.1.1 Transport channel parameters for Conversational / speech / DL:5.9 kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB subflow #1	RAB subflow #2
RLC	Logical channel type		DTCH	
	RLC mode		TM	TM
	Payload sizes, bit		39, 55 (alt. 0, 39, 55)	63
	Max data rate, bps		5 900	
	TrD PDU header, bit		0	
MAC	MAC header, bit		0	
	MAC multiplexing		N/A	
Layer 1	TrCH type		DCH	DCH
	TB sizes, bit		39, 55 (alt. 0, 39, 55)	63
	TFS	TF0, bits	0x55 (alt. 1x0) (note)	0x63
		TF1, bits	1x39	1x63
		TF2, bits	1x55	N/A
	TTI, ms		20	20
	Coding type		CC 1/3	CC 1/3
	CRC, bit		12	N/A

	Max number of bits/TTI after channel coding	225	213
	Max number of bits/radio frame before rate matching	113	107
	RM attribute	180 to 220	170 to 210
NOTE: CRC parity bits are to be attached to RAB subflow#1 any time since number of TrBlks are 1 even if there is no data on RAB subflow#1 (see clause 4.2.1.1 in 3GPP TS 25.222 [29]).			

6.10.3.4.1.9.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.9.2.1.3 TFCS

TFCS size	6
TFCS	(RAB subflow#1, RAB subflow#2, DCCH)= (TF0, TF0, TF0), (TF1, TF0, TF0), (TF2, TF1, TF0), (TF0, TF0, TF1), (TF1, TF0, TF1), (TF2, TF1, TF1)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.9.2.2 Physical channel parameters

DPCH Downlink	Midamble	512 chips
	Codes and time slots	SF16 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	228 bits
	TFCI code word	16 bits
	Puncturing limit	0.56

6.10.3.4.1.10 Conversational / speech / UL:5.15 DL:5.15 kbps / CS RAB + UL:1.7 DL:1.7 kbps SRBs for DCCH

6.10.3.4.1.10.1 Uplink

6.10.3.4.1.10.1.1 Transport channel parameters

6.10.3.4.1.10.1.1.1 Transport channel parameters for Conversational / speech / UL:5.15 kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB subflow #1	RAB subflow #2
RLC	Logical channel type		DTCH	
	RLC mode		TM	TM
	Payload sizes, bit		39, 49 (alt. 0, 39, 49)	54
	Max data rate, bps		5 150	
	TrD PDU header, bit		0	
MAC	MAC header, bit		0	
	MAC multiplexing		N/A	
Layer 1	TrCH type		DCH	DCH
	TB sizes, bit		39, 49 (alt. 0, 39, 49)	54
	TFS	TF0, bits	0x49 (alt. 1x0) (note)	0x54
		TF1, bits	1x39	1x54
		TF2, bits	1x49	N/A
	TTI, ms		20	20
	Coding type		CC 1/3	CC 1/3
	CRC, bit		12	N/A
	Max number of bits/TTI after channel coding		207	186
	Max number of bits/radio frame before rate matching		104	93
	RM attribute		180 to 220	170 to 210
NOTE: In case of using this alternative, CRC parity bits are to be attached to RAB subflow#1 any time since number of TrBlks are 1 even if there is no data on RAB subflow#1 (see clause 4.2.1.1 in 3GPP TS 25.222 [29]).				

6.10.3.4.1.10.1.1.2 Transport channel parameters for UL:1.7 kbps SRBs for DCCH

See clause 6.10.3.4.1.1.1.1.1.

6.10.3.4.1.10.1.1.3 TFCS

TFCS size	6
TFCS	(RAB subflow#1, RAB subflow#2, DCCH)= (TF0, TF0, TF0), (TF1, TF0, TF0), (TF2, TF1, TF0), (TF0, TF0, TF1), (TF1, TF0, TF1), (TF2, TF1, TF1)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.10.1.2 Physical channel parameters

DPCH Uplink	Midamble	512 chips
	Codes and time slots	SF16 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	226 bits
	TFCI code word	16 bits
	TPC	2 bits
	Puncturing Limit	0.72

6.10.3.4.1.10.2 Downlink

6.10.3.4.1.10.2.1 Transport channel parameters

6.10.3.4.1.10.2.1.1 Transport channel parameters for Conversational / speech / DL:5.15 kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB subflow #1	RAB subflow #2
RLC	Logical channel type		DTCH	
	RLC mode		TM	TM
	Payload sizes, bit		39, 49 (alt. 0, 39, 49)	54
	Max data rate, bps		5 150	
	TrD PDU header, bit		0	
MAC	MAC header, bit		0	
	MAC multiplexing		N/A	
Layer 1	TrCH type		DCH	DCH
	TB sizes, bit		39, 49 (alt. 0, 39, 49)	54
	TFS	TF0, bits	0x49 (alt. 1x0) (note)	0x54
		TF1, bits	1x39	1x54
		TF2, bits	1x49	N/A
	TTI, ms		20	20
	Coding type		CC 1/3	CC 1/3
	CRC, bit		12	N/A
	Max number of bits/TTI after channel coding		207	186
	Max number of bits/radio frame before rate matching		104	93
	RM attribute		180 to 220	170 to 210
NOTE: CRC parity bits are to be attached to RAB subflow#1 any time since number of TrBlks are 1 even if there is no data on RAB subflow#1 (see clause 4.2.1.1 in 3GPP TS 25.222 [29]).				

6.10.3.4.1.10.2.1.2 Transport channel parameters for DL: 1.7 kbps SRBs for DCCH

See clause 6.10.3.4.1.1.2.1.1.

6.10.3.4.1.10.2.1.3 TFCS

TFCS size	6
TFCS	(RAB subflow#1, RAB subflow#2, DCCH)= (TF0, TF0, TF0), (TF1, TF0, TF0), (TF2, TF1, TF0), (TF0, TF0, TF1), (TF1, TF0, TF1), (TF2, TF1, TF1)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.10.2.2 Physical channel parameters

DPCH Downlink	Midamble	512 chips
	Codes and time slots	SF16 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	228 bits

	TFCI code word	16 bits
	Puncturing limit	0.72

6.10.3.4.1.11 Conversational / speech / UL:4.75 DL:4.75 kbps / CS RAB + UL:1.7 DL:1.7 kbps SRBs for DCCH

6.10.3.4.1.11.1 Uplink

6.10.3.4.1.11.1.1 Transport channel parameters

6.10.3.4.1.11.1.1.1 Transport channel parameters for Conversational / speech / UL:4.75 kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB subflow #1	RAB subflow #2
RLC	Logical channel type		DTCH	
	RLC mode		TM	TM
	Payload sizes, bit		39, 42 (alt. 0, 39, 42)	53
	Max data rate, bps		4 750	
	TrD PDU header, bit		0	
MAC	MAC header, bit		0	
	MAC multiplexing		N/A	
Layer 1	TrCH type		DCH	DCH
	TB sizes, bit		39, 42 (alt. 0, 39, 42)	53
	TFS	TF0, bits	0x42 (alt. 1x0) (note)	0x53
		TF1, bits	1x39	1x53
		TF2, bits	1x42	N/A
	TTI, ms		20	20
	Coding type		CC 1/3	CC 1/3
	CRC, bit		12	N/A
	Max number of bits/TTI after channel coding		186	183
	Max number of bits/radio frame before rate matching		93	92
	RM attribute		180 to 220	170 to 210
NOTE: In case of using this alternative, CRC parity bits are to be attached to RAB subflow#1 any time since number of TrBlks are 1 even if there is no data on RAB subflow#1 (see clause 4.2.1.1 in 3GPP TS 25.222 [29]).				

6.10.3.4.1.11.1.1.2 Transport channel parameters for UL:1.7 kbps SRBs for DCCH

See clause 6.10.3.4.1.1.1.1.

6.10.3.4.1.11.1.1.3 TFCS

TFCS size	6
TFCS	(RAB subflow#1, RAB subflow#2, DCCH)= (TF0, TF0, TF0), (TF1, TF0, TF0), (TF2, TF1, TF0), (TF0, TF0, TF1), (TF1, TF0, TF1), (TF2, TF1, TF1)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.11.1.2 Physical channel parameters

DPCH Uplink	Midamble	512 chips
	Codes and time slots	SF16 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	226 bits
	TFCI code word	16 bits
	TPC	2 bits
	Puncturing Limit	0.76

6.10.3.4.1.11.2 Downlink

6.10.3.4.1.11.2.1 Transport channel parameters

6.10.3.4.1.11.2.1.1 Transport channel parameters for Conversational / speech / DL:4.75 kbps / CS RAB

Higher layer	RAB/Signalling RB	RAB subflow #1	RAB subflow #2

RLC	Logical channel type		DTCH	
	RLC mode		TM	TM
	Payload sizes, bit		39, 42 (alt. 0, 39, 42)	53
	Max data rate, bps		4 750	
	TrD PDU header, bit		0	
MAC	MAC header, bit		0	
	MAC multiplexing		N/A	
Layer 1	TrCH type		DCH	DCH
	TB sizes, bit		39, 42 (alt. 0, 39, 42)	53
	TFS	TF0, bits	0X42 (alt.1x0)(note)	0x53
		TF1, bits	1x39	1x53
		TF2, bits	1x42	N/A
	TTI, ms		20	20
	Coding type		CC 1/3	CC 1/3
	CRC, bit		12	N/A
	Max number of bits/TTI after channel coding		186	183
	Max number of bits/radio frame before rate matching		93	92
	RM attribute		180 to 220	170 to 210
NOTE: CRC parity bits are to be attached to RAB subflow#1 any time since number of TrBlks are 1 even if there is no data on RAB subflow#1 (see clause 4.2.1.1 in 3GPP TS 25.222 [29]).				

6.10.3.4.1.11.2.1.2 Transport channel parameters for DL:1.7 kbps SRBs for DCCH

See clause 6.10.3.4.1.1.2.1.1.

6.10.3.4.1.11.2.1.3 TFCS

TFCS size	6
TFCS	(RAB subflow#1, RAB subflow#2, DCCH)= (TF0, TF0, TF0), (TF1, TF0, TF0), (TF2, TF1, TF0), (TF0, TF0, TF1), (TF1, TF0, TF1), (TF2, TF1, TF1)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.11.2.2 Physical channel parameters

DPCH Downlink	Midamble	512 chips
	Codes and time slots	SF16 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	228 bits
	TFCI code word	16 bits
	Puncturing limit	0.76

6.10.3.4.1.12 Conversational / unknown / UL:28.8/DL:28.8 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.3.4.1.12.1 Uplink

6.10.3.4.1.12.1.1 Transport channel parameters

6.10.3.4.1.12.1.1.1 Transport channel parameters for conversational / unknown / UL:28.8 kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		TM
	Payload sizes, bit		576
	Max data rate, bps		28 800
	TrD PDU header, bit		0
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		576
	TFS	TF0, bits	0x576
		TF1, bits	1x576
	TTI, ms		20

	Coding type	TC
	CRC, bit	16
	Max number of bits/TTI after channel coding	3 564
	Max number of bits/radio frame before rate matching	891
	RM attribute	160 to 200

6.10.3.4.1.12.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.12.1.1.3 TFCS

TFCS size	4
TFCS	(28.8 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF0, TF1), (TF1, TF1)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.12.1.2 Physical channel parameters

DPCH Uplink	Midamble	512 chips
	Codes and time slots	SF4 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	904 bits
	TFCI code word	16 bits
	TPC	2 bits
	Puncturing Limit	0.76
NOTE: In case the first TFC in a TFCS is not configured, the TFCI code word will be 8 bits.		

6.10.3.4.1.12.2 Downlink

6.10.3.4.1.12.2.1 Transport channel parameters

6.10.3.4.1.12.2.1.1 Transport channel parameters for conversational / unknown / DL:28.8 kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		TM
	Payload sizes, bit		576
	Max data rate, bps		28 800
	TrD PDU header, bit		0
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		576
	TFS	TF0, bits	0x576
		TF1, bits	1x576
	TTI, ms		20
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		3 564
	Max number of bits/radio frame before rate matching		891
	RM attribute		160 to 200

6.10.3.4.1.12.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.12.2.1.3 TFCS

TFCS size	4
TFCS	(28.8 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF0, TF1), (TF1, TF1)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.12.2.2 Physical channel parameters

DPCH Downlink	Midamble	512 chips
	Codes and time slots	SF16 x 2 codes x 1 time slot
	Max. Number of data bits/radio frame	472 bits
	TFCI code word	16 bits
	Puncturing limit	0.40
NOTE: In case the first TFC in the TFCS is not configured, the TFCI code word will be 8 bits.		

6.10.3.4.1.13 Conversational / unknown / UL:64 DL:64 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.3.4.1.13.1 Uplink

6.10.3.4.1.13.1.1 Transport channel parameters

6.10.3.4.1.13.1.1.1 Transport channel parameters for Conversational / unknown / UL:64 kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		TM
	Payload sizes, bit		640
	Max data rate, bps		64 000
	TrD PDU header, bit		0
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		640
	TFS	TF0, bits	0x640
		TF1, bits	2x640
	TTI, ms		20
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		3 948
	Max number of bits/radio frame before rate matching		1 974
	RM attribute		150 to 195

6.10.3.4.1.13.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.13.1.1.3 TFCS

TFCS size	4
TFCS	(64 kbps RAB, DCCH)=(TF0, TF0), (TF1, TF0), (TF0, TF1), (TF1, TF1)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.13.1.2 Physical channel parameters

DPCH Uplink	Midamble	512 chips
	Codes and time slots	SF16 x 1 code x 1 time slot + SF4 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	1148 bits
	TFCI code word	16 bits
	TPC	2 bits
	Puncturing Limit	0.48
NOTE: In case the first TFC in the TFCS is not configured, the TFCI code word will be 8 bits.		

6.10.3.4.1.13.2 Downlink

6.10.3.4.1.13.2.1 Transport channel parameters

6.10.3.4.1.13.2.1.1 Transport channel parameters for Conversational / unknown / DL:64 kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		TM
	Payload sizes, bit		640
	Max data rate, bps		64 000
	TrD PDU header, bit		0
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		640
	TFS	TF0, bits	0x640
		TF1, bits	2x640
	TTI, ms		20
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		3 948
	Max number of bits/radio frame before rate matching		1 974
	RM attribute		150 to 195

6.10.3.4.1.13.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.13.2.1.3 TFCS

TFCS size	4
TFCS	(64 kbps RAB, DCCH)=(TF0, TF0), (TF1, TF0), (TF0, TF1), (TF1, TF1)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.13.2.2 Physical channel parameters

DPCH Downlink	Midamble	512 chips
	Codes and time slots	SF16 x 5 codes x 1 time slot
	Max. Number of data bits/radio frame	1 204 bits
	TFCI code word	16 bits
	Puncturing limit	0.52
NOTE: In case the first TFC in the TFCS is not configured, the TFCI code word will be 8 bits.		

6.10.3.4.1.14 Conversational / unknown / UL:32 DL:32 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.3.4.1.14.1 Uplink

6.10.3.4.1.14.1.1 Transport channel parameters

6.10.3.4.1.14.1.1.1 Transport channel parameters for Conversational / unknown / UL:32 kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		TM
	Payload sizes, bit		640
	Max data rate, bps		32 000
	TrD PDU header, bit		0
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		640
	TFS	TF0, bits	0x640

		TF1, bits	1x640
	TTI, ms		20
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		1 980
	Max number of bits/radio frame before rate matching		990
	RM attribute		165 to 210

6.10.3.4.1.14.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.14.1.1.3 TFCS

TFCS size	4
TFCS	(32 kbps RAB, DCCH)=(TF0, TF0), (TF1, TF0), (TF0, TF1), (TF1, TF1)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.14.1.2 Physical channel parameters

DPCH Uplink	Midamble	512 chips
	Codes and time slots	SF4 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	904 bits
	TFCI code word	16 bits
	TPC	2 bits
	Puncturing Limit	0.68
NOTE: In case the first TFC in the TFCS is not configured, the TFCI code word will be 8 bits.		

6.10.3.4.1.14.2 Downlink

6.10.3.4.1.14.2.1 Transport channel parameters

6.10.3.4.1.14.2.1.1 Transport channel parameters for Conversational / unknown / DL:32 kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		TM
	Payload sizes, bit		640
	Max data rate, bps		32 000
	TrD PDU header, bit		0
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		640
	TFS	TF0, bits	0x640
		TF1, bits	1x640
	TTI, ms		20
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		1 980
	Max number of bits/radio frame before rate matching		990
	RM attribute		165 to 210

6.10.3.4.1.14.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.14.2.1.3 TFCS

TFCS size	4
TFCS	(32 kbps RAB, DCCH)=(TF0, TF0), (TF1, TF0), (TF0, TF1), (TF1, TF1)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.14.2.2 Physical channel parameters

DPCH Downlink	Midamble	512 chips
	Codes and time slots	SF16 x 3 codes x 1 time slot
	Max. Number of data bits/radio frame	716 bits
	TFCI code word	16 bits
	Puncturing limit	0.52
NOTE: In case the first TFC in the TFCS is not configured, the TFCI code word will be 8 bits.		

6.10.3.4.1.15 Streaming / unknown / UL:14.4/DL:14.4 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.3.4.1.15.1 Uplink

6.10.3.4.1.15.1.1 Transport channel parameters

6.10.3.4.1.15.1.1.1 Transport channel parameters for Streaming / unknown / UL: 14.4 kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		TM
	Payload sizes, bit		576
	Max data rate, bps		14 400
	TrD PDU header, bit		0
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		576
	TFS	TF0, bits	0x576
		TF1, bits	1x576
	TTI, ms		40
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		1 788
	Max number of bits/radio frame before rate matching		447
	RM attribute		145 to 185

6.10.3.4.1.15.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.15.1.1.3 TFCS

TFCS size	4
TFCS	(14.4 kbps RAB, DCCH)=(TF0, TF0), (TF1, TF0), (TF0, TF1), (TF1, TF1)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.15.1.2 Physical channel parameters

DPCH Uplink	Midamble	512 chips
	Codes and time slots	SF8 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	452bits
	TFCI code word	16 bits
	TPC	2 bits
	Puncturing Limit	0.76
NOTE: In case the first TFC in the TFCS is not configured, the TFCI code word will be 8 bits.		

6.10.3.4.1.15.2 Downlink

6.10.3.4.1.15.2.1 Transport channel parameters

6.10.3.4.1.15.2.1.1 Transport channel parameters for Streaming / unknown / DL:14.4 kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		TM
	Payload sizes, bit		576
	Max data rate, bps		14 400
	TrD PDU header, bit		0
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		576
	TFS	TF0, bits	0x576
		TF1, bits	1x576
	TTI, ms		40
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		1 788
	Max number of bits/radio frame before rate matching		447
	RM attribute		145 to 185

6.10.3.4.1.15.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.15.2.1.3 TFCS

TFCS size	4
TFCS	(14.4 kbps RAB, DCCH)=(TF0, TF0), (TF1, TF0), (TF0, TF1), (TF1, TF1)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.15.2.2 Physical channel parameters

DPCH Downlink	Midamble	512 chips
	Codes and time slots	SF16 x 2 codes x 1 time slot
	Max. Number of data bits/radio frame	472 bits
	TFCI code word	16 bits
	Puncturing limit	0.80
NOTE: In case the first TFC in the TFCS is not configured, the TFCI code word will be 8 bits.		

6.10.3.4.1.16 Streaming / unknown / UL:28.8/DL:28.8 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.3.4.1.16.1 Uplink

6.10.3.4.1.16.1.1 Transport channel parameters

6.10.3.4.1.16.1.1.1 Transport channel parameters for Streaming / unknown / UL:28.8 kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		TM
	Payload sizes, bit		576
	Max data rate, bps		28 800
	TrD PDU header, bit		0
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		576
	TFS	TF0, bits	0x576

		TF1, bits	1x576
	TTI, ms		20
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		3 564
	Max number of bits/radio frame before rate matching		891
	RM attribute		135 to 175

6.10.3.4.1.16.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.16.1.1.3 TFCS

TFCS size	4
TFCS	(28.8 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF0, TF1), (TF1, TF1)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.16.1.2 Physical channel parameters

DPCH Uplink	Midamble	512 chips
	Codes and time slots	SF8 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	452 bits
	TFCI code word	16 bits
	TPC	2 bits
	Puncturing Limit	0.44
NOTE: In case the first TFC in the TFCS is not configured, the TFCI code word will be 8 bits.		

6.10.3.4.1.16.2 Downlink

6.10.3.4.1.16.2.1 Transport channel parameters

6.10.3.4.1.16.2.1.1 Transport channel parameters for Streaming / unknown / DL:28.8 kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		TM
	Payload sizes, bit		576
	Max data rate, bps		28 800
	TrD PDU header, bit		0
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		576
	TFS	TF0, bits	0x576
		TF1, bits	1x576
	TTI, ms		20
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		3 564
	Max number of bits/radio frame before rate matching		891
	RM attribute		135 to 175

6.10.3.4.1.16.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.16.2.1.3 TFCS

TFCS size	4
TFCS	(28.8 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF0, TF1), (TF1, TF1)

NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.

6.10.3.4.1.16.2.2 Physical channel parameters

DPCH Downlink	Midamble	512 chips
	Codes and time slots	SF16 x 2 codes x 1 time slot
	Max. Number of data bits/radio frame	472 bits
	TFCI code word	16 bits
	Puncturing limit	0.44
NOTE: In case the first TFC in the TFCS is not configured, the TFCI code word will be 8 bits.		

6.10.3.4.1.17 Streaming / unknown / UL:57.6/DL:57.6 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.3.4.1.17.1 Uplink

6.10.3.4.1.17.1.1 Transport channel parameters

6.10.3.4.1.17.1.1.1 Transport channel parameters for Streaming / unknown / UL:57.6 kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		TM
	Payload sizes, bit		576
	Max data rate, bps		57 600
	TrD PDU header, bit		0
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		576
	TFS	TF0, bits	0x576
		TF1, bits	1x576
		TF2, bits	2x576
		TF3, bits	3x576
		TF4, bits	4x576
	TTI, ms		40
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		7 116
	Max number of bits/radio frame before rate matching		1 779
	RM attribute		125 to 165

6.10.3.4.1.17.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.17.1.1.3 TFCS

TFCS size	10
TFCS	(57.6 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF3, TF0), (TF4, TF0), (TF0, TF1), (TF1, TF1), (TF2, TF1), (TF3, TF1), (TF4, TF1)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.17.1.2 Physical channel parameters

DPCH Uplink	Midamble	512 chips
	Codes and time slots	SF4 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	904 bits
	TFCI code word	16 bits
	TPC	2 bits
	Puncturing Limit	0.44

6.10.3.4.1.17.2 Downlink

6.10.3.4.1.17.2.1 Transport channel parameters

6.10.3.4.1.17.2.1.1 Transport channel parameters for Streaming / unknown / DL:57.6 kbps / CS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		TM
	Payload sizes, bit		576
	Max data rate, bps		57 600
	TrD PDU header, bit		0
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		576
	TFS	TF0, bits	0x576
		TF1, bits	1x576
		TF2, bits	2x576
		TF3, bits	3x576
		TF4, bits	4x576
	TTI, ms		40
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		7 116
	Max number of bits/radio frame before rate matching		1 779
	RM attribute		125 to 165

6.10.3.4.1.17.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.17.2.1.3 TFCS

TFCS size	10
TFCS	(57.6 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF3, TF0), (TF4, TF0), (TF0, TF1), (TF1, TF1), (TF2, TF1), (TF3, TF1), (TF4, TF1)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.17.2.2 Physical channel parameters

DPCH Downlink	Midamble	512 chips
	Codes and time slots	SF16 x 4 codes x 1 time slot
	Max. Number of data bits/radio frame	960 bits
	TFCI code word	16 bits
	Puncturing limit	0.48

6.10.3.4.1.18 Void

6.10.3.4.1.19 Void

6.10.3.4.1.20 Void

6.10.3.4.1.21 Void

6.10.3.4.1.22 Void

6.10.3.4.1.23 Interactive or background / UL:32 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.3.4.1.23.1 Uplink

6.10.3.4.1.23.1.1 Transport channel parameters

6.10.3.4.1.23.1.1.1 Transport channel parameters for Interactive or background / UL:32 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		320 (alt. 128)
	Max data rate, bps		32 000
	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		336 (alt.144)
	TFS	TF0, bits	0x336 (alt. 0x144)
		TF1, bits	1x336 (alt. 1x144)
		TF2, bits	2x336 (alt. 5x144)
	TTI, ms		20)
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		2 124 (alt. 2 412)
	Max number of bits/radio frame before rate matching		1 062 (alt. 1 206)
	RM attribute		135 to 175

6.10.3.4.1.23.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.23.1.1.3 TFCS

TFCS size	6
TFCS	(32 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF0, TF1), (TF1, TF1), (TF2, TF1)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.23.1.2 Physical channel parameters

DPCH Uplink	Midamble	512 chips
	Codes and time slots	SF4 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	904 bits
	TFCI code word	16 bits
	TPC	2 bits
	Puncturing Limit	0.72 (alt. 0.64)

6.10.3.4.1.23.2 Downlink

6.10.3.4.1.23.2.1 Transport channel parameters

6.10.3.4.1.23.2.1.1 Transport channel parameters for Interactive or background / DL:8 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		320
	Max data rate, bps		8 000
	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		336
	TFS	TF0, bits	0x336
		TF1, bits	1x336
	TTI, ms		40
	Coding type		TC
	CRC, bit		16

	Max number of bits/TTI after channel coding	1 068
	Max number of bits/radio frame before rate matching	267
	RM attribute	135 to 175

6.10.3.4.1.23.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.23.2.1.3 TFCS

TFCS size	4
TFCS	(8 kbps RAB, DCCH)=(TF0, TF0), (TF1, TF0), (TF0, TF1), (TF1, TF1)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.23.2.2 Physical channel parameters

DPCH Downlink	Midamble	512 chips
	Codes and time slots	SF16 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	228 bits
	TFCI code word	16 bits
	Puncturing limit	0.56
NOTE: In case the first TFC in the TFCS is not configured, the TFCI code word will be 8 bits.		

6.10.3.4.1.23a Interactive or background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.3.4.1.23a.1 Uplink

6.10.3.4.1.23a.1.1 Transport channel parameters

6.10.3.4.1.23a.1.1.1 Transport channel parameters for Interactive or background / UL:8 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		320 (alt. 128)
	Max data rate, bps		8 000
	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		336 (alt. 144)
	TFS	TF0, bits	0x336 (alt. 0x144)
		TF1, bits	1x336 (alt. 1x144)
		TF2, bits	N/A (alt. 5x144)
	TTI, ms		40 (alt. 80)
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		1 068 (alt. 2 412)
	Max number of bits/radio frame before rate matching		267 (alt. 302)
	RM attribute		135 to 175

6.10.3.4.1.23a.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.23a.1.1.3 TFCS

TFCS size	4 (alt. 6)
TFCS	(8 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF0, TF1), (TF1, TF1) (alt. (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF0, TF1), (TF1, TF1), (TF2, TF1))
NOTE: In case TB size zero is configured for any transport channel the first TFC is required; it is optional otherwise.	

6.10.3.4.1.23a.1.2 Physical channel parameters

DPCH Uplink	Midamble	512 chips
	Codes and time slots	SF16 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	226 bits
	TFCI code word	16 bits
	TPC	2 bit
	Puncturing Limit	0.56 (alt. 0.48)

6.10.3.4.1.23a.2 Downlink

See clause 6.10.3.4.1.23.2.

6.10.3.4.1.23b Interactive or background / UL:16 DL:16 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.3.4.1.23b.1 Uplink

6.10.3.4.1.23b.1.1 Transport channel parameters

6.10.3.4.1.23b.1.1.1 Transport channel parameters for Interactive or background / UL:16 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		320 (alt. 128)
	Max data rate, bps		16 000
	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		336 (alt. 144)
	TFS	TF0, bits	0x336 (alt. 0x144)
		TF1, bits	1x336 (alt. 1x144)
		TF2, bits	2x336 (alt. 5x144)
	TTI, ms		40
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		2 124 (alt. 2 412)
	Max number of bits/radio frame before rate matching		531 (alt. 603)
	RM attribute		135 to 175

6.10.3.4.1.23b.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.23b.1.1.3 TFCS

TFCS size	6
TFCS	(16 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF0, TF1), (TF1, TF1), (TF2, TF1)
NOTE: In case TB size zero is configured for any transport channel the first TFC is required; it is optional otherwise.	

6.10.3.4.1.23b.1.2 Physical channel parameters

DPCH Uplink	Midamble	512 chips
	Codes and time slots	SF8 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	452 bits
	TFCI code word	16 bits
	TPC	2 bit
	Puncturing Limit	0.68 (alt. 0.60)

6.10.3.4.1.23b.2 Downlink

6.10.3.4.1.23b.2.1 Transport channel parameters

6.10.3.4.1.23b.2.1.1 Transport channel parameters for Interactive or background / DL:16 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		320
	Max data rate, bps		16 000
	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		336
	TFS	TF0, bits	0x336
		TF1, bits	1x336
		TF2, bits	2x336
	TTI, ms		40
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		2 124
	Max number of bits/radio frame before rate matching		531
	RM attribute		135 to 175

6.10.3.4.1.23b.2.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.23b.2.1.3 TFCS

TFCS size	6
TFCS	(16 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF0, TF1), (TF1, TF1), (TF2, TF1)
NOTE: In case TB size zero is configured for any transport channel the first TFC is required; it is optional otherwise.	

6.10.3.4.1.23b.2.2 Physical channel parameters

DPCH Downlink	Midamble	512 chips
	Codes and time slots	SF16 x 2 codes x 1 time slot
	Max. Number of data bits/radio frame	472 bits
	TFCI code word	16 bits
	Puncturing limit	0.68

6.10.3.4.1.23c Interactive or background / UL:32 DL:32 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.3.4.1.23c.1 Uplink

6.10.3.4.1.23c.1.1 Transport channel parameters

6.10.3.4.1.23c.1.1.1 Transport channel parameters for Interactive or background / UL:32 kbps / PS RAB

Higher layer	RAB/Signalling RB	RAB
RLC	Logical channel type	DTCH
	RLC mode	AM
	Payload sizes, bit	320 (alt. 128)
	Max data rate, bps	32 000
	AMD PDU header, bit	16
MAC	MAC header, bit	0
	MAC multiplexing	N/A
Layer 1	TrCH type	DCH
	TB sizes, bit	336 (alt. 144)

	TFS	TF0, bits	0x336 (alt. 0x144)
		TF1, bits	1x336 (alt. 1x144)
		TF2, bits	2x336 (alt. 5x144)
		TF3, bits	3x336 (alt. 7x144)
		TF4, bits	4x336 (alt. 10x144)
	TTI, ms		40
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		4 236 (alt. 4 812)
	Max number of bits/radio frame before rate matching		1 059 (alt. 1 203)
	RM attribute		135 to 175

6.10.3.4.1.23c.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.23c.1.1.3 TFCS

TFCS size	10
TFCS	(32 kbps RAB, DCCH)= (TF0,TF0), (TF1,TF0), (TF2,TF0), (TF3,TF0), (TF4,TF0), (TF0,TF1), (TF1,TF1), (TF2,TF1), (TF3,TF1), (TF4,TF1)
NOTE: In case TB size zero is configured for any transport channel the first TFC is required; it is optional otherwise.	

6.10.3.4.1.23c.1.2 Physical channel parameters

DPCH Uplink	Midamble	512 chips
	Codes and time slots	SF4 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	904 bits
	TFCI code word	16 bits
	TPC	2 bits
	Puncturing Limit	0.72 (alt. 0.64)

6.10.3.4.1.23c.2 Downlink

6.10.3.4.1.23c.2.1 Transport channel parameters

6.10.3.4.1.23c.2.1.1 Transport channel parameters for Interactive or background / DL:32 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		320
	Max data rate, bps		32 000
	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		336
	TFS	TF0, bits	0x336
		TF1, bits	1x336
		TF2, bits	2x336
		TF3, bits	3x336
		TF4, bits	4x336
	TTI, ms		40
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		4 236
	Max number of bits/radio frame before rate matching		1 059
	RM attribute		135 to 175

6.10.3.4.1.23c.2.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.23c.2.1.3 TFCS

TFCS size	10
TFCS	(32 kbps RAB, DCCH)= (TF0,TF0), (TF1,TF0), (TF2,TF0), (TF3,TF0), (TF4,TF0), (TF0,TF1), (TF1,TF1), (TF2,TF1), (TF3,TF1), (TF4,TF1)
NOTE: In case TB size zero is configured for any transport channel the first TFC is required; it is optional otherwise.	

6.10.3.4.1.23c.2.2 Physical channel parameters

DPCH Downlink	Midamble	512 chips
	Codes and time slots	SF16 x 3 codes x 1 time slot
	Max. Number of data bits/radio frame	716
	TFCI code word	16 bits
	Puncturing limit	0.60

6.10.3.4.1.23d Interactive or background / UL:32 DL:32 kbps / PS RAB (20 ms TTI)+ UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.3.4.1.23d.1 Uplink

6.10.3.4.1.23d.1.1 Transport channel parameters

6.10.3.4.1.23d.1.1.1 Transport channel parameters for Interactive or background / UL:32 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		320 (alt. 128)
	Max data rate, bps		32 000
	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		336 (alt. 144)
	TFS	TF0, bits	0x336 (alt. 0x144)
		TF1, bits	1x336 (alt 1x144)
		TF2, bits	2x336 (alt. 5x144)
	TTI, ms		20
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		2 124 (alt. 2 412)
	Max number of bits/radio frame before rate matching		1 062 (alt. 1 206)
	RM attribute		135 to 175

6.10.3.4.1.23d.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.23d.1.1.3 TFCS

TFCS size	6
TFCS	(32 kbps RAB, DCCH)= (TF0,TF0), (TF1,TF0), (TF2,TF0), (TF0,TF1), (TF1,TF1), (TF2,TF1)
NOTE: In case TB size zero is configured for any transport channel the first TFC is required; it is optional otherwise.	

6.10.3.4.1.23d.1.2 Physical channel parameters

DPCH Uplink	Midamble	512 chips
	Codes and time slots	SF4 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	904 bits

	TFCI code word	16 bits
	TPC	2 bits
	Puncturing Limit	0.72 (alt. 0.64)

6.10.3.4.1.23d.2 Downlink

6.10.3.4.1.23d.2.1 Transport channel parameters

6.10.3.4.1.23d.2.1.1 Transport channel parameters for Interactive or background / DL:32 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		320
	Max data rate, bps		32 000
	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		336
	TFS	TF0, bits	0x336
		TF1, bits	1x336
		TF2, bits	2x336
	TTI, ms		20
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		2 124
	Max number of bits/radio frame before rate matching		1 062
	RM attribute		135 to 175

6.10.3.4.1.23d.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.23d.2.1.3 TFCS

TFCS size	6
TFCS	(32 kbps RAB, DCCH)= (TF0,TF0), (TF1,TF0), (TF2,TF0), (TF0,TF1), (TF1,TF1), (TF2,TF1)
NOTE: In case TB size zero is configured for any transport channel the first TFC is required; it is optional otherwise.	

6.10.3.4.1.23d.2.2 Physical channel parameters

DPCH Downlink	Midamble	512 chips
	Codes and time slots	SF16 x 3 codes x 1 time slot
	Max. Number of data bits/radio frame	716 bits
	TFCI code word	16 bits
	Puncturing limit	0.56

6.10.3.4.1.24 Void

6.10.3.4.1.25 Interactive or background / UL:32 DL: 64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.3.4.1.25.1 Uplink

See clause 6.10.3.4.1.23.1.

6.10.3.4.1.25.2 Downlink

6.10.3.4.1.25.2.1 Transport channel parameters

6.10.3.4.1.25.2.1.1 Transport channel parameters for Interactive or background / DL:64 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		320
	Max data rate, bps		64 000
	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		336
	TFS	TF0, bits	0x336
		TF1, bits	1x336
		TF2, bits	2x336
		TF3, bits	3x336
		TF4, bits	4x336
	TTI, ms		20
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		4 236
	Max number of bits/radio frame before rate matching		2 118
	RM attribute		130 to 170

6.10.3.4.1.25.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.25.2.1.3 TFCS

TFCS size	10
TFCS	(64 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF3, TF0), (TF4, TF0), (TF0, TF1), (TF1, TF1), (TF2, TF1), (TF3, TF1), (TF4, TF1)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.25.2.2 Physical channel parameters

DPCH Downlink		Physical Configuration 1	Physical Configuration 2
	Midamble	512 chips	512 chips
	Codes and time slots	SF16 x 3 codes x 1 time slot + SF16 x 2 codes x 1 time slot	SF16 x 9 codes x 1 time slot
	Max. Number of data bits/radio frame	1 204 bits	2 180 bits
	TFCI code word	16 bits	16 bits
	Puncturing limit	0.52	0.96

6.10.3.4.1.26 Interactive or background / UL:64 DL: 64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.3.4.1.26.1 Uplink

6.10.3.4.1.26.1.1 Transport channel parameters

6.10.3.4.1.26.1.1.1 Transport channel parameters for Interactive or background / UL:64 kbps / PS RAB

Higher layer	RAB/Signalling RB	RAB
RLC	Logical channel type	DTCH
	RLC mode	AM
	Payload sizes, bit	320 (alt. 128)
	Max data rate, bps	64 000
	AMD PDU header, bit	16
MAC	MAC header, bit	0
	MAC multiplexing	N/A
Layer 1	TrCH type	DCH
	TB sizes, bit	336 (alt. 144)

	TFS	TF0, bits	0x336 (alt. 0x144)
		TF1, bits	1x336 (alt. 1x144)
		TF2, bits	2x336 (alt. 3x144)
		TF3, bits	3x336 (alt. 7x144)
		TF4, bits	4x336 (alt. 10x144)
	TTI, ms		20
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		4 236 (alt. 4 812)
	Max number of bits/radio frame before rate matching		2 118 (alt. 2 406)
	RM attribute		130 to 170

6.10.3.4.1.26.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.26.1.1.3 TFCS

TFCS size	10
TFCS	(64 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF3, TF0), (TF4, TF0), (TF0, TF1), (TF1, TF1), (TF2, TF1), (TF3, TF1), (TF4, TF1)

6.10.3.4.1.26.1.2 Physical channel parameters

DPCH Uplink		Physical Configuration 1	Physical Configuration 2
	Midamble	512 chips	512 chips
	Codes and time slots	SF16 x 1 code x 1 time slot + SF4 x 1 code x 1 time slot	SF2 x 1 code x 1 time slot + SF4 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	1148 bits	2 784 bits
	TFCI code word	16 bits	16 bits
	TPC	2 bits	2 bits
	Puncturing Limit	0.48 (alt. 0.44)	1

6.10.3.4.1.26.2 Downlink

See clause 6.10.3.4.1.25.2.

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

6.10.3.4.1.27.1 Uplink

See clause 6.10.3.4.1.26.1.

6.10.3.4.1.27.2 Downlink

6.10.3.4.1.27.2.1 Transport channel parameters

6.10.3.4.1.27.2.1.1 Transport channel parameters for Interactive or background / DL:128 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		320
	Max data rate, bps		128 000
	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		336
	TFS	TF0, bits	0x336
		TF1, bits	1x336
		TF2, bits	2x336

		TF3, bits	4x336
		TF4, bits	8x336
	TTI, ms		20
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		8 460
	Max number of bits/radio frame before rate matching		4 230
	RM attribute		120 to 160

6.10.3.4.1.27.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.27.2.1.3 TFCS

TFCS size	10
TFCS	(128 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF3, TF0), (TF4, TF0), (TF0, TF1), (TF1, TF1), (TF2, TF1), (TF3, TF1), (TF4, TF1)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.27.2.2 Physical channel parameters

DPCH Downlink		Physical Configuration 1	Physical Configuration 2
	Midamble	256 chips	256 chips
	Codes and time slots	SF16 x 8 codes x 1 time slot	SF16 x 4 codes x 2 time slots + SF16 x 3 codes x 2 time slots
	Max. Number of data bits/radio frame	2 192 bits	3848 bits
	TFCI code word	16 bits	16 bits
	Puncturing limit	0.48	0.84

6.10.3.4.1.28 Interactive or background / UL:128 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.3.4.1.28.1 Uplink

6.10.3.4.1.28.1.1 Transport channel parameters

6.10.3.4.1.28.1.1.1 Transport channel parameters for Interactive or background / UL:128 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		320 (alt. 128)
	Max data rate, bps		128 000
	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		336 (alt. 144)
	TFS	TF0, bits	0x336 (alt. 0x144)
		TF1, bits	1x336 (alt. 1x144)
		TF2, bits	2x336 (alt. 7x144)
		TF3, bits	4x336 (alt 14x144)
		TF4, bits	8x336 (alt. 20x144)
	TTI, ms		20
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		8 460 (alt. 9 612)
	Max number of bits/radio frame before rate matching		4 230 (alt. 4 806)
	RM attribute		120 to 160

6.10.3.4.1.28.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.28.1.1.3 TFCS

TFCS size	9 (alt.10)
TFCS	(128 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF3, TF0), (TF4, TF0), (TF0, TF1), (TF1, TF1), (TF2, TF1), (TF3, TF1) (alt. (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF3, TF0), (TF4, TF0), (TF0, TF1), (TF1, TF1), (TF2, TF1), (TF3, TF1), (TF4, TF1))
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.28.1.2 Physical channel parameters

DPCH Uplink		Physical Configuration 1	Physical Configuration 2
	Midamble	256 chips	256 chips
	Codes and time slots	SF2 x 1 code x 1 timeslot	SF2 x 1 code x 2 timeslots + SF4 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	2 064 bits	5 376 bits
	TFCI code word	16 bits	16 bits
	TPC	2 bits	2 bits
	Puncturing Limit	0.44 (alt. 0.40)	1

6.10.3.4.1.28.2 Downlink

See clause 6.10.3.4.1.27.2.

6.10.3.4.1.29 Interactive or background / UL:64 DL:144 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH

6.10.3.4.1.29.1 Uplink

See clause 6.10.3.4.1.26.1.

6.10.3.4.1.29.2 Downlink

6.10.3.4.1.29.2.1 Transport channel parameters

6.10.3.4.1.29.2.1.1 Transport channel parameters for Interactive or background / DL:144 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		320
	Max data rate, bps		144 000
	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		336
	TFS	TF0, bits	0x336
		TF1, bits	1x336
		TF2, bits	2x336
		TF3, bits	4x336
		TF4, bits	8x336
		TF5, bits	9x336
	TTI, ms		20
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		9 516
	Max number of bits/radio frame before rate matching		4 758
	RM attribute		140 to 180

6.10.3.4.1.29.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.29.2.1.3 TFCS

TFCS size	12
TFCS	(144 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF3, TF0), (TF4, TF0), (TF5, TF0) (TF0, TF1), (TF1, TF1), (TF2, TF1), (TF3, TF1), (TF4, TF1), (TF5, TF1)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.29.2.2 Physical channel parameters

DPCH Downlink	Midamble	256 chips
	Codes and time slots	SF16 x 9 codes x 1 time slot
	Max. Number of data bits/radio frame	2468 bits
	TFCI code word	16 bits
	Puncturing limit	0.48

6.10.3.4.1.30 Interactive or background / UL:144 DL:144 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH

6.10.3.4.1.30.1 Uplink

6.10.3.4.1.30.1.1 Transport channel parameters

6.10.3.4.1.30.1.1.1 Transport channel parameters for Interactive or background / UL:144 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		320 (alt. 128)
	Max data rate, bps		144 000
	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		336 (alt. 144)
	TFS	TF0, bits	0x336 (alt. 0x144)
		TF1, bits	1x336 (alt. 1x144)
		TF2, bits	2x336 (alt. 10x144)
		TF3, bits	4x336 (alt. 20x144)
		TF4, bits	8x336 (alt. 30x144)
		TF5, bits	9x336 (alt. 45x144)
	TTI, ms		20 (alt. 40)
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		9 516 (alt. 21 624)
	Max number of bits/radio frame before rate matching		4 758 (alt. 5 406)
	RM attribute		140 to 180

6.10.3.4.1.30.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.30.1.1.3 TFCS

TFCS size	12
TFCS	(144 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF3, TF0), (TF4, TF0), (TF5, TF0) (TF0, TF1), (TF1, TF1), (TF2, TF1), (TF3, TF1), (TF4, TF1), (TF5, TF1)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.30.1.2 Physical channel parameters

DPCH Uplink	Midamble	256 chips
	Codes and time slots	SF16 x 1 code x 1 time slot + SF2 x 1 codex 1 time slot
	Max. Number of data bits/radio frame	2340 bits
	TFCI code word	16 bits
	TPC	2 bits
	Puncturing Limit	0.44 (alt. 0.40)

6.10.3.4.1.30.2 Downlink

See clause 6.10.3.4.1.29.2.

6.10.3.4.1.31 Interactive or background / UL:64 DL:256 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH

6.10.3.4.1.31.1 Uplink

See clause 6.10.3.4.1.26.1.

6.10.3.4.1.31.2 Downlink

6.10.3.4.1.31.2.1 Transport channel parameters

6.10.3.4.1.31.2.1.1 Transport channel parameters for Interactive or background / DL:256 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		320
	Max data rate, bps		384 000
	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		336
	TFS	TF0, bits	0x336
		TF1, bits	1x336
		TF2, bits	2x336
		TF3, bits	4x336
		TF4, bits	8x336
		TF5, bits	N/A (alt. 12x336)
		TF6, bits	N/A (alt. 16x336)
	TTI, ms		10 (alt. 20)
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		8 460 (alt. 16 920)
	Max number of bits/radio frame before rate matching		8 460 (alt. 8 460)
	RM attribute		135 to 175

6.10.3.4.1.31.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.31.2.1.3 TFCS

TFCS size	10 (alt.14)
TFCS	(256 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF3, TF0), (TF4, TF0), (TF0, TF1), (TF1, TF1), (TF2, TF1), (TF3, TF1), (TF4, TF1) (alt. (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF3, TF0), (TF4, TF0), (TF5, TF0), (TF6, TF0) (TF0, TF1), (TF1, TF1), (TF2, TF1), (TF3, TF1), (TF4, TF1), (TF5, TF1), (TF6, TF1))
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.31.2.2 Physical channel parameters

DPCH Downlink	Midamble	256 chips
	Codes and time slots	SF16 x 8 codes x 2 time slots
	Max. Number of data bits/radio frame	4 400 bits
	TFCI code word	16 bits
	Puncturing limit	0.48

6.10.3.4.1.32 Interactive or background / UL:64 DL:384 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH

6.10.3.4.1.32.1 Uplink

See clause 6.10.3.4.1.26.1.

6.10.3.4.1.32.2 Downlink

6.10.3.4.1.32.2.1 Transport channel parameters

6.10.3.4.1.32.2.1.1 Transport channel parameters for Interactive or background / DL:384 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		320
	Max data rate, bps		384 000
	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		336
	TFS	TF0, bits	0x336
		TF1, bits	1x336
		TF2, bits	2x336
		TF3, bits	4x336
		TF4, bits	8x336
		TF5, bits	12x336
		TF6, bits	N/A (alt. 16x336)
		TF7, bits	N/A (alt. 20x336)
		TF8, bits	N/A (alt. 24x336)
	TTI, ms		10 (alt. 20)
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		12 684 (alt. 25 368)
	Max number of bits/radio frame before rate matching		12 684 (alt. 12 684)
	RM attribute		110 to 150

6.10.3.4.1.32.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.32.2.1.3 TFCS

TFCS size	12 (alt.18)
TFCS	(384 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF3, TF0), (TF4, TF0), (TF5, TF0) (TF0, TF1), (TF1, TF1), (TF2, TF1), (TF3, TF1), (TF4, TF1), (TF5, TF1) (alt. (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF3, TF0), (TF4, TF0), (TF5, TF0), (TF6, TF0), (TF7, TF0), (TF8, TF0), (TF0, TF1), (TF1, TF1), (TF2, TF1), (TF3, TF1), (TF4, TF1), (TF5, TF1), (TF6, TF1), (TF7, TF1), (TF8, TF1))
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.32.2.2 Physical channel parameters

DPCH Downlink		Physical Configuration 1	Physical Configuration 2
	Midamble	256 chips	256 chips
	Codes and time slots	SF16 x 8 codes x 3 time slots	SF16 x 6 codes x 4 time slots + SF16 x 4 codes x 1 time slot (alt. SF1 x 1 code x 3 time slots)
	Max. Number of data bits/radio frame	6 608 bits	7 712 bits (alt. 13232 bits)
	TFCI code word	16 bits	16 bits
	Puncturing Limit	0.48	0.60 (alt. 1)

6.10.3.4.1.33 Interactive or background / UL:128 DL:384 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.3.4.1.33.1 Uplink

See clause 6.10.3.4.1.28.1.

6.10.3.4.1.33.2 Downlink

See clause 6.10.3.4.1.32.2.

6.10.3.4.1.34 Interactive or background / UL:384 DL:384 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.3.4.1.34.1 Uplink

6.10.3.4.1.34.1.1 Transport channel parameters

6.10.3.4.1.34.1.1.1 Transport channel parameters for Interactive or background / UL:384 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		320
	Max data rate, bps		384 000
	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		336
	TFS	TF0, bits	0x336
		TF1, bits	1x336
		TF2, bits	2x336
		TF3, bits	4x336
		TF4, bits	8x336
		TF5, bits	12x336
		TF6, bits	N/A (alt. 16x336)
		TF7, bits	N/A (alt. 20x336)
		TF8, bits	N/A (alt. 24x336)
	TTI, ms		10 (alt. 20)
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		12 684 (alt. 25 368)
	Max number of bits/radio frame before rate matching		12 684
	RM attribute		110 to 150

6.10.3.4.1.34.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.34.1.1.3 TFCS

TFCS size	12 (alt.18)

TFCS	(384 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF3, TF0), (TF4, TF0), (TF5, TF0), (TF0, TF1), (TF1, TF1), (TF2, TF1), (TF3, TF1), (TF4, TF1), (TF5, TF1) (alt. (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF3, TF0), (TF4, TF0), (TF5, TF0), (TF6, TF0), (TF7, TF0), (TF8, TF0), (TF0, TF1), (TF1, TF1), (TF2, TF1), (TF3, TF1), (TF4, TF1), (TF5, TF1), (TF6, TF1), (TF7, TF1), (TF8, TF1))
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.34.1.2 Physical channel parameters

DPCH Uplink		Physical Configuration 1	Physical Configuration 2
	Midamble	256 chips	256 chips
	Codes and time slots	SF2 x 1 code x 3 time slots	SF2 x 1 code x 5 timeslots + SF4 x 1 code x 2 timeslots (alt. {SF2 x 1 code + SF4 x 1 code} x 4 timeslots)
	Max. Number of data bits/radio frame	6 480 bits	13 104 bits
	TFCI code word	16 bits	16 bits
	TPC	2 bits	2 bits
	Puncturing Limit	0.48	1

6.10.3.4.1.34.2 Downlink

See clause 6.10.3.4.1.32.2.

6.10.3.4.1.35 Interactive or background / UL:64 DL:2 048 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.3.4.1.35.1 Uplink

6.10.3.4.1.35.1.1 Transport channel parameters

See clause 6.10.3.4.1.26.1.1.

6.10.3.4.1.35.1.1.2 Physical channel parameters

DPCH Uplink	Midamble	256 chips
	Codes and time slots	SF2 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	2 064 bits
	TFCI code word	16 bits
	TPC	2 bits
	Puncturing Limit	0.88 (alt. 0.80)

6.10.3.4.1.35.2 Downlink

6.10.3.4.1.35.2.1 Transport channel parameters

6.10.3.4.1.35.2.1.1 Transport channel parameters for Interactive or background / DL:2 048 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		640
	Max data rate, bps		2 048 000
	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		656
	TFS	TF0, bits	0x656
		TF1, bits	1x656
		TF2, bits	2x656

Higher layer	RAB/Signalling RB		RAB
		TF3, bits	4x656
		TF4, bits	8x656
		TF5, bits	12x656
		TF6, bits	16x656
		TF7, bits	20x656
		TF8, bits	24x656
		TF9, bits	28x656
		TF10, bits	31x656 (alt. 32x656)
		TF11, bits	N/A (alt. 36x656)
		TF12, bits	N/A (alt. 40x656)
		TF13, bits	N/A (alt. 44x656)
		TF14, bits	N/A (alt. 48x656)
		TF15, bits	N/A (alt. 52x656)
		TF16, bits	N/A (alt. 56x656)
		TF17, bits	N/A (alt. 60x656)
		TF18, bits	N/A (alt. 64x656)
	TTI, ms		10 (alt. 20)
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		62 565 (alt. 129 141)
	Max number of bits/radio frame before rate matching		62 565 (alt. 64 571)
	RM attribute		130 to 170

6.10.3.4.1.35.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.35.2.1.3 TFCS

TFCS size	21 (alt.38)
TFCS	(2 048 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF3, TF0), (TF4, TF0), (TF5, TF0), (TF6, TF0), (TF7, TF0), (TF8, TF0), (TF9, TF0), (TF10, TF0), (TF0, TF1), (TF1, TF1), (TF2, TF1), (TF3, TF1), (TF4, TF1), (TF5, TF1), (TF6, TF1), (TF7, TF1), (TF8, TF1), (TF9, TF1) (alt. TF0, TF0), (TF1, TF0), (TF2, TF0), (TF3, TF0), (TF4, TF0), (TF5, TF0), (TF6, TF0), (TF7, TF0), (TF8, TF0), (TF9, TF0), (TF10, TF0),(TF11, TF0), (TF12, TF0), (TF13, TF0), (TF14, TF0), (TF15, TF0), (TF16, TF0), (TF17, TF0), (TF18, TF0), (TF0, TF1), (TF1, TF1), (TF2, TF1), (TF3, TF1), (TF4, TF1), (TF5, TF1), (TF6, TF1), (TF7, TF1), (TF8, TF1), (TF9, TF1), (TF10, TF1),(TF11, TF1), (TF12, TF1), (TF13, TF1), (TF14, TF1), (TF15, TF1), (TF16, TF1), (TF17, TF1(TF18, TF1))
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.35.2.2 Physical channel parameters

DPCH Downlink		Physical Configuration 1	Physical Configuration 2
	Midamble	256 chips	256 chips
	Codes and time slots	SF1 x 1 code x 11 time slots	SF16 x 13 codes x 4 time slots + SF16 x 12 codes x 7 time slot
	Max. Number of data bits/radio frame	48 560 bits (alt. 48 544)	37 520 bits (alt. 37 504)
	TFCI code word	16 bits (alt. 32 bits)	16 bits (alt. 32 bits)
	Puncturing limit	0.76 (alt.0.72)	0.56

6.10.3.4.1.36 Void

6.10.3.4.1.37 Void

6.10.3.4.1.38 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

6.10.3.4.1.38.1 Uplink

6.10.3.4.1.38.1.1 Transport channel parameters

6.10.3.4.1.38.1.1.1 Transport channel parameters for Conversational / speech / UL:12.2 kbps / CS RAB

See clause 6.10.3.4.1.4.1.1.1.

6.10.3.4.1.38.1.1.2 Transport channel parameters for Interactive or background / UL:32 kbps / PS RAB

See clause 6.10.3.4.1.23.1.1.1.

6.10.3.4.1.38.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.38.1.1.4 TFCS

TFCS size	18
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 32kbps RAB , DCCH)= (TF0, TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0, TF0), (TF2, TF1, TF1, TF0, TF0), (TF0, TF0, TF0, TF1, TF0), (TF1, TF0, TF0, TF1, TF0), (TF2, TF1, TF1, TF1, TF0), (TF0, TF0, TF0, TF2, TF0), (TF1, TF0, TF0, TF2, TF0), (TF2, TF1, TF1, TF2, TF0), (TF0, TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1), (TF0, TF0, TF0, TF1, TF1), (TF1, TF0, TF0, TF1, TF1), (TF2, TF1, TF1, TF1, TF1), (TF0, TF0, TF0, TF2, TF1), (TF1, TF0, TF0, TF2, TF1), (TF2, TF1, TF1, TF2, TF1)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.38.1.2 Physical channel parameters

DPCH Uplink	Midamble	512 chips
	Codes and time slots	SF4 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	904 bits
	TFCI code word	16 bits
	TPC	2 bits
	Puncturing Limit	0.52 (alt. 0.48)

6.10.3.4.1.38.2 Downlink

6.10.3.4.1.38.2.1 Transport channel parameters

6.10.3.4.1.38.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 kbps / CS RAB

See clause 6.10.3.4.1.4.2.1.1.

6.10.3.4.1.38.2.1.2 Transport channel parameters for Interactive or background / DL:8 kbps / PS RAB

See clause 6.10.3.4.1.23.2.1.1.

6.10.3.4.1.38.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.

6.10.3.4.1.38.2.1.4 TFCS

TFCS size	12
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3,8kbps RAB, DCCH)= (TF0, TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0, TF0), (TF2, TF1, TF1, TF0, TF0), (TF0, TF0, TF0, TF1, TF0), (TF1, TF0, TF0, TF1, TF0), (TF2, TF1, TF1, TF1, TF0), (TF0, TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1), (TF0, TF0, TF0, TF1, TF1), (TF1, TF0, TF0, TF1, TF1), (TF2, TF1, TF1, TF1, TF1)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.38.2.2 Physical channel parameters

DPCH Downlink	Midamble	512 chips
	Codes and time slots	SF16 x 2 codes x 1 time slot

	Max. Number of data bits/radio frame	472 bits
	TFCI code word	16 bits
	Puncturing limit	0.52

6.10.3.4.1.38a Conversational / speech / 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

6.10.3.4.1.38a.1 Uplink

6.10.3.4.1.38a.1.1 Transport channel parameters

6.10.3.4.1.38a.1.1.1 Transport channel parameters for Conversational / speech / UL:12.2 kbps / CS RAB

See clause 6.10.3.4.1.4.1.1.1.

6.10.3.4.1.38a.1.1.2 Transport channel parameters for Interactive or background / UL:0 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		320 (alt. 128)
	Max data rate, bps		0
	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		336 (alt. 144)
	TFS	TF0, bits	0x336 (alt 0x144)
	TTI, ms		20
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		0
	Max number of bits/radio frame before rate matching		0
	RM attribute		130 to 170

6.10.3.4.1.38a.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.38a.1.1.4 TFCS

TFCS size	6
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 0kbps RAB, DCCH)= (TF0,TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0,TF0), (TF2,TF1,TF1,TF0,TF0), (TF0,TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF0,TF1), (TF2,TF1,TF1,TF0,TF1)
NOTE: In case TB size zero is configured for any transport channel the first TFC is required; it is optional otherwise.	

6.10.3.4.1.38a.1.2 Physical channel parameters

DPCH Uplink	Midamble	512 chips
	Codes and time slots	SF8 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	452 bits
	TFCI code word	16 bits
	TPC	2 bit
	Puncturing Limit	0.68

6.10.3.4.1.38a.2 Downlink

6.10.3.4.1.38a.2.1 Transport channel parameters

6.10.3.4.1.38a.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 kbps / CS RAB

See clause 6.10.3.4.1.4.2.1.1.

6.10.3.4.1.38a.2.1.2 Transport channel parameters for Interactive or background / DL:0 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		320
	Max data rate, bps		0
	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		336
	TFS	TF0, bits	0x336
	TTI, ms		20
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		0
	Max number of bits/radio frame before rate matching		0
	RM attribute		130 to 170

6.10.3.4.1.38a.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1

6.10.3.4.1.38a.2.1.4 TFCS

TFCS size	6
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 0kbps RAB, DCCH)= (TF0,TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0,TF0), (TF2,TF1,TF1,TF0,TF0), (TF0,TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF0,TF1), (TF2,TF1,TF1,TF0,TF1)
NOTE: In case TB size zero is configured for any transport channel the first TFC is required; it is optional otherwise.	

6.10.3.4.1.38a.2.2 Physical channel parameters

DPCH Downlink	Midamble	512 chips
	Codes and time slots	SF16 x 2 codes x 1 time slot
	Max. Number of data bits/radio frame	472 bits
	TFCI code word	16 bits
	Puncturing limit	0.68

6.10.3.4.1.38b 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

6.10.3.4.1.38b.1 Uplink

6.10.3.4.1.38b.1.1 Transport channel parameters

6.10.3.4.1.38b.1.1.1 Transport channel parameters for Conversational / speech / UL:12.2 kbps / CS RAB

See clause 6.10.3.4.1.4.1.1.1.

6.10.3.4.1.38b.1.1.2 Transport channel parameters for Interactive or background / UL:8 kbps / PS RAB

See clause 6.10.3.4.1.23a.1.1.1.

6.10.3.4.1.38b.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.38b.1.1.4 TFCS

TFCS size	12 (alt. 17)
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 8 kbps RAB, DCCH)= (TF0,TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0,TF0), (TF2,TF1,TF1,TF0,TF0),

	(TF0,TF0,TF0,TF1,TF0), (TF1,TF0,TF0,TF1,TF0), (TF2,TF1,TF1,TF1,TF0), (TF0,TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF0,TF1), (TF2,TF1,TF1,TF0,TF1), (TF0,TF0,TF0,TF1,TF1), (TF1,TF0,TF0,TF1,TF1), (TF2,TF1,TF1,TF1,TF1) (alt. (TF0,TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0,TF0), (TF2,TF1,TF1,TF0,TF0), (TF0,TF0,TF0,TF1,TF0), (TF1,TF0,TF0,TF1,TF0), (TF2,TF1,TF1,TF1,TF0), (TF0,TF0,TF0,TF2,TF0), (TF1,TF0,TF0,TF2,TF0), (TF2,TF1,TF1,TF2,TF0), (TF0,TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF0,TF1), (TF2,TF1,TF1,TF0,TF1), (TF0,TF0,TF0,TF1,TF1), (TF1,TF0,TF0,TF1,TF1), (TF2,TF1,TF1,TF1,TF1) (TF0,TF0,TF0,TF2,TF1), (TF1,TF0,TF0,TF2,TF1))
NOTE: In case TB size zero is configured for any transport channel the first TFC is required; it is optional otherwise.	

6.10.3.4.1.38b.1.2 Physical channel parameters

DPCH Uplink	Midamble	512 chips
	Codes and time slots	SF8 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	452 bits
	TFCI code word	16 bits
	TPC	2 bits
	Puncturing Limit	0.48 (alt. 0.56)

6.10.3.4.1.38b.2 Downlink

6.10.3.4.1.38b.2.1 Transport channel parameters

6.10.3.4.1.38b.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 kbps / CS RAB

See clause 6.10.3.4.1.4.2.1.1.

6.10.3.4.1.38b.2.1.2 Transport channel parameters for Interactive or background / DL:8 kbps / PS RAB

See clause 6.10.3.4.1.23.2.1.1.

6.10.3.4.1.38b.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.38b.2.1.4 TFCS

TFCS size	12
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 8 kbps RAB, DCCH)= (TF0,TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0,TF0), (TF2,TF1,TF1,TF0,TF0), (TF0,TF0,TF0,TF1,TF0), (TF1,TF0,TF0,TF1,TF0), (TF2,TF1,TF1,TF1,TF0), (TF0,TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF0,TF1), (TF2,TF1,TF1,TF0,TF1), (TF0,TF0,TF0,TF1,TF1), (TF1,TF0,TF0,TF1,TF1), (TF2,TF1,TF1,TF1,TF1)
NOTE: In case TB size zero is configured for any transport channel the first TFC is required; it is optional otherwise.	

6.10.3.4.1.38b.2.2 Physical channel parameters

DPCH Downlink	Midamble	512 chips
	Codes and time slots	SF16 x 2 codes x 1 time slot
	Max. Number of data bits/radio frame	472 bits
	TFCI code word	16 bits
	Puncturing limit	0.52

6.10.3.4.1.38c 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

6.10.3.4.1.38c.1 Uplink

6.10.3.4.1.38c.1.1 Transport channel parameters

6.10.3.4.1.38c.1.1.1 Transport channel parameters for Conversational / speech / UL:12.2 kbps / CS RAB

See clause 6.10.3.4.1.4.1.1.1.

6.10.3.4.1.38c.1.1.2 Transport channel parameters for Interactive or background / UL:32 kbps / PS RAB

See clause 6.10.3.4.1.23d.1.1.1.

6.10.3.4.1.38c.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.38c.1.1.4 TFCS

TFCS size	18 (alt. 17)
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 32 kbps RAB, DCCH)= (TF0,TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0,TF0), (TF2,TF1,TF1,TF0,TF0), (TF0,TF0,TF0,TF1,TF0), (TF1,TF0,TF0,TF1,TF0), (TF2,TF1,TF1,TF1,TF0), (TF0,TF0,TF0,TF2,TF0), (TF1,TF0,TF0,TF2,TF0), (TF2,TF1,TF1,TF2,TF0), (TF0,TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF0,TF1), (TF2,TF1,TF1,TF0,TF1), (TF0,TF0,TF0,TF1,TF1), (TF1,TF0,TF0,TF1,TF1), (TF2,TF1,TF1,TF1,TF1), (TF0,TF0,TF0,TF2,TF1), (TF1,TF0,TF0,TF2,TF1), (TF2,TF1,TF1,TF2,TF1) (alt. (TF0,TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0,TF0), (TF2,TF1,TF1,TF0,TF0), (TF0,TF0,TF0,TF1,TF0), (TF1,TF0,TF0,TF1,TF0), (TF2,TF1,TF1,TF1,TF0), (TF0,TF0,TF0,TF2,TF0), (TF1,TF0,TF0,TF2,TF0), (TF2,TF1,TF1,TF2,TF0), (TF0,TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF0,TF1), (TF2,TF1,TF1,TF0,TF1), (TF0,TF0,TF0,TF1,TF1), (TF1,TF0,TF0,TF1,TF1), (TF2,TF1,TF1,TF1,TF1), (TF0,TF0,TF0,TF2,TF1), (TF1,TF0,TF0,TF2,TF1))
NOTE: In case TB size zero is configured for any transport channel the first TFC is required; it is optional otherwise.	

6.10.3.4.1.38c.1.2 Physical channel parameters

DPCH Uplink	Midamble	512 chips
	Codes and time slots	SF4 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	904 bits
	TFCI code word	16 bits
	TPC	2 bits
	Puncturing Limit	0.52 (alt. 0.52)

6.10.3.4.1.38c.2 Downlink

6.10.3.4.1.38c.2.1 Transport channel parameters

6.10.3.4.1.38c.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 kbps / CS RAB

See clause 6.10.3.4.1.4.2.1.1.

6.10.3.4.1.38c.2.1.2 Transport channel parameters for Interactive or background / DL:32 kbps / PS RAB

See clause 6.10.3.4.1.23d.2.1.1.

6.10.3.4.1.38c.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.38c.2.1.4 TFCS

TFCS size	18
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 32 kbps RAB, DCCH)= (TF0,TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0,TF0), (TF2,TF1,TF1,TF0,TF0), (TF0,TF0,TF0,TF1,TF0), (TF1,TF0,TF0,TF1,TF0), (TF2,TF1,TF1,TF1,TF0), (TF0,TF0,TF0,TF2,TF0), (TF1,TF0,TF0,TF2,TF0), (TF2,TF1,TF1,TF2,TF0), (TF0,TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF0,TF1), (TF2,TF1,TF1,TF0,TF1), (TF0,TF0,TF0,TF1,TF1), (TF1,TF0,TF0,TF1,TF1), (TF2,TF1,TF1,TF1,TF1), (TF0,TF0,TF0,TF2,TF1), (TF1,TF0,TF0,TF2,TF1), (TF2,TF1,TF1,TF2,TF1)
NOTE: In case TB size zero is configured for any transport channel the first TFC is required; it is optional otherwise.	

6.10.3.4.1.38c.2.2 Physical channel parameters

DPCH Downlink	Midamble	512 chips
	Codes and time slots	SF16 x 4 codes x 1 time slot
	Max. Number of data bits/radio frame	960
	TFCI code word	16 bits
	Puncturing limit	0.56

6.10.3.4.1.38d 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

6.10.3.4.1.38d.1 Uplink

6.10.3.4.1.38d.1.1 Transport channel parameters

6.10.3.4.1.38d.1.1.1 Transport channel parameters for Conversational / speech / UL:12.2 kbps / CS RAB

See clause 6.10.3.4.1.4.1.1.1.

6.10.3.4.1.38d.1.1.2 Transport channel parameters for Interactive or background / UL:64 kbps / PS RAB + UL:64 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB	RAB
RLC	Logical channel type		DTCH	DTCH
	RLC mode		AM	AM
	Payload sizes, bit		320 (alt. 128)	320 (alt. 128)
	Max data rate, bps		64 000	64 000
	AMD PDU header, bit		16	16
MAC	MAC header, bit		4	4
	MAC multiplexing		2 logical channel multiplexing	
Layer 1	TrCH type		DCH	
	TB sizes, bit		340 (alt. 148)	
	TFS	TF0, bits	0x340 (alt 0x148)	
		TF1, bits	1x340 (alt 1x148)	
		TF2, bits	2x340 (alt 3x148)	
		TF3, bits	3x340 (alt 7x148)	
		TF4, bits	4x340 (alt 10x148)	
	TTI, ms		20	
	Coding type		TC	
	CRC, bit		16	
	Max number of bits/TTI after channel coding		4 284 (alt. 4 932)	
	Max number of bits/radio frame before rate matching		2 142 (alt. 2 466)	
	RM attribute		130 to 170	

6.10.3.4.1.38d.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.38d.1.1.4 TFCS

TFCS size	30
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 64 kbps RAB + 64 kbps RAB, DCCH)= (TF0,TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0,TF0),(TF2,TF1,TF1,TF0,TF0), (TF0,TF0,TF0,TF1,TF0), (TF1,TF0,TF0,TF1,TF0),(TF2,TF1,TF1,TF1,TF0), (TF0,TF0,TF0,TF2,TF0), (TF1,TF0,TF0,TF2,TF0),(TF2,TF1,TF1,TF2,TF0), (TF0,TF0,TF0,TF3,TF0), (TF1,TF0,TF0,TF3,TF0),(TF2,TF1,TF1,TF3,TF0), (TF0,TF0,TF0,TF4,TF0), (TF1,TF0,TF0,TF4,TF0),(TF2,TF1,TF1,TF4,TF0), (TF0,TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF0,TF1),(TF2,TF1,TF1,TF0,TF1), (TF0,TF0,TF0,TF1,TF1), (TF1,TF0,TF0,TF1,TF1),(TF2,TF1,TF1,TF1,TF1), (TF0,TF0,TF0,TF2,TF1), (TF1,TF0,TF0,TF2,TF1),(TF2,TF1,TF1,TF2,TF1), (TF0,TF0,TF0,TF3,TF1), (TF1,TF0,TF0,TF3,TF1),(TF2,TF1,TF1,TF3,TF1), (TF0,TF0,TF0,TF4,TF1), (TF1,TF0,TF0,TF4,TF1),(TF2,TF1,TF1,TF4,TF1)
NOTE: In case TB size zero is configured for any transport channel the first TFC is required; it is optional otherwise.	

6.10.3.4.1.38d.1.2 Physical channel parameters

DPCH Uplink	Midamble	256 chips
	Codes and time slots	SF2 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	2 064 bits
	TFCI code word	16 bit
	TPC	2 bits
	Puncturing Limit	0.72 (alt. 0.64)

6.10.3.4.1.38d.2 Downlink

6.10.3.4.1.38d.2.1 Transport channel parameters

6.10.3.4.1.38d.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 kbps / CS RAB

See clause 6.10.3.4.1.4.2.1.1.

6.10.3.4.1.38d.2.1.2 Transport channel parameters for Interactive or background / DL:64 kbps / PS RAB + DL:64 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB	RAB
RLC	Logical channel type		DTCH	DTCH
	RLC mode		AM	AM
	Payload sizes, bit		320	320
	Max data rate, bps		64 000	64 000
	AMD PDU header, bit		16	16
MAC	MAC header, bit		4	4
	MAC multiplexing		2 logical channel multiplexing	
Layer 1	TrCH type		DCH	
	TB sizes, bit		340	
	TFS	TF0, bits	0x340	
		TF1, bits	1x340	
		TF2, bits	2x340	
		TF3, bits	3x340	
		TF4, bits	4x340	
	TTI, ms		20	
	Coding type		TC	
	CRC, bit		16	
	Max number of bits/TTI after channel coding		4 284	
	Max number of bits/radio frame before rate matching		2 142	
	RM attribute		130 to 170	

6.10.3.4.1.38d.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.38d.2.1.4 TFCS

TFCS size	30
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 64 kbps RAB + 64 kbps RAB, DCCH)= (TF0,TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0,TF0),(TF2,TF1,TF1,TF0,TF0), (TF0,TF0,TF0,TF1,TF0), (TF1,TF0,TF0,TF1,TF0),(TF2,TF1,TF1,TF1,TF0), (TF0,TF0,TF0,TF2,TF0), (TF1,TF0,TF0,TF2,TF0),(TF2,TF1,TF1,TF2,TF0), (TF0,TF0,TF0,TF3,TF0), (TF1,TF0,TF0,TF3,TF0),(TF2,TF1,TF1,TF3,TF0), (TF0,TF0,TF0,TF4,TF0), (TF1,TF0,TF0,TF4,TF0),(TF2,TF1,TF1,TF4,TF0), (TF0,TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF0,TF1),(TF2,TF1,TF1,TF0,TF1), (TF0,TF0,TF0,TF1,TF1), (TF1,TF0,TF0,TF1,TF1),(TF2,TF1,TF1,TF1,TF1), (TF0,TF0,TF0,TF2,TF1), (TF1,TF0,TF0,TF2,TF1),(TF2,TF1,TF1,TF2,TF1), (TF0,TF0,TF0,TF3,TF1), (TF1,TF0,TF0,TF3,TF1),(TF2,TF1,TF1,TF3,TF1), (TF0,TF0,TF0,TF4,TF1), (TF1,TF0,TF0,TF4,TF1),(TF2,TF1,TF1,TF4,TF1)
NOTE: In case TB size zero is configured for any transport channel the first TFC is required; it is optional otherwise.	

6.10.3.4.1.38d.2.2 Physical channel parameters

DPCH Downlink	Midamble	256 chips
	Codes and time slots	SF16 x 7 codes x 1 time slot
	Max. Number of data bits/radio frame	1 916 bits
	TFCI code word	16 bits
	Puncturing limit	0.68

6.10.3.4.1.38e 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

6.10.3.4.1.38e.1 Uplink

6.10.3.4.1.38e.1.1 Transport channel parameters

6.10.3.4.1.38e.1.1.1 Transport channel parameters for Conversational / speech / UL: (12.2, 7.95, 5.9, 4.75) kbps / CS RAB

See clause 6.10.3.4.1.4a.1.1.1.

6.10.3.4.1.38e.1.1.2 Transport channel parameters for Interactive or background / UL:0 kbps / PS RAB

See clause 6.10.3.4.1.38a.1.1.2.

6.10.3.4.1.38e.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.38e.1.1.4 TFCS

TFCS size	12
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 0 kbps RAB, DCCH)= (TF0,TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0,TF0), (TF2,TF1,TF0,TF0,TF0), (TF3,TF2,TF0,TF0,TF0), (TF4,TF3,TF0,TF0,TF0), (TF5,TF4,TF1,TF0,TF0), (TF0,TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF0,TF1), (TF2,TF1,TF0,TF0,TF1), (TF3,TF2,TF0,TF0,TF1), (TF4,TF3,TF0,TF0,TF1), (TF5,TF4,TF1,TF0,TF1)
NOTE: In case TB size zero is configured for any transport channel the first TFC is required; it is optional otherwise.	

6.10.3.4.1.38e.1.2 Physical channel parameters

DPCH Uplink	Midamble	512 chips
	Codes and time slots	SF8 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	452 bits
	TFCI code word	16 bits
	TPC	2 bit
	Puncturing Limit	0.68

6.10.3.4.1.38e.2 Downlink

6.10.3.4.1.38e.2.1 Transport channel parameters

6.10.3.4.1.38e.2.1.1 Transport channel parameters for Conversational / speech / DL: (12.2, 7.95, 5.9, 4.75) kbps / CS RAB

See clause 6.10.3.4.1.4a.2.1.1.

6.10.3.4.1.38e.2.1.2 Transport channel parameters for Interactive or background / DL:0 kbps / PS RAB

See clause 6.10.3.4.1.38a.2.1.2.

6.10.3.4.1.38e.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.38e.2.1.4 TFCS

TFCS size	12
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 0 kbps RAB, DCCH)= (TF0,TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0,TF0), (TF2,TF1,TF0,TF0,TF0), (TF3,TF2,TF0,TF0,TF0), (TF4,TF3,TF0,TF0,TF0), (TF5,TF4,TF1,TF0,TF0), (TF0,TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF0,TF1), (TF2,TF1,TF0,TF0,TF1), (TF3,TF2,TF0,TF0,TF1), (TF4,TF3,TF0,TF0,TF1), (TF5,TF4,TF1,TF0,TF1),
NOTE: In case TB size zero is configured for any transport channel the first TFC is required; it is optional otherwise.	

6.10.3.4.1.38e.2.2 Physical channel parameters

DPCH Downlink	Midamble	512 chips
	Codes and time slots	SF16 x 2 codes x 1 time slot
	Max. Number of data bits/radio frame	472 bits
	TFCI code word	16 bits
	Puncturing limit	0.68

6.10.3.4.1.38f Conversational / speech / (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

6.10.3.4.1.38f.1 Uplink

6.10.3.4.1.38f.1.1 Transport channel parameters

6.10.3.4.1.38f.1.1.1 Transport channel parameters for Conversational / speech / UL: (12.2, 7.95, 5.9, 4.75) kbps / CS RAB

See clause 6.10.3.4.1.4a.1.1.1.

6.10.3.4.1.38f.1.1.2 Transport channel parameters for Interactive or background / UL:8 kbps / PS RAB

See clause 6.10.3.4.1.23a.1.1.1.

6.10.3.4.1.38f.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.38f.1.1.4 TFCS

TFCS size	24 (alt. 32)
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 8 kbps RAB, DCCH)= (TF0,TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0,TF0), (TF2,TF1,TF0,TF0,TF0), (TF3,TF2,TF0,TF0,TF0), (TF4,TF3,TF0,TF0,TF0), (TF5,TF4,TF1,TF0,TF0), (TF0,TF0,TF0,TF1,TF0), (TF1,TF0,TF0,TF1,TF0), (TF2,TF1,TF0,TF1,TF0), (TF3,TF2,TF0,TF1,TF0), (TF4,TF3,TF0,TF1,TF0), (TF5,TF4,TF1,TF1,TF0), (TF0,TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF0,TF1), (TF2,TF1,TF0,TF0,TF1), (TF3,TF2,TF0,TF0,TF1), (TF4,TF3,TF0,TF0,TF1), (TF5,TF4,TF1,TF0,TF1), (TF0,TF0,TF0,TF1,TF1), (TF1,TF0,TF0,TF1,TF1), (TF2,TF1,TF0,TF1,TF1), (TF3,TF2,TF0,TF1,TF1), (TF4,TF3,TF0,TF1,TF1), (TF5,TF4,TF1,TF1,TF1) (alt. (TF0,TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0,TF0), (TF2,TF1,TF0,TF0,TF0), (TF3,TF2,TF0,TF0,TF0), (TF4,TF3,TF0,TF0,TF0), (TF5,TF4,TF1,TF0,TF0), (TF0,TF0,TF0,TF1,TF0), (TF1,TF0,TF0,TF1,TF0), (TF2,TF1,TF0,TF1,TF0), (TF3,TF2,TF0,TF1,TF0), (TF4,TF3,TF0,TF1,TF0), (TF5,TF4,TF1,TF1,TF0), (TF0,TF0,TF0,TF2,TF0), (TF1,TF0,TF0,TF2,TF0), (TF2,TF1,TF0,TF2,TF0), (TF3,TF2,TF0,TF2,TF0), (TF4,TF3,TF0,TF2,TF0), (TF5,TF4,TF1,TF2,TF0), (TF0,TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF0,TF1), (TF2,TF1,TF0,TF0,TF1), (TF3,TF2,TF0,TF0,TF1), (TF4,TF3,TF0,TF0,TF1), (TF5,TF4,TF1,TF0,TF1), (TF0,TF0,TF0,TF1,TF1), (TF1,TF0,TF0,TF1,TF1), (TF2,TF1,TF0,TF1,TF1), (TF3,TF2,TF0,TF1,TF1), (TF4,TF3,TF0,TF1,TF1), (TF5,TF4,TF1,TF1,TF1) (TF0,TF0,TF0,TF2,TF1), (TF1,TF0, TF0, TF2, TF1))
NOTE: In case TB size zero is configured for any transport channel the first TFC is required; it is optional otherwise.	

6.10.3.4.1.38f.1.2 Physical channel parameters

DPCH Uplink	Midamble	512 chips

	Codes and time slots	SF8 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	452 bits
	TFCI code word	16 bits
	TPC	2 bits
	Puncturing Limit	0.48 (alt.0.56)

6.10.3.4.1.38f.2 Downlink

6.10.3.4.1.38f.2.1 Transport channel parameters

6.10.3.4.1.38f.2.1.1 Transport channel parameters for Conversational / speech / DL: (12.2, 7.95, 5.9, 4.75) kbps / CS RAB

See clause 6.10.3.4.1.4a.2.1.1.

6.10.3.4.1.38f.2.1.2 Transport channel parameters for Interactive or background / DL:8 kbps / PS RAB

See clause 6.10.3.4.1.23.2.1.1.

6.10.3.4.1.38f.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.38f.2.1.4 TFCS

TFCS size	24
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 8 kbps RAB, DCCH)= (TF0,TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0,TF0), (TF2,TF1,TF0,TF0,TF0), (TF3,TF2,TF0,TF0,TF0), (TF4,TF3,TF0,TF0,TF0), (TF5,TF4,TF1,TF0,TF0), (TF0,TF0,TF0,TF1,TF0), (TF1,TF0,TF0,TF1,TF0), (TF2,TF1,TF0,TF1,TF0), (TF3,TF2,TF0,TF1,TF0), (TF4,TF3,TF0,TF1,TF0), (TF5,TF4,TF1,TF1,TF0), (TF0,TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF0,TF1), (TF2,TF1,TF0,TF0,TF1), (TF3,TF2,TF0,TF0,TF1), (TF4,TF3,TF0,TF0,TF1), (TF5,TF4,TF1,TF0,TF1), (TF0,TF0,TF0,TF1,TF1), (TF1,TF0,TF0,TF1,TF1), (TF2,TF1,TF0,TF1,TF1), (TF3,TF2,TF0,TF1,TF1), (TF4,TF3,TF0,TF1,TF1), (TF5,TF4,TF1,TF1,TF1)
NOTE: In case TB size zero is configured for any transport channel the first TFC is required; it is optional otherwise.	

6.10.3.4.1.38f.2.2 Physical channel parameters

DPCH Downlink	Midamble	512 chips
	Codes and time slots	SF16 x 2 codes x 1 time slot
	Max. Number of data bits/radio frame	472 bits
	TFCI code word	16 bits
	Puncturing limit	0.52

6.10.3.4.1.38g Conversational / speech / (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

6.10.3.4.1.38g.1 Uplink

6.10.3.4.1.38g.1.1 Transport channel parameters

6.10.3.4.1.38g.1.1.1 Transport channel parameters for Conversational / speech / UL: (12.2, 7.95, 5.9, 4.75) kbps / CS RAB

See clause 6.10.3.4.1.4a.1.1.1.

6.10.3.4.1.38g.1.1.2 Transport channel parameters for Interactive or background / UL:16 kbps / PS RAB

See clause 6.10.3.4.1.23b.1.1.1.

6.10.3.4.1.38g.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.38g.1.1.4 TFCS

TFCS size	32 (alt. 31)
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 16 kbps RAB, DCCH)= (TF0,TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0,TF0), (TF2,TF1,TF0,TF0,TF0), (TF3,TF2,TF0,TF0,TF0), (TF4,TF3,TF0,TF0,TF0), (TF5,TF4,TF1,TF0,TF0), (TF0,TF0,TF0,TF1,TF0), (TF1,TF0,TF0,TF1,TF0), (TF3,TF2,TF0,TF1,TF0), (TF4,TF3,TF0,TF1,TF0), (TF5,TF4,TF1,TF1,TF0), (TF0,TF0,TF0,TF2,TF0), (TF1,TF0,TF0,TF2,TF0), (TF3,TF2,TF0,TF2,TF0), (TF4,TF3,TF0,TF2,TF0), (TF5,TF4,TF1,TF2,TF0), (TF0,TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF0,TF1), (TF2,TF1,TF0,TF0,TF1), (TF3,TF2,TF0,TF0,TF1), (TF4,TF3,TF0,TF0,TF1), (TF5,TF4,TF1,TF0,TF1), (TF0,TF0,TF0,TF1,TF1), (TF1,TF0,TF0,TF1,TF1), (TF3,TF2,TF0,TF1,TF1), (TF4,TF3,TF0,TF1,TF1), (TF5,TF4,TF1,TF1,TF1), (TF0,TF0,TF0,TF2,TF1), (TF1,TF0,TF0,TF2,TF1), (TF3,TF2,TF0,TF2,TF1), (TF4,TF3,TF0,TF2,TF1), (TF5,TF4,TF1,TF2,TF1) (alt. (TF0,TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0,TF0), (TF2,TF1,TF0,TF0,TF0), (TF3,TF2,TF0,TF0,TF0), (TF4,TF3,TF0,TF0,TF0), (TF5,TF4,TF1,TF0,TF0), (TF0,TF0,TF0,TF1,TF0), (TF1,TF0,TF0,TF1,TF0), (TF3,TF2,TF0,TF1,TF0), (TF4,TF3,TF0,TF1,TF0), (TF5,TF4,TF1,TF1,TF0), (TF0,TF0,TF0,TF2,TF0), (TF1,TF0,TF0,TF2,TF0), (TF3,TF2,TF0,TF2,TF0), (TF4,TF3,TF0,TF2,TF0), (TF5,TF4,TF1,TF2,TF0), (TF0,TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF0,TF1), (TF2,TF1,TF0,TF0,TF1), (TF3,TF2,TF0,TF0,TF1), (TF4,TF3,TF0,TF0,TF1), (TF5,TF4,TF1,TF0,TF1), (TF0,TF0,TF0,TF1,TF1), (TF1,TF0,TF0,TF1,TF1), (TF3,TF2,TF0,TF1,TF1), (TF4,TF3,TF0,TF1,TF1), (TF5,TF4,TF1,TF1,TF1), (TF0,TF0,TF0,TF2,TF1), (TF1,TF0,TF0,TF2,TF1), (TF3,TF2,TF0,TF2,TF1), (TF4,TF3,TF0,TF2,TF1))
NOTE 1: In case TB size zero is configured for any transport channel the first TFC is required; it is optional otherwise. NOTE 2: The alt. TFCS is used when the 16Kbps RAB alt. is used.	

6.10.3.4.1.38g.1.2 Physical channel parameters

DPCH Uplink	Midamble	512 chips
	Codes and time slots	SF8 x 1 code x 1 time slot + SF16 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	664 bits (alt. 696 bits)
	TFCI code word	32 bits (alt. 16 bits)
	TPC	2 bits
	Puncturing Limit	0.56 (alt. 0.60)

6.10.3.4.1.38g.2 Downlink

6.10.3.4.1.38g.2.1 Transport channel parameters

6.10.3.4.1.38g.2.1.1 Transport channel parameters for Conversational / speech / DL: (12.2, 7.95, 5.9, 4.75) kbps / CS RAB

See clause 6.10.3.4.1.4a.2.1.1.

6.10.3.4.1.38g.2.1.2 Transport channel parameters for Interactive or background / DL:16 kbps / PS RAB

See clause 6.10.3.4.1.23b.2.1.1.

6.10.3.4.1.38g.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1

6.10.3.4.1.38g.2.1.4 TFCS

TFCS size	36
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 16 kbps RAB, DCCH)= (TF0,TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0,TF0), (TF2,TF1,TF0,TF0,TF0), (TF3,TF2,TF0,TF0,TF0), (TF4,TF3,TF0,TF0,TF0), (TF5,TF4,TF1,TF0,TF0), (TF0,TF0,TF0,TF1,TF0), (TF1,TF0,TF0,TF1,TF0), (TF2,TF1,TF0,TF1,TF0), (TF3,TF2,TF0,TF1,TF0), (TF4,TF3,TF0,TF1,TF0), (TF5,TF4,TF1,TF1,TF0), (TF0,TF0,TF0,TF2,TF0), (TF1,TF0,TF0,TF2,TF0), (TF2,TF1,TF0,TF2,TF0), (TF3,TF2,TF0,TF2,TF0), (TF4,TF3,TF0,TF2,TF0), (TF5,TF4,TF1,TF2,TF0), (TF0,TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF0,TF1), (TF2,TF1,TF0,TF0,TF1), (TF3,TF2,TF0,TF0,TF1), (TF4,TF3,TF0,TF0,TF1), (TF5,TF4,TF1,TF0,TF1), (TF0,TF0,TF0,TF1,TF1), (TF1,TF0,TF0,TF1,TF1), (TF2,TF1,TF0,TF1,TF1), (TF3,TF2,TF0,TF1,TF1), (TF4,TF3,TF0,TF1,TF1), (TF5,TF4,TF1,TF1,TF1), (TF0,TF0,TF0,TF2,TF1), (TF1,TF0,TF0,TF2,TF1), (TF2,TF1,TF0,TF2,TF1), (TF3,TF2,TF0,TF2,TF1), (TF4,TF3,TF0,TF2,TF1), (TF5,TF4,TF1,TF2,TF1)
NOTE: In case TB size zero is configured for any transport channel the first TFC is required; it is optional otherwise.	

6.10.3.4.1.38g.2.2 Physical channel parameters

DPCH Downlink	Midamble	512 chips
	Codes and time slots	SF16 x 3 codes x 1 time slot
	Max. Number of data bits/radio frame	700 bits
	TFCI code word	32 bits
	Puncturing limit	0.56

6.10.3.4.1.38h Conversational / speech / (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

6.10.3.4.1.38h.1 Uplink

6.10.3.4.1.38h.1.1 Transport channel parameters

6.10.3.4.1.38h.1.1.1 Transport channel parameters for Conversational / speech / UL: (12.2, 7.95, 5.9, 4.75) kbps / CS RAB

See clause 6.10.3.4.1.4a.1.1.1.

6.10.3.4.1.38h.1.1.2 Transport channel parameters for Interactive or background / UL:32 kbps / PS RAB

See clause 6.10.3.4.1.23d.1.1.1.

6.10.3.4.1.38h.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.38h.1.1.4 TFCS

TFCS size	32
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 32 kbps RAB, DCCH)= (TF0,TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0,TF0), (TF2,TF1,TF0,TF0,TF0), (TF3,TF2,TF0,TF0,TF0), (TF4,TF3,TF0,TF0,TF0), (TF5,TF4,TF1,TF0,TF0), (TF0,TF0,TF0,TF1,TF0), (TF1,TF0,TF0,TF1,TF0), (TF2,TF1,TF0,TF1,TF0), (TF3,TF2,TF0,TF1,TF0), (TF4,TF3,TF0,TF1,TF0), (TF5,TF4,TF1,TF1,TF0), (TF0,TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF0,TF1), (TF2,TF1,TF0,TF0,TF1), (TF3,TF2,TF0,TF0,TF1), (TF4,TF3,TF0,TF0,TF1), (TF5,TF4,TF1,TF0,TF1), (TF0,TF0,TF0,TF1,TF1), (TF1,TF0,TF0,TF1,TF1), (TF2,TF1,TF0,TF1,TF1), (TF3,TF2,TF0,TF1,TF1), (TF4,TF3,TF0,TF1,TF1), (TF5,TF4,TF1,TF1, TF1), (TF0,TF0,TF0,TF2,TF0), (TF1,TF0,TF0,TF2,TF0), (TF2,TF1,TF0,TF2,TF0), (TF3,TF2,TF0,TF2,TF0), (TF4,TF3,TF0,TF2,TF0), (TF5,TF4,TF1,TF2,TF0), (TF0,TF0,TF0,TF2,TF1), (TF1,TF0,TF0,TF2,TF1)
NOTE: In case TB size zero is configured for any transport channel the first TFC is required; it is optional otherwise.	

6.10.3.4.1.38h.1.2 Physical channel parameters

DPCH Uplink	Midamble	512 chips
	Codes and time slots	SF4 x 1 code x 1 time slot + SF16 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	1 084 bits
	TFCI code word	32 bits
	TPC	2 bits
	Puncturing Limit	0.68 (alt.0.60)

6.10.3.4.1.38h.2 Downlink

6.10.3.4.1.38h.2.1 Transport channel parameters

6.10.3.4.1.38h.2.1.1 Transport channel parameters for Conversational / speech / DL: (12.2, 7.95, 5.9, 4.75) kbps / CS RAB

See clause 6.10.3.4.1.4a.2.1.1.

6.10.3.4.1.38h.2.1.2 Transport channel parameters for Interactive or background / DL:32 kbps / PS RAB

See clause 6.10.3.4.1.23d.2.1.1.

6.10.3.4.1.38h.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.38h.2.1.4 TFCS

TFCS size	32
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 32 kbps RAB, DCCH)= (TF0,TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0,TF0), (TF2,TF1,TF0,TF0,TF0), (TF3,TF2,TF0,TF0,TF0), (TF4,TF3,TF0,TF0,TF0), (TF5,TF4,TF1,TF0,TF0), (TF0,TF0,TF0,TF1,TF0), (TF1,TF0,TF0,TF1,TF0), (TF2,TF1,TF0,TF1,TF0), (TF3,TF2,TF1,TF0,TF0), (TF4,TF3,TF0,TF1,TF0), (TF5,TF4,TF1,TF1,TF0), (TF0,TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF0,TF1), (TF2,TF1,TF0,TF0,TF1), (TF3,TF2,TF0,TF0,TF1), (TF4,TF3,TF0,TF0,TF1), (TF5,TF4,TF1,TF0,TF1), (TF0,TF0,TF0,TF1,TF1), (TF1,TF0,TF0,TF1,TF1), (TF2,TF1,TF0,TF1,TF1), (TF3,TF2,TF0,TF1,TF1), (TF4,TF3,TF0,TF1,TF1), (TF5,TF4,TF1,TF1, TF1), (TF0,TF0,TF0,TF2,TF0), (TF1,TF0,TF0,TF2,TF0), (TF2,TF1,TF0,TF2,TF0), (TF3,TF2,TF0,TF2,TF0), (TF4,TF3,TF0,TF2,TF0), (TF5,TF4,TF1,TF2,TF0), (TF0,TF0,TF0,TF2,TF1), (TF1,TF0,TF0,TF2,TF1)
NOTE: In case TB size zero is configured for any transport channel the first TFC is required; it is optional otherwise.	

6.10.3.4.1.38h.2.2 Physical channel parameters

DPCH Downlink	Midamble	512 chips
	Codes and time slots	SF16 x 4 codes x 1 time slot
	Max. Number of data bits/radio frame	944
	TFCI code word	32 bits
	Puncturing limit	0.60

6.10.3.4.1.38i Conversational / speech / (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

6.10.3.4.1.38i.1 Uplink

6.10.3.4.1.38i.1.1 Transport channel parameters

6.10.3.4.1.38i.1.1.1 Transport channel parameters for Conversational / speech / UL: (12.2, 7.95, 5.9, 4.75) kbps / CS RAB

See clause 6.10.3.4.1.4a.1.1.1.

6.10.3.4.1.38i.1.1.2 Transport channel parameters for Interactive or background / UL:64 kbps / PS RAB

See clause 6.10.3.4.1.26.1.1.1.

6.10.3.4.1.38i.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.38i.1.1.4 TFCS

TFCS size	48
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 64 kbps RAB, DCCH)= (TF0,TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0,TF0), (TF2,TF1,TF0,TF0,TF0), (TF3,TF2,TF0,TF0,TF0), (TF4,TF3,TF0,TF0,TF0), (TF5,TF4,TF1,TF0,TF0), (TF0,TF0,TF0,TF1,TF0), (TF1,TF0,TF0,TF1,TF0), (TF2,TF1,TF0,TF1,TF0), (TF3,TF2,TF0,TF1,TF0), (TF4,TF3,TF0,TF1,TF0), (TF5,TF4,TF1,TF1,TF0), (TF0,TF0,TF0,TF2,TF0), (TF1,TF0,TF0,TF2,TF0), (TF2,TF1,TF0,TF2,TF0), (TF3,TF2,TF0,TF2,TF0), (TF4,TF3,TF0,TF2,TF0), (TF5,TF4,TF1,TF2,TF0), (TF0,TF0,TF0,TF4,TF0), (TF1,TF0,TF0,TF4,TF0), (TF2,TF1,TF0,TF4,TF0), (TF3,TF2,TF0,TF4,TF0), (TF4,TF3,TF0,TF4,TF0), (TF5,TF4,TF1,TF4,TF0), (TF0,TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF0,TF1), (TF2,TF1,TF0,TF0,TF1), (TF3,TF2,TF0,TF0,TF1), (TF4,TF3,TF0,TF0,TF1), (TF5,TF4,TF1,TF0,TF1), (TF0,TF0,TF0,TF1,TF1), (TF1,TF0,TF0,TF1,TF1), (TF2,TF1,TF0,TF1,TF1), (TF3,TF2,TF0,TF1,TF1), (TF4,TF3,TF0,TF1,TF1), (TF5,TF4,TF1,TF1,TF1), (TF0,TF0,TF0,TF2,TF1), (TF1,TF0,TF0,TF2,TF1), (TF2,TF1,TF0,TF2,TF1), (TF3,TF2,TF0,TF2,TF1), (TF4,TF3,TF0,TF2,TF1), (TF5,TF4,TF1,TF2,TF1), (TF0,TF0,TF0,TF4,TF1), (TF1,TF0,TF0,TF4,TF1), (TF2,TF1,TF0,TF4,TF1), (TF3,TF2,TF0,TF4,TF1), (TF4,TF3,TF0,TF4,TF1), (TF5,TF4,TF1,TF4,TF1)
NOTE: In case TB size zero is configured for any transport channel the first TFC is required; it is optional otherwise.	

6.10.3.4.1.38i.1.2 Physical channel parameters

DPCH Uplink	Midamble	256 chips
	Codes and time slots	SF2 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	1 936 bits
	TFCI code word	32 bit
	TPC	2 bits
	Puncturing Limit	0.68 (alt.0.60)

6.10.3.4.1.38i.2 Downlink

6.10.3.4.1.38i.2.1 Transport channel parameters

6.10.3.4.1.38i.2.1.1 Transport channel parameters for Conversational / speech / DL: (12.2, 7.95, 5.9, 4.75) kbps / CS RAB

See clause 6.10.3.4.1.4a.2.1.1.

6.10.3.4.1.38i.2.1.2 Transport channel parameters for Interactive or background / DL:64 kbps / PS RAB

See clause 6.10.3.4.1.25.2.1.1.

6.10.3.4.1.38i.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.38i.2.1.4 TFCS

TFCS size	60
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 64 kbps RAB, DCCH)= (TF0,TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0,TF0), (TF2,TF1,TF0,TF0,TF0), (TF3,TF2,TF0,TF0,TF0), (TF4,TF3,TF0,TF0,TF0), (TF5,TF4,TF1,TF0,TF0), (TF0,TF0,TF0,TF1,TF0), (TF1,TF0,TF0,TF1,TF0), (TF2,TF1,TF0,TF1,TF0), (TF3,TF2,TF0,TF1,TF0), (TF4,TF3,TF0,TF1,TF0), (TF5,TF4,TF1,TF1,TF0), (TF0,TF0,TF0,TF2,TF0), (TF1,TF0,TF0,TF2,TF0), (TF2,TF1,TF0,TF2,TF0),

	(TF3,TF2,TF0,TF2,TF0), (TF4,TF3,TF0,TF2,TF0), (TF5,TF4,TF1,TF2,TF0), (TF0,TF0,TF0,TF3,TF0), (TF1,TF0,TF0,TF3,TF0), (TF2,TF1,TF0,TF3,TF0), (TF3,TF2,TF0,TF3,TF0), (TF4,TF3,TF0,TF3,TF0), (TF5,TF4,TF1,TF3,TF0), (TF0,TF0,TF0,TF4,TF0), (TF1,TF0,TF0,TF4,TF0), (TF2,TF1,TF0,TF4,TF0), (TF3,TF2,TF0,TF4,TF0), (TF4,TF3,TF0,TF4,TF0), (TF5,TF4,TF1,TF4,TF0), (TF0,TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF0,TF1), (TF2,TF1,TF0,TF0,TF1), (TF3,TF2,TF0,TF0,TF1), (TF4,TF3,TF0,TF0,TF1), (TF5,TF4,TF1,TF0,TF1), (TF0,TF0,TF0,TF1,TF1), (TF1,TF0,TF0,TF1,TF1), (TF2,TF1,TF0,TF1,TF1), (TF3,TF2,TF0,TF1,TF1), (TF4,TF3,TF0,TF1,TF1), (TF5,TF4,TF1,TF1,TF1), (TF0,TF0,TF0,TF2,TF1), (TF1,TF0,TF0,TF2,TF1), (TF2,TF1,TF0,TF2,TF1), (TF3,TF2,TF0,TF2,TF1), (TF4,TF3,TF0,TF2,TF1), (TF5,TF4,TF1,TF2,TF1), (TF0,TF0,TF0,TF3,TF1), (TF1,TF0,TF0,TF3,TF1), (TF2,TF1,TF0,TF3,TF1), (TF3,TF2,TF0,TF3,TF1), (TF4,TF3,TF0,TF3,TF1), (TF5,TF4,TF1,TF3,TF1), (TF0,TF0,TF0,TF4,TF1), (TF1,TF0,TF0,TF4,TF1), (TF2,TF1,TF0,TF4,TF1), (TF3,TF2,TF0,TF4,TF1), (TF4,TF3,TF0,TF4,TF1), (TF5,TF4,TF1,TF4,TF1)
NOTE: In case TB size zero is configured for any transport channel the first TFC is required; it is optional otherwise.	

6.10.3.4.1.38i.2.2 Physical channel parameters

DPCH Downlink	Midamble	256 chips
	Codes and time slots	SF16 x 7 codes x 1 time slot
	Max. Number of data bits/radio frame	1 900 bits
	TFCI code word	32 bits
	Puncturing limit	0.68

6.10.3.4.1.38j Conversational / speech / (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

6.10.3.4.1.38j.1 Uplink

See clause 6.10.3.4.1.38i.1

6.10.3.4.1.38j.2 Downlink

6.10.3.4.1.38j.2.1 Transport channel parameters

6.10.3.4.1.38j.2.1.1 Transport channel parameters for Conversational / speech / DL: (12.2, 7.95, 5.9, 4.75) kbps / CS RAB

See clause 6.10.3.4.1.4a.2.1.1.

6.10.3.4.1.38j.2.1.2 Transport channel parameters for Interactive or background / DL:128 kbps / PS RAB

See clause 6.10.3.4.1.27.2.1.1.

6.10.3.4.1.38j.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.38j.2.1.4 TFCS

TFCS size	60
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 128 kbps RAB, DCCH)= (TF0,TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0,TF0), (TF2,TF1,TF0,TF0,TF0), (TF3,TF2,TF0,TF0,TF0), (TF4,TF3,TF0,TF0,TF0), (TF5,TF4,TF1,TF0,TF0), (TF0,TF0,TF0,TF1,TF0), (TF1,TF0,TF0,TF1,TF0), (TF2,TF1,TF0,TF1,TF0), (TF3,TF2,TF0,TF1,TF0), (TF4,TF3,TF0,TF1,TF0), (TF5,TF4,TF1,TF1,TF0), (TF0,TF0,TF0,TF2,TF0), (TF1,TF0,TF0,TF2,TF0), (TF2,TF1,TF0,TF2,TF0), (TF3,TF2,TF0,TF2,TF0), (TF4,TF3,TF0,TF2,TF0), (TF5,TF4,TF1,TF2,TF0), (TF0,TF0,TF0,TF3,TF0), (TF1,TF0,TF0,TF3,TF0), (TF2,TF1,TF0,TF3,TF0), (TF3,TF2,TF0,TF3,TF0), (TF4,TF3,TF0,TF3,TF0), (TF5,TF4,TF1,TF3,TF0), (TF0,TF0,TF0,TF4,TF0), (TF1,TF0,TF0,TF4,TF0), (TF2,TF1,TF0,TF4,TF0), (TF3,TF2,TF0,TF4,TF0), (TF4,TF3,TF0,TF4,TF0), (TF5,TF4,TF1,TF4,TF0), (TF0,TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF0,TF1), (TF2,TF1,TF0,TF0,TF1), (TF3,TF2,TF0,TF0,TF1), (TF4,TF3,TF0,TF0,TF1), (TF5,TF4,TF1,TF0,TF1),

	(TF0,TF0,TF0,TF1,TF1), (TF1,TF0,TF0,TF1,TF1), (TF2,TF1,TF0,TF1,TF1), (TF3,TF2,TF0,TF1,TF1), (TF4,TF3,TF0,TF1,TF1), (TF5,TF4,TF1,TF1,TF1), (TF0,TF0,TF0,TF2,TF1), (TF1,TF0,TF0,TF2,TF1), (TF2,TF1,TF0,TF2,TF1), (TF3,TF2,TF0,TF2,TF1), (TF4,TF3,TF0,TF2,TF1), (TF5,TF4,TF1,TF2,TF1), (TF0,TF0,TF0,TF3,TF1), (TF1,TF0,TF0,TF3,TF1), (TF2,TF1,TF0,TF3,TF1), (TF3,TF2,TF0,TF3,TF1), (TF4,TF3,TF0,TF3,TF1), (TF5,TF4,TF1,TF3,TF1), (TF0,TF0,TF0,TF4,TF1), (TF1,TF0,TF0,TF4,TF1), (TF2,TF1,TF0,TF4,TF1), (TF3,TF2,TF0,TF4,TF1), (TF4,TF3,TF0,TF4,TF1), (TF5,TF4,TF1,TF4,TF1)
NOTE: In case TB size zero is configured for any transport channel the first TFC is required; it is optional otherwise.	

6.10.3.4.1.38j.2.2 Physical channel parameters

DPCH Downlink	Midamble	256 chips
	Codes and time slots	SF16 x 6 codes x 2 time slots
	Max. Number of data bits/radio frame	3 280 bits
	TFCI code word	32 bits
	Puncturing limit	0.64

6.10.3.4.1.39 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

6.10.3.4.1.39.1 Uplink

See clause 6.10.3.4.1.38.1.

6.10.3.4.1.39.2 Downlink

6.10.3.4.1.39.2.1 Transport channel parameters

6.10.3.4.1.39.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 kbps / CS RAB

See clause 6.10.3.4.1.4.2.1.1.

6.10.3.4.1.39.2.1.2 Transport channel parameters for Interactive or background / DL:64 kbps / PS RAB

See clause 6.10.3.4.1.25.2.1.1.

6.10.3.4.1.39.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.39.2.1.4 TFCS

TFCS size	30
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 64 kbps RAB , DCCH)= (TF0, TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0, TF0), (TF2, TF1, TF1, TF0, TF0), (TF0, TF0, TF0, TF1, TF0), (TF1, TF0, TF0, TF1, TF0), (TF2, TF1, TF1, TF1, TF0), (TF0, TF0, TF0, TF2, TF0), (TF1, TF0, TF0, TF2, TF0), (TF2, TF1, TF1, TF2, TF0), (TF0, TF0, TF0, TF3, TF0), (TF1, TF0, TF0, TF3, TF0), (TF2, TF1, TF1, TF3, TF0), (TF0, TF0, TF0, TF4, TF0), (TF1, TF0, TF0, TF4, TF0), (TF2, TF1, TF1, TF4, TF0), (TF0, TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1), (TF0, TF0, TF0, TF1, TF1), (TF1, TF0, TF0, TF1, TF1), (TF2, TF1, TF1, TF1, TF1), (TF0, TF0, TF0, TF2, TF1), (TF1, TF0, TF0, TF2, TF1), (TF2, TF1, TF1, TF2, TF1), (TF0, TF0, TF0, TF3, TF1), (TF1, TF0, TF0, TF3, TF1), (TF2, TF1, TF1, TF3, TF1), (TF0, TF0, TF0, TF4, TF1), (TF1, TF0, TF0, TF4, TF1), (TF2, TF1, TF1, TF4, TF1)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.39.2.2 Physical channel parameters

DPCH Downlink	Midamble	512 chips
	Codes and time slots	SF16 x 8 codes x 1 time slot
	Max. Number of data bits/radio frame	1 936 bits
	TFCI code word	16 bits

	Puncturing limit	0.68

6.10.3.4.1.40 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

6.10.3.4.1.40.1 Uplink

6.10.3.4.1.40.1.1 Transport channel parameters

6.10.3.4.1.40.1.1.1 Transport channel parameters for Conversational / speech / UL:12.2 kbps / CS RAB

See clause 6.10.3.4.1.4.1.1.1.

6.10.3.4.1.40.1.1.2 Transport channel parameters for Interactive or background / UL:64 kbps / PS RAB

See clause 6.10.3.4.1.26.1.1.1.

6.10.3.4.1.40.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.40.1.1.4 TFCS

6.10.3.4.1.40.1.1.4.1 TFCS (one CCTrCH case)

TFCS size	30
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 64 kbps RAB , DCCH)= (TF0, TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0, TF0), (TF2, TF1, TF1, TF0, TF0), (TF0, TF0, TF0, TF1, TF0), (TF1, TF0, TF0, TF1, TF0), (TF2, TF1, TF1, TF1, TF0), (TF0, TF0, TF0, TF2, TF0), (TF1, TF0, TF0, TF2, TF0), (TF2, TF1, TF1, TF2, TF0), (TF0, TF0, TF0, TF3, TF0), (TF1, TF0, TF0, TF3, TF0), (TF2, TF1, TF1, TF3, TF0), (TF0, TF0, TF0, TF4, TF0), (TF1, TF0, TF0, TF4, TF0), (TF2, TF1, TF1, TF4, TF0), (TF0, TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1), (TF0, TF0, TF0, TF1, TF1), (TF1, TF0, TF0, TF1, TF1), (TF2, TF1, TF1, TF1, TF1), (TF0, TF0, TF0, TF2, TF1), (TF1, TF0, TF0, TF2, TF1), (TF2, TF1, TF1, TF2, TF1), (TF0, TF0, TF0, TF3, TF1), (TF1, TF0, TF0, TF3, TF1), (TF2, TF1, TF1, TF3, TF1), (TF0, TF0, TF0, TF4, TF1), (TF1, TF0, TF0, TF4, TF1), (TF2, TF1, TF1, TF4, TF1)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.40.1.1.4.2 TFCS (two CCTrCH case)

6.10.3.4.1.40.1.1.4.2.1 TFCS (conversational + SRB)

TFCS size	6
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 64 kbps RAB, DCCH)= (TF0, TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0, TF0), (TF2, TF1, TF1, TF0, TF0), (TF0, TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.40.1.1.4.2.2 TFCS (Interactive or background)

TFCS size	5
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 64 kbps RAB, DCCH)= (TF0, TF0, TF0, TF0, TF0), (TF0, TF0, TF0, TF1, TF0), (TF0, TF0, TF0, TF2, TF0), (TF0, TF0, TF0, TF3, TF0), (TF0, TF0, TF0, TF4, TF0)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.40.1.2 Physical channel parameters

6.10.3.4.1.40.1.2.1 Physical channel (one CCTrCH case)

DPCH Uplink	Midamble	512 chips
	Codes and time slots	SF2 x 1 code x 1 time slot

	Max. Number of data bits/radio frame	1 808 bits
	TFCI code word	16 bit
	TPC	2 bits
	Puncturing Limit	0.64 (alt. 0.56)

6.10.3.4.1.40.1.2.2 Physical channel (two CCTrCH case)

6.10.3.4.1.40.1.2.2.1 Physical channel (conversational + SRB)

DPCH Uplink	Midamble	512 chips
	Codes and time slots	SF8 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	452 bits
	TFCI code word	16 bits
	TPC	2 bit
	Puncturing Limit	0.68

6.10.3.4.1.40.1.2.2.2 Physical channel (Interactive or background)

DPCH Uplink	Midamble	512 chips
	Codes and time slots	SF2 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	1 808 bits
	TFCI code word	16 bits
	TPC	2 bits
	Puncturing Limit	0.84 (alt. 0.72)

6.10.3.4.1.40.2 Downlink

Transport channel parameters

6.10.3.4.1.40.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 kbps / CS RAB

See clause 6.10.3.4.1.4.2.1.1.

6.10.3.4.1.40.2.1.2 Transport channel parameters for Interactive or background / DL:64 kbps / PS RAB

See clause 6.10.3.4.1.25.2.1.1.

6.10.3.4.1.40.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.40.2.1.4 TFCS

6.10.3.4.1.40.2.1.4.1 TFCS (one CCTrCH case)

See Clause 6.10.3.4.1.39.2.1.4.

6.10.3.4.1.40.2.1.4.2 TFCS (two CCTrCH case)

6.10.3.4.1.40.2.1.4.2.1 TFCS (conversational + SRB)

TFCS size	6
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 64 kbps RAB, DCCH)= (TF0, TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0, TF0), (TF2, TF1, TF1, TF0, TF0), (TF0, TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.40.2.1.4.2.2 TFCS (Interactive or background)

TFCS size	5
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 64 kbps RAB, DCCH)= (TF0, TF0, TF0, TF0, TF0), (TF0, TF0, TF0, TF1, TF0), (TF0, TF0, TF0, TF2, TF0), (TF0, TF0, TF0, TF3, TF0), (TF0, TF0, TF0, TF4, TF0)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.40.2.2 Physical channel parameters

6.10.3.4.1.40.2.2.1 Physical channel parameters (one CCTrCH)

See clause 6.10.3.4.1.39.2.2.

6.10.3.4.1.40.2.2.2 Physical channel parameters (two CCTrCHs)

6.10.3.4.1.40.2.2.2.1 Physical channel parameters (conversational + SRB)

DPCH Downlink	Midamble	512 chips
	Codes and time slots	SF16 x 2 codes x 1 time slot
	Max. Number of data bits/radio frame	472 bits
	TFCI code word	16 bits
	Puncturing limit	0.68

6.10.3.4.1.40.2.2.2.2 Physical channel parameters (Interactive or background)

DPCH Downlink	Midamble	512 chips
	Codes and time slots	SF16 x 5 codes x 1 time slot
	Max. Number of data bits/radio frame	1 204 bits
	TFCI code word	16 bits
	Puncturing limit	0.56

6.10.3.4.1.41 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

6.10.3.4.1.41.1 Uplink

See clause 6.10.3.4.1.40.1.

6.10.3.4.1.41.2 Downlink

6.10.3.4.1.41.2.1 Transport channel parameters

6.10.3.4.1.41.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 kbps / CS RAB

See clause 6.10.3.4.1.4.2.1.1.

6.10.3.4.1.41.2.1.2 Transport channel parameters for Interactive or background / DL:128 kbps / PS RAB

See clause 6.10.3.4.1.27.2.1.1.

6.10.3.4.1.41.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.41.2.1.4 TFCS

6.10.3.4.1.41.2.1.4.1 TFCS (one CCTrCH case)

TFCS size	30
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 128 kbps RAB , DCCH)= (TF0, TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0, TF0), (TF2, TF1, TF1, TF0, TF0), (TF0, TF0, TF0, TF1, TF0), (TF1, TF0, TF0, TF1, TF0), (TF2, TF1, TF1, TF1, TF0), (TF0, TF0, TF0, TF2, TF0), (TF1, TF0, TF0, TF2, TF0), (TF2, TF1, TF1, TF2, TF0), (TF0, TF0, TF0, TF3, TF0), (TF1, TF0, TF0, TF3, TF0), (TF2, TF1, TF1, TF3, TF0), (TF0, TF0, TF0, TF4, TF0), (TF1, TF0, TF0, TF4, TF0), (TF2, TF1, TF1, TF4, TF0), (TF0, TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1), (TF0, TF0, TF0, TF1, TF1), (TF1, TF0, TF0, TF1, TF1), (TF2, TF1, TF1, TF1, TF1), (TF0, TF0, TF0, TF2, TF1), (TF1, TF0, TF0, TF2, TF1), (TF2, TF1, TF1, TF2, TF1), (TF0, TF0, TF0, TF3, TF1), (TF1, TF0, TF0, TF3, TF1), (TF2, TF1, TF1, TF3, TF1), (TF0, TF0, TF0, TF4, TF1), (TF1, TF0, TF0, TF4, TF1), (TF2, TF1, TF1, TF4, TF1)

NOTE:	In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.

6.10.3.4.1.41.2.1.4.2 TFCS (two CCTrCH case)

6.10.3.4.1.41.2.1.4.2.1 TFCS (conversational + SRB)

TFCS size	6
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 128 kbps RAB , DCCH)= (TF0, TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0, TF0), (TF2, TF1, TF1, TF0, TF0), (TF0, TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.41.2.1.4.2.2 TFCS (Interactive or background)

TFCS size	5
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 128 kbps RAB , DCCH)= (TF0, TF0, TF0, TF0, TF0), (TF0, TF0, TF0, TF1, TF0), (TF0, TF0, TF0, TF2, TF0), (TF0, TF0, TF0, TF3, TF0), (TF0, TF0, TF0, TF4, TF0)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.41.2.2 Physical channel parameters

6.10.3.4.1.41.2.2.1 Physical channel parameters (one CCTrCH)

DPCH Downlink	Midamble	256 chips
	Codes and time slots	SF16 x 5codes x 2time slots
	Max. Number of data bits/radio frame	2 744 bits
	TFCI code word	16 bits
	Puncturing limit	0.52

6.10.3.4.1.41.2.2.2 Physical channel parameters (two CCTrCHs)

6.10.3.4.1.41.2.2.2.1 Physical channel parameters (conversational + SRB)

DPCH Downlink	Midamble	512 chips
	Codes and time slots	SF16 x 2 codes x 1 time slot
	Max. Number of data bits/radio frame	472 bits
	TFCI code word	16 bits
	Puncturing limit	0.64

6.10.3.4.1.41.2.2.2.2 Physical channel parameters (Interactive or background)

DPCH Downlink	Midamble	256 chips
	Codes and time slots	SF16 x 8 codes x 1 time slot
	Max. Number of data bits/radio frame	2 192 bits
	TFCI code word	16 bits
	Puncturing limit	0,48

6.10.3.4.1.42 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

6.10.3.4.1.42.1 Uplink

6.10.3.4.1.42.1.1 Transport channel parameters

6.10.3.4.1.42.1.1.1 Transport channel parameters for Conversational / speech / UL:12.2 kbps / CS RAB

See clause 6.10.3.4.1.4.1.1.1.

6.10.3.4.1.42.1.1.2 Transport channel parameters for Interactive or background / UL:64 kbps / PS RAB

See clause 6.10.3.4.1.26.1.1.1.

6.10.3.4.1.42.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.42.1.1.4 TFCS

See clause 6.10.3.4.1.40.1.1.4.1.

6.10.3.4.1.42.1.2 Physical channel parameters

See clause 6.10.3.4.1.40.1.2.1.

6.10.3.4.1.42.2 Downlink

6.10.3.4.1.42.2.1 Transport channel parameters

6.10.3.4.1.42.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 kbps / CS RAB

See clause 6.10.3.4.1.4.2.1.1.

6.10.3.4.1.42.2.1.2 Transport channel parameters for Interactive or background / DL:256 kbps / PS RAB

See clause 6.10.3.4.1.31.2.1.1.

6.10.3.4.1.42.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.42.2.1.4 TFCS

TFCS size	30 (alt. 42)
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 256 kbps RAB, DCCH)= (TF0, TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0, TF0), (TF2, TF1, TF1, TF0, TF0), (TF0, TF0, TF0, TF1, TF0), (TF1, TF0, TF0, TF1, TF0), (TF2, TF1, TF1, TF1, TF0), (TF0, TF0, TF0, TF2, TF0), (TF1, TF0, TF0, TF2, TF0), (TF2, TF1, TF1, TF2, TF0), (TF0, TF0, TF0, TF3, TF0), (TF1, TF0, TF0, TF3, TF0), (TF2, TF1, TF1, TF3, TF0), (TF0, TF0, TF0, TF4, TF0), (TF1, TF0, TF0, TF4, TF0), (TF2, TF1, TF1, TF4, TF0), (TF0, TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1), (TF0, TF0, TF0, TF1, TF1), (TF1, TF0, TF0, TF1, TF1), (TF2, TF1, TF1, TF1, TF1), (TF0, TF0, TF0, TF2, TF1), (TF1, TF0, TF0, TF2, TF1), (TF2, TF1, TF1, TF2, TF1), (TF0, TF0, TF0, TF3, TF1), (TF1, TF0, TF0, TF3, TF1), (TF2, TF1, TF1, TF3, TF1), (TF0, TF0, TF0, TF4, TF1), (TF1, TF0, TF0, TF4, TF1), (TF2, TF1, TF1, TF4, TF1) (alt. (TF0, TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0, TF0), (TF2, TF1, TF1, TF0, TF0), (TF0, TF0, TF0, TF1, TF0), (TF1, TF0, TF0, TF1, TF0), (TF2, TF1, TF1, TF1, TF0), (TF0, TF0, TF0, TF2, TF0), (TF1, TF0, TF0, TF2, TF0), (TF2, TF1, TF1, TF2, TF0), (TF0, TF0, TF0, TF3, TF0), (TF1, TF0, TF0, TF3, TF0), (TF2, TF1, TF1, TF3, TF0), (TF0, TF0, TF0, TF4, TF0), (TF1, TF0, TF0, TF4, TF0), (TF2, TF1, TF1, TF4, TF0), (TF0, TF0, TF0, TF5, TF0), (TF1, TF0, TF0, TF5, TF0), (TF2, TF1, TF1, TF5, TF0), (TF0, TF0, TF0, TF6, TF0), (TF1, TF0, TF0, TF6, TF0), (TF2, TF1, TF1, TF6, TF0), (TF0, TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1), (TF0, TF0, TF0, TF1, TF1), (TF1, TF0, TF0, TF1, TF1), (TF2, TF1, TF1, TF1, TF1), (TF0, TF0, TF0, TF2, TF1), (TF1, TF0, TF0, TF2, TF1), (TF2, TF1, TF1, TF2, TF1), (TF0, TF0, TF0, TF3, TF1), (TF1, TF0, TF0, TF3, TF1), (TF2, TF1, TF1, TF3, TF1), (TF0, TF0, TF0, TF4, TF1), (TF1, TF0, TF0, TF4, TF1), (TF2, TF1, TF1, TF4, TF1) (TF0, TF0, TF0, TF5, TF1), (TF1, TF0, TF0, TF5, TF1), (TF2, TF1, TF1, TF5, TF1), (TF0, TF0, TF0, TF6, TF1), (TF1, TF0, TF0, TF6, TF1), (TF2, TF1, TF1, TF6, TF1))
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.42.2.2 Physical channel parameters

DPCH Downlink	Midamble	256 chips
	Codes and time slots	SF16 x 8 codes x 2 time slots + SF16 x 4 codes x 1 time slot
	Max. Number of data bits/radio frame	5 504 bits (alt. 5 488)

	TFCI code word	16 bits (alt. 32)
	Puncturing limit	0.60

6.10.3.4.1.43 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

6.10.3.4.1.43.1 Uplink

See clause 6.10.3.4.1.40.1.

6.10.3.4.1.43.2 Downlink

6.10.3.4.1.43.2.1 Transport channel parameters

6.10.3.4.1.43.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 kbps / CS RAB

See clause 6.10.3.4.1.4.2.1.1.

6.10.3.4.1.43.2.1.2 Transport channel parameters for Interactive or background / DL:384 kbps / PS RAB

See clause 6.10.3.4.1.32.2.1.1.

6.10.3.4.1.43.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.43.2.1.4 TFCS

6.10.3.4.1.43.2.1.4.1 TFCS (one CCTrCH case)

TFCS size	36 (alt. 54)
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 384 kbps RAB, DCCH)= (TF0, TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0, TF0), (TF2, TF1, TF1, TF0, TF0), (TF0, TF0, TF0, TF1, TF0), (TF1, TF0, TF0, TF1, TF0), (TF2, TF1, TF1, TF1, TF0), (TF0, TF0, TF0, TF2, TF0), (TF1, TF0, TF0, TF2, TF0), (TF2, TF1, TF1, TF2, TF0), (TF0, TF0, TF0, TF3, TF0), (TF1, TF0, TF0, TF3, TF0), (TF2, TF1, TF1, TF3, TF0), (TF0, TF0, TF0, TF4, TF0), (TF1, TF0, TF0, TF4, TF0), (TF2, TF1, TF1, TF4, TF0), (TF0, TF0, TF0, TF5, TF0), (TF1, TF0, TF0, TF5, TF0), (TF2, TF1, TF1, TF5, TF0), (TF0, TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1), (TF0, TF0, TF0, TF1, TF1), (TF1, TF0, TF0, TF1, TF1), (TF2, TF1, TF1, TF1, TF1), (TF0, TF0, TF0, TF2, TF1), (TF1, TF0, TF0, TF2, TF1), (TF2, TF1, TF1, TF2, TF1), (TF0, TF0, TF0, TF3, TF1), (TF1, TF0, TF0, TF3, TF1), (TF2, TF1, TF1, TF3, TF1), (TF0, TF0, TF0, TF4, TF1), (TF1, TF0, TF0, TF4, TF1), (TF2, TF1, TF1, TF4, TF1) (TF0, TF0, TF0, TF5, TF1), (TF1, TF0, TF0, TF5, TF1), (TF2, TF1, TF1, TF5, TF1), (alt. (TF0, TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0, TF0), (TF2, TF1, TF1, TF0, TF0), (TF0, TF0, TF0, TF1, TF0), (TF1, TF0, TF0, TF1, TF0), (TF2, TF1, TF1, TF1, TF0), (TF0, TF0, TF0, TF2, TF0), (TF1, TF0, TF0, TF2, TF0), (TF2, TF1, TF1, TF2, TF0), (TF0, TF0, TF0, TF3, TF0), (TF1, TF0, TF0, TF3, TF0), (TF2, TF1, TF1, TF3, TF0), (TF0, TF0, TF0, TF4, TF0), (TF1, TF0, TF0, TF4, TF0), (TF2, TF1, TF1, TF4, TF0), (TF0, TF0, TF0, TF5, TF0), (TF1, TF0, TF0, TF5, TF0), (TF2, TF1, TF1, TF5, TF0), (TF0, TF0, TF0, TF6, TF0), (TF1, TF0, TF0, TF6, TF0), (TF2, TF1, TF1, TF6, TF0), (TF0, TF0, TF0, TF7, TF0), (TF1, TF0, TF0, TF7, TF0), (TF2, TF1, TF1, TF7, TF0), (TF0, TF0, TF0, TF8, TF0), (TF1, TF0, TF0, TF8, TF0), (TF2, TF1, TF1, TF8, TF0), (TF0, TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1), (TF0, TF0, TF0, TF1, TF1), (TF1, TF0, TF0, TF1, TF1), (TF2, TF1, TF1, TF1, TF1), (TF0, TF0, TF0, TF2, TF1), (TF1, TF0, TF0, TF2, TF1), (TF2, TF1, TF1, TF2, TF1), (TF0, TF0, TF0, TF3, TF1), (TF1, TF0, TF0, TF3, TF1), (TF2, TF1, TF1, TF3, TF1), (TF0, TF0, TF0, TF4, TF1), (TF1, TF0, TF0, TF4, TF1), (TF2, TF1, TF1, TF4, TF1) (TF0, TF0, TF0, TF5, TF1), (TF1, TF0, TF0, TF5, TF1), (TF2, TF1, TF1, TF5, TF1) (TF0, TF0, TF0, TF6, TF1), (TF1, TF0, TF0, TF6, TF1), (TF2, TF1, TF1, TF6, TF1), (TF0, TF0, TF0, TF7, TF1), (TF1, TF0, TF0, TF7, TF1), (TF2, TF1, TF1, TF7, TF1) (TF0, TF0, TF0, TF8, TF1), (TF1, TF0, TF0, TF8, TF1), (TF2, TF1, TF1, TF8, TF1))
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.43.2.1.4.2 TFCS (two CCTrCH case)

6.10.3.4.1.43.2.1.4.2.1 TFCS (conversational + SRB)

TFCS size	6
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 384 kbps RAB, DCCH)= (TF0, TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0, TF0), (TF2, TF1, TF1, TF0, TF0), (TF0, TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.43.2.1.4.2.2 TFCS (Interactive or background)

TFCS size	6 (alt. 9)
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 384 kbps RAB, DCCH)= (TF0, TF0, TF0, TF0, TF0), (TF0, TF0, TF0, TF1, TF0), (TF0, TF0, TF0, TF2, TF0), (TF0, TF0, TF0, TF3, TF0), (TF0, TF0, TF0, TF4, TF0), (TF0, TF0, TF0, TF5, TF0) (alt. (TF0, TF0, TF0, TF0, TF0), (TF0, TF0, TF0, TF1, TF0), (TF0, TF0, TF0, TF2, TF0), (TF0, TF0, TF0, TF3, TF0), (TF0, TF0, TF0, TF4, TF0), (TF0, TF0, TF0, TF5, TF0), (TF0, TF0, TF0, TF6, TF0), (TF0, TF0, TF0, TF7, TF0), (TF0, TF0, TF0, TF8, TF0))
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.43.2.2 Physical channel parameters

6.10.3.4.1.43.2.2.1 Physical channel parameters (one CCTrCH)

DPCH Downlink	Midamble	256 chips
	Codes and time slots	SF16 x 8 codes x 3 time slots
	Max. Number of data bits/radio frame	6 592 bits
	TFCI code word	32 bits
	Puncturing limit	0.48

6.10.3.4.1.43.2.2.2 Physical channel parameters (two CCTrCHs)

6.10.3.4.1.43.2.2.2.1 Physical channel parameters (conversational + SRB)

DPCH Downlink	Midamble	512 chips
	Codes and time slots	SF16 x 2 codes x 1 time slot
	Max. Number of data bits/radio frame	472 bits
	TFCI code word	16 bits
	Puncturing limit	0.60

6.10.3.4.1.43.2.2.2.2 Physical channel parameters (Interactive or background)

DPCH Downlink	Midamble	256 chips
	Codes and time slots	SF16 x 8 codes x 3 time slots
	Max. Number of data bits/radio frame	6 608 bits
	TFCI code word	16 bits
	Puncturing limit	0,52

6.10.3.4.1.44 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:128 DL:2 048 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.3.4.1.44.1 Uplink

6.10.3.4.1.44.1.1 Transport channel parameters

6.10.3.4.1.44.1.1.1 Transport channel parameters for Conversational / speech / UL:12.2 kbps / CS RAB

See clause 6.10.3.4.1.4.1.1.1.

6.10.3.4.1.44.1.1.2 Transport channel parameters for Interactive or background / UL:128 kbps / PS RAB

See clause 6.10.3.4.1.28.1.1.1.

6.10.3.4.1.44.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.44.1.1.4 TFCS

TFCS size	30
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 128 kbps RAB , DCCH)= (TF0, TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0, TF0), (TF2, TF1, TF1, TF0, TF0), (TF0, TF0, TF0, TF1, TF0), (TF1, TF0, TF0, TF1, TF0), (TF2, TF1, TF1, TF1, TF0), (TF0, TF0, TF0, TF2, TF0), (TF1, TF0, TF0, TF2, TF0), (TF2, TF1, TF1, TF2, TF0), (TF0, TF0, TF0, TF3, TF0), (TF1, TF0, TF0, TF3, TF0), (TF2, TF1, TF1, TF3, TF0), (TF0, TF0, TF0, TF4, TF0), (TF1, TF0, TF0, TF4, TF0), (TF2, TF1, TF1, TF4, TF0), (TF0, TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1), (TF0, TF0, TF0, TF1, TF1), (TF1, TF0, TF0, TF1, TF1), (TF2, TF1, TF1, TF1, TF1), (TF0, TF0, TF0, TF2, TF1), (TF1, TF0, TF0, TF2, TF1), (TF2, TF1, TF1, TF2, TF1), (TF0, TF0, TF0, TF3, TF1), (TF1, TF0, TF0, TF3, TF1), (TF2, TF1, TF1, TF3, TF1), (TF0, TF0, TF0, TF4, TF1), (TF1, TF0, TF0, TF4, TF1), (TF2, TF1, TF1, TF4, TF1)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.44.1.2 Physical channel parameters

DPCH Uplink	Midamble	256 chips
	Codes and time slots	{SF8 x 1 code + SF2 x 1 code} x 1 time slot
	Max. Number of data bits/radio frame	2 616 bits
	TFCI code word	16 bits
	TPC	2 bits
	Puncturing Limit	0.52 (alt. 0.44)

6.10.3.4.1.44.2 Downlink

6.10.3.4.1.44.2.1 Transport channel parameters

6.10.3.4.1.44.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 kbps / CS RAB

See clause 6.10.3.4.1.4.2.1.1.

6.10.3.4.1.44.2.1.2 Transport channel parameters for Interactive or background / DL:2 048 kbps / PS RAB

See clause 6.10.3.4.1.35.2.1.1.

6.10.3.4.1.44.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.44.2.1.4 TFCS

TFCS size	66 (alt. 114)
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 2 048 kbps RAB , DCCH)= (TF0, TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0, TF0), (TF2, TF1, TF1, TF0, TF0), (TF0, TF0, TF0, TF1, TF0), (TF1, TF0, TF0, TF1, TF0), (TF2, TF1, TF1, TF1, TF0), (TF0, TF0, TF0, TF2, TF0), (TF1, TF0, TF0, TF2, TF0), (TF2, TF1, TF1, TF2, TF0), (TF0, TF0, TF0, TF3, TF0), (TF1, TF0, TF0, TF3, TF0), (TF2, TF1, TF1, TF3, TF0), (TF0, TF0, TF0, TF4, TF0), (TF1, TF0, TF0, TF4, TF0), (TF2, TF1, TF1, TF4, TF0), (TF0, TF0, TF0, TF5, TF0), (TF1, TF0, TF0, TF5, TF0), (TF2, TF1, TF1, TF5, TF0), (TF0, TF0, TF0, TF6, TF0), (TF1, TF0, TF0, TF6, TF0), (TF2, TF1, TF1, TF6, TF0), (TF0, TF0, TF0, TF7, TF0), (TF1, TF0, TF0, TF7, TF0), (TF2, TF1, TF1, TF7, TF0), (TF0, TF0, TF0, TF8, TF0), (TF1, TF0, TF0, TF8, TF0), (TF2, TF1, TF1, TF8, TF0), (TF0, TF0, TF0, TF9, TF0), (TF1, TF0, TF0, TF9, TF0), (TF2, TF1, TF1, TF9, TF0), (TF0, TF0, TF0, TF10, TF0), (TF1, TF0, TF0, TF10, TF0), (TF2, TF1, TF1, TF10, TF0), (TF0, TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1), (TF0, TF0, TF0, TF1, TF1), (TF1, TF0, TF0, TF1, TF1), (TF2, TF1, TF1, TF1, TF1), (TF0, TF0, TF0, TF2, TF1), (TF1, TF0, TF0, TF2, TF1), (TF2, TF1, TF1, TF2, TF1), (TF0, TF0, TF0, TF3, TF1), (TF1, TF0, TF0, TF3, TF1), (TF2, TF1, TF1, TF3, TF1), (TF0, TF0, TF0, TF4, TF1), (TF1, TF0, TF0, TF4, TF1), (TF2, TF1, TF1, TF4, TF1) (TF0, TF0, TF0, TF5, TF1), (TF1, TF0, TF0, TF5, TF1), (TF2, TF1, TF1, TF5, TF1), TF0, TF0, TF0, TF6, TF1), (TF1, TF0, TF0, TF6, TF1), (TF2, TF1, TF1, TF6, TF1), (TF0, TF0, TF0, TF7, TF1), (TF1, TF0, TF0, TF7, TF1), (TF2, TF1, TF1, TF7, TF1), (TF0, TF0, TF0, TF8, TF1), (TF1, TF0, TF0, TF8, TF1), (TF2, TF1, TF1, TF8, TF1), (TF0, TF0, TF0, TF9, TF1), (TF1, TF0, TF0, TF9, TF1), (TF2, TF1, TF1, TF9, TF1) (TF0, TF0, TF0, TF10, TF1), (TF1, TF0, TF0, TF10, TF1), (TF2, TF1, TF1, TF10, TF1) (alt. (TF0, TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0, TF0), (TF2, TF1, TF1, TF0, TF0), (TF0, TF0, TF0, TF1, TF0), (TF1, TF0, TF0, TF1, TF0), (TF2, TF1, TF1, TF1, TF0), (TF0, TF0, TF0, TF2, TF0), (TF1, TF0, TF0, TF2, TF0), (TF2, TF1, TF1, TF2, TF0), (TF0, TF0, TF0, TF3, TF0), (TF1, TF0, TF0, TF3, TF0), (TF2, TF1, TF1, TF3, TF0), (TF0, TF0, TF0, TF4, TF0), (TF1, TF0, TF0, TF4, TF0), (TF2, TF1, TF1, TF4, TF0), (TF0, TF0, TF0, TF5, TF0), (TF1, TF0, TF0, TF5, TF0), (TF2, TF1, TF1, TF5, TF0), (TF0, TF0, TF0, TF6, TF0), (TF1, TF0, TF0, TF6, TF0), (TF2, TF1, TF1, TF6, TF0), (TF0, TF0, TF0, TF7, TF0), (TF1, TF0, TF0, TF7, TF0), (TF2, TF1, TF1, TF7, TF0), (TF0, TF0, TF0, TF8, TF0), (TF1, TF0, TF0, TF8, TF0), (TF2, TF1, TF1, TF8, TF0), (TF0, TF0, TF0, TF9, TF0), (TF1, TF0, TF0, TF9, TF0), (TF2, TF1, TF1, TF9, TF0), (TF0, TF0, TF0, TF10, TF0), (TF1, TF0, TF0, TF10, TF0), (TF2, TF1, TF1, TF10, TF0), (TF0, TF0, TF0, TF11, TF0), (TF1, TF0, TF0, TF11, TF0), (TF2, TF1, TF1, TF11, TF0), (TF0, TF0, TF0, TF12, TF0), (TF1, TF0, TF0, TF12, TF0), (TF2, TF1, TF1, TF12, TF0), (TF0, TF0, TF0, TF13, TF0), (TF1, TF0, TF0, TF13, TF0), (TF2, TF1, TF1, TF13, TF0), (TF0, TF0, TF0, TF14, TF0), (TF1, TF0, TF0, TF14, TF0), (TF2, TF1, TF1, TF14, TF0), (TF0, TF0, TF0, TF15, TF0), (TF1, TF0, TF0, TF15, TF0), (TF2, TF1, TF1, TF15, TF0), (TF0, TF0, TF0, TF16, TF0), (TF1, TF0, TF0, TF16, TF0), (TF2, TF1, TF1, TF16, TF0), (TF0, TF0, TF0, TF17, TF0), (TF1, TF0, TF0, TF17, TF0), (TF2, TF1, TF1, TF17, TF0), (TF0, TF0, TF0, TF18, TF0), (TF1, TF0, TF0, TF18, TF0), (TF2, TF1, TF1, TF18, TF0), (TF0, TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1), (TF0, TF0, TF0, TF1, TF1), (TF1, TF0, TF0, TF1, TF1), (TF2, TF1, TF1, TF1, TF1), (TF0, TF0, TF0, TF2, TF1), (TF1, TF0, TF0, TF2, TF1), (TF2, TF1, TF1, TF2, TF1), (TF0, TF0, TF0, TF3, TF1), (TF1, TF0, TF0, TF3, TF1), (TF2, TF1, TF1, TF3, TF1), (TF0, TF0, TF0, TF4, TF1), (TF1, TF0, TF0, TF4, TF1), (TF2, TF1, TF1, TF4, TF1), (TF0, TF0, TF0, TF5, TF1), (TF1, TF0, TF0, TF5, TF1), (TF2, TF1, TF1, TF5, TF1), (TF0, TF0, TF0, TF6, TF1), (TF1, TF0, TF0, TF6, TF1), (TF2, TF1, TF1, TF6, TF1), (TF0, TF0, TF0, TF7, TF1), (TF1, TF0, TF0, TF7, TF1), (TF2, TF1, TF1, TF7, TF1), (TF0, TF0, TF0, TF8, TF1), (TF1, TF0, TF0, TF8, TF1), (TF2, TF1, TF1, TF8, TF1), (TF0, TF0, TF0, TF9, TF1), (TF1, TF0, TF0, TF9, TF1), (TF2, TF1, TF1, TF9, TF1), (TF0, TF0, TF0, TF10, TF1), (TF1, TF0, TF0, TF10, TF1), (TF2, TF1, TF1, TF10, TF1), (TF0, TF0, TF0, TF11, TF1), (TF1, TF0, TF0, TF11, TF1), (TF2, TF1, TF1, TF11, TF1), (TF0, TF0, TF0, TF12, TF1), (TF1, TF0, TF0, TF12, TF1), (TF2, TF1, TF1, TF12, TF1), (TF0, TF0, TF0, TF13, TF1), (TF1, TF0, TF0, TF13, TF1), (TF2, TF1, TF1, TF13, TF1), (TF0, TF0, TF0, TF14, TF1), (TF1, TF0, TF0, TF14, TF1), (TF2, TF1, TF1, TF14, TF1), (TF0, TF0, TF0, TF15, TF1), (TF1, TF0, TF0, TF15, TF1), (TF2, TF1, TF1, TF15, TF1), (TF0, TF0, TF0, TF16, TF1), (TF1, TF0, TF0, TF16, TF1), (TF2, TF1, TF1, TF16, TF1), (TF0, TF0, TF0, TF17, TF1), (TF1, TF0, TF0, TF17, TF1), (TF2, TF1, TF1, TF17, TF1), (TF0, TF0, TF0, TF18, TF1), (TF1, TF0, TF0, TF18, TF1), (TF2, TF1, TF1, TF18, TF1))
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.44.2.2 Physical channel parameters

DPCH Downlink	Midamble	256 chips
	Codes and time slots	SF16 x 12 codes x 11 time slots
	Max. Number of data bits/radio frame	36 400 bits
	TFCI code word	32 bits
	Puncturing limit	0.52

6.10.3.4.1.45 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

6.10.3.4.1.45.1 Uplink

6.10.3.4.1.45.1.1 Transport channel parameters

6.10.3.4.1.45.1.1.1 Transport channel parameters for Conversational / speech / UL:12.2 kbps / CS RAB

See clause 6.10.3.4.1.4.1.1.1.

6.10.3.4.1.45.1.1.2 Transport channel parameters for Streaming / unknown / UL:57.6 kbps / CS RAB

See clause 6.10.3.4.1.17.1.1.1.

6.10.3.4.1.45.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.45.1.1.4 TFCS

TFCS size	30
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 57.6 kbps RAB , DCCH)= (TF0, TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0, TF0), (TF2, TF1, TF1, TF0, TF0), (TF0, TF0, TF0, TF1, TF0), (TF1, TF0, TF0, TF1, TF0), (TF2, TF1, TF1, TF1, TF0), (TF0, TF0, TF0, TF2, TF0), (TF1, TF0, TF0, TF2, TF0), (TF2, TF1, TF1, TF2, TF0), (TF0, TF0, TF0, TF3, TF0), (TF1, TF0, TF0, TF3, TF0), (TF2, TF1, TF1, TF3, TF0), (TF0, TF0, TF0, TF4, TF0), (TF1, TF0, TF0, TF4, TF0), (TF2, TF1, TF1, TF4, TF0), (TF0, TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1), (TF0, TF0, TF0, TF1, TF1), (TF1, TF0, TF0, TF1, TF1), (TF2, TF1, TF1, TF1, TF1), (TF0, TF0, TF0, TF2, TF1), (TF1, TF0, TF0, TF2, TF1), (TF2, TF1, TF1, TF2, TF1), (TF0, TF0, TF0, TF3, TF1), (TF1, TF0, TF0, TF3, TF1), (TF2, TF1, TF1, TF3, TF1), (TF0, TF0, TF0, TF4, TF1), (TF1, TF0, TF0, TF4, TF1), (TF2, TF1, TF1, TF4, TF1)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.45.1.2 Physical channel parameters

DPCH Uplink	Midamble	512 chips
	Codes and time slots	SF8 x 1 code x 1 time slot + SF4 x 1 codex 1 time slot
	Max. Number of data bits/radio frame	1 392 bits
	TFCI code word	16 bits
	TPC	2 bits
	Puncturing Limit	0.56

6.10.3.4.1.45.2 Downlink

6.10.3.4.1.45.2.1 Transport channel parameters

6.10.3.4.1.45.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 kbps / CS RAB

See clause 6.10.3.4.1.4.2.1.1.

6.10.3.4.1.45.2.1.2 Transport channel parameters for Streaming / unknown / DL:57.6 kbps / CS RAB

See clause 6.10.3.4.1.17.2.1.1.

6.10.3.4.1.45.2.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.45.2.1.4 TFCS

TFCS size	30
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 57.6 kbps RAB , DCCH)= (TF0, TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0, TF0), (TF2, TF1, TF1, TF0, TF0), (TF0, TF0, TF0, TF1, TF0), (TF1, TF0, TF0, TF1, TF0), (TF2, TF1, TF1, TF1, TF0), (TF0, TF0, TF0, TF2, TF0), (TF1, TF0, TF0, TF2, TF0), (TF2, TF1, TF1, TF2, TF0), (TF0, TF0, TF0, TF3, TF0), (TF1, TF0, TF0, TF3, TF0), (TF2, TF1, TF1, TF3, TF0), (TF0, TF0, TF0, TF4, TF0), (TF1, TF0, TF0, TF4, TF0), (TF2, TF1, TF1, TF4, TF0), (TF0, TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1), (TF0, TF0, TF0, TF1, TF1), (TF1, TF0, TF0, TF1, TF1), (TF2, TF1, TF1, TF1, TF1), (TF0, TF0, TF0, TF2, TF1), (TF1, TF0, TF0, TF2, TF1), (TF2, TF1, TF1, TF2, TF1), (TF0, TF0, TF0, TF3, TF1), (TF1, TF0, TF0, TF3, TF1), (TF2, TF1, TF1, TF3, TF1), (TF0, TF0, TF0, TF4, TF1), (TF1, TF0, TF0, TF4, TF1), (TF2, TF1, TF1, TF4, TF1)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.45.2.2 Physical channel parameters

DPCH Downlink	Midamble	512 chips
	Codes and time slots	SF16 x 6 codes x 1 time slot
	Max. Number of data bits/radio frame	1 448 bits
	TFCI code word	16 bits
	Puncturing limit	0.56

6.10.3.4.1.46 Void

6.10.3.4.1.47 Void

6.10.3.4.1.48 Void

6.10.3.4.1.49 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

6.10.3.4.1.49.1 Uplink

6.10.3.4.1.49.1.1 Transport channel parameters

6.10.3.4.1.49.1.1.1 Transport channel parameters for Conversational / speech / UL:12.2 kbps / CS RAB

See clause 6.10.3.4.1.4.1.1.1.

6.10.3.4.1.49.1.1.2 Transport channel parameters for Conversational / unknown / UL:64 kbps / CS RAB

See clause 6.10.3.4.1.13.1.1.1.

6.10.3.4.1.49.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.49.1.1.4 TFCS

TFCS size	12
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 64 kbps RAB, DCCH)= (TF0, TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0, TF0), (TF2, TF1, TF1, TF0, TF0), (TF0, TF0, TF0, TF1, TF0), (TF1, TF0, TF0, TF1, TF0), (TF2, TF1, TF1, TF1, TF0), (TF0, TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1), (TF0, TF0, TF0, TF1, TF1), (TF1, TF0, TF0, TF1, TF1), (TF2, TF1, TF1, TF1, TF1)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.49.1.2 Physical channel parameters

DPCH Uplink	Midamble	256 chips
	Codes and time slots	SF2 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	2 064 bits
	TFCI code word	16 bits
	TPC	2 bits
	Puncturing Limit	0.72

6.10.3.4.1.49.2 Downlink

6.10.3.4.1.49.2.1 Transport channel parameters

6.10.3.4.1.49.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 kbps / CS RAB

See clause 6.10.3.4.1.4.2.1.1.

6.10.3.4.1.49.2.1.2 Transport channel parameters for Conversational / unknown / DL:64 kbps / CS RAB

See clause 6.10.3.4.1.13.2.1.1.

6.10.3.4.1.49.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.49.2.1.4 TFCS

TFCS size	12
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 64 kbps RAB, DCCH)= (TF0, TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0, TF0), (TF2, TF1, TF1, TF0, TF0), (TF0, TF0, TF0, TF1, TF0), (TF1, TF0, TF0, TF1, TF0), (TF2, TF1, TF1, TF1, TF0), (TF0, TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1), (TF0, TF0, TF0, TF1, TF1), (TF1, TF0, TF0, TF1, TF1), (TF2, TF1, TF1, TF1, TF1)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.49.2.2 Physical channel parameters

DPCH Downlink	Midamble	256 chips
	Codes and time slots	SF16 x 8 codes x 1 time slot
	Max. Number of data bits/radio frame	2 192 bits
	TFCI code word	16 bits
	Puncturing limit	0.76

6.10.3.4.1.49a Conversational / speech / UL:(12.2 7.95 5.9 4.75) DL:(12.2 7.95 5.9 4.75) kbps / CS RAB + Conversational / unknown / UL:64 DL:64 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.3.4.1.49a.1 Uplink

6.10.3.4.1.49a.1.1 Transport channel parameters

6.10.3.4.1.49a.1.1.1 Transport channel parameters for Conversational / speech / UL: (12.2 7.95 5.9 4.75) kbps / CS RAB

See clause 6.10.3.4.1.4a.1.1.1.

6.10.3.4.1.49a.1.1.2 Transport channel parameters for Conversational / unknown / UL:64 kbps / CS RAB

See clause 6.10.3.4.1.13.1.1.1.

6.10.3.4.1.49a.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.49a.1.1.4 TFCS

TFCS size	24

TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 64 kbps RAB, DCCH)= (TF0,TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0,TF0), (TF2,TF1,TF0,TF0,TF0), (TF3,TF2,TF0,TF0,TF0), (TF4,TF3,TF0,TF0,TF0), (TF5,TF4,TF1,TF0,TF0), (TF0,TF0,TF0,TF1,TF0), (TF1,TF0,TF0,TF1,TF0), (TF2,TF1,TF0,TF1,TF0), (TF3,TF2,TF0,TF1,TF0), (TF4,TF3,TF0,TF1,TF0), (TF5,TF4,TF1,TF1,TF0), (TF0,TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF0,TF1), (TF2,TF1,TF0,TF0,TF1), (TF3,TF2,TF0,TF0,TF1), (TF4,TF3,TF0,TF0,TF1), (TF5,TF4,TF1,TF0,TF1), (TF0,TF0,TF0,TF1,TF1), (TF1,TF0,TF0,TF1,TF1), (TF2,TF1,TF0,TF1,TF1), (TF3,TF2,TF0,TF1,TF1), (TF4,TF3,TF0,TF1,TF1), (TF5,TF4,TF1,TF1,TF1)
NOTE: In case TB size zero is configured for any transport channel the first TFC is required; it is optional otherwise.	

6.10.3.4.1.49a.1.2 Physical channel parameters

DPCH Uplink	Midamble	256 chips
	Codes and time slots	SF2 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	2 064 bits
	TFCI code word	16 bit
	TPC	2 bits
	Puncturing Limit	0.72

6.10.3.4.1.49a.2 Downlink

6.10.3.4.1.49a.2.1 Transport channel parameters

6.10.3.4.1.49a.2.1.1 Transport channel parameters for Conversational / speech / DL: (12.2 7.95 5.9 4.75) kbps / CS RAB

See clause 6.10.3.4.1.4a.2.1.1.

6.10.3.4.1.49a.2.1.2 Transport channel parameters for Conversational / unknown / DL:64 kbps / CS RAB

See clause 6.10.3.4.1.13.2.1.1.

6.10.3.4.1.49a.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.49a.2.1.4 TFCS

TFCS size	24
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 64 kbps RAB, DCCH)= (TF0,TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0,TF0), (TF2,TF1,TF0,TF0,TF0), (TF3,TF2,TF0,TF0,TF0), (TF4,TF3,TF0,TF0,TF0), (TF5,TF4,TF1,TF0,TF0), (TF0,TF0,TF0,TF1,TF0), (TF1,TF0,TF0,TF1,TF0), (TF2,TF1,TF0,TF1,TF0), (TF3,TF2,TF0,TF1,TF0), (TF4,TF3,TF0,TF1,TF0), (TF5,TF4,TF1,TF1,TF0), (TF0,TF0,TF0,TF0,TF1), (TF1,TF0,TF0,TF0,TF1), (TF2,TF1,TF0,TF0,TF1), (TF3,TF2,TF0,TF0,TF1), (TF4,TF3,TF0,TF0,TF1), (TF5,TF4,TF1,TF0,TF1), (TF0,TF0,TF0,TF1,TF1), (TF1,TF0,TF0,TF1,TF1), (TF2,TF1,TF0,TF1,TF1), (TF3,TF2,TF0,TF1,TF1), (TF4,TF3,TF0,TF1,TF1), (TF5,TF4,TF1,TF1,TF1)
NOTE: In case TB size zero is configured for any transport channel the first TFC is required; it is optional otherwise.	

6.10.3.4.1.49a.2.2 Physical channel parameters

DPCH Downlink	Midamble	256 chips
	Codes and time slots	SF16 x 7 codes x 1 time slot
	Max. Number of data bits/radio frame	1 916 bits
	TFCI code word	16 bits
	Puncturing limit	0.68

6.10.3.4.1.50 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

6.10.3.4.1.50.1 Uplink

6.10.3.4.1.50.1.1 Transport channel parameters

6.10.3.4.1.50.1.1.1 Transport channel parameters for Conversational / unknown / UL:64 kbps / CS RAB

See clause 6.10.3.4.1.13.1.1.1.

6.10.3.4.1.50.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.50.1.1.3 TFCS

TFCS size	8
TFCS	(64 kbps RAB, 64 kbps RAB, DCCH)= (TF0, TF0, TF0), (TF1, TF0, TF0), (TF0, TF1, TF0), (TF1, TF1, TF0) (TF0, TF0, TF1), (TF1, TF0, TF1), (TF0, TF1, TF1), (TF1, TF1, TF1)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.50.1.2 Physical channel parameters

DPCH Uplink	Midamble	512 chips
	Codes and time slots	SF2 x 1 code x 1time slot + SF4 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	2 784 bits
	TFCI code word	16 bits
	TPC	2 bits
	Puncturing Limit	0.60

6.10.3.4.1.50.2 Downlink

6.10.3.4.1.50.2.1 Transport channel parameters

6.10.3.4.1.50.2.1.1 Transport channel parameters for Conversational / unknown / DL:64 kbps / CS RAB

See clause 6.10.3.4.1.13.2.1.1.

6.10.3.4.1.50.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.50.2.1.3 TFCS

TFCS size	8
TFCS	(64 kbps RAB, 64 kbps RAB, DCCH)= (TF0, TF0, TF0), (TF1, TF0, TF0), (TF0, TF1, TF0), (TF1, TF1, TF0) (TF0, TF0, TF1), (TF1, TF0, TF1), (TF0, TF1, TF1), (TF1, TF1, TF1)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.50.2.2 Physical channel parameters

DPCH Downlink	Midamble	512 chips
	Codes and time slots	SF16 x 6codes x 2 time slots
	Max. Number of data bits/radio frame	2 912 bits
	TFCI code word	16 bits
	Puncturing limit	0.64

6.10.3.4.1.51 Conversational / unknown / UL:64 DL:64 kbps / CS RAB + Interactive or background / UL:64 DL:64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.3.4.1.51.1 Uplink

6.10.3.4.1.51.1.1 Transport channel parameters

6.10.3.4.1.51.1.1.1 Transport channel parameters for Conversational / unknown / UL:64 kbps / CS RAB

See clause 6.10.3.4.1.13.1.1.1.

6.10.3.4.1.51.1.1.2 Transport channel parameters for Interactive or background / UL:64 kbps / PS RAB

See clause 6.10.3.4.1.26.1.1.1.

6.10.3.4.1.51.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.51.1.1.4 TFCS

TFCS size	20
TFCS	(Conv. 64 kbps RAB, I/B 64 kbps RAB, DCCH)= (TF0, TF0, TF0), (TF0, TF1, TF0), (TF0, TF2, TF0), (TF0, TF3, TF0), (TF0, TF4, TF0), (TF1, TF0, TF0), (TF1, TF1, TF0), (TF1, TF2, TF0), (TF1, TF3, TF0), (TF1, TF4, TF0), (TF0, TF0, TF1), (TF0, TF1, TF1), (TF0, TF2, TF1), (TF0, TF3, TF1), (TF0, TF4, TF1), (TF1, TF0, TF1), (TF1, TF1, TF1), (TF1, TF2, TF1), (TF1, TF3, TF1), (TF1, TF4, TF1)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.51.1.2 Physical channel parameters

DPCH Uplink	Midamble	256 chips
	Codes and time slots	SF2 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	2 064 bits
	TFCI code word	16 bits
	TPC	2 bits
	Puncturing Limit	0.44 (alt. 0.40)

6.10.3.4.1.51.2 Downlink

6.10.3.4.1.51.2.1 Transport channel parameters

6.10.3.4.1.51.2.1.1 Transport channel parameters for Conversational / unknown / DL:64 kbps / CS RAB

See clause 6.10.3.4.1.13.2.1.1.

6.10.3.4.1.51.2.1.2 Transport channel parameters for Interactive or background / DL:64 kbps / PS RAB

See clause 6.10.3.4.1.25.2.1.1.

6.10.3.4.1.51.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.51.2.1.4 TFCS

TFCS size	20
TFCS	(Conv. 64 kbps RAB, I/B 64 kbps RAB, DCCH)= (TF0, TF0, TF0), (TF0, TF1, TF0), (TF0, TF2, TF0), (TF0, TF3, TF0), (TF0, TF4, TF0), (TF1, TF0, TF0), (TF1, TF1, TF0), (TF1, TF2, TF0), (TF1, TF3, TF0), (TF1, TF4, TF0), (TF0, TF0, TF1), (TF0, TF1, TF1), (TF0, TF2, TF1), (TF0, TF3, TF1), (TF0, TF4, TF1), (TF1, TF0, TF1), (TF1, TF1, TF1), (TF1, TF2, TF1), (TF1, TF3, TF1), (TF1, TF4, TF1)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.51.2.2 Physical channel parameters

DPCH Downlink	Midamble	256 chips
	Codes and time slots	SF16 x 8 codes x 1 time slot
	Max. Number of data bits/radio frame	2 192 bits
	TFCI code word	16 bits
	Puncturing limit	0.48

6.10.3.4.1.51a 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

6.10.3.4.1.51a.1 Uplink

6.10.3.4.1.51a.1.1 Transport channel parameters

6.10.3.4.1.51a.1.1.1 Transport channel parameters for Conversational / unknown / UL:64 kbps / CS RAB

See clause 6.10.3.4.1.13.1.1.1.

6.10.3.4.1.51a.1.1.2 Transport channel parameters for Interactive or Background / UL:8 kbps / PS RAB

See clause 6.10.3.4.1.23a.1.1.1.

6.10.3.4.1.51a.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.51a.1.1.4 TFCS

TFCS size	8 (alt. 12)
TFCS	(64 kbps Conversational RAB, 8 kbps I/B RAB, DCCH)= (TF0, TF0, TF0), (TF0, TF1, TF0), (TF0, TF0, TF1), (TF0, TF1, TF1), (TF1, TF0, TF0), (TF1, TF1, TF0), (TF1, TF0, TF1), (TF1, TF1, TF1) (alt. (TF0, TF0, TF0), (TF0, TF1, TF0), (TF0, TF2, TF0), (TF0, TF0, TF1), (TF0, TF1, TF1), (TF0, TF2, TF1), (TF1, TF0, TF0), (TF1, TF1, TF0), (TF1, TF2, TF0), (TF1, TF0, TF1), (TF1, TF1, TF1), (TF1, TF2, TF1))
NOTE: In case TB size zero is configured for any transport channel the first TFC is required; it is optional otherwise.	

6.10.3.4.1.51a.1.2 Physical channel parameters

DPCH Uplink	Midamble	256 chips
	Codes and time slots	SF2 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	2 064 bits
	TFCI code word	16 bit
	TPC	2 bits
	Puncturing Limit	0.76

6.10.3.4.1.51a.2 Downlink

6.10.3.4.1.51a.2.1 Transport channel parameters

6.10.3.4.1.51a.2.1.1 Transport channel parameters for Conversational / unknown / DL:64 kbps / PS RAB

See clause 6.10.3.4.1.13.2.1.1.

6.10.3.4.1.51a.2.1.2 Transport channel parameters for Interactive or Background / DL:8 kbps / PS RAB

See clause 6.10.3.4.1.23.2.1.1.

6.10.3.4.1.51a.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.51a.2.1.4 TFCS

TFCS size	8
TFCS	(64 kbps Conversational RAB, 8 kbps I/B RAB, DCCH)= (TF0, TF0, TF0), (TF0, TF1, TF0), (TF0, TF0, TF1), (TF0, TF1, TF1), (TF1, TF0, TF0), (TF1, TF1, TF0), (TF1, TF0, TF1), (TF1, TF1, TF1)
NOTE: In case TB size zero is configured for any transport channel the first TFC is required; it is optional otherwise.	

6.10.3.4.1.51a.2.2 Physical channel parameters

DPCH Downlink	Midamble	256 chips
	Codes and time slots	SF16 x 6 codes x 1 time slot
	Max. Number of data bits/radio frame	1 640 bits
	TFCI code word	16 bits
	Puncturing limit	0.60

6.10.3.4.1.51b 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

6.10.3.4.1.51b.1 Uplink

6.10.3.4.1.51b.1.1 Transport channel parameters

6.10.3.4.1.51b.1.1.1 Transport channel parameters for Conversational / unknown / UL:64 kbps / CS RAB

See clause 6.10.3.4.1.13.1.1.1.

6.10.3.4.1.51b.1.1.2 Transport channel parameters for Interactive or Background / UL:16 kbps / PS RAB

See clause 6.10.3.4.1.23b.1.1.1.

6.10.3.4.1.51b.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.51b.1.1.4 TFCS

TFCS size	12
TFCS	(64 kbps Conversational RAB, 16 kbps I/B RAB, DCCH)= (TF0, TF0, TF0), (TF0, TF1, TF0), (TF0, TF2, TF0), (TF0, TF0, TF1), (TF0, TF1, TF1), (TF0, TF2, TF1), (TF1, TF0, TF0), (TF1, TF1, TF0), (TF1, TF2, TF0), (TF1, TF0, TF1), (TF1, TF1, TF1), (TF1, TF2, TF1)
NOTE: In case TB size zero is configured for any transport channel the first TFC is required; it is optional otherwise.	

6.10.3.4.1.51b.1.2 Physical channel parameters

DPCH Uplink	Midamble	256 chips
	Codes and time slots	SF2 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	2 064 bits
	TFCI code word	16 bit
	TPC	2 bits
	Puncturing Limit	0.68

6.10.3.4.1.51b.2 Downlink

See clause 6.10.3.4.1.51.2.

6.10.3.4.1.52 Conversational / unknown / UL:64 DL:64 kbps / CS RAB + Interactive or background / UL:64 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.3.4.1.52.1 Uplink

See clause 6.10.3.4.1.51.1.

6.10.3.4.1.52.2 Downlink

6.10.3.4.1.52.2.1 Transport channel parameters

6.10.3.4.1.52.2.1.1 Transport channel parameters for Conversational / unknown / DL:64 kbps / CS RAB

See clause 6.10.3.4.1.13.2.1.1.

6.10.3.4.1.52.2.1.2 Transport channel parameters for Interactive or background / DL:128 kbps / PS RAB

See clause 6.10.3.4.1.27.2.1.1.

6.10.3.4.1.52.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.52.2.1.4 TFCS

TFCS size	20
TFCS	(Conv. 64 kbps RAB, I/B 128 kbps RAB, DCCH)= (TF0, TF0, TF0), (TF0, TF1, TF0), (TF0, TF2, TF0), (TF0, TF3, TF0), (TF0, TF4, TF0), (TF1, TF0, TF0), (TF1, TF1, TF0), (TF1, TF2, TF0), (TF1, TF3, TF0), (TF1, TF4, TF0), (TF0, TF0, TF1), (TF0, TF1, TF1), (TF0, TF2, TF1), (TF0, TF3, TF1), (TF0, TF4, TF1), (TF1, TF0, TF1), (TF1, TF1, TF1), (TF1, TF2, TF1), (TF1, TF3, TF1), (TF1, TF4, TF1)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.52.2.2 Physical channel parameters

DPCH Downlink	Midamble	512 chips
	Codes and time slots	{SF16 x 8 codes x 1 time slot} + {SF16 x 5 codes x 1 time slot}
	Max. Number of data bits/radio frame	3 156 bits
	TFCI code word	16 bits
	Puncturing limit	0.44

6.10.3.4.1.53 Conversational / unknown / UL:64 DL:64 kbps / CS RAB + Interactive or background / UL:128 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.3.4.1.53.1 Uplink

6.10.3.4.1.53.1.1 Transport channel parameters

6.10.3.4.1.53.1.1.1 Transport channel parameters for Conversational / unknown / UL:64 kbps / CS RAB

See clause 6.10.3.4.1.13.1.1.1.

6.10.3.4.1.53.1.1.2 Transport channel parameters for Interactive or background / UL:128 kbps / PS RAB

See clause 6.10.3.4.1.28.1.1.1.

6.10.3.4.1.53.1.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.53.1.1.4 TFCS

TFCS size	20
TFCS	(Conv. 64 kbps RAB, I/B 128kbps RAB, DCCH)= (TF0, TF0, TF0), (TF0, TF1, TF0), (TF0, TF2, TF0), (TF0, TF3, TF0), (TF0, TF4, TF0), (TF1, TF0, TF0), (TF1, TF1, TF0), (TF1, TF2, TF0), (TF1, TF3, TF0), (TF1, TF4, TF0), (TF0, TF0, TF1), (TF0, TF1, TF1), (TF0, TF2, TF1), (TF0, TF3, TF1), (TF0, TF4, TF1), (TF1, TF0, TF1), (TF1, TF1, TF1), (TF1, TF2, TF1), (TF1, TF3, TF1), (TF1, TF4, TF1)
NOTE: In case TB size zero is configured for any transport channel, the first TFC is required; it is optional otherwise.	

6.10.3.4.1.53.1.2 Physical channel parameters

DPCH Uplink	Midamble	512 chips
	Codes and time slots	SF2 x 1 code x 2 timeslots
	Max. Number of data bits/radio frame	3 760 bits
	TFCI code word	16 bits
	TPC	2 bits
	Puncturing Limit	0.52 (alt. 0.48)

6.10.3.4.1.53.2 Downlink

See clause 6.10.3.4.1.52.2.

6.10.3.4.1.54 Void

6.10.3.4.1.55 Void

6.10.3.4.1.56 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

6.10.3.4.1.56.1 Uplink

6.10.3.4.1.56.1.1 Transport channel parameters

6.10.3.4.1.56.1.1.1 Transport channel parameters for Interactive or background / UL:8 kbps / PS RAB + UL:8 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB	RAB
RLC	Logical channel type		DTCH	DTCH
	RLC mode		AM	AM
	Payload sizes, bit		320 (alt. 128)	320 (alt.128)
	Max data rate, bps		8 000	8 000
	AMD PDU header, bit		16	16
MAC	MAC header, bit		4	4
	MAC multiplexing		2 logical channel multiplexing	
Layer 1	TrCH type		DCH	
	TB sizes, bit		340 (alt. 148)	
	TFS	TF0, bits	0x340 (alt. 0x148)	
		TF1, bits	1x340 (alt. 1x148)	
		TF2, bits	N/A (alt. 5x148)	
	TTI, ms		40 (alt. 80)	
	Coding type		TC	
	CRC, bit		16	
	Max number of bits/TTI after channel coding		1 080 (alt. 2 472)	
	Max number of bits/radio frame before rate matching		270 (alt. 309)	
	RM attribute		135 to 175	

6.10.3.4.1.56.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.56.1.1.3 TFCS

TFCS size	4 (alt. 6)
TFCS	(8 kbps RAB + 8 kbps RAB, DCCH)= (TF0,TF0), (TF1,TF0), (TF0,TF1), (TF1,TF1) (alt. (TF0,TF0), (TF1,TF0), (TF2,TF0), (TF0,TF1), (TF1,TF1), (TF2,TF1))
NOTE: In case TB size zero is configured for any transport channel the first TFC is required; it is optional otherwise.	

6.10.3.4.1.56.1.2 Physical channel parameters

DPCH Uplink	Midamble	512 chips
	Codes and time slots	SF16 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	226 bits
	TFCI code word	16 bits
	TPC	2 bits
	Puncturing Limit	0.52 (alt. 0.48)
NOTE: In case the first TFC in the TFCS is not configured, the TFCI code word will be 8 bits (alt. 16 bits).		

6.10.3.4.1.56.2 Downlink

6.10.3.4.1.56.2.1 Transport channel parameters

6.10.3.4.1.56.2.1.1 Transport channel parameters for Interactive or background / DL:8 kbps / PS RAB + DL:8 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB	RAB
RLC	Logical channel type		DTCH	DTCH
	RLC mode		AM	AM
	Payload sizes, bit		320	320
	Max data rate, bps		8 000	8 000
	AMD PDU header, bit		16	16
MAC	MAC header, bit		4	4
	MAC multiplexing		2 logical channel multiplexing	
Layer 1	TrCH type		DCH	
	TB sizes, bit		340	
	TFS	TF0, bits	0x340	
		TF1, bits	1x340	
	TTI, ms		40	
	Coding type		TC	
	CRC, bit		16	
	Max number of bits/TTI after channel coding		1 080	
	Max number of bits/radio frame before rate matching		270	
	RM attribute		135 to 175	

6.10.3.4.1.56.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.56.2.1.3 TFCS

TFCS size	4
TFCS	(8 kbps RAB + 8 kbps RAB, DCCH)= (TF0,TF0), (TF1,TF0), (TF0,TF1), (TF1,TF1)
NOTE: In case TB size zero is configured for any transport channel the first TFC is required; it is optional otherwise.	

6.10.3.4.1.56.2.2 Physical channel parameters

DPCH Downlink	Midamble	512 chips
	Codes and time slots	SF16 x 1 codes x 1 time slot
	Max. Number of data bits/radio frame	228 bits
	TFCI code word	16 bits
	Puncturing limit	0.56
NOTE: In case the first TFC in the TFCS is not configured, the TFCI code word will be 8 bits.		

6.10.3.4.1.57 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

6.10.3.4.1.57.1 Uplink

6.10.3.4.1.57.1.1 Transport channel parameters

6.10.3.4.1.57.1.1.1 Transport channel parameters for Interactive or background / UL:64 kbps / PS RAB + UL:64 kbps / PS RAB

See clause 6.10.3.4.1.38d.1.1.2.

6.10.3.4.1.57.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.57.1.1.3 TFCS

TFCS size	10
TFCS	(64 kbps RAB + 64 kbps RAB, DCCH)= (TF0,TF0), (TF1,TF0), (TF2,TF0), (TF3,TF0), (TF4,TF0), (TF0,TF1), (TF1,TF1), (TF2,TF1), (TF3,TF1), (TF4,TF1)
NOTE: In case TB size zero is configured for any transport channel the first TFC is required; it is optional otherwise.	

6.10.3.4.1.57.1.2 Physical channel parameters

DPCH Uplink	Midamble	256 chips
	Codes and time slots	SF2 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	2 064 bits
	TFCI code word	16 bits
	TPC	2 bits
	Puncturing Limit	0.88 (alt. 0.76)

6.10.3.4.1.57.2 Downlink

6.10.3.4.1.57.2.1 Transport channel parameters

6.10.3.4.1.57.2.1.1 Transport channel parameters for Interactive or background / DL:64 kbps / PS RAB + DL:64 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB	RAB
RLC	Logical channel type		DTCH	DTCH
	RLC mode		AM	AM
	Payload sizes, bit		320	320
	Max data rate, bps		64 000	64 000
	AMD PDU header, bit		16	16
MAC	MAC header, bit		4	4
	MAC multiplexing		2 logical channel multiplexing	
Layer 1	TrCH type		DCH	
	TB sizes, bit		340	
	TFS	TF0, bits	0x340	
		TF1, bits	1x340	
		TF2, bits	2x340	
		TF3, bits	3x340	
		TF4, bits	4x340	
	TTI, ms		20	
	Coding type		TC	
	CRC, bit		16	
	Max number of bits/TTI after channel coding		4 284	
	Max number of bits/radio frame before rate matching		2 142	
	RM attribute		130 to 170	

6.10.3.4.1.57.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.57.2.1.3 TFCS

TFCS size	10
TFCS	(64 kbps RAB + 64 kbps RAB, DCCH)= (TF0,TF0), (TF1,TF0), (TF2,TF0), (TF3,TF0), (TF4,TF0), (TF0,TF1), (TF1,TF1), (TF2,TF1), (TF3,TF1), (TF4,TF1)
NOTE: In case TB size zero is configured for any transport channel the first TFC is required; it is optional otherwise.	

6.10.3.4.1.57.2.2 Physical channel parameters

DPCH Downlink	Midamble	256 chips
	Codes and time slots	SF16 x 5 codes x 1 time slot
	Max. Number of data bits/radio frame	1 364 bits
	TFCI code word	16 bits
	Puncturing limit	0.56

6.10.3.4.1.58 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

6.10.3.4.1.58.1 Uplink

6.10.3.4.1.58.1.1 Transport channel parameters

6.10.3.4.1.58.1.1.1 Transport channel parameters for Streaming / unknown / UL:16 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		320
	Max data rate, bps		16 000
	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		336
	TFS	TF0, bits	0x336
		TF1, bits	1x336
	TTI, ms		20
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		1 068
	Max number of bits/radio frame before rate matching		534
	RM attribute		135 to 175

6.10.3.4.1.58.1.1.2 Transport channel parameters for Interactive or background / UL:8 kbps / PS RAB

See clause 6.10.3.4.1.23a.1.1.1.

6.10.3.4.1.58.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.58.1.1.4 TFCS

TFCS size	8 (alt. 12)
TFCS	(16 kbps RAB, 8 kbps RAB, DCCH)= (TF0,TF0,TF0), (TF1,TF0,TF0), (TF0,TF1,TF0), (TF1,TF1,TF0), (TF0,TF0,TF1), (TF1,TF0,TF1), (TF0,TF1,TF1), (TF1,TF1,TF1) (alt. (TF0,TF0,TF0), (TF1,TF0,TF0), (TF0,TF1,TF0), (TF1,TF1,TF0), (TF0,TF2,TF0), (TF1,TF2,TF0), (TF0,TF0,TF1), (TF1,TF0,TF1), (TF0,TF1,TF1), (TF1,TF1,TF1), (TF0,TF2,TF1), (TF1,TF2,TF1))
NOTE: In case TB size zero is configured for any transport channel the first TFC is required; it is optional otherwise.	

6.10.3.4.1.58.1.2 Physical channel parameters

DPCH Uplink	Midamble	512 chips
	Codes and time slots	SF8 x 1 code x 1 time slot + SF16 x 1code x 1 time slot
	Max. Number of data bits/radio frame	696 bits
	TFCI code word	16 bits
	TPC	2 bits
	Puncturing Limit	0.72 (alt. 0.68)

6.10.3.4.1.58.2 Downlink

6.10.3.4.1.58.2.1 Transport channel parameters

6.10.3.4.1.58.2.1.1 Transport channel parameters for Streaming / unknown / DL:64 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		640
	Max data rate, bps		64 000
	AM PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		656
	TFS	TF0, bits	0x656
		TF1, bits	1x656
		TF2, bits	2x656
		TF3, bits	4x656
	TTI, ms		40
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		8 076
	Max number of bits/radio frame before rate matching		2 019
	RM attribute		125 to 165

6.10.3.4.1.58.2.1.2 Transport channel parameters for Interactive or background / DL:8 kbps / PS RAB

See clause 6.10.3.4.1.23.2.1.1.

6.10.3.4.1.58.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.58.2.1.4 TFCS

TFCS size	16
TFCS	(64 kbps RAB, 8 kbps RAB, DCCH)= (TF0,TF0,TF0), (TF1,TF0,TF0), (TF2,TF0,TF0), (TF3,TF0,TF0), (TF0,TF1,TF0), (TF1,TF1,TF0), (TF2,TF1,TF0), (TF3,TF1,TF0), (TF0,TF0,TF1), (TF1,TF0,TF1), (TF2,TF0,TF1), (TF3,TF0,TF1), (TF0,TF1,TF1), (TF1,TF1,TF1), (TF2,TF1,TF1), (TF3,TF1,TF1)
NOTE: In case TB size zero is configured for any transport channel the first TFC is required; it is optional otherwise.	

6.10.3.4.1.58.2.2 Physical channel parameters

DPCH Downlink	Midamble	256 chips
	Codes and time slots	SF16 x 6 codes x 1 time slot
	Max. Number of data bits/radio frame	1 640 bits
	TFCI code word	16 bits
	Puncturing limit	0.64

6.10.3.4.1.59 Reserved for future use

6.10.3.4.1.60 Reserved for future use

6.10.3.4.1.61 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

6.10.3.4.1.61.1 Uplink

6.10.3.4.1.61.1.1 Transport channel parameters

6.10.3.4.1.61.1.1.1 Transport channel parameters for Conversational / unknown / UL:8 kbps / PS RAB

Higher layer	RAB/Signalling RB	RAB
RLC	Logical channel type	DTCH
	RLC mode	UM
	Payload sizes, bit	320

	Max data rate, bps		8 000
	UMD PDU header, bit		8
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		328 (alt 0, 328)
	TFS	TF0, bits	0x328 (alt 1x0) (note)
		TF1, bits	1x328
	TTI, ms		40
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		1 044
	Max number of bits/radio frame before rate matching		261
	RM attribute		135 to 175
NOTE: In case of using this alternative, CRC parity bits are to be attached any time since number of TrBlks are 1 even if there is no data on the RAB (see clause 4.2.1.1 in 3GPP TS 25.222 [29]).			

6.10.3.4.1.61.1.1.2 Transport channel parameters for Interactive or Background / UL:8 kbps / PS RAB

See clause 6.10.3.4.1.23a.1.1.1.

6.10.3.4.1.61.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.61.1.1.4 TFCS

TFCS size	8 (alt. 12)
TFCS	(8 kbps Conversational RAB, 8 kbps I/B RAB, DCCH)= (TF0, TF0, TF0), (TF0, TF1, TF0), (TF0, TF0, TF1), (TF0, TF1, TF1), (TF1, TF0, TF0), (TF1, TF1, TF0), (TF1, TF0, TF1), (TF1, TF1, TF1) (alt. (TF0, TF0, TF0), (TF0, TF1, TF0), (TF0, TF2, TF0), (TF0, TF0, TF1), (TF0, TF1, TF1), (TF0, TF2, TF1), (TF1, TF0, TF0), (TF1, TF1, TF0), (TF1, TF2, TF0), (TF1, TF0, TF1), (TF1, TF1, TF1), (TF1, TF2, TF1))
NOTE: In case TB size zero is configured for any transport channel the first TFC is required; it is optional otherwise.	

6.10.3.4.1.61.1.2 Physical channel parameters

DPCH Uplink	Midamble	512 chips
	Codes and time slots	SF8 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	452 bits
	TFCI code word	16 bits
	TPC	2 bits
	Puncturing Limit	0.68 (alt. 0.64)

6.10.3.4.1.61.2 Downlink

6.10.3.4.1.61.2.1 Transport channel parameters

6.10.3.4.1.61.2.1.1 Transport channel parameters for Conversational / unknown / DL:8 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		UM
	Payload sizes, bit		320
	Max data rate, bps		8 000
	AMD PDU header, bit		8
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		328 (alt 0, 328)
	TFS	TF0, bits	0x328 (alt 1x0) (note)

		TF1, bits	1x328
	TTI, ms		40
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		1 044
	Max number of bits/radio frame before rate matching		261
	RM attribute		135 to 175
NOTE: In case of using this alternative, CRC parity bits are to be attached any time since number of TrBlks are 1 even if there is no data on the RAB (see clause 4.2.1.1 in 3GPP TS 25.222 [29]).			

6.10.3.4.1.61.2.1.2 Transport channel parameters for Interactive or Background / DL:8 kbps / PS RAB

See clause 6.10.3.4.1.23.2.1.1.

6.10.3.4.1.61.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.61.2.1.4 TFCS

TFCS size	8
TFCS	(8 kbps Conversational RAB, 8 kbps I/B RAB, DCCH)= (TF0, TF0, TF0), (TF0, TF1, TF0), (TF0, TF0, TF1), (TF0, TF1, TF1), (TF1, TF0, TF0), (TF1, TF1, TF0), (TF1, TF0, TF1), (TF1, TF1, TF1)
NOTE: In case TB size zero is configured for any transport channel the first TFC is required; it is optional otherwise.	

6.10.3.4.1.61.2.2 Physical channel parameters

DPCH Downlink	Midamble	512 chips
	Codes and time slots	SF16 x 2 codes x 1 time slot
	Max. Number of data bits/radio frame	472 bits
	TFCI code word	16 bits
	Puncturing limit	0.68

6.10.3.4.2 Combinations on PDSCH, SCCPCH, PUSCH and PRACH

6.10.3.4.2.1 Interactive or background / UL: 64 DL: 256 kbps / PS RAB + UL: 3.4/16.8 DL: 3.4/33.6 kbps SRBs for DCCH, CCCH and BCCH + UL: 16.8 DL: 16 kbps SRBs for SHCCH

6.10.3.4.2.1.1 Uplink

6.10.3.4.2.1.1.1 Transport channel parameters

6.10.3.4.2.1.1.1.1 Transport channel parameters for Interactive or background / UL: 64 kbps / PS RAB and UL SRB for SHCCH mapped on USCH

Higher layer	RAB/Signalling RB		RAB	SRB#5
RLC	Logical channel type		DTCH	SHCCH
	RLC mode		AM	TM
	Payload sizes, bit		320 (alt. 128)	168
	Max data rate, bps		64 000	16 800
	AMD/TrD PDU header, bit		16	0
MAC	MAC header, bit		1	1
	MAC multiplexing		N/A	N/A
Layer 1	TrCH type		USCH	USCH
	TB sizes, bit		337 (alt. 145)	169
	TFS	TF0, bits	0x337 (alt. 0x145)	0x169
		TF1, bits	1x337 (alt. 1x145)	1x169
		TF2, bits	2x337 (alt. 3x145)	N/A
		TF3, bits	3x337 (alt. 7x145)	N/A
		TF4, bits	4x337 (alt. 10x145)	N/A
	TTI, ms		20	10
	Coding type		TC	CC 1/2
	CRC, bit		16	16

	Max number of bits/TTI after channel coding	4 248 (alt. 4 842)	386
	Max number of bits/radio frame before rate matching	2 124 (alt. 2 421)	386
	RM attribute	135 to 175	230 to 250

6.10.3.4.2.1.1.1.2 Transport channel parameters for UL: 3.4 Kbps SRBs for DCCH mapped on USCH

Higher layer	RAB/signalling RB		SRB#1	SRB#2	SRB#3	SRB#4
	User of Radio Bearer		RRC	RRC	NAS_DT High prio	NAS_DT Low prio
RLC	Logical channel type		DCCH	DCCH	DCCH	DCCH
	RLC mode		UM	AM	AM	AM
	Payload sizes, bit		136	128	128	128
	Max data rate, bps		3 400	3 200	3 200	3 200
	AMD/UMD PDU header, bit		8	16	16	16
MAC	MAC header, bit		5	5	5	5
	MAC multiplexing		4 logical channel multiplexing			
Layer 1	TrCH type		USCH			
	TB sizes, bit		149			
	TFS	TF0, bits	0x149			
		TF1, bits	1x149			
	TTI, ms		40			
	Coding type		CC 1/3			
	CRC, bit		16			
	Max number of bits/TTI before rate matching		519			
	Max number of bits/radio frame before rate matching		130			
	RM attribute		190 to 210			

6.10.3.4.2.1.1.1.3 TFCS for USCH

TFCS size	20
TFCS	(64 kbps RAB, SHCCH, SRBs for DCCH)= (TF0, TF0, TF0), (TF1, TF0, TF0), (TF2, TF0, TF0), (TF3, TF0, TF0), (TF4, TF0, TF0), (TF0, TF1, TF0), (TF1, TF1, TF0), (TF2, TF1, TF0), (TF3, TF1, TF0), (TF4, TF1, TF0), (TF0, TF0, TF1), (TF1, TF0, TF1), (TF2, TF0, TF1), (TF3, TF0, TF1), (TF4, TF0, TF1), (TF0, TF1, TF1), (TF1, TF1, TF1), (TF2, TF1, TF1), (TF3, TF1, TF1), (TF4, TF1, TF1)

6.10.3.4.2.1.1.1.4 Transport channel parameters for SRB for CCCH and UL SRBs for DCCH and UL SRB for SHCCH mapped on RACH

6.10.3.4.2.1.1.1.4.1 RACH transport channel configuration without DTCH

Higher layer	RAB/signalling RB	SRB#0	SRB#1	SRB#2	SRB#3	SRB#4	SRB#5
	User of Radio Bearer	RRC	RRC	RRC	NAS_DT High prio	NAS_DT Low prio	RRC
RLC	Logical channel type	CCCH	DCCH	DCCH	DCCH	DCCH	SHCCH
	RLC mode	TM	UM	AM	AM	AM	TM
	Payload sizes, bit	168	136	128	128	128	168
	Max data rate, bps	16 800	13 600	12 800	12 800	12 800	16 800
	AMD/UMD/TrD PDU header, bit	0	8	16	16	16	0
MAC	MAC header, bit	2	26	26	26	26	2
	MAC multiplexing	6 logical channel multiplexing					
Layer 1	TrCH type	RACH					
	TB sizes, bit	170					
	TFS | TF0, bits	1x170					
	TTI, ms	10					
	Coding type	CC 1/2					
	CRC, bit	16					
	Max number of bits/TTI after channel coding	388					
	Max number of bits/radio frame before rate matching	388					

6.10.3.4.2.1.1.1.4.2 RACH transport channel configuration with DTCH

Higher layer	RAB/signalling RB	RAB	SRB#0	SRB#1	SRB#2	SRB#3	SRB#4	SRB#5
	User of Radio Bearer	Interactive/ Background RAB	RRC	RRC	RRC	NAS_DT High prio	NAS_DT Low prio	RRC
RLC	Logical channel type	DTCH	CCCH	DCCH	DCCH	DCCH	DCCH	SHCCH
	RLC mode	AM	TM	UM	AM	AM	AM	TM
	Payload sizes, bit	128	168	136	128	128	128	168
	Max data rate, bps	12 800	16 800	13 600	12 800	12 800	12 800	16 800
	AMD/UMD/TrD PDU header, bit	16	0	8	16	16	16	0
MAC	MAC header, bit	26	2	26	26	26	26	2
	MAC multiplexing	7 logical channel multiplexing						
Layer 1	TrCH type	RACH						
	TB sizes, bit	170						
	TFS TF0, bits	1x170						
	TTI, ms	10						
	Coding type	CC 1/2						
	CRC, bit	16						
	Max number of bits/TTI after channel coding	388						
	Max number of bits/radio frame before rate matching	388						

6.10.3.4.2.1.1.2 Physical channel parameters

6.10.3.4.2.1.1.2.1 Physical channel parameters for PUSCH

PUSCH	Midamble	512 chips
	Codes and time slots	SF2 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	1 808 bits
	TFCI code word	16 bits
	TPC	2 bits
	Puncturing Limit	0.60 (alt. 0.56)

6.10.3.4.2.1.1.2.2 Physical channel parameters for PRACH

PRACH	Midamble	512 chips
	Codes and time slots	SF8 (alt. SF16) x 1 code x 1 time slot
	Max. Number of data bits/radio frame	464 (alt. 232)
	Puncturing Limit	1 (alt. 0.56)

6.10.3.4.2.1.2 Downlink

6.10.3.4.2.1.2.1 Transport channel parameters

6.10.3.4.2.1.2.1.1 Transport channel parameters for Interactive or background / DL: 256 kbps / PS RAB and DL SRB for SHCCH mapped on DSCH

Higher layer	RAB/Signalling RB	RAB	SRB#5
RLC	Logical channel type	DTCH	SHCCH
	RLC mode	AM	UM
	Payload sizes, bit	320	160
	Max data rate, bps	256 000	16 000
	AMD/UMD PDU header, bit	16	8
MAC	MAC header, bit	1	1
	MAC multiplexing	N/A	N/A
Layer 1	TrCH type	DSCH	DSCH
	TB sizes, bit	337	169

	TFS	TF0, bits	0x337	0x169
		TF1, bits	1x337	1x169
		TF2, bits	2x337	N/A
		TF3, bits	4x337	N/A
		TF4, bits	8x337	N/A
		TF5, bits	N/A (alt. 12x337)	N/A
		TF6, bits	N/A (alt. 16x337)	N/A
	TTI, ms		10 (alt. 20)	10
	Coding type		TC	CC 1/2
	CRC, bit		16	16
	Max number of bits/TTI after channel coding		8 484 (alt. 16 968)	386
	Downlink: Max number of bits/radio frame before rate matching		8 484 (alt. 8 484)	386
	RM attribute		135 to 175	230 to 250

6.10.3.4.2.1.2.1.2 Transport channel parameters for DL: 3.4 Kbps SRBs for DCCH mapped on DSCH

Higher layer	RAB/signalling RB		SRB#1	SRB#2	SRB#3	SRB#4
	User of Radio Bearer		RRC	RRC	NAS_DT High prio	NAS_DT Low prio
RLC	Logical channel type		DCCH	DCCH	DCCH	DCCH
	RLC mode		UM	AM	AM	AM
	Payload sizes, bit		136	128	128	128
	Max data rate, bps		3 400	3 200	3 200	3 200
	AMD/UMD PDU header, bit		8	16	16	16
MAC	MAC header, bit		5	5	5	5
	MAC multiplexing		4 logical channel multiplexing			
Layer 1	TrCH type		DSCH			
	TB sizes, bit		149			
	TFS	TF0, bits	0x149			
		TF1, bits	1x149			
	TTI, ms		40			
	Coding type		CC 1/3			
	CRC, bit		16			
	Max number of bits/TTI before rate matching		519			
	Max number of bits/radio frame before rate matching		130			
	RM attribute		155 to 165			

6.10.3.4.2.1.2.1.3 TFCS for DSCH

TFCS size	20 (alt. 28)
TFCS	(256 kbps RAB, SHCCH, SRB for DCCH)= (TF0, TF0, TF0), (TF1, TF0, TF0), (TF2, TF0, TF0), (TF3, TF0, TF0), (TF4, TF0, TF0), (TF0, TF1, TF0), (TF1, TF1, TF0), (TF2, TF1, TF0), (TF3, TF1, TF0), (TF4, TF1, TF0), (TF0, TF0, TF1), (TF1, TF0, TF1), (TF2, TF0, TF1), (TF3, TF0, TF1), (TF4, TF0, TF1), (TF0, TF1, TF1), (TF1, TF1, TF1), (TF2, TF1, TF1), (TF3, TF1, TF1), (TF4, TF1, TF1) (alt. (TF0, TF0, TF0), (TF1, TF0, TF0), (TF2, TF0, TF0), (TF3, TF0, TF0), (TF4, TF0, TF0), (TF5, TF0, TF0), (TF6, TF0, TF0), (TF0, TF1, TF0), (TF1, TF1, TF0), (TF2, TF1, TF0), (TF3, TF1, TF0), (TF4, TF1, TF0), (TF5, TF1, TF0), (TF6, TF1, TF0), (TF0, TF0, TF1), (TF1, TF0, TF1), (TF2, TF0, TF1), (TF3, TF0, TF1), (TF4, TF0, TF1), (TF5, TF0, TF1), (TF6, TF0, TF1), (TF0, TF1, TF1), (TF1, TF1, TF1), (TF2, TF1, TF1), (TF3, TF1, TF1), (TF4, TF1, TF1), (TF5, TF1, TF1), (TF6, TF1, TF1))

6.10.3.4.2.1.2.1.4 Transport channel parameters for DL SRBs for DCCH and SRB for CCCH and SRB for BCCH and DL SRB for SHCCH mapped on FACH

6.10.3.4.2.1.2.1.4.1 FACH transport channel configuration without DTCH

Higher layer	RAB/signalling RB		SRB#0	SRB#1	SRB#2	SRB#3	SRB#4	SRB#5	SRB#6
	User of Radio Bearer		RRC	RRC	RRC	NAS_DT High prio	NAS_DT Low prio	RRC	RRC
RLC	Logical channel type		CCCH	DCCH	DCCH	DCCH	DCCH	SHCCH	BCCH
	RLC mode		UM	UM	AM	AM	AM	UM	TM
	Payload sizes, bit		160	136 or 120 (note)	128	128	128	160	168
	Max data rate, bps		32 000 (alt. 16 000)	27 200 or 24 000 (alt. 13 600 or 12 000)	25 600 (alt. 12 800)	25 600 (alt. 12 800)	25 600 (alt. 12 800)	32 000 (alt. 16 000)	33 600 (alt. 16 800)
	AMD/UMD/TrD PDU header, bit		8	8	16	16	16	8	0
MAC	MAC header, bit		3	27 or 43	27	27	27	3	3
	MAC multiplexing		7 logical channel multiplexing						
Layer 1	TrCH type		FACH						
	TB sizes, bit		171						
	TFS	TF0, bits	0x171						
		TF1, bits	1x171						
		TF2, bits	2x171						
		TF3, bits	3x171(alt. N/A)						
		TF4, bits	4x171(alt. N/A)						
	TTI, ms		20						
	Coding type		TC						
	CRC, bit		16						
	Max number of bits/TTI after channel coding		2 256 (alt. 1 134)						
	Max number of bits/radio frame before rate matching		1 128 (alt. 567)						
NOTE: MAC header size and RLC payload size depend on use of U-RNTI or C-RNTI.									

6.10.3.4.2.1.2.1.4.2 FACH transport channel configuration with DTCH

Higher layer	RAB/signalling RB		RAB	SRB#0	SRB#1	SRB#2	SRB#3	SRB#4	SRB#5	SRB#6
	User of Radio Bearer		Interactive/ Background RAB	RRC	RRC	RRC	NAS_DT High prio	NAS_DT Low prio	RRC	RRC
RLC	Logical channel type		DTCH	CCCH	DCCH	DCCH	DCCH	DCCH	SHCCH	BCCH
	RLC mode		AM	UM	UM	AM	AM	AM	UM	TM
	Payload sizes, bit		320	160	136 or 120 (note)	128	128	128	160	168
	Max data rate, bps		32 000 (alt. 16 000)	32 000 (alt. 16 000)	27 200 or 24 000 (alt. 13 600 or 12 000)	25 600 (alt. 12 800)	25 600 (alt. 12 800)	25 600 (alt. 12 800)	32 000 (alt. 16 000)	33 600 (alt. 16 800)
	AMD/UMD/TrD PDU header, bit		16	8	8	16	16	16	8	0
MAC	MAC header, bit		27	3	27 or 43	27	27	27	3	3
	MAC multiplexing		8 logical channel multiplexing							
Layer 1	TrCH type		FACH							
	TB sizes, bit		171, 363							
	TFS	TF0, bits	0x171							
		TF1, bits	1x171							
		TF2, bits	2x171							
		TF3, bits	1x363							
		TF4, bits	3x171 (alt N/A)							
		TF5, bits	4x171 (alt. N/A)							
		TF6, bits	2x363 (alt. N/A)							
	TTI, ms		20							
	Coding type		TC							
	CRC, bit		16							
	Max number of bits/TTI after channel coding		2 286 (alt. 1 149)							
	Max number of bits/radio frame before rate matching		1 143 (alt. 575)							
NOTE: MAC header size and RLC payload size depend on use of U-RNTI or C-RNTI.										

6.10.3.4.2.1.2.1.5 TFCS for FACH

6.10.3.4.2.1.2.1.5.1 TFCS for FACH transport channel configuration without DTCH

TFCS size	5 (alt. 3)
TFCS	FACH = (TF0), (TF1), (TF2), (TF3), (TF4) (alt. FACH = (TF0), (TF1), (TF2))

6.10.3.4.2.1.2.1.5.2 TFCS for FACH transport channel configuration with DTCH

TFCS size	7 (alt. 4)
TFCS	FACH = (TF0), (TF1), (TF2), (TF3), (TF4), (TF5), (TF6) (alt. FACH = (TF0), (TF1), (TF2), (TF3))

6.10.3.4.2.1.2.2 Physical channel parameters

6.10.3.4.2.1.2.2.1 Physical channel parameters for PDSCH

PDSCH	Midamble	256 chips
	Codes and time slots	SF16 x 8 codes x 2 time slots
	Max. Number of data bits/radio frame	4 400 bits
	TFCI code word	16 bits
	Puncturing Limit	0.44

6.10.3.4.2.1.2.2.2 Physical channel parameters for SCCPCH

6.10.3.4.2.1.2.2.2.1 Physical channel parameters for SCCPCH without DTCH

SCCPCH	Midamble	512 chips
	Codes and time slots	SF16 x 5 codes x 1 time slot (alt. SF16 x 2 codes x 1 time slot)
	Max. Number of data bits/radio frame	1 204 bits (alt. 480 bits)
	TFCI code word	16 bits (alt. 8 bits)
	Puncturing Limit	1 (alt. 0.84)

6.10.3.4.2.1.2.2.2.2 Physical channel parameters for SCCPCH with DTCH

SCCPCH	Midamble	512 chips
	Codes and time slots	SF16 x 5 codes x 1 time slot (alt. SF16 x 2 codes x 1 time slot)
	Max. Number of data bits/radio frame	1 204 bits (alt. 472 bits)
	TFCI code word	16 bits
	Puncturing Limit	1 (alt. 0.80)

6.10.3.4.2.2 Interactive or background / UL: 64 DL: 384 kbps / PS RAB + UL: 3.4/16.8 DL: 3.4/33.6 kbps SRBs for DCCH, CCCH and BCCH+ UL: 16.8 DL: 16 kbps SRBs for SHCCH

6.10.3.4.2.2.1 Uplink

See clause 6.10.3.4.2.1.1.

6.10.3.4.2.2.2 Downlink

6.10.3.4.2.2.2.1 Transport channel parameters

6.10.3.4.2.2.2.1.1 Transport channel parameters for Interactive or background / DL: 384 kbps / PS RAB and DL SRB for SHCCH mapped on DSCH

Higher layer	RAB/Signalling RB	RAB	SRB#5
RLC	Logical channel type	DTCH	SHCCH
	RLC mode	AM	UM
	Payload sizes, bit	320	160
	Max data rate, bps	384 000	16 000
	AMD/UMD PDU header, bit	16	8

MAC	MAC header, bit		1	1
	MAC multiplexing		N/A	N/A
Layer 1	TrCH type		DSCH	DSCH
	TB sizes, bit		337	169
	TFS	TF0, bits	0x337	0x169
		TF1, bits	1x337	1x169
		TF2, bits	2x337	N/A
		TF3, bits	4x337	N/A
		TF4, bits	8x337	N/A
		TF5, bits	12x337	N/A
		TF6, bits	N/A (alt. 16x337)	N/A
		TF7, bits	N/A (alt. 20x337)	N/A
		TF8, bits	N/A (alt. 24x337)	N/A
	TTI, ms		10 (alt. 20)	10
	Coding type		TC	CC 1/2
	CRC, bit		16	16
	Max number of bits/TTI after channel coding		12 720 (alt. 25 440)	386
	Downlink: Max number of bits/radio frame before rate matching		12 720 (alt. 12 720)	386
	RM attribute		135 to 175	230 to 250

6.10.3.4.2.2.2.1.2 Transport channel parameters for DL: 3.4 Kbps SRBs for DCCH mapped on DSCH

See clause 6.10.3.4.2.1.2.1.2.

6.10.3.4.2.2.2.1.3 TFCS for DSCH

TFCS size	24 (alt. 36)
TFCS	(384 kbps RAB, SHCCH, SRBs for DCCH)= (TF0, TF0, TF0), (TF1, TF0, TF0), (TF2, TF0, TF0), (TF3, TF0, TF0), (TF4, TF0, TF0), (TF5, TF0, TF0), (TF0, TF1, TF0), (TF1, TF1, TF0), (TF2, TF1, TF0), (TF3, TF1, TF0), (TF4, TF1, TF0), (TF5, TF1, TF0), (TF0, TF0, TF1), (TF1, TF0, TF1), (TF2, TF0, TF1), (TF3, TF0, TF1), (TF4, TF0, TF1), (TF5, TF0, TF1), (TF0, TF1, TF1), (TF1, TF1, TF1), (TF2, TF1, TF1), (TF3, TF1, TF1), (TF4, TF1, TF1), (TF5, TF1, TF1) (alt. (TF0, TF0, TF0), (TF1, TF0, TF0), (TF2, TF0, TF0), (TF3, TF0, TF0), (TF4, TF0, TF0), (TF5, TF0, TF0), (TF6, TF0, TF0), (TF7, TF0, TF0), (TF8, TF0, TF0), (TF0, TF1, TF0), (TF1, TF1, TF0), (TF2, TF1, TF0), (TF3, TF1, TF0), (TF4, TF1, TF0), (TF5, TF1, TF0), (TF6, TF1, TF0), (TF7, TF1, TF0), (TF8, TF1, TF0), (TF0, TF0, TF1), (TF1, TF0, TF1), (TF2, TF0, TF1), (TF3, TF0, TF1), (TF4, TF0, TF1), (TF5, TF0, TF1), (TF6, TF0, TF1), (TF7, TF0, TF1), (TF8, TF0, TF1), (TF0, TF1, TF1), (TF1, TF1, TF1), (TF2, TF1, TF1), (TF3, TF1, TF1), (TF4, TF1, TF1), (TF5, TF1, TF1), (TF6, TF1, TF1), (TF7, TF1, TF1), (TF8, TF1, TF1))

6.10.3.4.2.2.2.1.4 Transport channel parameters for DL SRBs for DCCH and SRB for CCCH and SRB for BCCH and DL SRB for SHCCH mapped on FACH (with & without DTCH)

See clause 6.10.3.4.2.1.2.1.4.

6.10.3.4.2.2.2.1.5 TFCS for FACH

See clause 6.10.3.4.2.1.2.1.5.

6.10.3.4.2.2.2.2 Physical channel parameters

6.10.3.4.2.2.2.2.1 Physical channel parameters for PDSCH

PDSCH	Midamble	256 chips
	Codes and time slots	SF16 x 8 codes x 3 time slots
	Max. Number of data bits/radio frame	6 608 bits (alt. 6 592 bits)
	TFCI code word	16 bits (alt. 32 bits)
	Puncturing Limit	0.48

6.10.3.4.2.2.2.2.2 Physical channel parameters for SCCPCH

See clause 6.10.3.4.2.1.2.2.2.

6.10.3.4.2.3 Interactive or background / UL: 64 DL: 2 048 kbps / PS RAB + UL: 3.4/16.8 DL: 3.4/33.6 kbps SRBs for DCCH, CCCH and BCCH + UL: 16.8 DL: 16 kbps SRBs for SHCCH

6.10.3.4.2.3.1 Uplink

See clause 6.10.3.4.2.1.1.

6.10.3.4.2.3.2 Downlink

6.10.3.4.2.3.2.1 Transport channel parameters

6.10.3.4.2.3.2.1.1 Transport channel parameters for Interactive or background / DL: 2 048 kbps / PS RAB and DL SRB for SHCCH mapped on DSCH

Higher layer	RAB/Signalling RB		RAB	SRB#5
RLC	Logical channel type		DTCH	SHCCH
	RLC mode		AM	UM
	Payload sizes, bit		640	160
	Max data rate, bps		2 048 000	16 000
	AMD/UMD PDU header, bit		16	8
MAC	MAC header, bit		1	1
	MAC multiplexing		N/A	N/A
Layer 1	TrCH type		DSCH	DSCH
	TB sizes, bit		657	169
	TFS	TF0, bits	0x657	0x169
		TF1, bits	1x657	1x169
		TF2, bits	2x657	N/A
		TF3, bits	4x657	N/A
		TF4, bits	8x657	N/A
		TF5, bits	12x657	N/A
		TF6, bits	16x657	N/A
		TF7, bits	20x657	N/A
		TF8, bits	24x657	N/A
		TF9, bits	28x657	N/A
		TF10, bits	30x657 (alt. 32x657)	N/A
		TF11, bits	N/A (alt. 36x657)	N/A
		TF12, bits	N/A (alt. 40x657)	N/A
		TF13, bits	N/A (alt. 44x657)	N/A
		TF14, bits	N/A (alt. 48x657)	N/A
		TF15, bits	N/A (alt. 52x657)	N/A
		TF16, bits	N/A (alt. 56x657)	N/A
		TF17, bits	N/A (alt. 60x657)	N/A
		TF18, bits	N/A (alt. 64x657)	N/A
	TTI, ms		10 (alt. 20)	10
	Coding type		TC	CC 1/2
	CRC, bit		16	16
	Max number of bits/TTI after channel coding		60 624 (alt. 129 330)	386
	Downlink: Max number of bits/radio frame before rate matching		60 624 (alt. 64 665)	386
	RM attribute		135 to 175	230 to 250

6.10.3.4.2.3.2.1.2 Transport channel parameters for DL: 3.4 Kbps SRBs for DCCH mapped on DSCH

See clause 6.10.3.4.2.1.2.1.2.

6.10.3.4.2.3.2.1.3 TFCS for DSCH

TFCS size	41 (alt.76)
TFCS	(2 048 kbps RAB, SHCCH, SRBs for DCCH)= (TF0, TF0, TF0), (TF1, TF0, TF0), (TF2, TF0, TF0), (TF3, TF0, TF0), (TF4, TF0, TF0), (TF5, TF0, TF0), (TF6, TF0, TF0), (TF7, TF0, TF0), (TF8, TF0, TF0), (TF9, TF0, TF0), (TF10, TF0, TF0), (TF0, TF1, TF0), (TF1, TF1, TF0), (TF2, TF1, TF0), (TF3, TF1, TF0), (TF4, TF1, TF0), (TF5, TF1, TF0), (TF6, TF1, TF0), (TF7, TF1, TF0), (TF8, TF1, TF0), (TF9, TF1, TF0), (TF0, TF0, TF1), (TF1, TF0, TF1), (TF2, TF0, TF1), (TF3, TF0, TF1), (TF4, TF0, TF1),

	(TF5, TF0, TF1), (TF6, TF0, TF1), (TF7, TF0, TF1), (TF8, TF0, TF1), (TF9, TF0, TF1), (TF0, TF1, TF1), (TF1, TF1, TF1), (TF2, TF1, TF1), (TF3, TF1, TF1), (TF4, TF1, TF1), (TF5, TF1, TF1), (TF6, TF1, TF1), (TF7, TF1, TF1), (TF8, TF1, TF1), (TF9, TF1, TF1) (alt. (TF0, TF0, TF0), (TF1, TF0, TF0), (TF2, TF0, TF0), (TF3, TF0, TF0), (TF4, TF0, TF0), (TF5, TF0, TF0), (TF6, TF0, TF0), (TF7, TF0, TF0), (TF8, TF0, TF0), (TF9, TF0, TF0), (TF10, TF0, TF0),(TF11, TF0, TF0), (TF12, TF0, TF0), (TF13, TF0, TF0), (TF14, TF0, TF0), (TF15, TF0, TF0), (TF16, TF0, TF0), (TF17, TF0, TF0), (TF18, TF0, TF0), (TF0, TF1, TF0), (TF1, TF1, TF0), (TF2, TF1, TF0), (TF3, TF1, TF0), (TF4, TF1, TF0), (TF5, TF1, TF0), (TF6, TF1, TF0), (TF7, TF1, TF0), (TF8, TF1, TF0), (TF9, TF1, TF0), (TF10, TF1, TF0),(TF11, TF1, TF0), (TF12, TF1, TF0), (TF13, TF1, TF0), (TF14, TF1, TF0), (TF15, TF1, TF0), (TF16, TF1, TF0), (TF17, TF1, TF0), (TF18, TF1, TF0), (TF0, TF0, TF1), (TF1, TF0, TF1), (TF2, TF0, TF1), (TF3, TF0, TF1), (TF4, TF0, TF1), (TF5, TF0, TF1), (TF6, TF0, TF1), (TF7, TF0, TF1), (TF8, TF0, TF1), (TF9, TF0, TF1), (TF10, TF0, TF1), (TF11, TF0, TF1), (TF12, TF0, TF1), (TF13, TF0, TF1), (TF14, TF0, TF1), (TF15, TF0, TF1), (TF16, TF0, TF1), (TF17, TF0, TF1), (TF18, TF0, TF1), (TF0, TF1, TF1), (TF1, TF1, TF1), (TF2, TF1, TF1), (TF3, TF1, TF1), (TF4, TF1, TF1), (TF5, TF1, TF1), (TF6, TF1, TF1), (TF7, TF1, TF1), (TF8, TF1, TF1), (TF9, TF1, TF1), (TF10, TF1, TF1),(TF11, TF1, TF1), (TF12, TF1, TF1), (TF13, TF1, TF1), (TF14, TF1, TF1), (TF15, TF1, TF1), (TF16, TF1, TF1), (TF17, TF1, TF1), (TF18, TF1, TF1))

6.10.3.4.2.3.2.1.4 Transport channel parameters for DL SRBs for DCCH and SRB for CCCH and SRB for BCCH and DL SRB for SHCCH mapped on FACH

See clause 6.10.3.4.2.1.2.1.4.1.

6.10.3.4.2.3.2.1.5 TFCS for FACH

See clause 6.10.3.4.2.1.2.1.45.1.

6.10.3.4.2.3.2.2 Physical channel parameters

6.10.3.4.2.3.2.2.1 Physical channel parameters for PDSCH

PDSCH	Midamble	256 chips
	Codes and time slots	SF16 x 12 codes x 11 time slots
	Max. Number of data bits/radio frame	36 400 bits
	TFCI code word	32 bits
	Puncturing Limit	0.56 (alt. 0.52)

6.10.3.4.2.3.2.2.2 Physical channel parameters for SCCPCH

See clause 6.10.3.4.2.1.2.2.2.1.

6.10.3.4.2.4 Interactive or background / UL: 384 DL: 2 048 kbps / PS RAB + UL: 3.4/16.8 DL: 3.4/33.6 kbps SRBs for DCCH, CCCH and BCCH + UL: 16.8 DL: 16 kbps SRBs for SHCCH

6.10.3.4.2.4.1 Uplink

6.10.3.4.2.4.1.1 Transport channel parameters

6.10.3.4.2.4.1.1.1 Transport channel parameters for Interactive or background / UL:384 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB	SRB#5
RLC	Logical channel type		DTCH	SHCCH
	RLC mode		AM	TM
	Payload sizes, bit		320 (alt. 128)	168
	Max data rate, bps		384 000	16 800
	AMD/TrD PDU header, bit		16	0
MAC	MAC header, bit		1	1
	MAC multiplexing		N/A	N/A
Layer 1	TrCH type		USCH	USCH
	TB sizes, bit		337 (alt. 145)	169
	TFS	TF0, bits	0x337 (alt. 0x145)	0x169
		TF1, bits	1x337 (alt. 1x145)	1x169

		TF2, bits	2x337 (alt. 5x145)	N/A
		TF3, bits	4x337 (alt. 10x145)	N/A
		TF4, bits	8x337 (alt. 20x145)	N/A
		TF5, bits	12x337 (alt. 30x145)	N/A
		TF6, bits	16x337 (alt. 40x145)	N/A
		TF7, bits	20x337 (alt. 50x145)	N/A
		TF8, bits	24x337 (alt. 60x145)	N/A
	TTI, ms		20	10
	Coding type		TC	CC 1/2
	CRC, bit		16	16
	Max number of bits/TTI after channel coding		25 440 (alt. 29 004)	386
	Max number of bits/radio frame before rate matching		12 720 (alt. 14 502)	386
	RM attribute		135 to 175	230 to 250

6.10.3.4.2.4.1.1.2 Transport channel parameters for UL: 3.4 Kbps SRBs for DCCH mapped on USCH

See clause 6.10.3.4.2.1.1.1.2.

6.10.3.4.2.4.1.1.3 TFCS for USCH

TFCS size	36
TFCS	(384 kbps RAB, SHCCH, SRBs for DCCH)= (TF0, TF0, TF0), (TF1, TF0, TF0), (TF2, TF0, TF0), (TF3, TF0, TF0), (TF4, TF0, TF0), (TF5, TF0, TF0), (TF6, TF0, TF0), (TF7, TF0, TF0), (TF8, TF0, TF0), (TF0, TF1, TF0), (TF1, TF1, TF0), (TF2, TF1, TF0), (TF3, TF1, TF0), (TF4, TF1, TF0), (TF5, TF1, TF0), (TF6, TF1, TF0), (TF7, TF1, TF0), (TF8, TF1, TF0), (TF0, TF0, TF1), (TF1, TF0, TF1), (TF2, TF0, TF1), (TF3, TF0, TF1), (TF4, TF0, TF1), (TF5, TF0, TF1), (TF6, TF0, TF1), (TF7, TF0, TF1), (TF8, TF0, TF1) (TF0, TF1, TF1), (TF1, TF1, TF1), (TF2, TF1, TF1), (TF3, TF1, TF1), (TF4, TF1, TF1), (TF5, TF1, TF1), (TF6, TF1, TF1), (TF7, TF1, TF1), (TF8, TF1, TF1)

6.10.3.4.2.4.1.1.4 Transport channel parameters for SRB for CCCH and UL SRBs for DCCH and UL SRB for SHCCH mapped on RACH

See clause 6.10.3.4.2.1.1.1.4.

6.10.3.4.2.4.1.2 Physical channel parameters

6.10.3.4.2.4.1.2.1 Physical channel parameters for PUSCH

PUSCH	Midamble	512 chips
	Codes and time slots	SF1 x 1 code x 2 time slots
	Max. Number of data bits/radio frame	7 264 bits
	TFCI code word	32 bits
	TPC	2 bits
	Puncturing Limit	0.52 (alt. 0.44)

6.10.3.4.2.4.1.2.2 Physical channel parameters for PRACH

See clause 6.10.3.4.2.1.1.2.2.

6.10.3.4.2.4.2 Downlink

6.10.3.4.2.4.2.1 Transport channel parameters

See clause 6.10.3.4.2.3.2.1.

6.10.3.4.2.4.2.2 Physical channel parameters

6.10.3.4.2.4.2.2.1 Physical channel parameters for PDSCH

PDSCH	Midamble	256 chips

	Codes and time slots	SF1 x 1 codes x 9 time slots
	Max. Number of data bits/radio frame	39 712 bits
	TFCI code word	32 bits
	Puncturing Limit	0.64 (alt. 0.60)

6.10.3.4.2.4.2.2.2 Physical channel parameters for SCCPCH

See clause 6.10.3.4.2.1.2.2.2.1.

6.10.3.4.3 Combinations on PDSCH, SCCPCH, DPCH, PUSCH and PRACH

6.10.3.4.3.1 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH + Interactive or background / UL: 64 DL: 256 kbps / PS RAB + UL: 16.8 kbps SRBs for CCCH and SHCCH+ DL: 33.6 kbps SRBs for CCCH SHCCH and BCCH

6.10.3.4.3.1.1 Uplink

6.10.3.4.3.1.1.1 Transport channel parameters

6.10.3.4.3.1.1.1.1 Transport channel parameters for Conversational / speech / UL:12.2 / CS RAB

See clause 6.10.3.4.1.4.1.1.1.

6.10.3.4.3.1.1.1.2 Transport channel parameters for UL SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.3.1.1.1.3 TFCS for DCH

See clause 6.10.3.4.1.4.1.1.3.

6.10.3.4.3.1.1.1.4 Transport channel parameters for Interactive or background / UL: 64 kbps / PS RAB and UL SRB for SHCCH mapped on USCH

See clause 6.10.3.4.2.1.1.1.1.

6.10.3.4.3.1.1.1.5 TFCS for USCH

TFCS size	10
TFCS	(64 kbps RAB, SHCCH)= (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF3, TF0), (TF4, TF0), (TF0, TF1), (TF1, TF1), (TF2, TF1), (TF3, TF1), (TF4, TF1)

6.10.3.4.3.1.1.1.6 Transport channel parameters for SRB for CCCH and UL SRB for SHCCH mapped on RACH

Higher layer	RAB/signalling RB		SRB#0	SRB#5
	User of Radio Bearer		RRC	RRC
RLC	Logical channel type		CCCH	SHCCH
	RLC mode		TM	TM
	Payload sizes, bit		168	168
	Max data rate, bps		16 800	16 800
	TrD PDU header, bit		0	0
MAC	MAC header, bit		2	2
	MAC multiplexing		2 logical channel multiplexing	
Layer 1	TrCH type		RACH	
	TB sizes, bit		170	
	TFS	TF0, bits	1x170	
	TTI, ms		10	
	Coding type		CC 1/2	
	CRC, bit		16	
	Max number of bits/TTI after channel coding		388	
	Max number of bits/radio frame before rate matching		388	

6.10.3.4.3.1.1.2 Physical channel parameters

6.10.3.4.3.1.1.2.1 Physical channel parameters for DPCH

See clause 6.10.3.4.1.4.1.2.

6.10.3.4.3.1.1.2.2 Physical channel parameters for PUSCH

PUSCH	Midamble	512 chips
	Codes and time slots	SF2 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	1 808 bits
	TFCI code word	16 bits
	TPC	2 bits
	Puncturing Limit	0.76 (alt. 0.68)

6.10.3.4.3.1.1.2.3 Physical channel parameters for PRACH

See clause 6.10.3.4.2.1.1.2.2.

6.10.3.4.3.1.2 Downlink

6.10.3.4.3.1.2.1 Transport channel parameters

6.10.3.4.3.1.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 kbps / CS RAB

See clause 6.10.3.4.1.4.2.1.1.

6.10.3.4.3.1.2.1.2 Transport channel parameters for DL SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.3.1.2.1.3 TFCS for DCH

See clause 6.10.3.4.1.4.2.1.3.

6.10.3.4.3.1.2.1.4 Transport channel parameters for Interactive or background / DL: 256 kbps / PS RAB and DL SRB for SHCCH mapped on DSCH

See clause 6.10.3.4.2.1.2.1.1.

6.10.3.4.3.1.2.1.5 TFCS for DSCH

TFCS size	10 (alt. 14)
TFCS	(256 kbps RAB, SHCCH)= (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF3, TF0), (TF4, TF0), (TF0, TF1), (TF1, TF1), (TF2, TF1), (TF3, TF1), (TF4, TF1) (alt. (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF3, TF0), (TF4, TF0), (TF5, TF0), (TF6, TF0), (TF0, TF1), (TF1, TF1), (TF2, TF1), (TF3, TF1), (TF4, TF1), (TF5, TF1), (TF6, TF1))

6.10.3.4.3.1.2.1.6 Transport channel parameters for SRB for CCCH and SRB for BCCH and DL SRB for SHCCH mapped on FACH

Higher layer	RAB/Signalling RB		SRB#0	SRB#5	SRB#6
	User of Radio Bearer		RRC	RRC	RRC
RLC	Logical channel type		CCCH	SHCCH	BCCH
	RLC mode		UM	UM	TM
	Payload sizes, bit		160	160	168
	Max data rate, bps		32 000 (alt. 16 000)	32 000 (alt. 16 000)	33 600 (alt. 16 800)
	UMD/TrD PDU header, bit		8	8	0
MAC	MAC header, bit		3		
	MAC multiplexing		3 logical channel multiplexing		
Layer 1	TrCH type		FACH		
	TB sizes, bit		171		
	TFS	TF0, bits	0x171		
		TF1, bits	1x171		

		TF2, bits	2x171
		TF3, bits	3x171 (alt. N/A)
		TF4, bits	4x171 (alt. N/A)
	TTI, ms		20
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		2 256 (alt. 1 134)
	Max number of bits/radio frame before rate matching		1 128 (alt 567)

6.10.3.4.3.1.2.1.7 TFCS for FACH

TFCS size	5 (alt. 3)
TFCS	FACH = (TF0), (TF1), (TF2), (TF3), (TF4) (alt. FACH = (TF0), (TF1), (TF2))

6.10.3.4.3.1.2.2 Physical channel parameters

6.10.3.4.3.1.2.2.1 Physical channel parameters for DPCH

Seeclause 6.10.3.4.1.4.2.2.

6.10.3.4.3.1.2.2.2 Physical channel parameters for PDSCH

PDSCH	Midamble	256 chips
	Codes and time slots	SF16 x 8 codes x 2 time slots
	Max. Number of data bits/radio frame	4 400 bits
	TFCI code word	16 bits
	Puncturing Limit	0.48

6.10.3.4.3.1.2.2.3 Physical channel parameters for SCCPCH

See clause 6.10.3.4.2.1.2.2.2.1.

6.10.3.4.3.2 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH + Interactive or background / UL: 64 DL: 384 kbps / PS RAB + UL: 16.8 kbps SRBs for CCCH and SHCCH+ DL: 33.6 kbps SRBs for CCCH, SHCCH and BCCH

6.10.3.4.3.2.1 Uplink

See clause 6.10.3.4.3.1.1.

6.10.3.4.3.2.2 Downlink

6.10.3.4.3.2.2.1 Transport channel parameters

6.10.3.4.3.2.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 kbps / CS RAB

See clause 6.10.3.4.1.4.2.1.1.

6.10.3.4.3.2.2.1.2 Transport channel parameters for DL SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.3.2.2.1.3 TFCS for DCH

See clause 6.10.3.4.1.4.2.1.3.

6.10.3.4.3.2.2.1.4 Transport channel parameters for Interactive or background / DL: 384 kbps / PS RAB and DL SRB for SHCCH mapped on DSCH

See clause 6.10.3.4.2.2.2.1.1.

6.10.3.4.3.2.2.1.5 TFCS for DSCH

TFCS size	12 (alt. 18)
TFCS	(384 kbps RAB, SHCCH)= (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF3, TF0), (TF4, TF0), (TF5, TF0), (TF0, TF1), (TF1, TF1), (TF2, TF1), (TF3, TF1), (TF4, TF1), (TF5, TF1) (alt. (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF3, TF0), (TF4, TF0), (TF5, TF0), (TF6, TF0), (TF7, TF0), (TF8, TF0), (TF0, TF1), (TF1, TF1), (TF2, TF1), (TF3, TF1), (TF4, TF1), (TF5, TF1), (TF6, TF1), (TF7, TF1), (TF8, TF1))

6.10.3.4.3.2.2.1.6 Transport channel parameters for SRB for CCCH and SRB for BCCH and DL SRB for SHCCH mapped on FACH

See clause 6.10.3.4.3.1.2.1.6.

6.10.3.4.3.2.2.1.7 TFCS for FACH

See clause 6.10.3.4.3.1.2.1.7.

6.10.3.4.3.2.2.2 Physical channel parameters

6.10.3.4.3.2.2.2.1 Physical channel parameters for downlink DPCH

See clause 6.10.3.4.1.4.2.2.

6.10.3.4.3.2.2.2.2 Physical channel parameters for PDSCH

PDSCH	Midamble	256 chips
	Codes and time slots	SF16 x 8 codes x 3 time slots
	Max. Number of data bits/radio frame	6 608 bits
	TFCI code word	16 bits
	Puncturing Limit	0.48

6.10.3.4.3.2.2.2.3 Physical channel parameters for SCCPCH

See clause 6.10.3.4.2.1.2.2.2.1.

6.10.3.4.3.3 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH + Interactive or background / UL: 64 DL: 2 048 kbps / PS RAB + UL: 16.8 kbps SRBs for CCCH and SHCCH+ DL: 33.6 kbps SRBs for CCCH, SHCCH and BCCH

6.10.3.4.3.3.1 Uplink

See clause 6.10.3.4.3.1.1.

6.10.3.4.3.3.2 Downlink

6.10.3.4.3.3.2.1 Transport channel parameters

6.10.3.4.3.3.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 kbps / CS RAB

See clause 6.10.3.4.1.4.2.1.1.

6.10.3.4.3.3.2.1.2 Transport channel parameters for DL SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.3.3.2.1.3 TFCS for DCH

See clause 6.10.3.4.1.4.2.1.3.

6.10.3.4.3.3.2.1.4 Transport channel parameters for Interactive or background / DL: 2 048 kbps / PS RAB and DL SRB for SHCCH mapped on DSCH

See clause 6.10.3.4.2.3.2.1.1.

6.10.3.4.3.3.2.1.5 TFCS for DSCH

TFCS size	22 (alt. 38)
TFCS	(2 048 kbps RAB, SHCCH)= (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF3, TF0), (TF4, TF0), (TF5, TF0), (TF6, TF0), (TF7, TF0), (TF8, TF0), (TF9, TF0), (TF10, TF0), (TF0, TF1), (TF1, TF1), (TF2, TF1), (TF3, TF1), (TF4, TF1), (TF5, TF1), (TF6, TF1), (TF7, TF1), (TF8, TF1), (TF9, TF1) (alt. (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF3, TF0), (TF4, TF0), (TF5, TF0), (TF6, TF0), (TF7, TF0), (TF8, TF0), (TF9, TF0), (TF10, TF0),(TF11, TF0), (TF12, TF0), (TF13, TF0), (TF14, TF0), (TF15, TF0), (TF16, TF0), (TF17, TF0), (TF18, TF0), (TF0, TF1), (TF1, TF1), (TF2, TF1), (TF3, TF1), (TF4, TF1), (TF5, TF1), (TF6, TF1), (TF7, TF1), (TF8, TF1), (TF9, TF1), (TF10, TF1),(TF11, TF1), (TF12, TF1), (TF13, TF1), (TF14, TF1), (TF15, TF1), (TF16, TF1), (TF17, TF1), (TF18, TF1))

6.10.3.4.3.3.2.1.6 Transport channel parameters for SRB for CCCH and SRB for BCCH and DL SRB for SHCCH mapped on FACH

See clause 6.10.3.4.3.1.2.1.6.

6.10.3.4.3.3.2.1.7 TFCS for FACH

See clause 6.10.3.4.3.1.2.1.7.

6.10.3.4.3.3.2.2 Physical channel parameters

6.10.3.4.3.3.2.2.1 Physical channel parameters for downlink DPCH

See clause 6.10.3.4.1.4.2.2.

6.10.3.4.3.3.2.2.2 Physical channel parameters for PDSCH

DPCH Downlink	Midamble	256 chips
	Codes and time slots	SF1 x 1 code x 7 time slot
	Max. Number of data bits/radio frame	30 896 bits (alt. 30 880)
	TFCI code word	16 bits (alt. 32 bits)
	Puncturing limit	0.48 (alt. 0.44)

6.10.3.4.3.3.2.2.3 Physical channel parameters for SCCPCH

See clause 6.10.3.4.2.1.2.2.2.1.

6.10.3.4.4 Combinations on SCCPCH

6.10.3.4.4.1 Stand-alone signalling RB for PCCH

6.10.3.4.4.1.1 Transport channel parameters

6.10.3.4.4.1.1.1 Transport channel parameter of SRB for PCCH

Higher layer	RAB/signalling RB		SRB
	User of Radio Bearer		RRC
RLC	Logical channel type		PCCH
	RLC mode		TM
	Payload sizes, bit		240 (alt. 80)
	Max data rate, bps		12 000 (alt. 8 000)
	TrD PDU header, bit		0
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		PCH
	TB sizes, bit		240 (alt. 80)
	TFS	TF0, bts	0x240 (alt. 0x80)
		TF1, bits	1x240 (alt. 1x80)
		TF2, bits	N/A (alt.2x80)
	TTI, ms		20

	Coding type	CC 1/2
	CRC, bit	16
	Max number of bits/TTI before rate matching	528 (alt. 400)
	Max number of bits/radio frame before rate matching	264 (alt. 200)
	RM attribute	210 to 250

6.10.3.4.4.1.1.2 TFCS

TFCS size	2 (alt. 3)
TFCS	SRBs for PCCH = (TF0), (TF1) (alt. (TF0), (TF1), (TF2))

6.10.3.4.4.1.2 Physical channel parameters

S-CCPCH	Midamble	512 chips
	Codes and time slots	SF16 x 2 codes x 1 time slot (alt. SF16 x 1 code x 1 time slot)
	Max. Number of data bits/radio frame	480 bits (alt. 236 bits)
	TFCI code word	8 bits
	Puncturing limit	1

6.10.3.4.4.2 Interactive/Background 32 kbps PS RAB + SRBs for CCCH + SRB for DCCH + SRB for BCCH

6.10.3.4.4.2.1 Transport channel parameters

6.10.3.4.4.2.1.1 Transport channel parameters for Interactive/Background 32 kbps PS RAB

Higher layer	RAB/signalling RB		RAB
	User of Radio Bearer		Interactive/ Background RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		320
	Max data rate, bps		32 000 (alt. 16 000)
	AMD PDU header, bit		16
MAC	MAC header, bit		27
	MAC multiplexing		N/A
Layer 1	TrCH type		FACH
	TB sizes, bit		363
	TFS	TF0, bits	0 x363
		TF1, bits	1x363
		TF2, bits	2x363 (alt. N/A)
	TTI, ms		20
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI before rate matching		2 286 (alt. 1 149)
	Max number of bits/radio frame before rate matching		1 143 (alt. 575)
	RM attribute		110 to 150

6.10.3.4.4.2.1.2 Transport channel parameters of SRBs for CCCH, SRB for DCCH, and SRB for BCCH

Higher layer	RAB/signalling RB	SRB#0	SRB#1	SRB#2	SRB#3	SRB#4	SRB#5
	User of Radio Bearer	RRC	RRC	RRC	NAS_DT High prio	NAS_DT Low prio	RRC
RLC	Logical channel type	CCCH	DCCH	DCCH	DCCH	DCCH	BCCH
	RLC mode	UM	UM	AM	AM	AM	TM
	Payload sizes, bit	160	136 or 120 (note)	128	128	128	168

	Max data rate, bps		32 000 (alt. 16 000)	27 200 or 24 000 (alt. 24 000 or 12 000)	25 600 (alt. 12 800)	25 600 (alt. 12 800)	25 600 (alt. 12 800)	33 600 (alt. 16 800)
	AMD/UMD/TrD PDU header, bit		8	8	16	16	16	0
MAC	MAC header, bit		3	27 or 43	27	27	27	3
	MAC multiplexing		6 logical channel multiplexing					
Layer 1	TrCH type		FACH					
	TB sizes, bit		171					
	TFS	TF0, bits	0x171					
		TF1, bits	1x171					
		TF2, bits	2x171					
		TF3, bits	3x171 (alt. N/A)					
		TF4, bits	4x171 (alt. N/A)					
	TTI, ms		20					
	Coding type		TC					
	CRC, bit		16					
	Max number of bits/TTI before rate matching		2 256 (alt. 1 134)					
	Max number of bits/radio frame before rate matching		1 128 (alt. 567)					
	RM attribute		200 to 240					
NOTE: MAC header size and RLC payload size depend on use of U-RNTI or C-RNTI.								

6.10.3.4.4.2.1.3 TFCS

TFCS size	9 (alt. 4)
TFCS	(32kbps RAB, SRBs for CCCH/DCCH/BCCH) = (TF0, TF0), (TF0, TF1), (TF0, TF2), (TF0, TF3), (TF0, TF4),(TF1, TF0), (TF1, TF1), (TF1, TF2), (TF2, TF0) (alt. (TF0, TF0), (TF0, TF1), (TF0, TF2), (TF1, TF0))
NOTE: First TFCS applies when the alternative for the 3 2kbps RAB and the alternative for the SRBs for CCCH/DCCH/BCCH are both not configured. The alt. TFCS applies when both the alt. for the 32 kbps RAB and the alt. for the SRBs for CCCH/DCCH/BCCH are configured. All other combinations of these alternatives are not valid.	

6.10.3.4.4.2.2 Physical channel parameters

S-CCPCH	Midamble	512 chips
	Codes and time slots	SF16 x 5 codes x 1 time slot (alt. SF16 x 2 codes x 1 time slot)
	Max. Number of data bits/radio frame	1 204 bits (alt. 472)
	TFCI code word	16 bits
	Puncturing limit	0.60 (alt. 0.48)

6.10.3.4.4.2a Interactive/Background 32 kbps PS RAB + Interactive/Background 32 kbps PS RAB + SRBs for CCCH + SRB for DCCH + SRB for BCCH

6.10.3.4.4.2a.1 Transport channel parameters

6.10.3.4.4.2a.1.1 Transport channel parameters for Interactive/Background 32 kbps PS RAB + Interactive/Background 32 kbps PS RAB

Higher layer	RAB/Signalling RB	RAB	RAB
	User of Radio Bearer	Interactive/Background RAB	Interactive/Background RAB
RLC	Logical channel type	DTCH	DTCH
	RLC mode	AM	AM
	Payload sizes, bit	320	320
	Max data rate, bps	32 000 (alt. 16 000)	32 000 (alt. 16 000)
	AMD PDU header, bit	16	16
MAC	MAC header, bit	27	27

	MAC multiplexing		2 logical channel multiplexing
Layer 1	TrCH type		FACH
	TB sizes, bit		363
	TFS	TF0, bits	0x363
		TF1, bits	1x363
		TF2, bits	2x363 (alt. N/A)
	TTI, ms		20
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI before rate matching		2 286 (alt. 1 149)
	Max number of bits/radio frame before rate matching		1 143 (alt. 575)
	RM attribute		110 to 150

6.10.3.4.4.2a.1.2 Transport channel parameters of SRBs for CCCH, SRB for DCCH, and SRB for BCCH

See clause 6.10.3.4.4.2.1.2.

6.10.3.4.4.2a.1.3 TFCS

TFCS size	9 (alt. 4)
TFCS	(32kbps RAB + 32kbps RAB, SRBs for CCCH/DCCH/BCCH) = (TF0, TF0), (TF0, TF1), (TF0, TF2), (TF0, TF3), (TF0, TF4), (TF1, TF0), (TF1, TF1), (TF1, TF2), (TF2, TF0) (alt. (TF0, TF0), (TF0, TF1), (TF0, TF2), (TF1, TF0))
NOTE: First TFCS applies when the alternative for the 32 kbps RABs and the alternative for the SRBs for CCCH/DCCH/BCCH are both not configured. The alt. TFCS applies when both the alt. for the 32 kbps RABs and the alt. for the SRBs for CCCH/DCCH/BCCH are configured. All other combinations of these alternatives are not valid.	

6.10.3.4.4.2a.2 Physical channel parameters

S-CCPCH	Midamble	512 chips
	Codes and time slots	SF16 x 5 codes x 1 time slot (alt. SF16 x 2 codes x 1 time slot)
	Max. Number of data bits/radio frame	1 204 bits (alt. 472)
	TFCI code word	16 bits
	Puncturing limit	0.60 (alt. 0.48)

6.10.3.4.4.2b SRBs for CCCH + SRB for DCCH + SRB for BCCH

6.10.3.4.4.2b.1 Transport channel parameters

6.10.3.4.4.2b.1.1 Transport channel parameters of SRBs for CCCH, SRB for DCCH, and SRB for BCCH

See clause 6.10.3.4.4.2.1.2.

6.10.3.4.4.2b.1.2 TFCS

TFCS size	5 (alt. 3)
TFCS	(SRBs for CCCH/DCCH/BCCH) = (TF0), (TF1), (TF2), (TF3), (TF4) (alt. (TF0), (TF1), (TF2))

6.10.3.4.4.2b.2 Physical channel parameters

S-CCPCH	Midamble	512 chips
	Codes and time slots	SF16 x 5 codes x 1 time slot (alt. SF16 x 2 codes x 1 time slot)
	Max. Number of data bits/radio frame	1 204 bits (alt. 480 bits)
	TFCI code word	16 bits (alt. 8 bits)

	Puncturing limit	1 (alt. 0.84)

6.10.3.4.4.3 Interactive/Background 32 kbps RAB + SRB for PCCH + SRB for CCCH + SRB for DCCH + SRB for BCCH

6.10.3.4.4.3.1 Transport channel parameters

6.10.3.4.4.3.1.1 Transport channel parameters for Interactive/Background 32 kbps RAB

See clause 6.10.3.4.4.2.1.1.

6.10.3.4.4.3.1.2 Transport channel parameters of SRB for PCCH

See clause 6.10.3.4.4.1.1.1.

6.10.3.4.4.3.1.3 Transport channel parameters of SRBs for CCCH, SRB for DCCH, and SRB for BCCH

See clause 6.10.3.4.4.2.1.2.

6.10.3.4.4.3.1.4 TFCS

TFCS size	30 (alt. 8)
TFCS	(32 kbps RAB, SRB for PCCH, SRBs for CCCH/ DCCH/ BCCH) = (TF0, TF0, TF0), (TF0, TF0, TF1), (TF0, TF0, TF2), (TF0, TF0, TF3), (TF0, TF0, TF4), (TF0, TF1, TF0), (TF0, TF1, TF1), (TF0, TF1, TF2), (TF0, TF1, TF3), (TF0, TF1, TF4), (TF1, TF0, TF0), (TF1, TF0, TF1), (TF1, TF0, TF2), (TF1, TF0, TF3), (TF1, TF0, TF4),(TF1, TF1, TF0), (TF1, TF1, TF1), (TF1, TF1, TF2), (TF1, TF1, TF3), (TF1, TF1, TF4), (TF2, TF0, TF0), (TF2, TF0, TF1), (TF2, TF0, TF2), (TF2, TF0, TF3), (TF2, TF0, TF4),(TF2, TF1, TF0), (TF2, TF1, TF1), (TF2, TF1, TF2), (TF2, TF1, TF3), (TF2, TF1, TF4) (alt. (TF0, TF0, TF0), (TF0, TF0, TF1), (TF0, TF0, TF2), (TF0, TF1, TF0), (TF0, TF1, TF1), (TF0, TF2, TF0), (TF0, TF2, TF1), (TF1, TF0, TF0))
NOTE: Alt. TFCS applies when alts for 32 kbps RAB, SRB for PCCH, and SRBs for CCCH/ DCCH/ BCCH are all configured.	

6.10.3.4.4.3.2 Physical channel parameters

S-CCPCH	Midamble	512 chips
	Codes and time slots	SF16 x 8 codes x 1 time slot (alt. SF16 x 2 codes x 1 time slot)
	Max. Number of data bits/radio frame	1 936 bits (alt. 472 bits)
	TFCI code word	16 bits
	Puncturing limit	0.52 (alt. 0.56)
NOTE: Alt. applies when alts for 32 kbps RAB and SRBs for CCCH/ DCCH/ BCCH are both configured.		

6.10.3.4.4.3a SRB for PCCH + SRB for CCCH + SRB for DCCH + SRB for BCCH

6.10.3.4.4.3a.1 Transport channel parameters

6.10.3.4.4.3a.1.1 Transport channel parameters of SRB for PCCH

See clause 6.10.3.4.4.1.1.1.

6.10.3.4.4.3a.1.2 Transport channel parameters of SRBs for CCCH, SRB for DCCH, and SRB for BCCH

See clause 6.10.3.4.4.2.1.2.

6.10.3.4.4.3a.1.3 TFCS

TFCS size	10 (alt.7)
TFCS	(SRB for PCCH, SRBs for CCCH/ DCCH/ BCCH) = (TF0, TF0), (TF0, TF1), (TF0, TF2), (TF0, TF3), (TF0, TF4), (TF1, TF0), (TF1, TF1), (TF1, TF2), (TF1, TF3), (TF1, TF4) (alt. (TF0, TF0), (TF0, TF1), (TF0, TF2), (TF1, TF0), (TF1, TF1), (TF2, TF0), (TF2, TF1))
NOTE: Alt. TFCS applies when alts for SRB for PCCH and SRBs for CCCH/ DCCH/ BCCH are both configured.	

6.10.3.4.4.3a.2 Physical channel parameters

S-CCPCH	Midamble	512 chips
	Codes and time slots	SF16 x 5 codes x 1 time slot (alt. SF16 x 2 codes x 1 time slot)
	Max. Number of data bits/radio frame	1 204 bits (alt. 480 bits)
	TFCI code word	16 bits (alt. 8 bits)
	Puncturing limit	0.84 (alt. 0.84)
NOTE: Alt. applies when alt for SRBs for CCCH/ DCCH/ BCCH is configured.		

6.10.3.4.4.4 RB for CTCH + SRB for CCCH + SRB for BCCH

6.10.3.4.4.4.1 Transport channel parameters

6.10.3.4.4.4.1.1 Transport channel parameters of RB for CTCH

Higher layer	RAB/signalling RB		N/A
	User of Radio Bearer		BMC
RLC	Logical channel type		CTCH
	RLC mode		UM
	Payload sizes, bit		152
	Max data rate, bps		15 200
	UMD PDU header, bit		8
MAC	MAC header, bit		3
	MAC multiplexing		N/A
Layer 1	TrCH type		FACH
	TB sizes, bit		163
	TFS	TF0, bits	0x163
		TF1, bits	1x163
		TF2, bits	2x163
	TTI, ms		20
	Coding type		CC 1/3
	CRC, bit		16
	Max number of bits/TTI before rate matching		1 098
	Max number of bits/radio frame before rate matching		549
	RM attribute		200 to 240

6.10.3.4.4.4.1.2 Transport channel parameters of SRB for CCCH and SRB for BCCH

Higher layer	RAB/signalling RB		SRB#0	SRB#5
	User of Radio Bearer		RRC	RRC
RLC	Logical channel type		CCCH	BCCH
	RLC mode		UM	TM
	Payload sizes, bit		160	168
	Max data rate, bps		16 000	16 800
	AMD/UMD/TrD PDU header, bit		8	0
MAC	MAC header, bit		3	3
	MAC multiplexing		2 logical channel multiplexing	
Layer 1	TrCH type		FACH	
	TB sizes, bit		171	
	TFS	TF0, bits	0x171	
		TF1, bits	1x171	
		TF2, bits	2x171	
	TTI, ms		20	
	Coding type		TC	
	CRC, bit		16	
	Max number of bits/TTI before rate matching		1 134	
	Max number of bits/radio frame before rate matching		567	
	RM attribute		200 to 240	

6.10.3.4.4.4.1.3 TFCS

TFCS size	4
TFCS	(RB for CTCH, SRBs for CCCH/BCCH) = (TF0, TF0), (TF0, TF1), (TF0, TF2), (TF1, TF0) , (TF1, TF1), (TF2, TF0)

6.10.3.4.4.4.2 Physical channel parameters

S-CCPCH	Midamble	512 chips
	Codes and time slots	SF16 x 2 codes x 1 time slot
	Max. Number of data bits/radio frame	472 bits
	TFCI code word	16 bits
	Puncturing limit	0.80

6.10.3.4.5 Combinations on PRACH

6.10.3.4.5.1 SRB for CCCH + SRB for DCCH

6.10.3.4.5.1.1 Transport channel parameters

6.10.3.4.5.1.1.1 Transport channel parameter for SRB for CCCH, SRB for DCCH

Higher layer	RAB/signalling RB		SRB#0	SRB#1	SRB#2	SRB#3	SRB#4
	User of Radio Bearer		RRC	RRC	RRC	NAS_DT High priority	NAS_DT Low priority
RLC	Logical channel type		CCCH	DCCH	DCCH	DCCH	DCCH
	RLC mode		TM	UM	AM	AM	AM
	Payload sizes, bit		168	136	128	128	128
	Max data rate, bps		16 800	13 600	12 800	12 800	12 800
	AMD/UMD/TrD PDU header, bit		0	8	16	16	16
MAC	MAC header, bit		2	26	26	26	26
	MAC multiplexing		5 logical channel multiplexing				
Layer 1	TrCH type		RACH				
	TB sizes, bit		170				
	TFS	TF0, bits	1x170				
	TTI, ms		10				
	Coding type		CC 1/2				
	CRC, bit		16				
	Max number of bits/TTI after channel coding		388				
	Max number of bits/Radio frame before rate matching		388				

6.10.3.4.5.1.1.2 TFCS

TFCS size	1
TFCS	SRBs for CCCH/ DCCH = (TF0)

6.10.3.4.5.1.2 Physical channel parameters

PRACH	Midamble	512 chips
	Codes and time slots	SF8 (alt. SF16) x 1 code x 1 time slot
	Max. Number of data bits/radio frame	488 bits (alt. 244 bits)
	Puncturing Limit	1.0 (alt. 0.60)

6.10.3.4.5.2 Interactive/Background 12.8 kbps PS RAB + SRB for CCCH + SRB for DCCH

6.10.3.4.5.2.1 Transport channel parameters

Higher	RAB/signalling RB	RAB	SRB#0	SRB#1	SRB#2	SRB#3	SRB#4

	User of Radio Bearer	Interactive/ Background RAB	RRC	RRC	RRC	NAS_DT High priority	NAS_DT Low priority
RLC	Logical channel type	DTCH	CCCH	DCCH	DCCH	DCCH	DCCH
	RLC mode	AM	TM	UM	AM	AM	AM
	Payload sizes, bit	128	168	136	128	128	128
	Max data rate, bps	12 800	16 800	13 600	12 800	12 800	12 800
	AMD/UMD/TrD PDU header, bit	16	0	8	16	16	16
MAC	MAC header, bit	26	2	26	26	26	26
	MAC multiplexing	6 logical channel multiplexing					
Layer 1	TrCH type	RACH					
	TB sizes, bit	170					
	TFS TF0, bits	1x170					
	TTI, ms	10					
	Coding type	CC 1/2					
	CRC, bit	16					
	Max number of bits/TTI after channel coding	388					
	Max number of bits/ Radio frame before rate matching	388					

6.10.3.4.5.2.2 Physical channel parameters

See clause 6.10.3.4.5.1.2.

6.10.3.4.5.3 Interactive/Background 12.8 kbps PS RAB + Interactive/Background 12.8 kbps PS RAB + SRB for CCCH + SRB for DCCH

6.10.3.4.5.3.1 Transport channel parameters

Higher layer	RAB/signalling RB	RAB	RAB	SRB#0	SRB#1	SRB#2	SRB#3	SRB#4
	User of Radio Bearer	Interactive/ Background RAB	Interactive/ Background RAB	RRC	RRC	RRC	NAS_DT High prio	NAS_DT Low prio
RLC	Logical channel type	DTCH	DTCH	CCCH	DCCH	DCCH	DCCH	DCCH
	RLC mode	AM	AM	TM	UM	AM	AM	AM
	Payload sizes, bit	128	128	168	136	128	128	128
	Max data rate, bps	12 800	12 800	16 800	13 600	12 800	12 800	12 800
	AMD/UMD/TrD PDU header, bit	16	16	0	8	16	16	16
MAC	MAC header, bit	26	26	2	26	26	26	26
	MAC multiplexing	7 logical channel multiplexing						
Layer 1	TrCH type	RACH						
	TB sizes, bit	170						
	TFS TF0, bits	1x170						
	TTI, ms	10						
	Coding type	CC 1/2						
	CRC, bit	16						
	Max number of bits/TTI after channel coding	388						
	Max number of bits/ Radio frame before rate matching	388						

6.10.3.4.5.3.2 Physical channel parameters

See clause 6.10.3.4.5.1.2.

6.11 Common Radio Bearer configurations for other test purposes

The common radio bearer configurations are used for functional testing of various UE functions. Only common configurations that are used by multiple test cases and are not covered by the reference radio bearer configurations in

clause 6.10 are specified in the present clause. Radio bearer configurations only used by a single test case are specified in the actual test case itself.

NOTE If not specifically specified then the mid-value of the RM attribute value range as specified by the actual reference radio bearer configuration shall be applied for testing.

6.11.1 Unacknowledged Mode Radio Bearer configuration (7 bit Length Indicator)

This configuration is based on the Interactive or background / UL:8 DL 8 kbps / PS RAB + UL:3.4 DL 3.4 kbps SRBs for DCCH (see clause 6.10.2.4.1.23a) with the transport channels parameters of the RAB and TFCS defined as follows.

6.11.1.1 Transport channel parameters for the Uplink RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		UM
	Payload sizes, bit		328
	Max data rate, bps		8 200
	UMD PDU header, bit		8
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		336
	TFS	TF0, bits	0x336
		TF1, bits	1x336
	TTI, ms		40
	Coding type		CC 1/3
	CRC, bit		16
	Max number of bits/TTI after channel coding		1 080
	Uplink: Max number of bits/radio frame before rate matching		270
	RM attribute		135 to 175

6.11.1.2 TFCS

TFCS size	4
TFCS	(8 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF0, TF1), (TF1, TF1)

6.11.1.3 Transport channel parameters for the Downlink RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		UM
	Payload sizes, bit		328
	Max data rate, bps		8 200
	UMD PDU header, bit		8
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		336
	TFS	TF0, bits	0x336
		TF1, bits	1x336
	TTI, ms		40
	Coding type		CC 1/3
	CRC, bit		16
	Max number of bits/TTI after channel coding		1 080
	RM attribute		135 to 175

6.11.1.4 TFCS

TFCS size	4

TFCS	(8 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF0, TF1), (TF1, TF1)

6.11.2 Unacknowledged Mode Radio Bearer configuration (15 bit Length Indicator)

This configuration is based on the Interactive or background / UL:64 DL 64 kbps / PS RAB + UL:3.4 DL 3.4 kbps SRBs for DCCH (see clause 6.10.2.4.1.26) with the transport channels parameters of the RAB defined as followed.

6.11.2.1 Transport channel parameters for the Uplink RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		UM
	Payload sizes, bit		1 336
	Max data rate, bps		66 800
	UMD PDU header, bit		8
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		1 344
	TFS	TF0, bits	0x1344
		TF1, bits	1x1344
	TTI, ms		20
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		4 092
	Uplink: Max number of bits/radio frame before rate matching		2 046
	RM attribute		130 to 170

6.11.2.2 Transport channel parameters for the Downlink RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		UM
	Payload sizes, bit		1 336
	Max data rate, bps		66 800
	UMD PDU header, bit		8
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		1 344
	TFS	TF0, bits	0x1344
		TF1, bits	1x1344
	TTI, ms		20
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		4 092
	RM attribute		130 to 170

6.11.3 Acknowledged Mode Radio Bearer configuration (7 bit Length Indicator)

This configuration is based on the Interactive or background / UL:8 DL 8 kbps / PS RAB + UL:3.4 DL 3.4 kbps SRBs for DCCH (see clause 6.10.2.4.1.23a) with the transport channels parameters of the RAB and TFCS defined as follows.

6.11.3.1 Transport channel parameters for the Uplink RAB

Higher layer	RAB/Signalling RB	RAB
RLC	Logical channel type	DTCH
	RLC mode	AM

	Payload sizes, bit		128
	Max data rate, bps		6 400
	UMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		144
	TFS	0x144	0x144
		1x144	1x144
	TTI, ms		20
	Coding type		CC 1/3
	CRC, bit		16
	Max number of bits/TTI after channel coding		504
	Uplink: Max number of bits/radio frame before rate matching		252
	RM attribute		135 to 175

6.11.3.2 TFCS

TFCS size	4
TFCS	(RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF0, TF1), (TF1, TF1)

6.11.3.3 Transport channel parameters for the Downlink RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		128
	Max data rate, bps		6 400
	UMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		144
	TFS	0x144	0x144
		1x144	1x144
	TTI, ms		20
	Coding type		CC 1/3
	CRC, bit		16
	Max number of bits/TTI after channel coding		504
	RM attribute		135 to 175

6.11.3.4 TFCS

TFCS size	4
TFCS	(RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF0, TF1), (TF1, TF1)

6.11.4 Acknowledged Mode Radio Bearer configuration (15 bit Length Indicator)

This configuration is based on the Interactive or background / UL:64 DL 64 kbps / PS RAB + UL:3.4 DL 3.4 kbps SRBs for DCCH (see clause 6.10.2.4.1.26) with the transport channels parameters of the RAB defined as followed.

6.11.4.1 Transport channel parameters for the Uplink RAB

Higher layer	RAB/Signalling RB	RAB
RLC	Logical channel type	DTCH
	RLC mode	AM
	Payload sizes, bit	1 328
	Max data rate, bps	66 400

	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		1 344
	TFS	TF0, bits	0x1344
		TF1, bits	1x1344
	TTI, ms		20
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		4 092
	Uplink: Max number of bits/radio frame before rate matching		2 046
	RM attribute		130 to 170

6.11.4.2 Transport channel parameters for the Downlink RAB

Higher layer	RAB/Signalling RB		**RAB**
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		1 328
	Max data rate, bps		66 400
	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		1 344
	TFS	TF0, bits	0x1344
		TF1, bits	1x1344
	TTI, ms		20
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		4 092
	RM attribute		130 to 170

6.11.4a Reference Radio Bearer configurations used in MAC-hs testing

6.11.4a.1 5 x Interactive or background / UL: 8 kbps DL: [max bit rate depending on UE category] / UM PS RAB

This reference radio bearer configuration is used by the MAC-hs test case 7.1.5.2 in 3GPP TS 34.123-1 [1].

6.11.4a.1.1 Uplink

6.11.4a.1.1.1 Uplink Transport channel parameters for DCH

6.11.4a.1.1.1.1 Transport channel parameters for 5 x Interactive or background / UL:8 kbps / PS RAB

Higher layer	RAB/Signalling RB		**RB5**	**RB6**	**RB7**	**RB8**	**RB9**
RLC	Logical channel type		DTCH	DTCH	DTCH	DTCH	DTCH
	RLC mode		UM	UM	UM	UM	UM
	Payload sizes, bit		328	328	328	328	328
	Max data rate, bps		8 200	8 200	8 200	8 200	8 200
	UMD PDU header, bit		8	8	8	8	8
MAC	MAC header, bit		4	4	4	4	4
	MAC multiplexing		5 logical channel multiplexing				
Layer 1	TrCH type		DCH				
	TB sizes, bit		340				
	TFS	TF0, bits	0x340				
		TF1, bits	1x340				
	TTI, ms		40				
	Coding type		TC				
	CRC, bit		16				
	Max number of bits/TTI after channel coding		1 080				

	Uplink: Max number of bits/radio frame before rate matching	270
	RM attribute	135 to 175

6.11.4a.1.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.1.1.1.

6.11.4a.1.1.1.3 Uplink TFCS

TFCS size	4
TFCS	(5x8 kbps PS RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF0, TF1), (TF1, TF1)

6.11.4a.1.1.2 Uplink physical channel parameters

DPCH Uplink	Min spreading factor	64
	Max number of DPDCH data bits/radio frame	600
	Puncturing Limit	1.0

6.11.4a.1.2 Downlink

6.11.4a.1.2.1 Transport channel parameters for HS-DSCH

6.11.4a.1.2.1.1 MAC-d flow #1 parameters for 2 x Interactive or background / DL: [max bit rate depending on UE category] / PS RAB

Higher layer	RAB/Signalling RB	RB5	RB6
RLC	Logical channel type	DTCH	DTCH
	RLC mode	UM	UM
	Payload sizes, bit	328	328
	Max data rate, bps	depends on UE category	depends on UE category
	UMD PDU header, bit	8	8
MAC-d	MAC-d header, bit	4	4
	MAC multiplexing	2 logical channel multiplexing	
	MAC-d PDU size, bit	340	

6.11.4a.1.2.1.2 MAC-d flow #2 parameters for 2 x Interactive or background / DL: [max bit rate depending on UE category] / PS RAB

Higher layer	RAB/Signalling RB	RB7	RB8
RLC	Logical channel type	DTCH	DTCH
	RLC mode	UM	UM
	Payload sizes, bit	328	328
	Max data rate, bps	depends on UE category	depends on UE category
	UMD PDU header, bit	8	8
MAC-d	MAC-d header, bit	4	4
	MAC multiplexing	2 logical channel multiplexing	
	MAC-d PDU size, bit	340	

6.11.4a.1.2.1.3 MAC-d flow#3 parameters for Interactive or background / DL: [max bit rate depending on UE category] / PS RAB

Higher layer	RAB/Signalling RB	RB9
RLC	Logical channel type	DTCH
	RLC mode	UM
	Payload sizes, bit	328
	Max data rate, bps	depends on UE category
	UMD PDU header, bit	8
MAC-d	MAC-d header, bit	0
	MAC multiplexing	N/A

	MAC-d PDU size, bit	336

6.11.4a.1.2.1.4 MAC-hs and Layer 1 parameters for Interactive or background / DL: [max bit rate depending on UE category] / PS RAB

MAC-hs	MAC-hs header fixed part, bit	21
Layer 1	TrCH type	HS-DSCH
	TTI	2 ms
	Coding type	TC
	CRC, bit	24

6.11.4a.1.2.2 Downlink Transport channel parameters for DCH

6.11.4a.1.2.2.1 Transport channel parameters for DL: 3.4 kbps SRBs for DCCH

See clause 6.10.2.4.1.2.2.1.1.

6.11.4a.1.2.2.2 Downlink TFCS

TFCS size	2
TFCS	SRBs for DCCH = TF0, TF1

6.11.4a.1.2.3 Downlink physical channel parameters

6.11.4a.1.2.3.1 Downlink physical channel parameters on DPCH

See clause 6.10.2.4.1.2.2.2.

6.11.4a.1.2.3.2 Physical channel parameters on HS-PDSCH

UE HS-DSCH Physical Layer:

HS-PDSCH	Number of processes	2
	Process memory size	Split equally among all processes
	Max Data Rate	Depending on UE category

6.11.5 Reference Radio Bearer configurations used in Radio Bearer testing for 1.28 Mcps TDD

6.11.5.1 RABs and signalling RBs

See clause 6.10.3.1.

6.11.5.2 Combinations of RABs and Signalling RBs

In the present document, physical channel parameters for following combinations of RABs and signalling RBs on a CCTrCH are described.

NOTE: It is understood that for speech service the AMR mode may be operated asymmetrically for the uplink and downlink.

Combinations on DPCH

1) Stand-alone UL:1.7 DL:1.7 kbps SRBs for DCCH.

1a) Stand-alone UL:1.7 DL:1.7 kbps SRBs for DCCH (Multiframe).

2) Stand-alone UL:3.4 DL:3.4 kbps SRBs for DCCH.

3) Stand-alone UL:13.6 DL:13.6 kbps SRBs for DCCH.

4) Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

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

5) Conversational / speech / UL:10.2 DL:10.2 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

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

6) Conversational / speech / UL:7.95 DL:7.95 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

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

7) Conversational / speech / UL:7.4 DL:7.4 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

8) Conversational / speech / UL:6.7 DL:6.7 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

9) Conversational / speech / UL:5.9 DL:5.9 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

10) Conversational / speech / UL:5.15 DL:5.15 kbps / CS RAB
+ UL:1.7 DL:1.7 kbps SRBs for DCCH.

11) Conversational / speech / UL:4.75 DL:4.75 kbps / CS RAB
+ UL:1.7 DL:1.7 kbps SRBs for DCCH.

12) Conversational / unknown / UL:28.8 DL:28.8 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

13) Conversational / unknown / UL:64 DL:64 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

14) Conversational / unknown / UL:32 DL:32 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

15) Streaming / unknown / UL:14.4/DL:14.4 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

16) Streaming / unknown / UL:28.8/DL:28.8 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

17) Streaming / unknown / UL:57.6/DL:57.6 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

18) Void.

19) Void.

20) Void.

21) Void.

22) Void.

23) Interactive or background / UL:32 DL:8 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

23a) Interactive or background / UL:8 DL:8 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

23b) Interactive or background / UL:16 DL:16 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

23c) Interactive or background / UL:32 DL:32 kbps / PS RAB
+ 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)

24) Void.

25) Interactive or background / UL:32 DL: 64 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

26) Interactive or background / UL:64 DL: 64 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

27) Interactive or background / UL:64 DL:128 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

28) Interactive or background / UL:128 DL:128 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

29) Interactive or background / UL:64 DL:144 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

30) Interactive or background / UL:144 DL:144 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

31) Interactive or background / UL:64 DL:256 kbps / PS RAB
+ UL:3.4 DL: 3.4 kbps SRBs for DCCH.

32) Interactive or background / UL:64 DL:384 kbps / PS RAB
+ UL:3.4 DL: 3.4 kbps SRBs for DCCH.

33) Interactive or background / UL:128 DL:384 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

34) Interactive or background / UL:384 DL:384 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

35) Interactive or background / UL:64 DL:2 048 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

36) Void.

37) Void.

38) 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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

39) 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.

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.

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.

42) 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.

43) 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.

44) Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB
+ Interactive or background / UL:128 DL:2 048 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

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.

46) Void.

47) Void.

48) Void.

49) 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.

49a) Conversational / speech / UL:(12.2, 7.95, 5.9, 4.75) DL: (12.2, 7.95, 5.9, 4.75) kbps / CS RAB
+ Conversational / unknown / UL:64 DL:64 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

50) 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.

51) Conversational / unknown / UL:64 DL:64 kbps / CS RAB
+ Interactive or background / UL:64 DL:64 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

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.

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.

52) Conversational / unknown / UL:64 DL:64 kbps / CS RAB
+ Interactive or background / UL:64 DL:128 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

53) Conversational / unknown / UL:64 DL:64 kbps / CS RAB
+ Interactive or background / UL:128 DL:128 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

54) Void.

55) Void.

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.

57) Interactive or Background / UL:64 DL:64 kbps / CS RAB
+ Interactive or background / UL:64 DL:64 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

58) Streaming / Unknown / UL:16 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.

59) Reserved for future use

60) Reserved for future use

61) Conversational / Unknown / UL:8 DL:8 kbps / CS RAB
+ Interactive or background / UL:8 DL:8 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

Combinations on PDSCH, SCCPCH, PUSCH and PRACH

1) Interactive or background / UL:64 DL:256 kbps / PS RAB
+ UL: 3.4/16.8 DL: 3.4/33.6 kbps SRBs for DCCH, CCCH and BCCH
+ UL:16.8 DL: 16 kbps SRBs for SHCCH.

2) Interactive or background / UL:64 DL:384 kbps / PS RAB
+ UL: 3.4/16.8 DL: 3.4/33.6 kbps SRBs for DCCH, CCCH and BCCH
+ UL: 16.8 DL: 16 kbps SRBs for SHCCH.

3) Interactive or background / UL:64 DL:2 048 kbps / PS RAB
+ UL:3.4/16.8 DL: 3.4/33.6 kbps SRBs for DCCH, CCCH and BCCH
+ UL: 16.8 DL: 16 kbps SRBs for SHCCH.

Combinations on PDSCH, SCCPCH, DPCH, PUSCH and PRACH

1) Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB
   + UL:3.4 DL:3.4 kbps SRBs for DCCH
   + Interactive or background / UL:64 DL:256 kbps / PS RAB
   + UL:16.8 kbps SRBs for CCCH and SHCCH
   + DL: 33.6 kbps SRBs for CCCH, SHCCH and BCCH.

2) Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB
   + UL:3.4 DL:3.4 kbps SRBs for DCCH
   + Interactive or background / UL:64 DL:384 kbps / PS RAB
   + UL:16.8 kbps SRBs for CCCH and SHCCH
   + DL: 33.6 kbps SRBs for CCCH, SHCCH and BCCH.

3) Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB
   + UL:3.4 DL:3.4 kbps SRBs for DCCH
   + Interactive or background / UL:64 DL:2 048 kbps / PS RAB
   + UL:16.8 kbps SRBs for CCCH and SHCCH
   + DL: 33.6 kbps SRBs for CCCH, SHCCH and BCCH.

Combinations on SCCPCH

1) Stand-alone 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
   + SRB for CCCH
   + SRBs 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.

3a) SRB for PCCH
   + SRB for CCCH
   + SRB for DCCH
   + SRB for BCCH.

4) RB for CTCH
   + SRB for CCCH
   + SRB for BCCH.

Combinations on PRACH

1) SRB for CCCH
   + SRBs for DCCH.

2) Interactive/Background 12.8 kbps PS RAB
   + SRB for CCCH
   + SRBs for DCCH.

3) Interactive/Background 12.8 kbps PS RAB
   + Interactive/Background 12.8 kbps PS RAB

+ SRB for CCCH
+ SRBs for DCCH.

6.11.5.3 Example of linkage between RABs and services

See clause 6.10.3.3.

6.11.5.4 Typical radio parameter sets

6.11.5.4.1 Combinations on DPCH

6.11.5.4.1.1 Stand-alone UL:1.7 DL:1.7 kbps SRBs for DCCH

6.11.5.4.1.1.1 Uplink

6.11.5.4.1.1.1.1 Transport channel parameters

6.11.5.4.1.1.1.1.1 Transport channel parameters for UL:1.7 kbps SRBs for DCCH

See clause 6.10.3.4.1.1.1.1.1.

6.11.5.4.1.1.1.1.2 TFCS

See clause 6.10.3.4.1.1.1.1.2.

6.11.5.4.1.1.1.2 Physical channel parameters

DPCH Uplink	Modulation	QPSK
	Codes and time slots / radio frame	SF16 x 1 code x 2 time slots
	Max. Number of data bits / radio frame	160 bits
	TFCI code word / radio frame	8 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	1

6.11.5.4.1.1.2 Downlink

6.11.5.4.1.1.2.1 Transport channel parameters

6.11.5.4.1.1.2.1.1 Transport channel parameters for DL:1.7 kbps SRBs for DCCH

See clause 6.10.3.4.1.1.2.1.1.

6.11.5.4.1.1.2.1.2 TFCS

See clause 6.10.3.4.1.1.2.1.2.

6.11.5.4.1.1.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF16 x 1 code x 2 time slots
	Max. Number of data bits / radio frame	160 bits
	TFCI code word / radio frame	8 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	1

6.11.5.4.1.1a Stand-alone UL:1.7 DL:1.7 kbps SRBs for DCCH (multiframe)

6.11.5.4.1.1a.1 Uplink

6.11.5.4.1.1a.1.1 Transport channel parameters

6.11.5.4.1.1a.1.1.1 Transport channel parameters for UL:1.7 kbps SRBs for DCCH

See clause 6.10.3.4.1.1a.1.1.1.

6.11.5.4.1.1a.1.1.2 TFCS

See clause 6.10.3.4.1.1a.1.1.2.

6.11.5.4.1.1a.1.2 Physical channel parameters

DPCH Uplink	Modulation	QPSK
	Codes and time slots / radio frame	SF16 x 1 code x 2 time slots
	Max. Number of data bits / radio frame	160 bits
	TFCI code word / radio frame	8 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.60
NOTE: In case the first TFC in the TFCS is not configured, the TFCI code word will be 4 bit.		

6.11.5.4.1.1a.2 Downlink

6.11.5.4.1.1a.2.1 Transport channel parameters

6.11.5.4.1.1a.2.1.1 Transport channel parameters for DL:1.7 kbps SRBs for DCCH

See clause 6.10.3.4.1.1a.2.1.1.

6.11.5.4.1.1a.2.1.2 TFCS

See clause 6.10.3.4.1.1a.2.1.2.

6.11.5.4.1.1a.2.2 Physical channel parameters

DPCH Uplink	Modulation	QPSK
	Codes and time slots / radio frame	SF16 x 1 code x 2 time slots
	Max. Number of data bits / radio frame	160 bits
	TFCI code word / radio frame	8 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.60
NOTE: In case the first TFC in the TFCS is not configured, the TFCI code word will be 4 bit.		

6.11.5.4.1.2 Stand-alone UL:3.4 DL:3.4 kbps SRBs for DCCH

6.11.5.4.1.2.1 Uplink

6.11.5.4.1.2.1.1 Transport channel parameters

6.11.5.4.1.2.1.1.1 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.2.1.1.2 TFCS

See clause 6.10.3.4.1.2.1.1.2.

6.11.5.4.1.2.1.2 Physical channel parameters

DPCH Uplink	Modulation	QPSK
	Codes and time slots / radio frame	SF16 x 1 code x 2 time slots
	Max. Number of data bits / radio frame	160 bits
	TFCI code word / radio frame	8 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	1
NOTE: In case the first TFCS is not configured, the TFCI code word will be 4 bit.		

6.11.5.4.1.2.2 Downlink

6.11.5.4.1.2.2.1 Transport channel parameters

6.11.5.4.1.2.2.1.1 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.2.2.1.2 TFCS

See clause 6.10.3.4.1.2.2.1.2.

6.11.5.4.1.2.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF16 x 1 code x 2 time slots
	Max. Number of data bits / radio frame	160 bits
	TFCI code word / radio frame	8 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	1
NOTE: In case the first TFCS is not configured, the TFCI code word will be 4 bit.		

6.11.5.4.1.3 Stand-alone UL:13.6 DL:13.6 kbps SRBs for DCCH

6.11.5.4.1.3.1 Uplink

6.11.5.4.1.3.1.1 Transport channel parameters

6.11.5.4.1.3.1.1.1 Transport channel parameters for UL:13.6 kbps SRBs for DCCH

See clause 6.10.3.4.1.3.1.1.1.

6.11.5.4.1.3.1.1.2 TFCS

See clause 6.10.3.4.1.3.1.1.2.

6.11.5.4.1.3.1.2 Physical channel parameters

DPCH Uplink	Modulation	QPSK
	Codes and time slots / radio frame	SF8 x 1 code x 2 time slots
	Max. Number of data bits / radio frame	336 bits
	TFCI code word / radio frame	8 bits
	TPC / radio frame	2x2 bit
	SS / radio frame	2x2 bit
	Puncturing Limit	0.64
NOTE: In case the first TFCS is not configured, the TFCI code word will be 4 bit.		

6.11.5.4.1.3.2 Downlink

6.11.5.4.1.3.2.1 Transport channel parameters

6.11.5.4.1.3.2.1.1 Transport channel parameters for DL:13.6 kbps SRBs for DCCH

See clause 6.10.3.4.1.3.2.1.1.

6.11.5.4.1.3.2.1.2 TFCS

See clause 6.10.3.4.1.3.2.1.2.

6.11.5.4.1.3.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF 16 x 2 code x 2 time slots
	Max. Number of data bits / radio frame	336 bits
	TFCI code word / radio frame	8 bits

	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.64
NOTE: In case the first TFCS is not configured, the TFCI code word will be 4 bit.		

6.11.5.4.1.4 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.11.5.4.1.4.1 Uplink

6.11.5.4.1.4.1.1 Transport channel parameters

6.11.5.4.1.4.1.1.1 Transport channel parameters for Conversational / speech / UL:12.2 kbps / CS RAB

See clause 6.10.3.4.1.4.1.1.1.

6.11.5.4.1.4.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.4.1.1.3 TFCS

See clause 6.10.3.4.1.4.1.1.3.

6.11.5.4.1.4.1.2 Physical channel parameters

DPCH Uplink	Modulation	QPSK
	Codes and time slots / radio frame	SF8 x 1 code x 2 time slots
	Max. Number of data bits / radio frame	328 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.48

6.11.5.4.1.4.2 Downlink

6.11.5.4.1.4.2.1 Transport channel parameters

6.11.5.4.1.4.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 kbps / CS RAB

See clause 6.10.3.4.1.4.2.1.1.

6.11.5.4.1.4.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.4.2.1.3 TFCS

See clause 6.10.3.4.1.4.2.1.3.

6.11.5.4.1.4.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF 16 x 2 code x 2 time slots
	Max. Number of data bits / radio frame	328 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.48

6.11.5.4.1.4a 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

6.11.5.4.1.4a.1 Uplink

6.11.5.4.1.4a.1.1 Transport channel parameters

6.11.5.4.1.4a.1.1.1 Transport channel parameters for Conversational / speech / UL: 12.2 7.95 5.9 4.75 kbps / CS RAB

See clause 6.10.3.4.1.4a.1.1.1.

6.11.5.4.1.4a.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.4a.1.1.3 TFCS

See clause 6.10.3.4.1.4a.1.1.3.

6.11.5.4.1.4a.1.2 Physical channel parameters

DPCH Uplink	Modulation	QPSK
	Codes and time slots / radio frame	SF8 x 1 code x 2 time slots
	Max. Number of data bits / radio frame	328 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.48

6.11.5.4.1.4a.2 Downlink

6.11.5.4.1.4a.2.1 Transport channel parameters

6.11.5.4.1.4a.2.1.1 Transport channel parameters for Conversational / speech / DL: (12.2, 7.95, 5.9, 4.75) kbps / CS RAB

See clause 6.10.3.4.1.4a.2.1.1.

6.11.5.4.1.4a.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.4a.2.1.3 TFCS

See clause 6.10.3.4.1.4a.1.2.1.3.

6.11.5.4.1.4a.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF 16 x 2 code x 2 time slots
	Max. Number of data bits / radio frame	328 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.48

6.11.5.4.1.5 Conversational / speech / UL:10.2 DL:10.2 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.11.5.4.1.5.1 Uplink

6.11.5.4.1.5.1.1 Transport channel parameters

6.11.5.4.1.5.1.1.1 Transport channel parameters for Conversational / speech / UL:10.2 kbps / CS RAB

See clause 6.10.3.4.1.5.1.1.1.

6.11.5.4.1.5.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.5.1.1.3 TFCS

See clause 6.10.3.4.1.5.1.1.3.

6.11.5.4.1.5.1.2 Physical channel parameters

DPCH Uplink	Modulation	QPSK
	Codes and time slots / radio frame	SF 8 x 1 code x 2 time slots
	Max. Number of data bits / radio frame	328 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.52

6.11.5.4.1.5.2 Downlink

6.11.5.4.1.5.2.1 Transport channel parameters

6.11.5.4.1.5.2.1.1 Transport channel parameters for Conversational / speech / DL:10.2 kbps / CS RAB

See clause 6.10.3.4.1.5.2.1.1.

6.11.5.4.1.5.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.5.2.1.3 TFCS

See clause 6.10.3.4.1.5.2.1.3.

6.11.5.4.1.5.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF 16 x 2 code x 2 time slots
	Max. Number of data bits / radio frame	328 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.52

6.11.5.4.1.5a 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

6.11.5.4.1.5a.1 Uplink

6.11.5.4.1.5a.1.1 Transport channel parameters

6.11.5.4.1.5a.1.1.1 Transport channel parameters for Conversational / speech / UL:10.2 6.7 5.9 4.75 kbps / CS RAB

See clause 6.10.3.4.1.5a.1.1.1.

6.11.5.4.1.5a.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.5a.1.1.3 TFCS

See clause 6.10.3.4.1.5a.1.1.3.

6.11.5.4.1.5a.1.2 Physical channel parameters

DPCH Uplink	Modulation	QPSK
	Codes and time slots / radio frame	SF 8 x 1 code x 2 time slots
	Max. Number of data bits / radio frame	328 bits
	TFCI code word / radio frame	16 bits

	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.52

6.11.5.4.1.5a.2 Downlink

6.11.5.4.1.5a.2.1 Transport channel parameters

6.11.5.4.1.5a.2.1.1 Transport channel parameters for Conversational / speech / DL: 10.2 6.7 5.9 4.75 kbps / CS RAB

See clause 6.10.3.4.1.5a.2.1.1.

6.11.5.4.1.5a.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.5a.2.1.3 TFCS

See clause 6.10.3.4.1.5a.2.1.3.

6.11.5.4.1.5a.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF 16 x 2 code x 2 time slots
	Max. Number of data bits / radio frame	328 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.52

6.11.5.4.1.6 Conversational / speech / UL:7.95 DL:7.95 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.11.5.4.1.6.1 Uplink

6.11.5.4.1.6.1.1 Transport channel parameters

6.11.5.4.1.6.1.1.1 Transport channel parameters for Conversational / speech / UL:7.95 kbps / CS RAB

See clause 6.10.3.4.1.6.1.1.1.

6.11.5.4.1.6.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.6.1.1.3 TFCS

See clause 6.10.3.4.1.6.1.1.3.

6.11.5.4.1.6.1.2 Physical channel parameters

DPCH Uplink	Modulation	QPSK
	Codes and time slots / radio frame	SF 8 x 1 code x 2 time slots
	Max. Number of data bits / radio frame	328 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.60

6.11.5.4.1.6.2 Downlink

6.11.5.4.1.6.2.1 Transport channel parameters

6.11.5.4.1.6.2.1.1 Transport channel parameters for Conversational / speech / DL:7.95 kbps / CS RAB

See clause 6.10.3.4.1.6.2.1.1.

6.11.5.4.1.6.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.6.2.1.3 TFCS

See clause 6.10.3.4.1.6.2.1.3.

6.11.5.4.1.6.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF 16 x 2 code x 2 time slots
	Max. Number of data bits / radio frame	328 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.60

6.11.5.4.1.7 Conversational / speech / UL:7.4 DL:7.4 kbps / CS RAB+ UL:3.4 DL:3.4 kbps SRBs for DCCH

6.11.5.4.1.7.1 Uplink

6.11.5.4.1.7.1.1 Transport channel parameters

6.11.5.4.1.7.1.1.1 Transport channel parameters for Conversational / speech / UL:7.4 kbps / CS RAB

See clause 6.10.3.4.1.7.1.1.1.

6.11.5.4.1.7.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.7.1.1.3 TFCS

See clause 6.10.3.4.1.7.1.1.3.

6.11.5.4.1.7.1.2 Physical channel parameters

DPCH Uplink	Modulation	QPSK
	Codes and time slots / radio frame	SF 8 x 1 code x 2 time slots
	Max. Number of data bits / radio frame	328 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.64

6.11.5.4.1.7.2 Downlink

6.11.5.4.1.7.2.1 Transport channel parameters

6.11.5.4.1.7.2.1.1 Transport channel parameters for Conversational / speech / DL:7.4 kbps / CS RAB

See clause 6.10.3.4.1.7.2.1.1.

6.11.5.4.1.7.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.7.2.1.3 TFCS

See clause 6.10.3.4.1.7.2.1.3.

6.11.5.4.1.7.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF 16 x 2 code x 2 time slots
	Max. Number of data bits / radio frame	328 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.64

6.11.5.4.1.7a Conversational / speech / UL:7.4 6.7 5.9 4.75 DL:7.4 6.7 5.9 4.75 / CS RAB+ UL:3.4 DL:3.4 kbps SRBs for DCCH

6.11.5.4.1.7a.1 Uplink

6.11.5.4.1.7a.1.1 Transport channel parameters

6.11.5.4.1.7a.1.1.1 Transport channel parameters for Conversational / speech / UL:7.4 6.7 5.9 4.75 / CS RAB

See clause 6.10.3.4.1.7a.1.1.1.

6.11.5.4.1.7a.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.7a.1.1.3 TFCS

See clause 6.10.3.4.1.7a.1.1.3.

6.11.5.4.1.7a.1.2 Physical channel parameters

DPCH Uplink	Modulation	QPSK
	Codes and time slots / radio frame	SF 8 x 1 code x 2 time slots
	Max. Number of data bits / radio frame	328 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.64

6.11.5.4.1.7a.2 Downlink

6.11.5.4.1.7a.2.1 Transport channel parameters

6.11.5.4.1.7a.2.1.1 Transport channel parameters for Conversational / speech / DL:7.4 6.7 5.9 4.75 / CS RAB

See clause 6.10.3.4.1.7a.2.1.1.

6.11.5.4.1.7a.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.7a.2.1.3 TFCS

See clause 6.10.3.4.1.7a.2.1.3.

6.11.5.4.1.7a.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF 16 x 2 code x 2 time slots
	Max. Number of data bits / radio frame	328 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.64

6.11.5.4.1.8 Conversational / speech / UL:6.7 DL:6.7 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.11.5.4.1.8.1 Uplink

6.11.5.4.1.8.1.1 Transport channel parameters

6.11.5.4.1.8.1.1.1 Transport channel parameters for Conversational / speech / UL:6.7 kbps / CS RAB

See clause 6.10.3.4.1.8.1.1.1.

6.11.5.4.1.8.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.8.1.1.3 TFCS

See clause 6.10.3.4.1.8.1.1.3.

6.11.5.4.1.8.1.2 Physical channel parameters

DPCH Uplink	Modulation	QPSK
	Codes and time slots / radio frame	SF 8 x 1 code x 2 time slots
	Max. Number of data bits / radio frame	328 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.68

6.11.5.4.1.8.2 Downlink

6.11.5.4.1.8.2.1 Transport channel parameters

6.11.5.4.1.8.2.1.1 Transport channel parameters for Conversational / speech / DL:6.7 kbps / CS RAB

See clause 6.10.3.4.1.8.2.1.1.

6.11.5.4.1.8.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.8.2.1.3 TFCS

See clause 6.10.3.4.1.8.2.1.3.

6.11.5.4.1.8.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF 16 x 2 code x 2 time slots
	Max. Number of data bits / radio frame	328 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.68

6.11.5.4.1.9 Conversational / speech / UL:5.9 DL:5.9 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.11.5.4.1.9.1 Uplink

6.11.5.4.1.9.1.1 Transport channel parameters

6.11.5.4.1.9.1.1.1 Transport channel parameters for Conversational / speech / UL:5.9 kbps / CS RAB

See clause 6.10.3.4.1.9.1.1.1.

6.11.5.4.1.9.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.9.1.1.3 TFCS

See clause 6.10.3.4.1.9.1.1.3.

6.11.5.4.1.9.1.2 Physical channel parameters

DPCH Uplink	Modulation	QPSK
	Codes and time slots / radio frame	SF 8 x 1 code x 2 time slots
	Max. Number of data bits / radio frame	328 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.72

6.11.5.4.1.9.2 Downlink

6.11.5.4.1.9.2.1 Transport channel parameters

6.11.5.4.1.9.2.1.1 Transport channel parameters for Conversational / speech / DL:5.9 kbps / CS RAB

See clause 6.10.3.4.1.9.2.1.1.

6.11.5.4.1.9.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.9.2.1.3 TFCS

See clause 6.10.3.4.1.9.2.1.3.

6.11.5.4.1.9.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF 16 x 2 code x 2 time slots
	Max. Number of data bits / radio frame	328 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.72

6.11.5.4.1.10 Conversational / speech / UL:5.15 DL:5.15 kbps / CS RAB + UL:1.7 DL:1.7 kbps SRBs for DCCH

6.11.5.4.1.10.1 Uplink

6.11.5.4.1.10.1.1 Transport channel parameters

6.11.5.4.1.10.1.1.1 Transport channel parameters for Conversational / speech / UL:5.15 kbps / CS RAB

See clause 6.10.3.4.1.10.1.1.1.

6.11.5.4.1.10.1.1.2 Transport channel parameters for UL:1.7 kbps SRBs for DCCH

See clause 6.10.3.4.1.1.1.1.1.

6.11.5.4.1.10.1.1.3 TFCS

See clause 6.10.3.4.1.10.1.1.3.

6.11.5.4.1.10.1.2 Physical channel parameters

DPCH Uplink	Modulation	QPSK
	Codes and time slots / radio frame	SF 8 x 1 code x 2 time slots
	Max. Number of data bits / radio frame	328 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.96

6.11.5.4.1.10.2 Downlink

6.11.5.4.1.10.2.1 Transport channel parameters

6.11.5.4.1.10.2.1.1 Transport channel parameters for Conversational / speech / DL:5.15 kbps / CS RAB

See clause 6.10.3.4.1.10.2.1.1.

6.11.5.4.1.10.2.1.2 Transport channel parameters for DL:1.7 kbps SRBs for DCCH

See clause 6.10.3.4.1.1.2.1.1.

6.11.5.4.1.10.2.1.3 TFCS

See clause 6.10.3.4.1.10.2.1.3.

6.11.5.4.1.10.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF 16 x 2 code x 2 time slots
	Max. Number of data bits / radio frame	328 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.96

6.11.5.4.1.11 Conversational / speech / UL:4.75 DL:4.75 kbps / CS RAB + UL:1.7 DL:1.7 kbps SRBs for DCCH

6.11.5.4.1.11.1 Uplink

6.11.5.4.1.11.1.1 Transport channel parameters

6.11.5.4.1.11.1.1.1 Transport channel parameters for Conversational / speech / UL:4.75 kbps / CS RAB

See clause 6.10.3.4.1.11.1.1.1.

6.11.5.4.1.11.1.1.2 Transport channel parameters for UL:1.7 kbps SRBs for DCCH

See clause 6.10.3.4.1.1.1.1.1.

6.11.5.4.1.11.1.1.3 TFCS

See clause 6.10.3.4.1.11.1.1.3.

6.11.5.4.1.11.1.2 Physical channel parameters

DPCH Uplink	Modulation	QPSK
	Codes and time slots / radio frame	SF 8 x 1 code x 2 time slots
	Max. Number of data bits / radio frame	328 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	1

6.11.5.4.1.11.2 Downlink

6.11.5.4.1.11.2.1 Transport channel parameters

6.11.5.4.1.11.2.1.1 Transport channel parameters for Conversational / speech / DL:4.75 kbps / CS RAB

See clause 6.10.3.4.1.11.2.1.1.

6.11.5.4.1.11.2.1.2 Transport channel parameters for DL:1.7 kbps SRBs for DCCH

See clause 6.10.3.4.1.1.2.1.1.

6.11.5.4.1.11.2.1.3 TFCS

See clause 6.10.3.4.1.11.2.1.3.

6.11.5.4.1.11.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF 16 x 2 code x 2 time slots
	Max. Number of data bits / radio frame	328 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	1

6.11.5.4.1.12 Conversational / unknown / UL:28.8/DL:28.8 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.11.5.4.1.12.1 Uplink

6.11.5.4.1.12.1.1 Transport channel parameters

6.11.5.4.1.12.1.1.1 Transport channel parameters for conversational / unknown / UL:28.8 kbps / CS RAB

See clause 6.10.3.4.1.12.1.1.1.

6.11.5.4.1.12.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.12.1.1.3 TFCS

See clause 6.10.3.4.1.12.1.1.3.

6.11.5.4.1.12.1.2 Physical channel parameters

DPCH Uplink	Modulation	QPSK
	Codes and time slots / radio frame	SF 4 x 1 code x 2 time slots
	Max. Number of data bits / radio frame	680 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.52

6.11.5.4.1.12.2 Downlink

6.11.5.4.1.12.2.1 Transport channel parameters

6.11.5.4.1.12.2.1.1 Transport channel parameters for conversational / unknown / DL:28.8 kbps / CS RAB

See clause 6.10.3.4.1.12.2.1.1.

6.11.5.4.1.12.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.12.2.1.3 TFCS

See clause 6.10.3.4.1.12.2.1.3.

6.11.5.4.1.12.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF 16 x 4 code x 2 time slots
	Max. Number of data bits / radio frame	680 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.52

6.11.5.4.1.13 Conversational / unknown / UL:64 DL:64 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.11.5.4.1.13.1 Uplink

6.11.5.4.1.13.1.1 Transport channel parameters

6.11.5.4.1.13.1.1.1 Transport channel parameters for Conversational / unknown / UL:64 kbps / CS RAB

See clause 6.10.3.4.1.13.1.1.1.

6.11.5.4.1.13.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.13.1.1.3 TFCS

See clause 6.10.3.4.1.13.1.1.3.

6.11.5.4.1.13.1.2 Physical channel parameters

DPCH Uplink	Modulation	QPSK
	Codes and time slots / radio frame	SF2 x 1 code x 2 time slots
	Max. Number of data bits / radio frame	1 384 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.52

6.11.5.4.1.13.2 Downlink

6.11.5.4.1.13.2.1 Transport channel parameters

6.11.5.4.1.13.2.1.1 Transport channel parameters for Conversational / unknown / DL:64 kbps / CS RAB

See clause 6.10.3.4.1.13.2.1.1.

6.11.5.4.1.13.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.13.2.1.3 TFCS

See clause 6.10.3.4.1.13.2.1.3.

6.11.5.4.1.13.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF 16 x 8 code x 2 time slots
	Max. Number of data bits / radio frame	1 384 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits

	SS / radio frame	2x2 bits
	Puncturing Limit	0.52

6.11.5.4.1.14 Conversational / unknown / UL:32 DL:32 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.11.5.4.1.14.1 Uplink

6.11.5.4.1.14.1.1 Transport channel parameters

6.11.5.4.1.14.1.1.1 Transport channel parameters for Conversational / unknown / UL:32 kbps / CS RAB

See clause 6.10.3.4.1.14.1.1.1.

6.11.5.4.1.14.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.14.1.1.3 TFCS

See clause 6.10.3.4.1.14.1.1.3.

6.11.5.4.1.14.1.2 Physical channel parameters

DPCH Uplink	Modulation	QPSK
	Codes and time slots / radio frame	SF4 x 1 code x 2 time slots
	Max. Number of data bits / radio frame	680 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.44

6.11.5.4.1.14.2 Downlink

6.11.5.4.1.14.2.1 Transport channel parameters

6.11.5.4.1.14.2.1.1 Transport channel parameters for Conversational / unknown / DL:32 kbps / CS RAB

See clause 6.10.3.4.1.14.2.1.1.

6.11.5.4.1.14.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.14.2.1.3 TFCS

See clause 6.10.3.4.1.14.2.1.3.

6.11.5.4.1.14.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF16 x 4 code x 2 time slots
	Max. Number of data bits / radio frame	680 bits
	TFCI code word / radio frame	8 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.44

6.11.5.4.1.15 Streaming / unknown / UL:14.4/DL:14.4 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.11.5.4.1.15.1 Uplink

6.11.5.4.1.15.1.1 Transport channel parameters

6.11.5.4.1.15.1.1.1 Transport channel parameters for Streaming / unknown / UL: 14.4 kbps / CS RAB

See clause 6.10.3.4.1.15.1.1.1.

6.11.5.4.1.15.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.15.1.1.3 TFCS

See clause 6.10.3.4.1.15.1.1.3.

6.11.5.4.1.15.1.2 Physical channel parameters

DPCH Uplink	Modulation	QPSK
	Codes and time slots / radio frame	SF4 x 1 code x 2 time slots
	Max. Number of data bits / radio frame	680 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	1

6.11.5.4.1.15.2 Downlink

6.11.5.4.1.15.2.1 Transport channel parameters

6.11.5.4.1.15.2.1.1 Transport channel parameters for Streaming / unknown / DL:14.4 kbps / CS RAB

See clause 6.10.3.4.1.15.2.1.1.

6.11.5.4.1.15.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.15.2.1.3 TFCS

See clause 6.10.3.4.1.15.2.1.3.

6.11.5.4.1.15.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF16 x 3 code x 2 time slots
	Max. Number of data bits / radio rame	504 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.76

6.11.5.4.1.16 Streaming / unknown / UL:28.8/DL:28.8 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.11.5.4.1.16.1 Uplink

6.11.5.4.1.16.1.1 Transport channel parameters

6.11.5.4.1.16.1.1.1 Transport channel parameters for Streaming / unknown / UL:28.8 kbps / CS RAB

See clause 6.10.3.4.1.16.1.1.1.

6.11.5.4.1.16.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.16.1.1.3 TFCS

See clause 6.10.3.4.1.16.1.1.3.

6.11.5.4.1.16.1.2 Physical channel parameters

DPCH Uplink	Modulation	QPSK
	Codes and time slots / frame	SF4 x 1 code x 2 time slots
	Max. Number of data bits / radio frame	680 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.56

6.11.5.4.1.16.2 Downlink

6.11.5.4.1.16.2.1 Transport channel parameters

6.11.5.4.1.16.2.1.1 Transport channel parameters for Streaming / unknown / DL:28.8 kbps / CS RAB

See clause 6.10.3.4.1.16.2.1.1.

6.11.5.4.1.16.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.16.2.1.3 TFCS

See clause 6.10.3.4.1.16.2.1.3.

6.11.5.4.1.16.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF16 x 4 code x 2 time slots
	Max. Number of data bits / radio frame	680 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.56

6.11.5.4.1.17 Streaming / unknown / UL:57.6/DL:57.6 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.11.5.4.1.17.1 Uplink

6.11.5.4.1.17.1.1 Transport channel parameters

6.11.5.4.1.17.1.1.1 Transport channel parameters for Streaming / unknown / UL:57.6 kbps / CS RAB

See clause 6.10.3.4.1.17.1.1.1.

6.11.5.4.1.17.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.17.1.1.3 TFCS

See clause 6.10.3.4.1.17.1.1.3.

6.11.5.4.1.17.1.2 Physical channel parameters

DPCH Uplink	Modulation	QPSK
	Codes and time slots / radio frame	SF2 x 1 code x 2 time slots
	Max. Number of data bits / radio frame	1 384 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.68

6.11.5.4.1.17.2 Downlink

6.11.5.4.1.17.2.1 Transport channel parameters

6.11.5.4.1.17.2.1.1 Transport channel parameters for Streaming / unknown / DL:57.6 kbps / CS RAB

See clause 6.10.3.4.1.17.2.1.1.

6.11.5.4.1.17.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.17.2.1.3 TFCS

See clause 6.10.3.4.1.17.2.1.3.

6.11.5.4.1.17.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF16 x 8 code x 2 time slots
	Max. Number of data bits / radio frame	1 384 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.68

6.11.5.4.1.18 Void

6.11.5.4.1.19 Void

6.11.5.4.1.20 Void

6.11.5.4.1.21 Void

6.11.5.4.1.22 Void

6.11.5.4.1.23 Interactive or background / UL:32 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.11.5.4.1.23.1 Uplink

6.11.5.4.1.23.1.1 Transport channel parameters

6.11.5.4.1.23.1.1.1 Transport channel parameters for Interactive or background / UL:32 kbps / PS RAB

See clause 6.10.3.4.1.23.1.1.1.

6.11.5.4.1.23.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.23.1.1.3 TFCS

See clause 6.10.3.4.1.23.1.1.3.

6.11.5.4.1.23.1.2 Physical channel parameters

DPCH Uplink	Modulation	QPSK
	Codes and time slots / radio frame	SF 4 x 1 code x 2 time slots
	Max. Number of data bits/radio frame	680bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.48 (alt. 0.44)

6.11.5.4.1.23.2 Downlink

6.11.5.4.1.23.2.1 Transport channel parameters

6.11.5.4.1.23.2.1.1 Transport channel parameters for Interactive or background / DL:8 kbps / PS RAB

See clause 6.10.3.4.1.23.2.1.1.

6.11.5.4.1.23.2.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.23.2.1.3 TFCS

See clause 6.10.3.4.1.23.2.1.3.

6.11.5.4.1.23.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF 16 x 2 codes x 2 time slots
	Max. Number of data bits/radio frame	336 bits
	TFCI code word / radio frame	8 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.76

6.11.5.4.1.23a Interactive or background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.11.5.4.1.23a.1 Uplink

6.11.5.4.1.23a.1.1 Transport channel parameters

6.11.5.4.1.23a.1.1.1 Transport channel parameters for Interactive or background / UL:8kbps / PS RAB

See clause 6.10.3.4.1.23a.1.1.1.

6.11.5.4.1.23a.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.23a.1.1.3 TFCS

See clause 6.10.3.4.1.23a.1.1.3.

6.11.5.4.1.23a.1.2 Physical channel parameters

DPCH Uplink	Modulation	QPSK
	Codes and time slots / radio frame	SF 8 x 1 code x 2 time slots
	Max. Number of data bits / radio frame	328 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.72 (alt 0.68)

6.11.5.4.1.23a.2 Downlink

See clause 6.11.5.4.1.23.2.

6.11.5.4.1.23b Interactive or background / UL:16 DL:16 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.11.5.4.1.23b.1 Uplink

6.11.5.4.1.23b.1.1 Transport channel parameters

6.11.5.4.1.23b.1.1.1 Transport channel parameters for Interactive or background / UL:16 kbps / PS RAB

See clause 6.10.3.4.1.23b.1.1.1.

6.11.5.4.1.23b.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.23b.1.1.3 TFCS

See clause 6.10.3.4.1.23b.1.1.3.

6.11.5.4.1.23b.1.2 Physical channel parameters

DPCH Uplink	Modulation	QPSK
	Codes and time slots / radio frame	SF4 x 1 code x 2 time slots
	Max. Number of data bits / radio frame	688 bits
	TFCI code word / radio frame	16bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.92 alt (0.84)

6.11.5.4.1.23b.2 Downlink

6.11.5.4.1.23b.2.1 Transport channel parameters

6.11.5.4.1.23b.2.1.1 Transport channel parameters for Interactive or background / DL:16 kbps / PS RAB

See clause 6.10.3.4.1.23b.2.1.1.

6.11.5.4.1.23b.2.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.23b.2.1.3 TFCS

See clause 6.10.3.4.1.23b.2.1.3.

6.11.5.4.1.23b.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF16 x 3 code x 2 time slots
	Max. Number of data bits / radio rame	512 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.68

6.11.5.4.1.23c Interactive or background / UL:32 DL32 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.11.5.4.1.23c.1 Uplink

6.11.5.4.1.23c.1.1 Transport channel parameters

6.11.5.4.1.23c.1.1.1 Transport channel parameters for Interactive or background / UL:32 kbps / PS RAB

See clause 6.10.3.4.1.23c.1.1.1.

6.11.5.4.1.23c.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.23c.1.1.3 TFCS

See clause 6.10.3.4.1.23c.1.1.3.

6.11.5.4.1.23c.1.2 Physical channel parameters

DPCH Uplink	Modulation	QPSK
	Codes and time slots / radio frame	SF 4 x 1 code x 2 time slots
	Max. Number of data bits/radio frame	680bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.48 (alt 0.44)

6.11.5.4.1.23c.2 Downlink

6.11.5.4.1.23c.2.1 Transport channel parameters

6.11.5.4.1.23c.2.1.1 Transport channel parameters for Interactive or background / DL:32 kbps / PS RAB

See clause 6.10.3.4.1.23c.2.1.1.

6.11.5.4.1.23c.2.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.23c.2.1.3 TFCS

See clause 6.10.3.4.1.23c.2.1.3.

6.11.5.4.1.23c.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF16 x 4 code x 2 time slots
	Max. Number of data bits/radio frame	680 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.48

6.11.5.4.1.23d Interactive or background / UL:32 DL32 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.11.5.4.1.23d.1 Uplink

6.11.5.4.1.23d.1.1 Transport channel parameters

6.11.5.4.1.23d.1.1.1 Transport channel parameters for Interactive or background / UL:32 kbps / PS RAB

See clause 6.10.3.4.1.23d.1.1.1.

6.11.5.4.1.23d.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.23d.1.1.3 TFCS

See clause 6.10.3.4.1.23d.1.1.3.

6.11.5.4.1.23d.1.2 Physical channel parameters

DPCH Uplink	Modulation	QPSK
	Codes and time slots / radio frame	SF 4 x 1 code x 2 time slots
	Max. Number of data bits/radio frame	680 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.48 (alt. 0.44)

6.11.5.4.1.23d.2 Downlink

6.11.5.4.1.23d.2.1 Transport channel parameters

6.11.5.4.1.23d.2.1.1 Transport channel parameters for Interactive or background / DL:32 kbps / PS RAB

See clause 6.10.3.4.1.23d.2.1.1.

6.11.5.4.1.23d.2.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.23d.2.1.3 TFCS

See clause 6.10.3.4.1.23d.2.1.3.

6.11.5.4.1.23d.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF16 x 4 code x 2 time slots
	Max. Number of data bits/radio frame	680 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.48

6.11.5.4.1.24 Void.

6.11.5.4.1.25 Interactive or background / UL:32 DL: 64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.11.5.4.1.25.1 Uplink

See clause 6.11.5.4.1.23.1.

6.11.5.4.1.25.2 Downlink

6.11.5.4.1.25.2.1 Transport channel parameters

6.11.5.4.1.25.2.1.1 Transport channel parameters for Interactive or background / DL:64 kbps / PS RAB

See clause 6.10.3.4.1.25.2.1.1.

6.11.5.4.1.25.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.25.2.1.3 TFCS

See clause 6.10.3.4.1.25.2.1.3.

6.11.5.4.1.25.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF16 x 8 codes x 2 time slots
	Max. Number of data bits/radio frame	1 384 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit/ radio frame	0.56

6.11.5.4.1.26 Interactive or background / UL:64 DL: 64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.11.5.4.1.26.1 Uplink

6.11.5.4.1.26.1.1 Transport channel parameters

6.11.5.4.1.26.1.1.1 Transport channel parameters for Interactive or background / UL:64 kbps / PS RAB

See clause 6.10.3.4.1.26.1.1.1.

6.11.5.4.1.26.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.26.1.1.3 TFCS

See clause 6.10.3.4.1.26.1.1.3.

6.11.5.4.1.26.1.2 Physical channel parameters

DPCH Uplink		Physical 1	Physical 2
	Modulation	QPSK	QPSK
	Codes and time slots / radio frame	SF2 x 1 code x 2 time slots	SF1 x 1 code x 2 time slots
	Max. Number of data bits/radio frame	1 384 bits	2 792 bits
	TFCI code word / radio frame	16 bits	16 bits
	TPC / radio frame	2x2 bits	2x2 bits
	SS / radio frame	2x2 bits	2x2 bits
	Puncturing Limit	0.56 (alt 0.48)	1

6.11.5.4.1.26.2 Downlink

See clause 6.11.5.4.1.25.2.

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

6.11.5.4.1.27.1 Uplink

See clause 6.11.5.4.1.26.1.

6.11.5.4.1.27.2 Downlink

6.11.5.4.1.27.2.1 Transport channel parameters

6.11.5.4.1.27.2.1.1 Transport channel parameters for Interactive or background / DL:128 kbps / PS RAB

See clause 6.10.3.4.1.27.2.1.1.

6.11.5.4.1.27.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.27.2.1.3 TFCS

See clause 6.10.3.4.1.27.2.1.3.

6.11.5.4.1.27.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF 16 x 9 codes x 4 time slots
	Max. Number of data bits/radio frame	3 144 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.68

6.11.5.4.1.28 Interactive or background / UL:128 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.11.5.4.1.28.1 Uplink

6.11.5.4.1.28.1.1 Transport channel parameters

6.11.5.4.1.28.1.1.1 Transport channel parameters for Interactive or background / UL:128 kbps / PS RAB

See clause 6.10.3.4.1.28.1.1.1.

6.11.5.4.1.28.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.28.1.1.3 TFCS

See clause 6.10.3.4.1.28.1.1.3.

6.11.5.4.1.28.1.2 Physical channel parameters

DPCH Uplink	Modulation	QPSK
	Codes and time slots / radio frame	SF1 x 1 codes x 2 time slots
	Max. Number of data bits/radio frame	2 792 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.60

6.11.5.4.1.28.2 Downlink

See clause 6.11.5.4.1.27.2.

6.11.5.4.1.29 Interactive or background / UL:64 DL:144 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH

6.11.5.4.1.29.1 Uplink

See clause 6.11.5.4.1.26.1.

6.11.5.4.1.29.2 Downlink

6.11.5.4.1.29.2.1 Transport channel parameters

6.11.5.4.1.29.2.1.1 Transport channel parameters for Interactive or background / DL:144 kbps / PS RAB

See clause 6.10.3.4.1.29.2.1.1.

6.11.5.4.1.29.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.29.2.1.3 TFCS

See clause 6.10.3.4.1.29.2.1.3.

6.11.5.4.1.29.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF 16 x 9 codes x 4 time slots
	Max. Number of data bits/radio frame	3 144 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.52

6.11.5.4.1.30 Interactive or background / UL:144 DL:144 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH

6.11.5.4.1.30.1 Uplink

6.11.5.4.1.30.1.1 Transport channel parameters

6.11.5.4.1.30.1.1.1 Transport channel parameters for Interactive or background / UL:144 kbps / PS RAB

See clause 6.10.3.4.1.30.1.1.1.

6.11.5.4.1.30.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.30.1.1.3 TFCS

See clause 6.10.3.4.1.30.1.1.3.

6.11.5.4.1.30.1.2 Physical channel parameters

DPCH Uplink	Modulation	QPSK	8PSK
	Codes and time slots / radio frame	(SF1 x 1 code x 2 time slots) + (SF2 x 1 code x 2 time slots)	SF1 x 1code x 2 time slots
	Max. Number of data bits/radio frame	4 200 bits	4 188 bits
	TFCI code word / radio frame	16 bits	24 bits
	TPC / radio frame	2x2 bits	2x3 bits
	SS / radio frame	2x2 bits	2x3 bits
	Puncturing Limit	0.72 (alt 0.64)	0.72 (alt 0.64)

6.11.5.4.1.30.2 Downlink

See clause 6.11.5.4.1.29.2.

6.11.5.4.1.31 Interactive or background / UL:64 DL:256 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH

6.11.5.4.1.31.1 Uplink

See clause 6.11.5.4.1.26.1.

6.11.5.4.1.31.2 Downlink

6.11.5.4.1.31.2.1 Transport channel parameters

6.11.5.4.1.31.2.1.1 Transport channel parameters for Interactive or background / DL:256 kbps / PS RAB

See clause 6.10.3.4.1.31.2.1.1.

6.11.5.4.1.31.2.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.31.2.1.3 TFCS

See clause 6.10.3.4.1.31.2.1.3.

6.11.5.4.1.31.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF 1 x 1 code x 4 time slots
	Max. Number of data bits/radio frame	5 608 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.56

6.11.5.4.1.32 Interactive or background / UL:64 DL:384 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH

6.11.5.4.1.32.1 Uplink

See clause 6.11.5.4.1.26.1.

6.11.5.4.1.32.2 Downlink

6.11.5.4.1.32.2.1 Transport channel parameters

6.11.5.4.1.32.2.1.1 Transport channel parameters for Interactive or background / DL:384 kbps / PS RAB

See clause 6.10.3.4.1.32.2.1.1.

6.11.5.4.1.32.2.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.32.2.1.3 TFCS

See clause 6.10.3.4.1.32.2.1.3.

6.11.5.4.1.32.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK	8PSK
	Codes and time slots / radio frame	SF1 x 1 code x 6 time slots	SF1 x 1 code x 4 time slots
	Max. Number of data bits/radio frame	8 424 bits	8 412 bits
	TFCI code word / radio frame	16 bits	24 bits
	TPC / radio frame	2x2 bits	2x3 bits
	SS / radio frame	2x2 bits	2x3 bits
	Puncturing Limit	0.64	0.64

6.11.5.4.1.33 Interactive or background / UL:128 DL:384 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.11.5.4.1.33.1 Uplink

See clause 6.11.5.4.1.28.1.

6.11.5.4.1.33.2 Downlink

See clause 6.11.5.4.1.32.2.

6.11.5.4.1.34 Interactive or background / UL:384 DL:384 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.11.5.4.1.34.1 Uplink

6.11.5.4.1.34.1.1 Transport channel parameters

6.11.5.4.1.34.1.1.1 Transport channel parameters for Interactive or background / UL:384 kbps / PS RAB

See clause 6.10.3.4.1.34.1.1.1.

6.11.5.4.1.34.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.34.1.1.3 TFCS

See clause 6.10.3.4.1.34.1.1.3.

6.11.5.4.1.34.1.2 Physical channel parameters

DPCH Uplink	Modulation	QPSK	8PSK
	Codes and time slots / radio frame	SF 1 x 1 code x 6 time slots	SF 1 x 1 code x 4 time slots
	Max. Number of data bits/radio frame	8 424 bits	8 412 bits
	TFCI code word / radio frame	16 bits	24 bits
	TPC / radio frame	2x2 bits	2x3 bits
	SS / radio frame	2x2 bits	2x3 bits
	Puncturing Limit	0.64	0.64

6.11.5.4.1.34.2 Downlink

See clause 6.11.5.4.1.32.2.

6.11.5.4.1.35 Interactive or background / UL:64 DL:2 048 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.11.5.4.1.35.1 Uplink

See clause 6.11.5.4.1.26.1.

6.11.5.4.1.35.2 Downlink

6.11.5.4.1.35.2.1 Transport channel parameters

6.11.5.4.1.35.2.1.1 Transport channel parameters for Interactive or background / DL:2 048 kbps / PS RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		1 704
	Max data rate, bps		2 048 000
	RLC header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		1720
	TFS	TF0, bits	0x1720
		TF1, bits	1x1720
		TF2, bits	2x1720
		TF3, bits	4x1720
		TF4, bits	8x1720
		TF5, bits	12x1720
		TF6, bits	N/A (alt. 16x1720)
		TF7, bits	N/A (alt. 20x1720)
		TF8, bits	N/A (alt. 24x1720)
	TTI, ms		10 (alt. 20)
	Coding type		No coding
	CRC, bit		24
	Max number of bits/TTI after channel coding		20 928 (alt. 41 856)
	Max number of bits/radio frame before rate matching		20 928 (alt. 20 928)
	RM attribute		130 to 170

6.11.5.4.1.35.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.35.2.1.3 TFCS

TFCS size	12 (alt.18)
TFCS	(2 048 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF3, TF0), (TF4, TF0), (TF5, TF0), (TF0, TF1), (TF1, TF1), (TF2, TF1), (TF3, TF1), (TF4, TF1), (TF5, TF1), (alt. (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF3, TF0), (TF4, TF0), (TF5, TF0), (TF6, TF0), (TF7, TF0), (TF8, TF0), (TF0, TF1), (TF1, TF1), (TF2, TF1), (TF3, TF1), (TF4, TF1), (TF5, TF1), (TF6, TF1), (TF7, TF1), (TF8, TF1))

6.11.5.4.1.35.2.2 Physical channel parameters

DPCH Downlink	Modulation	8PSK
	Codes and time slots / radio frame	SF1 x 1 code x 10 time slots
	Max. Number of data bits/radio frame	21 084 bits
	TFCI code word / radio frame	24 bits
	TPC / radio frame	2x3 bits

	SS / radio frame	2x3 bits
	Puncturing Limit	1

6.11.5.4.1.36 Void

6.11.5.4.1.37 Void

6.11.5.4.1.38 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

6.11.5.4.1.38.1 Uplink

6.11.5.4.1.38.1.1 Transport channel parameters

6.11.5.4.1.38.1.1.1 Transport channel parameters for Conversational / speech / UL:12.2 kbps / CS RAB

See clause 6.10.3.4.1.4.1.1.1.

6.11.5.4.1.38.1.1.2 Transport channel parameters for Interactive or background / UL:32 kbps / PS RAB

See clause 6.10.3.4.1.23.1.1.1.

6.11.5.4.1.38.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.38.1.1.4 TFCS

See clause 6.10.3.4.1.38.1.1.4.

6.11.5.4.1.38.1.2 Physical channel parameters

DPCH Uplink	Modulation	QPSK
	Codes and time slots / radio frame	SF 2 x 1 code x 2 time slots
	Max. Number of data bits/radio frame	1 384 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.72 (alt 0.68)

6.11.5.4.1.38.2 Downlink

6.11.5.4.1.38.2.1 Transport channel parameters

6.11.5.4.1.38.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 kbps / CS RAB

See clause 6.10.3.4.1.4.2.1.1.

6.11.5.4.1.38.2.1.2 Transport channel parameters for Interactive or background / DL:8 kbps / PS RAB

See clause 6.10.3.4.1.23.2.1.1.

6.11.5.4.1.38.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.38.2.1.4 TFCS

See clause 6.10.3.4.1.38.2.1.4.

6.11.5.4.1.38.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF16 x 3 codes x 2 time slots
	Max. Number of data bits/radio frame	504 bits
	TFCI code word / radio frame	16 bits

	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.44

6.11.5.4.1.38a 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

6.11.5.4.1.38a.1 Uplink

6.11.5.4.1.38a.1.1 Transport channel parameters

6.11.5.4.1.38a.1.1.1 Transport channel parameters for Conversational / speech / UL:12.2 kbps / CS RAB

See clause 6.10.3.4.1.4.1.1.1.

6.11.5.4.1.38a.1.1.2 Transport channel parameters for Interactive or background / UL:0 kbps / PS RAB

See clause 6.10.3.4.1.38a.1.1.2.

6.11.5.4.1.38a.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.38a.1.1.4 TFCS

See clause 6.10.3.4.1.38a.1.1.4.

6.11.5.4.1.38a.1.2 Physical channel parameters

DPCH Uplink	Modulation	QPSK
	Codes and time slots / radio frame	SF8 x 1 code x 2 time slots
	Max. Number of data bits / radio frame	328 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.48

6.11.5.4.1.38a.2 Downlink

6.11.5.4.1.38a.2.1 Transport channel parameters

6.11.5.4.1.38a.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 kbps / CS RAB

See clause 6.10.3.4.1.4.2.1.1.

6.11.5.4.1.38a.2.1.2 Transport channel parameters for Interactive or background / DL:0 kbps / PS RAB

See clause 6.10.3.4.1.38a.2.1.2.

6.11.5.4.1.38a.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.38a.2.1.4 TFCS

See clause 6.10.3.4.1.38a.2.1.4.

6.11.5.4.1.38a.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF 16 x 2 code x 2 time slots
	Max. Number of data bits / radio frame	328 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.48

6.11.2.5.1.38b 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

6.11.5.4.1.38b.1 Uplink

6.11.5.4.1.38b.1.1 Transport channel parameters

6.11.5.4.1.38b.1.1.1 Transport channel parameters for Conversational / speech / UL:12.2 kbps / CS RAB

See clause 6.10.3.4.1.4.1.1.1.

6.11.5.4.1.38b.1.1.2 Transport channel parameters for Interactive or background / UL:8 kbps / PS RAB

See clause 6.10.3.4.1.23a.1.1.1.

6.11.5.4.1.38b.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.38b.1.1.4 TFCS

See clause 6.10.3.4.1.38b.1.1.4.

6.11.5.4.1.38b.1.2 Physical channel parameters

DPCH Uplink	Modulation	QPSK
	Codes and time slots / frame	SF4 x 1 code x 2 time slots
	Max. Number of data bits / radio frame	680 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.64 (alt. 0.60)

6.11.5.4.1.38b.2 Downlink

6.11.5.4.1.38b.2.1 Transport channel parameters

6.11.5.4.1.38b.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 kbps / CS RAB

See clause 6.10.3.4.1.4.2.1.1.

6.11.5.4.1.38b.2.1.2 Transport channel parameters for Interactive or background / DL:8 kbps / PS RAB

See clause 6.10.3.4.1.23.2.1.1.

6.11.5.4.1.38b.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.38b.2.1.4 TFCS

See clause 6.10.3.4.1.38b.2.1.4.

6.11.5.4.1.38b.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF16 x 4 code x 2 time slots
	Max. Number of data bits / radio frame	680 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.64

6.11.5.4.1.38c 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

6.11.5.4.1.38c.1 Uplink

6.11.5.4.1.38c.1.1 Transport channel parameters

6.11.5.4.1.38c.1.1.1 Transport channel parameters for Conversational / speech / UL:12.2 kbps / CS RAB

See clause 6.10.3.4.1.4.1.1.1.

6.11.5.4.1.38c.1.1.2 Transport channel parameters for Interactive or background / UL:32 kbps / PS RAB

See clause 6.10.3.4.1.23d.1.1.1.

6.11.5.4.1.38c.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.38c.1.1.4 TFCS

See clause 6.10.3.4.1.38c.1.1.4.

6.11.5.4.1.38c.1.2 Physical channel parameters

DPCH Uplink	Modulation	QPSK
	Codes and time slots / radio frame	SF2 x 1 code x 2 time slots
	Max. Number of data bits / radio frame	1 384 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.72 (alt 0.64) for TFCS size=18 0.80 (alt 0.72) for TFCS size=17

6.11.5.4.1.38c.2 Downlink

6.11.5.4.1.38c.2.1 Transport channel parameters

6.11.5.4.1.38c.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 kbps / CS RAB

See clause 6.10.3.4.1.4.2.1.1.

6.11.5.4.1.38c.2.1.2 Transport channel parameters for Interactive or background / DL:32 kbps / PS RAB

See clause 6.10.3.4.1.23d.2.1.1.

6.11.5.4.1.38c.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.38c.2.1.4 TFCS

See clause 6.10.3.4.1.38c.2.1.4.

6.11.5.4.1.38c.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF16 x 8 code x 2 time slots
	Max. Number of data bits / radio frame	1 384 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.72 (alt 0.64)

6.11.5.4.1.38d 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

6.11.5.4.1.38d.1 Uplink

6.11.5.4.1.38d.1.1 Transport channel parameters

6.11.5.4.1.38d.1.1.1 Transport channel parameters for Conversational / speech / UL:12.2 kbps / CS RAB

See clause 6.10.3.4.1.4.1.1.1.

6.11.5.4.1.38d.1.1.2 Transport channel parameters for Interactive or background / UL:64 kbps / PS RAB

See clause 6.10.3.4.1.38d.1.1.2.

6.11.5.4.1.38d.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.38d.1.1.4 TFCS

See clause 6.10.3.4.1.38d.1.1.4.

6.11.5.4.1.38d.1.2 Physical channel parameters

DPCH Uplink	Modulation	QPSK	8PSK
	Codes and time slots / radio frame	(SF1 x 1 code x 2 time slots) + (SF2 x 1 code x 2 time slots)	SF1 x 1code x 2 time slots
	Max. Number of data bits/radio frame	4 200 bits	4 188 bits
	TFCI code word / radio frame	16 bits	24 bits
	TPC / radio frame	2x2 bits	2x3 bits
	SS / radio frame	2x2 bits	2x3 bits
	Puncturing Limit	0.72 (alt 0.64)	0.72 (alt 0.64)

6.11.5.4.1.38d.2 Downlink

6.11.5.4.1.38d.2.1 Transport channel parameters

6.11.5.4.1.38d.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 kbps / CS RAB

See clause 6.10.3.4.1.4.2.1.1.

6.11.5.4.1.38d.2.1.2 Transport channel parameters for Interactive or background / DL:64 kbps / PS RAB

See clause 6.10.3.4.1.38d.2.1.2.

6.11.5.4.1.38d.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.38d.2.1.4 TFCS

See clause 6.10.3.4.1.38d.2.1.4.

6.11.5.4.1.38d.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF 16 x 9 codes x 4 time slots
	Max. Number of data bits/radio frame	3 144 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.52

6.11.5.4.1.38e 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

6.11.5.4.1.38e.1 Uplink

6.11.5.4.1.38e.1.1 Transport channel parameters

6.11.5.4.1.38e.1.1.1 Transport channel parameters for Conversational / speech / UL: 12.2 7.95 5.9 4.75 / CS RAB

See clause 6.10.3.4.1.4a.1.1.1.

6.11.5.4.1.38e.1.1.2 Transport channel parameters for Interactive or background / UL:0 kbps / PS RAB

See clause 6.10.3.4.1.38a.1.1.2.

6.11.5.4.1.38e.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.38e.1.1.4 TFCS

See clause 6.10.3.4.1.38e.1.1.4.

6.11.5.4.1.38e.1.2 Physical channel parameters

DPCH Uplink	Modulation	QPSK
	Codes and time slots / radio frame	SF8 x 1 code x 2 time slots
	Max. Number of data bits / radio frame	328 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.48

6.11.5.4.1.38e.2 Downlink

6.11.5.4.1.38e.2.1 Transport channel parameters

6.11.5.4.1.38e.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 7.95 5.9 4.75 / CS RAB

See clause 6.10.3.4.1.4a.2.1.1.

6.11.5.4.1.38e.2.1.2 Transport channel parameters for Interactive or background / DL:0 kbps / PS RAB

See clause 6.10.3.4.1.38a.2.1.2.

6.11.5.4.1.38e.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.38e.2.1.4 TFCS

See clause 6.10.3.4.1.38e.2.1.4.

6.11.5.4.1.38e.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF 16 x 2 code x 2 time slots
	Max. Number of data bits / radio frame	328 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.48

6.11.5.4.1.38f 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

6.11.5.4.1.38f.1 Uplink

6.11.5.4.1.38f.1.1 Transport channel parameters

6.11.5.4.1.38f.1.1.1 Transport channel parameters for Conversational / speech / UL: 12.2 7.95 5.9 4.75 / CS RAB

See clause 6.10.3.4.1.4a.1.1.1.

6.11.5.4.1.38f.1.1.2 Transport channel parameters for Interactive or background / UL:8 kbps / PS RAB

See clause 6.10.3.4.1.23a.1.1.1.

6.11.5.4.1.38f.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.38f.1.1.4 TFCS

See clause 6.10.3.4.1.38f.1.1.4.

6.11.5.4.1.38f.1.2 Physical channel parameters

DPCH Uplink	Modulation	QPSK
	Codes and time slots / frame	SF4 x 1 code x 2 time slots
	Max. Number of data bits / radio frame	680 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.64 (alt 0.60)

6.11.5.4.1.38f.2 Downlink

6.11.5.4.1.38f.2.1 Transport channel parameters

6.11.5.4.1.38f.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 7.95 5.9 4.75 / CS RAB

See clause 6.10.3.4.1.4a.2.1.1.

6.11.5.4.1.38f.2.1.2 Transport channel parameters for Interactive or background / DL:8 kbps / PS RAB

See clause 6.10.3.4.1.23.2.1.1.

6.11.5.4.1.38f.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.38f.2.1.4 TFCS

See clause 6.10.3.4.1.38f.2.1.4.

6.11.5.4.1.38f.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF16 x 4 code x 2 time slots
	Max. Number of data bits / radio frame	680 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.64

6.11.5.4.1.38g 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

6.11.5.4.1.38g.1 Uplink

6.11.5.4.1.38g.1.1 Transport channel parameters

6.11.5.4.1.38g.1.1.1 Transport channel parameters for Conversational / speech / UL: 12.2 7.95 5.9 4.75 / CS RAB

See clause 6.10.3.4.1.4a.1.1.1.

6.11.5.4.1.38g.1.1.2 Transport channel parameters for Interactive or background / UL:16 kbps / PS RAB

See clause 6.10.3.4.1.23b.1.1.1.

6.11.5.4.1.38g.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.38g.1.1.4 TFCS

See clause 6.10.3.4.1.38g.1.1.4.

6.11.5.4.1.38g.1.2 Physical channel parameters

DPCH Uplink	Modulation	QPSK
	Codes and time slots / radio frame	SF2 x 1 code x 2 time slots
	Max. Number of data bits / radio frame	1 368 bits (alt. 1 384 bits)
	TFCI code word / radio frame	32 bits (alt. 16 bits)
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.96 (alt 1.0)
NOTE: There are 32 bit and 16 bit TFCIs for the two cases.		

6.11.5.4.1.38g.2 Downlink

6.11.5.4.1.38g.2.1 Transport channel parameters

6.11.5.4.1.38g.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 7.95 5.9 4.75 / CS RAB

See clause 6.10.3.4.1.4a.2.1.1.

6.11.5.4.1.38g.2.1.2 Transport channel parameters for Interactive or background / DL:16 kbps / PS RAB

See clause 6.10.3.4.1.23b.2.1.1.

6.11.5.4.1.38g.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.38g.2.1.4 TFCS

See clause 6.10.3.4.1.38g.2.1.4.

6.11.5.4.1.38g.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF16 x 8 code x 2 time slots
	Max. Number of data bits / radio frame	1 368 bits
	TFCI code word / radio frame	32 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	1.0

6.11.5.4.1.38h 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

6.11.5.4.1.38h.1 Uplink

6.11.5.4.1.38h.1.1 Transport channel parameters

6.11.5.4.1.38h.1.1.1 Transport channel parameters for Conversational / speech / UL: 12.2 7.95 5.9 4.75 / CS RAB

See clause 6.10.3.4.1.4a.1.1.1.

6.11.5.4.1.38h.1.1.2 Transport channel parameters for Interactive or background / UL:32 kbps / PS RAB

See clause 6.10.3.4.1.23d.1.1.1.

6.11.5.4.1.38h.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.38h.1.1.4 TFCS

See clause 6.10.3.4.1.38h.1.1.4.

6.11.5.4.1.38h.1.2 Physical channel parameters

DPCH Uplink	Modulation	QPSK
	Codes and time slots / radio frame	SF2 x 1 code x 2 time slots
	Max. Number of data bits/radio frame	1 368 bits
	TFCI code word / radio frame	32 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.72 (alt 0.64)

6.11.5.4.1.38h.2 Downlink

6.11.5.4.1.38h.2.1 Transport channel parameters

6.11.5.4.1.38h.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 7.95 5.9 4.75 / CS RAB

See clause 6.10.3.4.1.4a.2.1.1.

6.11.5.4.1.38h.2.1.2 Transport channel parameters for Interactive or background / DL:32 kbps / PS RAB

See clause 6.10.3.4.1.23d.2.1.1.

6.11.5.4.1.38h.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.38h.2.1.4 TFCS

See clause 6.10.3.4.1.38h.2.1.4.

6.11.5.4.1.38h.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF16 x 8 code x 2 time slots
	Max. Number of data bits / radio frame	1 368 bits
	TFCI code word / radio frame	32 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.72

6.11.5.4.1.38i 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

6.11.5.4.1.38i.1 Uplink

6.11.5.4.1.38i.1.1 Transport channel parameters

6.11.5.4.1.38i.1.1.1 Transport channel parameters for Conversational / speech / UL: 12.2 7.95 5.9 4.75 / CS RAB

See clause 6.10.3.4.1.4a.1.1.1.

6.11.5.4.1.38i.1.1.2 Transport channel parameters for Interactive or background / UL:64 kbps / PS RAB

See clause 6.10.3.4.1.26.1.1.1.

6.11.5.4.1.38i.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.38i.1.1.4 TFCS

See clause 6.10.3.4.1.38i.1.1.4.

6.11.5.4.1.38i.1.2 Physical channel parameters

DPCH Uplink	Modulation	QPSK	8PSK
	Codes and time slots / radio frame	(SF1 x 1 code x 2 time slots) + (SF2 x 1 code x 2 time slots)	SF1 x 1code x 2 time slots
	Max. Number of data bits/radio frame	4 184 bits	4 164 bits
	TFCI code word / radio frame	32 bits	48 bits
	TPC / radio frame	2x2 bits	2x3 bits
	SS / radio frame	2x2 bits	2x3 bits
	Puncturing Limit	1	1

6.11.5.4.1.38i.2 Downlink

6.11.5.4.1.38i.2.1 Transport channel parameters

6.11.5.4.1.38i.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 7.95 5.9 4.75 / CS RAB

See clause 6.10.3.4.1.4a.2.1.1.

6.11.5.4.1.38i.2.1.2 Transport channel parameters for Interactive or background / DL:64 kbps / PS RAB

See clause 6.10.3.4.1.25.2.1.1.

6.11.5.4.1.38i.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.38i.2.1.4 TFCS

See clause 6.10.3.4.1.38i.2.1.4.

6.11.5.4.1.38i.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF 16 x 9 codes x 4 time slots
	Max. Number of data bits/radio frame	3 128 bits
	TFCI code word / radio frame	32 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	1

6.11.5.4.1.38j 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

6.11.5.4.1.38j.1 Uplink

See clause 6.11.5.4.1.38i.1.

6.11.5.4.1.38j.2 Downlink

6.11.5.4.1.38j.2.1 Transport channel parameters

6.11.5.4.1.38j.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 7.95 5.9 4.75 / CS RAB

See clause 6.10.3.4.1.4a.2.1.1.

6.11.5.4.1.38j.2.1.2 Transport channel parameters for Interactive or background / DL:128 kbps / PS RAB

See clause 6.10.3.4.1.27.2.1.1.

6.11.5.4.1.38j.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.38j.2.1.4 TFCS

See clause 6.10.3.4.1.38j.2.1.4.

6.11.5.4.1.38j.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF 16 x 9 codes x 4 time slots
	Max. Number of data bits/radio frame	3 128 bits
	TFCI code word / radio frame	32 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.60

6.11.5.4.1.39 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

6.11.5.4.1.39.1 Uplink

See clause 6.11.5.4.1.38.1.

6.11.5.4.1.39.2 Downlink

6.11.5.4.1.39.2.1 Transport channel parameters

6.11.5.4.1.39.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 kbps / CS RAB

See clause 6.10.3.4.1.4.2.1.1.

6.11.5.4.1.39.2.1.2 Transport channel parameters for Interactive or background / DL:64 kbps / PS RAB

See clause 6.10.3.4.1.25.2.1.1.

6.11.5.4.1.39.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.39.2.1.4 TFCS

See clause 6.10.3.4.1.39.2.1.4.

6.11.5.4.1.39.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF 16 x 10 codes x 2 time slots
	Max. Number of data bits/radio frame	1 736 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.56

6.11.5.4.1.40 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

6.11.5.4.1.40.1 Uplink

6.11.5.4.1.40.1.1 Transport channel parameters

See clause 6.10.3.4.1.40.1.1.

6.11.5.4.1.40.1.2 Physical channel parameters

6.11.5.4.1.40.1.2.1 Physical channel parameters (one CCTrCH case)

DPCH Uplink	Modulation	QPSK
	Codes and time slots / radio frame	SF1 x 1 code x 2 time slots
	Max. Number of data bits/radio frame	2 792 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.92 (alt. 0.84)

6.11.5.4.1.40.1.2.2 Physical channel parameters (two CCTrCH case)

6.11.5.4.1.40.1.2.2.1 Physical channel parameters (conversational + SRB)

See clause 6.11.5.4.1.4.1.2.

6.11.5.4.1.40.1.2.2.2 Physical channel parameters (Interactive or background)

DPCH Uplink	Modulation	QPSK
	Codes and time slots / radio frame	SF2 x 1 code x 2 time slots
	Max. Number of data bits/radio frame	1 384 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.64 (alt. 0.56)

6.11.5.4.1.40.2 Downlink

6.11.5.4.1.40.2.1 Transport channel parameters

See clause 6.10.3.4.1.40.2.1.

6.11.5.4.1.40.2.2 Physical channel parameters

6.11.5.4.1.40.2.2.1 Physical channel parameters (one CCTrCH)

See clause 6.11.5.4.1.39.2.2.

6.11.5.4.1.40.2.2.2 Physical channel parameters (two CCTrCHs)

6.11.5.4.1.40.2.2.2.1 Physical channel parameters (conversational + SRB)

See clause 6.11.5.4.1.4.2.2.

6.11.5.4.1.40.2.2.2.2 Physical channel parameters (Interactive or background)

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF16 x 8 codes x 2 time slots
	Max. Number of data bits/radio frame	1 384 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.64

6.11.5.4.1.41 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

6.11.5.4.1.41.1 Uplink

See clause 6.11.5.4.1.40.1.

6.11.5.4.1.41.2 Downlink

6.11.5.4.1.41.2.1 Transport channel parameters

See clause 6.10.3.4.1.41.2.1.

6.11.5.4.1.41.2.2 Physical channel parameters

6.11.5.4.1.41.2.2.1 Physical channel parameters (one CCTrCH case)

DPCH Downlink	Modulation	QPSK	8PSK
	Codes and time slots / radio frame	SF 16 x 9 codes x 4 time slots	SF 16 x 12 codes x 2 time slots
	Max. Number of data bits/radio frame	3 144 bits	3 132 bits
	TFCI code word / radio frame	16 bits	24 bits
	TPC / radio frame	2x2 bits	2x3 bits
	SS / radio frame	2x2 bits	2x3 bits
	Puncturing Limit	0.60	0.60

6.11.5.4.1.41.2.2.2 Physical channel parameters (two CCTrCHs)

6.11.5.4.1.41.2.2.2.1 Physical channel parameters (conversational + SRB)

See clause 6.11.5.4.1.4.2.2.

6.11.5.4.1.41.2.2.2.2 Physical channel parameters (Interactive or background)

DPCH Downlink	Modulation	QPSK	8PSK
	Codes and time slots / radio frame	SF 1 x 1 code x 2 time slots	SF 16 x 11 codes x 2 time slots
	Max. Number of data bits/radio frame	2 792 bits	2868 bits
	TFCI code word / radio frame	16 bits	24 bits
	TPC / radio frame	2x2 bits	2x3 bits
	SS / radio frame	2x2 bits	2x3 bits
	Puncturing Limit	0.64	0.64

6.11.5.4.1.42 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

6.11.5.4.1.42.1 Uplink

6.11.5.4.1.42.1.1 Transport channel parameters

See clause 6.10.3.4.1.42.1.1.

6.11.5.4.1.42.1.2 Physical channel parameters

See clause 6.10.3.4.1.40.1.2.1.

6.11.5.4.1.42.2 Downlink

6.11.5.4.1.42.2.1 Transport channel parameters

6.11.5.4.1.42.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 kbps / CS RAB

See clause 6.10.3.4.1.4.2.1.1.

6.11.5.4.1.42.2.1.2 Transport channel parameters for Interactive or background / DL:256 kbps / PS RAB

See clause 6.10.3.4.1.31.2.1.1.

6.11.5.4.1.42.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.42.2.1.4 TFCS

See clause 6.10.3.4.1.42.2.1.4.

6.11.5.4.1.42.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK	8PSK
	Codes and time slots / radio frame	SF1 x 1code x 6 time slots	SF1 x 1 code x 4 time slots
	Max. Number of data bits/radio frame	8 408 bits	8 388 bits
	TFCI code word / radio frame	32 bits	48 bits
	TPC / radio frame	2x2 bits	2x3 bits
	SS / radio frame	2x2 bits	2x3 bits
	Puncturing Limit	0.80	0.80

6.11.5.4.1.43 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

6.11.5.4.1.43.1 Uplink

See clause 6.11.5.4.1.40.1.

6.11.5.4.1.43.2 Downlink

6.11.5.4.1.43.2.1 Transport channel parameters

See clause 6.10.3.4.1.43.2.1.

6.11.5.4.1.43.2.2 Physical channel parameters

6.11.5.4.1.43.2.2.1 Physical channel parameters (one CCTrCH)

DPCH Downlink	Modulation	QPSK	8PSK
	Codes and time slots / radio frame	SF 1 x 1 code x 6 time slots	SF 1 x 1 code x 4 time slots
	Max. Number of data bits/radio frame	8 408 bits	8 388 bits
	TFCI code word / radio frame	32 bits	48 bits
	TPC / radio frame	2x2 bits	2x3 bits
	SS / radio frame	2x2 bits	2x3 bits
	Puncturing Limit	0.60	0.60

6.11.5.4.1.43.2.2.2 Physical channel parameters (two CCTrCHs)

6.11.5.4.1.43.2.2.2.1 Physical channel parameters (conversational + SRB)

See clause 6.11.5.4.1.4.2.2.

6.11.5.4.1.43.2.2.2.2 Physical channel parameters (Interactive or background)

DPCH Downlink	Modulation	QPSK	8PSK
	Codes and time slots / radio frame	(SF 1 x 1 code x 4 time slots) + (SF 16 x 10 codes x 2 time slots)	SF 1 x 1 code x 4 time slots

	Max. Number of data bits/radio frame	7 368 bits	8 412 bits
	TFCI code word / radio frame	16 bits	24 bits
	TPC / radio frame	2x2 bits	2x3 bits
	SS / radio frame	2x2 bits	2x3 bits
	Puncturing Limit	0.56	0.64

6.11.5.4.1.44 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:128 DL:2 048 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.11.5.4.1.44.1 Uplink

6.11.5.4.1.44.1.1 Transport channel parameters

6.11.5.4.1.44.1.1.1 Transport channel parameters for Conversational / speech / UL:12.2 kbps / CS RAB

See clause 6.10.3.4.1.4.1.1.1.

6.11.5.4.1.44.1.1.2 Transport channel parameters for Interactive or background / UL:128 kbps / PS RAB

See clause 6.10.3.4.1.28.1.1.1.

6.11.5.4.1.44.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.44.1.1.4 TFCS

See clause 6.10.3.4.1.44.1.1.4.

6.11.5.4.1.44.1.2 Physical channel parameters

DPCH Uplink	Modulation	8PSK
	Codes and time slots / radio frame	SF1 x 1 code x 2 time slots
	Max. Number of data bits/radio frame	4 188 bits
	TFCI code word / radio frame	24 bits
	TPC / radio frame	2x3 bits
	SS / radio frame	2x3 bits
	Puncturing Limit	0.80 (alt 0.72)

6.11.5.4.1.44.2 Downlink

6.11.5.4.1.44.2.1 Transport channel parameters

6.11.5.4.1.44.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 kbps / CS RAB

See clause 6.10.3.4.1.4.2.1.1.

6.11.5.4.1.44.2.1.2 Transport channel parameters for Interactive or background / DL:2 048 kbps / PS RAB

See clause 6.11.5.4.1.35.2.1.1.

6.11.5.4.1.44.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.44.2.1.4 TFCS

TFCS size	32 (alt. 50)
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 2 048 kbps RAB , DCCH)= ((TF0, TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0, TF0), (TF2, TF1, TF1, TF0, TF0), (TF0, TF0, TF0, TF1, TF0), (TF1, TF0, TF0, TF1, TF0), (TF2, TF1, TF1, TF1, TF0), (TF0, TF0, TF0, TF2, TF0), (TF1, TF0, TF0, TF2, TF0), (TF2, TF1, TF1, TF2, TF0), (TF0, TF0, TF0, TF3, TF0), (TF1, TF0, TF0, TF3, TF0), (TF2, TF1, TF1, TF3, TF0), (TF0, TF0, TF0, TF4, TF0), (TF1, TF0, TF0, TF4, TF0), (TF2, TF1, TF1, TF4, TF0), (TF0, TF0, TF0, TF5, TF0), (TF0, TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1),

	(TF0, TF0, TF0, TF1, TF1), (TF1, TF0, TF0, TF1, TF1), (TF2, TF1, TF1, TF1, TF1), (TF0, TF0, TF0, TF2, TF1), (TF1, TF0, TF0, TF2, TF1), (TF2, TF1, TF1, TF2, TF1), (TF0, TF0, TF0, TF3, TF1), (TF1, TF0, TF0, TF3, TF1), (TF2, TF1, TF1, TF3, TF1), (TF0, TF0, TF0, TF4, TF1), (TF1, TF0, TF0, TF4, TF1), (TF2, TF1, TF1, TF4, TF1), (TF0, TF0, TF0, TF5, TF1)) (alt. (TF0, TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0, TF0), (TF2, TF1, TF1, TF0, TF0), (TF0, TF0, TF0, TF1, TF0), (TF1, TF0, TF0, TF1, TF0), (TF2, TF1, TF1, TF1, TF0), (TF0, TF0, TF0, TF2, TF0), (TF1, TF0, TF0, TF2, TF0), (TF2, TF1, TF1, TF2, TF0), (TF0, TF0, TF0, TF3, TF0), (TF1, TF0, TF0, TF3, TF0), (TF2, TF1, TF1, TF3, TF0), (TF0, TF0, TF0, TF4, TF0), (TF1, TF0, TF0, TF4, TF0), (TF2, TF1, TF1, TF4, TF0), (TF0, TF0, TF0, TF5, TF0), (TF1, TF0, TF0, TF5, TF0), (TF2, TF1, TF1, TF5, TF0), (TF0, TF0, TF0, TF6, TF0), (TF1, TF0, TF0, TF6, TF0), (TF2, TF1, TF1, TF6, TF0), (TF0, TF0, TF0, TF7, TF0), (TF1, TF0, TF0, TF7, TF0), (TF2, TF1, TF1, TF7, TF0), (TF0, TF0, TF0, TF8, TF0), (TF0, TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1), (TF0, TF0, TF0, TF1, TF1), (TF1, TF0, TF0, TF1, TF1), (TF2, TF1, TF1, TF1, TF1), (TF0, TF0, TF0, TF2, TF1), (TF1, TF0, TF0, TF2, TF1), (TF2, TF1, TF1, TF2, TF1), (TF0, TF0, TF0, TF3, TF1), (TF1, TF0, TF0, TF3, TF1), (TF2, TF1, TF1, TF3, TF1), (TF0, TF0, TF0, TF4, TF1), (TF1, TF0, TF0, TF4, TF1), (TF2, TF1, TF1, TF4, TF1), (TF0, TF0, TF0, TF5, TF1), (TF1, TF0, TF0, TF5, TF1), (TF2, TF1, TF1, TF5, TF1), (TF0, TF0, TF0, TF6, TF1), (TF1, TF0, TF0, TF6, TF1), (TF2, TF1, TF1, TF6, TF1), (TF0, TF0, TF0, TF7, TF1), (TF1, TF0, TF0, TF7, TF1), (TF2, TF1, TF1, TF7, TF1), (TF0, TF0, TF0, TF8, TF1))

For better understanding of the TFCS please note that the following combinations are not included in the table above:

- (TF2, TF1, TF1, TF5, TF0), (TF1, TF0, TF0, TF5, TF0), (TF1, TF0, TF0, TF5, TF1), (TF2, TF1, TF1, TF5, TF1), (TF2, TF1, TF1, TF8, TF0), (TF1, TF0, TF0, TF8, TF0), (TF1, TF0, TF0, TF8, TF1), (TF2, TF1, TF1, TF8, TF1).

6.11.5.4.1.44.2.2 Physical channel parameters

DPCH Downlink	Modulation	8PSK
	Codes and time slots / radio frame	SF 1 x 1 code x 10 time slots
	Max. Number of data bits/radio frame	21 060 bits
	TFCI code word / radio frame	48 bits
	TPC / radio frame	2x3 bits
	SS / radio frame	2x3 bits
	Puncturing Limit	1

6.11.5.4.1.45 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

6.11.5.4.1.45.1 Uplink

6.11.5.4.1.45.1.1 Transport channel parameters

6.11.5.4.1.45.1.1.1 Transport channel parameters for Conversational / speech / UL:12.2 kbps / CS RAB

See clause 6.10.3.4.1.4.1.1.1.

6.11.5.4.1.45.1.1.2 Transport channel parameters for Streaming / unknown / UL:57.6 kbps / CS RAB

See clause 6.10.3.4.1.17.1.1.1.

6.11.5.4.1.45.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.45.1.1.4 TFCS

See clause 6.10.3.4.1.45.1.1.4.

6.11.5.4.1.45.1.2 Physical channel parameters

DPCH Uplink	Modulation	QPSK

	Codes and time slots / radio frame	SF2 x 1 code x 2 time slots
	Max. Number of data bits/radio frame	1 384 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.52

6.11.5.4.1.45.2 Downlink

6.11.5.4.1.45.2.1 Transport channel parameters

6.11.5.4.1.45.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 kbps / CS RAB

See clause 6.10.3.4.1.4.2.1.1.

6.11.5.4.1.45.2.1.2 Transport channel parameters for Streaming / unknown / DL:57.6 kbps / CS RAB

See clause 6.10.3.4.1.17.2.1.1.

6.11.5.4.1.45.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.45.2.1.4 TFCS

See clause 6.10.3.4.1.45.2.1.4.

6.11.5.4.1.45.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF 16 x 9 codes x 2 time slots
	Max. Number of data bits/radio frame	1 560 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.56

6.11.5.4.1.46 Void

6.11.5.4.1.47 Void

6.11.5.4.1.48 Void

6.11.5.4.1.49 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

6.11.5.4.1.49.1 Uplink

6.11.5.4.1.49.1.1 Transport channel parameters

6.11.5.4.1.49.1.1.1 Transport channel parameters for Conversational / speech / UL:12.2 kbps / CS RAB

See clause 6.10.3.4.1.4.1.1.1.

6.11.5.4.1.49.1.1.2 Transport channel parameters for Conversational / unknown / UL:64 kbps / CS RAB

See clause 6.10.3.4.1.13.1.1.1.

6.11.5.4.1.49.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.49.1.1.4 TFCS

See clause 6.10.3.4.1.49.1.1.4.

6.11.5.4.1.49.1.2 Physical channel parameters

DPCH Uplink	Modulation	QPSK
	Codes and time slots / radio frame	SF 1 x 1 code x 2 time slots
	Max. Number of data bits/radio frame	2 792 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.88

6.11.5.4.1.49.2 Downlink

6.11.5.4.1.49.2.1 Transport channel parameters

6.11.5.4.1.49.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 kbps / CS RAB

See clause 6.10.3.4.1.4.2.1.1.

6.11.5.4.1.49.2.1.2 Transport channel parameters for Conversational / unknown / DL:64 kbps / CS RAB

See clause 6.10.3.4.1.13.2.1.1.

6.11.5.4.1.49.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.49.2.1.4 TFCS

See clause 6.10.3.4.1.49.2.1.4.

6.11.5.4.1.49.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF16 x 11 codes x 2 time slots
	Max. Number of data bits/radio frame	1 912 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.60

6.11.5.4.1.49a Conversational / speech / UL: 12.2 7.95 5.9 4.75 DL: 12.2 7.95 5.9 4.75 kbps / CS RAB + Conversational / unknown / UL:64 DL:64 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.11.5.4.1.49a.1 Uplink

6.11.5.4.1.49a.1.1 Transport channel parameters

6.11.5.4.1.49a.1.1.1 Transport channel parameters for Conversational / speech / UL: 12.2 7.95 5.9 4.75 kbps / CS RAB

See clause 6.10.3.4.1.4a.1.1.1.

6.11.5.4.1.49a.1.1.2 Transport channel parameters for Conversational / unknown / UL:64 kbps / CS RAB

See clause 6.10.3.4.1.13.1.1.1.

6.11.5.4.1.49a.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.49a.1.1.4 TFCS

See clause 6.10.3.4.1.49a.1.1.4.

6.11.5.4.1.49a.1.2 Physical channel parameters

DPCH Uplink	Modulation	QPSK
	Codes and time slots / radio frame	SF 1 x 1 code x 2 time slots
	Max. Number of data bits/radio frame	2 792 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.88

6.11.5.4.1.49a.2 Downlink

6.11.5.4.1.49a.2.1 Transport channel parameters

6.11.5.4.1.49a.2.1.1 Transport channel parameters for Conversational / speech / DL: 12.2 7.95 5.9 4.75 kbps / CS RAB

See clause 6.10.3.4.1.4a.2.1.1.

6.11.5.4.1.49a.2.1.2 Transport channel parameters for Conversational / unknown / DL:64 kbps / CS RAB

See clause 6.10.3.4.1.13.2.1.1.

6.11.5.4.1.49a.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.49.2.1.4 TFCS

See clause 6.10.3.4.1.49a.2.1.4.

6.11.5.4.1.49a.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF16 x 11 codes x 2 time slots
	Max. Number of data bits/radio frame	1 912 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.60

6.11.5.4.1.50 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

6.11.5.4.1.50.1 Uplink

6.11.5.4.1.50.1.1 Transport channel parameters

6.11.5.4.1.50.1.1.1 Transport channel parameters for Conversational / unknown / UL:64 kbps / CS RAB

See clause 6.10.3.4.1.13.1.1.1.

6.11.5.4.1.50.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.50.1.1.3 TFCS

See clause 6.10.3.4.1.50.1.1.3.

6.11.5.4.1.50.1.2 Physical channel parameters

DPCH Uplink	Modulation	QPSK
	Codes and time slots / radio frame	SF 1 x 1 code x 2 time slots
	Max. Number of data bits/radio frame	2 792 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits

	Puncturing Limit	0.52

6.11.5.4.1.50.2 Downlink

6.11.5.4.1.50.2.1 Transport channel parameters

6.11.5.4.1.50.2.1.1 Transport channel parameters for Conversational / unknown / DL:64 kbps / CS RAB

See clause 6.10.3.4.1.13.2.1.1.

6.11.5.4.1.50.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.50.2.1.3 TFCS

See clause 6.10.3.4.1.50.2.1.3.

6.11.5.4.1.50.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF 16 x 15 codes x 2 time slots
	Max. Number of data bits/radio frame	2 616 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.48

6.11.5.4.1.51 Conversational / unknown / UL:64 DL:64 kbps / CS RAB + Interactive or background / UL:64 DL:64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.11.5.4.1.51.1 Uplink

6.11.5.4.1.51.1.1 Transport channel parameters

6.11.5.4.1.51.1.1.1 Transport channel parameters for Conversational / unknown / UL:64 kbps / CS RAB

See clause 6.10.3.4.1.13.1.1.1.

6.11.5.4.1.51.1.1.2 Transport channel parameters for Interactive or background / UL:64 kbps / PS RAB

See clause 6.10.3.4.1.26.1.1.1.

6.11.5.4.1.51.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.51.1.1.4 TFCS

See clause 6.10.3.4.1.51.1.1.4.

6.11.5.4.1.51.1.2 Physical channel parameters

DPCH Uplink	Modulation	QPSK
	Codes and time slots / radio frame	SF 1 x 1 code x 2 time slots
	Max. Number of data bits/radio frame	2 792 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.52 (alt. 0.48)

6.11.5.4.1.51.2 Downlink

6.11.5.4.1.51.2.1 Transport channel parameters

6.11.5.4.1.51.2.1.1 Transport channel parameters for Conversational / unknown / DL:64 kbps / CS RAB

See clause 6.10.3.4.1.13.2.1.1.

6.11.5.4.1.51.2.1.2 Transport channel parameters for Interactive or background / DL:64 kbps / PS RAB

See clause 6.10.3.4.1.25.2.1.1.

6.11.5.4.1.51.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.51.2.1.4 TFCS

See clause 6.10.3.4.1.51.2.1.4.

6.11.5.4.1.51.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF1 x 1 code x 2 time slots
	Max. Number of data bits/radio frame	2 792 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.52

6.11.5.4.1.51a 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

6.11.5.4.1.51a.1 Uplink

6.11.5.4.1.51a.1.1 Transport channel parameters

6.11.5.4.1.51a.1.1.1 Transport channel parameters for Conversational / unknown / UL:64 kbps / CS RAB

See clause 6.10.3.4.1.13.1.1.1.

6.11.5.4.1.51a.1.1.2 Transport channel parameters for Interactive or background / UL:8 kbps / PS RAB

See clause 6.10.3.4.1.23a.1.1.1.

6.11.5.4.1.51a.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.51a.1.1.4 TFCS

See clause 6.10.3.4.1.51a.1.1.4.

6.11.5.4.1.51a.1.2 Physical channel parameters

DPCH Uplink		Physical 1	Physical 2
	Modulation	QPSK	QPSK
	Codes and time slots / radio frame	SF2 x 1 code x 2 time slots	SF1 x 1 code x 2 time slots
	Max. Number of data bits/radio frame	1 384 bits	2 792 bits
	TFCI code word / radio frame	16 bits	16 bits
	TPC / radio frame	2x2 bits	2x2 bits
	SS / radio frame	2x2 bits	2x2 bits
	Puncturing Limit	0.40	0.84

6.11.5.4.1.51a.2 Downlink

6.11.5.4.1.51a.2.1 Transport channel parameters

6.11.5.4.1.51a.2.1.1 Transport channel parameters for Conversational / unknown / DL:64 kbps / CS RAB

See clause 6.10.3.4.1.13.2.1.1.

6.11.5.4.1.51a.2.1.2 Transport channel parameters for Interactive or background / DL:8 kbps / PS RAB

See clause 6.10.3.4.1.23.2.1.1.

6.11.5.4.1.51a.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.51a.2.1.4 TFCS

See clause 6.10.3.4.1.51.2.1.4.

6.11.5.4.1.51a.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF1 x 1 code x 2 time slots
	Max. Number of data bits/radio frame	2 792 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.84

6.11.5.4.1.51b 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

6.11.5.4.1.51b.1 Uplink

6.11.5.4.1.51b.1.1 Transport channel parameters

6.11.5.4.1.51b.1.1.1 Transport channel parameters for Conversational / unknown / UL:64 kbps / CS RAB

See clause 6.10.3.4.1.13.1.1.1.

6.11.5.4.1.51b.1.1.2 Transport channel parameters for Interactive or background / UL:16 kbps / PS RAB

See clause 6.10.3.4.1.23b.1.1.1.

6.11.5.4.1.51b.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.51b.1.1.4 TFCS

See clause 6.10.3.4.1.51b.1.1.4.

6.11.5.4.1.51b.1.2 Physical channel parameters

DPCH Uplink		Physical 1	Physical 2
	Modulation	QPSK	QPSK
	Codes and time slots / radio frame	SF2 x 1 code x 2 time slots	SF1 x 1 code x 2 time slots
	Max. Number of data bits/radio frame	1 384 bits	2 792 bits
	TFCI code word / radio frame	16 bits	16 bits
	TPC / radio frame	2x2 bits	2x2 bits
	SS / radio frame	2x2 bits	2x2 bits
	Puncturing Limit	0.40	0.76

6.11.5.4.1.51b.2 Downlink

See clause 6.11.5.4.1.51.2.

6.11.5.4.1.52 Conversational / unknown / UL:64 DL:64 kbps / CS RAB + Interactive or background / UL:64 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.11.5.4.1.52.1 Uplink

See clause 6.11.5.4.1.51.1.

6.11.5.4.1.52.2 Downlink

6.11.5.4.1.52.2.1 Transport channel parameters

6.11.5.4.1.52.2.1.1 Transport channel parameters for Conversational / unknown / DL:64 kbps / CS RAB

See clause 6.10.3.4.1.13.2.1.1.

6.11.5.4.1.52.2.1.2 Transport channel parameters for Interactive or background / DL:128 kbps / PS RAB

See clause 6.10.3.4.1.27.2.1.1.

6.11.5.4.1.52.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.52.2.1.4 TFCS

See clause 6.10.3.4.1.52.2.1.4.

6.11.5.4.1.52.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF 16 x 12 codes x 4 time slots
	Max. Number of data bits/radio frame	4 200 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.52

6.11.5.4.1.53 Conversational / unknown / UL:64 DL:64 kbps / CS RAB + Interactive or background / UL:128 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.11.5.4.1.53.1 Uplink

6.11.5.4.1.53.1.1 Transport channel parameters

6.11.5.4.1.53.1.1.1 Transport channel parameters for Conversational / unknown / UL:64 kbps / CS RAB

See clause 6.10.3.4.1.13.1.1.1.

6.11.5.4.1.53.1.1.2 Transport channel parameters for Interactive or background / UL:128 kbps / PS RAB

See clause 6.10.3.4.1.28.1.1.1.

6.11.5.4.1.53.1.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.53.1.1.4 TFCS

See clause 6.10.3.4.1.53.1.1.4.

6.11.5.4.1.53.1.2 Physical channel parameters

DPCH Uplink	Modulation	QPSK	8PSK
	Codes and time slots / radio frame	SF1 x 1 code x 4 time slots	SF1 x 1code x 2 time slots
	Max. Number of data bits/radio frame	5 608 bits	4 188 bits
	TFCI code word / radio frame	16 bits	24 bits
	TPC / radio frame	2x2 bits	2x3 bits
	SS / radio frame	2x2 bits	2x3 bits
	Puncturing Limit	0.72 (alt 0.68)	0.52 (alt 0.48)

6.11.5.4.1.53.2 Downlink

See clause 6.11.5.4.1.52.2.

6.11.5.4.1.54 Void

6.11.5.4.1.55 Void

6.11.5.4.1.56 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

6.11.5.4.1.56.1 Uplink

6.11.5.4.1.56.1.1 Transport channel parameters

6.11.5.4.1.56.1.1.1 Transport channel parameters for Interactive or background / UL:8 kbps / PS RAB + UL:8 kbps / PS RAB

See clause 6.10.3.4.1.56.1.1.1.

6.11.5.4.1.56.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.56.1.1.3 TFCS

See clause 6.10.3.4.1.56.1.1.3.

6.11.5.4.1.56.1.2 Physical channel parameters

DPCH Uplink	Modulation	QPSK
	Codes and time slots / radio frame	SF4 x 1 code x 2 time slots
	Max. Number of data bits / radio frame	680 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.84 (alt 0.76)

6.11.5.4.1.56.2 Downlink

6.11.5.4.1.56.2.1 Transport channel parameters

6.11.5.4.1.56.2.1.1 Transport channel parameters for Interactive or background / DL:8 kbps / PS RAB + DL:8 kbps / PS RAB

See clause 6.10.3.4.1.56.2.1.1.

6.11.5.4.1.56.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.56.2.1.3 TFCS

See clause 6.10.3.4.1.56.2.1.3.

6.11.5.4.1.56.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF16 x 4 code x 2 time slots
	Max. Number of data bits / radio frame	680 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.84

6.11.5.4.1.57 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

6.11.5.4.1.57.1 Uplink

6.11.5.4.1.57.1.1 Transport channel parameters

6.11.5.4.1.57.1.1.1 Transport channel parameters for Interactive or background / UL:64 kbps / PS RAB + UL:64 kbps / PS RAB

See clause 6.10.3.4.1.38d.1.1.2.

6.11.5.4.1.57.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.57.1.1.3 TFCS

See clause 6.11.5.4.1.57.1.1.3.

6.11.5.4.1.57.1.2 Physical channel parameters

DPCH Uplink		Physical 1
	Modulation	QPSK
	Codes and time slots / radio frame	SF1 x 1 code x 2 time slots
	Max. Number of data bits/radio frame	2 792 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.52 (alt. 0.44)

6.11.5.4.1.57.2 Downlink

6.11.5.4.1.57.2.1 Transport channel parameters

6.11.5.4.1.57.2.1.1 Transport channel parameters for Interactive or background / DL:64 kbps / PS RAB + DL:64 kbps / PS RAB

See clause 6.10.3.4.1.57.2.1.1.

6.11.5.4.1.57.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.57.2.1.3 TFCS

See clause 6.10.3.4.1.57.2.1.3.

6.11.5.4.1.57.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF1 x 1 code x 2 time slots
	Max. Number of data bits/radio frame	2 792 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.52

6.11.5.4.1.58 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

6.11.5.4.1.58.1 Uplink

6.11.5.4.1.58.1.1 Transport channel parameters

6.11.5.4.1.58.1.1.1 Transport channel parameters for Streaming / unknown / UL:16 kbps / PS RAB

See clause 6.10.3.4.1.58.1.1.1.

6.11.5.4.1.58.1.1.2 Transport channel parameters for Interactive or background / UL:8 kbps / PS RAB

See clause 6.10.3.4.1.23a.1.1.1.

6.11.5.4.1.58.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.58.1.1.4 TFCS

See clause 6.10.3.4.1.58.1.1.4.

6.11.5.4.1.58.1.2 Physical channel parameters

DPCH Uplink	Modulation	QPSK
	Codes and time slots / frame	SF4 x 1 code x 2 time slots
	Max. Number of data bits / radio frame	680 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.60 (alt 0.56)

6.11.5.4.1.58.2 Downlink

6.11.5.4.1.58.2.1 Transport channel parameters

6.11.5.4.1.58.2.1.1 Transport channel parameters for Streaming / unknown / DL:64 kbps / PS RAB

See clause 6.10.3.4.1.58.2.1.1.

6.10.5.4.1.58.2.1.2 Transport channel parameters for Interactive or background / DL:8 kbps / PS RAB

See clause 6.10.3.4.1.23.2.1.1.

6.11.5.4.1.58.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.58.2.1.4 TFCS

See clause 6.10.3.4.1.58.2.1.4.

6.11.5.4.1.58.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF16 x 8 code x 2 time slots
	Max. Number of data bits / radio frame	1 384 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.44

6.11.5.4.1.59 Reserved for future use

6.11.5.4.1.60 Reserved for future use

6.11.5.4.1.61 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

6.11.5.4.1.61.1 Uplink

6.11.5.4.1.61.1.1 Transport channel parameters

6.11.5.4.1.61.1.1.1 Transport channel parameters for Conversational / unknown / UL:8 kbps / PS RAB

See clause 6.10.3.4.1.61.1.1.1.

6.10.5.4.1.61.1.1.2 Transport channel parameters for Interactive or Background / UL:8 kbps / PS RAB

See clause 6.10.3.4.1.23a.1.1.1.

6.11.5.4.1.61.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.61.1.1.4 TFCS

See clause 6.10.3.4.1.61.1.1.4.

6.11.5.4.1.61.2 Physical channel parameters

DPCH Uplink	Modulation	QPSK
	Codes and time slots / radio frame	SF 4 x 1 code x 2 time slots
	Max. Number of data bits / radio frame	680 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.84 (alt 0.80)

6.11.5.4.1.61.2 Downlink

6.11.5.4.1.61.2.1 Transport channel parameters

6.11.5.4.1.61.2.1.1 Transport channel parameters for Conversational / unknown / DL:8 kbps / PS RAB

See clause 6.10.3.4.1.61.2.1.1.

6.11.5.4.1.61.2.1.2 Transport channel parameters for Interactive or Background / DL:8 kbps / PS RAB

See clause 6.10.3.4.1.23.2.1.1.

6.11.5.4.1.61.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.61.2.1.4 TFCS

See clause 6.10.3.4.1.61.2.1.4.

6.11.5.4.1.61.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots / radio frame	SF 16 x 4 code x 2 time slots
	Max. Number of data bits / radio frame	680 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.84

6.11.5.4.2 Combinations on PDSCH, SCCPCH, PUSCH and PRACH

6.11.5.4.2.1 Interactive or background / UL: 64 DL: 256 kbps / PS RAB + UL: 3.4/16.8 DL: 3.4/33.6 kbps SRBs for DCCH, CCCH and BCCH + UL: 16.8 DL: 16 kbps SRBs for SHCCH

6.11.5.4.2.1.1 Uplink

6.11.5.4.2.1.1.1 Transport channel parameters

6.11.5.4.2.1.1.1.1 Transport channel parameters for Interactive or background / UL: 64 kbps / PS RAB and UL SRB for SHCCH mapped on USCH

See clause 6.10.3.4.2.1.1.1.1.

6.11.5.4.2.1.1.1.2 Transport channel parameters for UL: 3.4 Kbps SRBs for DCCH mapped on USCH

See clause 6.10.3.4.2.1.1.1.2.

6.11.5.4.2.1.1.1.3 TFCS for USCH

See clause 6.10.3.4.2.1.1.1.3.

6.11.5.4.2.1.1.1.4 Transport channel parameters for SRB for CCCH and UL SRBs for DCCH and UL SRB for SHCCH mapped on RACH

See clause 6.10.3.4.2.1.1.1.4.

6.11.5.4.2.1.1.2 Physical channel parameters

6.11.5.4.2.1.1.2.1 Physical channel parameters for PUSCH

PUSCH	Modulation	QPSK
	Codes and time slots / radio frame	SF 1 x 1 code x 2 time slots
	Max. Number of data bits/radio frame	2 792 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.88

6.11.5.4.2.1.1.2.2 Physical channel parameter for PRACH.

See clause 6.11.5.4.5.1.2.

6.11.5.4.2.1.2 Downlink

6.11.5.4.2.1.2.1 Transport channel parameters

6.11.5.4.2.1.2.1.1 Transport channel parameters for Interactive or background / DL: 256 kbps / PS RAB and DL SRB for SHCCH mapped on DSCH

See clause 6.10.3.4.2.1.2.1.1.

6.11.5.4.2.1.2.1.2 Transport channel parameters for DL: 3.4 Kbps SRBs for DCCH mapped on DSCH

See clause 6.10.3.4.2.1.2.1.2.

6.11.5.4.2.1.2.1.3 TFCS for DSCH

See clause 6.10.3.4.2.1.2.1.3.

6.11.5.4.2.1.2.1.4 Transport channel parameters for DL SRBs for DCCH and SRB for CCCH and SRB for BCCH and DL SRB for SHCCH mapped on FACH

6.11.5.4.2.1.2.1.4.1 FACH transport channel configuration without DTCH

Higher layer	RAB/signalling RB		SRB#0	SRB#1	SRB#2	SRB#3	SRB#4	SRB#5	SRB#6
	User of Radio Bearer		RRC	RRC	RRC	NAS_DT High prio	NAS_DT Low prio	RRC	RRC
RLC	Logical channel type		CCCH	DCCH	DCCH	DCCH	DCCH	SHCCH	BCCH
	RLC mode		UM	UM	AM	AM	AM	UM	TM
	Payload sizes, bit		160	136 or 120*	128	128	128	160	168
	Max data rate, bps		32 000 (alt. 16 000)	27 200 or 24 000 (alt. 13 600 or 12 000)	25 600 (alt. 12 800)	25 600 (alt. 12 800)	25 600 (alt. 12 800)	32 000 (alt. 16 000)	33 600 (alt. 16 000)
	RLC header, bit		8	8	16	16	16	8	0
MAC	MAC header, bit		3	27 or 43	27	27	27	3	3
	MAC multiplexing		7 logical channel multiplexing						
Layer 1	TrCH type		FACH						
	TB sizes, bit		171	171	171	171	171	171	171
	TFS	TF0, bits	0x171						

		TF1, bits	1x171						
		TF2, bits	2x171						
		TF3, bits	3x171(alt. N/A)						
		TF4, bits	4x171(alt. N/A)						
		TF5, bits							
		TF6, bits							
	TTI, ms		20						
	Coding type		CC 1/2						
	CRC, bit		16						
	Max number of bits/TTI after channel coding		1 528 (alt. 764)	1 528 (alt. 764)	1 528 (alt. 764)	1 528 (alt. 764)	1 528 (alt. 764)	1 528 (alt. 764)	1 528 (alt. 764)
NOTE: MAC header size and RLC payload size depend on use of U-RNTI or C-RNTI.									

6.11.5.4.2.1.2.1.4.2 FACH transport channel configuration with DTCH

Higher layer	RAB/signalling RB		RAB	SRB#0	SRB#1	SRB#2	SRB#3	SRB#4	SRB#5	SRB#6
	User of Radio Bearer		Interactive/ Background RAB	RRC	RRC	RRC	NAS_DT High prio	NAS_DT Low prio	RRC	RRC
RLC	Logical channel type		DTCH	CCCH	DCCH	DCCH	DCCH	DCCH	SHCCH	BCCH
	RLC mode		AM	UM	UM	AM	AM	AM	UM	TM
	Payload sizes, bit		320	160	136 or 120 (note)	128	128	128	160	168
	Max data rate, bps		32 000 (alt. 16 000)	32 000 (alt. 16 000)	27 200 or 24 000 (alt. 13 600 or 12 000)	25 600 (alt. 12 800)	25 600 (alt. 12 800)	25 600 (alt. 12 800)	32 000 (alt. 16 000)	33 600 (alt. 16 800)
	AMD/UMD/TrD PDU header, bit		16	8	8	16	16	16	8	0
MAC	MAC header, bit		27	3	27 or 43	27	27	27	3	3
	MAC multiplexing		8 logical channel multiplexing							
Layer 1	TrCH type		FACH							
	TB sizes, bit		171, 363							
	TFS	TF0, bits	0x171							
		TF1, bits	1x171							
		TF2, bits	2x171							
		TF3, bits	1x363							
		TF4, bits	3x171 (alt N/A)							
		TF5, bits	4x171 (alt. N/A)							
		TF6, bits	2x363 (alt. N/A)							
	TTI, ms		20							
	Coding type		CC ½							
	CRC, bit		16							
	Max number of bits/TTI after channel coding		1 532 (alt. 766)							
NOTE: MAC header size and RLC payload size depend on use of U-RNTI or C-RNTI.										

6.11.5.4.2.1.2.1.5 TFCS for FACH

See clause 6.10.3.4.2.1.2.1.5.

6.11.5.4.2.1.2.2 Physical channel parameters

6.11.5.4.2.1.2.2.1 Physical channel parameters for PDSCH

PDSCH	Modulation	QPSK	8PSK
	Codes and time slots / radio frame	SF16 x 11 codes x 6 time slots	SF1 x 1 code x 4 time slots
	Max. Number of data bits/radio frame	5 784 bits	6 511 bits
	TFCI code word / radio frame	16 bits	24 bits
	TPC / radio frame	2x2 bits	2x3 bits

	SS / radio frame	2x2 bits	2x3 bits
	Puncturing Limit	0.60	0.68

6.11.5.4.2.1.2.2.2 Physical channel parameters for SCCPCH

6.11.5.4.2.1.2.2.2.1 Physical channel parameters for SCCPCH without DTCH

S-CCPCH	Modulation	QPSK
	Codes and time slots / radio frame	SF16 x 5 codes x 2 time slots (alt. SF16 x 2 codes x 2 time slot)
	Max. Number of data bits/radio frame	864 bits (alt. 344 bits)
	TFCI code word / radio frame	16 bits
	TP(alt. 8 bits)C/ radio frame	0 bits
	SS / radio frame	0 bits
	Puncturing Limit	1 (alt. 0.88)

6.11.5.4.2.1.2.2.2.2 Physical channel parameters for SCCPCH with DTCH

S-CCPCH	Modulation	QPSK
	Codes and time slots / radio frame	SF16 x 5 codes x 2 time slots (alt. SF16 x 2 codes x 2 time slot)
	Max. Number of data bits/radio frame	864 bits (alt. 336 bits)
	TFCI code word / radio frame	16 bits
	TPC / radio frame	0 bits
	SS / radio frame	0 bits
	Puncturing Limit	1 (alt. 0.84)

6.11.5.4.2.2 Interactive or background / UL: 64 DL: 384 kbps / PS RAB + UL: 3.4/16.8 DL: 3.4/33.6 kbps SRBs for DCCH, CCCH and BCCH+ UL: 16.8 DL: 16 kbps SRBs for SHCCH

6.11.5.4.2.2.1 Uplink

See clause 6.11.5.4.2.1.1.

6.11.5.4.2.2.2 Downlink

6.11.5.4.2.2.2.1 Transport channel parameters

6.11.5.4.2.2.2.1.1 Transport channel parameters for Interactive or background / DL: 384 kbps / PS RAB and DL SRB for SHCCH mapped on DSCH

See clause 6.10.3.4.2.2.2.1.1.

6.11.5.4.2.2.2.1.2 Transport channel parameters for DL: 3.4 Kbps SRBs for DCCH mapped on DSCH

See clause 6.10.3.4.2.1.2.1.2.

6.11.5.4.2.2.2.1.3 TFCS for DSCH

See clause 6.10.3.4.2.2.2.1.3.

6.11.5.4.2.2.2.1.4 Transport channel parameters for DL SRBs for DCCH and SRB for CCCH and SRB for BCCH and DL SRB for SHCCH mapped on FACH

See clause 6.11.5.4.2.1.2.1.4.

6.11.5.4.2.2.2.1.5 TFCS for FACH

See clause 6.11.5.4.2.1.2.1.5.

6.11.5.4.2.2.2.2 Physical channel parameters

6.11.5.4.2.2.2.2.1 Physical channel parameters for PDSCH

PDSCH	Modulation	QPSK

	Codes and time slots / radio frame	SF 1 x 1 code x 6 time slots
	Max. Number of data bits/radio frame	8 424 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x2 bits
	SS / radio frame	2x2 bits
	Puncturing Limit	0.60

6.11.5.4.2.2.2.2.2 Physical channel parameters for SCCPCH

See clause 6.11.5.4.2.1.2.2.2.

6.11.5.4.2.3 Interactive or background / UL: 64 DL: 2 048 kbps / PS RAB + UL: 3.4/16.8 DL: 3.4/33.6 kbps SRBs for DCCH, CCCH and BCCH + UL: 16.8 DL: 16 kbps SRBs for SHCCH

6.11.5.4.2.3.1 Uplink

See clause 6.11.5.4.2.1.1.

6.11.5.4.2.3.2 Downlink

6.11.5.4.2.3.2.1 Transport channel parameters

6.11.5.4.2.3.2.1.1 Transport channel parameters for Interactive or background / DL: 2 048 kbps / PS RAB and DL SRB for SHCCH mapped on DSCH

Higher layer	RAB/Signalling RB		RAB	SRB#5
RLC	Logical channel type		DTCH	SHCCH
	RLC mode		AM	UM
	Payload sizes, bit		1 704	160
	Max data rate, bps		2 048 000	16 000
	RLC header, bit		16	8
MAC	MAC header, bit		0	0
	MAC multiplexing		N/A	N/A
Layer 1	TrCH type		DSCH	DSCH
	TB sizes, bit		1720	168
	TFS	TF0, bits	0x1720	0x168
		TF1, bits	1x1720	1x168
		TF2, bits	2x1720	N/A
		TF3, bits	4x1720	N/A
		TF4, bits	8x1720	N/A
		TF5, bits	12x1720	N/A
		TF6, bits	N/A (alt. 16x1720)	N/A
		TF7, bits	N/A (alt. 20x1720)	N/A
		TF8, bits	N/A (alt. 24x1720)	N/A
	TTI, ms		10 (alt. 20)	10
	Coding type		No Coding	CC 1/2
	CRC, bit		24	16
	Max number of bits/TTI after channel coding		20 928 (alt. 41 856)	384
	Downlink: Max number of bits/radio frame before rate matching		20 928 (alt. 20 928)	384
	RM attribute		135 to 175	180 to 220

6.11.5.4.2.3.2.1.2 Transport channel parameters for DL: 3.4 Kbps SRBs for DCCH mapped on DSCH

See clause 6.10.3.4.2.1.2.1.2.

6.11.5.4.2.3.2.1.3 TFCS for DSCH

TFCS size	22 (alt.34)
TFCS	(2 048 kbps RAB, SHCCH, SRBs for DCCH)= (TF0, TF0, TF0), (TF1, TF0, TF0), (TF2, TF0, TF0), (TF3, TF0, TF0), (TF4, TF0, TF0), (TF5, TF0, TF0), (TF0, TF1, TF0), (TF1, TF1, TF0), (TF2, TF1, TF0), (TF3, TF1, TF0), (TF4, TF1, TF0), (TF0, TF0, TF1), (TF1, TF0, TF1), (TF2, TF0, TF1), (TF3, TF0, TF1), (TF4, TF0, TF1), (TF5, TF0, TF1), (TF0, TF1, TF1), (TF1, TF1, TF1), (TF2, TF1, TF1), (TF3, TF1, TF1), (TF4, TF1, TF1),

	(alt. (TF0, TF0, TF0), (TF1, TF0, TF0), (TF2, TF0, TF0), (TF3, TF0, TF0), (TF4, TF0, TF0), (TF5, TF0, TF0), (TF6, TF0, TF0), (TF7, TF0, TF0), (TF8, TF0, TF0), (TF0, TF1, TF0), (TF1, TF1, TF0), (TF2, TF1, TF0), (TF3, TF1, TF0), (TF4, TF1, TF0), (TF5, TF1, TF0), (TF6, TF1, TF0), (TF7, TF1, TF0), (TF0, TF0, TF1), (TF1, TF0, TF1), (TF2, TF0, TF1), (TF3, TF0, TF1), (TF4, TF0, TF1), (TF5, TF0, TF1), (TF6, TF0, TF1), (TF7, TF0, TF1), (TF8, TF0, TF1), (TF0, TF1, TF1), (TF1, TF1, TF1), (TF2, TF1, TF1), (TF3, TF1, TF1), (TF4, TF1, TF1), (TF5, TF1, TF1), (TF6, TF1, TF1), (TF7, TF1, TF1))

For better understanding of the TFCS please note that the following combinations are not included in the table above:

- (TF5, TF1, TF0), (TF5, TF1, TF1), (TF8, TF1, TF0), (TF8, TF1, TF1).

6.11.5.4.2.3.2.1.4 Transport channel parameters for DL SRBs for DCCH and SRB for CCCH and SRB for BCCH and DL SRB for SHCCH mapped on FACH

See clause 6.11.5.4.2.1.2.1.4.

6.11.5.4.2.3.2.1.5 TFCS for FACH

See clause 6.11.5.4.2.1.2.1.5.

6.11.5.4.2.3.2.2 Physical channel parameters

6.11.5.4.2.3.2.2.1 Physical channel parameters for PDSCH

PDSCH	Modulation	8PSK
	Codes and time slots / radio frame	SF1 x 1 code x 10 time slots
	Max. Number of data bits/radio frame	21 084 bits
	TFCI code word / radio frame	24 bits
	TPC / radio frame	2x3 bits
	SS / radio frame	2x3 bits
	Puncturing Limit	1

6.11.5.4.2.3.2.2.2 Physical channel parameters for S-CCPCH

See clause 6.11.5.4.2.1.2.2.2.

6.11.5.4.3 Combinations on PDSCH, SCCPCH, DPCH, PUSCH and PRACH

6.11.5.4.3.1 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB+ UL:3.4 DL:3.4 kbps SRBs for DCCH + Interactive or background / UL: 64 DL: 256 kbps / PS RAB + UL: 16.8 kbps SRBs for CCCH and SHCCH+ DL: 33.6 kbps SRBs for CCCH, SHCCH and BCCH

6.11.5.4.3.1.1 Uplink

6.11.5.4.3.1.1.1 Transport channel parameters

6.11.5.4.3.1.1.1.1 Transport channel parameters for Conversational / speech / UL:12.2 / CS RAB

See clause 6.10.3.4.1.4.1.1.1.

6.11.5.4.3.1.1.1.2 Transport channel parameters for UL SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.3.1.1.1.3 TFCS for DCH

See clause 6.10.3.4.1.4.1.1.3.

6.11.5.4.3.1.1.1.4 Transport channel parameters for Interactive or background / UL: 64 kbps / PS RAB and UL SRB for SHCCH mapped on USCH

See clause 6.10.3.4.2.1.1.1.1.

6.11.5.4.3.1.1.1.5 TFCS for USCH

See clause 6.10.3.4.3.1.1.1.5.

6.11.5.4.3.1.1.1.6 Transport channel parameters for SRB for CCCH and UL SRB for SHCCH mapped on RACH

See clause 6.10.3.4.3.1.1.1.6.

6.11.5.4.3.1.1.2 Physical channel parameters

Physical channel parameters for uplink DPCH see clause 6.11.5.4.1.4.1.2.

Physical channel parameters for PUSCH see clause 6.11.5.4.2.1.1.2.

Physical channel parameters for PRACH see clause 6.11.5.4.2.1.1.2.

6.11.5.4.3.1.2 Downlink

6.11.5.4.3.1.2.1 Transport channel parameters

6.11.5.4.3.1.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 kbps / CS RAB

See clause 6.10.3.4.1.4.2.1.1.

6.11.5.4.3.1.2.1.2 Transport channel parameters for DL SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.3.1.2.1.3 TFCS for DCH

See clause 6.10.3.4.1.4.2.1.3.

6.11.5.4.3.1.2.1.4 Transport channel parameters for Interactive or background / DL: 256 kbps / PS RAB and DL SRB for SHCCH mapped on DSCH

See clause 6.10.3.4.2.1.2.1.1.

6.11.5.4.3.1.2.1.5 TFCS for DSCH

See clause 6.10.3.4.3.1.2.1.5.

6.11.5.4.3.1.2.1.6 Transport channel parameters for SRB for CCCH and SRB for BCCH and DL SRB for SHCCH mapped on FACH

Higher layer	RAB/Signalling RB		SRB#0	SRB#5	SRB#6
	User of Radio Bearer		RRC	RRC	RRC
RLC	Logical channel type		CCCH	SHCCH	BCCH
	RLC mode		UM	UM	TM
	Payload sizes, bit		160	160	168
	Max data rate, bps		32 000	32 000	33 600
	RLC header, bit		8	8	0
MAC	MAC header, bit		3		
	MAC multiplexing		3 logical channel multiplexing		
Layer 1	TrCH type		FACH		
	TB sizes, bit		171		
	TFS	TF0, bits	0x171		
		TF1, bits	1x171		
		TF2, bits	2x171		
		TF3, bits	3x171		
		TF4, bits	4x171		
	TTI, ms		20		
	Coding type		CC 1/2		
	CRC, bit		16		
	Max number of bits/TTI after channel coding		1 528		
	Max number of bits/radio frame before rate matching		764		

6.11.5.4.3.1.2.1.7 TFCS for FACH

TFCS size	5
TFCS	FACH = TF0, TF1,TF2,TF3,TF4

6.11.5.4.3.1.2.2 Physical channel parameters

Physical channel parameters for downlink for DPCH see clause 6.11.5.4.1.4.2.2.

Physical channel parameters for downlink for PDSCH see clause 6.11.5.4.2.1.2.2.

Physical channel parameters for SCCPCH see clause 6.11.5.4.2.1.2.2.

6.11.5.4.3.2 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB+ UL:3.4 DL:3.4 kbps SRBs for DCCH + Interactive or background / UL: 64 DL: 384 kbps / PS RAB + UL: 16.8 kbps SRBs for CCCH and SHCCH+ DL: 33.6 kbps SRBs for CCCH, SHCCH and BCCH

6.11.5.4.3.2.1 Uplink

See clause 6.11.5.4.3.1.1.

6.11.5.4.3.2.2 Downlink

6.11.5.4.3.2.2.1 Transport channel parameters

6.11.5.4.3.2.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 kbps / CS RAB

See clause 6.10.3.1.4.1.4.2.1.1.

6.11.5.4.3.2.2.1.2 Transport channel parameters for DL SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.3.2.2.1.3 TFCS for DCH

See clause 6.10.3.4.1.4.2.1.3.

6.11.5.4.3.2.2.1.4 Transport channel parameters for Interactive or background / DL: 384 kbps / PS RAB and DL SRB for SHCCH mapped on DSCH

See clause 6.10.3.4.2.2.2.1.1.

6.11.5.4.3.2.2.1.5 TFCS for DSCH

See clause 6.10.3.4.3.2.2.1.5.

6.11.5.4.3.2.2.1.6 Transport channel parameters for SRB for CCCH and SRB for BCCH and DL SRB for SHCCH mapped on FACH

See clause 6.11.5.4.3.1.2.1.6.

6.11.5.4.3.2.2.1.7 TFCS for FACH

See clause 6.11.5.4.3.1.2.1.7.

6.11.5.4.3.2.2.2 Physical channel parameters

Physical channel parameters for downlink for DPCH see clause 6.11.5.4.1.4.2.2.

Physical channel parameters for downlink for PDSCH see clause 6.11.5.4.2.2.2.2.

Physical channel parameters for downlink for SCCPCH see clause 6.11.5.4.2.1.2.2.

6.11.5.4.3.3 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB+ UL:3.4 DL:3.4 kbps SRBs for DCCH + Interactive or background / UL: 64 DL: 2 048 kbps / PS RAB + UL: 16.8 kbps SRBs for CCCH and SHCCH + DL: 33.6 kbps SRBs for CCCH, SHCCH and BCCH

6.11.5.4.3.3.1 Uplink

See clause 6.11.5.4.3.1.1.

6.11.5.4.3.3.2 Downlink

6.11.5.4.3.3.2.1 Transport channel parameters

6.11.5.4.3.3.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 kbps / CS RAB

See clause 6.10.3.4.1.4.2.1.1.

6.11.5.4.3.3.2.1.2 Transport channel parameters for DL SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.3.3.2.1.3 TFCS for DCH

See clause 6.10.3.4.1.4.2.1.3.

6.11.5.4.3.3.2.1.4 Transport channel parameters for Interactive or background / DL: 2 048 kbps / PS RAB and DL SRB for SHCCH mapped on DSCH

See clause 6.11.5.4.2.3.2.1.2.

6.11.5.4.3.3.2.1.5 TFCS for DSCH

See clause 6.11.5.4.2.3.2.1.4.

6.11.5.4.3.3.2.1.6 Transport channel parameters for SRB for CCCH and SRB for BCCH and DL SRB for SHCCH mapped on FACH

See clause 6.11.5.4.3.1.2.1.6.

6.11.5.4.3.3.2.1.7 TFCS for FACH

See clause 6.11.5.4.3.1.2.1.7.

6.11.5.4.3.3.2.2 Physical channel parameters

Physical channel parameters for downlink DPCH see clause 6.11.5.4.1.4.2.2.

Physical channel parameters for PDSCH see clause 6.11.5.4.2.3.2.2.

Physical channel parameters for SCCPCH see clause 6.11.5.4.2.1.2.2.

6.11.5.4.4 Combinations on SCCPCH

6.11.5.4.4.1 Stand-alone signalling RB for PCCH

6.11.5.4.4.1.1 Transport channel parameters

6.11.5.4.4.1.1.1 Transport channel parameter of SRB for PCCH

See clause 6.10.3.4.4.1.1.1.

6.11.5.4.4.1.1.2 TFCS

See clause 6.10.3.4.4.1.1.2.

6.11.5.4.4.1.2 Physical channel parameters

S-CCPCH	Modulation	QPSK

	Codes and time slots / radio frame	SF16 x 2 codes x 2 time slots (alt. SF16 x 1 codes x 2 time slots)
	Max. Number of data bits/radio frame	344 bits (alt. 168 bits)
	TFCI code word / radio frame	8 bits
	TPC / radio frame	0 bits
	SS / radio frame	0 bits
	Puncturing Limit	1 (alt. 0.84)
NOTE: Alt. Puncturing Limit applies when alt. payload sizes and alt. codes and time slots / radio frame are both configured.		

6.11.5.4.4.2 Interactive/Background 32 kbps PS RAB + SRBs for CCCH + SRB for DCCH + SRB for BCCH

6.11.5.4.4.2.1 Transport channel parameters

6.11.5.4.4.2.1.1 Transport channel parameters for Interactive/Background 32 kbps PS RAB

See clause 6.10.3.4.4.2.1.1.

6.11.5.4.4.2.1.2 Transport channel parameters of SRBs for CCCH, SRB for DCCH, and SRB for BCCH

Higher layer	RAB/signalling RB		SRB#0	SRB#1	SRB#2	SRB#3	SRB#4	SRB#5
	User of Radio Bearer		RRC	RRC	RRC	NAS_DT High prio	NAS_DT Low prio	RRC
RLC	Logical channel type		CCCH	DCCH	DCCH	DCCH	DCCH	BCCH
	RLC mode		UM	UM	AM	AM	AM	TM
	Payload sizes, bit		160	136 or 120	128	128	128	168
	Max data rate, bps		32 000 (alt. 16 000)	27 200 or 2400 (alt. 24 000 or 12 000)	25 600 (alt. 12 800)	25 600 (alt. 12 800)	25 600 (alt. 12 800)	33 600 (alt. 16 800)
	RLC header, bit		8	8	16	16	16	0
MAC	MAC header, bit		3	27 or 43	27	27	27	3
	MAC multiplexing		6 logical channel multiplexing					
Layer 1	TrCH type		FACH					
	TB sizes, bit		171					
	TFS	TF0, bits	0x171					
		TF1, bits	1x171					
		TF2, bits	2x171					
		TF3, bits	3x171 (alt. N/A)					
		TF4, bits	4x171 (alt. N/A)					
	TTI, ms		20					
	Coding type		CC 1/2					
	CRC, bit		16					
	Max number of bits/TTI before rate matching		1 528 (alt. 764)					
	Max number of bits/radio frame before rate matching		764 (alt. 382)					
	RM attribute		200 to 240					
NOTE: MAC header size and RLC payload size depend on use of U-RNTI or C-RNTI.								

6.11.5.4.4.2.1.3 TFCS

See clause 6.10.3.4.4.2.1.3.

6.11.5.4.4.2.2 Physical channel parameters

SCCPCH	Modulation	QPSK
	Codes and time slots / radio frame	SF 16 x 9 codes x 2 time slots (alt. SF16 x 4 codes x 2 time slots)
	Max. Number of data bits/radio frame	1 568 bits (alt. 688 bits)
	TFCI code word / radio frame	16 bits
	TPC / radio frame	0 bits
	SS / radio frame	0 bits

	Puncturing Limit	0.52 (alt. 0.48)
NOTE: Alt. Puncturing Limit applies when alt. TFCS and alt. codes and time slots / radio frame are both configured.		

6.11.5.4.4.2a Interactive/Background 32 kbps PS RAB + Interactive/Background 32 kbps PS RAB + SRBs for CCCH + SRB for DCCH + SRB for BCCH

6.11.5.4.4.2a.1 Transport channel parameters

6.11.5.4.4.2a.1.1 Transport channel parameters for Interactive/Background 32 kbps PS RAB + Interactive/Background 32 kbps PS RAB

See clause 6.10.3.4.2a.1.1.

6.11.5.4.4.2a.1.2 Transport channel parameters of SRBs for CCCH, SRB for DCCH, and SRB for BCCH

See clause 6.11.5.4.4.2.1.2.

6.11.5.4.4.2a.1.3 TFCS

See clause 6.10.3.4.4.2a.1.3.

6.11.5.4.4.2a.2 Physical channel parameters

See clause 6.11.5.4.4.2.2.

6.11.5.4.4.2b SRBs for CCCH + SRB for DCCH + SRB for BCCH

6.11.5.4.4.2b.1 Transport channel parameters

6.11.5.4.4.2b.1.1 Transport channel parameters of SRBs for CCCH, SRB for DCCH, and SRB for BCCH

See clause 6.11.5.4.4.2.1.2.

6.11.5.4.4.2b.1.2 TFCS

See clause 6.10.3.4.4.2b.1.2.

6.11.5.4.4.2b.2 Physical channel parameters

SCCPCH	Modulation	QPSK
	Codes and time slots / radio frame	SF 16 x 4 codes x 2 time slots (alt. SF16 x 2 codes x 2 time slots)
	Max. Number of data bits/radio frame	688 bits (alt. 344 bits)
	TFCI code word / radio frame	16 bits (alt. 8 bits)
	TPC / radio frame	0 bits
	SS / radio frame	0 bits
	Puncturing Limit	0.88
NOTE: Alt. Puncturing Limit applies when alt. TFCS and alt. codes and time slots / radio frame are both configured.		

6.11.5.4.4.3 Interactive/Background 32 kbps RAB + SRB for PCCH + SRB for CCCH + SRB for DCCH + SRB for BCCH

6.11.5.4.4.3.1 Transport channel parameters

6.11.5.4.4.3.1.1 Transport channel parameters of SRB for Interactive/Background 32 kbps RAB

See clause 6.10.3.4.4.2.1.1.

6.11.5.4.4.3.1.2 Transport channel parameters of SRB for PCCH

See clause 6.10.3.4.4.1.1.1.

6.11.5.4.4.3.1.3 Transport channel parameters of SRBs for CCCH, SRB for DCCH, and SRB for BCCH

See clause 6.11.5.4.4.2.1.2.

6.11.5.4.4.3.1.4 TFCS

See clause 6.10.3.4.4.3.1.4.

6.11.5.4.4.3.2 Physical channel parameters

S-CCPCH	Modulation	QPSK
	Codes and time slots / radio frame	SF16 x 10 codes x 2 time slots (alt. SF16 x 6 codes x 2 time slots)
	Max. Number of data bits/radio frame	1 744 bits (alt. 1 040 bits)
	TFCI code word / radio frame	16 bits
	TPC / radio frame	0 bits
	SS / radio frame	0 bits
	Puncturing Limit	0.48 (alt. 0.52)
NOTE: Alt. Puncturing Limit applies when alt. TFCS and alt. codes and time slots / radio frame are both configured.		

6.11.5.4.4.3a SRB for PCCH + SRB for CCCH + SRB for DCCH + SRB for BCCH

6.11.5.4.4.3a.1 Transport channel parameters

6.11.5.4.4.3a.1.1 Transport channel parameters of SRB for PCCH

See clause 6.10.3.4.4.1.1.1.

6.11.5.4.4.3a.1.2 Transport channel parameters of SRBs for CCCH, SRB for DCCH, and SRB for BCCH

See clause 6.11.5.4.4.2.1.2.

6.11.5.4.4.3a.1.3 TFCS

See clause 6.10.3.4.4.3a.1.3.

6.11.5.4.4.3a.2 Physical channel parameters

SCCPCH	Modulation	QPSK
	Codes and time slots / radio frame	SF 16 x 4 codes x 2 time slots (alt. SF16 x 2 codes x 2 time slots)
	Max. Number of data bits/radio frame	688 bits (alt. 336 bits)
	TFCI code word / radio frame	16 bits
	TPC / radio frame	0 bits
	SS / radio frame	0 bits
	Puncturing Limit	0.60 (alt. 0.52)
NOTE: Alt. applies when alts for SRB for PCCH and SRBs for CCCH/ DCCH/ BCCH are both configured.		

6.11.5.4.4.4 RB for CTCH + SRB for CCCH + SRB for BCCH

6.11.5.4.4.4.1 Transport channel parameters

6.11.5.4.4.4.1.1 Transport channel parameters of RB for CTCH

See clause 6.10.3.4.4.4.1.1.

6.11.5.4.4.4.1.2 Transport channel parameters of SRB for CCCH and SRB for BCCH

Higher layer	RAB/signalling RB	SRB#0	SRB#5
	User of Radio Bearer	RRC	RRC
RLC	Logical channel type	CCCH	BCCH
	RLC mode	UM	TM

Higher layer	RAB/signalling RB		SRB#0	SRB#5
	User of Radio Bearer		RRC	RRC
	Payload sizes, bit		160	168
	Max data rate, bps		16 000	16 800
	AMD/UMD/TrD PDU header, bit		8	0
MAC	MAC header, bit		3	3
	MAC multiplexing		2 logical channel multiplexing	
Layer 1	TrCH type		FACH	
	TB sizes, bit		171	
	TFS	TF0, bits	0x171	
		TF1, bits	1x171	
		TF2, bits	2x171	
	TTI, ms		20	
	Coding type		CC 1/3	
	CRC, bit		16	
	Max number of bits/TTI before rate matching		1 146	
	Max number of bits/radio frame before rate matching		573	
	RM attribute		200 to 240	

6.11.5.4.4.4.1.3 TFCS

See clause 6.10.3.4.4.4.1.3.

6.11.5.4.4.4.2 Physical channel parameters

SCCPCH	Modulation	QPSK
	Codes and time slots / radio frame	SF 16 x 4 codes x 2 time slots
	Max. Number of data bits/radio frame	688 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	0 bits
	SS / radio frame	0 bits
	Puncturing Limit	0.52

6.11.5.4.5 Combinations on PRACH

6.11.5.4.5.1 SRB for CCCH + SRBs for DCCH

6.11.5.4.5.1.1 Transport channel parameters

6.11.5.4.5.1.1.1 Transport channel parameter for SRB for CCCH, SRBs for DCCH

See clause 6.10.3.4.5.1.1.1.

6.11.5.4.5.1.1.2 TFCS

See clause 6.10.3.4.5.1.1.2.

6.11.5.4.5.1.2 Physical channel parameters

PRACH	Modulation	QPSK
	Codes and time slots / radio frame	SF 8 x 1 code x 2 time slots
	Max. Number of data bits/radio frame	352 bits
	TPC / radio frame	0 bits
	SS / radio frame	0 bits
	Puncturing Limit	0.88

6.11.5.4.5.2 Interactive/Background 12.8 kbps PS RAB + SRB for CCCH + SRBs for DCCH

6.11.5.4.5.2.1 Transport channel parameters

6.11.5.4.5.2.1.1 Transport channel parameters for Interactive or background / 12.8 kbps / PS RAB + SRB for CCCH + SRBs for DCCH

Higher layer	RAB/signalling RB	RAB	SRB#0	SRB#1	SRB#2	SRB#3	SRB#4

	User of Radio Bearer	Interactive/ Background RAB	RRC	RRC	RRC	NAS_DT High priority	NAS_DT Low priority
RLC	Logical channel type	DTCH	CCCH	DCCH	DCCH	DCCH	DCCH
	RLC mode	AM	TM	UM	AM	AM	AM
	Payload sizes, bit	128	168	136	128	128	128
	Max data rate, bps	12 800	16 800	13 600	12 800	12 800	12 800
	AMD/UMD/TrD PDU header, bit	16	0	8	16	16	16
MAC	MAC header, bit	26	2	26	26	26	26
	MAC multiplexing	6 logical channel multiplexing					
Layer 1	TrCH type	RACH					
	TB sizes, bit	170					
	TFS TF0, bits	1x170					
	TTI, ms	10					
	Coding type	CC 1/2					
	CRC, bit	16					
	Max number of bits/TTI after channel coding	388					
	Max number of bits/ Radio frame before rate matching	388					

6.11.5.4.5.2.1.2 TFCS

TFCS size	1
TFCS	12.8 kbps PS RAB + SRB for CCCH + SRBs for DCCH = (TF0)

6.11.5.4.5.2.2 Physical channel parameters

See clause 6.11.5.4.5.1.2.

6.11.5.4.5.3 Interactive/Background 12.8 kbps PS RAB + Interactive/Background 12.8 kbps PS RAB + SRB for CCCH + SRB for DCCH

6.11.5.4.5.3.1 Transport channel parameters

6.11.5.4.5.3.1.1 Transport channel parameters for Interactive or background / 12.8 kbps / PS RAB + Interactive or background / 12.8 kbps / PS RAB + SRB for CCCH + SRBs for DCCH

Higher layer	RAB/signalling RB	RAB	RAB	SRB#0	SRB#1	SRB#2	SRB#3	SRB#4
	User of Radio Bearer	Interactive/ Background RAB	Interactive/ Background RAB	RRC	RRC	RRC	NAS_DT High prio	NAS_DT Low prio
RLC	Logical channel type	DTCH	DTCH	CCCH	DCCH	DCCH	DCCH	DCCH
	RLC mode	AM	AM	TM	UM	AM	AM	AM
	Payload sizes, bit	128	128	168	136	128	128	128
	Max data rate, bps	12 800	12 800	16 800	13 600	12 800	12 800	12 800
	AMD/UMD/TrD PDU header, bit	16	16	0	8	16	16	16
MAC	MAC header, bit	26	26	2	26	26	26	26
	MAC multiplexing	7 logical channel multiplexing						
Layer 1	TrCH type	RACH						
	TB sizes, bit	170						
	TFS TF0, bits	1x170						
	TTI, ms	10						
	Coding type	CC ½						
	CRC, bit	16						
	Max number of bits/TTI after channel coding	388						
	Max number of bits/ Radio frame before rate matching	388						

6.11.5.4.5.3.1.2 TFCS

TFCS size	1
TFCS	12.8 kbps PS RAB + 12.8 kbps PS RAB + SRB for CCCH + SRBs for DCCH = (TF0)

6.11.5.4.5.3.2 Physical channel parameters

See clause 6.11.5.4.5.1.2.

7 Generic setup procedures

7.1 Basic Generic Procedures

7.1.1 UE Test States for Basic Generic Procedures

This clause describes a set of procedures for use by test cases in 3GPP TS 34.123-1 [1]. Describing these procedures in a generic manner allows their use in many test cases. By using these procedures, test case descriptions need not detail signalling that is not relevant to its purpose or understanding.

The procedures are based upon default values that are adapted to the most common usage. Test cases that require values different from the default will, when specifying the Basic Generic Procedure, also specify those parameters that are modified.

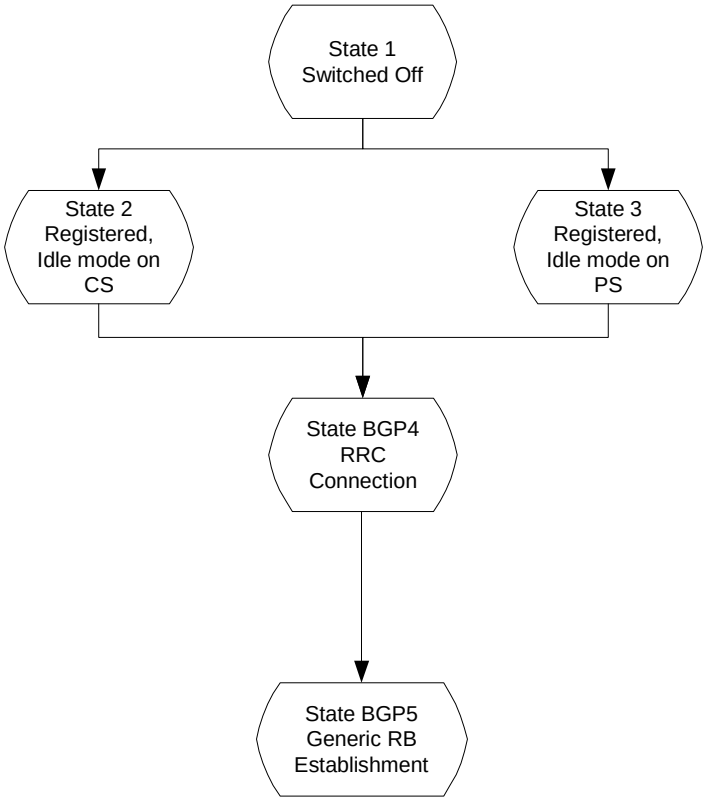

Figure 7.1.1: UE Test States for Basic Generic Procedures

In order that the UE can set up a call in UTRAN, there are a number of procedures to be undertaken in a hierachical sequence to move between known states. The sequences are shown in figure 7.1.1 and the status of the relevant protocols in the UE in the different states are given in table 7.1.1.

Table 7.1.1: The UE states

		RRC	CC	MM	SM	GMM
State 1	Power OFF	-----	null	detached	inactive	detached
State 2	CS Registered Idle Mode	idle	null	idle	inactive	detached
State 3	PS Registered Idle Mode	idle	null	detached	inactive	idle
State BGP4	RRC Connection	connected	null	as previous	inactive	as previous
State BGP5	Generic RB Establishment	connected	null	as previous	inactive	as previous

7.1.2 Mobile terminated establishment of Radio Resource Connection

7.1.2.1 Initial conditions

System Simulator:

The system simulator will start from the default idle state. Parameters will the default parameters for a single cell, unless otherwise specified in the test case.

User Equipment:

Unless otherwise specified in the test case, the UE will be in the following state:

- Default test operating conditions.
- The UE shall have followed the generic registration procedure for CS or PS operations, and will be in Idle Mode, Camped-on (State 2 or State 3).

7.1.2.2 Definition of system information messages

The default system information messages are used.

7.1.2.3 Procedure

- The SS sends a PAGING TYPE 1 message to the UE on the appropriate paging block, and with the IE "Paging record" containing the TMSI or P-TMSI of the UUT.
- The SS receives an RRC CONNECTION REQUEST message from the UE.
- On receipt of the RRC CONNECTION REQUEST the SS shall transmit a RRC CONNECTION SETUP message to the UE. The SS shall wait for the receipt of an RRC CONNECTION SETUP COMPLETE message from the UE.
- On receipt of an RRC CONNECTION SETUP COMPLETE message, the procedure is complete.

Step	Direction		Message	Comments
	UE	SS		
1		←	SYSTEM INFORMATION (BCCH)	Default SI messages
2		←	PAGING TYPE 1 (PCCH)	Sent on appropriate cycle
3		→	RRC CONNECTION REQUEST (CCCH)	RRC
4		←	RRC CONNECTION SETUP (CCCH)	RRC
5		→	RRC CONNECTION SETUP COMPLETE (DCCH)	RRC

7.1.2.4 Specific message contents

7.1.2.4.1 PAGING TYPE 1

This message is sent from the SS to the UE, using the TM RLC SAP, on the PCCH logical channel.

Information Element				Value/Remark
Message Type				PAGING TYPE 1
UE Information elements				
Paging record list	Paging record	CN originator	Paging cause	Terminating Speech Call (note)
			CN domain identity	CS domain (note)
			UE Identity	TMSI (GSM-MAP) As specified during Registration procedure
Other information elements				
BCCH modification info				omit
NOTE: These defaults are applied if no subsequent procedure is to be run. Otherwise, the Paging cause, CN domain identity and UE Identity are selected in accordance with the requirements of the following procedure.				

7.1.2.4.2 RRC CONNECTION REQUEST

This message is sent by the UE to the SS using the TM-RLC SAP. It is sent on the CCCH Logical channel.

Information Element			Value/Remark
Message Type			RRC CONNECTION REQUEST
UE information elements			
Initial UE identity	TMSI and LAI	TMSI (GSM-MAP)	As specified during Registration procedure
		LAI (GSM-MAP)	As specified by default 1 cell environment
Initial UE capability	Maximum number of AM entities		As declared in UE ICS
Establishment cause			As appropriate
Protocol error indicator			FALSE
>UE Specific Behaviour Information 1 idle			This IE will not be checked by default behaviour, but in specific test case.
Measurement information elements			
Measured results on RACH			Not checked
NOTE: These defaults are applied if no subsequent procedure is to be run. Otherwise, the UE Identity is selected in accordance with the requirements of the following procedure.			

7.1.2.4.3 RRC CONNECTION SETUP

This message is sent from the SS to the UE using the UM-RLC SAP. The message is sent on the CCCH Logical channel.

The default RRC CONNECTION SETUP message for the transition to connected mode CELL_DCH is used except for the IE fields specified below.

Information Element			Value/Remark
Message Type			RRC CONNECTION SETUP
UE Information Elements			
Initial UE identity	TMSI and LAI	TMSI (GSM-MAP)	As specified during Registration procedure
		LAI (GSM-MAP)	As specified by default 1 cell environment
RB Information Elements			
Use default			
TrCH Information Elements			
Use default			
PhyCH Information Elements			
Frequency info			As specified by default 1 cell environment
Uplink radio resources			
Use default			
Downlink radio resources			
Use default			
NOTE: These defaults are applied if no subsequent procedure is to be run. Otherwise, the UE Identity is selected in accordance with the requirements of the following procedure.			

7.1.2.4.4 RRC CONNECTION SETUP COMPLETE

This message is sent by the UE to the SS using AM-RLC SAP. The message is sent on the DCCH Logical channel.

Information Element			Value/Remark
Message Type			RRC CONNECTION SETUP COMPLETE
UE Information Elements			
Hyper frame number			Not checked
UE radio access capability	Conformance test compliance		R99
	PDCP capability	Support for lossless SRNS relocation	Not checked
		Supported algorithm types	Not checked

Information Element			Value/Remark
	RLC capability	Total RLC AM buffer size	Not checked
		Maximum number of AM entities	Not checked
	Transport channel capability	**Downlink**	
		Max no of bits received	Not checked
		Max convolutionally coded bits received	Not checked
		Max turbo coded bits received	Not checked
		Maximum number of simultaneous transport channels	Not checked
		Max no of received transport blocks	Not checked
		Maximum number of TFC in the TFCS	Not checked
		Maximum number of TF	Not checked
		Support for turbo decoding	Not checked
		Uplink	
		Max no of bits transmitted	Not checked
		Max convolutionally coded bits received	Not checked
		Max turbo coded bits received	Not checked
		Maximum number of simultaneous transport channels	Not checked
		Max no of transmitted transport blocks	Not checked
		Maximum number of TFC in the TFCS	Not checked
		Maximum number of TF	Not checked
		Support for turbo encoding	Not checked
	RF capability	UE power class	As declared for UE
		Tx/Rx frequency separation	Not checked
	Physical channel capability	**Downlink**	
		Maximum number of simultaneous CCTrCH	Not checked
		Max no DPCH/PDSCH codes	Not checked (PDSCH: R99 and Rel-4 only)
		Max no physical channel bits received	Not checked
		Support for SF 512	Not checked
		Support of PDSCH	Not checked (R99 and Rel-4 only)
		Simultaneous reception of SCCPCH and DPCH	Not checked
		Max no of S-CCPCH RL	Not checked
		Uplink	
		Maximum number of DPDCH bits transmitted per 10 ms	Not checked
		Support of PCPCH (R99 and Rel-4 only)	Not checked
	UE multi-mode/multi-RAT capability	Multi-RAT capability	
		Multi-mode capability	FDD or FDD/TDD
	Security capability	Ciphering algorithm capability	Not checked
		Integrity protection algorithm capability	Not checked
	LCS capability	Standalone location method(s) supported	Not checked
		UE based OTDOA supported	Not checked

Information Element			Value/Remark
		Network Assisted GPS support	Not checked
		GPS reference time capable	Not checked
		Support for IPDL	Not checked
	Measurement capability	Need for downlink compressed mode	Not checked
		FDD measurements DL	Not checked
		TDD measurements DL	Not checke
		GSM 900 DL	Not checked
		DCS 1800 DL	Not checked
		GSM 1900 DL	Not checked
		Multi-carrier measurement DL	Not checked
		Need for uplink compressed mode	Not checked
		FDD measurements UL	Not checked
		TDD measurements UL	Not checked
		GSM 900 UL	Not checked
		DCS 1800 UL	Not checked
		GSM 1900 UL	Not checked
		Multi-carrier measurement UL	Not checked
UE system specific capability			Not checked

7.1.3 Radio Bearer Setup Procedure

7.1.3.1 Initial conditions

The procedure specified in clause 7.1.2 will be run. This procedure starts from the successful completion of clause 7.1.2.

7.1.3.2 Definition of system information messages

The default system information messages are used.

7.1.3.3 Procedure

- The SS sends a RADIO BEARER SETUP message to the UE on the DCCH established by the RRC Connection Establishment procedure.
- The SS receives a RADIO BEARER SETUP COMPLETE message from the UE in RLC Acknowledged mode on the DCCH.

On receiption of the RADIO BEARER SETUP COMPLETE the procedure is complete.

Step	Direction		Message	Comments
	UE	SS		
1	←		RADIO BEARER SETUP (DCCH)	RRC
2	→		RADIO BEARER SETUP COMPLETE (DCCH)	RRC

7.1.3.4 Specific message contents

7.1.3.4.1 RADIO BEARER SETUP

The RADIO BEARER SETUP message is sent from the System Simulator to the UE, using AM-RLC on the DCCH logical channel.

The default RRC CONNECTION SETUP message for the setup of a speech radio access bearer is used except for the IE fields specified below.

Information Element	Value/Remark
Message Type	RADIO BEARER SETUP
UE Information Elements	
CN Information Elements	

RB Information Elements	
RAB information for setup	Default parameters for 12.2 kbps speech RAB + 3.4 kbps signalling radio bearer according to clause 6.10.2.4.1.4 for FDD, clause 6.10.3.4.1.4 for 3.84 Mcps TDD and 6.11.5.4.1.4 for 1.28 Mcps TDD

7.1.3.4.2 RADIO BEARER SETUP COMPLETE

The RADIO BEARER SETUP COMPLETE message is sent from the UE to the System Simulator, using AM-RLC on the DCCH logical channel.

The default RADIO BEARER SETUP COMPLETE message is used.

Information Element	Value/Remark
Message Type	RADIO BEARER SETUP COMPLETE
Use default	

7.2 Generic setup procedures

7.2.1 UE Test States for Generic setup procedures

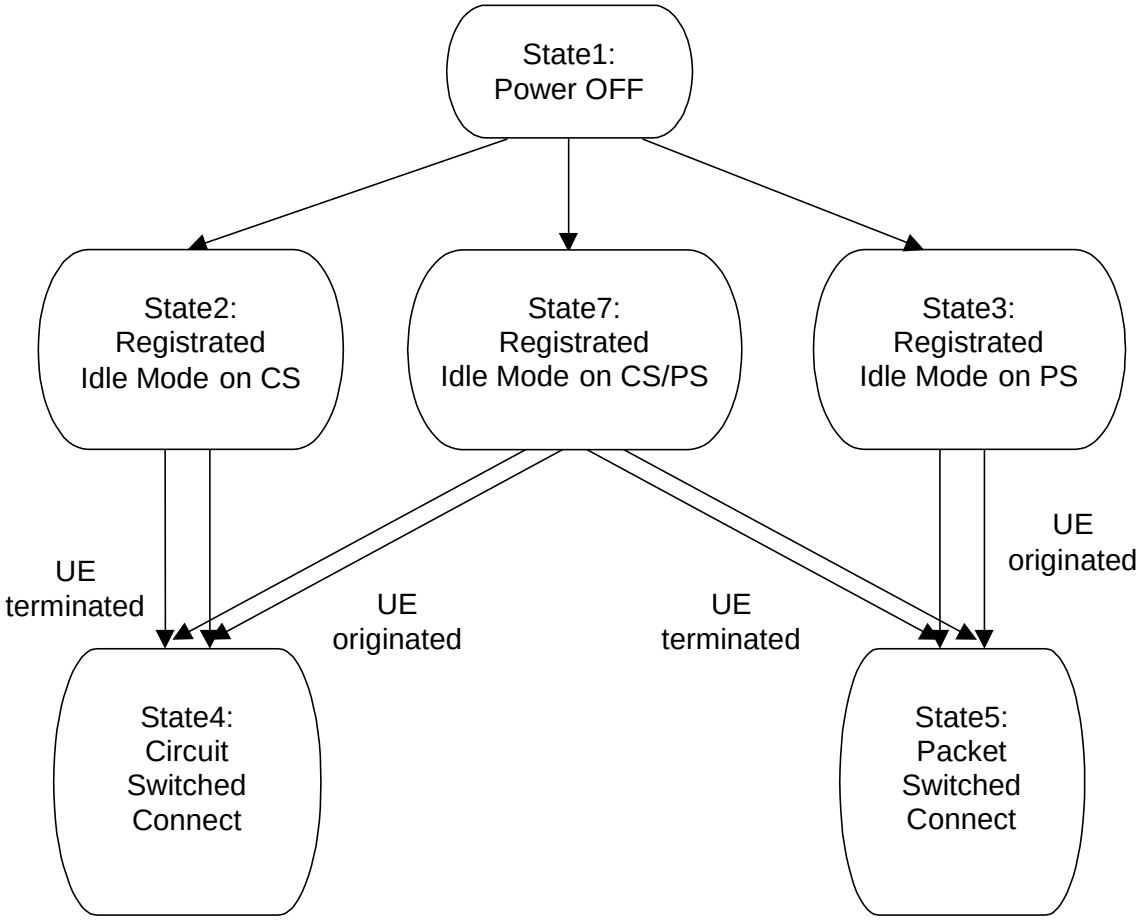

Figure 7.2.1.1: UE Test States for Generic setup procedures

In order that the UE can set up a call in UTRAN, there are a number of procedures to be undertaken in a hierarchical sequence to move between known states. The sequences are shown in figure 7.2.1.1 and the status of the relevant protocols in the UE in the different states are given in table 7.2.1.1.

Table 7.2.1.1: The UE states

	RRC	CC	MM	SM	GMM

		RRC	CC	MM	SM	GMM
State1	Power OFF	-----	null	detached	inactive	detached
State2	Registered Idle Mode on CS	idle	null	idle	inactive	detached
State3	Registered Idle Mode on PS	idle	null	detached	inactive	idle
State4	Circuit Switched Connect	connected	active	connected	inactive	same as previous state
State5	Packet Switched Connect	connected	null	same as previous state	active	connected
State7	Registered Idle Mode on CS/PS	idle	null	idle	inactive	idle

7.2.2 Registration of UE

The default procedures required to achieve the changes of state between State 1, in clause 7.2.1, and States 2, 3 and 7 are illustrated in the following clauses.

The choice of which procedure to use given a UE supporting packet services is influenced by the Network Mode of Operation being simulated by the SS and by the Operation Mode of the UE, as described in 3GPP TS 24.008 [32] clause 1.7.2.2. Table 7.2.2 shows the appropriate clause number for each combination of these two modes of operation.

Table 7.2.2: Registration Procedures for UEs Supporting Packet Services

Network Mode		NMO I	NMO II
UE Mode	**PS/CS**	7.2.2.3	7.2.2.4
	PS	7.2.2.2	7.2.2.2

7.2.2.1 Registration on CS

7.2.2.1.1 Initial condition

System Simulator:

- 1 cell, default parameters.

User Equipment:

- The UE shall be operated under normal test conditions.
- The Test-USIM shall be inserted.

7.2.2.1.2 Definition of system information messages

The default system information messages are used.

7.2.2.1.3 Procedure

Registration of UE for SS shall be established under ideal radio conditions as defined in clause 5.

Step	Direction		Message	Comments
	UE	SS		
1		←	SYSTEM INFORMATION (BCCH)	NW Broadcast
2		→	RRC CONNECTION REQUEST (CCCH)	RRC
3		←	RRC CONNECTION SETUP (CCCH)	RRC
4		→	RRC CONNECTION SETUP COMPLETE (DCCH)	RRC
5		→	LOCATION UPDATING REQUEST	MM
6		←	AUTHENTICATION REQUEST	MM
7		→	AUTHENTICATION RESPONSE	MM
8		←	SECURITY MODE COMMAND	RRC
9		→	SECURITY MODE COMPLETE	RRC
10		←	LOCATION UPDATING ACCEPT	MM
11		→	TMSI REALLOCATION COMPLETE	MM
12		←	RRC CONNECTION RELEASE	RRC
13		→	RRC CONNECTION RELEASE COMPLETE	RRC

7.2.2.1.4 Specific message contents

All Specific message contents shall be referred to clause 9.

7.2.2.2 Registration on PS

7.2.2.2.1 Initial condition

System Simulator:

- 1 cell, default parameters.

User Equipment:

- The UE shall be operated under normal test conditions.
- The Test-USIM shall be inserted.

7.2.2.2.2 Definition of system information messages

The default system information messages are used.

7.2.2.2.3 Procedure

Registration of UE for SS shall be established under ideal radio conditions as defined in clause 5.

Step	Direction		Message	Comments
	UE	SS		
1		←	SYSTEM INFORMATION (BCCH)	NW Broadcast
2	→		RRC CONNECTION REQUEST (CCCH)	RRC
3		←	RRC CONNECTION SETUP (CCCH)	RRC
4	→		RRC CONNECTION SETUP COMPLETE (DCCH)	RRC
5	→		ATTACH REQUEST	GMM
6		←	AUTHENTICATION AND CIPHERING REQUEST	GMM
7	→		AUTHENTICATION AND CIPHERING RESPONSE	GMM
8		←	SECURITY MODE COMMAND	RRC
9	→		SECURITY MODE COMPLETE	RRC
10		←	ATTACH ACCEPT	GMM
11	→		ATTACH COMPLETE	GMM
12		←	RRC CONNECTION RELEASE	RRC
13	→		RRC CONNECTION RELEASE COMPLETE	RRC

7.2.2.2.4 Specific message contents

All Specific message contents shall be referred to clause 9.

7.2.2.3 Registration on CS / PS combined environment

7.2.2.3.1 Initial condition

System Simulator:

- 1 cell operating in network operation mode I, default parameters.

User Equipment:

- The UE shall be operated under normal test conditions.
- The Test-USIM shall be inserted.

7.2.2.3.2 Definition of system information messages

The default system information messages are used.

7.2.2.3.3 Procedure UE establish PS registration immediately after the UE has been switched on

Registration of UE for SS shall be established under ideal radio conditions as defined in clause 5.

Step	Direction		Message	Comments
	UE	SS		
1	←		SYSTEM INFORMATION (BCCH)	NW Broadcast
2	→		RRC CONNECTION REQUEST (CCCH)	RRC
3	←		RRC CONNECTION SETUP (CCCH)	RRC
4	→		RRC CONNECTION SETUP COMPLETE (DCCH)	RRC
5	→		ATTACH REQUEST	GMM
6	←		AUTHENTICATION AND CIPHERING REQUEST	GMM
7	→		AUTHENTICATION AND CIPHERING RESPONSE	GMM
8	←		SECURITY MODE COMMAND	RRC
9	→		SECURITY MODE COMPLETE	RRC
10	←		ATTACH ACCEPT	GMM
11	→		ATTACH COMPLETE	GMM
12	←		RRC CONNECTION RELEASE	RRC
13	→		RRC CONNECTION RELEASE COMPLETE	RRC

7.2.2.3.3a Procedure UE establish PS registration later the user decides to use the PS services

CS registration has been successfully completed and RRC connection is released, cee clause 7.2.2.1. Registration of UE for SS shall be established under ideal radio conditions as defined in clause 5.

Step	Direction		Message	Comments
	UE	SS		
1	←		SYSTEM INFORMATION (BCCH)	NW Broadcast
1a				The UE initiates an attach by MMI or by AT command.
2	→		RRC CONNECTION REQUEST (CCCH)	RRC
3	←		RRC CONNECTION SETUP (CCCH)	RRC
4	→		RRC CONNECTION SETUP COMPLETE (DCCH)	RRC
5	→		ATTACH REQUEST	GMM
6	←		AUTHENTICATION AND CIPHERING REQUEST	GMM
7	→		AUTHENTICATION AND CIPHERING RESPONSE	GMM
8	←		SECURITY MODE COMMAND	RRC
9	→		SECURITY MODE COMPLETE	RRC
10	←		ATTACH ACCEPT	GMM
11	→		ATTACH COMPLETE	GMM
12	←		RRC CONNECTION RELEASE	RRC
13	→		RRC CONNECTION RELEASE COMPLETE	RRC

7.2.2.3.4 Specific message contents

All Specific message contents shall be referred to clause 9.

7.2.2.4 Registration on CS / PS non-combined environment

7.2.2.4.1 Initial condition

System Simulator:

- 1 cell operating in network operation mode II, default parameters.

User Equipment:

- The UE set to Operation mode A
- The UE shall be operated under normal test conditions.

- The Test-USIM shall be inserted.

7.2.2.4.2 Definition of system information messages

The default system information messages are used.

7.2.2.4.3 Procedure

Registration of UE for SS shall be established under ideal radio conditions as defined in clause 5.

Registrations in the CS domain and in the PS domain shall execute independently. The separate registration procedures may occur sequentially or in parallel. If the procedures occur sequentially PS domain registration can be started immediately after power on or the UE can initiate PS registration by MMI or by AT command. If MMI or AT commands are used, registrations are done with two separate RRC connections. The procedures for CS and PS registration shall be as defined in clauses 7.2.2.1 and 7.2.2.2.

7.2.2.4.4 Specific message contents

All Specific message contents shall be referred to clause 9.

7.2.3 Call setup

7.2.3.1 Generic call set up procedure for mobile terminating circuit switched calls

7.2.3.1.1 Initial conditions

System Simulator:

- 1 cell, default parameters.

User Equipment:

- The UE shall be operated under normal test conditions.
- The Test-USIM shall be inserted.

7.2.3.1.2 Definition of system information messages

The default system information messages are used.

7.2.3.1.3 Procedure

The Call Set-up procedure shall be performed under Ideal radio conditions as defined in clause 5.

Step	Direction		Message	Comments
	UE	SS		
1		←	SYSTEM INFORMATION (BCCH)	Broadcast
2		←	PAGING (PCCH)	Paging
3		→	RRC CONNECTION REQUEST (CCCH)	RRC
4		←	RRC CONNECTION SETUP (CCCH)	RRC
5		→	RRC CONNECTION SETUP COMPLETE (DCCH)	RRC
6		→	PAGING RESPONSE	RR
7		←	AUTHENTICATION REQUEST	MM
8		→	AUTHENTICATION RESPONSE	MM
9		←	SECURITY MODE COMMAND	RRC
10		→	SECURITY MODE COMPLETE	RRC
11		←	SET UP	CC (see note)
12		→	CALL CONFIRMED	CC
13		←	RADIO BEARER SETUP	RRC RAB SETUP
14		→	RADIO BEARER SETUP COMPLETE	RRC
15		→	ALERTING	CC (this message is optional)
16		→	CONNECT	CC
17		←	CONNECT ACKNOWLEDGE	CC
NOTE: The "Signal" information element is not included in the SETUP message.				

7.2.3.1.4 Specific message contents

All Specific message contents shall be referred to clause 9.

7.2.3.2 Generic call set-up procedure for mobile originating circuit switched calls

7.2.3.2.1 Initial conditions

System Simulator:

- 1 cell, default parameters.

User Equipment:

- The UE shall be operated under normal test conditions.
- The Test-USIM shall be inserted.

7.2.3.2.2 Definition of system information messages

The default system information messages are used.

7.2.3.2.3 Procedure

The Call Set-up procedure shall be performed under Ideal radio conditions as defined in clause 5.

Step	Direction		Message	Comments
	UE	SS		
1	←		SYSTEM INFORMATION (BCCH)	Broadcast
2	→		RRC CONNECTION REQUEST (CCCH)	RRC
3	←		RRC CONNECTION SETUP (CCCH)	RRC
4	→		RRC CONNECTION SETUP COMPLETE (DCCH)	RRC
5	→		CM SERVICE REQUEST	MM
6	←		AUTHENTICATION REQUEST	MM
7	→		AUTHENTICATION RESPONSE	MM
8	←		SECURITY MODE COMMAND	RRC
9	→		SECURITY MODE COMPLETE	RRC
10	→		SET UP	CC
11	←		CALL PROCEEDING	CC
12	←		RADIO BEARER SETUP	RRC RAB SETUP
13	→		RADIO BEARER SETUP COMPLETE	RRC
14	←		ALERTING	CC
15	←		CONNECT	CC
16	→		CONNECT ACKOWLEDGE	CC

7.2.3.2.4 Specific message contents

All Specific message contents shall be referred to clause 9.

7.2.4 Session setup

7.2.4.1 Generic session set up procedure for mobile terminating packet switched sessions

7.2.4.1.1 Initial conditions

System Simulator:

- 1 cell, default parameters.

User Equipment:

- The UE shall be operated under normal test conditions.

- The Test-USIM shall be inserted.

7.2.4.1.2 Definition of system information messages

The default system information messages are used.

7.2.4.1.3 Procedure

The Session Set-up procedure shall be performed under Ideal radio conditions as defined in clause 5.

Step	Direction		Message	Comments
	UE	SS		
1		←	SYSTEM INFORMATION (BCCH)	Broadcast
2		←	PAGING TYPE1 (PCCH)	Paging
3		→	RRC CONNECTION REQUEST (CCCH)	RRC
4		←	RRC CONNECTION SETUP (CCCH)	RRC
5		→	RRC CONNECTION SETUP COMPLETE (DCCH)	RRC
6		→	SERVICE REQUEST	GMM
7		←	AUTHENTICATION AND CIPHERING REQUEST	GMM
8		→	AUTHENTICATION AND CIPHERING RESPONSE	GMM
9		←	SECURITY MODE COMMAND	RRC
10		→	SECURITY MODE COMPLETE	RRC
11		←	REQUEST PDP CONTEXT ACTIVATION	SM
12		→	ACTIVATE PDP CONTEXT REQUEST	SM
13		←	RADIO BEARER SETUP	RRC RAB SETUP
14		→	RADIO BEARER SETUP COMPLETE	RRC
15		←	ACTIVATE PDP CONTEXT ACCEPT	SM

7.2.4.1.4 Specific message contents

All Specific message contents shall be referred to clause 9.

7.2.4.2 Generic session set up procedure for mobile originating packet switched sessions

7.2.4.2.1 Initial conditions

System Simulator:

- 1 cell, default parameters.

User Equipment:

- The UE shall be operated under normal test conditions.
- The Test-USIM shall be inserted.

7.2.4.2.2 Definition of system information messages

The default system information messages are used.

7.2.4.2.3 Procedure

The Session Set-up procedure shall be performed under Ideal radio conditions as defined in clause 5.

Step	Direction		Message	Comments
	UE	SS		
1		←	SYSTEM INFORMATION (BCCH)	Broadcast
2		→	RRC CONNECTION REQUEST (CCCH)	RRC
3		←	RRC CONNECTION SETUP (CCCH)	RRC
4		→	RRC CONNECTION SETUP COMPLETE (DCCH)	RRC
5		→	SERVICE REQUEST	GMM
6		←	AUTHENTICATION AND CIPHERING REQUEST	GMM
7		→	AUTHENTICATION AND CIPHERING RESPONSE	GMM

8	←	SECURITY MODE COMMAND	RRC
9	→	SECURITY MODE COMPLETE	RRC
10	→	ACTIVATE PDP CONTEXT REQUEST	SM
11	←	RADIO BEARER SETUP	RRC RAB SETUP
12	→	RADIO BEARER SETUP COMPLETE	RRC
13	←	ACTIVATE PDP CONTEXT ACCEPT	SM

7.2.4.2.4 Specific message contents

All Specific message contents shall be referred to clause 9.

7.3 Test procedures for RF test

NOTE: In general parameters defined for specific test cases in 3GPP TS 34.121 [2] take priority over the default parameters defined in the present document.

7.3.1 UE Test States for RF testing

In this clause, the states of the UE for the test are defined.

		RRC	CC	MM	SM	GMM
State1	Power OFF	-----	null	detached	inactive	detached
State2	CS Registered Idle Mode	idle	null	idle	inactive	detached
State3	PS Registered Idle Mode	idle	null	detached	inactive	idle
State4	Test Mode	connected	null	detached	inactive	detached
State5	Circuit Switched Connect	connected	active	connected	inactive	same as previous state
State6	Packet Switched Connect	connected	null	same as previous state	active	connected

7.3.2 Test procedure for TX, RX and Performance Requirement (without handover)

7.3.2.1 Initial conditions

System Simulator

- test cases using 1 cell:
  - 1cell, default parameters.
- other test cases using this test procedure:
  - Number of cells and parameters for specific tests are defined in 3GPP TS 34.121 [2] and take priority over the default parameters.

User Equipment:

- The UE shall initially be operated under normal RF test conditions if not otherwise stated in the initial conditions for the actual test case.
- The Test-USIM shall be inserted.
- The UE has a valid TMSI (CS) after the execution of the procedure described in clause 7.2.2.1.
- The UE has a valid P-TMSI (PS) after the execution of the procedure described in clause 7.2.2.2.

7.3.2.2 Definition of system information messages

The default system information messages specified in clause 6.1.0b are used with the following exceptions.

Contents of System information block type 1: RRC

Information Element	Value/remark
- CN domain system information	
- CN domain identity	PS
- CHOICE CN Type	GSM-MAP
- CN domain specific NAS system information	
- GSM-MAP NAS system information	00 00
- CN domain specific DRX cycle length coefficient	7
- CN domain identity	CS
- CHOICE CN Type	GSM-MAP
- CN domain specific NAS system information	
- GSM-MAP NAS system information	00(T3212 is set to infinity) 01
- CN domain specific DRX cycle length coefficient	7
- UE Timers and constants in connected mode	
- T305	Infinity

Contents of System Information Block type 5 (FDD)

Information Element	Value/remark
- Secondary CCPCH system information	
- Secondary CCPCH info	
- CHOICE mode	FDD
- Secondary scrambling code	Not Present
- STTD indicator	FALSE
- Spreading factor	64
- Code number	2
- 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

7.3.2.3 Procedure

For UE supporting CS

Step	Direction		Message	Comments
	UE	SS		
1	←		SYSTEM INFORMATION (BCCH)	Broadcast
2	←		PAGING TYPE1 (PCCH)	Paging (CS domain, TMSI)
3	→		RRC CONNECTION REQUEST (CCCH)	RRC
4	←		RRC CONNECTION SETUP (CCCH)	RRC
5	→		RRC CONNECTION SETUP COMPLETE (DCCH)	RRC
6	→		PAGING RESPONSE	RR
7	←		AUTHENTICATION REQUEST	MM
8	→		AUTHENTICATION RESPONSE	MM
9	←		SECURITY MODE COMMAND	RRC
10	→		SECURITY MODE COMPLETE	RRC
11	←		ACTIVATE RB TEST MODE	TC
12	→		ACTIVATE RB TEST MODE COMPLETE	TC
13	←		RADIO BEARER SETUP	RRC (RAB SETUP)
14	→		RADIO BEARER SETUP COMPLETE	RRC
15	←		CLOSE UE TEST LOOP (DCCH)	TC (UE test loop mode set up)
16	→		CLOSE UE TEST LOOP COMPLETE	TC (confirms that loopback entities for the radio bearer(s) have been created and loop back is activated)
17	←		OPEN UE TEST LOOP	TC
18	→		OPEN UE TEST LOOP COMPLETE	TC
19	←		RRC CONNECTION RELEASE	RRC
20	→		RRC CONNECTION RELEASE COMPLETE	RRC

For UE supporting PS only

Step	Direction	Message	Comments

	UE	SS		
1		←	SYSTEM INFORMATION (BCCH)	Broadcast
2		←	PAGING TYPE1 (PCCH)	Paging (PS domain, P-TMSI)
3		→	RRC CONNECTION REQUEST (CCCH)	RRC
4		←	RRC CONNECTION SETUP (CCCH)	RRC
5		→	RRC CONNECTION SETUP COMPLETE (DCCH)	RRC
6		→	SERVICE REQUEST	GMM
7		←	AUTHENTICATION AND CIPHERING REQUEST	GMM
8		→	AUTHENTICATION AND CIPHERING RESPONSE	GMM
9		←	SECURITY MODE COMMAND	RRC
10		→	SECURITY MODE COMPLETE	RRC
11		←	ACTIVATE RB TEST MODE	TC
12		→	ACTIVATE RB TEST MODE COMPLETE	TC
13		←	RADIO BEARER SETUP	RRC (RAB SETUP)
14		→	RADIO BEARER SETUP COMPLETE	RRC
15		←	CLOSE UE TEST LOOP (DCCH)	TC (UE test loop mode set up)
16		→	CLOSE UE TEST LOOP COMPLETE	TC (confirms that loopback entities for the radio bearer(s) have been created and loop back is activated)
17		←	OPEN UE TEST LOOP	TC
18		→	OPEN UE TEST LOOP COMPLETE	TC
19		←	RRC CONNECTION RELEASE	RRC
20		→	RRC CONNECTION RELEASE COMPLETE	RRC

7.3.2.4 Specific message contents

The default message contents specified in clause 9.2 are used with the following exceptions.

7.3.2.4.1 ATTACH ACCEPT

This message is sent from the SS to the UE, used for the UE supporting PS only.

Contents of Attach Accept message: GMM

Information Element	Value/remark
Periodic RA update timer	E0 (timer is deactivated)

7.3.2.4.2 Reference measurement channels

The configurations of the reference measurement channels for RF tests are described in 3GPP TS 34.121 [2], annex C for FDD and 3GPP TS 34.122 [5], annex C for TDD.

7.3.2.4.3 Void

7.3.2.4.4 Compressed mode

[T.B.D]

7.3.2.4.5 Transmit diversity mode

[T.B.D]

7.3.3 Test procedure for test cases using Cell_PCH or URA_PCH state

7.3.3.1 Initial conditions

System Simulator:

- Number of cells and parameters for specific tests are defined in 3GPP TS 34.121 [2] and take priority over the default parameters.

User Equipment:

- The UE shall be operated under RF test conditions.
- The Test-USIM shall be inserted.
- The UE has a valid TMSI (CS) after the execution of the procedure described in clause 7.2.2.1.
- The UE has a valid P-TMSI (PS) after the execution of the procedure described in clause 7.2.2.2.

7.3.3.2 Definition of system information messages

The default system information messages specified in clause 6.1.0b are used with the following exceptions.

Contents of System information block type 1: RRC

Information Element	Value/remark
- CN domain system information	
- CN domain identity	PS
- CHOICE CN Type	GSM-MAP
- CN domain specific NAS system information	
- GSM-MAP NAS system information	00 00
- CN domain specific DRX cycle length coefficient	7
- CN domain identity	CS
- CHOICE CN Type	GSM-MAP
- CN domain specific NAS system information	
- GSM-MAP NAS system information	00(T3212 is set to infinity) 01
- CN domain specific DRX cycle length coefficient	7
- UE Timers and constants in connected mode	
- T305	Infinity

Contents of System Information Block type 5 (FDD)

Information Element	Value/remark
- Secondary CCPCH system information	
- Secondary CCPCH info	
- CHOICE mode	FDD
- Secondary scrambling code	Not Present
- STTD indicator	FALSE
- Spreading factor	64
- Code number	2
- 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

7.3.3.3 Procedure

For UE supporting PS

Step	Direction		Message	Comments
	UE	SS		
1	←		SYSTEM INFORMATION (BCCH)	Broadcast
2	←		PAGING TYPE1 (PCCH)	Paging (PS domain, P-TMSI)
3	→		RRC CONNECTION REQUEST (CCCH)	RRC
4	←		RRC CONNECTION SETUP (CCCH)	RRC
5	→		RRC CONNECTION SETUP COMPLETE (DCCH)	RRC
6	→		SERVICE REQUEST	GMM
7	←		AUTHENTICATION AND CIPHERING REQUEST	GMM
8	→		AUTHENTICATION AND CIPHERING RESPONSE	GMM
9	←		SECURITY MODE COMMAND	RRC
10	→		SECURITY MODE COMPLETE	RRC
11	←		ACTIVATE RB TEST MODE	TC
12	→		ACTIVATE RB TEST MODE COMPLETE	TC

13	←	RADIO BEARER SETUP	RRC - RAB SETUP using Reference Radio Bearer Configuration
14	→	RADIO BEARER SETUP COMPLETE	RRC
15	←	PHYSICAL CHANNEL RECONFIGURATION	RRC - RRC state indicator is set to "Cell_PCH" or "URA_PCH" depending on the test case
16	→	PHYSICAL CHANNEL RECONFIGURATION COMPLETE	RRC The UE sends this message before it completes state transition.
17		Void	SS sends the L2 ack on the PHYSICAL CHANNEL RECONFIGURATION COMPLETE message. NOTE: The SS should continue to keep the dedicated channel configuration during the time when the L2 ack is sent to the UE.

7.3.3.4 Specific message contents

The default message contents specified in clause 9.2 are used with the following exceptions.

The RADIO BEARER SETUP message is defined in clause 9.2.1, "Contents of RADIO BEARER SETUP message: AM or UM (UE supports PS RAB only)".

The PHYSICAL CHANNEL RECONFIGURATION message is defined in clause 9.1.1, "Contents of PHYSICAL CHANNEL RECONFIGURATION message: AM or UM" using condition A8 for URA_PCH and condition A10 for Cell_PCH.

Contents of Attach Accept message: GMM

Information Element	Value/remark
Periodic RA update timer	E0 (timer is deactivated)

7.3.4 Test procedure for Handover

NOTE: This test procedure is also used for some other test cases involving more than 1 cell.

7.3.4.1 Initial conditions

System Simulator:

- Intra-frequency hard handover and soft handover (for FDD) case:
  - 2 cells, default parameters according to Cell 1 and Cell 2 in clause 6.1.4.
- Inter-frequency hard handover case:
  - 2 cells, default parameters according to Cell 1 and Cell 4 in clause 6.1.4.
- Inter-system handover UTRAN to GSM case:
  - 2 cells, default parameters according to Cell 1 and Cell 9 in clause 6.1.4.
- other test cases using this test procedure:
  - Number of cells and parameters for specific tests are defined in 3GPP TS 34.121 [2] for FDD and TS 34.122 [5] for TDD and take priority over the default parameters.

UserEquipment:

- The UE shall be initially operated under the normal RF test conditions if not otherwise stated in the initial conditions for the actual test case.

- The Test-USIM shall be inserted.
- The UE has a valid TMSI (CS) after the execution of the procedure described in clause 7.2.2.1.
- The UE has a valid P-TMSI (PS) after the execution of the procedure described in clause 7.2.2.2.

7.3.4.2 Definition of system information messages

The default system information messages specified in clause 6.1.0b are used with the following exceptions.

Contents of System information block type 1: RRC

Information Element	Value/remark
- CN domain system information	
- CN domain identity	PS
- CHOICE CN Type	GSM-MAP
- CN domain specific NAS system information	
- GSM-MAP NAS system information	00 00
- CN domain specific DRX cycle length coefficient	7
- CN domain identity	CS
- CHOICE CN Type	GSM-MAP
- CN domain specific NAS system information	
- GSM-MAP NAS system information	00(T3212 is set to infinity) 01
- CN domain specific DRX cycle length coefficient	7
- UE Timers and constants in connected mode	
- T305	Infinity

Contents of System Information Block type 5 (FDD)

Information Element	Value/remark
- Secondary CCPCH system information	
- Secondary CCPCH info	
- CHOICE mode	FDD
- Secondary scrambling code	Not Present
- STTD indicator	FALSE
- Spreading factor	64
- Code number	2
- 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

For the intra-frequency hard handover and soft handover (for FDD) case the default messages for SIB11 and SIB12 as specified for Cell 1 and Cell 2 in clause 6.1.4 are used.

For the inter-frequency hard handover case the default messages for SIB11 and SIB12 as specified for Cell 1 and Cell 4 in clause 6.1.4 are used.

For the inter-system handover from UTRAN to GSM case the default messages for SIB11 and SIB12 as specified for Cell 1 and Cell 9 in clause 6.1.4 are used.

7.3.4.3 Procedure

For UE supporting CS

Step	Direction		Message	Comments
	UE	SS		
1		←	SYSTEM INFORMATION (BCCH)	Broadcast
2		←	PAGING TYPE1 (PCCH)	Paging (CS domain, TMSI)
3		→	RRC CONNECTION REQUEST (CCCH)	RRC
4		←	RRC CONNECTION SETUP (CCCH)	RRC
5		→	RRC CONNECTION SETUP COMPLETE (DCCH)	RRC
6		→	PAGING RESPONSE	RR
7		←	AUTHENTICATION REQUEST	MM

8	→	AUTHENTICATION RESPONSE	MM
9	←	SECURITY MODE COMMAND	RRC
10	→	SECURITY MODE COMPLETE	RRC
11	←	ACTIVATE RB TEST MODE	TC
12	→	ACTIVATE RB TEST MODE COMPLETE	TC
13	←	RADIO BEARER SETUP	RRC - RAB SETUP using Reference Radio Bearer Configuration - RRC state indicator is set to "CELL_DCH"
14	→	RADIO BEARER SETUP COMPLETE	RRC
15	←	RRC CONNECTION RELEASE	RRC
16	→	RRC CONNECTION RELEASE COMPLETE	RRC

For UE supporting PS only

Step	Direction		Message	Comments
	UE	SS		
1	←		SYSTEM INFORMATION (BCCH)	Broadcast
2	←		PAGING TYPE1 (PCCH)	Paging (PS domain, P-TMSI)
3	→		RRC CONNECTION REQUEST (CCCH)	RRC
4	←		RRC CONNECTION SETUP (CCCH)	RRC
5	→		RRC CONNECTION SETUP COMPLETE (DCCH)	RRC
6	→		SERVICE REQUEST	GMM
7	←		AUTHENTICATION AND CIPHERING REQUEST	GMM
8	→		AUTHENTICATION AND CIPHERING RESPONSE	GMM
9	←		SECURITY MODE COMMAND	RRC
10	→		SECURITY MODE COMPLETE	RRC
11	←		ACTIVATE RB TEST MODE	TC
12	→		ACTIVATE RB TEST MODE COMPLETE	TC
13	←		RADIO BEARER SETUP	RRC - RAB SETUP using Reference Radio Bearer Configuration - RRC state indicator is set to "CELL_DCH"
14	→		RADIO BEARER SETUP COMPLETE	RRC
15	←		RRC CONNECTION RELEASE	RRC
16	→		RRC CONNECTION RELEASE COMPLETE	RRC

7.3.4.4 Specific message contents

The default message contents specified in clause 9.2 are used with the following exceptions.

Contents of Attach Accept message: GMM

Information Element	Value/remark
Periodic RA update timer	E0 (timer is deactivated)

7.3.5 Test procedure for test cases using CELL_FACH state

7.3.5.1 Initial conditions

System Simulator:

- Number of cells and parameters for specific tests are defined in TS 34.121 [2] and take priority over the default parameters.

User Equipment:

- The UE shall be operated under RF test conditions.
- The Test-USIM shall be inserted.

- The UE has a valid TMSI (CS) after the execution of the procedure described in clause 7.2.2.1.
- The UE has a valid P-TMSI (PS) after the execution of the procedure described in clause 7.2.2.2.

7.3.5.2 Definition of system information messages

The default system information messages specified in clause 6.1.0b are used with the following exceptions.

Contents of System information block type 1: RRC

Information Element	Value/remark
- CN domain system information	
- CN domain identity	PS
- CHOICE CN Type	GSM-MAP
- CN domain specific NAS system information	
- GSM-MAP NAS system information	00 00
- CN domain specific DRX cycle length coefficient	7
- CN domain identity	CS
- CHOICE CN Type	GSM-MAP
- CN domain specific NAS system information	
- GSM-MAP NAS system information	00(T3212 is set to infinity) 01
- CN domain specific DRX cycle length coefficient	7
- UE Timers and constants in connected mode	
- T305	Infinity

Contents of System Information Block type 5 (FDD)

Information Element	Value/remark
- Secondary CCPCH system information	
- Secondary CCPCH info	
- CHOICE mode	FDD
- Secondary scrambling code	Not Present
- STTD indicator	FALSE
- Spreading factor	64
- Code number	2
- 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

7.3.5.3 Procedure

For UE supporting CS

Step	Direction		Message	Comments
	UE	SS		
1		←	SYSTEM INFORMATION (BCCH)	Broadcast
2		←	PAGING TYPE1 (PCCH)	Paging (CS domain, TMSI)
3	→		RRC CONNECTION REQUEST (CCCH)	RRC
4		←	RRC CONNECTION SETUP (CCCH)	RRC
5	→		RRC CONNECTION SETUP COMPLETE (DCCH)	RRC
6	→		PAGING RESPONSE	RR
7		←	AUTHENTICATION REQUEST	MM
8	→		AUTHENTICATION RESPONSE	MM
9		←	SECURITY MODE COMMAND	RRC
10	→		SECURITY MODE COMPLETE	RRC
11		←	ACTIVATE RB TEST MODE	TC
12	→		ACTIVATE RB TEST MODE COMPLETE	TC
13		←	DEACTIVATE RB TEST MODE	TC
14	→		DEACTIVATE RB TEST MODE COMPLETE	TC
15		←	RRC CONNECTION RELEASE	RRC
16	→		RRC CONNECTION RELEASE COMPLETE	RRC

For UE supporting PS only

Step	Direction		Message	Comments
	UE	SS		
1		←	SYSTEM INFORMATION (BCCH)	Broadcast
2		←	PAGING TYPE1 (PCCH)	Paging (PS domain, P-TMSI)
3		→	RRC CONNECTION REQUEST (CCCH)	RRC
4		←	RRC CONNECTION SETUP (CCCH)	RRC
5		→	RRC CONNECTION SETUP COMPLETE (DCCH)	RRC
6		→	SERVICE REQUEST	GMM
7		←	AUTHENTICATION AND CIPHERING REQUEST	GMM
8		→	AUTHENTICATION AND CIPHERING RESPONSE	GMM
9		←	SECURITY MODE COMMAND	RRC
10		→	SECURITY MODE COMPLETE	RRC
11		←	ACTIVATE RB TEST MODE	TC
12		→	ACTIVATE RB TEST MODE COMPLETE	TC
13		←	DEACTIVATE RB TEST MODE	TC
14		→	DEACTIVATE RB TEST MODE COMPLETE	TC
15		←	RRC CONNECTION RELEASE	RRC
16		→	RRC CONNECTION RELEASE COMPLETE	RRC

7.3.5.4 Specific message contents

The default message contents specified in clause 9.2 are used with the following exceptions.

Contents of Attach Accept message: GMM

Information Element	Value/remark
Periodic RA update timer	E0 (timer is deactivated)

The RRC connection setup is defined in clause 9.1.1, "Contents of RRC CONNECTION SETUP message: UM (Transition to CELL_FACH)".

7.3.6 Test procedure for HSDPA RF Performance Requirement

7.3.6.1 Initial conditions

System Simulator:

- 1 HS-DSCH cell, default parameters.

User Equipment:

- The UE shall initially be operated under normal RF test conditions if not otherwise stated in the initial conditions for the actual test case.
- The Test-USIM shall be inserted.
- The UE has a valid P-TMSI (PS) after the execution of the procedure described in clause 7.2.2.2.

7.3.6.2 Definition of system information messages

The default system information messages specified in clause 6.1.0b are used with the following exceptions.

Contents of System information block type 1: RRC

Information Element	Value/remark
- CN domain system information	
- CN domain identity	PS
- CHOICE CN Type	GSM-MAP
- CN domain specific NAS system information	
- GSM-MAP NAS system information	00 00
- CN domain specific DRX cycle length coefficient	7
- CN domain identity	CS

Information Element	Value/remark
- CHOICE CN Type	GSM-MAP
- CN domain specific NAS system information	
- GSM-MAP NAS system information	00(T3212 is set to infinity) 01
- CN domain specific DRX cycle length coefficient	7
- UE Timers and constants in connected mode	
- T305	Infinity

Contents of System Information Block type 5 (FDD)

Information Element	Value/remark
- Secondary CCPCH system information	
- Secondary CCPCH info	
- CHOICE mode	FDD
- Secondary scrambling code	Not Present
- STTD indicator	FALSE
- Spreading factor	64
- Code number	2
- 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

7.3.6.3 Procedure

Step	Direction		Message	Comments
	UE	SS		
1		←	SYSTEM INFORMATION (BCCH)	Broadcast
2		←	PAGING TYPE1 (PCCH)	Paging (PS domain, P-TMSI)
3		→	RRC CONNECTION REQUEST (CCCH)	RRC
4		←	RRC CONNECTION SETUP (CCCH)	RRC
5		→	RRC CONNECTION SETUP COMPLETE (DCCH)	RRC
6		→	SERVICE REQUEST	GMM
7		←	AUTHENTICATION AND CIPHERING REQUEST	GMM
8		→	AUTHENTICATION AND CIPHERING RESPONSE	GMM
9		←	SECURITY MODE COMMAND	RRC
10		→	SECURITY MODE COMPLETE	RRC
11		←	ACTIVATE RB TEST MODE	TC
12		→	ACTIVATE RB TEST MODE COMPLETE	TC
13		←	RADIO BEARER SETUP	RRC (RAB SETUP)
14		→	RADIO BEARER SETUP COMPLETE	RRC
15	<-->			Perform test
16		←	RRC CONNECTION RELEASE	RRC
17		→	RRC CONNECTION RELEASE COMPLETE	RRC

7.3.6.4 Specific message contents

The default message contents specified in clause 9.2 are used with the following exceptions.

7.3.6.4.1 ATTACH ACCEPT

This message is sent from the SS to the UE, used for the UE supporting PS only.

Contents of Attach Accept message: GMM

Information Element	Value/remark
Periodic RA update timer	E0 (timer is deactivated)

7.3.6.4.2 RADIO BEARER SETUP

For step 13, the messages in clause 9.2, "Contents of RADIO BEARER SETUP message: AM or UM (HSDPA)" is used.

The configurations of the fixed reference channels for HSDPA RF tests are described in 3GPP TS 34.121[2], annex C for FDD and 3GPP TS 34.122 [5], annex C for TDD.

7.3.6.4.3 RRC CONNECTION SETUP

For step 4 , the messages in clause 9.2, "Contents of RRC CONNECTION SETUP message: UM" is used with the following exceptions:

Contents of RRC CONNECTION SETUP message: UM

Information Element	Value/remark
- Default DPCH Offset Value	Arbitrary set to value 1536..306176 by step of 2560 (this corresponds to a 0.5 slot timing offset between the DPCCH and the HS-DPCCH)

7.3.7 Test procedure for inter-RAT handover used in RRM testing

7.3.7.1 Initial conditions

System Simulator:

- 2 cells, default parameters according to Cell 1 and Cell 9 in clause 6.1.4.

UserEquipment:

- The UE shall be initially operated under the normal RF test conditions if not otherwise stated in the initial conditions for the actual test case.
- The Test-USIM shall be inserted.
- The UE has a valid TMSI (CS) after the execution of the procedure described in clause 7.2.2.1.
- The UE has a valid P-TMSI (PS) after the execution of the procedure described in clause 7.2.2.2.

7.3.7.2 Definition of system information messages

The default system information messages specified in clause 6.1.0b are used with the following exceptions.

Contents of System information block type 1: RRC

Information Element	Value/remark
- CN domain system information	
- CN domain identity	PS
- CHOICE CN Type	GSM-MAP
- CN domain specific NAS system information	
- GSM-MAP NAS system information	00 00
- CN domain specific DRX cycle length coefficient	7
- CN domain identity	CS
- CHOICE CN Type	GSM-MAP
- CN domain specific NAS system information	
- GSM-MAP NAS system information	00(T3212 is set to infinity) 01
- CN domain specific DRX cycle length coefficient	7
- UE Timers and constants in connected mode	
- T305	Infinity

Contents of System Information Block type 5 (FDD)

Information Element	Value/remark
- Secondary CCPCH system information	
- Secondary CCPCH info	
- CHOICE mode	FDD
- Secondary scrambling code	Not Present

- STTD indicator	FALSE
- Spreading factor	64
- Code number	2
- 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

For the inter-system handover from UTRAN FDD to GSM case the default messages for SIB11 and SIB12 as specified for Cell 1 and Cell 9 in clause 6.1.4 are used.

7.3.7.3 Procedure

Step	Direction		Message	Comments
	UE	SS		
1		←	SYSTEM INFORMATION (BCCH)	Broadcast
2		←	PAGING (PCCH)	Paging
3		→	RRC CONNECTION REQUEST (CCCH)	RRC
4		←	RRC CONNECTION SETUP (CCCH)	RRC (Transition to cell DCH)
5		→	RRC CONNECTION SETUP COMPLETE (DCCH)	RRC
6		→	PAGING RESPONSE	RR
7		←	AUTHENTICATION REQUEST	MM
8		→	AUTHENTICATION RESPONSE	MM
9		←	SECURITY MODE COMMAND	RRC
10		→	SECURITY MODE COMPLETE	RRC
11		←	SET UP	CC (see note)
12		→	CALL CONFIRMED	CC
13		←	RADIO BEARER SETUP	RRC RAB SETUP
14		→	RADIO BEARER SETUP COMPLETE	RRC
15		→	ALERTING	CC (this message is optional)
16		→	CONNECT	CC
17		←	CONNECT ACKNOWLEDGE	CC
NOTE: The "Signal" information element is not included in the SETUP message.				

7.3.7.4 Specific message contents

The default message contents specified in clause 9.1 are used with the following exceptions.

Contents of Attach Accept message: GMM

Information Element	Value/remark
Periodic RA update timer	E0 (timer is deactivated)

7.3.8 Test procedure for inter-RAT cell FACH reselection used in RRM testing

7.3.8.1 Initial conditions

System Simulator:

- Number of cells and parameters for specific tests are defined in TS 34.121 [2] and take priority over the default parameters.

User Equipment:

- The UE shall be operated under RF test conditions.
- The Test-USIM shall be inserted.
- The UE has a valid TMSI (CS) after the execution of the procedure described in clause 7.2.2.1.

- The UE has a valid P-TMSI (PS) after the execution of the procedure described in clause 7.2.2.2.

7.3.8.2 Definition of system information messages

The default system information messages specified in clause 6.1.0b are used with the following exceptions.

Contents of System information block type 1: RRC

Information Element	Value/remark
- CN domain system information	
- CN domain identity	PS
- CHOICE CN Type	GSM-MAP
- CN domain specific NAS system information	
- GSM-MAP NAS system information	00 00
- CN domain specific DRX cycle length coefficient	7
- CN domain identity	CS
- CHOICE CN Type	GSM-MAP
- CN domain specific NAS system information	
- GSM-MAP NAS system information	00(T3212 is set to infinity) 01
- CN domain specific DRX cycle length coefficient	7
- UE Timers and constants in connected mode	
- T305	Infinity

Contents of System Information Block type 5 (FDD)

Information Element	Value/remark
- Secondary CCPCH system information	
- Secondary CCPCH info	
- CHOICE mode	FDD
- Secondary scrambling code	Not Present
- STTD indicator	FALSE
- Spreading factor	64
- Code number	2
- 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

7.3.8.3 Procedure

Step	Direction		Message	Comments
	UE	SS		
1	←		SYSTEM INFORMATION (BCCH)	Broadcast
2	→		RRC CONNECTION REQUEST (CCCH)	RRC
3	←		RRC CONNECTION SETUP (CCCH)	RRC
4	→		RRC CONNECTION SETUP COMPLETE (DCCH)	RRC
5	→		SERVICE REQUEST	GMM
6	←		AUTHENTICATION AND CIPHERING REQUEST	GMM
7	→		AUTHENTICATION AND CIPHERING RESPONSE	GMM
8	←		SECURITY MODE COMMAND	RRC
9	→		SECURITY MODE COMPLETE	RRC
10	→		ACTIVATE PDP CONTEXT REQUEST	SM
11	←		RADIO BEARER SETUP	RRC RAB SETUP
12	→		RADIO BEARER SETUP COMPLETE	RRC
13	←		ACTIVATE PDP CONTEXT ACCEPT	SM

7.3.8.4 Specific message contents

The default message contents specified in clause 9.1 are used with the following exceptions.

Contents of Attach Accept message: GMM

Information Element	Value/remark

Periodic RA update timer	E0 (timer is deactivated)

The RRC connection setup is defined in clause 9.1.1, "Contents of RRC CONNECTION SETUP message: UM (Transition to CELL_FACH)".

7.4 Common generic procedures for AS testing

7.4.1 UE RRC Test States for common procedures

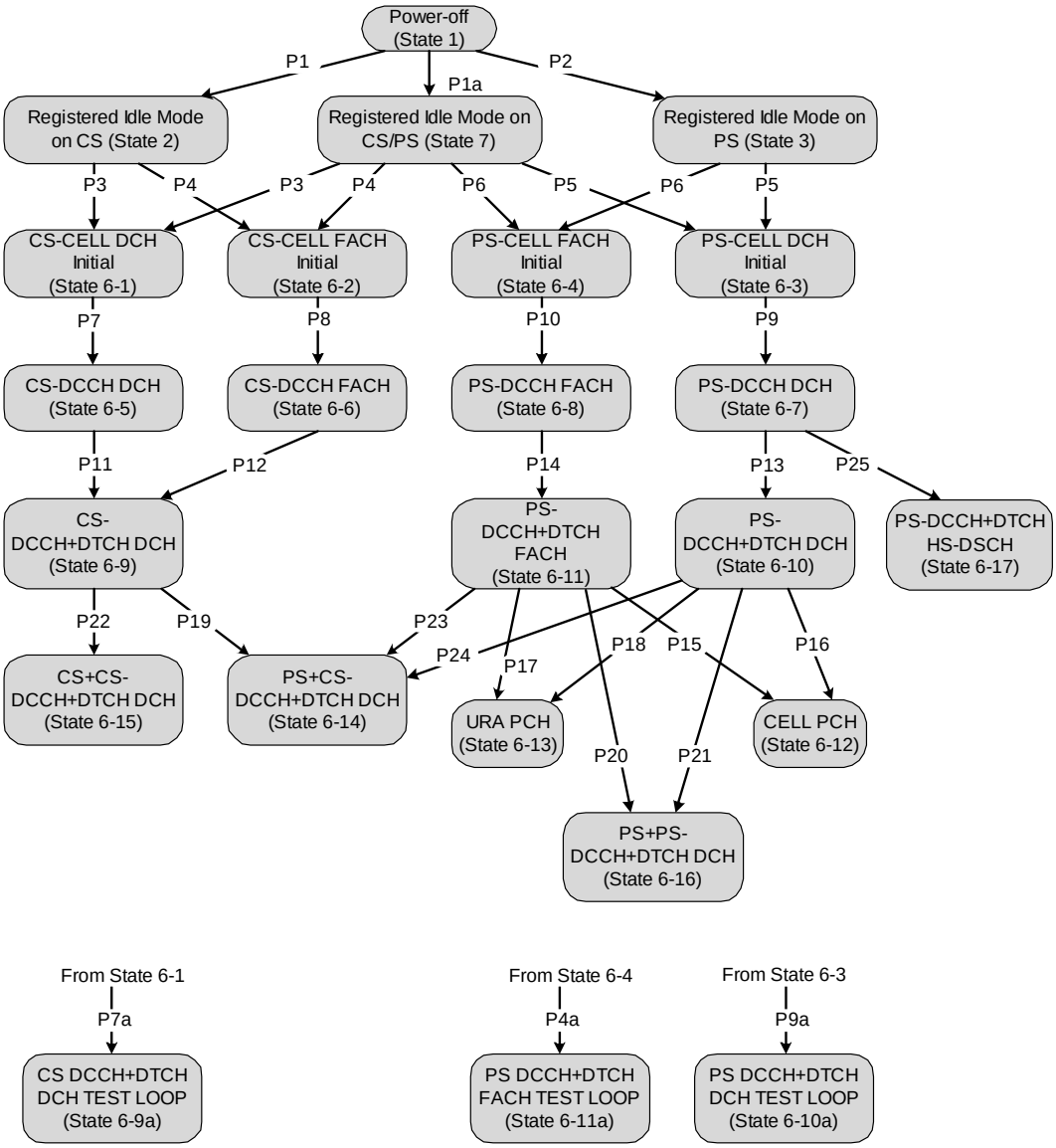

Figure 7.4.1.1: UE RRC test initial states and common procedures

For UE to set up a call in UTRAN, there are a number of procedures to be undertaken in a hierarchical sequence to move between known states. The sequences are shown in figure 7.4.1.1, the operating states for various protocols in the UE are given in table 7.4.1.1.

It is noted that figure 7.4.1.1 should not be construed as a formal state transition diagram, in any manner. The intention here is to define the starting state of UE following the execution of the procedures indicated above.

Table 7.4.1.1: The UE states

	RRC	CC	MM	SM	GMM

		RRC	CC	MM	SM	GMM
State 1	Power OFF	-----	Null	Detached	Inactive	Detached
State 2	Registered Idle Mode on CS	Idle	Null	Idle	Inactive	Detached
State 3	Registered Idle Mode on PS	Idle	Null	Detached	Inactive	Idle
State 7	Registered Idle Mode on CS/PS	Idle	Null	Idle	Inactive	Idle
State BGP6-1	CS-CELL_DCH_Initial	Connected	Null	As previous	Inactive	As previous
State BGP6-2	CS-CELL_FACH_Initial	Connected	Null	As previous	Inactive	As previous
State BGP6-3	PS-CELL_DCH_Initial	Connected	Null	As previous	Inactive	As previous
State BGP6-4	PS-CELL_FACH_Initial	Connected	Null	As previous	Inactive	As previous
State BGP6-5	CS-DCCH_DCH	Connected (CELL_DCH)	Null	As previous	Inactive	As previous
State BGP6-6	CS-DCCH_FACH	Connected (CELL_FACH)	Null	As previous	Inactive	As previous
State BGP6-7	PS-DCCH_DCH	Connected (CELL_DCH)	Null	As previous	Active pending	As previous
State BGP6-8	PS-DCCH_FACH	Connected (CELL_FACH)	Null	As previous	Active pending	As previous
State BGP6-9	CS-DCCH+DTCH_DCH	Connected (CELL_DCH)	Connected	As previous	Inactive	As previous
State BGP6-9a	CS-DCCH+DTCH_DCH_TEST_LOOP	Connected (CELL_DCH)	Null	As previous	Inactive	As previous
State BGP6-10	PS-DCCH+DTCH_DCH	Connected (CELL_DCH)	Null	As previous	Active	As previous
State BGP6-10a	PS-DCCH+DTCH_DCH_TEST_LOOP	Connected (CELL_DCH)	Null	As previous	Inactive	As previous
State BGP6-11	PS-DCCH+DTCH_FACH	Connected (CELL_FACH)	Null	As previous	Active	As previous
State BGP6-11a	PS-DCCH+DTCH_FACH_TEST_LOOP	Connected (CELL_FACH)	Null	As previous	Inactive	As previous
State BGP6-12	CELL_PCH	Connected (CELL_PCH)	Null	As previous	Inactive	As previous
State BGP6-13	URA_PCH	Connected (URA_PCH)	Null	As previous	Inactive	As previous
State BGP6-14	PS+CS-DCCH+DTCH_DCH	Connected (CELL_DCH)	Connected	As previous	Active	As previous
State BGP6-15	CS+CS-DCCH+DTCH_DCH	Connected (CELL_DCH)	Connected	As previous	Inactive	As previous
State BGP6-16	PS+PS-DCCH+DTCH_DCH	Connected (CELL_DCH)	Null	As previous	Active	As previous
State BGP6-17	PS-DCCH+DTCH_HS-DSCH	Connected (CELL_DCH)	Null	As previous	Active	As previous

State 1, state 2, state 3, P1, P2 and P1a are described in clause 7.2. States 6-X (for X=1 to 17) are described below.

7.4.2 Generic Setup Procedure for RRC test cases

7.4.2.1 RRC connection establishment procedure for circuit-switched calls (procedure P3 and P4)

7.4.2.1.1 Mobile terminating call

7.4.2.1.1.1 Initial conditions

System Simulator:

- 1 cell, default parameters.

User Equipment:

- The UE shall be operated under normal test conditions as specified in the present document.
- The Test USIM shall be inserted.

7.4.2.1.1.2 Definition of system information messages

The default system information messages are used as specified in clause 6.1.

7.4.2.1.1.3 Procedure

The Call Set-up procedure shall be performed under ideal radio conditions as defined in clauses 5.2 and 6.1.

Step	Direction		Message	Comments
	UE	SS		
1	←		PAGING TYPE 1 (PCCH)	RRC
2	→		RRC CONNECTION REQUEST (CCCH)	RRC
3	←		RRC CONNECTION SETUP (CCCH)	RRC
4	→		RRC CONNECTION SETUP COMPLETE (DCCH)	RRC
5	→		PAGING RESPONSE	RR

7.4.2.1.1.4 Specific message contents

To execute procedure P3, all specific message contents shall be referred to clause 9.

To execute procedure P4, all specific message contents with the exception of step 3 shall be referred to clause 9. For step 3, the message of the same type titled "Transition to CELL_FACH" in clause 9 is used.

7.4.2.1.2 Mobile originating calls

7.4.2.1.2.1 Initial conditions

System Simulator:

- 1 cell, default parameters.

User Equipment:

- The UE shall be operated under normal test conditions as specified in the present document.
- The Test USIM shall be inserted.

7.4.2.1.2.2 Definition of system information messages

The default system information messages specified in clause 6.1 are used.

7.4.2.1.2.3 Procedure

The Call Set-up procedure shall be performed under ideal radio conditions as defined in clauses 5.2 and 6.1.

Step	Direction		Message	Comments
	UE	SS		
1	→		RRC CONNECTION REQUEST (CCCH)	RRC
2	←		RRC CONNECTION SETUP (CCCH)	RRC
3	→		RRC CONNECTION SETUP COMPLETE (DCCH)	RRC
4	→		CM SERVICE REQUEST	MM

7.4.2.1.2.4 Specific message contents

To execute procedure P3, all specific message contents shall be referred to clause 9.

To execute procedure P4, all specific message contents with the exception of step 2 shall be referred to clause 9. For step 2, the message of the same type titled "Transition to CELL_FACH" in clause 9 is used.

7.4.2.2 RRC connection establishment procedure for packet switched sessions (procedure P5 and P6)

7.4.2.2.1 Mobile terminating session

7.4.2.2.1.1 Initial conditions

System Simulator:

- 1 cell, default parameters.

User Equipment:

- The UE shall be operated under normal test conditions as specified in the present document.
- The Test USIM shall be inserted.

7.4.2.2.1.2 Definition of system information messages

The default system information messages are used as specified in clause 6.1.

7.4.2.2.1.3 Procedure

The Session Set-up procedure shall be performed under Ideal radio conditions as defined in clauses 5.2 and 6.1.

Step	Direction		Message	Comments
	UE	SS		
1		←	PAGING TYPE1 (PCCH)	Paging
2		→	RRC CONNECTION REQUEST (CCCH)	RRC
3		←	RRC CONNECTION SETUP (CCCH)	RRC
4		→	RRC CONNECTION SETUP COMPLETE (DCCH)	RRC
5		→	SERVICE REQUEST	GMM

7.4.2.2.1.4 Specific message contents

To execute procedure P5, all specific message contents shall be referred to clause 9.

To execute procedure P6, all specific message contents with the exception of step 3 shall be referred to clause 9. For step 3, the message of the same type titled "Transition to CELL_FACH" in clause 9 is used.

7.4.2.2.2 Mobile originating sessions

7.4.2.2.2.1 Initial conditions

System Simulator:

- 1 cell, default parameters.

User Equipment:

- The UE shall be operated under normal test conditions as specified in the present document.
- The Test USIM shall be inserted.

7.4.2.2.2.2 Definition of system information messages

The default system information messages are used as specified in clause 6.1.

7.4.2.2.2.3 Procedure

The Session Set-up procedure shall be performed under Ideal radio conditions as defined in clauses 5.2 and 6.1.

Step	Direction		Message	Comments
	UE	SS		
1		→	RRC CONNECTION REQUEST (CCCH)	RRC
2		←	RRC CONNECTION SETUP (CCCH)	RRC

3	→	RRC CONNECTION SETUP COMPLETE (DCCH)	RRC
4	→	SERVICE REQUEST	GMM

7.4.2.2.2.4 Specific message contents

To execute procedure P5, all specific message contents shall be referred to clause 9.

To execute procedure P6, all specific message contents with the exception of step 2 shall be referred to clause 9. For step 2, the message of the same type titled "Transition to CELL_FACH" in clause 9 is used.

7.4.2.3 NAS call set up procedure for circuit switched calls (procedure P7 and P8)

7.4.2.3.1 Mobile terminating call

7.4.2.3.1.1 Initial conditions

System Simulator:

- 1 cell, default parameters.

User Equipment:

- The UE shall be in state 6-1 or state 6-2.
- The Test USIM shall be inserted.

7.4.2.3.1.2 Definition of system information messages

The default system information messages are used as specified in clause 6.1.

7.4.2.3.1.3 Procedure

The Call Set-up procedure shall be performed under Ideal radio conditions as defined in clauses 5.2 and 6.1.

Step	Direction		Message	Comments
	UE	SS		
1	←		AUTHENTICATION REQUEST	MM
2	→		AUTHENTICATION RESPONSE	MM
3	←		SECURITY MODE COMMAND	RRC
4	→		SECURITY MODE COMPLETE	RRC
5	←		SET UP	CC
6	→		CALL CONFIRMED	CC

7.4.2.3.1.4 Specific message contents

All RRC specific message contents shall be referred to clause 9.

7.4.2.3.2 Mobile originating calls

7.4.2.3.2.1 Initial conditions

System Simulator:

- 1 cell, default parameters.

User Equipment:

- The UE shall be in state 6-1or state 6-2.
- The Test USIM shall be inserted.

7.4.2.3.2.2 Definition of system information messages

The default system information messages are used as specified in clause 6.1.

7.4.2.3.2.3 Procedure

The Call Set-up procedure shall be performed under Ideal radio conditions as defined in clauses 5.2 and 6.1.

Step	Direction		Message	Comments
	UE	SS		
1	←		AUTHENTICATION REQUEST	MM
2	→		AUTHENTICATION RESPONSE	MM
3	←		SECURITY MODE COMMAND	RRC
4	→		SECURITY MODE COMPLETE	RRC
5	→		SET UP	CC
6	←		CALL PROCEEDING	CC

7.4.2.3.2.4 Specific message contents

All RRC specific message contents shall be referred to clause 9.

7.4.2.4 NAS session activation procedure for packet switched sessions (procedure P9 and P10)

7.4.2.4.1 Mobile terminating session

7.4.2.4.1.1 Initial conditions

System Simulator:

- 1 cell, default parameters.

User Equipment:

- The UE shall be in state 6-3 or state 6-4.
- The Test USIM shall be inserted.

7.4.2.4.1.2 Definition of system information messages

The default system information messages are used as specified in clause 6.1.

7.4.2.4.1.3 Procedure

The Session Set-up procedure shall be performed under Ideal radio conditions as defined in clauses 5.2 and 6.1.

Step	Direction		Message	Comments
	UE	SS		
1	←		AUTHENTICATION AND CIPHERING REQUEST	GMM
2	→		AUTHENTICATION AND CIPHERING RESPONSE	GMM
3	←		SECURITY MODE COMMAND	RRC
4	→		SECURITY MODE COMPLETE	RRC
5	←		REQUEST PDP CONTEXT ACTIVATION	SM
6	→		ACTIVATE PDP CONTEXT REQUEST	SM

7.4.2.4.1.4 Specific message contents

All RRC specific message contents shall be referred to clause 9.

7.4.2.4.2 Mobile originating sessions

7.4.2.4.2.1 Initial conditions

System Simulator:

- 1 cell, default parameters.

User Equipment:

- The UE shall be in state 6-3 or state 6-4.
- The Test USIM shall be inserted.

7.4.2.4.2.2 Definition of system information messages

The default system information messages are used as specified in clause 6.1.

7.4.2.4.2.3 Procedure

The Session Set-up procedure shall be performed under Ideal radio conditions as defined in clauses 5.2 and 6.1.

Step	Direction		Message	Comments
	UE	SS		
1		←	AUTHENTICATION AND CIPHERING REQUEST	GMM
2		→	AUTHENTICATION AND CIPHERING RESPONSE	GMM
3		←	SECURITY MODE COMMAND	RRC
4		→	SECURITY MODE COMPLETE	RRC
5		→	ACTIVATE PDP CONTEXT REQUEST	SM

7.4.2.4.2.4 Specific message contents

All RRC specific message contents shall be referred to clause 9.

7.4.2.5 Radio access bearer establishment procedure for circuit switched calls (procedure P11 and P12)

7.4.2.5.1 Mobile terminating call

7.4.2.5.1.1 Initial conditions

System Simulator:

- 1 cell, default parameters.

User Equipment:

- The UE shall be in state 6-5 or state 6-6.
- The Test USIM shall be inserted.

7.4.2.5.1.2 Definition of system information messages

The default system information messages are used as specified in clause 6.1.

7.4.2.5.1.3 Procedure

The Call Set-up procedure shall be performed under Ideal radio conditions as defined in clauses 5.2 and 6.1.

Step	Direction		Message	Comments
	UE	SS		
1		←	RADIO BEARER SETUP	RRC RAB SETUP
2		→	RADIO BEARER SETUP COMPLETE	RRC
3		→	ALERTING	CC (This message is optional)
4		→	CONNECT	CC
5		←	CONNECT ACKNOWLEDGE	CC

7.4.2.5.1.4 Specific message contents

To execute procedure P11, use the message titled "CS speech" (defined in clause 9) for the message in step 1. To execute procedure 12, use the message "The others of speech in CS" (defined in clause 9) for the message in step 1.

7.4.2.5.2 Mobile originating calls

7.4.2.5.2.1 Initial conditions

System Simulator:

- 1 cell, default parameters.

User Equipment:

- The UE shall be in state 6-5 or state 6-6.
- The Test USIM shall be inserted.

7.4.2.5.2.2 Definition of system information messages

The default system information messages are used as specified in clause 6.1.

7.4.2.5.2.3 Procedure

The Call Set-up procedure shall be performed under Ideal radio conditions as defined in clauses 5.2 and 6.1.

Step	Direction		Message	Comments
	UE	SS		
1		←	RADIO BEARER SETUP	RRC RAB SETUP
2		→	RADIO BEARER SETUP COMPLETE	RRC
3		←	ALERTING	CC
4		←	CONNECT	CC
5		→	CONNECT ACKOWLEDGE	CC

7.4.2.5.2.4 Specific message contents

To execute procedure P11, use the message titled "CS speech" (defined in clause 9) for the message in step 1. To execute procedure 12, use the message "The others of speech in CS" (defined in clause 9) for the message in step 1.

7.4.2.5a Test loop activation and radio access bearer establishment procedure for circuit switched calls (procedure P7a)

7.4.2.5a.1 Initial conditions

System Simulator:

- 1 cell, default parameters.

User Equipment:

- The UE shall be in state 6-1.
- The Test USIM shall be inserted.

7.4.2.5a.2 Definition of system information messages

The default system information messages are used as specified in clause 6.1.

7.4.2.5a.3 Procedure

The Call Set-up procedure shall be performed under Ideal radio conditions as defined in clauses 5.2 and 6.1.

Step	Direction		Message	Comments
	UE	SS		
1		←	AUTHENTICATION REQUEST	MM
2		→	AUTHENTICATION RESPONSE	MM
3		←	SECURITY MODE COMMAND	RRC
4		→	SECURITY MODE COMPLETE	RRC
5		←	ACTIVATE RB TEST MODE (DCCH)	TC
6		→	ACTIVATE RB TEST MODE COMPLETE (DCCH)	TC
1		←	RADIO BEARER SETUP	RRC RAB SETUP

2	→	RADIO BEARER SETUP COMPLETE	RRC
14	←	CLOSE UE TEST LOOP (DCCH)	TC UE test mode 1 RLC SDU size set as specified for the actual test case.
15	→	CLOSE UE TEST LOOP COMPLETE (DCCH)	TC

7.4.2.5a.4 Specific message contents

To execute procedure P7a, use the message titled "CS speech" (defined in clause 9) for the message in step 1.

7.4.2.6 Radio access bearer establishment procedure for packet switched sessions (procedure P13, P14 and P25)

7.4.2.6.1 Mobile terminating session

7.4.2.6.1.1 Initial conditions

System Simulator:

- 1 cell, default parameters.

User Equipment:

- The UE shall be in state 6-7 or state 6-8.
- The Test USIM shall be inserted.

7.4.2.6.1.2 Definition of system information messages

The default system information messages are used as specified in clause 6.1.

7.4.2.6.1.3 Procedure

The Session Set-up procedure shall be performed under Ideal radio conditions as defined in clauses 5.2 and 6.1.

Step	Direction		Message	Comments
	UE	SS		
1		←	RADIO BEARER SETUP	RRC RAB SETUP
2		→	RADIO BEARER SETUP COMPLETE	RRC
3		←	ACTIVATE PDP CONTEXT ACCEPT	SM

7.4.2.6.1.4 Specific message contents

For step 1, the messages in clause 9 are used. To execute procedure P13, use the message titled "Packet to CELL_DCH from CELL_DCH in PS". To execute procedure P14, use the message titled "Packet to CELL_FACH from CELL_FACH in PS". To execute procedure P25, use the message titled "Packet to CELL_DCH / HS-DSCH from CELL_DCH in PS".

7.4.2.6.2 Mobile originating sessions

7.4.2.6.2.1 Initial conditions

System Simulator:

- 1 cell, default parameters.

User Equipment:

- The UE shall be in state 6-7 or state 6-8.
- The Test USIM shall be inserted.

7.4.2.6.2.2 Definition of system information messages

The default system information messages are used as specified in clause 6.1.

7.4.2.6.2.3 Procedure

The Session Set-up procedure shall be performed under Ideal radio conditions as defined in clauses 5.2 and 6.1.

Step	Direction		Message	Comments
	UE	SS		
1		←	RADIO BEARER SETUP	RRC RAB SETUP
2		→	RADIO BEARER SETUP COMPLETE	RRC
3		←	ACTIVATE PDP CONTEXT ACCEPT	SM

7.4.2.6.2.4 Specific message contents

For step 1, the messages in clause 9 are used. To execute procedure P13, use the message titled "Packet to CELL_DCH from CELL_DCH in PS". To execute procedure P14, use the message titled "Packet to CELL_FACH from CELL_FACH in PS". To execute procedure P25, use the message titled "Packet to CELL_DCH / HS-DSCH from CELL_DCH in PS".

7.4.2.6a Test loop activation and radio access bearer establishment procedure for packet switched sessions (procedure P4a and P9a)

7.4.2.6a.1 Initial conditions

System Simulator:

- 1 cell, default parameters.

User Equipment:

- The UE shall be in state 6-3 or state 6-4.
- The Test USIM shall be inserted.

7.4.2.6a.2 Definition of system information messages

The default system information messages are used as specified in clause 6.1.

7.4.2.6a.3 Procedure

The Session Set-up procedure shall be performed under Ideal radio conditions as defined in clauses 5.2 and 6.1.

Step	Direction		Message	Comments
	UE	SS		
1		←	AUTHENTICATION AND CIPHERING REQUEST	GMM
2		→	AUTHENTICATION AND CIPHERING RESPONSE	GMM
3		←	SECURITY MODE COMMAND	RRC
4		→	SECURITY MODE COMPLETE	RRC
5		←	ACTIVATE RB TEST MODE (DCCH)	TC
6		→	ACTIVATE RB TEST MODE COMPLETE (DCCH)	TC
7		←	RADIO BEARER SETUP	RRC RAB SETUP. The 'pdcp info' IE shall be omitted.
8		→	RADIO BEARER SETUP COMPLETE	RRC
14		←	CLOSE UE TEST LOOP (DCCH)	TC UE test mode 1 RLC SDU size set as specified for the actual test case.
15		→	CLOSE UE TEST LOOP COMPLETE (DCCH)	TC

7.4.2.6a.4 Specific message contents

For step 1, the messages in clause 9 are used. To execute procedure P9a, use the message titled "Packet to CELL_DCH from CELL_DCH in PS". To execute procedure 4a, use the message titled "Packet to CELL_FACH from CELL_FACH in PS" with the exception that the 'pdcp info' IE shall be omitted.

7.4.2.7 Procedure for transitions to CELL_PCH or URA_PCH state (procedure P15, P16, P17 and P18)

7.4.2.7.1 Transition to CELL_PCH (procedure P15 and P16)

7.4.2.7.1.1 Initial conditions

System Simulator:

- 1 cell, default parameters.

User Equipment:

- The UE shall be in state 6-10 or state 6-11.
- The Test USIM shall be inserted.

7.4.2.7.1.2 Definition of system information messages

The default system information messages are used as specified in clause 6.1.

7.4.2.7.1.3 Procedure

The Call Set-up procedure shall be performed under ideal radio conditions as defined in clauses 5.2 and 6.1.

Step	Direction		Message	Comments
	UE	SS		
1	←		PHYSICAL CHANNEL RECONFIGURATION	RRC
2	→		PHYSICAL CHANNEL RECONFIGURATION COMPLETE	RRC

7.4.2.7.1.4 Specific message contents

Contents of PHYSICAL CHANNEL RECONFIGURATION message: DCCH-AM (Step 1)

Information Element	Value/remark
Message Type	
RRC State Indicator	CELL_PCH

7.4.2.7.2 Transition to URA_PCH (procedure P17 and P18)

7.4.2.7.2.1 Initial conditions

System Simulator:

- 1 cell, default parameters.

User Equipment:

- The UE shall be in state 6-10 or state 6-11.
- The Test USIM shall be inserted.

7.4.2.7.2.2 Definition of system information messages

The default system information messages are used as specified in clause 6.1.

7.4.2.7.2.3 Procedure

The Call Set-up procedure shall be performed under ideal radio conditions as defined in clauses 5.2 and 6.1.

Step	Direction		Message	Comments
	UE	SS		
1	←		PHYSICAL CHANNEL RECONFIGURATION	RRC
2	→		PHYSICAL CHANNEL RECONFIGURATION COMPLETE	RRC

7.4.2.7.2.4 Specific message contents

Contents of PHYSICAL CHANNEL RECONFIGURATION message: DCCH-AM (Step 1)

Information Element	Value/remark
Message Type	
RRC State Indicator	URA_PCH

7.4.2.8 Radio access bearer establishment procedure with packet switched sessions for transitions to Multi Call state (procedure P19, 20 and 21)

7.4.2.8.1 Transition to PS+CS-DCCH+DTCH DCH (procedure P19)

7.4.2.8.1.1 Mobile terminating session

7.4.2.8.1.1.1 Initial conditions

System Simulator:

- 1 cell, default parameters.

User Equipment:

- The UE shall have registered in CS/PS.
- The UE shall be in state 6-9.
- The Test USIM shall be inserted.

7.4.2.8.1.1.2 Definition of system information messages

The default system information messages are used as specified in clause 6.1.

7.4.2.8.1.1.3 Procedure

The Session Set-up procedure shall be performed under Ideal radio conditions as defined in clauses 5.2 and 6.1.

Step	Direction		Message	Comments
	UE	SS		
1		←	PAGING TYPE2 (DCCH)	Paging
2		→	SERVICE REQUEST	GMM
3		←	AUTHENTICATION AND CIPHERING REQUEST	GMM
4		→	AUTHENTICATION AND CIPHERING RESPONSE	GMM
5		←	SECURITY MODE COMMAND	RRC
6		→	SECURITY MODE COMPLETE	RRC
7		←	REQUEST PDP CONTEXT ACTIVATION	SM
8		→	ACTIVATE PDP CONTEXT REQUEST	SM
9		←	RADIO BEARER SETUP	RRC RAB SETUP
10		→	RADIO BEARER SETUP COMPLETE	RRC
11		←	ACTIVATE PDP CONTEXT ACCEPT	SM

7.4.2.8.1.1.4 Specific message contents

FFS

7.4.2.8.1.2 Mobile originating sessions

7.4.2.8.1.2.1 Initial conditions

System Simulator:

- 1 cell, default parameters.

User Equipment:

- The UE shall be in state 6-9.
- The Test USIM shall be inserted.

7.4.2.8.1.2.2 Definition of system information messages

The default system information messages are used as specified in clause 6.1.

7.4.2.8.1.2.3 Procedure

The Session Set-up procedure shall be performed under Ideal radio conditions as defined in clauses 5.2 and 6.1.

Step	Direction		Message	Comments
	UE	SS		
1	→		SERVICE REQUEST	GMM
2	←		AUTHENTICATION AND CIPHERING REQUEST	GMM
3	→		AUTHENTICATION AND CIPHERING RESPONSE	GMM
4	←		SECURITY MODE COMMAND	RRC
5	→		SECURITY MODE COMPLETE	RRC
6	→		ACTIVATE PDP CONTEXT REQUEST	SM
7	←		RADIO BEARER SETUP	RRC RAB SETUP
8	→		RADIO BEARER SETUP COMPLETE	RRC
9	←		ACTIVATE PDP CONTEXT ACCEPT	SM

7.4.2.8.1.2.4 Specific message contents

FFS

7.4.2.8.2 Transition to PS+PS-DCCH+DTCH DCH (procedure P20 and P21)

7.4.2.8.2.1 Mobile terminating session

7.4.2.8.2.1.1 Initial conditions

System Simulator:

- 1 cell, default parameters.

User Equipment:

- The UE shall be in state 6-10 or state 6-11.
- The Test USIM shall be inserted.

7.4.2.8.2.1.2 Definition of system information messages

The default system information messages are used as specified in clause 6.1.

7.4.2.8.2.1.3 Procedure

The Session Set-up procedure shall be performed under Ideal radio conditions as defined in clauses 5.2 and 6.1.

Step	Direction		Message	Comments
	UE	SS		
1	←		PAGING TYPE2 (DCCH)	Paging
2	→		SERVICE REQUEST	GMM
3	←		SERVICE ACCEPT	GMM
4	←		REQUEST PDP CONTEXT ACTIVATION	SM
5	→		ACTIVATE PDP CONTEXT REQUEST	SM
6	←		RADIO BEARER SETUP	RRC RAB SETUP
7	→		RADIO BEARER SETUP COMPLETE	RRC
8	←		ACTIVATE PDP CONTEXT ACCEPT	SM

7.4.2.8.2.1.4 Specific message contents

FFS

7.4.2.8.2.2 Mobile originating sessions

7.4.2.8.2.2.1 Initial conditions

System Simulator:

- 1 cell, default parameters.

User Equipment:

- The UE shall be in state 6-10 or state 6-11.
- The Test USIM shall be inserted.

7.4.2.8.2.2.2 Definition of system information messages

The default system information messages are used as specified in clause 6.1.

7.4.2.8.2.2.3 Procedure

The Session Set-up procedure shall be performed under Ideal radio conditions as defined in clauses 5.2 and 6.1.

Step	Direction		Message	Comments
	UE	SS		
1	→		SERVICE REQUEST	GMM
2	←		SERVICE ACCEPT	GMM
3	→		ACTIVATE PDP CONTEXT REQUEST	SM
4	←		RADIO BEARER SETUP	RRC RAB SETUP
5	→		RADIO BEARER SETUP COMPLETE	RRC
6	←		ACTIVATE PDP CONTEXT ACCEPT	SM

7.4.2.8.2.2.4 Specific message contents

FFS

7.4.2.9 Radio access bearer establishment procedure with circuit switched calls for transitions to Multi Call state (procedure P22, P23 and P24)

7.4.2.9.1 Transition to CS+CS-DCCH+DTCH DCH (procedure P22)

7.4.2.9.1.1 Mobile terminating call

7.4.2.9.1.1.1 Initial conditions

System Simulator:

- 1 cell, default parameters.

User Equipment:

- The UE shall be in state 6-9.
- The Test USIM shall be inserted.

7.4.2.9.1.1.2 Definition of system information messages

The default system information messages are used as specified in clause 6.1.

7.4.2.9.1.1.3 Procedure

The Call Set-up procedure shall be performed under Ideal radio conditions as defined in clauses 5.2 and 6.1.

Step	Direction		Message	Comments
	UE	SS		
1		←	PAGING TYPE2 (DCCH)	Paging
2		→	PAGING RESPONSE	RR
3		←	SET UP	CC
4		→	CALL CONFIRMED	CC
5		←	RADIO BEARER SETUP	RRC RAB SETUP
6		→	RADIO BEARER SETUP COMPLETE	RRC
7		→	ALERTING	CC (this message is optional)
8		→	CONNECT	CC
9		←	CONNECT ACKNOWLEDGE	CC

7.4.2.9.1.1.4 Specific message contents

FFS

7.4.2.9.1.2 Mobile originating calls

7.4.2.9.1.2.1 Initial conditions

System Simulator:

- 1 cell, default parameters.

User Equipment:

- The UE shall be in state 6-9.
- The Test USIM shall be inserted.

7.4.2.9.1.2.2 Definition of system information messages

The default system information messages are used as specified in clause 6.1.

7.4.2.9.1.2.3 Procedure

The Call Set-up procedure shall be performed under Ideal radio conditions as defined in clauses 5.2 and 6.1.

Step	Direction		Message	Comments
	UE	SS		
1		→	CM SERVICE REQUEST	MM
2		←	CM SERVICE ACCEPT	MM
3		→	SET UP	CC
4		←	CALL PROCEEDING	CC
5		←	RADIO BEARER SETUP	RRC RAB SETUP
6		→	RADIO BEARER SETUP COMPLETE	RRC
7		←	ALERTING	CC
8		←	CONNECT	CC
9		→	CONNECT ACKNOWLEDGE	CC

7.4.2.9.1.2.4 Specific message contents

FFS

7.4.2.9.2 Transition to PS+CS-DCCH+DTCH DCH (procedure P23 and 24)

7.4.2.9.2.1 Mobile terminating call

7.4.2.9.2.1.1 Initial conditions

System Simulator:

- 1 cell, default parameters.

User Equipment:

- The UE shall have registered in CS/PS.
- The UE shall be in state 6-10 or state 6-11.
- The Test USIM shall be inserted.

7.4.2.9.2.1.2 Definition of system information messages

The default system information messages are used as specified in clause 6.1.

7.4.2.9.2.1.3 Procedure

The Call Set-up procedure shall be performed under Ideal radio conditions as defined in clauses 5.2 and 6.1.

Step	Direction		Message	Comments
	UE	SS		
1	←		PAGING TYPE2 (DCCH)	Paging
2	→		PAGING RESPONSE	RR
3	←		AUTHENTICATION REQUEST	MM
4	→		AUTHENTICATION RESPONSE	MM
5	←		SECURITY MODE COMMAND	RRC
6	→		SECURITY MODE COMPLETE	RRC
7	←		SET UP	CC
8	→		CALL CONFIRMED	CC
9	←		RADIO BEARER SETUP	RRC RAB SETUP
10	→		RADIO BEARER SETUP COMPLETE	RRC
11	→		ALERTING	CC (this message is optional)
12	→		CONNECT	CC
13	←		CONNECT ACKNOWLEDGE	CC

7.4.2.9.2.1.4 Specific message contents

FFS

7.4.2.9.2.2 Mobile originating calls

7.4.2.9.2.2.1 Initial conditions

System Simulator:

- 1 cell, default parameters.

User Equipment:

- The UE shall be in state 6-10 or state 6-11.
- The Test USIM shall be inserted.

7.4.2.9.2.2.2 Definition of system information messages

The default system information messages are used as specified in clause 6.1.

7.4.2.9.2.2.3 Procedure

The Call Set-up procedure shall be performed under Ideal radio conditions as defined in clauses 5.2 and 6.1.

Step	Direction		Message	Comments
	UE	SS		
1	→		CM SERVICE REQUEST	MM
2	←		AUTHENTICATION REQUEST	MM
3	→		AUTHENTICATION RESPONSE	MM
4	←		SECURITY MODE COMMAND	RRC
5	→		SECURITY MODE COMPLETE	RRC
6	→		SET UP	CC
7	←		CALL PROCEEDING	CC
8	←		RADIO BEARER SETUP	RRC RAB SETUP

9	→	RADIO BEARER SETUP COMPLETE	RRC
10	←	ALERTING	CC
11	←	CONNECT	CC
12	→	CONNECT ACKOWLEDGE	CC

7.4.2.9.2.2.4 Specific message contents

FFS

7.5 Test procedures for A-GPS Performance requirements testing

This clause specifies the procedures that shall be used for testing of A-GPS Performance requirements in TS 34.171 [41].

7.5.1 Normal UE based A-GPS procedure

The procedure in this clause shall be used for all UE-based A-GPS TTFF test cases in CELL_DCH and CELL_FACH state as specified in TS 34.171 [41].

7.5.1.1 Initial conditions

User Equipment:

The UE is in CELL_DCH or CELL_FACH state after executing the procedure defined in clause D.2 of TS 34.171 [41].

7.5.1.2 Procedure

Step	Direction		Message	Comments
	UE	SS		
1		←	RESET UE POSITIONING STORED INFORMATION	TC
2		←	RRC MEASUREMENT CONTROL	RRC (Setup, No Reporting, Nav model Satellites 1, 2, 3, 4, 5 (1))
3		←	RRC MEASUREMENT CONTROL	RRC (Modify, No Reporting, Nav model Satellites 6, 7, 8, 9 (1), Iono Model)
4		←	RRC MEASUREMENT CONTROL	RRC (Modify, Periodical Reporting Criterion, GPS Ref time (1), ReferencePosition (1))
5		→	RRC MEASUREMENT REPORT	RRC (Position Estimate), 1st test instance
6		←	RESET UE POSITIONING STORED INFORMATION	TC
7		←	RRC MEASUREMENT CONTROL	RRC (Setup, No Reporting, Nav model Satellites 1, 2, 3, 4,5 (2))
8		←	RRC MEASUREMENT CONTROL	RRC (Modify, No Reporting, Nav model Satellites 6, 7, 8, 9 (2), Iono Model)
9		←	RRC MEASUREMENT CONTROL	RRC (Modify, Periodical Reporting Criterion, GPS Ref time (2), ReferencePosition (2))
10		→	RRC MEASUREMENT REPORT	RRC (Position Estimate), 2nd test instance
11		←	RESET UE POSITIONING STORED INFORMATION	TC
….		……	…….	
n		→	RRC MEASUREMENT REPORT	RRC (Position Estimate), nth test instance

7.5.1.3 Specific message contents

Contents of RESET UE POSITIONING STORED INFORMATION message: TC

Information Element	Value/remark
UE Positioning Technology	AGPS

Contents of MEASUREMENT CONTROL messages: RRC

MEASUREMENT CONTROL (Steps 2 + (n-1)*5):

Information element	Value/remark
Measurement Information Elements	
Measurement Identity	10
Measurement Command	Setup
Measurement Reporting Mode	
- Measurement report transfer mode	Acknowledged mode RLC
- Periodical reporting / Event trigger reporting mode	Periodical reporting
Additional Measurements List	Not present
CHOICE *Measurement type*	UE positioning measurement
- UE positioning measurement	
- UE positioning reporting quantity	
- Method type	UE based
- Positioning methods	GPS
- Response time	128
- Horizontal accuracy	19 (51 m)
- Vertical accuracy	48 (102 m)
- GPS timing of cell wanted	FALSE
- Multiple sets	FALSE
- Additional assistance data request	FALSE
- Environmental characterization	Not present
- Measurement validity	
- UE state	All states
- CHOICE *Reporting criteria*	
- No reporting	
- UE pos OTDOA assistance data for UE-assisted	Not present
- UE pos OTDOA assistance data for UE-based	Not present
- UE positioning GPS assistance data	
- UE positioning GPS navigation model	Satellites 1-5 as specified in clause 10
Physical Channel Information Elements	
DPCH compressed mode status info	Not present

MEASUREMENT CONTROL (Steps 3 + (n-1)*5):

Information element	Value/remark
Measurement Information Elements	
Measurement Identity	10
Measurement Command	Modify
Measurement Reporting Mode	
- Measurement report transfer mode	Acknowledged mode RLC
- Periodical reporting / Event trigger reporting mode	Periodical reporting
Additional Measurements List	Not present
CHOICE *Measurement type*	UE positioning measurement
- UE positioning measurement	
- UE positioning reporting quantity	
- Method type	UE based
- Positioning methods	GPS
- Response time	128
- Horizontal accuracy	19 (51 m)
- Vertical accuracy	48 (102 m)
- GPS timing of cell wanted	FALSE
- Multiple sets	FALSE
- Additional assistance data request	FALSE
- Environmental characterization	Not present
- Measurement validity	
- UE state	All states
- CHOICE *Reporting criteria*	
- No reporting	
- UE pos OTDOA assistance data for UE-assisted	Not present
- UE pos OTDOA assistance data for UE-based	Not present
- UE positioning GPS assistance data	
- UE positioning GPS navigation model	Satellites 6-9 as specified in clause 10
- UE positioning GPS ionospheric model	As specified in clause 10
Physical Channel Information Elements	
DPCH compressed mode status info	Not present

MEASUREMENT CONTROL (Steps 4 + (n-1)*5):

Information element	Value/remark
Measurement Information Elements	
Measurement Identity	10
Measurement Command	Modify
Measurement Reporting Mode	
- Measurement report transfer mode	Acknowledged mode RLC
- Periodical reporting / Event trigger reporting mode	Periodical reporting
Additional Measurements List	Not present
CHOICE *Measurement type*	UE positioning measurement
- UE positioning measurement	
- UE positioning reporting quantity	
- Method type	UE based
- Positioning methods	GPS
- Response time	128
- Horizontal accuracy	19 (51 m)
- Vertical accuracy	48 (102 m)
- GPS timing of cell wanted	FALSE
- Multiple sets	FALSE
- Additional assistance data request	FALSE
- Environmental characterization	Not present
- Measurement validity	
- UE state	All states
- CHOICE *Reporting criteria*	Periodical Reporting Criteria
- Amount of reporting	1
- Reporting Interval	20000
- UE pos OTDOA assistance data for UE-assisted	Not present
- UE pos OTDOA assistance data for UE-based	Not present
- UE positioning GPS assistance data	
- UE positioning GPS reference time	As specified in clause 10
- UE positioning GPS reference UE position	As specified in clause 10
Physical Channel Information Elements	
DPCH compressed mode status info	Not present

7.5.2 UE based A-GPS procedure for moving scenario and periodic update test case

The procedure in this clause shall be used for the UE-based A-GPS moving scenario and periodic update test case in CELL_DCH and CELL_FACH state as specified in TS 34.171 [41].

7.5.2.1 Initial conditions

User Equipment:

The UE is in CELL_DCH or CELL_FACH state after executing the procedure defined in clause D.2 of TS 34.171 [41].

7.5.2.2 Procedure

Step	Direction		Message	Comments
	UE	SS		
1	←		RESET UE POSITIONING STORED INFORMATION	TC
2	←		RRC MEASUREMENT CONTROL	RRC (Setup, No Reporting, Nav model Satellites 1, 2, 3, 4, 5)
3	←		RRC MEASUREMENT CONTROL	RRC (Modify, No Reporting, Nav model Satellites 6, 7, 8, 9, Iono Model)
4	←		RRC MEASUREMENT CONTROL	RRC (Modify, Periodical Reporting Criterion, GPS Ref time, ReferencePosition)
5	→		RRC MEASUREMENT REPORT	RRC (Position Estimate)
6	→		RRC MEASUREMENT REPORT	RRC (Position Estimate)
…..	→		……	
n	→		RRC MEASUREMENT REPORT	RRC (Position Estimate)

NOTE: In the actual testing the UE may report error messages at step 5 until it has been able to acquire a position estimate.

7.5.2.3 Specific message contents

Contents of RESET UE POSITIONING STORED INFORMATION message: TC

The contents of the Reset UE Positioning Stored Information message in Step 1 are the same as specified for Normal UE based A-GPS testing in clause 7.5.1.

Contents of MEASUREMENT CONTROL message: RRC

The contents of the Measurement Control message in steps 2 and 3 are the same as specified for Normal UE based A-GPS testing in clause 7.5.1.

The contents of the Measurement Control message in step 4 are the same as specified for Normal UE based A-GPS testing in clause 7.5.1 with the following exceptions:

Information Element	Value/remark
Amount of reporting	Infinite (see note)
Reporting interval	2 000 ms
NOTE: Infinite means during the complete test time.	

7.5.3 Void

7.5.4 Normal UE assisted GPS procedure

The procedure in this clause shall be used for all UE-assisted A-GPS TTFF test cases in CELL_DCH and CELL_FACH state as specified in TS 34.171 [41].

7.5.4.1 Initial conditions

User Equipment:

The UE is in CELL_DCH or CELL_FACH state after executing the procedure defined in clause D.2 of TS 34.171 [41].

7.5.4.2 Procedure

Step	Direction		Message	Comments
	UE	SS		
1		←	RESET UE POSITIONING STORED INFORMATION	TC
2		←	RRC MEASUREMENT CONTROL	RRC (Setup, Periodical Reporting Criteria, GPS Ref time)
3		→	RRC MEASUREMENT REPORT	RRC (Additional Assistance Data Request)
4		←	RRC MEASUREMENT CONTROL	RRC (Modify, No Reporting, Assistance Data Satellites 1, 2, 3, 4, 5, 6, 7, 8, 9)
5		←	RRC MEASUREMENT CONTROL	RRC (Modify, Periodical Reporting Criteria)
6		→	RRC MEASUREMENT REPORT	RRC (GPS Measured Results), 1st test instance
7		←	RESET UE POSITIONING STORED INFORMATION	TC
8		←	RRC MEASUREMENT CONTROL	RRC (Setup, Periodical Reporting Criteria, GPS Ref time)
9		→	RRC MEASUREMENT REPORT	RRC (Additional Assistance Data Request)
10		←	RRC MEASUREMENT CONTROL	RRC (Modify, No Reporting, Assistance Data Satellites 1, 2, 3, 4, 5, 6, 7, 8, 9)
11		←	RRC MEASUREMENT CONTROL	RRC (Modify, Periodical Reporting Criteria)
12		→	RRC MEASUREMENT REPORT	RRC (GPS Measured Results), 2nd test instance

Step	Direction		Message	Comments
	UE	SS		
13	←		RESET UE POSITIONING STORED INFORMATION	TC
….	……		…….	
n	→		RRC MEASUREMENT REPORT	RRC (GPS Measured Results), n^{th} test instance

7.5.4.3 Specific message contents

Contents of RESET UE POSITIONING STORED INFORMATION message: TC

Information Element	Value/remark
UE Positioning Technology	AGPS

Contents of MEASUREMENT CONTROL messages: RRC

MEASUREMENT CONTROL (Steps 2 + (n-1)*6):

Information element	Value/remark
Measurement Information Elements	
Measurement Identity	10
Measurement Command	Setup
Measurement Reporting Mode	
- Measurement report transfer mode	Acknowledged mode RLC
- Periodical reporting / Event trigger reporting mode	Periodical reporting
Additional Measurements List	Not present
CHOICE *Measurement type*	UE positioning measurement
- UE positioning measurement	
- UE positioning reporting quantity	
- Method type	UE assisted
- Positioning methods	GPS
- Response time	128
- Horizontal accuracy	19 (51 m)
- Vertical accuracy	48 (102 m)
- GPS timing of cell wanted	FALSE
- Multiple sets	FALSE
- Additional assistance data request	TRUE
- Environmental characterization	Not present
- Measurement validity	
- UE state	All states
- CHOICE *Reporting criteria*	Periodical Reporting Criteria
- Amount of reporting	1
- Reporting Interval	20000
- UE pos OTDOA assistance data for UE-assisted	Not present
- UE pos OTDOA assistance data for UE-based	Not present
- UE positioning GPS assistance data	
- UE positioning GPS reference time	As specified in clause 10
Physical Channel Information Elements	
DPCH compressed mode status info	Not present

MEASUREMENT REPORT (Steps 3 + (n-1)*6):

Information element	Value/remark
Measurement Information Elements	
Measurement Identity	10
Measured Results	
- CHOICE *Measurement*	
- UE positioning measured results	
- UE positioning OTDOA measured results	Not present
- UE positioning position estimate info	Not present
- UE positioning GPS measured results	Not present
- UE positioning error	
- Error reason	Assistance Data Missing
- GPS additional assistance data request	Defines assistance data requested by the UE
Measured Results on RACH	Not present
Additional Measured Results	Not present
Event Results	Not present

MEASUREMENT CONTROL (Steps 4 + (n-1)*6):

Information element	Value/remark
Measurement Information Elements	
Measurement Identity	10
Measurement Command	Modify
Measurement Reporting Mode	
- Measurement report transfer mode	Acknowledged mode RLC
- Periodical reporting / Event trigger reporting mode	Periodical reporting
Additional Measurements List	Not present
CHOICE *Measurement type*	UE positioning measurement
- UE positioning measurement	
- UE positioning reporting quantity	
- Method type	UE assisted
- Positioning methods	GPS
- Response time	128
- Horizontal accuracy	19 (51 m)
- Vertical accuracy	48 (102 m)
- GPS timing of cell wanted	FALSE
- Multiple sets	FALSE
- Additional assistance data request	FALSE
- Environmental characterization	Not present
- Measurement validity	
- UE state	All states
- CHOICE *Reporting criteria*	
- No reporting	
- UE pos OTDOA assistance data for UE-assisted	Not present
- UE pos OTDOA assistance data for UE-based	Not present
- UE positioning GPS assistance data	As specified in clause 10 and requested by the UE in Step 3+(n-1)*6
Physical Channel Information Elements	
DPCH compressed mode status info	Not present

MEASUREMENT CONTROL (Steps 5 + (n-1)*6):

Information element	Value/remark
Measurement Information Elements	
Measurement Identity	10
Measurement Command	Modify
Measurement Reporting Mode	
- Measurement report transfer mode	Acknowledged mode RLC
- Periodical reporting / Event trigger reporting mode	Periodical reporting
Additional Measurements List	Not present
CHOICE *Measurement type*	UE positioning measurement
- UE positioning measurement	
- UE positioning reporting quantity	
- Method type	UE assisted
- Positioning methods	GPS
- Response time	128
- Horizontal accuracy	19 (51 m)
- Vertical accuracy	48 (102 m)
- GPS timing of cell wanted	FALSE
- Multiple sets	FALSE
- Additional assistance data request	FALSE
- Environmental characterization	Not present
- Measurement validity	
- UE state	All states
- CHOICE *Reporting criteria*	Periodical Reporting Criteria
- Amount of reporting	1
- Reporting Interval	20000
- UE pos OTDOA assistance data for UE-assisted	Not present
- UE pos OTDOA assistance data for UE-based	Not present
- UE positioning GPS assistance data	Not present
Physical Channel Information Elements	
DPCH compressed mode status info	Not present

7.5.5 UE assisted A-GPS procedure for moving scenario and periodic update test case

The procedure in this clause shall be used for the UE-assisted A-GPS moving scenario and periodic update test case in CELL_DCH and CELL_FACH state as specified in TS 34.171 [41].

7.5.5.1 Initial conditions

User Equipment:

The UE is in CELL_DCH or CELL_FACH state after executing the procedure defined in clause D.2 of TS 34.171 [41].

7.5.5.2 Procedure

Step	Direction		Message	Comments
	UE	SS		
1	←		RESET UE POSITIONING STORED INFORMATION	TC
2	←		RRC MEASUREMENT CONTROL	RRC (Setup, Periodical Reporting Criteria, GPS Ref time)
3	→		RRC MEASUREMENT REPORT	RRC (Additional Assistance Data Request)
4	←		RRC MEASUREMENT CONTROL	RRC (Modify, No Reporting, Assistance Data Satellites 1, 2, 3, 4, 5, 6, 7, 8, 9)
5	←		RRC MEASUREMENT CONTROL	RRC (Modify, Periodical Reporting Criteria)
6	→		RRC MEASUREMENT REPORT	RRC (GPS Measured Results), 1st test instance
7	→		RRC MEASUREMENT REPORT	RRC (GPS Measured Results), 2nd test instance
…..	→		……	

n	→	RRC MEASUREMENT REPORT	RRC (GPS Measured Results), n^{th} test instance
NOTE:	In the actual testing the UE may report error messages at step 6 until it has been able to acquire GPS measured results.		

7.5.5.3 Specific message contents

Contents of RESET UE POSITIONING STORED INFORMATION message: TC

The contents of the Reset UE Positioning Stored Information message in Step 1 are the same as specified for Normal UE assisted A-GPS testing in clause 7.5.4.

Contents of MEASUREMENT CONTROL message: RRC

The contents of the Measurement Control message in steps 2 and 4 are the same as specified for Normal UE assisted A-GPS testing in clause 7.5.4.

The contents of the Measurement Control message in step 5 are the same as specified for Normal UE assisted A-GPS testing in clause 7.5.4 with the following exceptions:

Information Element	Value/remark
Amount of reporting	Infinite (see note)
Reporting interval	2 000 ms
NOTE: Infinite means during the complete test time.	

8 Test USIM Parameters

8.1 Introduction

This clause defines default parameters for programming the elementary files of the test USIM. The requirements of this clause do not apply to the USIM/ME tests of 3GPP TS 31.120 [39] and 3GPP TS 31.121 [40].

8.1.1 Definitions

"Test USIM card":

A USIM card supporting the test algorithm for authentication, programmed with the parameters defined in this clause. The electrical, mechanical and environmental requirements of the test USIM card are specified in 3GPP TS 31.101 [22] and 3GPP TS 31.102 [23].

"Test USIM":

Either a test USIM card or the USIM simulator programmed with the parameters defined in this clause.

8.1.2 Definition of the test algorithm for authentication

In order to be able to easily test the UMTS authentication and key agreement procedure as specified in 3GPP TS 33.102 [24] and 3GPP TS 33.105 [26] along the whole system, the availability of a test algorithm for generation of authentication vector based on quintets is needed (in GSM triplets was used). Additionally, calculation of the parameters for re-synchronization requests is needed. The definition of the test algorithm are the functions f1, f2, f3, f4, f5 and the corresponding functions for re-synchronization are f1* and f5*.

For test USIM intended to be used for inter-RAT test cases then the test USIM shall support the conversion function c3 according to 3GPP TS 33.102 [24], clause 6.8.1.2 to derive the GSM ciphering key Kc from the UMTS cipher/integrity keys CK and IK.

The test algorithm defined in the present clause shall be implemented in test USIM cards as well in test USIM simulators and SS. The test algorithm may also, for test purposes, be implemented in AUC.

The following procedure employs bit wise modulo 2 addition ("XOR").

The following convention applies:

All data variables in the specification of this test algorithm are presented with the most significant substring on the left hand side and the least significant substring on the right hand side. A substring may be a bit, byte or other arbitrary length bitstring. Where a variable is broken down into a number of substrings, the leftmost (most significant) substring is numbered 0, the next most significant is numbered 1, and so on through to the least significant.

8.1.2.1 Authentication and key derivation in the test USIM and SS

The following steps describe sequence of operations for the functions f1, f2, f3, f4 and f5 to perform in the test USIM and SS, in order to obtain the XMAC/MAC, RES/XRES, CK, IK, Kc and AK respectively, to be used in the authentication and key agreement procedure.

Step 1:

XOR to the challenge **RAND**, a predefined number **K** (in which at least one bit is not zero, see clause 8.2), having the same bit length (128 bits) as **RAND**.

The result **XDOUT** of this is:

XDOUT[bits 0,1, . . .126,127] = **K** [bits 0,1, . . .126,127] XOR **RAND**[bits 0,1, . . .126,127]

Step 2:

RES (test USIM)**, XRES** (SS), **CK, IK** and **AK** are extracted from **XDOUT** this way:

RES[bits 0,1, . . .n-1,n] = **f2**(**XDOUT**,n) = **XDOUT**[bits 0,1, . . .n-1,n] (with 30 < n < 128)

NOTE: Suggested length for RES is 128 bits (i.e. n = 127).
In SS and AUC, the XRES calculation is identical to RES.

CK[bits 0,1, . . .126,127] = **f3**(**XDOUT**) = **XDOUT**[bits 8,9, . . .126,127,0,1, . . .6,7]

IK[bits 0,1, . . . 126,127] = **f4**(**XDOUT**) = **XDOUT**[bits 16,17, . . .126,127,0,1, . . .14,15]

AK[bits 0,1, . . . 46,47] = **f4**(**XDOUT**) = **XDOUT**[bits 24,25, . . .70,71]

For test USIM intended for inter-RAT testing the GSM ciphering key Kc shall be derived from the UMTS cipher/integrity keys:

Kc[bits 0,1, . . . 62,63] **=** **c3(CK,IK)**, see 3GPP TS 33.102 [24], clause 6.8.1.2.

Step 3:

Concatenate **SQN** with **AMF** to obtain **CDOUT** like this:

CDOUT[bits 0,1,. . .62,63] = **SQN**[bits 0,1,. . .46,47] || **AMF**[bits 0,1,. . .14,15]

NOTE: For test USIM the **SQN** = $\mathbf{SQN_{MS}}$ = $\mathbf{SQN_{SS}}$[bits 0,1,. . .46,47] = **AUTN**[bits 0,1,. . .46,47] XOR **AK**[bits 0,1, . . . 46,47] where AUTN is the received authentication token.

Step 4:

XMAC (test USIM) and **MAC** (SS) are calculated from **XDOUT** and **CDOUT** this way:

XMAC[bits 0,1, . . .62, 63] = **f1**(**XDOUT, CDOUT**) = **XDOUT**[bits 0,1. . .62,63] XOR **CDOUT**[bits 0,1,. . .62,63]

NOTE: In SS and AUC, the MAC calculation is identical to XMAC.

Step 5:

The SS calculates the authentication token **AUTN**:

AUTN[bits 0,1,..126,127] = **SQN** ⊕ **AK**[bits 0,1,. . .46,47] || **AMF**[bits 0,1,. . .14,15] || **MAC**[bits 0,1, . . .62, 63]

Where **SQN** ⊕ **AK**[bits 0,1,. . .46,47] = **SQN**[bits 0,1,. . .46,47] XOR **AK**[bits 0,1, . . . 46,47]

8.1.2.2 Generation of re-synchronization parameters in the USIM

For SS to be able to initiate an authentication re-synchronization procedure a specific AMF value has been defined.

$AMF_{RESYNCH}$ = AMF[bits 0,1,..14,15] = "1111 1111 1111 1111"

When the test USIM receives an authentication token (AUTN) having the value of AMF field equal to the $AMF_{RESYNCH}$ value then the test USIM shall initiate the re-synchronization procedure.

When the test USIM starts the re-synchronization procedure, the MAC-S and AK have to be calculated using the functions f1* and f5*, which in the test algorithm are identical to f1 and f5, respectively.

Step 1:

XOR to the challenge **RAND**, a predefined number **K** (in which at least one bit is not zero, see 8.2), having the same bit length (128 bits) as **RAND**.

The result **XDOUT** of this is:

XDOUT[bits 0,1, . . .126,127] = **K**[bits 0,1, . . .126,127] XOR **RAND**[bits 0,1, . . .126,127]

Step 2:

AK is extracted from **XDOUT** this way:

AK[bits 0,1, . . . 46,47] = **f5***(**XDOUT**) = **XDOUT**[bits 24,25, . . .70,71]

Step 3:

Concatenate $\mathbf{SQN_{MS}}$ with **AMF*** to obtain **CDOUT** like this:

CDOUT[bits 0,1,. . .62,63] = $\mathbf{SQN_{MS}}$[bits 0,1,. . .46,47] || **AMF***[bits 0,1,. . .14,15]

Where **AMF*** assumes a dummy value of all zeros.

NOTE 1: For test USIM the $\mathbf{SQN_{MS}} = \mathbf{SQN_{SS}}$[bits 0,1,. . .46,47] = **AUTN**[bits 0,1,. . .46,47] XOR **AK**[bits 0,1, . . . 46,47] where AUTN is the received authentication token.

NOTE 2: For SS and AUC the $\mathbf{SQN_{MS}}$ = **AUTS**[bits 0,1,. . .46,47] XOR **AK**[bits 0,1, . . . 46,47] where AUTS is the received re-synchronization parameter.

Step 4:

MAC-S is calculated from **XDOUT** and **CDOUT** this way:

MAC-S[bits 0,1, . . .62, 63] = **f1***(**XDOUT, CDOUT**) = **XDOUT**[bits 0,1. . .62,63] XOR **CDOUT**[bits 0,1,. . .62,63]

NOTE: In SS and AUC, the XMAC-S calculation is identical to MAC-S.

Step 5:

The test USIM calculates the re-synchronization parameter **AUTS**:

AUTS[bits 0,1,..110,111] = $\mathbf{SQN_{MS}} \oplus$ **AK**[bits 0,1,. . .46,47] || **MAC-S**[bits 0,1, . . .62, 63]

Where $\mathbf{SQN_{MS}} \oplus$ **AK**[bits 0,1,. . .46,47] = $\mathbf{SQN_{MS}}$ [bits 0,1,. . .46,47] XOR **AK**[bits 0,1, . . . 46,47]

8.1.2.3 Using the authentication test algorithm for UE conformance testing

8.1.2.3.1 Authentication accept case

The authentication accept case is illustrated in figures 8.1.2.3.1 and 8.1.2.3.2.

The SS calculates the authentication token AUTN according to the test algorithm as specified in clause 8.1.2.1 (step 1 to step 5) using an AMF value different from the $AMF_{RESYNCH}$ value.

The SS sends an authentication request, including RAND and AUTN parameters, to the ME/USIM.

Based on the received RAND parameter the test USIM calculates the RES, CK, IK, Kc and XMAC parameters according to clause 8.1.2.1 (step 1 to step 4). The test USIM extracts the $SQN_{MS} = SQN_{SS}$, AMF and MAC parameters from the received authentication token AUTN.

The test USIM checks that XMAC = MAC and then return the RES, CK and IK parameters to the ME.

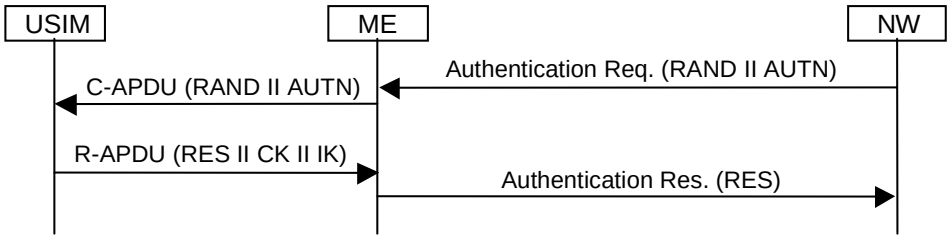

Figure 8.1.2.3.1: Network accepted by UE (USIM not supporting derivation of GSM cipher key Kc)

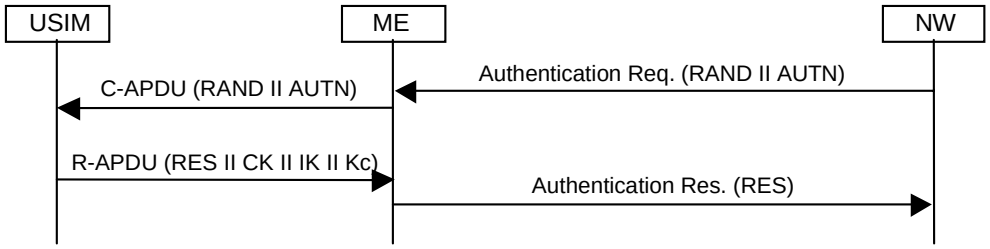

Figure 8.1.2.3.2: Network accepted by UE (USIM supporting derivation of GSM cipher key Kc)

8.1.2.3.2 MAC failure case

The MAC failure case is illustrated in figure 8.1.2.3.2.

The SS calculates the authentication token AUTN according to the test algorithm as specified in clause 8.1.2.1 (step 1 to step 5) using an AMF value different from the $AMF_{RESYNCH}$ value and a MAC value different from what is calculated in clause 8.1.2.1 step 4.

The SS sends an authentication request, including RAND and AUTN parameters, to the ME/USIM.

Based on the received RAND parameter The test USIM calculates the RES, CK, IK, Kc and XMAC parameters according to clause 8.1.2.1 (step 1 to step 4).

The test USIM extracts the $SQN_{MS} = SQN_{SS}$, AMF and MAC parameters from the received authentication token AUTN.

When the test USIM identifies that the calculated XMAC value is different from the MAC value received in AUTN then the USIM notifies the ME of the MAC failure and the ME sends an AUTENTICATION FAILURE message to the SS (cause "MAC failure").

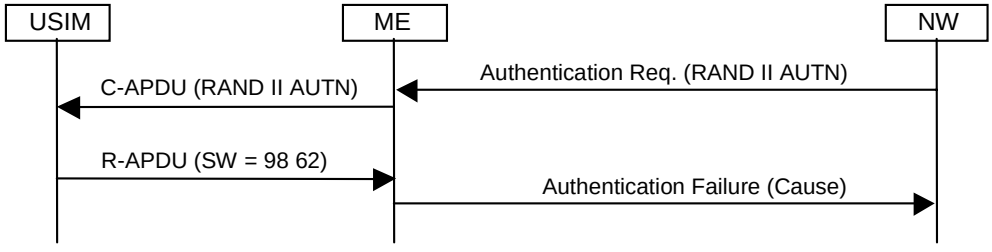

Figure 8.1.2.3.2: MAC failure cases

8.1.2.3.3 SQN failure case

The SQN failure case is illustrated in figure 8.1.2.3.3.

The SS calculates the authentication token AUTN according to the test algorithm as specified in clause 8.1.2.1 (step 1 to step 5) using an AMF value equal to $AMF_{RESYNCH}$.

The SS sends an authentication request, including RAND and AUTN parameters, to the UE/USIM.

The test USIM extracts the $SQN_{MS} = SQN_{SS}$, AMF and MAC parameters from the received authentication token AUTN.

When the test USIM identifies that the AMF field is equal to the $AMF_{RESYNCH}$ value it calculates the re-synchronization parameter AUTS as specified in clause 8.1.2.2 (step 1 to step 5) and forward it to the ME.

The ME sends an AUTHENTICATION FAILURE message to the SS including the AUTS parameter.

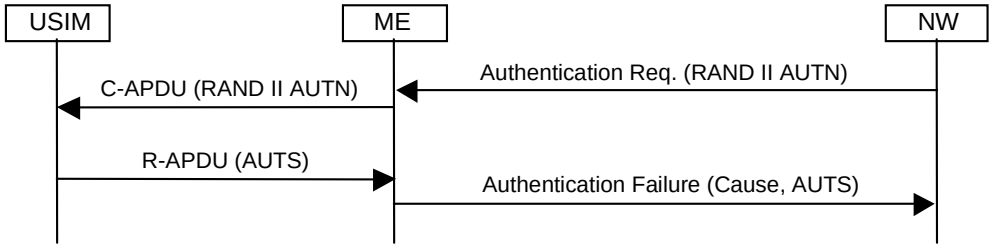

Figure 8.1.2.3.3: SQN failure case

8.1.3 Definition of the test algorithm for VGCS/VBS VSTK generation

In order to be able to easily test the VGCS/VBS key generation and encryption as specified in TS 43.020 [44] and TS 31.102 [23] along the whole system, the availability of a test algorithm for generation of the VSTK-key is needed.

The test algorithm defined in the present clause shall be implemented in test USIM cards as well in test USIM simulators and SS.

The following procedure employs bit wise modulo 2 addition ("XOR").

The following convention applies:

All data variables in the specification of this test algorithm are presented with the most significant substring on the left hand side and the least significant substring on the right hand side. A substring may be a bit, byte or other arbitrary length bitstring. Where a variable is broken down into a number of substrings, the leftmost (most significant) substring is numbered 0, the next most significant is numbered 1, and so on through to the least significant.

8.1.3.1 VSTK generation in the test USIM and SS

The following steps describe the sequence of operations for the function A8_V (TS 43.020 [44]) to be performed in the test USIM and SS, in order to obtain the VSTK, to be used in the subsequent ME/BSS key derivation steps for VGCS/VBS ciphering.

Step 1:

Expand the 36-bit value **VSTK_RAND** to an intermediate 40-bit value **EXPAND**:

FILLER[bits 0,..7] = “11111111”

EXPAND [bits 0,1, . . .39] **= FILLER**[bits 0,..3] **|| VSTK_RAND**[bits 0,1, . . .35]

Expand the 40-bit value **EXPAND** to a 128-bit value **EXP_RAND**:

EXP_RAND[bits 0,1, . . .126,127] = **EXPAND**[bits 0,1, . . .39] || **EXPAND**[bits 0,1, . . .39] || **EXPAND**[bits 0,1, . . .39] || **FILLER**[bits 0,..7]

Step 2:

XOR the expanded 128 bit **EXP_RAND** with a stored **V_Ki** i.e. a 128 bit Voice Group or Broadcast Group Key (128 bit) number taken by the USIM from an internal table indexed by VK_Id and Group_Id

The result **VSTK** of this is:

VSTK[bits 0,1, . . .126,127]= **V_Ki** [bits 0,1, . . .126,127] XOR **EXP_RAND**[bits 0,1, . . .126,127]

8.2 Default Parameters for the test USIM

K:

Size: 16 Bytes

Default values: Bytes 1 (HEX): 00

Bytes 2 (HEX): 01

Bytes 3 (HEX): 02

Bytes 4 (HEX): 03

Bytes 5 (HEX): 04

Bytes 6 (HEX): 05

Bytes 7 (HEX): 06

Bytes 8 (HEX): 07

Bytes 9 (HEX): 08

Bytes 10 (HEX): 09

Bytes 11 (HEX): 0A

Bytes 12 (HEX): 0B

Bytes 13 (HEX): 0C

Bytes 14 (HEX): 0D

Bytes 15 (HEX): 0E

Bytes 16 (HEX): 0F

PIN Disabling:

The PIN enabled / disabled flag will be set to "PIN Disabled". This ensures that when the Test USIM is inserted into a UE the user will not be prompted for PIN entry.

8.3 Default settings for the Elementary Files (EFs)

The format and coding of elementary files of the USIM are defined in 3GPP TS 31.101 [22] and 3GPP TS 31.102 [23]. The following clauses define the default parameters to be programmed into each elementary file. Some files may be updated by the UE based on information received from the SS. These are identified in the following clauses.

If EFs have an unassigned value, it may not be clear from the main text what this value should be. This clause suggests values in these cases.

8.3.1 Contents of the EFs at the MF level

8.3.1.1 EF_{DIR}

8.3.1.2 EF_{ICCID} (ICC Identity)

The programming of this EF is a test house option.

8.3.1.3 EF_{PL} (Preferred Languages)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.1.4 EF_{ARR} (Access rule reference)

The programming of this EF is a test house option.

8.3.2 Contents of files at the USIM ADF (Application DF) level

8.3.2.1 EF_{LI} (Language Indication)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.2.2 EF_{IMSI} (IMSI)

The IMSI value will be chosen by the test house. The IMSI used by the SS will align this value.

File size: 9 bytes

Default values: Byte 1 (DEC): 8

Bytes 2 to 9 (HEX): 09 10 10 ** ** ** ** **

"*" indicates any number between 0 and 9 subject to the restriction that IMSI mod 1000 (i.e. bytes 7, 8 and 9) lies in one of the following ranges:

- 063 to 125, 189 to 251, 315 to 377, 441 to 503, 567 to 629, 693 to 755, 819 to 881 or 945 to 999.

NOTE: This ensures that the UE can listen to the second CCCH when more than one basic physical channel is configured for the CCCH. This is necessary for the test of "paging re-organization".

8.3.2.3 EF_{Keys} (Ciphering and Integrity Keys)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.2.4 EF_{KeysPS} (Ciphering and Integrity Keys for Packet Switched domain)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.2.5 $EF_{PLMNwAcT}$ (User controlled PLMN selector with Access Technology)

File size:	5n bytes		
Default values (HEX):	Bytes 1 to 3:	32 F4 10	(MCC, MNC) - Translates to 234, 01
	Bytes 4 to 5:	80 00	(Access Technology) - Translates to UTRAN
	Bytes 6 to 8:	32 F4 20	(MCC, MNC)
	Bytes 9 to 10:	80 00	(Access Technology)
	Bytes 11 to 13:	32 F4 30	(MCC, MNC)
	....		
	....		
	....		

Bytes(5n-4) to (5n-2): 32 F4 43 (MCC, MNC)

Bytes (5n-1) to 5n: 80 00 (Access Technology)

PLMNs are shown coded above since this is the largest number required for a test. It is necessary to take this into account since the USIM cards must be dimensioned to cope with this number of records.

8.3.2.6 EF_{HPPLMN} (Higher Priority PLMN search period)

File size: 1 byte

Default value (HEX): 00 (No higher priority PLMN search attempts)

8.3.2.7 EF_{ACMmax} (ACM maximum value)

File size: 3 bytes

Default: Byte 1: 00

Byte 2: 00

Byte 3: 00

The above translates to: "Not valid".

8.3.2.8 EF_{UST} (USIM Service Table)

Services will be allocated and activated as follows.

Services		Activated	Version
Service n°1 :	Local Phone Book	Option	
Service n°2 :	Fixed Dialling Numbers (FDN)	Option	
Service n°3 :	Extension 2	Option	
Service n°4 :	Service Dialling Numbers (SDN)	Option	
Service n°5 :	Extension3	Option	
Service n°6 :	Barred Dialling Numbers (BDN)	Option	
Service n°7 :	Extension4	Option	
Service n°8 :	Outgoing Call Information (OCI and OCT)	Option	
Service n°9 :	Incoming Call Information (ICI and ICT)	Option	
Service n°10:	Short Message Storage (SMS)	Yes	
Service n°11:	Short Message Status Reports (SMSR)	Option	
Service n°12:	Short Message Service Parameters (SMSP)	Yes	
Service n°13:	Advice of Charge (AoC)	Yes	
Service n°14:	Capability Configuration Parameters (CCP)	Yes	
Service n°15:	Cell Broadcast Message Identifier	Yes	
Service n°16:	Cell Broadcast Message Identifier Ranges	Yes	
Service n°17:	Group Identifier Level 1	Option	
Service n°18:	Group Identifier Level 2	Option	
Service n°19:	Service Provider Name	Option	
Service n°20:	User controlled PLMN selector with Access Technology	Yes	
Service n°21:	MSISDN	Option	
Service n°22:	Image (IMG)	Option	
Service n°23:	Not used (reserved for SoLSA)	No	
Service n°24:	Enhanced Multi-Level Precedence and Pre-emption Service	Option	
Service n°25:	Automatic Answer for Emlpp	Option	
Service n°26:	RFU	No	
Service n°27:	GSM Access	Yes	
Service n°28:	Data download via SMS-PP	Option	
Service n°29:	Data download via SMS-CB	Option	
Service n°30:	Call Control by USIM	Option	
Service n°31:	MO-SMS Control by USIM	Option	
Service n°32:	RUN AT COMMAND command	Option	
Service n°33:	Packet Switched Domain	Yes	
Service n°34:	Enabled Services Table	Yes	
Service n°35:	APN Control List (ACL)	Option	

Services		Activated	Version
Service n°36:	Depersonalization Control Keys	Option	
Service n°37:	Co-operative Network List	Option	
Service n°38:	GSM security context	Yes	
Service n°39:	CPBCCH Information	Yes	
Service n°40:	Investigation Scan	Yes	
Service n°41:	MExE	Option	
Service n°42	Operator controlled PLMN selector with Access Technology	Yes	
Service n°43	HPLMN selector with Access Technology	Yes	
Service n°44	Extension 5	Option	
Service n°45	PLMN Network Name	Option	
Service n°46	Operator PLMN List	Option	
Service n°47	Mailbox Dialling Numbers	Option	
Service n°48	Message Waiting Indication Status	Option	
Service n°49	Call Forwarding Indication Status	Option	
Service n°50	Reserved and shall be ignored	Option	
Service n°51	Service Provider Display Information	Option	
Service n°52	Multimedia Messaging Service (MMS)	Option	
Service n°53	Extension 8	Option	
Service n°54	Call control on GPRS by USIM	Option	
Service n°55	MMS User Connectivity Parameters	Option	
Service n°56	Network's indication of alerting in the MS (NIA)	Option	
Service n°57	VGCS Group Identifier List (EF_{VGCS} and EF_{VGCSS})	YES	
Service n°58	VBS Group Identifier List (EF_{VBS} and EF_{VBSS})	YES	
Service n°59	Pseudonym	Option	REL-6 and later
Service n°60	User Controlled PLMN selector for WLAN access	Option	REL-6 and later
Service n°61	Operator Controlled PLMN selector for WLAN access	Option	REL-6 and later
Service n°62	User controlled WSID list	Option	REL-6 and later
Service n°63	Operator controlled WSID list	Option	REL-6 and later
Service n°64	VGCS security	YES	REL-6 and later
Service n°65	VBS security	YES	REL-6 and later
Service n°66	WLAN Reauthentication Identity	Option	REL-6 and later
Service n°67	Multimedia Messages Storage	Option	REL-6 and later
Service n°68	Generic Bootstrapping Architecture (GBA)	Option	REL-6 and later
Service n°69	MBMS security	Option	REL-6 and later
Service n°70	Data download via USSD and USSD application mode	Option	REL-6 and later
Service n°72	Additional TERMINAL PROFILE after UICC activation	Option	REL-6 and later

8.3.2.9 EF_{ACM} (Accumulated Call Meter)

File size: 3 bytes

Default: Byte 1: 00

Byte 2: 00

Byte 3: 00

The above translates to: "Not yet implemented".

8.3.2.10 EF_{GID1} (Group Identifier Level 1)

The programming of this EF is a test house option.

8.3.2.11 EF_{GID2} (Group Identifier Level 2)

The programming of this EF is a test house option.

8.3.2.12 EF_{SPN} (Service Provider Name)

The programming of this EF is a test house option.

8.3.2.13 EF_{PUCT} (Price per Unit and Currency Table)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.2.14 EF_{CBMI} (Cell Broadcast Message identifier selection)

The programming of this EF is a test house option.

The file size is 2n bytes, where n is the number of Cell broadcast message identifier records - each record defining a type of Cell Broadcast message which may be accessed by the UE. Care should be taken when dimensioning the USIM to take into account the number of Cell Broadcast message identifier records required.

8.3.2.15 EF_{ACC} (Access Control Class)

The EFACC can be selected by a test house in two types.

Type A;

File size:	2 Bytes	
Default values (BIN):	Byte 1:	000000**
	Byte 2:	********

The test house may set any single bit shown by "*" to "1". All remaining bits of byte 2 will be set to "0". This determines the access control class of the USIM.

Type B;

Default values (BIN):	Byte 1:	111110**
	Byte 2:	********

The test house may set any single bit shown by "*" to "1". All remaining bits of byte 2 will be set to "0". This determines the access control class of the USIM.

8.3.2.16 EF_{FPLMN} (Forbidden PLMNs)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.2.17 EF_{LOCI} (Location Information)

File size:	11 Bytes	
Default values:	Bytes 1 to 4 (HEX):	FF FF FF FF (TMSI)
	Bytes 5 to 9 (HEX):	42 F6 18 FF FE (LAI)
	Byte 10 (HEX):	FF (RFU)
	Byte 11 (BIN):	00000001 (Location Update Status = "not updated")

Bytes 5 to 9: LAI-MCC = 246 (bytes 5 to 6) and LAI-MNC = 81 (byte 7) are frequently used. The LAC (bytes 8 to 9) is set to "FF FE" since this, in conjunction with byte 11 setting of "01", is used to ensure that the UE performs a location update at the beginning of a test.

Bytes in this file (e.g. TMSI in bytes 1 to 4) may be updated as a result of a location update attempt by the UE.

8.3.2.18 EF_{AD} (Administrative Data)

File size:	4 bytes	
Default values	Byte 1:	10000000 - (type approval operations)
	Byte 2:	00000000
	Byte 3:	00000000
	Byte 4:	00000010

8.3.2.19 Void

8.3.2.20 EF_{CBMID} (Cell Broadcast Message Identifier for Data Download)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.2.21 EF_{ECC} (Emergency Call Codes)

The programming of this EF is a test house option.

8.3.2.22 EF_{CBMIR} (Cell Broadcast Message Identifier Range selection)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.2.23 EF_{PSLOCI} (Packet Switched location information)

File size: 14 Bytes

Default values:
- Bytes 1 to 4 (HEX): FF FF FF FF (P-TMSI)
- Bytes 5 to 7 (HEX): FF FF FF (P-TMSI signature value)
- Bytes 8 to 13 (HEX): 42 F6 18 FF FE FF (RAI)
- Byte 14 (BIN): 00000001 (Routing Area update status = "not updated")

Bytes 8 to 13: RAI-MCC = 246 (bytes 8 to 9) and RAI-MNC = 81 (byte 10) are frequently used. The LAC (bytes 11 to 12) is set to "FF FE" since this, in conjunction with byte 14 setting of "01", is used to ensure that the UE performs a location update at the beginning of a test.

Bytes in this file (e.g. P-TMSI in bytes 1 to 4) may be updated as a result of a location update attempt by the UE.

8.3.2.24 EF_{FDN} (Fixed Dialling Numbers)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.2.25 EF_{SMS} (Short messages)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.2.26 EF_{MSISDN} (MSISDN)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.2.27 EF_{SMSP} (Short message service parameters)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.2.28 EF_{SMSS} (SMS status)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.2.29 EF_{SDN} (Service Dialling Numbers)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.2.30 EF_{EXT2} (Extension2)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.2.31 EF_{EXT3} (Extension3)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.2.32 EF_{SMSR} (Short message status reports)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.2.33 EF_{ICI} (Incoming Call Information)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.2.34 EF_{OCI} (Outgoing Call Information)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.2.35 EF_{ICT} (Incoming Call Timer)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.2.36 EF_{OCT} (Outgoing Call Timer)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.2.37 EF_{EXT5} (Extension5)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.2.38 EF_{CCP2} (Capability Configuration Parameters 2)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.2.39 EF_{eMLPP} (enhanced Multi Level Precedence and Pre-emption)

The programming of this EF is a test house option.

8.3.2.40 EF_{AAeM} (Automatic Answer for eMLPP Service)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.2.41 Void

8.3.2.42 $EF_{Hiddenkey}$ (Key for hidden phone book entries)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.2.43 Void

8.3.2.44 EF_{BDN} (Barred dialling numbers)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.2.45 EF_{EXT4} (Extension 4)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.2.46 EF_{CMI} (Comparison method information)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.2.47 EF_{EST} (Enabled service table)

The programming of this EF is a test house option.

8.3.2.48 EF_{ACL} (Access point name control list)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.2.49 EF_{DCK} (Depersonalization control keys)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.2.50 EF_{CNL} (Co-operative network list)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.2.51 $EF_{START-HFN}$ (Initialisation values for Hyperframe number)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.2.52 $EF_{THRESHOLD}$ (Maximum value of START)

The programming of this EF is a test house option.

8.3.2.53 $EF_{OPLMNwACT}$ (Operator controlled PLMN selector with Access Technology)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.2.54 $EF_{HPLMNwAcT}$ (HPLMN selector with Access Technology)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.2.55 EF_{ARR} (Access rule reference)

The programming of this EF is a test house option.

8.3.2.56 Void

8.3.2.57 EF_{NETPAR} (Network Parameters)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.2.58 EF_{PNN} (PLMN Network Name)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.2.59 EF_{OPL} (Operator PLMN List)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.2.60 EF_{MBDN} (Mailbox Dialling Numbers)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.2.61 EF_{EXT6} (Extension6)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.2.62 EF_{MBI} (Mailbox Identifier)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.2.63 EF_{MWIS} (Message Waiting Indication Status)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.2.64 EF_{CFIS} (Call Forwarding Indication Status)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.2.65 EF_{EXT7} (Extension7)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.2.66 EF_{SPDI} (Service Provider Display Information)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.2.67 EF_{MMSN} (MMS Notification)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.2.68 EF_{EXT8} (Extension 8)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.2.69 EF_{MMSICP} (MMS Issuer Connectivity Parameters)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.2.70 EF_{MMSUP} (MMS User Preferences)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.2.71 EF_{MMSUCP} (MMS User Connectivity Parameters)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.2.72 EF_{NIA} (Network's Indication of Alerting)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

If service n°57 is "available", this file shall be present.

This EF contains a list of those VGCS group identifiers the user has subscribed to. The elementary file is used by the ME for group call establishment and group call reception.

File size: Bytes 200

Default values:

Bytes	Group ID	Value	BCD encoding in the USIM
1-4	1	12	21 FF FF FF
5-8	2	123	21 F3 FF FF
9-12	3	1234	21 43 FF FF
13-16	4	12348	21 43 F8 FF
17-20	5	123491	21 43 19 FF
21-24	6	1235029	21 53 20 F9
25-28	7	12351	21 53 F1 FF
29-32	8	12352	21 53 F2 FF
33-36	9	12353	21 53 F3 FF
37-40	10	12354	21 53 F4 FF
41-44	11	12355	21 53 F5 FF
45-48	12	12356	21 53 F6 FF
49-52	13	12357	21 53 F7 FF
53-56	14	12358	21 53 F8 FF
57-60	15	12359	21 53 F9 FF
61-64	16	20000	02 00 F0 FF
65-68	17	20001	02 00 F1 FF
69-72	18	20002	02 00 F2 FF
73-76	19	20003	02 00 F3 FF
77-80	20	20004	02 00 F4 FF
81-84	21	20005	02 00 F5 FF
85-88	22	20006	02 00 F6 FF
89-92	23	20007	02 00 F7 FF
93-96	24	20008	02 00 F8 FF
97-100	25	20009	02 00 F9 FF
101-104	26	20010	02 10 F0 FF
105-108	27	66660	66 66 F0 FF

Bytes	Group ID	Value	BCD encoding in the USIM
109-112	28	66661	66 66 F1 FF
113-116	29	66662	66 66 F2 FF
117-120	30	666638	66 66 83 FF
121-124	31	66664	66 66 F4 FF
125-128	32	66665	66 66 F5 FF
129-132	33	66666	66 66 F6 FF
133-136	34	66667	66 66 F7 FF
137-140	35	66668	66 66 F8 FF
141-144	36	66669	66 66 F9 FF
145-148	37	66670	66 76 F0 FF
149-152	38	80120	08 21 F0 FF
153-156	39	80121	08 21 F1 FF
157-160	40	80122	08 21 F2 FF
161-164	41	80123	08 21 F3 FF
165-168	42	80124	08 21 F4 FF
169-172	43	80125	08 21 F5 FF
173-176	44	80126	08 21 F6 FF
177-180	45	80127	08 21 F7 FF
181-184	46	80128	08 21 F8 FF
185-188	47	80129	08 21 F9 FF
189-192	48	80130	08 31 F0 FF
193-196	49	99999	99 99 F9 FF
197-200	50	1111119	11 11 11 F9

For Group Id = 1 V_Ki with VK_Id = 0:

Size: 16 Bytes

Default values: Bytes 1 (HEX): 00

Bytes 2 (HEX): 01

Bytes 3 (HEX): 02

Bytes 4 (HEX): 03

Bytes 5 (HEX): 04

Bytes 6 (HEX): 05

Bytes 7 (HEX): 06

Bytes 8 (HEX): 07

Bytes 9 (HEX): 08

Bytes 10 (HEX): 09

Bytes 11 (HEX): 0A

Bytes 12 (HEX): 0B

Bytes 13 (HEX): 0C

Bytes 14 (HEX): 0D

Bytes 15 (HEX): 0E

Bytes 16 (HEX): 0F

Group Id= 1: V_Ki with VK_Id = 1:

Size: 16 Bytes

Default values: Bytes 1 (HEX): 01

Bytes 2 (HEX): 02

Bytes 3 (HEX): 03

Bytes 4 (HEX): 04

Bytes 5 (HEX): 05

Bytes 6 (HEX): 06

Bytes 7 (HEX): 07

Bytes 8 (HEX): 08

Bytes 9 (HEX): 09

Bytes 10 (HEX): 0A

Bytes 11 (HEX): 0B

Bytes 12 (HEX): 0C

Bytes 13 (HEX): 0D

Bytes 14 (HEX): 0E

Bytes 15 (HEX): 0F

Bytes 16 (HEX): 00

8.3.2.74 EF_{VGCSS} (Voice Group Call Service Status)

.If service n°57 is "available", this file shall be present.

This EF contains the status of activation for the VGCS group identifiers. The elementary file is directly related to the EF_{VGCS}. This EF shall always be allocated if EF_{VGCS} is allocated. The following list of group ID are activated: 1, 4, 20, 30, 50.

File size: 7 Bytes

Default value(HEX) : Bytes 1-7: '09 00 08 20 00 00 FE'

8.3.2.75 EF_{VBS} (Voice Broadcast Service)

If service n°58 is "available", this file shall be present.

This EF contains a list of those VBS group identifiers the user has subscribed to. The elementary file is used by the ME for broadcast call establishment and broadcast call reception.

File size: Bytes 200

Default values:

Bytes	Group ID	Value	BCD encoding in the USIM
1-4	1	12	21 FF FF FF
5-8	2	123	21 F3 FF FF
9-12	3	1234	21 43 FF FF
13-16	4	12348	21 43 F8 FF
17-20	5	123491	21 43 19 FF
21-24	6	1235029	21 53 20 F9
25-28	7	12351	21 53 F1 FF
29-32	8	12352	21 53 F2 FF
33-36	9	12353	21 53 F3 FF
37-40	10	12354	21 53 F4 FF
41-44	11	12355	21 53 F5 FF
45-48	12	12356	21 53 F6 FF
49-52	13	12357	21 53 F7 FF
53-56	14	12358	21 53 F8 FF
57-60	15	12359	21 53 F9 FF
61-64	16	20000	02 00 F0 FF
65-68	17	20001	02 00 F1 FF
69-72	18	20002	02 00 F2 FF
73-76	19	20003	02 00 F3 FF
77-80	20	20004	02 00 F4 FF
81-84	21	20005	02 00 F5 FF
85-88	22	20006	02 00 F6 FF

Bytes	Group ID	Value	BCD encoding in the USIM
89-92	23	20007	02 00 F7 FF
93-96	24	20008	02 00 F8 FF
97-100	25	20009	02 00 F9 FF
101-104	26	20010	02 10 F0 FF
105-108	27	66660	66 66 F0 FF
109-112	28	66661	66 66 F1 FF
113-116	29	66662	66 66 F2 FF
117-120	30	666638	66 66 83 FF
121-124	31	66664	66 66 F4 FF
125-128	32	66665	66 66 F5 FF
129-132	33	66666	66 66 F6 FF
133-136	34	66667	66 66 F7 FF
137-140	35	66668	66 66 F8 FF
141-144	36	66669	66 66 F9 FF
145-148	37	66670	66 76 F0 FF
149-152	38	80120	08 21 F0 FF
153-156	39	80121	08 21 F1 FF
157-160	40	80122	08 21 F2 FF
161-164	41	80123	08 21 F3 FF
165-168	42	80124	08 21 F4 FF
169-172	43	80125	08 21 F5 FF
173-176	44	80126	08 21 F6 FF
177-180	45	80127	08 21 F7 FF
181-184	46	80128	08 21 F8 FF
185-188	47	80129	08 21 F9 FF
189-192	48	80130	08 31 F0 FF
193-196	49	99999	99 99 F9 FF
197-200	50	1111119	11 11 11 F9

8.3.2.76 EF_{VBSS} (Voice Broadcast Service Status)

If service n°58 is "available", this file shall be present.

This EF contains the status of activation for the VBS group identifiers. The elementary file is directly related to the EF_{VBS}. This EF shall always be allocated if EF_{VBS} is allocated.

The following list of group ID are activated: 1, 4, 20, 30, 50.

File size: 7 Bytes

Default values (HEX): Bytes 1-7: '09 00 08 20 00 00 FE'

For Group ID= 1 V_Ki with VK_Id = 0:

Size: 16 Bytes

Default values: Bytes 1 (HEX): 0F

Bytes 2 (HEX): 0E

Bytes 3 (HEX): 0D

Bytes 4 (HEX): 0C

Bytes 5 (HEX): 0B

Bytes 6 (HEX): 0A

Bytes 7 (HEX): 09

Bytes 8 (HEX): 08

Bytes 9 (HEX): 07

Bytes 10 (HEX): 06

Bytes 11 (HEX): 05

Bytes 12 (HEX): 04

Bytes 13 (HEX): 03

Bytes 14 (HEX): 02

Bytes 15 (HEX): 01

Bytes 16 (HEX): 00

For Group Id=1 V_Ki with VK_Id = 1:

Size: 16 Bytes

Default values: Bytes 1 (HEX): 00

Bytes 2 (HEX): 0F

Bytes 3 (HEX): 0E

Bytes 4 (HEX): 0D

Bytes 5 (HEX): 0C

Bytes 6 (HEX): 0B

Bytes 7 (HEX): 0A

Bytes 8 (HEX): 09

Bytes 9 (HEX): 08

Bytes 10 (HEX): 07

Bytes 11 (HEX): 06

Bytes 12 (HEX): 05

Bytes 13 (HEX): 04

Bytes 14 (HEX): 03

Bytes 15 (HEX): 02

Bytes 16 (HEX): 01

8.3.2.77 EF_{VGCSCA} (Voice Group Call Service Ciphering Algorithm)

If service n°64 is "available", this file shall be present.

This EF contains the ciphering algorithm identifiers for each of the Master Group Key (V_Ki) of each VGCS group that the user has subscribed to (defined in EF_{VGCS}).

File size: 2 Bytes

Default value: Byte 1 = ‘01’ (i.e. A5/1) and Byte 2 = ‘03’ (i.e. A5/3)

8.3.2.78 EF_{VBSCA} (Voice Broadcast Service Ciphering Algorithm)

If service n°65 is "available", this file shall be present.

This EF contains the ciphering algorithm identifiers for each of the Master Group Key (V_Ki) of each VBS group that the user has subscribed to (defined in EF_{VBS}).

File size: 2 Bytes

Default value: Byte 1 = ‘01’ (i.e. A5/1) and Byte 2 = ‘03’ (i.e. A5/3)

8.3.2.79 EF_{GBABP} (GBA Bootstrapping parameters)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.2.80 EF_{MSK} (MBMS Service Keys List)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.2.81 EF_{MUK} (MBMS User Key)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.2.82 Void

8.3.2.83 EF_{GBANL} (GBA NAF List)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.3 Contents of DFs at the USIM ADF (Application DF) level

8.3.3.1 Contents of files at the USIM SoLSA level

8.3.3.1.1 EF_{SAI} (SoLSA Access Indicator)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.3.1.2 EF_{SLL} (SoLSA LSA List)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.3.1.3 LSA Descriptor files

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.3.1.4 Contents of files at the MExE level

8.3.3.1.4.1 $EF_{MExE-ST}$ (MExE Service table)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.3.1.4.2 EF_{ORPK} (Operator Root Public Key)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.3.1.4.3 EF_{ARPK} (Administrator Root Public Key)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.3.1.4.4 EF_{TPRPK} (Third Party Root Public Key)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.3.1.4.5 EF_{TKCDF} (Trusted Key/Certificates Data Files)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.3.2 Contents of files at the DF PHONEBOOK level

8.3.3.2.1 EF_{PBR} (Phone Book Reference file)

The programming of this EF is a test house option.

8.3.3.2.2 EF_{IAP} (Index Administration Phone book)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.3.2.3 EF_{ADN} (Abbreviated dialling numbers)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.3.2.4 EF_{EXT1} (Extension1)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.3.2.5 EF_{PBC} (Phone Book Control)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.3.2.6 EF_{GRP} (Grouping file)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.3.2.7 EF_{AAS} (Additional number Alpha String)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.3.2.8 EF_{GAS} (Grouping information Alpha String)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.3.2.9 EF_{ANR} (Additional Number)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.3.2.10 EF_{SNE} (Second Name Entry)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.3.2.11 EF_{CCP1} (Capability Configuration Parameters 1)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.3.2.12 Phone Book Synchronization

8.3.3.2.12.1 EF_{UID} (Unique Identifier)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.3.2.12.2 EF_{PSC} (Phone book Synchronization Counter)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.3.2.12.3 EF_{CC} (Change Counter)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.3.2.12.4 EF_{PUID} (Previous Unique Identifier)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.3.2.13 EF_{EMAIL} (e-mail address)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.3.3 Contents of files at the DF GSM-ACCESS level (Files required for GSM Access)

8.3.3.3.1 EF_{Kc} (GSM Ciphering key Kc)

File size: 9 Bytes

Default values (HEX): Bytes 1 to 8: Align with Kc used by SS

Byte 9: 07

Byte 9 is set to 07 to indicate that there is no key available at the start of a test.

The bytes within this elementary file may be updated by the UE as a result of a successful authentication attempt.

8.3.3.3.2 EF_{KcGPRS} (GPRS Ciphering key KcGPRS)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.3.3.3 Void

8.3.3.3.4 EF_{CPBCCH} (CPBCCH Information)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.3.3.5 $EF_{InvScan}$ (Investigation Scan)

The programming of this EF follows default parameter.

8.3.4 Contents of EFs at the TELECOM level

8.3.4.1 EF_{ADN} (Abbreviated dialling numbers)

The programming of this EF is a test house option. It should be noted that sufficient space should be provided on the USIM card for 101 records.

8.3.4.2 EF_{EXT1} (Extension1)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.4.3 EF_{ECCP} (Extended Capability Configuration Parameter)

The programming of this EF is a test house option.

8.3.4.4 EF_{SUME} (SetUpMenu Elements)

The programming of this EF is a test house option.

8.3.4.5 EF_{ARR} (Access rule reference)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.5 Contents of DFs at the TELECOM level

8.3.5.1 Contents of files at the $DF_{GRAPHICS}$ level

8.3.5.1.1 EF_{IMG} (Image)

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.5.1.2 Image Instance Data Files

The programming of this EF follows default parameter written in 3GPP TS 31.102 [23], annex E.

8.3.5.2 Contents of files at the $DF_{PHONEBOOK}$ under the $DF_{TELECOM}$

The programming of this EF is a test house option.

9 Default Message Contents

9.1 Default Message Contents for Signalling

9.1.1 Default RRC Message Contents (FDD)

This clause contains the default values of common messages, which unless indicated otherwise in specific clauses of 3GPP TS 34.123-1 [1], shall be transmitted and checked by the system simulator.

In order to permit stability in test implementations certain alternative values, although less desirable, shall be permitted for a limited transitional period. Such values are indicated below, and in 3GPP TS 34.123-1 [1], by the term "Deprecated alternative value". Normal document modification procedures will be used to remove, on a case by case basis, the permission to use such alternative values.

In this clause, decimal values are normally used. However, sometimes a hexadecimal value, indicated by an "H", or a binary value, indicated by a "B" is used.

The necessary L3 messages are listed in alphabetic order, with the exception of the SYSTEM INFORMATION messages, where it is the information elements which are listed in alphabetic order (this is because some information elements occur in several SYSTEM INFORMATION types).

Default SYSTEM INFORMATION:

NOTE: SYSTEM INFORMATION BLOCK TYPE 1 (except for PLMN type "GSM-MAP"), SYSTEM INFORMATION BLOCK TYPE 8, SYSTEM INFORMATION BLOCK TYPE 9, SYSTEM INFORMATION BLOCK TYPE 10, SYSTEM INFORMATION BLOCK TYPE 14, SYSTEM INFORMATION BLOCK TYPE 15 and SYSTEM INFORMATION BLOCK TYPE 16 messages are not used.

Contents of ACTIVE SET UPDATE message: AM

Information Element	Value/remark	Version
Message Type		
RRC transaction identifier	Arbitrarily selects one integer between 0 to 3	
Integrity check info		
- message authentication code	SS calculates the value of MAC-I for this message and writes to this IE. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.	
- RRC message sequence number	SS provides the value of this IE, from its internal counter.	
Activation time	now	
New U-RNTI	Not Present	
CN information info	Not Present	
Maximum allowed UL TX power	Not Present - use default value	
Radio link addition information	Not Present	
Radio link removal information	Not Present	
TX Diversity Mode	None	
SSDT information	Not Present	R99 and Rel-4 only
DPC Mode	[FFS]	REL-5

Contents of ACTIVE SET UPDATE COMPLETE message: AM

Information Element	Value/remark
Message Type	
RRC transaction identifier	Checked to see if it matches the same value used in the corresponding downlink ACTIVE SET UPDATE message
Integrity check info	
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.

Contents of ACTIVE SET UPDATE FAILURE message: AM

Information Element	Value/remark
Message Type	
RRC transaction identifier	Checked to see if it matches the same value used in the corresponding downlink ACTIVE SET UPDATE message
Integrity check info	
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.
Failure cause	Refer to test requirement

Contents of CELL UPDATE message: TM

Information Element	Value/remark	Version
Message Type		
U-RNTI	Checked to see if it is set to the following values	
- SRNC identity	0000 0000 0001B	
- S-RNTI	0000 0000 0000 0000 0001B	
RRC transaction identifier	Checked to see if it is absent	
Integrity check info		
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.	
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.	
START List	Checked to see if the 'CN domain identity' and 'START' IEs are present for all CN domains supported by the UE .	
- CN domain identity	Checked to see if it is one of the supported CN domains	
- START	This IE is checked to see if it is present. The first/ leftmost bit of the bit string contains the most significant bit of the START.	
AM_RLC error indication (RB2, RB3 or RB4)	Checked to see if it is set to 'FALSE'	
AM_RLC error indication (RB>4)	Checked to see if it is set to 'FALSE'	
Cell update cause	See the specific test case	
Failure cause	Checked to see if it is absent	
RB timer indicator		
- T314 expired	Checked to see if it is set to 'FALSE'	
- T315 expired	Checked to see if it is set to 'FALSE'	
Establishment cause	This IE is checked to see if it is absent	REL-5
Measured results on RACH	Not checked	

Contents of CELL UPDATE CONFIRM message: UM

Information Element	Value/remark	Version
Message Type		
U-RNTI	If this message is sent on CCCH, use the following values. Else, this IE is absent.	

Information Element	Value/remark	Version
- SRNC identity	0000 0000 0001B	
- S-RNTI	0000 0000 0000 0000 0001B	
RRC transaction identifier	Selects an arbitrary integer between 0 to 3	
Integrity check info		
- message authentication code	SS calculates the value of MAC-I for this message and writes to this IE. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.	
- RRC message sequence number	SS provides the value of this IE, from its internal counter.	
Integrity protection mode info	Not Present	
Ciphering mode info	Not Present	
Activation time	Not Present - use default value	
New U-RNTI	Not Present	
New C-RNTI	Not Present	
New DSCH-RNTI	Not Present	R99 and Rel-4 only
New H-RNTI	Not Present	REL-5
RRC State indicator	CELL_FACH	
UTRAN DRX cycle length coefficient	Not Present	
RLC re-establish indicator (RB2, RB3 and RB4)	FALSE	
RLC re-establish indicator (RB5 and upwards)	FALSE	
CN information info	Not Present	
URA identity	Not Present	
RB information to release list	Not Present	
RB information to reconfigure list	Not Present	
RB information to be affected list	Not Present	
Downlink counter synchronization info	Not Present	
UL Transport channel information common for all transport channels	Not Present	
Deleted TrCH information list	Not Present	
Added or Reconfigured TrCH information list	Not Present	
CHOICE Mode	FDD	
- CPCH set ID	Not Present	R99 and Rel-4 only
- Added or Reconfigured TrCH information for DRAC list	Not Present	R99 and Rel-4 only
DL Transport channel information common for all transport channels	Not Present	
Deleted TrCH information list	Not Present	
Added or Reconfigured TrCH information list	Not Present	
Frequency info	Not Present	
Maximum allowed UL TX power	Not Present	
CHOICE channel requirement	Not Present	
CHOICE mode	FDD	
- Downlink PDSCH information	Not Present	R99 and Rel-4 only
Downlink HS-PDSCH Information	Not Present	REL-5
Downlink information common for all radio links	Not Present	
Downlink information per radio link list	Not Present	

Contents of DOWNLINK DIRECT TRANSFER message: AM

Information Element	Value/remark
Message Type	
RRC transaction identifier	Arbitrarily selects an integer between 0 and 3
Integrity check info	
- Message authentication code	SS calculates the value of MAC-I for this message and writes to this IE. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	SS provides the value of this IE, from its internal counter.
CN domain identity	CS domain or PS domain
NAS message	See Specific Message Content for each test case

Contents of HANDOVER FROM UTRAN COMMAND-GSM message: AM

Information Element	Value/remark
Message Type	
RRC transaction identifier	Arbitrarily selects one integer between 0 to 3
Integrity check info	
- Message authentication code	SS calculates the value of MAC-I for this message and writes to this IE. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	SS provides the value of this IE, from its internal counter.
Activation time	now
RAB Info	
- RAB identity	0000 0001B The first/ leftmost bit of the bit string contains the most significant bit of the RAB identity.
- CN domain identity	CS domain
- NAS Synchronization Indicator	Not present
- Re-establishment timer	Use T315
Inter-system message	
- CHOICE System type	GSM
- Frequency Band	Set to "GSM/ PCS 1900" if GSM/ PCS 1900 is used in this test. Otherwise set to "GSM/DCS 1800 Band"
- CHOICE GSM message	Single GSM message
- Single GSM message	GSM HANDOVER COMMAND formatted and coded according to GSM specifications as BIT STRING (1..512). The first/ l*eftmost/ most significant* bit of the bit string contains bit 8 of the first octet of the GSM message. The contents of the HANDOVER COMMAND is to be defined in the specific test case.

Contents of HANDOVER FROM UTRAN FAILURE message: AM

Information Element	Value/remark
Message Type	
RRC transaction identifier	Checked to see if it matches the same value used in the corresponding downlink HANDOVER FROM UTRAN COMMAND -GSM message
Integrity check info	
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.
Inter-RAT handover failure	
-Inter-RAT handover failure cause	physical channel failure
Inter-system message	Not Checked

Contents of INITIAL DIRECT TRANSFER message: AM

Information Element	Value/remark	Version
Message Type		
Integrity check info		
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.	
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.	
CN domain identity	Checked to see if set to supported CN domain as specified in the IXIT statements.	
Intra Domain NAS Node Selector		
- CHOICE version	R99	
- CHOICE CN type	GSM-MAP	
- CHOICE Routing basis	Local (P)TMSI	

- Routing parameter	If the IE "CN domain identity" is equal to "CS domain", this bit string is set to to bits b14 through b23 of the TMSI. If the IE "CN domain identity" is equal to "PS domain", this bit string is set to to bits b14 through b23 of the P-TMSI. The TMSI/P-TMSI consists of 4 octets (32bits). This can be represented by a string of bits numbered from b0 to b31, with bit b0 being the least significant The "Routing parameter" bit string consists of bits b14 through b23 of the TMSI/ PTMSI. The first/ leftmost/ most significant bit of the bit string contains bit b23 of the TMSI/ PTMSI.	
- Entered parameter	Not checked	
NAS message	Set according to that indicated in specific message content for each test case	
START	This IE is checked to see if it is present.	
Establishment cause	This IE is checked to see if it is absent	REL-5
Measured results on RACH	Not checked	

Contents of MEASUREMENT CONTROL message: AM

Information Element	Value/remark
Message Type	
RRC transaction identifier	Arbitrarily selects an unused integer between 0 to 3
Integrity check info	
- Message authentication code	SS calculates the value of MAC-I for this message and writes to this IE. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC message sequence number	SS provides the value of this IE, from its internal counter.
Measurement Identity	1
Measurement Command	Setup
Measurement Reporting Mode	
- Measurement Report Transfer Mode	Acknowledged mode RLC
- Periodical Reporting/Event Trigger Reporting Mode	Periodical reporting
Additional measurement list	Not Present
CHOICE Measurement type	Intra-frequency measurement
- Intra-frequency measurement	
- Intra-frequency cell info list	
- CHOICE intra-frequency cell removal	Not present
- New intra-frequency cell	
- Intra-frequency cell-id	1
- Cell info	
- Cell individual offset	0dB
- Reference time difference to cell	Not Present
- Read SFN number	FALSE
- CHOICE mode	FDD
- Primary CPICH info	
- Primary scrambling code	Different from the Default setting in clause 6.1 (FDD)
- Primary CPICH Tx power	Not Present
- TX Diversity indicator	FALSE
- Cells for measurement	Not present
- Intra-frequency measurement quantity	Not Present
- Intra-frequency reporting quantity	
- Reporting quantities for active set cells	
- Cell synchronization information reporting indicator	FALSE
- Cell Identity reporting indicator	TRUE
- CPICH Ec/N0 reporting indicator	FALSE
- CPICH RSCP reporting indicator	TRUE
- Pathloss reporting indicator	FALSE
- Reporting quantities for monitored set cells	
- Cell synchronization information reporting indicator	FALSE
- Cell Identity reporting indicator	TRUE
- CPICH Ec/N0 reporting indicator	FALSE
- CPICH RSCP reporting indicator	TRUE
- Pathloss reporting indicator	FALSE
- Reporting quantities for detected set cells	Not Present

Information Element	Value/remark
- Reporting cell status	
- CHOICE reported cell	Report cell within active set and/or monitored cells on used frequency
- Maximum number of reported cells	2
- Measurement validity	Not Present
- CHOICE report criteria	Periodic reporting criteria
- Amount of reporting	Infinity
- Reporting interval	64 s
DPCH Compressed mode status info	Not Present

Contents of MEASUREMENT CONTROL FAILURE message: AM

Information Element	Value/remark
Message Type	
RRC transaction identifier	Checked to see if it's set to the identical value for the same IE in the downlink MEASUREMENT CONTROL message
Integrity check info	
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.
Failure cause	See the test content

Contents of MEASUREMENT REPORT message: AM

Information Element	Value/remark	Version
Message Type		
Integrity check info		
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.	
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.	
Measurement identity	1	
Measured Results		
- Intra-frequency measured results		
- Cell measured results		
- Cell Identity	Not present	
- Cell synchronization information	Checked that this IE is absent	
- Primary CPICH info		
- Primary scrambling code	Different from the Default setting in clause 6.1 (FDD)	
- CPICH Ec/N0	Checked that this IE is absent	
- CPICH RSCP	Checked that this IE is present	
- Pathloss	Checked that this IE is absent	
Measured results on RACH	Checked that this IE is absent	
Additional measured results	Checked that this IE is absent	
Event results	Checked that this IE is absent	
		REL-4
GSM OTD reference cell	Checked that this IE is absent	REL-4

Contents of PAGING TYPE 1 message: TM (Speech in CS)

Information Element	Value/remark
Message Type	
Paging record list	
- Paging record	
- CHOICE Used paging identity	CN identity
- Paging cause	Terminating Conversational Call
- CN domain identity	CS domain
- CHOICE UE identity	
- IMSI (GSM-MAP)	Set to the same octet string as in the IMSI stored in the USIM card
BCCH modification info	Not Present

Contents of PAGING TYPE 1 message: TM (The others of speech in CS)

Information Element	Value/remark
Message Type	
Paging record list	
- Paging record	
- CHOICE Used paging identity	CN identity
- Paging cause	Terminating Streaming Call
- CN domain identity	CS domain
- CHOICE UE identity	
- IMSI (GSM-MAP)	Set to the same octet string as in the IMSI stored in the USIM card
BCCH modification info	Not Present

Contents of PAGING TYPE 1 message: TM (Packet in PS)

Information Element	Value/remark
Message Type	
Paging record list	
- Paging record	
- CHOICE Used paging identity	CN identity
- Paging cause	Terminating Interactive Call
- CN domain identity	PS domain
- CHOICE UE identity	
- P-TMSI	Use P-TMSI allocated by SS at initial attach.
BCCH modification info	Not Present

Contents of PAGING TYPE 1 message: TM (SMS in CS)

Information Element	Value/remark
Message Type	
Paging record list	
- Paging record	
- CHOICE Used paging identity	CN identity
- Paging cause	Terminating Low Priority Signalling
- CN domain identity	CS domain
- CHOICE UE identity	
- IMSI (GSM-MAP)	Set to the same octet string as in the IMSI stored in the TEST USIM card
BCCH modification info	Not Present

Contents of PAGING TYPE 1 message: TM (SMS in PS)

Information Element	Value/remark
Message Type	
Paging record list	
- Paging record	
- CHOICE Used paging identity	CN identity
- Paging cause	Terminating Low Priority Signalling
- CN domain identity	PS domain
- CHOICE UE identity	
- IMSI (GSM-MAP)	Set to the same octet string as in the IMSI stored in the TEST USIM card
BCCH modification info	Not Present

Contents of PAGING TYPE 2 message: AM (Speech in CS)

Information Element	Value/remark
Message Type	
RRC transaction identifier	Arbitrarily selects an integer between 0 and 3
Integrity check info	
- message authentication code	SS calculates the value of MAC-I for this message and writes to this IE. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC message sequence number	SS provides the value of this IE, from its internal counter.

Paging cause	Terminating Conversational Call
CN domain identity	CS domain
Paging record type identifier	Select the same type as in the IE "Initial UE Identity" in RRC CONNECTION REQUEST" message.

Contents of PHYSICAL CHANNEL RECONFIGURATION message: AM or UM

Information Element	Condition	Value/remark	Version
Message Type	A1, A2, A3, A4, A5, A6, A7, A8, A9, A10		
RRC transaction identifier		Arbitrarily selects an integer between 0 and 3	
Integrity check info			
- message authentication code		SS calculates the value of MAC-I for this message and writes to this IE. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.	
- RRC message sequence number		SS provides the value of this IE, from its internal counter.	
Integrity protection mode info		Not Present	
Ciphering mode info		Not Present	
Activation time	A1, A2, A3	(256+CFN-(CFN MOD 8 + 8))MOD 256	
Activation time	A4, A5, A6, A7, A8, A9, A10	Not Present	
New U-RNTI		Not Present	
New C-RNTI	A1, A2, A3, A4, A7, A8, A9, A10	Not Present	
New C-RNTI	A5, A6	'1010 1010 1010 1010'	
New DSCH-RNTI	A1, A2, A3, A4, A5, A6, A7, A8, A9, A10	Not Present	R99 and Rel-4 only
New H-RNTI	A1, A2, A3, A4, A5, A6, A7, A8, A9, A10	Not Present	REL-5
RRC State indicator	A1, A2, A3, A4	CELL_DCH	
RRC State indicator	A5, A6	CELL_FACH	
RRC State indicator	A7, A8	URA_PCH	
RRC State indicator	A9, A10	CELL_PCH	
UTRAN DRX cycle length coefficient	A1, A2, A3, A4, A5, A6	Not Present	
UTRAN DRX cycle length coefficient	A7, A8, A9, A10	3	
CN information info		Not Present	
URA identity		Not Present	
Downlink counter synchronization info		Not Present	
Frequency info	A1, A2, A3, A4, A5		
- UARFCN uplink (Nu)		Reference to clause 5.1 Test frequencies	
- UARFCN downlink (Nd)		Reference to clause 5.1 Test frequencies	
Frequency info	A6, A7, A8, A9, A10	Not Present	
Maximum allowed UL TX power		33dBm	
CHOICE *channel requirement*	A5, A6, A7, A8, A9, A10	Not Present	
CHOICE *channel requirement*	A1, A2, A3, A4	Uplink DPCH info	
- Uplink DPCH power control info			
- DPCCH power offset		-80dB (i.e. ASN.1 IE value of -40)	
- PC Preamble		1 frame	
- SRB delay		7 frames	
- Power Control Algorithm		Algorithm1	
- TPC step size		1dB	
- Δ_{ACK}		Not Present	REL-5
- Δ_{NACK}		Not Present	REL-5
- Ack-Nack repetition factor		Not Present	REL-5
- Scrambling code type		Long	
- Scrambling code number		0 (0 to 16777215)	
- Number of DPDCH		Not Present(1)	
- spreading factor		Reference to clause 6.10 Parameter Set	
- TFCI existence		Reference to clause 6.10 Parameter Set	
- Number of FBI bit		Reference to clause 6.10 Parameter Set	

Information Element	Condition	Value/remark	Version
- Puncturing Limit		Reference to clause 6.10 Parameter Set	
CHOICE Mode	A1, A2, A3, A4, A5, A6, A7, A8, A9, A10	FDD	
- Downlink PDSCH information		Not Present	R99 and Rel-4 only
Downlink HS-PDSCH Information	A1, A2, A3, A4, A5, A6, A7, A8, A9, A10	Not Present	REL-5
Downlink information common for all radio links	A1, A2, A3		
- Downlink DPCH info common for all RL			
- Timing indicator		Maintain	
- CFN-targetSFN frame offset		Not Present	
- Downlink DPCH power control information			
- DPC mode		0 (single)	
- CHOICE mode		FDD	
- Power offset $P_{Pilot-DPDCH}$		0	
- DL rate matching restriction information		Not Present	
- Spreading factor		Reference to clause 6.10 Parameter Set	
- Fixed or Flexible Position		Reference to clause 6.10 Parameter Set	
- TFCI existence		Reference to clause 6.10 Parameter Set	
- CHOICE SF		Reference to clause 6.10 Parameter Set	
- DPCH compressed mode info		Not Present	
- TX Diversity mode		None	
- SSDT information		Not Present	R99 and Rel-4 only
- Default DPCH Offset Value		Not Present	
- MAC-hs reset indicator		Not Present	REL-5
Downlink information common for all radio links	A4		
- Downlink DPCH info common for all RL			
- Timing indicator		Initialize	
- CFN-targetSFN frame offset		Not Present	
- Downlink DPCH power control information			
- DPC mode		0 (single)	
- CHOICE mode		FDD	
- Power offset $P_{Pilot-DPDCH}$		0	
- DL rate matching restriction information		Not Present	
- Spreading factor		Reference to clause 6.10 Parameter Set	
- Fixed or Flexible Position		Reference to clause 6.10 Parameter Set	
- TFCI existence		Reference to clause 6.10 Parameter Set	
- CHOICE SF		Reference to clause 6.10 Parameter Set	
- DPCH compressed mode info		Not Present	
- TX Diversity mode		None	
- SSDT information		Not Present	R99 and Rel-4 only
- Default DPCH Offset Value		Arbitrary set to value 0..306688 by step of 512	
- MAC-hs reset indicator		Not Present	REL-5
Downlink information common for all radio links	A5, A6, A7, A8, A9, A10	Not Present	
Downlink information for each radio links	A1, A2,A3		
- Choice mode		FDD	
- Primary CPICH info			
- Primary scrambling code		Ref. to the Default setting in clause 6.1 (FDD)	
- PDSCH with SHO DCH info		Not Present	R99 and Rel-4 only
- PDSCH code mapping		Not Present	R99 and Rel-4 only
- Serving HS-DSCH radio link indicator		FALSE	REL-5

Information Element	Condition	Value/remark	Version
- Downlink DPCH info for each RL			
- CHOICE mode		FDD	
- Primary CPICH usage for channel estimation		Primary CPICH may be used	
- DPCH frame offset		Set to value : Default DPCH Offset Value (as currently stored in SS) mod 38 400	
- Secondary CPICH info		Not Present	
- DL channelisation code			
- Secondary scrambling code		5	
- Spreading factor		Reference to clause 6.10 Parameter Set 0	
- Code number			
- Scrambling code change		No change	
- TPC combination index		0	
- SSDT Cell Identity		Not Present	R99 and Rel-4 only
- Closed loop timing adjustment mode		Not Present	
- SCCPCH information for FACH		Not Present	R99 and Rel-4 only
Downlink information for each radio links	A4		
- Choice mode		FDD	
- Primary CPICH info			
- Primary scrambling code		Ref. to the Default setting in clause 6.1 (FDD)	
- PDSCH with SHO DCH info		Not Present	R99 and Rel-4 only
- PDSCH code mapping		Not Present	R99 and Rel-4 only
- Serving HS-DSCH radio link indicator		FALSE	REL-5
- Downlink DPCH info for each RL			
- CHOICE mode		FDD	
- Primary CPICH usage for channel estimation		Primary CPICH may be used	
- DPCH frame offset		Set to value : Default DPCH Offset Value mod 38 400	
- Secondary CPICH info		Not Present	
- DL channelisation code			
- Secondary scrambling code		5	
- Spreading factor		Reference to clause 6.10 Parameter Set 0	
- Code number			
- Scrambling code change		No change	
- TPC combination index		0	
- SSDT Cell Identity		Not Present	R99 and Rel-4 only
- Closed loop timing adjustment mode		Not Present	
- SCCPCH information for FACH		Not Present	R99 and Rel-4 only
- Downlink information for each radio link	A5		
- Choice mode		FDD	
- Primary CPICH info			
- Primary scrambling code		Ref. to the Default setting in clause 6.1 (FDD)	
- PDSCH with SHO DCH info		Not Present	R99 and Rel-4 only
- PDSCH code mapping		Not Present	R99 and Rel-4 only
- Serving HS-DSCH radio link indicator		FALSE	REL-5
- Downlink DPCH info for each RL		Not Present	
- SCCPCH Information for FACH		Not Present	R99 and Rel-4 only
- Downlink information for each radio link	A6, A7, A8, A9, A10	Not Present	

Condition	Explanation

A1	This IE need for "Non speech in CS"
A2	This IE need for "Speech in CS"
A3	This IE need for "Packet to CELL_DCH from CELL_DCH in PS"
A4	This IE need for "Packet to CELL_DCH from CELL_FACH in PS"
A5	This IE need for "Packet to CELL_FACH from CELL_DCH in PS"
A6	This IE need for "Packet to CELL_FACH from CELL_FACH in PS"
A7	This IE need for "Packet to URA_PCH from CELL_FACH in PS"
A8	This IE need for "Packet to URA_PCH from CELL_DCH in PS"
A9	This IE need for "Packet to CELL_PCH from CELL_FACH in PS"
A10	This IE need for "Packet to CELL_PCH from CELL_DCH in PS"

Contents of PHYSICAL CHANNEL RECONFIGURATION COMPLETE message: AM

Information Element	Value/remark
Message Type	
RRC transaction identifier	Checked to see if it's set to identical value of the same IE in the downlink PHYSICAL CHANNEL RECONFIGURATION message
Integrity check info	
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.
Uplink integrity protection activation info	Not checked
CHOICE mode	FDD
COUNT-C activation time	Not checked
Radio bearer uplink ciphering activation time info	Not checked
Uplink counter synchronization info	Not present

Contents of PHYSICAL CHANNEL RECONFIGURATION FAILURE message: AM

Information Element	Value/remark
Message Type	
RRC transaction identitifer	Checked to see if it is set to identical value of the same IE in the downlink PHYSICAL CHANNEL RECONFIGURATION message.
Integrity check info	
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.
Failure cause	Checked to see if it meets test requirement

Contents of RADIO BEARER SETUP message: AM or UM

Information Element	Condition	Value/remark	Version
Message Type	A1, A2, A3, A4, A5, A6, A7, A8, A11 , A9, A10		REL-5
RRC transaction identifier		Arbitrarily selects an integer between 0 and 3	
Integrity check info			
- message authentication code		SS calculates the value of MAC-I for this message and writes to this IE. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.	
- RRC message sequence number		SS provides the value of this IE, from its internal counter.	
Integrity protection mode info		Not Present	
Ciphering mode info		Not Present	
Activation time	A1, A2, A3, A11 , A9	(256+CFN-(CFN MOD 8 + 8))MOD 256	REL-5
Activation time	A4, A5, A6, A7, A8 A10	Not Present	REL-5

Information Element	Condition	Value/remark	Version
New U-RNTI	A1, A2, A3, A4, A5, A6, A7, A8, A11 , A9, A10	Not Present	REL-5
New C-RNTI	A1, A2, A3, A4, A7, A8, A11 , A9, A10	Not Present	REL-5
New C-RNTI	A5, A6	'1010 1010 1010 1010'	
New DSCH-RNTI	A1, A2, A3, A4, A5, A6, A7, A8, A11	Not Present	R99 and Rel-4 only
New H-RNTI	A1, A2, A3, A4, A5, A6, A7, A8, A11	Not Present	REL-5
New H-RNTI	A9, A10	'1010 1010 1010 1010'	REL-5
RRC State indicator	A1, A2, A3, A4, A7, A8, A11 , A9, A10	CELL_DCH	REL-5
RRC State indicator	A5, A6	CELL_FACH	
UTRAN DRX cycle length coefficient	A1, A2, A3, A4, A5, A6, A7, A8, A11 , A9, A10	Not Present	REL-5
CN information info		Not Present	
URA identity		Not Present	
- Signalling RB information to setup		Not Present	
- RAB information for setup	A1, A7		
- RAB info			
- RAB identity		0000 0001B The first/ leftmost bit of the bit string contains the most significant bit of the RAB identity.	
- CN domain identity		CS domain	
- NAS Synchronization Indicator		Not Present	
- Re-establishment timer		useT314	
- RB information to setup			
- RB identity		10	
- PDCP info		Not Present	
- CHOICE RLC info type		RLC info	
- CHOICE Uplink RLC mode		TM RLC	
- Transmission RLC discard		Not Present	
- Segmentation indication		FALSE	
- CHOICE Downlink RLC mode		TM RLC	
- Segmentation indication		FALSE	
- RB mapping info			
- Information for each multiplexing option			
- RLC logical channel mapping indicator		Not Present	
- Number of uplink RLC logical channels		1	
- Uplink transport channel type		DCH	
- UL Transport channel identity		1	
- Logical channel identity		Not Present	
- CHOICE RLC size list		Configured	
- MAC logical channel priority		7	
- Downlink RLC logical channel info			
- Number of downlink RLC logical channels		1	
- Downlink transport channel type		DCH	
- DL DCH Transport channel identity		6	
- DL DSCH Transport channel identity		Not Present	
- Logical channel identity		Not Present	
- RAB information for setup	A2, A8		
- RAB info			
- RAB identity		0000 0001B The first/ leftmost bit of the bit string contains the most significant bit of the RAB identity.	

Information Element	Condition	Value/remark	Version
- CN domain identity		CS domain	
- NAS Synchronization Indicator		Not Present	
- Re-establishment timer		useT314	
- RB information to setup			
- RB identity		10	
- PDCP info		Not Present	
- CHOICE RLC info type		RLC info	
- CHOICE Uplink RLC mode		TM RLC	
- Transmission RLC discard		Not Present	
- Segmentation indication		FALSE	
- CHOICE Downlink RLC mode		TM RLC	
- Segmentation indication		FALSE	
- RB mapping info			
- Information for each multiplexing option			
- RLC logical channel mapping indicator		Not Present	
- Number of uplink RLC logical channels		1	
- Uplink transport channel type		DCH	
- UL Transport channel identity		1	
- Logical channel identity		Not Present	
- CHOICE RLC size list		Configured	
- MAC logical channel priority		6	
- Downlink RLC logical channel info			
- Number of downlink RLC logical channels		1	
- Downlink transport channel type		DCH	
- DL DCH Transport channel identity		6	
- DL DSCH Transport channel identity		Not Present	
- Logical channel identity		Not Present	
- RB identity		11	
- PDCP info		Not Present	
- CHOICE RLC info type		RLC info	
- CHOICE Uplink RLC mode		TM RLC	
- Transmission RLC discard		Not Present	
- Segmentation indication		FALSE	
- CHOICE Downlink RLC mode		TM RLC	
- Segmentation indication		FALSE	
- RB mapping info			
- Information for each multiplexing option			
- RLC logical channel mapping indicator		Not Present	
- Number of uplink RLC logical channels		1	
- Uplink transport channel type		DCH	
- UL Transport channel identity		2	
- Logical channel identity		Not Present	
- CHOICE RLC size list		Configured	
- MAC logical channel priority		6	
- Downlink RLC logical channel info			
- Number of downlink RLC logical channels		1	
- Downlink transport channel type		DCH	
- DL DCH Transport channel identity		7	
- DL DSCH Transport channel identity		Not Present	
- Logical channel identity		Not Present	
- RB identity		12	
- PDCP info		Not Present	
- CHOICE RLC info type		RLC info	
- CHOICE Uplink RLC mode		TM RLC	
- Transmission RLC discard		Not Present	

Information Element	Condition	Value/remark	Version
- Segmentation indication		FALSE	
- CHOICE Downlink RLC mode		TM RLC	
- Segmentation indication		FALSE	
- RB mapping info			
- Information for each multiplexing option			
- RLC logical channel mapping indicator		Not Present	
- Number of uplink RLC logical channels		1	
- Uplink transport channel type		DCH	
- UL Transport channel identity		3	
- Logical channel identity		Not Present	
- CHOICE RLC size list		Configured	
- MAC logical channel priority		6	
- Downlink RLC logical channel info			
- Number of downlink RLC logical channels		1	
- Downlink transport channel type		DCH	
- DL DCH Transport channel identity		8	
- DL DSCH Transport channel identity		Not Present	
- Logical channel identity		Not Present	
- RAB information for setup	A3, A4, A5, A6		
- RAB info		(AM DTCH for PS domain)	
- RAB identity		0000 0101B The first/ leftmost bit of the bit string contains the most significant bit of the RAB identity.	
- CN domain identity		PS domain	
- NAS Synchronization Indicator		Not Present	
- Re-establishment timer		useT315	
- RB information to setup			
- RB identity		20	
- PDCP info			
- Support for lossless SRNS relocation		FALSE	
- Max PDCP SN window size		Not present	
- PDCP PDU header		Absent	
- Header compression information		Not present	
- CHOICE RLC info type		RLC info	
- CHOICE Uplink RLC mode		AM RLC	
- Transmission RLC discard			
- CHOICE SDU discard mode		No Discard	
- MAX_DAT		15	
- Transmission window size		128	
- Timer_RST		500	
- Max_RST		4	
- Polling info			
- Timer_poll_prohibit		200	
- Timer_poll		200	
- Poll_PDU		Not Present	
- Poll_SDU		1	
- Last transmission PDU poll		TRUE	
- Last retransmission PDU poll		TRUE	
- Poll_Windows		99	
- Timer_poll_periodic		Not Present	
- CHOICE Downlink RLC mode		AM RLC	
- In-sequence delivery		TRUE	
- Receiving window size		128	
- Downlink RLC status info			
- Timer_status_prohibit		200	
- Timer_EPC		Not Present	
- Missing PDU indicator		TRUE	
- Timer_STATUS_periodic		Not Present	
- RB mapping info			

Information Element	Condition	Value/remark	Version
- Information for each multiplexing option		2 RBMuxOptions	
- RLC logical channel mapping indicator		Not Present	
- Number of uplink RLC logical channels		1	
- Uplink transport channel type		DCH	
- UL Transport channel identity		1	
- Logical channel identity		Not Present	
- CHOICE RLC size list		Configured	
- MAC logical channel priority		8	
- Downlink RLC logical channel info			
- Number of downlink RLC logical channels		1	
- Downlink transport channel type		DCH	
- DL DCH Transport channel identity		6	
- DL DSCH Transport channel identity		Not Present	
- Logical channel identity		Not Present	
- RLC logical channel mapping indicator		Not Present	
- Number of uplink RLC logical channels		1	
- Uplink transport channel type		RACH	
- UL Transport channel identity		Not Present	
- Logical channel identity		7	
- CHOICE RLC size list		Explicit list	
- RLC size index		Reference to clause 6 Parameter Set	
- MAC logical channel priority		8	
- Downlink RLC logical channel info			
- Number of downlink RLC logical channels		1	
- Downlink transport channel type		FACH	
- DL DCH Transport channel identity		Not Present	
- DL DSCH Transport channel identity		Not Present	
- Logical channel identity		7	
- RAB information for setup	A9		REL-5
- RAB info		(high-speed AM DTCH for PS domain)	
- RAB identity		0000 0101B The first/ leftmost bit of the bit string contains the most significant bit of the RAB identity.	
- CN domain identity		PS domain	
- NAS Synchronization Indicator		Not Present	
- Re-establishment timer		useT315	
- RB information to setup			
- RB identity		25	
- PDCP info			
- Support for lossless SRNS relocation		FALSE	
- Max PDCP SN window size		Not present	
- PDCP PDU header		Absent	
- Header compression information		Not present	
- CHOICE RLC info type		RLC info	
- CHOICE Uplink RLC mode		AM RLC	
- Transmission RLC discard			
- CHOICE SDU discard mode		No Discard	
- MAX_DAT		15	
- Transmission window size		128	
- Timer_RST		500	
- Max_RST		4	
- Polling info			
- Timer_poll_prohibit		100	
- Timer_poll		100	

Information Element	Condition	Value/remark	Version
- Poll_PDU		Not Present	
- Poll_SDU		1	
- Last transmission PDU poll		TRUE	
- Last retransmission PDU poll		TRUE	
- Poll_Windows		99	
- Timer_poll_periodic		Not Present	
- CHOICE Downlink RLC mode		AM RLC	
- CHOICE Downlink RLC PDU Size		Reference to clause 6 Parameter Set	
- In-sequence delivery		TRUE	
- Receiving window size		768	
- Downlink RLC status info			
- Timer_status_prohibit		100	
- Timer_EPC		Not Present	
- Missing PDU indicator		TRUE	
- Timer_STATUS_periodic		Not Present	
- One sided RLC re-establishment		FALSE	
- RB mapping info			
- Information for each multiplexing option		3 RBMuxOptions	
- RLC logical channel mapping indicator		Not Present	
- Number of uplink RLC logical channels		1	
- Uplink transport channel type		DCH	
- UL Transport channel identity		1	
- Logical channel identity		Not Present	
- CHOICE RLC size list		Configured	
- MAC logical channel priority		8	
- Downlink RLC logical channel info			
- Number of downlink RLC logical channels		1	
- Downlink transport channel type		DCH	
- DL DCH Transport channel identity		6	
- DL DSCH Transport channel identity		Not Present	
- DL HS-DSCH MAC-d flow identity		Not Present	
- Logical channel identity		Not Present	
- RLC logical channel mapping indicator		Not Present	
- Number of uplink RLC logical channels		1	
- Uplink transport channel type		DCH	
- UL Transport channel identity		1	
- Logical channel identity		Not Present	
- CHOICE RLC size list		Configured	
- MAC logical channel priority		8	
- Downlink RLC logical channel info			
- Number of downlink RLC logical channels		1	
- Downlink transport channel type		HS-DSCH	
- DL DCH Transport channel identity		Not Present	
- DL DSCH Transport channel identity		Not Present	
- DL HS-DSCH MAC-d flow identity		0	
- Logical channel identity		Not Present	
- RLC logical channel mapping indicator		Not Present	
- Number of uplink RLC logical channels		1	
- Uplink transport channel type		RACH	
- UL Transport channel identity		Not Present	
- Logical channel identity		7	
- CHOICE RLC size list		Explicit list	

Information Element	Condition	Value/remark	Version
- RLC size index		Reference to clause 6 Parameter Set	
- MAC logical channel priority		8	
- Downlink RLC logical channel info			
- Number of downlink RLC logical channels		1	
- Downlink transport channel type		FACH	
- DL DCH Transport channel identity		Not Present	
- DL DSCH Transport channel identity		Not Present	
- Logical channel identity		7	
- RAB information for setup	A10		REL-5
- RAB info		(high-speed AM DTCH for PS domain)	
- RAB identity		0000 0101B The first/ leftmost bit of the bit string contains the most significant bit of the RAB identity.	
- CN domain identity		PS domain	
- NAS Synchronization Indicator		Not Present	
- Re-establishment timer		useT315	
- RB information to setup			
- RB identity		25	
- PDCP info			
- Support for lossless SRNS relocation		FALSE	
- Max PDCP SN window size		Not present	
- PDCP PDU header		Absent	
- Header compression information		Not present	
- CHOICE RLC info type		RLC info	
- CHOICE Uplink RLC mode		AM RLC	
- Transmission RLC discard			
- CHOICE SDU discard mode		No Discard	
- MAX_DAT		15	
- Transmission window size		128	
- Timer_RST		500	
- Max_RST		4	
- Polling info			
- Timer_poll_prohibit		100	
- Timer_poll		100	
- Poll_PDU		Not Present	
- Poll_SDU		1	
- Last transmission PDU poll		TRUE	
- Last retransmission PDU poll		TRUE	
- Poll_Windows		99	
- Timer_poll_periodic		Not Present	
- CHOICE Downlink RLC mode		AM RLC	
- CHOICE Downlink RLC PDU Size		Reference to clause 6 Parameter Set	
- In-sequence delivery		TRUE	
- Receiving window size		768	
- Downlink RLC status info			
- Timer_status_prohibit		100	
- Timer_EPC		Not Present	
- Missing PDU indicator		TRUE	
- Timer_STATUS_periodic		Not Present	
- One sided RLC re-establishment		FALSE	
- RB mapping info			
- Information for each multiplexing option		1 RBMuxOption	
- RLC logical channel mapping indicator		Not present	
- Number of uplink RLC logical channels		1	
- Uplink transport channel type		DCH	
- UL Transport channel identity		1	
- Logical channel identity		Not Present	
- CHOICE RLC size list		Configured	
- MAC logical channel priority		8	

Information Element	Condition	Value/remark	Version
- Downlink RLC logical channel info			
- Number of downlink RLC logical channels		1	
- Downlink transport channel type		HS-DSCH	
- DL DCH Transport channel identity		Not present	
- DL DSCH Transport channel identity		Not present	
- DL HS-DSCH MAC-d flow identity		0	
- Logical channel identity		Not Present	
- RAB information for setup	A11		
- RAB info		(AM DTCH for PS domain)	
- RAB identity		0000 0101B The first/ leftmost bit of the bit string contains the most significant bit of the RAB identity.	
- CN domain identity		PS domain	
- NAS Synchronization Indicator		Not Present	
- Re-establishment timer		useT315	
- RB information to setup			
- RB identity		20	
- PDCP info			
- Support for lossless SRNS relocation		FALSE	
- Max PDCP SN window size		Not present	
- PDCP PDU header		Absent	
- Header compression information		Not present	
- CHOICE RLC info type		RLC info	
- CHOICE Uplink RLC mode		AM RLC	
- Transmission RLC discard			
- CHOICE SDU discard mode		No Discard	
- MAX_DAT		15	
- Transmission window size		128	
- Timer_RST		500	
- Max_RST		4	
- Polling info			
- Timer_poll_prohibit		200	
- Timer_poll		200	
- Poll_PDU		Not Present	
- Poll_SDU		1	
- Last transmission PDU poll		TRUE	
- Last retransmission PDU poll		TRUE	
- Poll_Windows		99	
- Timer_poll_periodic		Not Present	
- CHOICE Downlink RLC mode		AM RLC	
- In-sequence delivery		TRUE	
- Receiving window size		128	
- Downlink RLC status info			
- Timer_status_prohibit		200	
- Timer_EPC		Not Present	
- Missing PDU indicator		TRUE	
- Timer_STATUS_periodic		Not Present	
- RB mapping info			
- Information for each multiplexing option		2 RBMuxOptions	
- RLC logical channel mapping indicator		Not Present	
- Number of uplink RLC logical channels		1	
- Uplink transport channel type		DCH	
- UL Transport channel identity		4	
- Logical channel identity		Not Present	
- CHOICE RLC size list		Configured	
- MAC logical channel priority		8	
- Downlink RLC logical channel info			
- Number of downlink RLC logical		1	

Information Element	Condition	Value/remark	Version
channels			
- Downlink transport channel type		DCH	
- DL DCH Transport channel identity		9	
- DL DSCH Transport channel identity		Not Present	
- Logical channel identity		Not Present	
- RLC logical channel mapping indicator		Not Present	
- Number of uplink RLC logical channels		1	
- Uplink transport channel type		RACH	
- UL Transport channel identity		Not Present	
- Logical channel identity		7	
- CHOICE RLC size list		Explicit list	
- RLC size index		Reference to clause 6 Parameter Set	
- MAC logical channel priority		8	
- Downlink RLC logical channel info			
- Number of downlink RLC logical channels		1	
- Downlink transport channel type		FACH	
- DL DCH Transport channel identity		Not Present	
- DL DSCH Transport channel identity		Not Present	
- Logical channel identity		7	
RB information to be affected	A1, A2, A3, A4, A5, A6, A7, A8, A11, A9, A10	Not Present	REL-5
Downlink counter synchronization info	A1, A2, A3, A4, A5, A6, A7, A8, A11, A9, A10	Not Present	REL-5
UL Transport channel information for all transport channels	A1, A2, A3, A4, A5, A6, A7, A8, A11, A9, A10		REL-5
- PRACH TFCS		Not Present	
- CHOICE mode		FDD	
- TFC subset		Not Present	
- UL DCH TFCS			
- CHOICE TFCI signalling		Normal	
- TFCI Field 1 information			
- CHOICE TFCS representation		Complete reconfiguration	
- TFCS complete reconfigure information			
- CHOICE CTFC Size		Number of bits used must be enough to cover all combinations of CTFC from clause 6.10.2.4 Parameter Set.	
- CTFC information		This IE is repeated for TFC numbers and reference to clause 6.10.2.4 Parameter Set	
- CTFC		Reference to clause 6.10.2.4 Parameter Set	
- Power offset information			
- CHOICE Gain Factors		Computed Gain Factors(The last TFC is set to Signalled Gain Factors)	
- Gain factor βc		11 (below 64 kbps) 9 (higher than 64 kbps) (Not Present if the CHOICE Gain Factors is set to Computed Gain Factors)	
- Gain factor βd		15 (Not Present if the CHOICE Gain Factors is set to Computed Gain Factors)	
- Reference TFC ID		0	
- CHOICE mode		FDD	
- Power offset P p-m		Not Present	

Information Element	Condition	Value/remark	Version
Deleted UL TrCH information	A1, A2, A3, A4, A5, A6, A7, A8, A11 , A9, A10	Not Present	REL-5
Added or Reconfigured UL TrCH information	A1, A3 A4, A5, A6, A7 , A9, A10	1 DCH added, 1 DCH reconfigured (if from cell_DCH) OR 2 DCHs added (if from cell_FACH)	REL-5
- Uplink transport channel type		DCH	
- UL Transport channel identity		1	
- TFS			
- CHOICE Transport channel type		Dedicated transport channels	
- Dynamic Transport format information			
- RLC Size		Reference to clause 6.10 Parameter Set	
- Number of TBs and TTI List		(This IE is repeated for TFI number.)	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to clause 6.10 Parameter Set	
- CHOICE Logical channel list		All	
- Semi-static Transport Format information			
- Transmission time interval		Reference to clause 6.10 Parameter Set	
- Type of channel coding		Reference to clause 6.10 Parameter Set	
- Coding Rate		Reference to clause 6.10 Parameter Set	
- Rate matching attribute		Reference to clause 6.10 Parameter Set	
- CRC size		Reference to clause 6.10 Parameter Set	
- Uplink transport channel type		DCH	
- UL Transport channel identity		5	
- TFS			
- CHOICE Transport channel type		Dedicated transport channels	
- Dynamic Transport format information			
- RLC Size		Reference to clause 6.10 Parameter Set	
- Number of TBs and TTI List		(This IE is repeated for TFI number.)	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to clause 6.10 Parameter Set	
- CHOICE Logical channel list		All	
- Semi-static Transport Format information			
- Transmission time interval		Reference to clause 6.10 Parameter Set	
- Type of channel coding		Reference to clause 6.10 Parameter Set	
- Coding Rate		Reference to clause 6.10 Parameter Set	
- Rate matching attribute		Reference to clause 6.10 Parameter Set	
- CRC size		Reference to clause 6.10 Parameter Set	
Added or Reconfigured UL TrCH information	A11	1 DCH added for DTCH	
- Uplink transport channel type		DCH	
- UL Transport channel identity		4	
- TFS			
- CHOICE Transport channel type		Dedicated transport channels	
- Dynamic Transport format information			
- RLC Size		Reference to clause 6.10 Parameter Set	
- Number of TBs and TTI List		(This IE is repeated for TFI number.)	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to clause 6.10 Parameter Set	
- CHOICE Logical channel list		All	
- Semi-static Transport Format information			
- Transmission time interval		Reference to clause 6.10 Parameter Set	
- Type of channel coding		Reference to clause 6.10 Parameter Set	
- Coding Rate		Reference to clause 6.10 Parameter Set	
- Rate matching attribute		Reference to clause 6.10 Parameter Set	
- CRC size		Reference to clause 6.10 Parameter Set	
Added or Reconfigured UL TrCH information	A2, A8	4 TrCHs(DCH for DCCH and 3DCHs for DTCH)	
- Uplink transport channel type		DCH	
- UL Transport channel identity		5	
- TFS			

Information Element	Condition	Value/remark	Version
- CHOICE Transport channel type		Dedicated transport channels	
- Dynamic Transport format information			
- RLC Size		Reference to clause 6.10 Parameter Set	
- Number of TBs and TTI List		(This IE is repeated for TFI number.)	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to clause 6.10 Parameter Set	
- CHOICE Logical channel list		All	
- Semi-static Transport Format information			
- Transmission time interval		Reference to clause 6.10 Parameter Set	
- Type of channel coding		Reference to clause 6.10 Parameter Set	
- Coding Rate		Reference to clause 6.10 Parameter Set	
- Rate matching attribute		Reference to clause 6.10 Parameter Set	
- CRC size		Reference to clause 6.10 Parameter Set	
- Uplink transport channel type		DCH	
- UL Transport channel identity		1	
- TFS			
- CHOICE Transport channel type		Dedicated transport channels	
- Dynamic Transport format information			
- RLC Size		Reference to clause 6.10 Parameter Set	
- Number of TBs and TTI List		(This IE is repeated for TFI number.)	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to clause 6.10 Parameter Set	
- CHOICE Logical channel list		All	
- Semi-static Transport Format information			
- Transmission time interval		Reference to clause 6.10 Parameter Set	
- Type of channel coding		Reference to clause 6.10 Parameter Set	
- Coding Rate		Reference to clause 6.10 Parameter Set	
- Rate matching attribute		Reference to clause 6.10 Parameter Set	
- CRC size		Reference to clause 6.10 Parameter Set	
- Uplink transport channel type		DCH	
- UL Transport channel identity		2	
- TFS			
- CHOICE Transport channel type		Dedicated transport channels	
- Dynamic Transport format information			
- RLC Size		Reference to clause 6.10 Parameter Set	
- Number of TBs and TTI List		(This IE is repeated for TFI number.)	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to clause 6.10 Parameter Set	
- CHOICE Logical channel list		All	
- Semi-static Transport Format information			
- Transmission time interval		Reference to clause 6.10 Parameter Set	
- Type of channel coding		Reference to clause 6.10 Parameter Set	
- Coding Rate		Reference to clause 6.10 Parameter Set	
- Rate matching attribute		Reference to clause 6.10 Parameter Set	
- CRC size		Reference to clause 6.10 Parameter Set	
- Uplink transport channel type		DCH	
- UL Transport channel identity		3	
- TFS			
- CHOICE Transport channel type		Dedicated transport channels	
- Dynamic Transport format information			
- RLC Size		Reference to clause 6.10 Parameter Set	
- Number of TBs and TTI List		(This IE is repeated for TFI number.)	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to clause 6.10 Parameter Set	
- CHOICE Logical channel list		All	
- Semi-static Transport Format information			
- Transmission time interval		Reference to clause 6.10 Parameter Set	
- Type of channel coding		Reference to clause 6.10 Parameter Set	
- Coding Rate		Reference to clause 6.10 Parameter Set	

Information Element	Condition	Value/remark	Version
- Rate matching attribute		Reference to clause 6.10 Parameter Set	
- CRC size		Reference to clause 6.10 Parameter Set	
CHOICE *mode*	A1, A2, A3, A4, A5, A6, A7, A8, A11 , A9, A10	Not Present	REL-5
DL Transport channel information common for all transport channel	A1, A2, A7, A8		
- SCCPCH TFCS		Not Present	
- CHOICE mode		FDD	
- CHOICE DL parameters		SameasUL	
DL Transport channel information common for all transport channel	A3, A4, A5, A6, A11 A10		REL-5
- SCCPCH TFCS		Not Present	
- CHOICE mode		FDD	
- CHOICE DL parameters		Explicit	
- DL DCH TFCS			
- CHOICE TFCI Signalling		Normal	
- TFCI Field 1 Information			
- CHOICE TFCS representation		Complete reconfiguration	
- TFCS complete reconfigure			
- CHOICE CTFC Size		Number of bits used must be enough to cover all combinations of CTFC from clause 6.10.2.4 Parameter Set.	
- CTFC information		This IE is repeated for TFC numbers and reference to clause 6.10.2.4	
- CTFC		Reference to clause 6.10.2.4 Parameter Set	
- Power offset information		Not Present	
DL Transport channel information common for all transport channel	A9		REL-5
- SCCPCH TFCS		Not Present	
- CHOICE mode		FDD	
- CHOICE DL parameters		Explicit	
- DL DCH TFCS			
- CHOICE TFCI Signalling		Normal	
- TFCI Field 1 Information			
- CHOICE TFCS representation		Complete reconfiguration	
- TFCS complete reconfigure			
- CHOICE CTFC Size		ctfc2bit	
- CTFC information			
- CTFC		0 ((DL DCH RAB, DCCH)=(TF0, TF0))	
- Power offset information		Not Present	
- CTFC		1 ((DL DCH RAB, DCCH)=(TF0, TF1))	
- Power offset information		Not Present	
Deleted DL TrCH information	A1, A2, A3, A4, A5, A6, A7, A8 , A9, A10	Not Present	REL-5
Added or Reconfigured DL TrCH information	A1	1 DCH added, 1 DCH reconfigured	
- Downlink transport channel type		DCH	
- DL Transport channel identity		6	
- CHOICE DL parameters		Same as UL	
- Uplink transport channel type		DCH	
- UL TrCH identity		1	
- DCH quality target			
- BLER Quality value		-2.0	
- Downlink transport channel type		DCH	
- DL Transport channel identity		10	
- CHOICE DL parameters		Same as UL	
- Uplink transport channel type		DCH	
- UL TrCH identity		5	
- DCH quality target			
- BLER Quality value		-2.0	

Information Element	Condition	Value/remark	Version
Added or Reconfigured DL TrCH information	A3, A4, A5, A6, A7	2 TrCHs(DCH for DCCH and DCH for DTCH)	
- Downlink transport channel type		DCH	
- DL Transport channel identity		10	
- CHOICE DL parameters		Same as UL	
- Uplink transport channel type		DCH	
- UL TrCH identity		5	
- DCH quality target			
- BLER Quality value		-2.0	
- Downlink transport channel type		DCH	
- DL Transport channel identity		6	
- CHOICE DL parameters		Explicit	
		Except for RAB with the symmetric DL and UL rate: Same as UL	
- TFS			
- CHOICE Transport channel type		Dedicated transport channel	
- Dynamic transport format information			
- RLC Size		Reference to clause 6.10 Parameter Set	
- Number of TBs and TTI List		(This IE is repeated for TFI number.)	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to clause 6.10 Parameter Set only including TF0	
- CHOICE Logical channel list		All	
- Semi-static Transport Format information			
- Transmission time interval		Reference to clause 6.10 Parameter Set	
- Type of channel coding		Reference to clause 6.10 Parameter Set	
- Coding Rate		Reference to clause 6.10 Parameter Set	
- Rate matching attribute		Reference to clause 6.10 Parameter Set	
- CRC size		Reference to clause 6.10 Parameter Set	
- DCH quality target			
- BLER Quality value		-2.0	
Added or Reconfigured DL TrCH information	A2, A8	4 TrCHs(DCH for DCCH and 3DCHs for DTCH)	
- Downlink transport channel type		DCH	
- DL Transport channel identity		10	
- CHOICE DL parameters		Same as UL	
- Uplink transport channel type		DCH	
- UL TrCH identity		5	
- DCH quality target			
- BLER Quality value		2.0	
- Downlink transport channel type		DCH	
- DL Transport channel identity		6	
- CHOICE DL parameters		Explicit	
- TFS			
- CHOICE Transport channel type		Dedicated transport channel	
- Dynamic transport format information			
- RLC Size		Reference to clause 6.10 Parameter Set	
- Number of TBs and TTI List		(This IE is repeated for TFI number.)	
- Dynamic transport format information			
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to clause 6.10 Parameter Set	
- CHOICE Logical channel list		All	
- Semi-static Transport Format information			
- Transmission time interval		Reference to clause 6.10 Parameter Set	
- Type of channel coding		Reference to clause 6.10 Parameter Set	
- Coding Rate		Reference to clause 6.10 Parameter Set	
- Rate matching attribute		Reference to clause 6.10 Parameter Set	
- CRC size		Reference to clause 6.10 Parameter Set	
- DCH quality target			
- BLER Quality value		Not Present	
- Downlink transport channel type		DCH	
- DL Transport channel identity		7	

Information Element	Condition	Value/remark	Version
- CHOICE DL parameters		Explicit	
- TFS			
- CHOICE Transport channel type		Dedicated transport channel	
- Dynamic transport format information			
- RLC Size		Reference to clause 6.10 Parameter Set	
- Number of TBs and TTI List		(This IE is repeated for TFI number.)	
- Dynamic transport format information			
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to clause 6.10 Parameter Set	
- CHOICE Logical channel list		All	
- Semi-static Transport Format information			
- Transmission time interval		Reference to clause 6.10 Parameter Set	
- Type of channel coding		Reference to clause 6.10 Parameter Set	
- Coding Rate		Reference to clause 6.10 Parameter Set	
- Rate matching attribute		Reference to clause 6.10 Parameter Set	
- CRC size		Reference to clause 6.10 Parameter Set	
- DCH quality target			
- BLER Quality value		Not Present	
- Downlink transport channel type		DCH	
- DL Transport channel identity		8	
- CHOICE DL parameters		Explicit	
- TFS			
- CHOICE Transport channel type		Dedicated transport channel	
- Dynamic transport format information			
- RLC Size		Reference to clause 6.10 Parameter Set	
- Number of TBs and TTI List		(This IE is repeated for TFI number.)	
- Dynamic transport format information			
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to clause 6.10 Parameter Set	
- CHOICE Logical channel list		All	
- Semi-static Transport Format information			
- Transmission time interval		Reference to clause 6.10 Parameter Set	
- Type of channel coding		Reference to clause 6.10 Parameter Set	
- Coding Rate		Reference to clause 6.10 Parameter Set	
- Rate matching attribute		Reference to clause 6.10 Parameter Set	
- CRC size		Reference to clause 6.10 Parameter Set	
- DCH quality target			
- BLER Quality value		Not Present	
Added or Reconfigured DL TrCH information	A9	3 TrCHs (DCH for DCCH and DCH plus HS-DSCH for DTCH)	REL-5
- Downlink transport channel type		DCH	
- DL Transport channel identity		10	
- CHOICE DL parameters		Same as UL	
- Uplink transport channel type		DCH	
- UL TrCH identity		5	
- DCH quality target			
- BLER Quality value		-2.0	
- Downlink transport channel type		DCH	
- DL Transport channel identity		6	
- CHOICE DL parameters		Explicit	
- TFS			
- CHOICE Transport channel type		Dedicated transport channel	
- Dynamic transport format information			
- RLC Size		Reference to clause 6.10 Parameter Set	
- Number of TBs and TTI List		(This IE is repeated for TFI number.)	
- Dynamic transport format information			
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to clause 6.10 Parameter Set	
- CHOICE Logical channel list		All	

Information Element	Condition	Value/remark	Version
- Semi-static Transport Format information			
- Transmission time interval		Reference to clause 6.10 Parameter Set	
- Type of channel coding		Reference to clause 6.10 Parameter Set	
- Coding Rate		Reference to clause 6.10 Parameter Set	
- Rate matching attribute		Reference to clause 6.10 Parameter Set	
- CRC size		Reference to clause 6.10 Parameter Set	
- DCH quality target			
- BLER Quality value		-2.0	
- Downlink transport channel type		HS-DSCH	
- DL Transport channel identity		Not Present	
- CHOICE DL parameters		HS-DSCH	
- HARQ Info			
- Number of Processes		Reference to clause 6.10.2.4.5 Parameter Set	
- CHOICE *Memory Partitioning*		Implicit	
- Added or reconfigured MAC-d flow			
- MAC-hs queue to add or reconfigure list		(one queue)	
- MAC-hs queue Id		0	
- MAC-d Flow Identity		0	
- T1		50	
- MAC-hs window size		16	
- MAC-d PDU size Info			
- MAC-d PDU size		336	
- MAC-d PDU size index		0	
- MAC-hs queue to delete list		Not present	
- DCH quality target		Not present	
Added or Reconfigured DL TrCH information	A10	2 TrCHs (DCH for DCCH and HS-DSCH for DTCH)	REL-5
- Downlink transport channel type		DCH	
- DL Transport channel identity		10	
- CHOICE DL parameters		Same as UL	
- Uplink transport channel type		DCH	
- UL TrCH identity		5	
- DCH quality target			
- BLER Quality value		-2.0	
- Downlink transport channel type		HS-DSCH	
- DL Transport channel identity		Not Present	
- CHOICE DL parameters		HS-DSCH	
- HARQ Info			
- Number of Processes		Reference to clause 6.10.2.4.5 Parameter Set	
- CHOICE *Memory Partitioning*		Implicit	
- Added or reconfigured MAC-d flow			
- MAC-hs queue to add or reconfigure list		(one queue)	
- MAC-hs queue Id		0	
- MAC-d Flow Identity		0	
- T1		50	
- MAC-hs window size		16	
- MAC-d PDU size Info			
- MAC-d PDU size		336	
- MAC-d PDU size index		0	
- MAC-hs queue to delete list		Not present	
- DCH quality target		Not present	
Added or Reconfigured DL TrCH information	A11	1 DCH for DTCH	
- Downlink transport channel type		DCH	
- DL Transport channel identity		9	
- CHOICE DL parameters		Explicit	
- TFS			
- CHOICE Transport channel type		Dedicated transport channel	
- Dynamic transport format information			

Information Element	Condition	Value/remark	Version
- RLC Size		Reference to clause 6.10 Parameter Set	
- Number of TBs and TTI List		(This IE is repeated for TFI number.)	
- Dynamic transport format information			
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to clause 6.10 Parameter Set	
- CHOICE Logical channel list		All	
- Semi-static Transport Format information			
- Transmission time interval		Reference to clause 6.10 Parameter Set	
- Type of channel coding		Reference to clause 6.10 Parameter Set	
- Coding Rate		Reference to clause 6.10 Parameter Set	
- Rate matching attribute		Reference to clause 6.10 Parameter Set	
- CRC size		Reference to clause 6.10 Parameter Set	
- DCH quality target			
- BLER Quality value		-2.0	
Frequency info	A1, A2, A3, A4, A5, A7, A8, 11 , A9, A10		REL-5
- UARFCN uplink (Nu)		Reference to clause 5.1 Test frequencies. This IE should be present, if the default duplex distance defined for the operating frequency band is not used and frequency is different from the current frequency, otherwise set to Not Present.	
- UARFCN downlink (Nd)		Reference to clause 5.1 Test frequencies if frequency is different from the current frequency otherwise set to Not Present.	
Frequency info	A6	Not Present	
Maximum allowed UL TX power	A1, A2, A3, A4, A7, A8, A11 , A9, A10	33dBm	REL-5
Maximum allowed UL TX power	A5, A6	Not Present	
CHOICE channel requirement	A1, A2, A3, A4, A7, A8, A11	Uplink DPCH info	
- Uplink DPCH power control info			
- DPCCH power offset		-80dB	
- PC Preamble		1 frame	
- SRB delay		7 frames	
- Power Control Algorithm		Algorithm1	
- TPC step size		1dB	
- Δ_{NACK}		Not Present	REL-5
- Δ_{NACK}		Not Present	REL-5
- Ack-Nack repetition factor		Not Present	REL-5
- Scrambling code type		Long	
- Scrambling code number		0 (0 to 16777215)	
- Number of DPDCH		Not Present(1)	
- spreading factor		Reference to clause 6.10 Parameter Set	
- TFCI existence		Reference to clause 6.10 Parameter Set	
- Number of FBI bit		Reference to clause 6.10 Parameter Set	
- Puncturing Limit		Reference to clause 6.10 Parameter Set	
CHOICE channel requirement	A9, A10	Uplink DPCH info	REL-5
- Uplink DPCH power control info			
- DPCCH power offset		-80dB	
- PC Preamble		1 frame	
- SRB delay		7 frames	
- Power Control Algorithm		Algorithm1	
- TPC step size		1dB	
- Δ_{ACK}		3	
- Δ_{NACK}		3	
- Ack-Nack repetition factor		1	
- Scrambling code type		Long	
- Scrambling code number		0 (0 to 16777215)	
- Number of DPDCH		Not Present(1)	

Information Element	Condition	Value/remark	Version
- spreading factor		Reference to clause 6.10 Parameter Set	
- TFCI existence		Reference to clause 6.10 Parameter Set	
- Number of FBI bit		Reference to clause 6.10 Parameter Set	
- Puncturing Limit		Reference to clause 6.10 Parameter Set	
CHOICE channel requirement	A5,A6	Not Present	
CHOICE Mode	A1, A2, A3, A4, A5, A6, A7, A8, A11 , A9, A10	FDD	REL-5
- Downlink PDSCH information		Not Present	R99 and Rel-4 only
Downlink information common for all radio links	A1, A2, A3, A11		
- Downlink DPCH info common for all RL			
- Timing indicator		Maintain	
- CFN-targetSFN frame offset		Not Present	
- Downlink DPCH power control information			
- DPC mode		0 (single)	
- CHOICE mode		FDD	
- Power offset $P_{Pilot-DPDCH}$		0	
- DL rate matching restriction information		Not Present	
- Spreading factor		Reference to clause 6.10 Parameter Set	
- Fixed or Flexible Position		Reference to clause 6.10 Parameter Set	
- TFCI existence		Reference to clause 6.10 Parameter Set	
- CHOICE SF		Reference to clause 6.10 Parameter Set	
- CHOICE mode		FDD	
- DPCH compressed mode info		Not Present	
- TX Diversity mode		None	
- SSDT information		Not Present	R99 and Rel-4 only
- Default DPCH Offset Value		Not Present	
Downlink information common for all radio links	A9		REL-5
- Downlink DPCH info common for all RL			
- Timing indicator		Maintain	
- CFN-targetSFN frame offset		Not Present	
- Downlink DPCH power control information			
- DPC mode		0 (single)	
- CHOICE mode		FDD	
- Power offset PPilot-DPDCH		0	
- DL rate matching restriction information		Not Present	
- Spreading factor		Reference to clause 6.10 Parameter Set	
- Fixed or Flexible Position		Reference to clause 6.10 Parameter Set	
- TFCI existence		Reference to clause 6.10 Parameter Set	
- CHOICE SF		Reference to clause 6.10 Parameter Set	
- CHOICE mode		FDD	
- DPCH compressed mode info		Not Present	
- TX Diversity mode		None	
- SSDT information		Not Present	R99 and Rel-4 only
- Default DPCH Offset Value		Not Present	
- MAC-hs reset indicator		TRUE	
Downlink information common for all radio links	A4,A7,A8		
- Downlink DPCH info common for all RL			
- Timing indicator		Initialize	
- CFN-targetSFN frame offset		Not Present	
- Downlink DPCH power control information			
- DPC mode		0 (single)	
- CHOICE mode		FDD	

Information Element	Condition	Value/remark	Version
- Power offset $P_{Pilot-DPDCH}$		0	
- DL rate matching restriction information		Not Present	
- Spreading factor		Reference to clause 6.10 Parameter Set	
- Fixed or Flexible Position		Reference to clause 6.10 Parameter Set	
- TFCI existence		Reference to clause 6.10 Parameter Set	
- CHOICE SF		Reference to clause 6.10 Parameter Set	
- CHOICE mode		FDD	
- DPCH compressed mode info		Not Present	
- TX Diversity mode		None	
- SSDT information		Not Present	R99 and Rel-4 only
- Default DPCH Offset Value		Arbitrary set to value 0..306688 by step of 512	
Downlink information common for all radio links	A10		REL-5
- Downlink DPCH info common for all RL			
- Timing indicator		Initialize	
- CFN-targetSFN frame offset		Not Present	
- Downlink DPCH power control information			
- DPC mode		0 (single)	
- CHOICE mode		FDD	
- Power offset PPilot-DPDCH		0	
- DL rate matching restriction information		Not Present	
- Spreading factor		Reference to clause 6.10 Parameter Set	
- Fixed or Flexible Position		Reference to clause 6.10 Parameter Set	
- TFCI existence		Reference to clause 6.10 Parameter Set	
- CHOICE SF		Reference to clause 6.10 Parameter Set	
- CHOICE mode		FDD	
- DPCH compressed mode info		Not Present	
- TX Diversity mode		None	
- SSDT information		Not Present	R99 and Rel-4 only
- Default DPCH Offset Value		Arbitrary set to value 0..306688 by step of 512	
- MAC-hs reset indicator		TRUE	
Downlink HS-PDSCH Information	A1, A2, A3, A4, A5, A6, A7, A8, A11	Not Present	REL-5
Downlink HS-PDSCH Information	A9, A10		REL-5
- HS-SCCH Info			
- CHOICE mode		FDD	
- DL Scrambling Code		Not present	
- HS-SCCH Channelisation Code Information			
- HS-SCCH Channelisation Code		1	
- Measurement Feedback Info			
- CHOICE mode		FDD	
- POhsdsch		6 dB	
- CQI Feedback cycle, k		4 ms	
- CQI repetition factor		1	
- Δ_{CQI}		5 (corresponds to 0dB in relative power offset)	
- CHOICE mode		FDD (no data)	
Downlink information common for all radio links	A5,A6	Not Present	
Downlink information for each radio link list	A1, A2, A3, A4, A7, A8, A11		
- Downlink information for each radio link			
- Choice mode		FDD	
- Primary CPICH info			
- Primary scrambling code		Ref. to the Default setting in clause 6.1 (FDD)	
- PDSCH with SHO DCH info		Not Present	R99 and Rel-

Information Element	Condition	Value/remark	Version
			4 only
- PDSCH code mapping		Not Present	R99 and Rel-4 only
- Serving HS-DSCH radio link indicator		FALSE	REL-5
- Downlink DPCH info for each RL			
- Primary CPICH usage for channel estimation		Primary CPICH may be used	
- DPCH frame offset		Set to value Default DPCH Offset Value (as currently stored in SS) mod 38 400	
- Secondary CPICH info		Not Present	
- DL channelisation code			
- Secondary scrambling code		1	
- Spreading factor		Reference to clause 6.10 Parameter Set 0	
- Code number			
- Scrambling code change		No code change	
- TPC combination index		0	
- SSDT Cell Identity		Not Present	R99 and Rel-4 only
- Closed loop timing adjustment mode		Not Present	
- SCCPCH information for FACH		Not Present	R99 and Rel-4 only
Downlink information for each radio link list	A5		
- Downlink information for each radio link			
- Choice mode		FDD	
- Primary CPICH info			
- Primary scrambling code		Ref. to the Default setting in clause 6.1 (FDD)	
- PDSCH with SHO DCH info		Not Present	R99 and Rel-4 only
- PDSCH code mapping		Not Present	R99 and Rel-4 only
- Serving HS-DSCH radio link indicator		FALSE	REL-5
- Downlink DPCH info for each RL		Not present	
- SCCPCH information for FACH		Not Present	R99 and Rel-4 only
Downlink information for each radio link list	A9, A10		REL-5
- Downlink information for each radio link			
- Choice mode		FDD	
- Primary CPICH info			
- Primary scrambling code		Ref. to the Default setting in clause 6.1 (FDD)	
- PDSCH with SHO DCH info		Not Present	R99 and Rel-4 only
- PDSCH code mapping		Not Present	R99 and Rel-4 only
- Serving HS-DSCH radio link indicator		TRUE	
- Downlink DPCH info for each RL			
- Primary CPICH usage for channel estimation		Primary CPICH may be used	
- DPCH frame offset		Set to value Default DPCH Offset Value (as currently stored in SS) mod 38 400	
- Secondary CPICH info		Not Present	
- DL channelisation code			
- Secondary scrambling code		1	
- Spreading factor		Reference to clause 6.10 Parameter Set 0	
- Code number			
- Scrambling code change		No code change	
- TPC combination index		0	
- SSDT Cell Identity		Not Present	R99 and Rel-4 only
- Closed loop timing adjustment mode		Not Present	

Information Element	Condition	Value/remark	Version
- SCCPCH information for FACH		Not Present	R99 and Rel-4 only
Downlink information for each radio link list	A6	Not Present	

Condition	Explanation	Version
A1	This IE is needed for "Non speech to CELL_DCH from CELL_DCH in CS"	
A2	This IE is needed for "Speech to CELL_DCH from CELL_DCH in CS"	
A3	This IE is needed for "Packet to CELL_DCH from CELL_DCH in PS"	
A4	This IE is needed for "Packet to CELL_DCH from CELL_FACH in PS"	
A5	This IE is needed for "Packet to CELL_FACH from CELL_DCH in PS"	
A6	This IE is needed for "Packet to CELL_FACH from CELL_FACH in PS"	
A7	This IE is needed for "Non speech to CELL_DCH from CELL_FACH in CS"	
A8	This IE is needed for "Speech to CELL_DCH from CELL_FACH in CS"	
A9	This IE is needed for "Packet to CELL_DCH / HS-DSCH using three multiplexing options", or when not stated otherwise, for "Packet to CELL_DCH / HS-DSCH from CELL_DCH in PS"	REL-5
A10	This IE is needed for "Packet to CELL_DCH / HS-DSCH using one multiplexing option", or when not stated otherwise, for "Packet to CELL_DCH / HS-DSCH from CELL_FACH in PS"	REL-5
A11	This IE is needed for " Packet RAB Setup after Speech RAB Setup in CELL_DCH"	

Contents of RADIO BEARER SETUP COMPLETE message: AM

Information Element	Value/remark
Message Type	
RRC transaction identifier	Checked to see if the value is identical to the same IE in the downlink RADIO BEARER SETUP message.
Integrity check info	
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.
Uplink integrity protection activation info	Not checked.
CHOICE mode	FDD
START	Not checked (if ciphering is OFF), check the presence if ciphering is ON.
COUNT-C activation time	The UE shall include this IE if the following two conditions are fulfilled: (a) The RADIO BEARER SETUP message did not contain the IE "Ciphering activation time for DPCH" and (b) The RADIO BEARER SETUP message established the first RB(s) mapped to RLC-TM for a CN domain. Else, this IE is absent.
Radio bearer uplink ciphering activation time info	Not checked
Uplink counter synchronization info	Not present

Contents of RADIO BEARER SETUP FAILURE message: AM

Information Element	Value/remark
Message Type	
RRC transaction identitifer	Checked to see if it is set to identical value of the same IE in the downlink RADIO BEARER SETUP message.
Integrity check info	
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.
Failure cause	Checked to see if it meets test requirement
Radio bearers for which reconfiguration would have succeeded	Not checked

Contents of RADIO BEARER RECONFIGURATION message: AM or UM

Information Element	Condition	Value/remark	Version
Message Type	A1,A2,A3,A4,A5, A6		
RRC transaction identifier		Arbitrarily selects an integer between 0 and 3	
Integrity check info			
- message authentication code		SS calculates the value of MAC-I for this message and writes to this IE. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.	
- RRC message sequence number		SS provides the value of this IE, from its internal counter.	
Integrity protection mode info		Not Present	
Ciphering mode info		Not Present	
Activation time	A1,A2,A3	(256+CFN-(CFN MOD 8 + 8))MOD 256	
Activation time	A4, A5,A6	Not Present	
New U-RNTI		Not Present	
New C-RNTI	A1, A2, A3, A4,	Not Present	
New C-RNTI	A5, A6	'1010 1010 1010 1010'	
New DSCH-RNTI	A1, A2, A3, A4, A5, A6	Not Present	R99 and Rel-4 only
New H-RNTI	A1, A2, A3, A4, A5, A6	Not Present	REL-5
RRC State indicator	A1, A2, A3, A4	CELL_DCH	
RRC State indicator	A5, A6	CELL_FACH	
UTRAN DRX cycle length coefficient	A1,A2,A3,A4,A5, A6	Not Present	
CN information info		Not Present	
URA identity		Not Present	
CHOICE specification mode		[FFS]	REL-5
RAB information to reconfigure list		Not Present	
RB information to reconfigure list	A1	TS25.331 specifies that "Although this IE is not always required, need is MP to align with ASN.1".	
- RB information to reconfigure		(UM DCCH for RRC)	
- RB identity		1	
- PDCP info		Not Present	
- PDCP SN info		Not Present	
- RLC info		Not Present	
- RB mapping info		Not Present	
- RB stop/continue		Not Present	
- RB information to reconfigure		(AM DCCH for RRC)	
- RB identity		2	
- PDCP info		Not Present	
- PDCP SN info		Not Present	
- RLC info		Not Present	
- RB mapping info		Not Present	
- RB stop/continue		Not Present	
- RB information to reconfigure		(AM DCCH for NAS_DT High priority)	
- RB identity		3	
- PDCP info		Not Present	
- PDCP SN info		Not Present	
- RLC info		Not Present	
- RB mapping info		Not Present	
- RB stop/continue		Not Present	
- RB information to reconfigure		(AM DCCH for NAS_DT Low priority)	
- RB identity		4	
- PDCP info		Not Present	
- PDCP SN info		Not Present	
- RLC info		Not Present	
- RB mapping info		Not Present	
- RB stop/continue		Not Present	
- RB information to reconfigure		(TM DTCH)	
- RB identity		10	
- PDCP info		Not Present	
- PDCP SN info		Not Present	
- RLC info		Not Present	
- RB mapping info		Not Present	

Information Element	Condition	Value/remark	Version
- RB stop/continue		Not Present	
RB information to reconfigure list	A2	TS25.331 specifies that "Although this IE is not always required, need is MP to align with ASN.1".	
- RB information to reconfigure		(UM DCCH for RRC)	
- RB identity		1	
- PDCP info		Not Present	
- PDCP SN info		Not Present	
- RLC info		Not Present	
- RB mapping info		Not Present	
- RB stop/continue		Not Present	
- RB information to reconfigure		(AM DCCH for RRC)	
- RB identity		2	
- PDCP info		Not Present	
- PDCP SN info		Not Present	
- RLC info		Not Present	
- RB mapping info		Not Present	
- RB stop/continue		Not Present	
- RB information to reconfigure		(AM DCCH for NAS_DT High priority)	
- RB identity		3	
- PDCP info		Not Present	
- PDCP SN info		Not Present	
- RLC info		Not Present	
- RB mapping info		Not Present	
- RB stop/continue		Not Present	
- RB information to reconfigure		(AM DCCH for NAS_DT Low priority)	
- RB identity		4	
- PDCP info		Not Present	
- PDCP SN info		Not Present	
- RLC info		Not Present	
- RB mapping info		Not Present	
- RB stop/continue		Not Present	
- RB information to reconfigure		(TM DTCH)	
- RB identity		10	
- PDCP info		Not Present	
- PDCP SN info		Not Present	
- RLC info		Not Present	
- RB mapping info		Not Present	
- RB stop/continue		Not Present	
- RB information to reconfigure		(TM DTCH)	
- RB identity		11	
- PDCP info		Not Present	
- PDCP SN info		Not Present	
- RLC info		Not Present	
- RB mapping info		Not Present	
- RB stop/continue		Not Present	
- RB information to reconfigure		(TM DTCH) (This IE is needed for 12.2 kbps and 10.2 kbps)	
- RB identity		12	
- PDCP info		Not Present	
- PDCP SN info		Not Present	
- RLC info		Not Present	
- RB mapping info		Not Present	
- RB stop/continue		Not Present	
RB information to reconfigure list	A3,A4,A5,A6	TS25.331 specifies that "Although this IE is not always required, need is MP to align with ASN.1".	
- RB information to reconfigure		(UM DCCH for RRC)	
- RB identity		1	
- PDCP info		Not Present	
- PDCP SN info		Not Present	
- RLC info		Not Present	
- RB mapping info		Not Present	
- RB stop/continue		Not Present	
- RB information to reconfigure		(AM DCCH for RRC)	
- RB identity		2	

Information Element	Condition	Value/remark	Version
- PDCP info		Not Present	
- PDCP SN info		Not Present	
- RLC info		Not Present	
- RB mapping info		Not Present	
- RB stop/continue		Not Present	
- RB information to reconfigure		(AM DCCH for NAS_DT High priority)	
- RB identity		3	
- PDCP info		Not Present	
- PDCP SN info		Not Present	
- RLC info		Not Present	
- RB mapping info		Not Present	
- RB stop/continue		Not Present	
- RB information to reconfigure		(AM DCCH for NAS_DT Low priority)	
- RB identity		4	
- PDCP info		Not Present	
- PDCP SN info		Not Present	
- RLC info		Not Present	
- RB mapping info		Not Present	
- RB stop/continue		Not Present	
- RB information to reconfigure		(AM DTCH)	
- RB identity		20	
- PDCP info		Not Present	
- PDCP SN info		Not Present	
- RLC info		Not Present	
- RB mapping info		Not Present	
- RB stop/continue		Not Present	
RB information to be affected	A1, A2, A3,A4,A5,A6	Not Present	
UL Transport channel information for all transport channels	A1, A2, A5,A6	Not Present	
UL Transport channel information for all transport channels	A3, A4		
- PRACH TFCS		Not Present	
- CHOICE mode		FDD	
- TFC subset		Not Present	
- UL DCH TFCS			
- CHOICE TFCI signalling		Normal	
- TFCI Field 1 information			
- CHOICE TFCS representation		Complete reconfiguration	
- TFCS complete reconfigure information			
- CHOICE CTFC Size		Number of bits used must be enough to cover all combinations of CTFC from clause 6.10.2.4 Parameter Set.	
- CTFC information		This IE is repeated for TFC numbers and reference to clause 6.10.2.4 Parameter Set	
- CTFC		Reference to clause 6.10.2.4 Parameter Set	
- Power offset information			
- CHOICE Gain Factors		Computed Gain Factors(The last TFC is set to Signalled Gain Factors)	
- Gain factor βc		11 (below 64 kbps) 9 (higher than 64 kbps) (Not Present if the CHOICE Gain Factors is set to ComputedGain Factors)	
- Gain factor βd		15 (Not Present if the CHOICE Gain Factors is set to ComputedGain Factors)	
- Reference TFC ID		0	
- CHOICE mode		FDD	
- Power offset $P_{p\text{-}m}$		Not Present	
Deleted UL TrCH information	A1, A2, A3, A4, A5,A6	Not Present	
Added or Reconfigured UL TrCH information	A1, A2, A5,A6	Not Present	
Added or Reconfigured UL TrCH	A4	2 TrCHs(DCH for DCCH and DCH for	

Information Element	Condition	Value/remark	Version
information		DTCH)	
- Uplink transport channel type		DCH	
- UL Transport channel identity		5	
- TFS			
- CHOICE Transport channel type		Dedicated transport channels	
- Dynamic Transport format information			
- RLC Size		Reference to clause 6.10 Parameter Set	
- Number of TBs and TTI List		(This IE is repeated for TFI number.)	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to clause 6.10 Parameter Set	
- CHOICE Logical channel list		All	
- Semi-static Transport Format information			
- Transmission time interval		Reference to clause 6.10 Parameter Set	
- Type of channel coding		Reference to clause 6.10 Parameter Set	
- Coding Rate		Reference to clause 6.10 Parameter Set	
- Rate matching attribute		Reference to clause 6.10 Parameter Set	
- CRC size		Reference to clause 6.10 Parameter Set	
- Uplink transport channel type		DCH	
- UL Transport channel identity		1	
- TFS			
- CHOICE Transport channel type		Dedicated transport channels	
- Dynamic Transport format information			
- RLC Size		Reference to clause 6.10 Parameter Set	
- Number of TBs and TTI List		(This IE is repeated for TFI number.)	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to clause 6.10 Parameter Set	
- CHOICE Logical channel list		All	
- Semi-static Transport Format information			
- Transmission time interval		Reference to clause 6.10 Parameter Set	
- Type of channel coding		Reference to clause 6.10 Parameter Set	
- Coding Rate		Reference to clause 6.10 Parameter Set	
- Rate matching attribute		Reference to clause 6.10 Parameter Set	
- CRC size		Reference to clause 6.10 Parameter Set	
Added or Reconfigured UL TrCH information	A3	(DCH for DTCH)	
- Uplink transport channel type		DCH	
- UL Transport channel identity		1	
- TFS			
- CHOICE Transport channel type		Dedicated transport channels	
- Dynamic Transport format information			
- RLC Size		Reference to clause 6.10 Parameter Set	
- Number of TBs and TTI List		(This IE is repeated for TFI number.)	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to clause 6.10 Parameter Set	
- CHOICE Logical channel list		All	
- Semi-static Transport Format information			
- Transmission time interval		Reference to clause 6.10 Parameter Set	
- Type of channel coding		Reference to clause 6.10 Parameter Set	
- Coding Rate		Reference to clause 6.10 Parameter Set	
- Rate matching attribute		Reference to clause 6.10 Parameter Set	
- CRC size		Reference to clause 6.10 Parameter Set	
CHOICE mode	A1,A2,A3,A4,A5, A6	Not Present	
DL Transport channel information common for all transport channel	A1, A2, A5, A6	Not Present	
DL Transport channel information common for all transport channel	A3,A4		
- SCCPCH TFCS		Not Present	
- CHOICE mode		FDD	
- CHOICE DL parameters		Explicit	
- DL DCH TFCS			

Information Element	Condition	Value/remark	Version
- CHOICE TFCI Signalling		Normal	
- TFCI Field 1 Information			
- CHOICE TFCS representation		Complete reconfiguration	
- TFCS complete reconfigure			
- CHOICE CTFC Size		Number of bits used must be enough to cover all combinations of CTFC from clause 6.10.2.4 Parameter Set.	
- CTFC information		This IE is repeated for TFC numbers and reference to clause 6.10.2.4	
- CTFC		Reference to clause 6.10.2.4 Parameter Set	
- Power offset information		Not Present	
Deleted DL TrCH information	A1, A2, A3, A4, A5,A6	Not Present	
Added or Reconfigured DL TrCH information	A1, A2, A5, A6	Not Present	
Added or Reconfigured DL TrCH information	A4	2 TrCHs(DCH for DCCH and DCH for DTCH)	
- Downlink transport channel type		DCH	
- DL Transport channel identity		10	
- CHOICE DL parameters		Same as UL	
- Uplink transport channel type		DCH	
- UL TrCH identity		5	
- DCH quality target			
- BLER Quality value		Not Present	
- Downlink transport channel type		DCH	
- DL Transport channel identity		6	
- CHOICE DL parameters		Explicit	
- TFS			
- CHOICE Transport channel type		Dedicated transport channel	
- Dynamic transport format information			
- RLC Size		Reference to clause 6.10 Parameter Set	
- Number of TBs and TTI List		(This IE is repeated for TFI number.)	
- Dynamic transport format information			
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to clause 6.10 Parameter Set	
- Semi-static Transport Format information			
- Transmission time interval		Reference to clause 6.10 Parameter Set	
- Type of channel coding		Reference to clause 6.10 Parameter Set	
- Coding Rate		Reference to clause 6.10 Parameter Set	
- Rate matching attribute		Reference to clause 6.10 Parameter Set	
- CRC size		Reference to clause 6.10 Parameter Set	
- DCH quality target			
- BLER Quality value		-2.0	
Added or Reconfigured DL TrCH information	A3		
- Downlink transport channel type		DCH	
- DL Transport channel identity		6	
- CHOICE DL parameters		Explicit	
- TFS			
- CHOICE Transport channel type		Dedicated transport channel	
- Dynamic transport format information			
- RLC Size		Reference to clause 6.10 Parameter Set	
- Number of TBs and TTI List		(This IE is repeated for TFI number.)	
- Dynamic transport format information			
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to clause 6.10 Parameter Set	
- Semi-static Transport Format information			
- Transmission time interval		Reference to clause 6.10 Parameter Set	
- Type of channel coding		Reference to clause 6.10 Parameter Set	
- Coding Rate		Reference to clause 6.10 Parameter Set	
- Rate matching attribute		Reference to clause 6.10 Parameter Set	
- CRC size		Reference to clause 6.10 Parameter Set	

Information Element	Condition	Value/remark	Version
- DCH quality target			
- BLER Quality value		-2.0	
Preconfiguration	A1,A2,A3,A4,A5, A6	[FFS]	REL-5
Frequency info	A1,A2,A3,A4,A5		
- UARFCN uplink (Nu)		Reference to clause 5.1 Test frequencies	
- UARFCN downlink (Nd)		Reference to clause 5.1 Test frequencies	
Frequency info	A6	Not Present	
Maximum allowed UL TX power	A1,A2,A3,A4,A5, A6	33dBm	
CHOICE channel requirement	A1, A2, A3, A4	Uplink DPCH info	
-Uplink DPCH power control info			
- DPCCH power offset		-80dB (i.e. ASN.1 IE value of -40)	
- PC Preamble		1 frame	
- SRB delay		7 frames	
- Power Control Algorithm		Algorithm1	
- TPC step size		1dB	
- Δ_{ACK}		Not Present	REL-5
- Δ_{NACK}		Not Present	REL-5
- Ack-Nack repetition factor		Not Present	REL-5
- Scrambling code type		Long	
- Scrambling code number		0 (0 to 16777215)	
- Number of DPDCH		Not Present(1)	
- spreading factor		Reference to clause 6.10 Parameter Set	
- TFCI existence		Reference to clause 6.10 Parameter Set	
- Number of FBI bit		Reference to clause 6.10 Parameter Set	
- Puncturing Limit		Reference to clause 6.10 Parameter Set	
CHOICE channel requirement	A5, A6	Not Present	
CHOICE Mode	A1,A2,A3,A4,A5, A6	FDD	
- Downlink PDSCH information		Not Present	R99 and Rel-4 only
Downlink HS-PDSCH Information	A1, A2, A3, A4, A5, A6	Not Present	REL-5
Downlink information common for all radio links	A5, A6	Not Present	
Downlink information common for all radio links	A1, A2, A3		
- Downlink DPCH info common for all RL			
- Timing indicator		Maintain	
- CFN-targetSFN frame offset		Not Present	
- Downlink DPCH power control information			
- DPC mode		0 (single)	
- CHOICE mode		FDD	
- Power offset $P_{Pilot-DPDCH}$		0	
- DL rate matching restriction information		Not Present	
- Spreading factor		Reference to clause 6.10 Parameter Set	
- Fixed or Flexible Position		Reference to clause 6.10 Parameter Set	
- TFCI existence		Reference to clause 6.10 Parameter Set	
- CHOICE SF		Reference to clause 6.10 Parameter Set	
- DPCH compressed mode info		Not Present	
- TX Diversity mode		None	
- SSDT information		Not Present	R99 and Rel-4 only
- Default DPCH Offset Value		Not Present	
- MAC-hs reset indicator		Not Present	REL-5
Downlink information common for all radio links	A4		
- Downlink DPCH info common for all RL			

Information Element	Condition	Value/remark	Version
- Timing indicator		Initialize	
- CFN-targetSFN frame offset		Not Present	
- Downlink DPCH power control information			
- DPC mode		0 (single)	
- CHOICE mode		FDD	
- Power offset $P_{Pilot-DPDCH}$		0	
- DL rate matching restriction information		Not Present	
- Spreading factor		Reference to clause 6.10 Parameter Set	
- Fixed or Flexible Position		Reference to clause 6.10 Parameter Set	
- TFCI existence		Reference to clause 6.10 Parameter Set	
- CHOICE SF		Reference to clause 6.10 Parameter Set	
- DPCH compressed mode info		Not Present	
- TX Diversity mode		None	
- SSDT information		Not Present	R99 and Rel-4 only
- Default DPCH Offset Value		Present Arbitrary set to value 0..306688 by step of 512	
- MAC-hs reset indicator		Not Present	REL-5
Downlink information per radio link list	A1, A2, A3		
-Downlink information for each radio link			
- Choice mode		FDD	
- Primary CPICH info			
- Primary scrambling code		Ref. to the Default setting in clause 6.1 (FDD)	
- PDSCH with SHO DCH info		Not Present	R99 and Rel-4 only
- PDSCH code mapping		Not Present	R99 and Rel-4 only
- Serving HS-DSCH radio link indicator		FALSE	REL-5
- Downlink DPCH info for each RL			
- Primary CPICH usage for channel estimation		Primary CPICH may be used	
- DPCH frame offset		Set to value Default DPCH Offset Value (as currently stored in SS) mod 38 400	
- Secondary CPICH info		Not Present	
- Secondary scrambling code			
- channelisation code			
- DL channelisation code			
- Secondary scrambling code		2	
- Spreading factor		Reference to clause 6.10 Parameter Set	
- Code number		0	
- Scrambling code change		No change	
- TPC combination index		0	
- SSDT Cell Identity		Not Present	R99 and Rel-4 only
- Closed loop timing adjustment mode		Not Present	
- SCCPCH information for FACH		Not Present	R99 and Rel-4 only
Downlink information per radio link list	A4		
-Downlink information for each radio link			
- Choice mode		FDD	
- Primary CPICH info			
- Primary scrambling code		Ref. to the Default setting in clause 6.1 (FDD)	
- PDSCH with SHO DCH info		Not Present	R99 and Rel-4 only
- PDSCH code mapping		Not Present	R99 and Rel-4 only
- Serving HS-DSCH radio link indicator		FALSE	REL-5
- Downlink DPCH info for each RL			
- Primary CPICH usage for channel estimation		Primary CPICH may be used	
- DPCH frame offset		Set to value : Default DPCH Offset Value mod 38 400	
- Secondary CPICH info		Not Present	

Information Element	Condition	Value/remark	Version
- Secondary scrambling code			
- channelisation code			
- DL channelisation code			
- Secondary scrambling code		2	
- Spreading factor		Reference to clause 6.10 Parameter Set	
- Code number		0	
- Scrambling code change		No change	
- TPC combination index		0	
- SSDT Cell Identity		Not Present	R99 and Rel-4 only
- Closed loop timing adjustment mode		Not Present	
- SCCPCH information for FACH		Not Present	R99 and Rel-4 only
- Downlink information for each radio link	A5		
- Choice mode		FDD	
- Primary CPICH info			
- Primary scrambling code		Ref. to the Default setting in clause 6.1 (FDD)	
- PDSCH with SHO DCH info		Not Present	R99 and Rel-4 only
- PDSCH code mapping		Not Present	R99 and Rel-4 only
- Serving HS-DSCH radio link indicator		FALSE	REL-5
- Downlink DPCH info for each RL		Not present	
- SCCPCH Information for FACH		Not Present	R99 and Rel-4 only
- Downlink information for each radio link	A6		R99
- Choice mode		FDD	
- Primary CPICH info			
- Primary scrambling code		Ref. to the Default setting in clause 6.1 (FDD)	
- PDSCH with SHO DCH info		Not Present	R99 and Rel-4 only
- PDSCH code mapping		Not Present	R99 and Rel-4 only
- Downlink DPCH info for each RL		Not present	
- SCCPCH Information for FACH		Not Present	R99 and Rel-4 only
- Downlink information for each radio link	A6	Not Present	REL-4 on

Condition	Explanation
A1	This IE need for "Non speech in CS"
A2	This IE need for "Speech in CS"
A3	This IE need for "Packet to CELL_DCH from CELL_DCH in PS"
A4	This IE need for "Packet to CELL_DCH from CELL_FACH in PS"
A5	This IE need for "Packet to CELL_FACH from CELL_DCH in PS"
A6	This IE need for "Packet to CELL_FACH from CELL_FACH in PS"

Contents of RADIO BEARER RECONFIGURATION FAILURE message: AM

Information Element	Value/remark
Message Type	
RRC transaction identitifer	Checked to see if it is set to identical value of the same IE in the downlink RADIO BEARER RECONFIGURATION message.
Integrity check info	
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.
Failure cause	Checked to see if it meets test requirement
Radio bearers for which reconfiguration would have succeeded List	Not checked

Contents of RADIO BEARER RECONFIGURATION COMPLETE message: AM

Information Element	Value/remark
Message Type	
RRC transaction identifier	Checked to see if the value is identical to the same IE in the downlink RADIO BEARER RECONFIGURATION COMPLETE message
Integrity check info	
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.
Uplink integrity protection activation info	Not checked
CHOICE mode	FDD
COUNT-C activation time	Not checked
Radio bearer uplink ciphering activation time info	Not checked
Uplink counter synchronization info	Not present

Contents of RADIO BEARER RELEASE message: AM or UM

Information Element	Condition	Value/remark	Version
Message Type	A1, A2, A3, A4, A5, A6, A7, A8		
	, A9, A10		REL-5
RRC transaction identifier		Arbitrarily selects an integer between 0 and 3	
Integrity check info			
- message authentication code		SS calculates the value of MAC-I for this message and writes to this IE. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.	
- RRC message sequence number		SS provides the value of this IE, from its internal counter.	
Integrity protection mode info		Not Present	
Ciphering mode info		Not Present	
Activation time	A1, A2, A3, A7, A8	(256+CFN-(CFN MOD 8 + 8))MOD 256	
	, A9, A10		REL-5
Activation time	A4, A5, A6	Not Present	
New U-RNTI		Not Present	
New C-RNTI	A1,A2,A3,A4	Not Present	
	, A9		REL-5
New C-RNTI	A5, A6, A7, A8	'1010 1010 1010 1010'	
	, A10		REL-5
New DSCH-RNTI	A1, A2, A3, A4, A5, A6, A7, A8	Not Present	R99 and Rel-4 only
New H-RNTI	A1, A2, A3, A4, A5, A6, A7, A8	Not Present	
	, A9, A10,		REL-5
RRC State indicator	A1,A2, A3, A4	CELL_DCH	
	, A9		REL-5
RRC State indicator	A5, A6, A7, A8	CELL_FACH	
	, A10		REL-5
UTRAN DRX cycle length coefficient	A1,A2,A3,A4,A5,A6, A7, A8	Not Present	
	, A9, A10		REL-5
CN information info		Not Present	

Information Element	Condition	Value/remark	Version
Signalling Connection release indication		Not Present	
URA identity		Not Present	
RAB information to reconfigure list		Not Present	
RB information to release	A1,A2, A7, A8		
- RB identity		10	
RB information to release	A2, A8		
- RB identity		11	
RB information to release	A2, A8		
- RB identity		12	
RB information to release	A3, A4, A5, A6		
- RB identity		20	
RB information to release	A9, A10		REL-5
- RB identity		25	
RB information to be affected	A1,A2, A3,A4,A5, A6, A7, A8	Not Present	
	, A9, A10		REL-5
Downlink counter synchronization info	A1,A2,A3,A4,A5,A6, A7, A8	Not Present	
	, A9, A10		REL-5
UL Transport channel information for all transport channels	A1, A2, A3, A4, A5, A6, A7, A8	TFCS reconfigured to fit the new transport channel configuration.	
	, A9, A10		REL-5
Deleted UL TrCH Information	A1,A2, A3, A4, A5, A6, A7, A8		
	, A9, A10		REL-5
- Uplink transport channel type		DCH	
- Transport channel identity		1	
Deleted UL TrCH Information	A2, A8		
- Uplink transport channel type		DCH	
- Transport channel identity		2	
Deleted UL TrCH Information	A2, A8		
- Uplink transport channel type		DCH	
- Transport channel identity		3	
Added or Reconfigured UL TrCH information	A5, A6, A7, A8	Not Present	
	, A10		REL-5
Added or Reconfigured UL TrCH information	A1, A2, A3, A4	TrCHs(DCH for DCCH)	
	, A9		REL-5
- Uplink transport channel type		DCH	
- UL Transport channel identity		5	
- TFS			
- CHOICE Transport channel type		Dedicated transport channels	
- Dynamic Transport format information			
- RLC Size		According to clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)	
- Number of TBs and TTI List		(This IE is repeated for TFI number.)	
- Transmission Time Interval		According to clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)	
- Number of Transport blocks		According to clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)	
- CHOICE Logical channel list		All	
- Semi-static Transport Format information			
- Transmission time interval		According to clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)	
- Type of channel coding		According to clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio	

Information Element	Condition	Value/remark	Version
		bearer)	
- Coding Rate		According to clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)	
- Rate matching attribute		According to clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)	
- CRC size		According to clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)	
DL Transport channel information for all transport channels	A1, A2, A3, A4, A5, A6, A7, A8	TFCS reconfigured to fit the new transport channel configuration.	
	, A9, A10		REL-5
Deleted DL TrCH Information	A1, A2, A3, A4, A5, A6, A7, A8		
	, A9		REL-5
- Downlink transport channel type		DCH	
- Transport channel identity		6	
Deleted DL TrCH Information	A2, A8		
- Downlink transport channel type		DCH	
- Transport channel identity		7	
Deleted DL TrCH Information	A2, A8		
- Downlink transport channel type		DCH	
- Transport channel identity		8	
Deleted DL TrCH Information	A9, A10		REL-5
- Downlink transport channel type		HS-DSCH	
- DL HS-DSCH MAC-d flow identity		0	
Added or Reconfigured DL TrCH information	A5, A6, A7, A8	Not Present	
	, A10		REL-5
Added or Reconfigured DL TrCH information	A1, A2, A3, A4	1 TrCHs(DCH for DCCH)	
	, A9		REL-5
- Downlink transport channel type		DCH	
- DL Transport channel identity		10	
- CHOICE DL parameters		Same as UL	
- Uplink transport channel type		DCH	
- UL TrCH identity		5	
- DCH quality target			
- BLER Quality value		Not Present	
Frequency info	A1,A2,A3,A4,A5, A7, A8		
	, A9, A10		REL-5
- UARFCN uplink (Nu)		Reference to clause 5.1 Test frequencies	
- UARFCN downlink (Nd)		Reference to clause 5.1 Test frequencies	
Maximum allowed UL TX power		33dBm	
Frequency info	A6	Not Present	
CHOICE *channel requirement*	A5, A6, A7, A8	Not Present	
	, A10		REL-5
CHOICE channel requirement	A1,A2,A3,A4	Uplink DPCH info	
	, A9		REL-5
- Uplink DPCH power control info			
- DPCCH power offset		-80dB (i.e. ASN.1 IE value of -40)	
- PC Preamble		1 frame	
- SRB delay		7 frames	
- Power Control Algorithm		Algorithm1	
- Δ_{ACK}		Not Present	REL-5
- Δ_{NACK}		Not Present	REL-5
- Ack-Nack repetition factor		Not Present	REL-5
- TPC step size		1dB	

Information Element	Condition	Value/remark	Version
- Scrambling code type		Long	
- Scrambling code number		0 (0 to 16777215)	
- Number of DPDCH		Not Present(1)	
- spreading factor		Reference to clause 6.10 Parameter Set	
- TFCI existence		Reference to clause 6.10 Parameter Set	
- Number of FBI bit		Reference to clause 6.10 Parameter Set	
- Puncturing Limit		Reference to clause 6.10 Parameter Set	
CHOICE Mode	A1,A2,A3,A4,A5,A6, A7, A8 , A9, A10	FDD	REL-5
- Downlink PDSCH information		Not Present	R99 and Rel-4 only
Downlink HS-PDSCH Information	A1, A2, A3, A4, A5, A6, A7, A8, A9, A10	Not Present	REL-5
Downlink information common for all radio links	A5, A6, A7, A8 , A10	Not Present	REL-5
Downlink information common for all radio links	A1,A2, A3 , A9		REL-5
- Downlink DPCH info common for all RL			
- Timing indicator		Maintain	
- CFN-targetSFN frame offset		Not Present	
- Downlink DPCH power control information			
- DPC mode		0 (single)	
- CHOICE mode		FDD	
- Power offset $P_{Pilot-DPDCH}$		0	
- DL rate matching restriction information		Not Present	
- Spreading factor		Reference to clause 6.10 Parameter Set	
- Fixed or Flexible Position		Reference to clause 6.10 Parameter Set	
- TFCI existence		Reference to clause 6.10 Parameter Set	
- CHOICE SF		Reference to clause 6.10 Parameter Set	
- DPCH compressed mode info		Not Present	
- TX Diversity mode		None	
- SSDT information		Not Present	R99 and Rel-4 only
- Default DPCH Offset Value		Not Present	
- MAC-hs reset indicator		Not Present	REL-5
Downlink information common for all radio links	A4		
- Downlink DPCH info common for all RL			
- Timing indicator		Initialize	
- CFN-targetSFN frame offset		Not Present	
- Downlink DPCH power control information			
- DPC mode		0 (single)	
- CHOICE mode		FDD	
- Power offset $P_{Pilot-DPDCH}$		0	
- DL rate matching restriction information		Not Present	
- Spreading factor		Reference to clause 6.10 Parameter Set	
- Fixed or Flexible Position		Reference to clause 6.10 Parameter Set	
- TFCI existence		Reference to clause 6.10 Parameter Set	
- CHOICE SF		Reference to clause 6.10 Parameter Set	
- DPCH compressed mode info		Not Present	
- TX Diversity mode		None	
- SSDT information		Not Present	R99 and Rel-4 only
- Default DPCH Offset Value		Arbitrary set to value 0..306688 by step of 512	
- MAC-hs reset indicator		Not Present	REL-5
Downlink information for each radio link list	A1,A2,A3 , A9		REL-5
-Downlink information for each radio link			
- Choice mode		FDD	
- Primary CPICH info			
- Primary scrambling code		Ref. to the Default setting in clause 6.1 (FDD)	

Information Element	Condition	Value/remark	Version
- PDSCH with SHO DCH info		Not Present	R99 and Rel-4 only
- PDSCH code mapping		Not Present	R99 and Rel-4 only
- Serving HS-DSCH radio link indicator		FALSE	REL-5
- Downlink DPCH info for each RL			
- Primary CPICH usage for channel estimation		Primary CPICH may be used	
- DPCH frame offset		Set to value Default DPCH Offset Value (as currently stored in SS) mod 38 400	
- Secondary CPICH info		Not Present	
- Secondary scrambling code			
- channelisation code			
- DL channelisation code			
- Secondary scrambling code		3	
- Spreading factor		Reference to clause 6.10 Parameter Set 0	
- Code number			
- Scrambling code change		No change	
- TPC combination index		0	
- SSDT Cell Identity		Not Present	R99 and Rel-4 only
- Closed loop timing adjustment mode		Not Present	
- SCCPCH information for FACH		Not Present	R99 and Rel-4 only
Downlink information for each radio link list	A4		
-Downlink information for each radio link			
- Choice mode		FDD	
- Primary CPICH info			
- Primary scrambling code		Ref. to the Default setting in clause 6.1 (FDD)	
- PDSCH with SHO DCH info		Not Present	R99 and Rel-4 only
- PDSCH code mapping		Not Present	R99 and Rel-4 only
- Serving HS-DSCH radio link indicator		FALSE	REL-5
- Downlink DPCH info for each RL			
- Primary CPICH usage for channel estimation		Primary CPICH may be used	
- DPCH frame offset		Set to value : Default DPCH Offset Value mod 38 400	
- Secondary CPICH info		Not Present	
- Secondary scrambling code			
- channelisation code			
- DL channelisation code			
- Secondary scrambling code		3	
- Spreading factor		Reference to clause 6.10 Parameter Set 0	
- Code number			
- Scrambling code change		No change	
- TPC combination index		0	
- SSDT Cell Identity		Not Present	R99 and Rel-4 only
- Closed loop timing adjustment mode		Not Present	
- SCCPCH information for FACH		Not Present	R99 and Rel-4 only
- Downlink information for each radio link	A5, A7, A8		
- Choice mode		FDD	
- Primary CPICH info			
- Primary scrambling code		Ref. to the Default setting in clause 6.1 (FDD)	
- PDSCH with SHO DCH info		Not Present	R99 and Rel-4 only
- PDSCH code mapping		Not Present	R99 and Rel-4 only
- Serving HS-DSCH radio link indicator		FALSE	REL-5
- Downlink DPCH info for each RL		Not present	
- SCCPCH information for FACH		Not Present	R99 and Rel-4 only

Information Element	Condition	Value/remark	Version
- Downlink information for each radio link	A6, A10	Not Present	

Condition	Explanation	Version
A1	This IE need for "Non speech in CS"	
A2	This IE need for "Speech in CS"	
A3	This IE need for "Packet to CELL_DCH from CELL_DCH in PS"	
A4	This IE need for "Packet to CELL_DCH from CELL_FACH in PS"	
A5	This IE need for "Packet to CELL_FACH from CELL_DCH in PS"	
A6	This IE need for "Packet to CELL_FACH from CELL_FACH in PS"	
A7	This IE need for "Non speech to CELL_FACH from CELL_DCH in CS"	
A8	This IE need for "Speech to CELL_FACH from CELL_DCH in CS"	
A9	This IE is needed for "Packet to CELL_DCH / HS-DSCH using three multiplexing options", or when not stated otherwise, for "Packet to CELL_DCH from CELL_DCH / HS-DSCH in PS"	REL-5
A10	This IE is needed for "Packet to CELL_DCH / HS-DSCH using one multiplexing option", or when not stated otherwise, for "Packet to CELL_FACH from CELL_DCH / HS-DSCH in PS"	REL-5

Contents of RADIO BEARER RELEASE COMPLETE message: AM

Information Element	Value/remark
Message Type	
RRC transaction identifier	Checked to see the value is identical to the same IE in the downlink RADIO BEARER RELEASE message.
Integrity check info	
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.
Uplink integrity protection activation info	Not checked.
CHOICE mode	FDD
COUNT-C activation time	Not checked
Radio bearer uplink ciphering activation time info	Not checked
Uplink counter synchronization info	Not present

Contents of RADIO BEARER RELEASE FAILURE message: AM

Information Element	Value/remark
Message Type	
RRC transaction identitifer	Checked to see if it is set to identical value of the same IE in the downlink RADIO BEARER RELEASE message.
Integrity check info	
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.
Failure cause	Checked to see if it meets test requirement
Radio bearers for which reconfiguration would have succeeded	Not checked

Contents of RRC CONNECTION REQUEST message: TM

Information Element	Value/remark	Version
Message Type		
Predefined configuration status information	To be checked against requirement if specified	REL-5
Initial UE identity		
- CHOICE UE id type		
- TMSI and LAI (GSM-MAP)	Set to the UE's TMSI and LAI.	
Establishment cause	To be checked against requirement if specified	
Protocol error indicator	FALSE	

UE Specific Behaviour Information 1 idle	This IE will not be checked by default behaviour, but in specific test case.	
Measured results on RACH	To be checked against requirement if specified	REL-4
Access stratum release indicator	To be checked against requirement if specified	REL-4

Contents of RRC CONNECTION REJECT message: UM

Information Element	Value/remark
Message Type	
RRC transaction identifier	Arbitrarily selects an integer between 0 and 3
Initial UE identity	Select the same type as in the IE "Initial UE Identity" in RRC CONNECTION REQUEST" message.
Rejection cause	Unspecified
Wait Time	0
Redirection info	Not Present

Contents of RRC CONNECTION RELEASE message: UM

Information Element	Value/remark	Version
Message Type		
U-RNTI	This IE is set to the following value when the message is transmitted on the CCCH. When transmitted on DCCH, this is absent.	R99, REL-4
- SRNC identity	0000 0000 0001B	
- S-RNTI	0000 0000 0000 0000 0001B	
CHOICE identity type	This IE is set to the following value when the message is transmitted on the CCCH. When transmitted on DCCH, this is absent.	REL-5
- U-RNTI		
- SRNC identity	0000 0000 0001B	
- S-RNTI	0000 0000 0000 0000 0001B	
- Group identity	[FFS]	
- Group release information	[FFS]	
RRC transaction identifier	Arbitrarily selects an integer between 0 and 3	
Integrity check info	This IE is present when this message is transmitted on downlink DCCH. Else, this IE and the sub-IEs are omitted.	
- Message authentication code	SS calculates the value of MAC-I for this message and writes to this IE. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.	
- RRC Message sequence number	SS provides the value of this IE, from its internal counter.	
N308	2 (for CELL_DCH state) (Deprecated alternative value "1"). Not Present (for UE in other connected mode states).	
Release cause	Normal event	
Rplmn information	Not Present	

Contents of RRC CONNECTION RELEASE COMPLETE message: AM or UM

Information Element	Semantics description
Message Type	
RRC transaction identifier	The value of this IE is checked to see that it matches the value of the same IE transmitted in the downlink RRC CONNECTION RELEASE message.
Integrity check info	
- Message authentication code	Checked to see if it's identical to the value of XMAC-I calculated by the SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	Checked to see if it is present. This number is used by the SS to compute the XMAC-I
Error indication	Not checked

Contents of RRC CONNECTION SETUP message: UM (Transition to CELL_DCH)

Information Element	Value/remark	Version

Information Element	Value/remark	Version
Message Type		
Initial UE identity	Select the same identity as in the IE "Initial UE Identity" in received RRC CONNECTION REQUEST" message	
RRC transaction identifier	Arbitrarily selects an integer between 0 and 3	
Activation time	Not Present(Now)	
New U-RNTI		
- SRNC identity	0000 0000 0001B	
- S-RNTI	0000 0000 0000 0000 0001B	
New C-RNTI	Not present	
RRC State Indicator	CELL_DCH	
UTRAN DRX cycle length coefficient	9	
Capability update requirement		
- UE radio access FDD capability update requirement	TRUE	
- UE radio access TDD capability update requirement	FALSE	
- System specific capability update requirement list	GSM	
CHOICE *specification mode*	Complete specification	REL-5
- Complete specification		REL-5
- Signalling RB information to setup	(UM DCCH for RRC)	
- RB identity	Not Present	
- CHOICE RLC info type		
- RLC info		
- CHOICE Uplink RLC mode	UM RLC	
- Transmission RLC discard	Not Present	
- CHOICE Downlink RLC mode	UM RLC	
- RB mapping info		
- Information for each multiplexing option	2 RBMuxOptions	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	DCH	
- UL Transport channel identity	5	
- Logical channel identity	1	
- CHOICE RLC size list	Configured	
- MAC logical channel priority	1	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	DCH	
- DL DCH Transport channel identity	10	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	1	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	RACH	
- UL Transport channel identity	Not Present	
- Logical channel identity	1	
- CHOICE RLC size list	Explicit List	
- RLC size index	According to clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)	
- MAC logical channel priority	1	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	FACH	
- DL DCH Transport channel identity	Not Present	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	1	
- Signalling RB information to setup	(AM DCCH for RRC)	
- RB identity	Not Present	
- CHOICE RLC info type		

Information Element	Value/remark	Version
- RLC info		
- CHOICE Uplink RLC mode	AM RLC	
- Transmission RLC discard		
- SDU discard mode	No discard	
- MAX_DAT	15	
- Transmission window size	32	
- Timer_RST	500	
- Max_RST	1	
- Polling info		
- Timer_poll_prohibit	200	
- Timer_poll	200	
- Poll_PDU	Not Present	
- Poll_SDU	1	
- Last transmission PDU poll	TRUE	
- Last retransmission PDU poll	TRUE	
- Poll_Window	99	
- Timer_poll_periodic	Not Present	
- CHOICE Downlink RLC mode	AM RLC	
- In-sequence delivery	TRUE	
- Receiving window size	32	
- Downlink RLC status info		
- Timer_status_prohibit	200	
- Timer_EPC	Not Present	
- Missing PDU indicator	TRUE	
- Timer_STATUS_periodic	Not Present	
- RB mapping info		
- Information for each multiplexing option	2 RBMuxOptions	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	DCH	
- UL Transport channel identity	5	
- Logical channel identity	2	
- CHOICE RLC size list	Configured	
- MAC logical channel priority	2	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	DCH	
- DL DCH Transport channel identity	10	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	2	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	RACH	
- UL Transport channel identity	Not Present	
- Logical channel identity	2	
- CHOICE RLC size list	Explicit List	
- RLC size index	According to clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)	
- MAC logical channel priority	2	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	FACH	
- DL DCH Transport channel identity	Not Present	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	2	
- Signalling RB information to setup	(AM DCCH for NAS_DT High priority)	
- RB identity	Not Present	
- CHOICE RLC info type		
- RLC info		
- CHOICE Uplink RLC mode	AM RLC	

Information Element	Value/remark	Version
- Transmission RLC discard		
- SDU discard mode	No discard	
- MAX_DAT	15	
- Transmission window size	32	
- Timer_RST	500	
- Max_RST	1	
- Polling info		
- Timer_poll_prohibit	200	
- Timer_poll	200	
- Poll_PDU	Not present	
- Poll_SDU	1	
- Last transmission PDU poll	TRUE	
- Last retransmission PDU poll	TRUE	
- Poll_Window	99	
- Timer_poll_periodic	Not Present	
- CHOICE Downlink RLC mode	AM RLC	
- In-sequence delivery	TRUE	
- Receiving window size	32	
- Downlink RLC status info		
- Timer_status_prohibit	200	
- Timer_EPC	Not present	
- Missing PDU indicator	TRUE	
- Timer_STATUS_periodic	Not Present	
- RB mapping info		
- Information for each multiplexing option	2 RBMuxOptions	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	DCH	
- UL Transport channel identity	5	
- Logical channel identity	3	
- CHOICE RLC size list	Configured	
- MAC logical channel priority	3	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	DCH	
- DL DCH Transport channel identity	10	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	3	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	RACH	
- UL Transport channel identity	Not Present	
- Logical channel identity	3	
- CHOICE RLC size list	Explicit List	
- RLC size index	According to clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)	
- MAC logical channel priority	3	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	FACH	
- DL DCH Transport channel identity	Not Present	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	3	
- Signalling RB information to setup	(AM DCCH for NAS_DT Low priority)	
- RB identity	Not Present	
- CHOICE RLC info type		
- RLC info		
- CHOICE Uplink RLC mode	AM RLC	
- Transmission RLC discard		
- SDU discard mode	No discard	

Information Element	Value/remark	Version
- MAX_DAT	15	
- Transmission window size	32	
- Timer_RST	500	
- Max_RST	1	
- Polling info		
- Timer_poll_prohibit	200	
- Timer_poll	200	
- Poll_PDU	Not present	
- Poll_SDU	1	
- Last transmission PDU poll	TRUE	
- Last retransmission PDU poll	TRUE	
- Poll_Window	99	
- Timer_poll_periodic	Not Present	
- CHOICE Downlink RLC mode	AM RLC	
- In-sequence delivery	TRUE	
- Receiving window size	32	
- Downlink RLC status info		
- Timer_status_prohibit	200	
- Timer_EPC	Not Present	
- Missing PDU indicator	TRUE	
- Timer_STATUS_periodic	Not Present	
- RB mapping info		
- Information for each multiplexing option	2 RBMuxOptions	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	DCH	
- UL Transport channel identity	5	
- Logical channel identity	4	
- CHOICE RLC size list	Configured	
- MAC logical channel priority	4	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	DCH	
- DL DCH Transport channel identity	10	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	4	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	RACH	
- UL Transport channel identity	Not Present	
- Logical channel identity	4	
- CHOICE RLC size list	Explicit List	
- RLC size index	According to clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)	
- MAC logical channel priority	4	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	FACH	
- DL DCH Transport channel identity	Not Present	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	4	
UL Transport channel information for all transport channels		
- PRACH TFCS	Not Present	
- CHOICE Mode	FDD	
- TFC subset	Nor Present	
- UL DCH TFCS		
- CHOICE TFCI signalling	Normal	
- TFCI Field 1 information		
- CHOICE TFCS representation	Complete	

Information Element	Value/remark	Version
- TFCS complete reconfigure		
- CHOICE CTFC Size	2bit CTFC	
- CTFC information	This IE is repeated for TFC numbers according to clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)	
- CTFC	According to clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)	
- Power offset information		
- CHOICE Gain Factors	Computed Gain Factors (The last TFC is set to Signalled Gain Factors)	
- Gain factor ßc	11 (below 64 kbps) 9 (higher than 64 kbps) (Not Present if the above is set to Computed Gain Factors)	
- Gain factor ßd	15 (Not Present if the above is set to Computed Gain Factors)	
- Reference TFC ID	0	
- CHOICE mode	FDD	
- Power offset Pp-m	Not Present	
Added or Reconfigured UL TrCH information		
- Uplink transport channel type	DCH	
- UL Transport channel identity	5	
- TFS		
- CHOICE Transport channel type	Dedicated transport channels	
- Dynamic Transport format information		
- RLC size	According to clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)	
- Number of TBs and TTI lists	(This IE is repeated for TFI number)	
- Transmission Time Interval	According to clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)	
- Number of Transport blocks	According to clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)	
- CHOICE Logical channel list	All	
- Semi-static Transport Format information		
- Transmission time interval	According to clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)	
- Type of channel coding	According to clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)	
- Coding Rate	According to clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)	
- Rate matching attribute	According to clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)	
- CRC size	According to clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)	
DL Transport channel information common for all transport channel		
- SCCPCH TFCS	Not Present	
- CHOICE mode	FDD	
- CHOICE DL parameters	Same as UL	
Added or Reconfigured DL TrCH information		
- Downlink transport channel type	DCH	
- DL Transport channel identity	10	
- CHOICE DL parameters	Same as UL	
- Uplink transport channel type	DCH	
- UL TrCH Identity	5	
- DCH quality target		
- BLER Quality value	-2.0	
Frequency info	Not Present	
Maximum allowed UL TX power	Not Present	
Uplink DPCH info		
- Uplink DPCH power control info		
- DPCCH power offset	-80dB (i.e. ASN.1 IE value of -40)	
- PC Preamble	1 frame	
- SRB delay	7 frames	
- Power Control Algorithm	Algorithm1	

Information Element	Value/remark	Version
- TPC step size	1dB	
- Scrambling code type	Long	
- Scrambling code number	0 (0 to 16777215)	
- Number of DPDCH	Not Present(1)	
- Spreading factor	According to clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)	
- TFCI existence	According to clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)	
- Number of FBI bit	According to clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)	
- Puncturing Limit	According to clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)	
Downlink information common for all radio links		
- Downlink DPCH info common for all RL		
- Timing Indication	Initialize	
- CFN-targetSFN frame offset	Not Present	
- CHOICE mode	FDD	
- Downlink DPCH power control information		
- DPC mode	0 (single)	
- Power offset $P_{Pilot-DPDCH}$	0	
- DL rate matching restriction information	Not Present	
- Spreading factor	According to clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)	
- Fixed or Flexible Position	According to clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)	
- TFCI existence	According to clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)	
- CHOICE SF	According to clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)	
- DPCH compressed mode info	Not Present	
- TX Diversity mode	None	
- SSDT information	Not Present	R99 and Rel-4 only
- Default DPCH Offset Value	Arbitrary set to value 0..306688 by step of 512	
Downlink information for each radio links list		
- Downlink information for each radio links		
- CHOICE mode	FDD	
- Primary CPICH info		
- Primary scrambling code	Reference to clause 6.1 "Default settings (FDD)"	
- PDSCH with SHO DCH info	Not Present	R99 and Rel-4 only
- PDSCH code mapping	Not Present	R99 and Rel-4 only
- Downlink DPCH info for each RL		
- Primary CPICH usage for channel estimation	Primary CPICH may be used	
- DPCH frame offset	Set to value: Default DPCH Offset Value mod 38 400	
- Secondary CPICH info	Not Present	
- DL channelisation code		
- Secondary scrambling code	1	
- Spreading factor	According to clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)	
- Code number	0	
- Scrambling code change	Not Present	
- TPC combination index	0	
- SSDT Cell Identity	Not Present	R99 and Rel-4 only
- Closed loop timing adjustment mode	Not Present	
- SCCPCH information for FACH	Not Present	R99 and Rel-4 only

Contents of RRC CONNECTION SETUP message: UM (Transition to CELL_FACH)

Information Element	Value/remark	Version
Message Type		
Initial UE identity	Select the same identity as in the IE "Initial UE Identity" in received RRC CONNECTION REQUEST" message	
RRC transaction identifier	Arbitrarily selects an integer between 0 and 3	
Activation time	Not Present (Now)	
New U-RNTI		
- SRNC identity	0000 0000 0001B	
- S-RNTI	0000 0000 0000 0000 0001B	
New C-RNTI	0000 0000 0000 0001B	
RRC state indicator	CELL_FACH	
UTRAN DRX cycle length coefficient	9	
Capability update requirement		
- UE radio access FDD capability update requirement	TRUE	
- UE radio access TDD capability update requirement	FALSE	
- System specific capability update requirement list	GSM	
CHOICE *specification mode*	Complete specification	REL-5
- Complete specification		REL-5
- Signalling RB information to setup	(UM DCCH for RRC)	
- RB identity	Not present (Deprecated alternative value "1")	
- CHOICE RLC info type	RLC info	
- CHOICE Uplink RLC mode	UM RLC	
- Transmission RLC discard	timerBasedNoExplicit : dt50	
- SDU discard mode	Not present	
- CHOICE Downlink RLC mode	UM RLC	
- RB mapping info		
- Information for each multiplexing option	2 RBMuxOptions	
- RLC logical channel mapping indicator	Not Present	
- Number of uplink RLC logical channels	1	
- Uplink transport channel type	DCH	
- UL Transport channel identity	5	
- Logical channel identity	1	
- CHOICE RLC size list	Configured	
- MAC logical channel priority	1	
- Downlink RLC logical channel info		
- Number of downlink RLC logical channels	1	
- Downlink transport channel type	DCH	
- DL DCH Transport channel identity	10	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	1	
- RLC logical channel mapping indicator	Not Present	
- Number of uplink RLC logical channels	1	
- Uplink transport channel type	RACH	
- UL Transport channel identity	Not Present	
- Logical channel identity	1	
- CHOICE RLC size list	Explicit list	
- RLC size index	According to clause 6.10.2.4.4.1	
- MAC logical channel priority	1	
- Downlink RLC logical channel info		
- Number of downlink RLC logical channels	1	
- Downlink transport channel type	FACH	
- DL DCH Transport channel identity	Not Present	

Information Element	Value/remark	Version
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	1	
- Signalling RB information to setup	(AM DCCH for RRC)	
- RB identity	Not Present (Deprecated alternative value "2")	
- CHOICE RLC info type	RLC info	
- CHOICE Uplink RLC mode	AM RLC	
- Transmission RLC discard		
- SDU discard mode	No Discard	
- MAX_DAT	15	
- Transmission window size	32	
- Timer_RST	500	
- Max_RST	1	
- Polling info		
- Timer_poll_prohibit	200	
- Timer_poll	200	
- Poll_PDU	Not Present	
- Poll_SDU	1	
- Last transmission PDU poll	TRUE	
- Last retransmission PDU poll	TRUE	
- Poll_Windows	99	
- Timer_poll_periodic	Not Present	
- CHOICE Downlink RLC mode	AM RLC	
- In-sequence delivery	TRUE	
- Receiving window size	32	
- Downlink RLC status info		
- Timer_status_prohibit	200	
- Timer_EPC	Not Present	
- Missing PDU indicator	TRUE	
- Timer_STATUS_periodic	Not Present	
- RB mapping info		
- Information for each multiplexing option	2 RBMuxOptions	
- RLC logical channel mapping indicator	Not Present	
- Number of uplink RLC logical channels	1	
- Uplink transport channel type	DCH	
- UL Transport channel identity	5	
- Logical channel identity	2	
- CHOICE RLC size list	Configured	
- MAC logical channel priority	2	
- Downlink RLC logical channel info		
- Number of downlink RLC logical channels	1	
- Downlink transport channel type	DCH	
- DL DCH Transport channel identity	10	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	2	
- RLC logical channel mapping indicator	Not Present	
- Number of uplink RLC logical channels	1	
- Uplink transport channel type	RACH	
- UL Transport channel identity	Not Present	
- Logical channel identity	2	
- CHOICE RLC size list	Explicit list	
- RLC size index	According to clause 6.10.2.4.4.1	
- MAC logical channel priority	2	
- Downlink RLC logical channel info		
- Number of downlink RLC logical channels	1	
- Downlink transport channel type	FACH	
- DL DCH Transport channel identity	Not Present	
- DL DSCH Transport channel identity	Not Present	

Information Element	Value/remark	Version
- Logical channel identity	2	
Signalling RB information to setup	(AM DCCH for NAS_DT High priority)	
- RB identity	Not present (Deprecated alternative value "3")	
- CHOICE RLC info type	RLC info	
- CHOICE Uplink RLC mode	AM RLC	
- Transmission RLC discard		
- SDU discard mode	No Discard	
- MAX_DAT	15	
- Transmission window size	32	
- Timer_RST	500	
- Max_RST	1	
- Polling info		
- Timer_poll_prohibit	200	
- Timer_poll	200	
- Poll_PDU	Not Present	
- Poll_SDU	1	
- Last transmission PDU poll	TRUE	
- Last retransmission PDU poll	TRUE	
- Poll_Windows	99	
- Timer_poll_periodic	Not Present	
- CHOICE Downlink RLC mode	AM RLC	
- In-sequence delivery	TRUE	
- Receiving window size	32	
- Downlink RLC status info		
- Timer_status_prohibit	200	
- Timer_EPC	Not Present	
- Missing PDU indicator	TRUE	
- Timer_STATUS_periodic	Not Present	
- RB mapping info		
- Information for each multiplexing option	2 RBMuxOptions	
- RLC logical channel mapping indicator	Not Present	
- Number of uplink RLC logical channels	1	
- Uplink transport channel type	DCH	
- UL Transport channel identity	5	
- Logical channel identity	3	
- CHOICE RLC size list	Configured	
- MAC logical channel priority	3	
- Downlink RLC logical channel info		
- Number of downlink RLC logical channels	1	
- Downlink transport channel type	DCH	
- DL DCH Transport channel identity	10	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	3	
- RLC logical channel mapping indicator	Not Present	
- Number of uplink RLC logical channels	1	
- Uplink transport channel type	RACH	
- UL DCH Transport channel identity	Not Present	
- Logical channel identity	3	
- CHOICE RLC size list	Explicit list	
- RLC size index	According to clause 6.10.2.4.4.1	
- MAC logical channel priority	3	
- Downlink RLC logical channel info		
- Number of downlink RLC logical channels	1	
- Downlink transport channel type	FACH	
- DL DCH Transport channel identity	Not Present	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	3	
- Signalling RB information to setup	(AM DCCH for NAS_DT Low priority)	

Information Element	Value/remark	Version
- RB identity	Not Present (Deprecated alternative value "4")	
- CHOICE RLC info type	RLC info	
- CHOICE Uplink RLC mode	AM RLC	
- Transmission RLC discard		
- SDU discard mode	No Discard	
- MAX_DAT	15	
- Transmission window size	32	
- Timer_RST	500	
- Max_RST	1	
- Polling info		
- Timer_poll_prohibit	200	
- Timer_poll	200	
- Poll_PDU	Not Present	
- Poll_SDU	1	
- Last transmission PDU poll	TRUE	
- Last retransmission PDU poll	TRUE	
- Poll_Windows	99	
- Timer_poll_periodic	Not Present	
- CHOICE Downlink RLC mode	AM RLC	
- In-sequence delivery	TRUE	
- Receiving window size	32	
- Downlink RLC status info		
- Timer_status_prohibit	200	
- Timer_EPC	Not Present	
- Missing PDU indicator	TRUE	
- Timer_STATUS_periodic	Not Present	
- RB mapping info		
- Information for each multiplexing option	2 RBMuxOptions	
- RLC logical channel mapping indicator	Not Present	
- Number of uplink RLC logical channels	1	
- Uplink transport channel type	DCH	
- UL Transport channel identity	5	
- Logical channel identity	4	
- CHOICE RLC size list	Configured	
- MAC logical channel priority	4	
- Downlink RLC logical channel info		
- Number of downlink RLC logical channels	1	
- Downlink transport channel type	DCH	
- DL DCH Transport channel identity	10	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	4	
- RLC logical channel mapping indicator	Not Present	
- Number of uplink RLC logical channels	1	
- Uplink transport channel type	RACH	
- UL Transport channel identity	Not Present	
- Logical channel identity	4	
- CHOICE RLC size list	Explicit list	
- RLC size index	According to clause 6.10.2.4.4.1	
- MAC logical channel priority	4	
- Downlink RLC logical channel info		
- Number of downlink RLC logical channels	1	
- Downlink transport channel type	FACH	
- DL DCH Transport channel identity	Not Present	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	4	
UL Transport channel information for all transport channels		
- PRACH TFCS	Not Present	

Information Element	Value/remark	Version
- CHOICE Mode	FDD	
- TFC subset	Not Present	
- UL DCH TFCS		
- CHOICE TFCI signalling	Normal	
- TFCI Field 1 information		
- CHOICE TFCS representation	Complete	
- TFCS complete reconfigure		
- CHOICE CTFC Size	2bit CTFC	
- CTFC information	This IE is repeated for TFC numbers according to clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)	
- CTFC	According to clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)	
- Power offset information		
- CHOICE Gain Factors	Computed Gain Factors (The last TFC is set to Signalled Gain Factors)	
- Gain factor ßc	11 (below 64 kbps) 9 (higher than 64 kbps) (Not Present if the above is set to Computed Gain Factors)	
- Gain factor ßd	15 (Not Present if the above is set to Computed Gain Factors)	
- Reference TFC ID	0	
- CHOICE mode	FDD	
- Power offset Pp-m	Not Present	
Added or Reconfigured TrCH information list	TS 25.331 specifies that "Although this IE is not required when the IE "RRC state indicator" is set to "CELL_FACH", need is MP to align with ASN.1"	
- Added or Reconfigured UL TrCH information		
- Uplink transport channel type	DCH	
- UL Transport channel identity	5	
- TFS		
- CHOICE Transport channel type	Dedicated transport channels	
- Dynamic Transport format information		
- RLC Size	bitMode sizeType2 {part1 2, part2 OMIT} This results in an RLC size of 144 bits	
- Number of TBs and TTI List	List with two entry	
- Transmission Time Interval	Not Present	
- Number of Transport blocks	0	
- Transmission Time Interval	Not Present	
- Number of Transport blocks	1	
- CHOICE Logical channel List	ALL	
- Semi-static Transport Format information		
- Transmission time interval	40 ms	
- Type of channel coding	Convolutional	
- Coding Rate	1/3	
- Rate matching attribute	-170	
- CRC size	16	
DL Transport channel information common for all transport channel		
- SCCPCH TFCS	Not Present	
- CHOICE mode	FDD	
- CHOICE DL parameters	Same as UL	
Added or Reconfigured TrCH information list	TS 25.331 specifies that "Although this IE is not required when the IE "RRC state indicator" is set to "CELL_FACH", need is MP to align with ASN.1"	
- Added or Reconfigured DL TrCH information		
- Downlink transport channel type	DCH	
- DL Transport channel identity	10	
- CHOICE DL parameters	Same as UL	
- Uplink Transport channel type	DCH	
- UL TrCH identity	5	
- DCH quality target	Not Present	
Frequency info	Not present	
Maximum allowed UL TX power	Not present	

Information Element	Value/remark	Version
CHOICE channel requirement	Not Present	
Downlink information common for all radio links	Not Present	
Downlink information for each radio link list	Not present	

Contents of RRC CONNECTION SETUP COMPLETE message: AM

Information Element	Value/remark
Message Type	
RRC transaction identifier	The value of this IE is checked to see that it matches the value of the same IE transmitted in the downlink RRC CONNECTION SETUP message.
START list	This IE is checked to see if it is present.
UE radio access capability	Not checked
UE radio access capability extension	Not checked
UE system specific capability	Not checked

Contents of RRC STATUS message: AM

Information Element	Value/remark
Message Type	
Integrity check info	
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.
Identification of received message	Not Checked
Protocol error information	
- Protocol error cause	Refer to test requirement.

Contents of SECURITY MODE COMMAND message: AM

Information Element	Condition	Value/remark
Message Type	A1, A2	
RRC transaction identifier		Arbitrarily selects an integer between 0 and 3
Integrity check info		
- Message authentication code		Set to MAC-I value computed by the SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message Sequence Number		Set to an arbitrarily selected integer between 0 and 15
Security capability		
- Ciphering algorithm capability		
- UEA0		If the UE has indicated support for ciphering algorithm UEA0 in the IE "security capability" in the RRC CONNECTION SETUP COMPLETE message, this IE is set to TRUE.
- UEA1		If the UE has indicated support for ciphering algorithm UEA1 in the IE "security capability" in the RRC CONNECTION SETUP COMPLETE message, this IE is set to TRUE.
- Spare		Spare 2-15 = FALSE
- Integrity protection algorithm capability		0000000000000010B (UIA1)
- UIA1		TRUE
- Spare		Spare 0 and Spare 2-15 = FALSE
Ciphering mode info		This presence of this IE is dependent on IXIT statements in TS 34.123-2. If ciphering is indicated to be active, this IE present with the values of the sub IEs as stated below. Else, this IE is omitted.
- Ciphering mode command		Start/restart
- Ciphering algorithm		UEA0 or UEA1. The indicated algorithm must be one of the algorithms supported by the UE as indicated in the IE "security capability" in the

Information Element	Condition	Value/remark
		RRC CONNECTION SETUP COMPLETE message.
- Ciphering activation time for DPCH		Not Present
- Radio bearer downlink ciphering activation time info		
- Radio bearer activation time		
- RB identity		1
- RLC sequence number		Current RLC SN
- RB identity		2
- RLC sequence number		Current RLC SN+2
- RB identity		3
- RLC sequence number		Current RLC SN
- RB identity		4
- RLC sequence number		Current RLC SN
Integrity protection mode info		
- Integrity protection mode command		Start
- Downlink integrity protection activation info		Not Present
- Integrity protection algorithm		UIA1
- Integrity protection initialisation number		SS selects an arbitrary 32 bits number for FRESH
CN domain identity		CS or PS
UE system specific security capability	A1	Not Checked
UE system specific security capability	A2	
- Inter-RAT UE security capability		
- CHOICE *system*		GSM
- GSM security capability		The indicated algorithms must be the same as the algorithms supported by the UE as indicated in the IE " UE system specific capability " in the RRC CONNECTION SETUP COMPLETE message.

Condition	Explanation
A1	UE not supporting GSM
A2	UE supporting GSM

Contents of SECURITY MODE COMPLETE message: AM

Information Element	Value/remark
Message Type	
RRC transaction identifier	The value of this IE is checked to see that it matches the value of the same IE transmitted in the downlink SECURITY MODE COMMAND message.
Integrity check info	
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.
Uplink integrity protection activation info	Not checked.
Radio bearer uplink ciphering activation time info	If ciphering is not activated in SECURITY MODE COMMAND message, this IE must be absent. Else, SS checks this IE for the presence of activation times for all ciphered uplink RLC-UM and RLC-AM RBs.

Contents of SECURITY MODE FAILURE message: AM

Information Element	Value/remark
Message Type	
RRC transaction identifier	Checked to see if the value is the identical to the same IE in the downlink SECURITY MODE COMMAND message.
Integrity check info	

- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.
Failure cause	Refer to test requirement.

Contents of TRANSPORT CHANNEL RECONFIGURATION message: AM or UM

Information Element	Condition	Value/remark	Version
Message Type	A1, A2, A3, A4, A5, A6		
RRC transaction identifier		Arbitrarily selects an integer between 0 and 3	
Integrity check info			
- message authentication code		SS calculates the value of MAC-I for this message and writes to this IE. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.	
- RRC message sequence number		SS provides the value of this IE, from its internal counter.	
Integrity protection mode info		Not Present	
Ciphering mode info		Not Present	
Activation time	A1, A2, A3	(256+CFN-(CFN MOD 8 + 8))MOD 256	
Activation time	A4, A5, A6	Not Present	
New U-RNTI		Not Present	
New C-RNTI	A1, A2, A3, A4	Not Present	
New C-RNTI	A5, A6	'1010 1010 1010 1010'	
New DSCH-RNTI	A1, A2, A3, A4, A5, A6	Not Present	R99 and Rel-4 only
New H-RNTI	A1, A2, A3, A4, A5, A6	Not Present	REL-5
RRC State indicator	A1, A2, A3, A4	CELL_DCH	
RRC State indicator	A5, A6	CELL_FACH	
UTRAN DRX cycle length coefficient	A1, A2, A3, A4,A5,A6	Not Present	
CN information info		Not Present	
URA identity		Not Present	
Downlink counter synchronization info		Not Present	
UL Transport channel information for all transport channels	A1, A2, A5, A6	Not Present	
UL Transport channel information for all transport channels	A3, A4		
- PRACH TFCS		Not Present	
- CHOICE mode		FDD	
- TFC subset		Not Present	
- UL DCH TFCS			
- CHOICE TFCI signalling		Normal	
- TFCI Field 1 information			
- CHOICE TFCS representation		Complete reconfiguration	
- TFCS complete reconfigure information			
- CHOICE CTFC Size		Number of bits used must be enough to cover all combinations of CTFC from clause 6.10.2.4 Parameter Set.	
- CTFC information		This IE is repeated for TFC numbers and reference to clause 6.10.2.4 Parameter Set	
- CTFC		Reference to clause 6.10.2.4 Parameter Set	
- Power offset information			
- CHOICE Gain Factors		Computed Gain Factors (The last TFC is set to Signalled Gain Factors)	
- Gain factor βc		11 (below 64 kbps) 9 (higher than 64 kbps) (Not Present if the CHOICE Gain Factors	

Information Element	Condition	Value/remark	Version
		is set to ComputedGain Factors)	
- Gain factor βd		15 (Not Present if the CHOICE Gain Factors is set to ComputedGain Factors)	
- Reference TFC ID		0	
- CHOICE mode		FDD	
- Power offset P p-m		Not Present	
Added or Reconfigured UL TrCH information	A1, A2, A5, A6	Not Present	
Added or Reconfigured UL TrCH information	A4	2 TrCHs(DCH for DCCH and DCH for DTCH)	
- Uplink transport channel type		DCH	
- UL Transport channel identity		5	
- TFS			
- CHOICE Transport channel type		Dedicated transport channels	
- Dynamic Transport format information			
- RLC Size		Reference to clause 6.10 Parameter Set	
- Number of TBs and TTI List		(This IE is repeated for TFI number.)	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to clause 6.10 Parameter Set	
- CHOICE Logical channel list		All	
- Semi-static Transport Format information			
- Transmission time interval		Reference to clause 6.10 Parameter Set	
- Type of channel coding		Reference to clause 6.10 Parameter Set	
- Coding Rate		Reference to clause 6.10 Parameter Set	
- Rate matching attribute		Reference to clause 6.10 Parameter Set	
- CRC size		Reference to clause 6.10 Parameter Set	
- Uplink transport channel type		DCH	
- UL Transport channel identity		1	
- TFS			
- CHOICE Transport channel type		Dedicated transport channels	
- Dynamic Transport format information			
- RLC Size		Reference to clause 6.10 Parameter Set	
- Number of TBs and TTI List		(This IE is repeated for TFI number.)	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to clause 6.10 Parameter Set	
- CHOICE Logical channel list		All	
- Semi-static Transport Format information			
- Transmission time interval		Reference to clause 6.10 Parameter Set	
- Type of channel coding		Reference to clause 6.10 Parameter Set	
- Coding Rate		Reference to clause 6.10 Parameter Set	
- Rate matching attribute		Reference to clause 6.10 Parameter Set	
- CRC size		Reference to clause 6.10 Parameter Set	
Added or Reconfigured UL TrCH information	A3	(DCH for DTCH)	
- Uplink transport channel type		DCH	
- UL Transport channel identity		1	
- TFS			
- CHOICE Transport channel type		Dedicated transport channels	
- Dynamic Transport format information			
- RLC Size		Reference to clause 6.10 Parameter Set	
- Number of TBs and TTI List		(This IE is repeated for TFI number.)	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to clause 6.10 Parameter Set	
- CHOICE Logical channel list		All	
- Semi-static Transport Format information			
- Transmission time interval		Reference to clause 6.10 Parameter Set	
- Type of channel coding		Reference to clause 6.10 Parameter Set	
- Coding Rate		Reference to clause 6.10 Parameter Set	
- Rate matching attribute		Reference to clause 6.10 Parameter Set	
- CRC size		Reference to clause 6.10 Parameter Set	

Information Element	Condition	Value/remark	Version
CHOICE *mode*	A1,A2,A3,A4,A5,A6	Not Present	
DL Transport channel information common for all transport channel	A1, A2, A5,A6	Not Present	
DL Transport channel information common for all transport channel	A3,A4		
- SCCPCH TFCS		Not Present	
- CHOICE mode		FDD	
- CHOICE DL parameters		Explicit	
- DL DCH TFCS			
- CHOICE TFCI Signalling		Normal	
- TFCI Field 1 Information			
- CHOICE TFCS representation		Complete reconfiguration	
- TFCS complete reconfigure			
- CHOICE CTFC Size		Number of bits used must be enough to cover all combinations of CTFC from clause 6.10.2.4 Parameter Set.	
- CTFC information		This IE is repeated for TFC numbers and reference to clause 6.10.2.4	
- CTFC		Reference to clause 6.10.2.4 Parameter Set	
- Power offset information		Not Present	
Added or Reconfigured DL TrCH information	A1, A2, A5, A6	Not Present	
Added or Reconfigured DL TrCH information	A4	2 TrCHs(DCH for DCCH and DCH for DTCH)	
- Downlink transport channel type		DCH	
- DL Transport channel identity		10	
- CHOICE DL parameters		Same as UL	
- Uplink transport channel type		DCH	
- UL TrCH identity		5	
- DCH quality target			
- BLER Quality value		Not Present	
- Downlink transport channel type		DCH	
- DL Transport channel identity		6	
- CHOICE DL parameters		Explicit Except for RAB with the symmetric DL and UL rate: Same as UL	
- TFS			
- CHOICE Transport channel type		Dedicated transport channel	
- Dynamic transport format information			
- RLC Size		Reference to clause 6.10 Parameter Set	
- Number of TBs and TTI List		(This IE is repeated for TFI number.)	
- Dynamic transport format information			
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to clause 6.10 Parameter Set	
- Semi-static Transport Format information			
- Transmission time interval		Reference to clause 6.10 Parameter Set	
- Type of channel coding		Reference to clause 6.10 Parameter Set	
- Coding Rate		Reference to clause 6.10 Parameter Set	
- Rate matching attribute		Reference to clause 6.10 Parameter Set	
- CRC size		Reference to clause 6.10 Parameter Set	
- DCH quality target			
- BLER Quality value		-2.0	
Added or Reconfigured DL TrCH information	A3		
- Downlink transport channel type		DCH	
- DL Transport channel identity		6	
- CHOICE DL parameters		Explicit Except for RAB with the symmetric DL and UL rate: Same as UL	
- TFS			
- CHOICE Transport channel type		Dedicated transport channel	
- Dynamic transport format information			
- RLC Size		Reference to clause 6.10 Parameter Set	

Information Element	Condition	Value/remark	Version
- Number of TBs and TTI List		(This IE is repeated for TFI number.)	
- Dynamic transport format information			
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to clause 6.10 Parameter Set	
- Semi-static Transport Format information			
- Transmission time interval		Reference to clause 6.10 Parameter Set	
- Type of channel coding		Reference to clause 6.10 Parameter Set	
- Coding Rate		Reference to clause 6.10 Parameter Set	
- Rate matching attribute		Reference to clause 6.10 Parameter Set	
- CRC size		Reference to clause 6.10 Parameter Set	
- DCH quality target			
- BLER Quality value		-2.0	
Frequency info	A1,A2,A3,A4,A5		
- UARFCN uplink (Nu)		Reference to clause 5.1 Test frequencies	
- UARFCN downlink (Nd)		Reference to clause 5.1 Test frequencies	
Frequency info	A6	Not Present	
Maximum allowed UL TX power	A1,A2,A3,A4,A5,A6	33dBm	
CHOICE *channel requirement*	A5, A6	Not Present	
CHOICE channel requirement	A1, A2, A3, A4	Uplink DPCH info	
-Uplink DPCH power control info			
- DPCCH power offset		-80dB (i.e. ASN.1 IE value of -40)	
- PC Preamble		1 frame	
- SRB delay		7 frames	
- Power Control Algorithm		Algorithm1	
- TPC step size		1dB	
- Δ_{ACK}		Not Present	REL-5
- Δ_{NACK}		Not Present	REL-5
- Ack-Nack repetition factor		Not Present	REL-5
- Scrambling code type		Long	
- Scrambling code number		0 (0 to 16777215)	
- Number of DPDCH		Not Present(1)	
- spreading factor		Reference to clause 6.10 Parameter Set	
- TFCI existence		Reference to clause 6.10 Parameter Set	
- Number of FBI bit		Reference to clause 6.10 Parameter Set	
- Puncturing Limit		Reference to clause 6.10 Parameter Set	
CHOICE Mode	A1,A2,A3,A4,A5,A6	FDD	
- Downlink PDSCH information		Not Present	R99 and Rel-4 only
Downlink HS-PDSCH Information	A1, A2, A3, A4, A5, A6	Not Present	REL-5
Downlink information common for all radio links	A5, A6	Not Present	
Downlink information common for all radio links	A1, A2, A3		
- Downlink DPCH info common for all RL			
- Timing indicator		Maintain	
- CFN-targetSFN frame offset		Not Present	
- Downlink DPCH power control information			
- DPC mode		0 (single)	
- CHOICE mode		FDD	
- Power offset $P_{Pilot-DPDCH}$		0	
- DL rate matching restriction information		Not Present	
- Spreading factor		Reference to clause 6.10 Parameter Set	
- Fixed or Flexible Position		Reference to clause 6.10 Parameter Set	
- TFCI existence		Reference to clause 6.10 Parameter Set	
- CHOICE SF		Reference to clause 6.10 Parameter Set	
- DPCH compressed mode info		Not Present	
- TX Diversity mode		None	
- SSDT information		Not Present	R99 and Rel-

Information Element	Condition	Value/remark	Version
			4 only
- Default DPCH Offset Value		Not Present	
- MAC-hs reset indicator		Not Present	REL-5
Downlink information common for all radio links	A4		
- Downlink DPCH info common for all RL			
- Timing indicator		Initialize	
- CFN-targetSFN frame offset		Not Present	
- Downlink DPCH power control information			
- DPC mode		0 (single)	
- CHOICE mode		FDD	
- Power offset $P_{Pilot-DPDCH}$		0	
- DL rate matching restriction information		Not Present	
- Spreading factor		Reference to clause 6.10 Parameter Set	
- Fixed or Flexible Position		Reference to clause 6.10 Parameter Set	
- TFCI existence		Reference to clause 6.10 Parameter Set	
- CHOICE SF		Reference to clause 6.10 Parameter Set	
- DPCH compressed mode info		Not Present	
- TX Diversity mode		None	
- SSDT information		Not Present	R99 and Rel-4 only
- Default DPCH Offset Value		Arbitrary set to value 0..306688 by step of 512	
- MAC-hs reset indicator		Not Present	REL-5
Downlink information for each radio link list	A1, A2, A3		
- Downlink information for each radio links			
- CHOICE mode		FDD	
- Primary CPICH info			
- Primary scrambling code		Ref. to the Default setting in clause 6.1 (FDD)	
- PDSCH with SHO DCH info		Not Present	R99 and Rel-4 only
- PDSCH code mapping		Not Present	R99 and Rel-4 only
- Serving HS-DSCH radio link indicator		FALSE	REL-5
- Downlink DPCH info for each RL			
- Primary CPICH usage for channel estimation		Primary CPICH may be used	
- DPCH frame offset		Set to value Default DPCH Offset Value (as currently stored in SS) mod 38 400	
- Power offset $P_{Pilot-DPDCH}$		0	
- Secondary CPICH info		Not Present	
- DL channelisation code			
- Secondary scrambling code		4	
- Spreading factor		Reference to clause 6.10 Parameter Set	
- Code number		0	
- Scrambling code change		No change	
- TPC combination index		0	
- SSDT Cell Identity		Not Present	R99 and Rel-4 only
- Closed loop timing adjustment mode		Not Present	
- SCCPCH information for FACH		Not Present	R99 and Rel-4 only
Downlink information for each radio link list	A4		
- Downlink information for each radio link			
- CHOICE mode		FDD	
- Primary CPICH info			
- Primary scrambling code		Ref. to the Default setting in clause 6.1 (FDD)	
- PDSCH with SHO DCH info		Not Present	R99 and Rel-4 only
- PDSCH code mapping		Not Present	R99 and Rel-4 only
- Serving HS-DSCH radio link indicator		FALSE	REL-5

Information Element	Condition	Value/remark	Version
- Downlink DPCH info for each RL			
- Primary CPICH usage for channel estimation		Primary CPICH may be used	
- DPCH frame offset		Set to value: Default DPCH Offset Value mod 38 400	
- Power offset $P_{Pilot-DPDCH}$		0	
- Secondary CPICH info		Not Present	
- DL channelisation code			
- Secondary scrambling code		4	
- Spreading factor		Reference to clause 6.10 Parameter Set	
- Code number		0	
- Scrambling code change		No change	
- TPC combination index		0	
- SSDT Cell Identity		Not Present	R99 and Rel-4 only
- Closed loop timing adjustment mode		Not Present	
- SCCPCH information for FACH		Not Present	R99 and Rel-4 only
- Downlink information for each radio link	A5		
- Choice mode		FDD	
- Primary CPICH info			
- Primary scrambling code		Ref. to the Default setting in clause 6.1 (FDD)	
- PDSCH with SHO DCH info		Not Present	R99 and Rel-4 only
- PDSCH code mapping		Not Present	R99 and Rel-4 only
- Serving HS-DSCH radio link indicator		FALSE	REL-5
- Downlink DPCH info for each RL		Not present	
- SCCPCH information for FACH		Not Present	R99 and Rel-4 only
- Downlink information for each radio link	A6	Not Present	

Condition	Explanation
A1	This IE need for "Non speech in CS"
A2	This IE need for "Speech in CS"
A3	This IE need for "Packet to CELL_DCH from CELL_DCH in PS"
A4	This IE need for "Packet to CELL_DCH from CELL_FACH in PS"
A5	This IE need for "Packet to CELL_FACH from CELL_DCH in PS"
A6	This IE need for "Packet to CELL_FACH from CELL_FACH in PS"

Contents of TRANSPORT CHANNEL RECONFIGURATION COMPLETE message: AM

Information Element	Value/remark
Message Type	
RRC transaction identifier	Checked to see if the value is identical to the same IE in the downlink TRANSPORT CHANNEL RECONFIGURATION message
Integrity check info	
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.
Uplink integrity protection activation info	Not checked
CHOICE mode	FDD
COUNT-C activation time	Not checked
Radio bearer uplink ciphering activation time info	Not checked
Uplink counter synchronization info	Not present

Contents of TRANSPORT CHANNEL RECONFIGURATION FAILURE message: AM

Information Element	Value/remark

Message Type	
RRC transaction identitifer	Checked to see if it is set to identical value of the same IE in the downlink TRANSPORT CHANNEL RECONFIGURATION message.
Integrity check info	
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.
Failure cause	Checked to see if it meets test requirement

Contents of TRANSPORT FORMAT COMBINATION CONTROL message: AM or UM (in CELL_DCH)

Information Element	Value/remark
Message Type	
RRC transaction identifier	Arbitrarily selects an integer between 0 and 3
Integrity check info	
- Message authentication code	SS calculates the value of MAC-I for this message and writes to this IE. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	SS provides the value of this IE, from its internal counter.
CHOICE mode	FDD
DPCH/PUSCH TFCS in Uplink	
- CHOICE *Subset representation*	Allowed transport format combination list
- Allowed Transport format combination	0 (The TFC is constructed from ALL TF0)
Activation time for TFC subset	Not Present
TFC Control duration	Not Present

Contents of TRANSPORT FORMAT COMBINATION CONTROL FAILURE message: AM

Information Element	Value/remark
Message Type	
RRC transaction identitifer	Checked to see if it is set to identical value of the same IE in the downlink TRANSPORT CHANNEL RECONFIGURATION message.
Integrity check info	
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.
Failure cause	Checked to see if it meets test requirement

Contents of UE CAPABILITY ENQUIRY message: AM or UM

Information Element	Value/remark
Message Type	
RRC transaction identifier	Arbitrarily selects an integer between 0 and 3
Integrity check info	
- Message authentication code	SS calculates the value of MAC-I for this message and writes to this IE. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	SS provides the value of this IE, from its internal counter.
Capability update requirement	
- UE radio access FDD capability update requirement	TRUE
- UE radio access TDD capability update requirement	FALSE
- System specific capability update requirement list	Not Present

Contents of UE CAPABILITY INFORMATION message: AM

Information Element	Value/remark
Message Type	

Information Element	Value/remark
RRC transaction identifier	Checked to see if the value is identical to the same IE in the downlink UE CAPABILITY ENQUIRY message.
Integrity check info	
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.
UE radio access capability	Value will be checked. Stated capability must be compatible with 3GPP TS 34.123-2 [3] (ICS statements) and the user settings
- Access stratum release indicator	
- PDCP Capability	
- RLC Capability	
- Transport channel capability	
- RF Capability FDD	
- RF Capability TDD	
- Physical channel capability	
- UE multi-mode/multi-RAT capability	
- Security Capability	
- UE positioning Capability	
- Measurement capability	
UE radio access capability extension	Value will be checked. Stated capability must be compatible with 3GPP TS 34.123-2 [3] (ICS statements) and the user settings
UE system specific capability	Not Checked

Contents of UE CAPABILITY INFORMATION CONFIRM message: UM

Information Element	Value/remark
Message Type	
RRC transaction identifier	Set to the same value as received in the UE CAPABILITY INFORMATON message.
Integrity check info	
- Message authentication code	SS calculates the value of MAC-I for this message and writes to this IE. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	SS provides the value of this IE, from its internal counter.

Contents of URA UPDATE message: TM

Information Element	Value/remark
Message Type	
U-RNTI	
- SRNC identity	0000 0000 0001B
- S-RNTI	0000 0000 0000 0000 0001B
RRC transaction identifier	Checked to see if it is absent
Integrity check info	
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.
URA update cause	See the test content
Protocol error indicator	Checked to see if it is absent or set to 'FALSE'
Protocol error information	Checked to see if it is absent

Contents of URA UPDATE CONFIRM message: UM

Information Element	Value/remark
Message Type	
U-RNTI	If this message is sent on CCCH, use the following values.

	Else, this IE is absent.
- SRNC identity	0000 0000 0001B
- S-RNTI	0000 0000 0000 0000 0001B
RRC transaction identifier	Arbitrarily selects and integer between 0 and 3
Integrity check info	
- message authentication code	SS calculates the value of MAC-I for this message and writes to this IE. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC message sequence number	SS provides the value of this IE, from its internal counter.
Integrity protection mode info	Not Present
Ciphering mode info	Not Present
New U-RNTI	Not Present
New C-RNTI	Not Present
RRC state indicator	URA_PCH
UTRAN DRX cycle length coefficient	3
CN information info	Not Present
URA identity	Not Present
Downlink counter synchronization info	Not Present

Contents of UPLINK DIRECT TRANSFER message: AM

Information Element	Value/remark
Message Type	
Integrity check info	
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.
CN domain identity	Checked to see if set to a CN domain for which a signalling connection exists
NAS message	Set according to that indicated in specific message content clause
Measured results on RACH	Not checked

Contents of UTRAN MOBILITY INFORMATION message: AM or UM

Information Element	Value/remark
Message Type	
Integrity check info	
- message authentication code	SS calculates the value of MAC-I for this message and writes to this IE. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC message sequence number	SS provides the value of this IE, from its internal counter.
RRC transaction identifier	Arbitrarily selects an integer between 0 and 3
Integrity protection mode info	Not Present
Ciphering mode info	Not Present
New U-RNTI	See the test content
New C-RNTI	See the test content
UE Timers and constants in connected mode	
- T301	2 000 milliseconds
- N301	2
- T302	4 000 milliseconds
- N302	3
- T304	1 000 milliseconds
- N304	3
- T305	60 minutes
- T307	50 seconds
- T308	320 milliseconds
- T309	8 seconds
- T310	320 milliseconds
- N310	5
- T311	500 milliseconds
- T312	5 seconds

Information Element	Value/remark
- N312	200
- T313	10 seconds
- N313	200
- T314	20 seconds
- T315	30 seconds
- N315	200
- T316	50 seconds
- T317	1 800 seconds
CN information info	Not Present
URA identity	Not present
Downlink counter synchronization info	Not Present

Contents of UTRAN MOBILITY INFORMATION CONFIRM message: AM

Information Element	Value/remark
Message Type	
RRC transaction identifier	Checked to see if it matches the value of the same IE in downlink UTRAN MOBILITY INFORMATION message
Integrity check info	
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.
Uplink integrity protection activation info	Not checked
COUNT-C activation time	Not checked
Radio bearer uplink ciphering activation time info	Not checked
Uplink counter synchronization info	Not present

Contents of UTRAN MOBILITY INFORMATION FAILURE message: AM

Information Element	Value/remark
Message Type	
RRC transaction identifier	Checked to see if it matches the value of the same IE in downlink UTRAN MOBILITY INFORMATION message
Integrity check info	
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.
Failure Cause	Checked to see if it meets test requirement

9.1.2 Default Message Contents for Signalling (TDD)

Contents of RRC STATUS message: AM

Information Element	Value/remark
Message Type	
Integrity check info	
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.
Identification of received message	Not checked
Protocol error information	
- Protocol error cause	Refer to test requirement.

Contents of SECURITY MODE FAILURE message: AM

Information Element	Value/remark
Message Type	
UE information elements	
RRC transaction identifier	The value of this IE is checked to see that it matches the value of the same IE transmitted in the downlink SECURITY MODE COMMAND message.
Integrity check info	
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.
Failure cause	Refer to test requirement.

Contents of URA UPDATE message: TM

Information Element	Value/remark
Message Type	
U-RNTI	Checked to see if it is set to the following values
- SRNC identity	0000 0000 0001B
- S-RNTI	0000 0000 0000 0000 0001B
RRC transaction identifier	Checked to see if it is absent
Integrity check info	
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.
URA update cause	See the test content
Protocol error indicator	Checked to see if it is absent or set to 'FALSE'
Protocol error information	Checked to see if it is absent

Contents of URA UPDATE CONFIRM message: UM

Information Element	Value/remark
Message Type	
U-RNTI	If this message is sent on CCCH, use the following values. Else, this IE is absent.
- SRNC identity	0000 0000 0001B
- S-RNTI	0000 0000 0000 0000 0001B
RRC transaction identifier	Arbitrarily selects and integer between 0 and 3
Integrity check info	
- Message authentication code	Set to MAC-I value computed by the SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message Sequence Number	Set to an arbitrarily selected integer between 0 and 15
Integrity protection mode info	Not present
Ciphering mode info	Not present
New U-RNTI	Not present
New C-RNTI	Not present
RRC State Indicator	URA_PCH
UTRAN DRX cycle length coefficient	3
CN Information info	Not present
URA identity	See the test content
Downlink counter synchronization info	Not present

Contents of UPLINK DIRECT TRANSFER message: AM

Information Element	Value/remark
Message Type	
Integrity check info	
- Message authentication code	This IE is checked to see if it is present. The value is compared

	against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.
CN domain identity	Checked to see if set to a CN domain for which a signalling connection exists
NAS message	Set according to that indicated in specific message content for each test case
Measured results on RACH	Not checked

Contents of UTRAN MOBILITY INFORMATION message: AM or UM

Information Element	Value/remark
Message Type	
Integrity check info	
- Message authentication code	Set to MAC-I value computed by the SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message Sequence Number	Set to an arbitrarily selected integer between 0 and 15
RRC transaction identifier	Arbitrarily selects and integer between 0 and 3
Integrity protection mode info	Not present
Ciphering mode info	Not present
New U-RNTI	See the test content
New C-RNTI	See the test content
UE Timers and constants in connected mode	
- T301	2 000 milliseconds
- N301	2
- T302	4 000 milliseconds
- N302	3
- T304	1 000 milliseconds
- N304	3
- T305	60 minutes
- T307	50 seconds
- T308	320 milliseconds
- T309	8 seconds
- T310	320 milliseconds
- N310	5
- T311	500 milliseconds
- T312	5 seconds
- N312	200
- T313	10 seconds
- N313	200
- T314	20 seconds
- T315	30 seconds
- N315	200
- T316	50 seconds
- T317	1 800 seconds
CN Information info	Not present
URA identity	Not present
Downlink counter synchronization info	Not present

Contents of UTRAN MOBILITY INFORMATION CONFIRM message: AM

Information Element	Value/remark
Message Type	
RRC transaction identifier	Checked to see if it matches the value of the same IE in downlink UTRAN MOBILITY INFORMATION message
Integrity check info	
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.
Uplink integrity protection activation info	Not checked
COUNT-C activation time	Not checked

Information Element	Value/remark
Radio bearer uplink ciphering activation time info	Not checked
Uplink counter synchronization info	Not checked

Contents of UE CAPABILITY ENQUIRY message

Information Element	Value/remark
Message Type	UE CAPABILITY ENQUIRY
Integrity check info	Not Present
- Message authentication code	If present, SS calculates the value of MAC-I for this message and writes to this IE. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	If present, SS provides the value of this IE, from its internal counter.
RRC transaction identifier	Arbitrarily selects an integer between 0 and 3
Capability update requirement	
- UE radio access FDD capability update requirement	FALSE
- UE radio access 3.84 Mcps TDD capability update requirement	FALSE
- UE radio access 1.28 Mcps TDD capability update requirement	TRUE
- System specific capability update requirement list	Not Present

Contents of UE CAPABILITY INFORMATION message (1.28 Mpcs TDD)

Information Element	Value/remark
Message Type	UE CAPABILITY INFORMATION
Integrity check info	Not Present
- Message authentication code	If present, SS calculates the value of MAC-I for this message and writes to this IE. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	If present, SS provides the value of this IE, from its internal counter.
RRC transaction identifier	Checked to see if the value is identical to the same IE in the downlink UE CAPABILITY ENQUIRY message.
UE radio access capability	Present
- Access stratum release indicator	REL-5
- DL capability with simultaneous HS-DSCH configuration	Not Present
- PDCP capability	
- Support for lossless SRNS relocation	TRUE
- Support for RFC2507	TRUE
- Max HC context space	512
- Support for RFC3095	FALSE
- RLC capability	
- Total RLC AM buffer size	150
- Maximum RLC AM Window Size	2 047
- Maximum number of AM entities	30
- Transport channel capability	
- Downlink transport channel capability information elements	
- Max number of bits received	640
- Max convolutionally coded bits received	6 400
- Max turbo coded bits received	6 400
- Max number of simultaneous transport channels	8
- Maximum number of simultaneous CCtrCH	1
- Max number of received transport blocks	32
- Max number of TFC	128
- Max number of TF	64
- Turbo decoding supported	TRUE
- Uplink transport channel capability information elements	
- Max number of bits transmitted	6 400
- Max convolutionally coded bits transmitted	6 400
- Max turbo coded bits transmitted	6 400

Information Element	Value/remark
- Max number of simultaneous transport channels	8
- Max number of simultaneous CCTrCH of DCH	1
- Max number of transmitted transport blocks	16
- max number of TFC	64
- Max number of TF	32
- Turbo coding supported	TRUE
- RF capability FDD	Not Present
- RF capability TDD	Present
- UE power class	1
- Radio frequency bands	a
- Chip rate capability	1.28 Mcps
- Physical channel capability	
-Downlink physical channel capability information	
- FDD physical channel capability	Not Present
- 3.84 Mcps TDD downlink physical channel capability	Not Present
- 1.28 Mcps TDD downlink physical channel capability	Present
- maxTS per subFrame	6
- max physical channel per frame	96
- min. SF	16
- Support of PDSCH	FALSE
- Support of HS-PDSCH	Unsupported
- max. physical channel per TS	16
- Support of 8psk	FALSE
-Uplink physical channel capability information	
- FDD physical channel capability	Not Present
- 3.84 Mcps TDD uplink physical channel capability	Not Present
- 1.28 Mcps TDD uplink physical channel capability	Present
- maxTS per subFrame	6
- max physical channel per timeslot	2
- min. SF	16
- Support of PDSCH	FALSE
- max. physical channel per TS	16
- Support of 8psk	FALSE
- UE multi-mode/multi-RAT capability	
- MultiRAT capability List	
- Support of GSM	FALSE
- Support of Multicarrier	TRUE
- MultiMode capability	TDD
- Support of UTRAN to GERAN NACC	FALSE
- Security capability	
- Ciphering algorithm capability	
- UEA0	FALSE
- UEA1	FALSE
- Spare	FALSE
- Integrity protection algorithm	
- UIA1	FALSE
- Spare	FALSE
- UE positioning capability	
- Standalone location method(s) supported	FALSE
- UE based OTDOA supported	FASLE
- Network Assisted GPS support	None
- Support for GPS timing of cell frames measurement	FALSE
- Support for IPDL	FALSE
- Support for RX-TX time difference type2 measurement	FALSE
- Support for Up measurement validaity in CELL-PCH and URA-PCH states	FALSE
- Measurement capability	Not Present
UE system specific capability	Not present

Contents of UE CAPABILITY INFORMATION CONFIRM message

Information Element	Value/remark

Information Element	Value/remark
Message Type	UE CAPABILITY INFORMATION
Integrity check info	Not Present
- Message authentication code	If present, SS calculates the value of MAC-I for this message and writes to this IE. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	If present, SS provides the value of this IE, from its internal counter.
RRC transaction identifier	Checked to see if the value is identical to the same IE in the downlink UE CAPABILITY ENQUIRY message.

Contents of TRANSPORT CHANNEL RECONFIGURATION message: AM or UM (3.84 Mcps TDD)

Information Element	Condition	Value/remark	Version
Message Type	A1, A2, A3, A4, A5, A6, A7, A8, A9, A10		
RRC transaction identifier		Arbitrarily selects an integer between 0 and 3	
Integrity check info			
- message authentication code		SS calculates the value of MAC-I for this message and writes to this IE. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.	
- RRC message sequence number		SS provides the value of this IE, from its internal counter.	
Integrity protection mode info		Not Present	
Ciphering mode info		Not Present	
Activation time	A1, A2, A3	(256+CFN-(CFN MOD 8 + 8))MOD 256	
Activation time	A4, A5, A6, A7, A8, A9, A10	Not Present	
New U-RNTI		Not Present	
New C-RNTI	A1, A2, A3, A4, A7, A8, A9, A10	Not Present	
New C-RNTI	A5, A6	'1010 1010 1010 1010'	
New DSCH-RNTI	A1, A2, A3, A4, A5, A6, A7, A8, A9, A10	Not Present	
New H-RNTI	A1, A2, A3, A4, A5, A6, A7, A8, A9, A10	Not Present	REL-5
RRC State indicator	A1, A2, A3, A4	CELL_DCH	
RRC State indicator	A5, A6	CELL_FACH	
RRC State indicator	A7, A8	URA_PCH	
RRC State indicator	A9, A10	CELL_PCH	
UTRAN DRX cycle length coefficient	A1, A2, A3, A4,A5,A6	Not Present	
UTRAN DRX cycle length coefficient	A7, A8, A9, A10	3	
CN information info		Not Present	
URA identity		Not Present	
Downlink counter synchronisation info		Not Present	
UL Transport channel information common for all transport channels	A1, A2, A5, A6	Not Present	

Information Element	Condition	Value/remark	Version
UL Transport channel information common for all transport channels	A3, A4		
- PRACH TFCS		Not Present	
- CHOICE mode		TDD	
- Individual UL CCTrCH information			
- UL TFCS Identity			
- TFCS ID		1	
- Shared Channel Indicator		FALSE	
- UL TFCS			
- CHOICE *TFCI signalling*		Normal	
- TFCI Field 1 Information			
- CHOICE *TFCS representation*		Complete reconfiguration	
- TFCS complete reconfiguration information			
- CHOICE *CTFC Size*		Number of bits used must be enough to cover all combinations of CTFC from TS34.108 clause 6.10.3.4 Parameter Set.	
- CTFC information		This IE is repeated for TFC numbers and reference to TS34.108 clause 6. 10.3.4 Parameter Set	
- CTFC		Reference to TS34.108 clause 6. 10.3.4 Parameter Set	
- Power offset information			
- CHOICE Gain Factors		Computed Gain Factors(The last TFC is set to Signalled Gain Factors)	
- Reference TFC ID		0 Integer(0.. 3)	
- CHOICE Gain Factors		Signalled Gain Factors(Not Present if the CHOICE Gain Factors is set to ComputedGain Factors)	
- CHOICE mode		TDD	
- Gain Factor β_d		15	
- Reference TFC ID		0 Integer(0.. 3)	
- CHOICE mode		TDD	
- TFC subset			
- CHOICE Subset representation		Full transport format combination set	
- TFC subset list		Not Present	
Added or Reconfigured TrCH information list	A1, A2, A5, A6	Not Present	

Information Element	Condition	Value/remark	Version
Added or Reconfigured TrCH information list	A4	2 TrCHs(DCH for DCCH and DCH for DTCH)	
- Added or Reconfigured UL TrCH information			
- Uplink transport channel type		DCH	
- UL Transport channel identity		5	
- TFS			
- CHOICE Transport channel type		Dedicated transport channels	
- Dynamic Transport format information			
- RLC Size		Reference to TS34.108 clause 6.10 Parameter Set	
- Number of TBs and TTI List		This IE is repeated for maxTF number	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to TS34.108 clause 6.10 Parameter Set	
- CHOICE Logical Channel list		All	
- Semi-static Transport Format information			
- Transmission time interval		Reference to TS34.108 clause 6.10 Parameter Set	
- Type of channel coding		Reference to TS34.108 clause 6.10 Parameter Set	
- Coding Rate		Reference to TS34.108 clause 6.10 Parameter Set	
- Rate matching attribute		Reference to TS34.108 clause 6.10 Parameter Set	
- CRC size		Reference to TS34.108 clause 6.10 Parameter Set	
- Uplink transport channel type		DCH	
- UL Transport channel identity		1	
- TFS			
- CHOICE Transport channel type		Dedicated transport channels	
- Dynamic Transport format information			
- RLC Size		Reference to TS34.108 clause 6.10 Parameter Set	
- Number of TBs and TTI List		This IE is repeated for maxTF number	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to TS34.108 clause 6.10 Parameter Set	
- CHOICE Logical Channel list		All	
- Semi-static Transport Format information			
- Transmission time interval		Reference to TS34.108 clause 6.10 Parameter Set	
- Type of channel coding		Reference to TS34.108 clause 6.10 Parameter Set	
- Coding Rate		Reference to TS34.108 clause 6.10 Parameter Set	
- Rate matching attribute		Reference to TS34.108 clause 6.10 Parameter Set	
- CRC size		Reference to TS34.108 clause 6.10 Parameter Set	
Added or Reconfigured TrCH information list	A3	(DCH for DTCH)	
- Added or Reconfigured UL TrCH information			
- Uplink transport channel type		DCH	
- UL Transport channel identity		1	
- TFS			
- CHOICE Transport channel type		Dedicated transport channels	
- Dynamic Transport format information			
- RLC Size		Reference to TS34.108 clause 6.10 Parameter Set	
- Number of TBs and TTI List	1 to maxTF	(This IE is repeated for TF number.)	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to TS34.108 clause 6.10 Parameter Set	
- CHOICE Logical Channel list		All	
- Semi-static Transport Format information			

Information Element	Condition	Value/remark	Version
- Transmission time interval		Reference to TS34.108 clause 6.10 Parameter Set	
- Type of channel coding		Reference to TS34.108 clause 6.10 Parameter Set	
- Coding Rate		Reference to TS34.108 clause 6.10 Parameter Set	
- Rate matching attribute		Reference to TS34.108 clause 6.10 Parameter Set	
- CRC size		Reference to TS34.108 clause 6.10 Parameter Set	
CHOICE *mode*	A1,A2,A3, A4,A5,A6	TDD	
Downlink HS-PDSCH Information			REL-5
DL Transport channel information common for all transport channels	A1, A2, A5,A6	Not Present	
DL Transport channel information common for all transport channels	A3,A4		
- SCCPCH TFCS		Not Present	
- CHOICE mode		TDD	
- Individual DL CCTrCH information			
- DL TFCS Identity			
- TFCS ID		2	
- Shared Channel Indicator		FALSE	
- CHOICE DL parameters		Independent	
- DL TFCS			
- CHOICE TFCI Signalling		Normal	
- TFCI Field 1 Information			
- CHOICE TFCS representation		Complete reconfiguration	
- TFCS complete reconfiguration information			
- CHOICE CTFC Size		Number of bits used must be enough to cover all combinations of CTFC from clause TS34.108 clause 6. 10.3.4 Parameter Set.	
- CTFC information		This IE is repeated for TFC numbers and reference to TS34.108 clause 6. 10.3.4	
- CTFC		Reference to TS34.108 clause 6. 10.3.4 Parameter Set	
- Power offset information		Not Present	
Added or Reconfigured TrCH information list	A1, A2, A5, A6	Not Present	

Information Element	Condition	Value/remark	Version
Added or Reconfigured TrCH information list	A4	2 TrCHs(DCH for DCCH and DCH for DTCH)	
- Added or Reconfigured DL TrCH information			
- Downlink transport channel type		DCH	
- DL Transport channel identity		10	
- CHOICE DL parameters		Same as UL	
- Uplink transport channel type		DCH	
- UL TrCH identity		5	
- DCH quality target			
- BLER Quality value		-2.0 Real(-6.3..0 by step of 0.1)	
- Transparent mode signalling info		Not Present	
- Downlink transport channel type		DCH	
- DL Transport channel identity		6	
- CHOICE DL parameters		Explicit	
- TFS			
- CHOICE Transport channel type		Dedicated transport channels	
- Dynamic transport format information			
- RLC Size		Reference to TS34.108 clause 6.10 Parameter Set	
- Number of TBs and TTI List		(This IE is repeated for TF number.)	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to TS34.108 clause 6.10 Parameter Set	
- Semi-static Transport Format information			
- Transmission time interval		Reference to TS34.108 clause 6.10 Parameter Set	
- Type of channel coding		Reference to TS34.108 clause 6.10 Parameter Set	
- Coding Rate		Reference to TS34.108 clause 6.10 Parameter Set	
- Rate matching attribute		Reference to TS34.108 clause 6.10 Parameter Set	
- CRC size		Reference to TS34.108 clause 6.10 Parameter Set	
- DCH quality target			
- BLER Quality value		-2.0	
Added or Reconfigured TrCH information list	A3		
- Added or Reconfigured DL TrCH information			
- Downlink transport channel type		DCH	
- DL Transport channel identity		6	
- CHOICE DL parameters		Explicit	
- TFS			
- CHOICE Transport channel type		Dedicated transport channels	
- Dynamic transport format information			
- RLC Size		Reference to TS34.108 clause 6.10 Parameter Set	
- Number of TBs and TTI List		(This IE is repeated for TF number.)	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to TS34.108 clause 6.10 Parameter Set	
- Semi-static Transport Format information			
- Transmission time interval		Reference to TS34.108 clause 6.10 Parameter Set	
- Type of channel coding		Reference to TS34.108 clause 6.10 Parameter Set	
- Coding Rate		Reference to TS34.108 clause 6.10 Parameter Set	
- Rate matching attribute		Reference to TS34.108 clause 6.10 Parameter Set	
- CRC size		Reference to TS34.108 clause 6.10 Parameter Set	
- DCH quality target			
- BLER Quality value		-2.0	
- Transparent mode signalling info		Not Present	
Frequency info	A1, A2, A3,		

Information Element	Condition	Value/remark	Version
- Choice mode - UARFCN (Nt)	A4, A5	TDD Reference to clause 5.1 Test frequencies	
Frequency info	A6, A7, A8, A9, A10	Not Present	
Maximum allowed UL TX power		33dBm	
CHOICE *channel requirement*	A5, A6, A7, A8, A9, A10	Not Present	
CHOICE *channel requirement* - Uplink DPCH power control info - CHOICE mode - CHOICE TDD option - UL target SIR - CHOICE UL OL PC info - CHOICE TDD option - Individual timeslot interference info - Individual timeslot interference - CHOICE TDD option - Timeslot number - TDD UL interference - Primary CCPCH Tx Power - CHOICE mode - Uplink Timing Advance Control - CHOICE Timing Advance - CHOICE TDD option	A1, A2, A3, A4	Uplink DPCH info TDD 3.84 Mcps TDD 6 Individually Signalled 3.84 Mcps TDD Reference to TS34.108 clause 6.10.3 Parameter Set (for number of TS's) 3.84 Mcps TDD As required by, Reference to TS34.108 clause 6.10.3 Parameter Set As required by, Reference to TS34.108 clause 6.10.3 Parameter Set (if not specified -60 dBm) 18 Integer(6..43) (-70 dBm Received if pathloss not specified) TDD Enabled 3.84 Mcps TDD	 REL-4 REL-4 REL-4 REL-4
- UL CCTrCH List - TFCS ID		 1	
- UL Target SIR		Real (-11 .. 20 by step of 0.5dB) Reference to TS34.108 Parameter set.	
- Time info - Activation time - Duration - Common timeslot info - 2nd interleaving mode - TFCI coding - Puncturing limit - Repetition period - Repetition length - Uplink DPCH timeslots and code - Dynamic SF usage - First individual timeslot info - Timeslot number - CHOICE TDD option - Timeslot number - TFCI existence - Midamble shift and burst type		 (256+CFN-(CFN MOD 8 + 8))MOD 256 Infinite Default value is "Frame" Reference to TS34.108 clause 6 Parameter set Reference to TS34.108 clause 6 Parameter set 1 null FALSE 3.84 Mcps TDD 1 OR 2 OR 3 TRUE	 REL-4
- CHOICE TDD option - Midamble allocation mode		3.84 Mcps TTD Default midamble	REL-4

Information Element	Condition	Value/remark	Version
- Midamble configuration		16	
- Midamble Shift		Not Present	
- CHOICE TDD option		3.84 Mcps TDD	REL-4
- First timeslot Code List		Repeated (1,2) for each channelisation code assigned in the slot to meet the needs of TS34.108 clause 6 Parameter Set.	
- channelisation codes		(SF/ i) where i denotes an unassigned code matching the SF specified in TS34.108 clause 6 Parameter Set.	
- CHOICE more timeslots		No more timeslots	
- UL CCTrCH List to Remove		Not present	
CHOICE Mode	A1, A2, A3, A4, A5, A6, A7, A8, A9, A10	TDD	
- Downlink PDSCH information		No data	
Downlink HS-PDSCH Information	A1, A2, A3, A4, A5, A6, A7, A8, A9, A10	Not Present	
Downlink information common for all radio links	A1, A2, A3		
- Downlink DPCH info common for all RL			
- Timing indication		Maintain	
- CFN-targetSFN frame offset		Not Present	
- Downlink DPCH power control information			
- CHOICE mode		TDD	
- TPC Step Size		1	
- MAC-d HFN initial value		Not Present	
- CHOICE mode		TDD	
- CHOICE mode		TDD	
- CHOICE TDD option		3.84 Mcps TDD	REL-4
- Default DPCH Offset Value		Not Present	
Downlink information common for all radio links	A4		
- Downlink DPCH info common for all RL			
- Timing indication		Initialise	
- CFN-targetSFN frame offset		Not Present	
- Downlink DPCH power control information			
- CHOICE mode		TDD	
- TPC Step Size		1	
- MAC-d HFN initial value		Not Present	
- CHOICE mode		TDD	
- CHOICE mode		TDD	
- CHOICE TDD option		3.84 Mcps TDD	REL-4
- Default DPCH Offset Value			
- CHOICE mode		TDD	
- Default DPCH Offset Value		0 Integer(0..7)	
Downlink information common for all radio links	A5, A6, A7, A8, A9, A10	Not Present	
Downlink information per radio link list	A1, A2, A3		
- Downlink information for each radio link			
- Choice mode		TDD	
- Primary CCPCH info			
- Choice mode		TDD	
- Choice TDD Option		3.84 Mcps TDD	REL-4
- CHOICE *SyncCase*		Sync Case 1	
- Timeslot		Reference clause 6.1.4 Default settings for cell 1	
- Cell parameters ID		Ref. to the Default setting in TS34.108 clause 6.1 (TDD) Integer(0..127)	
- SCTD indicator		FALSE	
- Downlink DPCH info for each RL			
- CHOICE mode		TDD	
- DL CCTrCh List			

Information Element	Condition	Value/remark	Version
- TFCS ID		2 Integer(1.8)	
- Time info			
- Activation time		Now	
- Duration		Infinite	
- Common timeslot info			
- 2nd interleaving mode		Default value is "Frame"	
- TFCI coding		Reference to TS34.108 clause 6 Parameter set	
- Puncturing limit		Reference to TS34.108 clause 6 Parameter set	
- Repetition period		1	
- Repetition length		NULL	
- Downlink DPCH timeslots and codes			
- First individual timeslot info			
- Timeslot number			
- CHOICE TDD option		3.84 Mcps TDD	REL-4
- Timeslot number		4 OR 5 OR 6	
- TFCI existence		TRUE	
- Midamble shift and burst type			
- CHOICE TDD option		3.84 Mcps TDD	REL-4
- CHOICE *Burst Type*		Type 1	
- Midamble allocation mode		Default midamble	
- Midamble configuration		16	
- Midamble Shift		Not Present	
- CHOICE TDD option		3.84 Mcps TDD	REL-4
- First timeslot channelisation codes		Repeated (1,2) for each channelisation code assigned in the slot to meet the needs of TS34.108 clause 6 Parameter Set.	
- CHOICE codes representation		Bitmap	
- Channelisation codes bitmap		Reference to TS34.108 clause 6.10 Parameter Set	
- CHOICE more timeslots		No more timeslots	
- UL CCTrCH TPC List		Default (is previous list or all defined UL CCTrCHs.)	
- UL TPC TFCS Identity			
- TFCS ID		1	
- Shared Channel Indicator		FALSE	
- DL CCTrCH List to Remove		Not present	
- SCCPCH Information for FACH		Not Present	R99 and Rel-4 only
Downlink information per radio link list	A4		
- Downlink information for each radio link			
- Choice mode		TDD	
- Primary CCPCH info			
- Choice mode		TDD	
- Choice TDD Option		3.84 Mcps TDD	REL-4
- CHOICE *SyncCase*		Sync Case 1	
- Timeslot		Reference clause 6.1.4 Default settings for cell 1	
- Cell parameters ID		Ref. to the Default setting in TS34.108 clause 6.1 (TDD) Integer(0..127)	
- SCTD indicator		FALSE	
- Downlink DPCH info for each RL			
- CHOICE mode		TDD	
- DL CCTrCh List			

Information Element	Condition	Value/remark	Version
- TFCS ID		2 Integer(1.8)	
- Time info			
- Activation time		Now	
- Duration		Infinite	
- Common timeslot info			
- 2nd interleaving mode		Default value is "Frame"	
- TFCI coding		Reference to TS34.108 clause 6 Parameter set	
- Puncturing limit		Reference to TS34.108 clause 6 Parameter set	
- Repetition period		1	
- Repetition length		NULL	
- Downlink DPCH timeslots and codes			
- First individual timeslot info			
- Timeslot number			
- CHOICE TDD option		3.84 Mcps TDD	REL-4
- Timeslot number		4 OR 5 OR 6	
- TFCI existence		TRUE	
- Midamble shift and burst type			
- CHOICE TDD option		3.84 Mcps TDD	REL-4
- CHOICE *Burst Type*		Type 1	
- Midamble allocation mode		Default midamble	
- Midamble configuration		16	
- Midamble Shift		Not Present	
- CHOICE TDD option		3.84 Mcps TDD	REL-4
- First timeslot channelisation codes		Repeated (1,2) for each channelisation code assigned in the slot to meet the needs of TS34.108 clause 6 Parameter Set.	
- CHOICE codes representation		Bitmap	
- Channelisation codes bitmap		Reference to TS34.108 clause 6.10 Parameter Set	
- CHOICE more timeslots		No more timeslots	
- UL CCTrCH TPC List		Default (is previous list or all defined UL CCTrCHs.)	
- UL TPC TFCS Identity			
- TFCS ID		1	
- Shared Channel Indicator		FALSE	
- DL CCTrCH List to Remove		Not present	
- SCCPCH Information for FACH		Not Present	R99 and Rel-4 only
Downlink information per radio link list	A5		
- Downlink information for each radio link			
- Choice mode		TDD	
- Primary CCPCH info			
- Choice mode		TDD	
- Choice TDD Option		3.84 Mcps TDD	REL-4
- CHOICE *SyncCase*		Sync Case 1	
- Timeslot		Reference clause 6.1.4 Default settings for cell 1	
- Cell parameters ID		Ref. to the Default setting in TS34.108 clause 6.1 (TDD) Integer(0..127)	
- SCTD indicator		FALSE	
- Downlink DPCH info for each RL		Not Present	
- SCCPCH Information for FACH		Not Present	R99 and Rel-4 only
Downlink information per radio link list	A6, A7, A8, A9, A10	Not Present	

Condition	Explanation
A1	This IE need for "Non speech in CS"
A2	This IE need for "Speech in CS"
A3	This IE need for "Packet to CELL_DCH from CELL_DCH in PS"
A4	This IE need for "Packet to CELL_DCH from CELL_FACH in PS"
A5	This IE need for "Packet to CELL_FACH from CELL_DCH in PS"
A6	This IE need for "Packet to CELL_FACH from CELL_FACH in PS"
A7	This IE need for "Packet to URA_PCH from CELL_FACH in PS"
A8	This IE need for "Packet to URA_PCH from CELL_DCH in PS"
A9	This IE need for "Packet to CELL_PCH from CELL_FACH in PS"
A10	This IE need for "Packet to CELL_PCH from CELL_DCH in PS"

Contents of TRANSPORT CHANNEL RECONFIGURATION message: AM or UM (1.28 Mcps TDD)

Information Element	Condition	Value/remark	Version
Message Type	A1, A2, A3, A4, A5, A6, A7, A8, A9, A10		
RRC transaction identifier		Arbitrarily selects an integer between 0 and 3	
Integrity check info			
- message authentication code		SS calculates the value of MAC-I for this message and writes to this IE. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.	
- RRC message sequence number		SS provides the value of this IE, from its internal counter.	
Integrity protection mode info		Not Present	
Ciphering mode info		Not Present	
Activation time	A1, A2, A3	(256+CFN-(CFN MOD 8 + 8))MOD 256	
Activation time	A4, A5, A6, A7, A8, A9, A10	Not Present	
New U-RNTI		Not Present	
New C-RNTI	A1, A2, A3, A4, A7, A8, A9, A10	Not Present	
New C-RNTI	A5, A6	'1010 1010 1010 1010'	
New DSCH-RNTI	A1, A2, A3, A4, A5, A6, A7, A8, A9, A10	Not Present	
New H-RNTI	A1, A2, A3, A4, A5, A6, A7, A8, A9, A10	Not Present	REL-5
RRC State indicator	A1, A2, A3, A4	CELL_DCH	
RRC State indicator	A5, A6	CELL_FACH	
RRC State indicator	A7, A8	URA_PCH	
RRC State indicator	A9, A10	CELL_PCH	
UTRAN DRX cycle length coefficient	A1, A2, A3, A4,A5,A6	Not Present	
UTRAN DRX cycle length coefficient	A7, A8, A9, A10	3	
CN information info		Not Present	
URA identity		Not Present	
Downlink counter synchronization info		Not Present	
UL Transport channel information for all transport channels	A1, A2, A5, A6	Not Present	
UL Transport channel information for all transport channels	A3, A4		
- PRACH TFCS		Not Present	
- CHOICE mode		TDD	
- Individual UL CCTrCH information			
- UL TFCS Identity			
- TFCS ID		1	
- Shared Channel Indicator		FALSE	
- UL TFCS			
- CHOICE *TFCI signalling*		Normal	
- TFCI Field 1 Information			

Information Element	Condition	Value/remark	Version
- CHOICE *TFCS representation*		Complete reconfiguration	
- TFCS complete reconfiguration information			
- CHOICE *CTFC Size*		Number of bits used must be enough to cover all combinations of CTFC from clause 6.11.5.4 Parameter Set.	
- CTFC information		This IE is repeated for TFC numbers and reference to clause 6.11.5.4 Parameter Set	
- CTFC		Reference to clause 6.11.5.4 Parameter Set	
- Power offset information			
- CHOICE Gain Factors		Computed Gain Factors(The last TFC is set to Signalled Gain Factors)	
- Reference TFC ID		0 Integer(0.. 3)	
- CHOICE Gain Factors		Signalled Gain Factors(Not Present if the CHOICE Gain Factors is set to ComputedGain Factors)	
- CHOICE mode		TDD	
- Gain Factor β_d		15	
- Reference TFC ID		0 Integer(0.. 3)	
- CHOICE mode		TDD	
- TFC subset			
- CHOICE Subset representation		Full transport format combination set	
- TFC subset list		Not Present	
Added or Reconfigured TrCH information list	A1, A2, A5, A6	Not Present	
Added or Reconfigured TrCH information list	A4	2 TrCHs(DCH for DCCH and DCH for DTCH)	
- Added or Reconfigured UL TrCH information			
- Uplink transport channel type		DCH	
- UL Transport channel identity		5	
- TFS			
- CHOICE Transport channel type		Dedicated transport channels	
- Dynamic Transport format information			
- RLC Size		Reference to clause 6.11 Parameter Set	
- Number of TBs and TTI List		This IE is repeated for maxTF number	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to clause 6.11 Parameter Set	
- CHOICE Logical channel list		All	
- Semi-static Transport Format information			
- Transmission time interval		Reference to clause 6.11 Parameter Set	
- Type of channel coding		Reference to clause 6.11 Parameter Set	
- Coding Rate		Reference to clause 6.11 Parameter Set	
- Rate matching attribute		Reference to clause 6.11 Parameter Set	
- CRC size		Reference to clause 6.11 Parameter Set	
- Uplink transport channel type		DCH	
- UL Transport channel identity		1	
- TFS			
- CHOICE Transport channel type		Dedicated transport channels	
- Dynamic Transport format information			
- RLC Size		Reference to clause 6.11 Parameter Set	
- Number of TBs and TTI List		This IE is repeated for maxTF number	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to clause 6.11	

Information Element	Condition	Value/remark	Version
		Parameter Set	
- CHOICE Logical channel list		All	
- Semi-static Transport Format information			
- Transmission time interval		Reference to clause 6.11 Parameter Set	
- Type of channel coding		Reference to clause 6.11 Parameter Set	
- Coding Rate		Reference to clause 6.11 Parameter Set	
- Rate matching attribute		Reference to clause 6.11 Parameter Set	
- CRC size		Reference to clause 6.11 Parameter Set	
Added or Reconfigured TrCH information list	A3	(DCH for DTCH)	
- Added or Reconfigured UL TrCH information			
- Uplink transport channel type		DCH	
- UL Transport channel identity		1	
- TFS			
- CHOICE Transport channel type		Dedicated transport channels	
- Dynamic Transport format information			
- RLC Size		Reference to clause 6.11 Parameter Set	
- Number of TBs and TTI List	1 to maxTF	(This IE is repeated for TF number.)	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to clause 6.11 Parameter Set	
- CHOICE Logical channel list		All	
- Semi-static Transport Format information			
- Transmission time interval		Reference to clause 6.11 Parameter Set	
- Type of channel coding		Reference to clause 6.11 Parameter Set	
- Coding Rate		Reference to clause 6.11 Parameter Set	
- Rate matching attribute		Reference to clause 6.11 Parameter Set	
- CRC size		Reference to clause 6.11 Parameter Set	
CHOICE *mode*	A1,A2,A3,A4,A5,A6	TDD	
Downlink HS-PDSCH Information			REL-5
DL Transport channel information common for all transport channels	A1, A2, A5,A6	Not Present	
DL Transport channel information common for all transport channel	A3,A4		
- SCCPCH TFCS		Not Present	
- CHOICE mode		TDD	
- Individual DL CCTrCH information			
- DL TFCS Identity			
- TFCS ID		2	
- Shared Channel Indicator		FALSE	
- CHOICE DL parameters		Independent	
- DL TFCS			
- CHOICE TFCI Signalling		Normal	
- TFCI Field 1 Information			
- CHOICE TFCS representation		Complete reconfiguration	
- TFCS complete reconfiguration information			
- CHOICE CTFC Size		Number of bits used must be enough to cover all combinations of CTFC from clause 6.11.5.4 Parameter Set.	
- CTFC information		This IE is repeated for TFC numbers and reference to clause 6.11.5.4	
- CTFC		Reference to clause 6.11.5.4	

Information Element	Condition	Value/remark	Version
		Parameter Set	
- Power offset information		Not Present	
Added or Reconfigured TrCH information list	A1, A2, A5, A6	Not Present	
Added or Reconfigured TrCH information list	A4	2 TrCHs(DCH for DCCH and DCH for DTCH)	
- Added or Reconfigured DL TrCH information			
- Downlink transport channel type		DCH	
- DL Transport channel identity		10	
- CHOICE DL parameters		Same as UL	
- Uplink transport channel type		DCH	
- UL TrCH identity		5	
- DCH quality target			
- BLER Quality value		-2.0 Real(-6.3..0 by step of 0.1)	
- Transparent mode signalling info		Not Present	
- Downlink transport channel type		DCH	
- DL Transport channel identity		6	
- CHOICE DL parameters		Explicit	
- TFS			
- CHOICE Transport channel type		Dedicated transport channels	
- Dynamic transport format information			
- RLC Size		Reference to clause 6.11 Parameter Set	
- Number of TBs and TTI List		(This IE is repeated for TF number.)	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to clause 6.11 Parameter Set	
- Semi-static Transport Format information			
- Transmission time interval		Reference to clause 6.11 Parameter Set	
- Type of channel coding		Reference to clause 6.11 Parameter Set	
- Coding Rate		Reference to clause 6.11 Parameter Set	
- Rate matching attribute		Reference to clause 6.11 Parameter Set	
- CRC size		Reference to clause 6.11 Parameter Set	
- DCH quality target			
- BLER Quality value		-2.0	
Added or Reconfigured TrCH information list	A3		
- Added or Reconfigured DL TrCH information			
- Downlink transport channel type		DCH	
- DL Transport channel identity		6	
- CHOICE DL parameters		Explicit	
- TFS			
- CHOICE Transport channel type		Dedicated transport channels	
- Dynamic transport format information			
- RLC Size		Reference to clause 6.11 Parameter Set	
- Number of TBs and TTI List		(This IE is repeated for TF number.)	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to clause 6.11 Parameter Set	
- Semi-static Transport Format information			
- Transmission time interval		Reference to clause 6.11 Parameter Set	
- Type of channel coding		Reference to clause 6.11 Parameter Set	
- Coding Rate		Reference to clause 6.11 Parameter Set	
- Rate matching attribute		Reference to clause 6.11 Parameter Set	
- CRC size		Reference to clause 6.11 Parameter Set	
- DCH quality target			

Information Element	Condition	Value/remark	Version
- BLER Quality value		-2.0	
- Transparent mode signalling info		Not Present	
Frequency info	A1, A2, A3, A4, A5		
- Choice mode		TDD	
- UARFCN (Nt)		Reference to clause 5.1 Test frequencies	
Frequency info	A6, A7, A8, A9, A10	Not Present	
Maximum allowed UL TX power		33dBm	
CHOICE *channel requirement*	A5, A6, A7, A8, A9, A10	Not Present	
CHOICE *channel requirement*	A1, A2, A3, A4	Uplink DPCH info	
- Uplink DPCH power control info			
- CHOICE mode		TDD	REL-4
- CHOICE TDD option		1.28 Mcps TDD	REL-4
- PRXPDPCHdes		-80 Integer(-120…-58 by step of 1)	
- CHOICE UL OL PC info		Individually Signalled	
- CHOICE TDD option		1.28 Mcps TDD	
- TPC step size		1	
- Primary CCPCH Tx Power		20 Integer(6..43)	
- CHOICE mode		TDD	
- Uplink Timing Advance Control			
- CHOICE Timing Advance		Enabled	
- CHOICE TDD option		1.28 Mcps TDD	
- Uplink synchronization parameters			
- Uplink synchronization step size		1	
- Uplink synchronization frequency		1	
- Synchronization parameters			
- SYNC_UL codes bitmap		01010101	
- FPACH info			
- Timeslot number		0	
- Channelisation code		16/15	
- Midamble Shift and burst type			
- CHOICE TDD option		1.28 Mcps TDD	
- Midamble Allocation Mode		Default midamble	
- Midamble configuration		16 Integer(2, 4, 6, 8, 10, 12, 14, 16)	
- WT		4 Integer(1..4)	
- PRXUpPCHdes		-80 dBm	
- SYNC_UL procedure			
- Max SYNC_UL Transmissions		2	
- Power Ramp Step		2	
- UL CCTrCH List			
- TFCS ID		1	
- UL Target SIR		Real (-11 .. 20 by step of 0.5dB) Reference to clause 6 Parameter set.	
- Time info			
- Activation time		(256+CFN-(CFN MOD 8 + 8))MOD 256	
- Duration		Infinite	
- Common timeslot info			
- 2nd interleaving mode		Default value is "Frame"	
- TFCI coding		Reference to clause 6 Parameter set	
- Puncturing limit		Reference to clause 6 Parameter set	
- Repetition period		1	
- Repetition length			
- Uplink DPCH timeslots and code			
- Dynamic SF usage		FALSE	
- First individual timeslot info			
- Timeslot number			
- CHOICE TDD option		1.28 Mcps TDD	
- Timeslot number		1 OR 2 OR 3	
- TFCI existence		TRUE	
- Midamble shift and burst type			

Information Element	Condition	Value/remark	Version
- CHOICE TDD option		1.28 Mcps TTD	
- Midamble allocation mode		Default midamble	
- Midamble configuration		16	
- Midamble Shift		Not Present	
- CHOICE TDD option		1.28 Mcps TDD	
- Modulation		QPSK	
- SS-TPC Symbols		1	
- Additional TPC-SS Symbols		Not present	
- First timeslot Code List		Repeated (1,2) for each channelisation code assigned in the slot to meet the needs of clause 6 Parameter Set.	
- channelisation codes		(SF/ i) where i denotes an unassigned code matching the SF specified in clause 6 Parameter Set.	
- CHOICE more timeslots		No more timeslots	
- UL CCTrCH List to Remove		Not present	
CHOICE Mode	A1, A2, A3, A4, A5, A6, A7, A8, A9, A10	TDD	
Downlink HS-PDSCH Information	A1, A2, A3, A4, A5, A6, A7, A8, A9, A10	Not Present	
Downlink information common for all radio links	A1, A2, A3		
- Downlink DPCH info common for all RL			
- Timing indication		Maintain	
- CFN-targetSFN frame offset		Not Present	
- Downlink DPCH power control information			
- CHOICE mode		TDD	
- TPC Step Size		1	
- MAC-d HFN initial value		Not Present	
- CHOICE mode		TDD	
- CHOICE mode		TDD	
- CHOICE TDD option		1.28 Mcps TDD	
- TSTD indicator		FALSE	
- Default DPCH Offset Value		Not Present	
Downlink information common for all radio links	A4		
- Downlink DPCH info common for all RL			
- Timing indication		Initialize	
- CFN-targetSFN frame offset		Not Present	
- Downlink DPCH power control information			
- CHOICE mode		TDD	
- TPC Step Size		1	
- MAC-d HFN initial value		Not Present	
- CHOICE mode		TDD	
- CHOICE mode		TDD	
- CHOICE TDD option		1.28 Mcps TDD	
- TSTD indicator		FALSE	
- Default DPCH Offset Value			
- CHOICE mode		TDD	
- Default DPCH Offset Value		0 Integer(0..7)	
Downlink information common for all radio links	A5, A6, A7, A8, A9, A10	Not Present	
Downlink information per radio link list	A1, A2, A3		
- Downlink information for each radio link			
- Choice mode		TDD	
- Primary CCPCH info			
- Choice mode		TDD	
- Choice TDD Option		1.28 Mcps TDD	
- TSTD indicator		FALSE	
- Cell parameters ID		Ref. to the Default setting in clause 6.1 (TDD) Integer(0..127)	
- SCTD indicator		FALSE	
- Downlink DPCH info for each RL			
- CHOICE mode		TDD	
- DL CCTrCh List			

Information Element	Condition	Value/remark	Version
- TFCS ID		2 Integer(1.8)	
- Time info			
- Activation time		Now	
- Duration		Infinite	
- Common timeslot info			
- 2nd interleaving mode		Default value is "Frame"	
- TFCI coding		Reference to clause 6 Parameter set	
- Puncturing limit		Reference to clause 6 Parameter set	
- Repetition period		1	
- Repetition length		NULL	
- Downlink DPCH timeslots and codes			
- First individual timeslot info			
- Timeslot number			
- CHOICE TDD option		1.28 Mcps TDD	
- Timeslot number		4 OR 5 OR 6	
- TFCI existence		TRUE	
- Midamble shift and burst type			
- CHOICE TDD option		1.28 Mcps TDD	
- Midamble allocation mode		Default midamble	
- Midamble configuration		16	
- Midamble Shift		Not Present	
- CHOICE TDD option		1.28 Mcps TDD	
- Modulation		QPSK	
- SS-TPC Symbols		1	
- Additional TPC-SS Sysbols		Not present	
- First timeslot channelisation codes		Repeated (1,2) for each channelisation code assigned in the slot to meet the needs of clause 6 Parameter Set.	
- CHOICE codes representation			
- Channelisation codes bitmap		Reference to clause 6.11 Parameter Set	
- CHOICE more timeslots		No more timeslots	
- UL CCTrCH TPC List		This list is not required for 1.28 Mcps TDD and is to be ignored by the UE.	
- UL TPC TFCS Identity			
- TFCS ID		1	
- Shared Channel Indicator		FALSE	
- DL CCTrCH List to Remove		Not present	
- SCCPCH Information for FACH		Not Present	R99 and Rel-4 only
Downlink information per radio link list	A4		
- Downlink information for each radio link			
- Choice mode		TDD	
- Primary CCPCH info			
- Choice mode		TDD	
- Choice TDD Option		1.28 Mcps TDD	
- TSTD indicator		FALSE	
- Cell parameters ID		Ref. to the Default setting in clause 6.1 (TDD) Integer(0..127)	
- SCTD indicator		FALSE	
- Downlink DPCH info for each RL			
- CHOICE mode		TDD	
- DL CCTrCh List			
- TFCS ID		2 Integer(1.8)	
- Time info			
- Activation time		Now	
- Duration		Infinite	
- Common timeslot info			
- 2nd interleaving mode		Default value is "Frame"	
- TFCI coding		Reference to clause 6 Parameter set	
- Puncturing limit		Reference to clause 6 Parameter set	

Information Element	Condition	Value/remark	Version
- Repetition period		1	
- Repetition length		NULL	
- Downlink DPCH timeslots and codes			
- First individual timeslot info			
- Timeslot number			
- CHOICE TDD option		1.28 Mcps TDD	
- Timeslot number		4 OR 5 OR 6	
- TFCI existence		TRUE	
- Midamble shift and burst type			
- CHOICE TDD option		1.28 Mcps TDD	
- Midamble allocation mode		Default midamble	
- Midamble configuration		16	
- Midamble Shift		Not Present	
- CHOICE TDD option		1.28 Mcps TDD	
- Modulation		QPSK	
- SS-TPC Symbols		1	
- Additional TPC-SS Sysbols		Not present	
- First timeslot channelisation codes		Repeated (1,2) for each channelisation code assigned in the slot to meet the needs of clause 6 Parameter Set.	
- CHOICE codes representation			
- Channelisation codes bitmap		Reference to clause 6.11 Parameter Set	
- CHOICE more timeslots		No more timeslots	
- UL CCTrCH TPC List		This list is not required for 1.28 Mcps TDD and is to be ignored by the UE.	
- UL TPC TFCS Identity			
- TFCS ID		1	
- Shared Channel Indicator		FALSE	
- DL CCTrCH List to Remove		Not present	
- SCCPCH Information for FACH		Not Present	R99 and Rel-4 only
Downlink information per radio link list	A5		
- Downlink information for each radio link			
- Choice mode		TDD	
- Primary CCPCH info			
- Choice mode		TDD	
- Choice TDD Option		1.28 Mcps TDD	
- TSTD indicator		FALSE	
- Cell parameters ID		Ref. to the Default setting in clause 6.1 (TDD) Integer(0..127)	
- SCTD indicator		FALSE	
- Downlink DPCH info for each RL		Not Present	
- SCCPCH Information for FACH		Not Present	R99 and Rel-4 only
Downlink information per radio link list	A6, A7, A8, A9, A10	Not Present	

Condition	Explanation
A1	This IE need for "Non speech in CS"
A2	This IE need for "Speech in CS"
A3	This IE need for "Packet to CELL_DCH from CELL_DCH in PS"
A4	This IE need for "Packet to CELL_DCH from CELL_FACH in PS"
A5	This IE need for "Packet to CELL_FACH from CELL_DCH in PS"
A6	This IE need for "Packet to CELL_FACH from CELL_FACH in PS"
A7	This IE need for "Packet to URA_PCH from CELL_FACH in PS"
A8	This IE need for "Packet to URA_PCH from CELL_DCH in PS"
A9	This IE need for "Packet to CELL_PCH from CELL_FACH in PS"
A10	This IE need for "Packet to CELL_PCH from CELL_DCH in PS"

Contents of TRANSPORT CHANNEL RECONFIGURATION COMPLETE message: AM (3.84 Mcps TDD)

Information Element	Value/remark	Version
Message Type		
RRC transaction identifier	Checked to see if it's set to identical value of the same IE in the downlink PHYSICAL CHANNEL RECONFIGURATION message	
Integrity check info		
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.	
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.	
Uplink integrity protection activation info	Not checked	
CHOICE mode	TDD	
- CHOICE TDD option	3.84 Mcps TDD	REL-4
- Uplink Timing Advance	0	
COUNT-C activation time	Not checked	
Radio bearer uplink ciphering activation time info	Not checked	
Uplink counter synchronisation info	Not checked	

Contents of TRANSPORT CHANNEL RECONFIGURATION COMPLETE message: AM (1.28 Mcps TDD)

Information Element	Value/remark	Version
Message Type		
RRC transaction identifier	Checked to see if the value is identical to the same IE in the downlink TRANSPORT CHANNEL RECONFIGURATION message	
Integrity check info		
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.	
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.	
Uplink integrity protection activation info	Not checked	
CHOICE mode	TDD	REL-4
CHOICE TDD option	1.28 Mcps TDD	REL-4
COUNT-C activation time	Not checked	
Radio bearer uplink ciphering activation time info	Not checked	
Uplink counter synchronization info	Not checked	

Contents of TRANSPORT CHANNEL RECONFIGURATION FAILURE message: AM

Information Element	Value/remark
Message Type	
RRC transaction identitifer	Checked to see if it is set to identical value of the same IE in the downlink TRANSPORT CHANNEL RECONFIGURATION message.
Integrity check info	
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.
Failure cause	Checked to see if it meets test requirement

Contents of TRANSPORT FORMAT COMBINATION CONTROL message: AM or UM (in CELL_DCH)

Information Element	Value/remark
Message Type	
RRC transaction identifier	Arbitrarily selects an integer between 0 and 3
Integrity check info	
- Message authentication code	SS calculates the value of MAC-I for this message and writes to this IE. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	SS provides the value of this IE, from its internal counter.
CHOICE mode	TDD
- TFCS Id	
- TFCS ID	1
- Shared Channel Indicator	FALSE
DPCH/PUSCH TFCS in uplink	
- CHOICE *Subset representation*	Allowed transport format combination list
- Allowed transport format combination list	0 (The TFC is constructed from ALL TF0)
Activation time for TFC subset	Now
TFC Control duration	Not Present

Contents of TRANSPORT FORMAT COMBINATION CONTROL FAILURE message: AM

Information Element	Value/remark
Message Type	
RRC transaction identitifer	Checked to see if it is set to identical value of the same IE in the downlink TRANSPORT CHANNEL RECONFIGURATION message.
Integrity check info	
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.
Failure cause	Checked to see if it meets test requirement

Contents of RRC CONNECTION REJECT message: UM

Information Element	Value/remark
Message Type	
RRC transaction identifier	Arbitrarily selects an integer between 0 and 3
Initial UE identity	Select the same type as in the IE "Initial UE Identity" in RRC CONNECTION REQUEST" message.
Rejection cause	Unspecified
Wait Time	0
Redirection info	Not Present

Contents of CELL UPDATE message: TM

Information Element	Value/remark
Message Type	
U-RNTI	Checked to see if it is set to the following values
- SRNC identity	0000 0000 0001B
- S-RNTI	0000 0000 0000 0000 0001B
RRC transaction identifier	Checked to see if it is absent
Integrity check info	
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.
START List	Checked to see if the 'CN domain identity' and 'START' IEs are present for all CN domains supported by the UE
- CN domain identity	Checked to see if it is one of the supported CN domains
- START	Checked to see if it is present

Information Element	Value/remark
AM_RLC error indication (RB2, RB3 or RB4)	Checked to see if it is set to 'FALSE'
AM_RLC error indication (RB>4)	Checked to see if it is set to 'FALSE'
Cell update cause	See the test content
Failure cause	Checked to see if it is absent
RB timer indicator	
- T314 expired	Checked to see if it is set to 'FALSE'
- T315 expired	Checked to see if it is set to 'FALSE'
Measured results on RACH	Not checked

Contents of CELL UPDATE CONFIRM message: UM

Information Element	Value/remark
Message Type	
U-RNTI	If this message is sent on CCCH, use the following values. Else, this IE is absent.
- SRNC identity	0000 0000 0001B
- S-RNTI	0000 0000 0000 0000 0001B
RRC transaction identifier	Selects an arbitrary integer between 0 to 3
Integrity check info	
- Message authentication code	Set to MAC-I value computed by the SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message Sequence Number	Set to an arbitrarily selected integer between 0 and 15
Integrity protection mode info	Not Present
Ciphering mode info	Not Present
Activation time	Not Present - use default value
New U-RNTI	Not Present
New C-RNTI	Not Present
New DSCH-RNTI	Not Present
RRC State indicator	CELL_FACH
UTRAN DRX cycle length coefficient	Not Present
RLC re-establish indicator (RB2, RB3 and RB4)	FALSE
RLC re-establish indicator (RB5 and upwards)	FALSE
CN information info	Not Present
URA identity	
-URA identity	0000 0000 0000 0001B
RB information to release list	Not Present
RB information to reconfigure list	Not Present
RB information to be affected list	Not Present
Downlink counter synchronization info	Not Present
UL Transport channel information common for all transport channels	Not Present
Deleted TrCH information list	Not Present
Added or Reconfigured TrCH information list	Not Present
CHOICE Mode	TDD
DL Transport channel information common for all transport channels	Not Present
Deleted TrCH information list	Not Present
Added or Reconfigured TrCH information list	Not Present
Frequency info	Not Present
Maximum allowed UL TX power	Not Present
CHOICE channel requirement	Not Present
CHOICE mode	TDD
Downlink information common for all radio links	Not Present
Downlink information per radio link list	Not Present

Contents of HANDOVER FROM UTRAN COMMAND-GSM message: AM

Information Element	Value/remark
Message Type	
RRC transaction identifier	Arbitrarily selects an integer between 0 and 3
Integrity check info	
- Message authentication code	Set to MAC-I value computed by the SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I
- RRC Message sequence number	Set to an arbitrarily selected integer between 0 and 15

Information Element	Value/remark
Activation time	Not Present - use default value "now"
RAB info	For each RAB to be handed over. In this version, the maximum size of the list of 1 shall be applied for all system types.
- RAB identity	0000 0001B
- CN domain identity	CS domain
- NAS Synchronization Indicator	Not present
- Re-establishment time	Use T315
CHOICE *System type*	GSM
- Frequency band	Set to "GSM/ PCS 1900" if GSM/ PCS 1900 is used in this test. Otherwise set to "GSM/DCS 1800 Band"
- CHOIC GSM message	Single GSM message
- Single GSM message	GSM HANDOVER COMMAND formatted and coded according to GSM specifications as BIT STRING (1..512). The first/ l*eftmost/ most significant* bit of the bit string contains bit 8 of the first octet of the GSM message. The contents of the HANDOVER COMMAND is to be defined in the specific test case.

Contents of HANDOVER FROM UTRAN FAILURE message: AM

Information Element/Group name	Value/remark
Message Type	
RRC transaction identifier	Checked to see if it matches the same value used in the corresponding downlink HANDOVER FROM UTRAN COMMAND - GSM message
Integrity check info	
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.
Inter-RAT handover failure	
- Inter-RAT handover failure cause	physical channel failure
- Protocol error information	Check to see if it is absent
Inter-system message	Not checked

Contents of MEASUREMENT CONTROL Message: AM (Intra-frequence measurement) (1.28 Mcps TDD)

Information Element	Value/remark
Message Type	
UE information elements	
RRC transaction identifier	Arbitrarily selects an unused integer between 0 to 3
Integrity check info	
- Message authentication code	SS calculates the value of MAC-I for this message and writes to this IE. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC message sequence number	SS provides the value of this IE, from its internal counter.
Measurement information elements	
Measurement Identity	1
Measurement Command	Setup
Measurement Reporting Mode	
- Measurement Report Transfer Mode	Acknowledged mode RLC
- Periodical Reporting/Event Trigger Reporting Mode	Periodical reporting
Additional measurement list	Not Present
CHOICE Measurement type	Intra-frequency measurement
- Intra-frequency measurement	
- Intra-frequency cell info list	
- CHOICE intra-frequency cell removal	Not present
- New intra-frequency cell	
- Intra-frequency cell-id	1
- Cell info	
- Cell individual offset	0dB
- Reference time difference to cell	Not Present
- Read SFN number	FALSE
- CHOICE mode	TDD

Information Element	Value/remark
- Primary CCPCH info	
- CHOICE mode	TDD
- CHOICE TDD option	1.28 Mcps TDD
-TSTD indicator	FALSE
- Cell parameters ID	Reference clause 6.1.4 Default settings for cell 1(TDD)
- SCTD indicator	FALSE
- Primary CCPCH Tx power	Not present
- Timeslot list	Not present
- Cells for measurement	Not present
- **Intra-frequency measurement quantity**	
- Filter coefficient	Not present (use default 0)
- CHOICE mode	TDD
- Measurement quantity list	
- Measurement quantity	Primary CCPCH RSCP
- Intra-frequency reporting quantity	
- Reporting quantities for active set cells	
- Cell synchronization information reporting indicator	FALSE
- Cell Identity reporting indicator	TRUE
- CHOICE mode	TDD
- Timeslot ISCP reporting indicator	FALSE
- Proposed TGSN reporting indicator	FALSE
- Primary CCPCH RSCP reporting indicator	FALSE
- Pathloss reporting indicator	FALSE
- Reporting quantities for monitored set cells	
- Cell synchronization information reporting indicator	FALSE
- Cell Identity reporting indicator	TRUE
- CHOICE mode	TDD
- Timeslot ISCP reporting indicator	FALSE
- Proposed TGSN reporting indicator	FALSE
- Primary CCPCH RSCP reporting indicator	FALSE
- Pathloss reporting indicator	FALSE
- Reporting quantities for detected set cells	Not present
- Reporting cell status	Not present
- Measurement validity	Not present
- CHOICE report criteria	Intra-frequency measurement reporting criteria
- Parameters required for each event	
- Intra-frequency event identity	1g
- Triggering condition 1	Not present (this IE is MP only for event "1b" or "1f", TDD should not present)
- Triggering condition 2	Not present (this IE is MP only for event "1c", TDD should not present)
- Reporting Range Constant	Not present (this IE is MP only for event "1a" or "1b", TDD should not present)
- Cells forbidden to affect Reporting range	Not present (this IE is MP only for event "1a" or "1b", TDD should not present)
- W	Not present (this IE is MP only for event "1a" or "1b", TDD should not present)
- Hysteresis	0 dBm
- Threshold used frequency	Not present (this IE is MP only for event "1e", "1f", "1h" or "1i")
- Reporting deactivation threshold	Not present (this IE is MP only for event "1a", TDD should not present)
- Replacement activation threshold	Not present (this IE is MP only for event "1c" TDD should not present)
- Time to trigger	0 ms
- Amount of reporting	Not present (this IE is MP only for event "1a" or "1c" TDD should not present)

Information Element	Value/remark
- Reporting interval	Not present (this IE is MP only for event "1a" or "1c", TDD should not present)
- Reporting cell status	Not present
Physical channel information elements	
DPCH Compressed mode status info	Not Present

Contents of MEASUREMENT CONTROL Message: AM (Inter-frequence measurement) (1.28 Mcps TDD)

Information Element	Value/remark
Message Type	
UE information elements	
RRC transaction identifier	Arbitrarily selects an unused integer between 0 to 3
Integrity check info	
- Message authentication code	SS calculates the value of MAC-I for this message and writes to this IE. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC message sequence number	SS provides the value of this IE, from its internal counter.
Measurement information elements	
Measurement Identity	2
Measurement Command	Setup
Measurement Reporting Mode	
- Measurement Report Transfer Mode	Acknowledged mode RLC
- Periodical Reporting/Event Trigger Reporting Mode	Periodical reporting
Additional measurement list	Not present
CHOICE Measurement type	Inter-frequency measurement
- Inter-frequency measurement	
- Inter-frequency cell info list	
- CHOICE inter-frequency cell removal	Not present
- New inter-frequency cell	
- Inter-frequency cell-id	4
- Frequency info	
- CHOICE mode	TDD
- UARFCN (Nt)	Reference to table 6.1.7 for cell 4
- Cell info	
- Cell individual offset	0dB
- Reference time difference to cell	Not Present
- Read SFN number	FALSE
- CHOICE mode	TDD
- Primary CCPCH info	
- CHOICE mode	TDD
- CHOICE TDD option	1.28 Mcps TDD
-TSTD indicator	FALSE
- Cell parameters ID	Reference clause 6.1.4 Default settings for cell 4(TDD)
- SCTD indicator	FALSE
- Primary CCPCH Tx power	Not present
- Timeslot list	Not present
- Cells for measurement	Not present
- **Inter-frequency measurement quantity**	
- CHOICE *reporting criteria*	Inter-frequency reporting criteria
- Inter-frequency reporting criteria	
- Filter coefficient	Not present (use default 0)
- CHOICE *mode*	TDD
- Measurement quantity for frequency quality estimate	Primary CCPCH RSCP
- Inter-frequency reporting quantity	
- UTRA Carrier RSSI	FALSE
- Frequency quality estimate	FALSE This parameters is not used in this release and should be set to FALSE. It shall be ignored by the UE.
- Non frequency related cell reporting quantities	
- Cell synchronization information reporting indicator	FALSE
- Cell Identity reporting indicator	FALSE
- CHOICE mode	TDD
- Timeslot ISCP reporting indicator	FALSE

Information Element	Value/remark
- Proposed TGSN reporting indicator	FALSE
- Primary CCPCH RSCP reporting indicator	FALSE
- Pathloss reporting indicator	FASLE
- Reporting cell status	Not present
- Measurement validity	Not present
- **Inter-frequency set update**	Not present (this IE only for FDD)
- CHOICE report criteria	Inter-frequency measurement reporting criteria
- Parameters required for each event	
- Inter-frequency event identity	2b
- Threshold used frequency	-70 dBm (this IE is MP for event 2b, 2d, or 2f Ranges used depend on measurement quantity. CPICH Ec/No -24..0dB CPICH/Primary CCPCH RSCP -115..-25dBm)
- W used frequency	0 (this IE is MP for event 2a, 2b, 2d or 2f Real(0, 0.1..2.0 by step of 0.1))
- Hysteresis	1 dBm
- Time to trigger	5 000 ms
- Reporting cell status	Within active set or within virtual active set or of the other RAT
- Maximum number of reporting cells	1
- Parameters required for each non-used frequency	
- Threshold non used frequency	-70 dBm (this IE is MP for event 2a, 2b, 2c or 2e Ranges used depend on measurement quantity. CPICH Ec/No -24..0dB CPICH/Primary CCPCH RSCP -115..-25dBm. This IE is not needed if the IE "Inter-frequency event identity" is set to 2a. However, it is specified to be mandatory to align with the ASN.1)
- W non-used frequency	0 (this IE is MP if 2a, 2b, 2c or 2e Real(0, 0.1..2.0 by step of 0.1))
Physical channel information elements	
DPCH Compressed mode status info	Not Present

Contents of MEASUREMENT CONTROL FAILURE Message: AM

Information Element	Value/remark
Message Type	
RRC transaction identifier	Checked to see if it's set to the identical value for the same IE in the downlink MEASUREMENT CONTROL message
Integrity check info	
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.
Failure cause	See the test content

Contents of MEASUREMENT REPORT message: AM（intra-frequency measurement (3.84 Mcps TDD)

Information Element	Value/remark	Version
Message Type		
Integrity check info		
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.	
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.	
Measurement identity	1	
Measured Results		
- Intra-frequency measured results		
- Cell measured results		
- Cell Identity	Checked that this IE is present	
- Cell synchronisation information	Checked that this IE is absent	
- CHOICE mode	TDD	
- Cell parameters Id	Different from the Default setting in TS34.108 clause 6.1 (TDD)	
- Proposed TGSN	Checked that this IE is absent	
- Primary CCPCH RSCP	Checked that this IE is absent	
- Pathloss	Checked that this IE is absent	
- Timeslot list	Checked that this IE is absent	
Measured results on RACH	Checked that this IE is absent	
Additional measured results	Checked that this IE is absent	
Event results		
- CHOICE *event result*	Intra-frequency measurement event results	
- Intra-frequency measurement event results		
- Intra-frequency event identity	Ig	
- Cell measurement event results		
- CHOICE *mode*	TDD	
- Primary CCPCH info		
- CHOICE mode	TDD	
- CHOICE TDD option	3.84 Mcps TDD	REL-4
- CHOICE *SyncCase*	Sync Case 1	
- Timeslot	Reference clause 6.1.4 Default settings for cell 1(TDD) (S/B 0)	
- Cell parameters ID	Reference clause 6.1.4 Default settings for cell 1(TDD)	
- SCTD indicator	FALSE	

Contents of MEASUREMENT REPORT message: AM（intra-frequency measurement）(1.28 Mcps TDD)

Information Element	Value/remark
Message Type	
Integrity check info	
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.
Measurement identity	1
Measured Results	
- Intra-frequency measured results	
- Cell measured results	
- Cell Identity	Checked that this IE is present
- Cell synchronization information	Checked that this IE is absent
- CHOICE mode	TDD
- Cell parameters Id	Different from the Default setting in clause 6.1 (TDD)
- Proposed TGSN	Checked that this IE is absent
- Primary CCPCH RSCP	Checked that this IE is absent
- Pathloss	Checked that this IE is absent
- Timeslot list	Checked that this IE is absent
Measured results on RACH	Checked that this IE is absent

Additional measured results	Checked that this IE is absent
Event results	
- CHOICE *event result*	Intra-frequency measurement event results
- Intra-frequency measurement event results	
- Intra-frequency event identity	Ig
- Cell measurement event results	
- CHOICE *mode*	TDD
- Primary CCPCH info	
- CHOICE mode	TDD
- CHOICE TDD option	1.28 Mcps TDD
-TSTD indicator	FALSE
- Cell parameters ID	Reference in clause 6.1.4 Default settings for cell 1(TDD)
- SCTD indicator	FALSE

Contents of MEASUREMENT REPORT message: AM (inter-frequency measurement) (3.84 Mcps TDD)

Information Element	Value/remark	Version
Message Type		
Integrity check info		
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.	
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.	
Measurement identity	1	
Measured Results	Checked that this IE is absent	
Measured results on RACH	Checked that this IE is absent	
Additional measured results	Checked that this IE is absent	
Event results		
- CHOICE *event result*	Inter-frequency measurement event results	
- Inter-frequency measurement event results		
- Inter-frequency event identity	2b	
- Inter-frequency cells		
- Frequency info	Reference to table 6.1.7 for cell 4	
- Non frequency related measurement event results		
- Cell measurement event results		
- CHOICE *mode*	TDD	
- Primary CCPCH info		
- CHOICE mode	TDD	
- CHOICE TDD option	3.84 Mcps TDD	REL-4
- CHOICE *SyncCase*	Sync Case 1	
- Timeslot	Reference clause 6.1.4 Default settings for cell 1(TDD) (S/B 0)	
- Cell parameters ID	Reference clause 6.1.4 Default settings for cell 1(TDD)	
- SCTD indicator	FALSE	
GSM OTD reference cell	Checked that this IE is absent	REL-4

Contents of MEASUREMENT REPORT message: AM (inter-frequency measurement) (1.28 Mcps TDD)

Information Element	Value/remark	Version
Message Type		
Integrity check info		
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.	
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.	
Measurement identity	1	
Measured Results	Checked that this IE is absent	
Measured results on RACH	Checked that this IE is absent	

Information Element	Value/remark	Version
Additional measured results	Checked that this IE is absent	
Event results		
- CHOICE *event result*	Inter-frequency measurement event results	
- Inter-frequency measurement event results		
- Inter-frequency event identity	2b	
- Inter-frequency cells		
- Frequency info	Reference to table 6.1.7 for cell 4	
- Non frequency related measurement event results		
- Cell measurement event results		
- CHOICE *mode*	TDD	
- Primary CCPCH info		
- CHOICE mode	TDD	
- CHOICE TDD option	1.28 Mcps TDD	
-TSTD indicator	FALSE	
- Cell parameters ID	Reference clause 6.1.4 Default settings for cell 1(TDD)	
- SCTD indicator	FALSE	
GSM OTD reference cell	Checked that this IE is absent	REL-4

Contents of PHYSICAL CHANNEL RECONFIGURATION message: AM or UM (3.84 Mcps TDD)

Information Element	Condition	Value/remark	Version
Message Type RRC transaction identifier Integrity check info - message authentication code - RRC message sequence number Integrity protection mode info Ciphering mode info Activation time Activation time New U-RNTI	A1, A2, A3, A4, A5, A6, A7, A8, A9, A10 A1, A2, A3 A4, A5, A6, A7, A8, A9, A10	 Arbitrarily selects an integer between 0 and 3 SS calculates the value of MAC-I for this message and writes to this IE. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I. SS provides the value of this IE, from its internal counter. Not Present Not Present (256+CFN-(CFN MOD 8 + 8))MOD 256 Not Present Not Present	
New C-RNTI	A1, A2, A3, A4, A7, A8, A9, A10	Not Present	
New C-RNTI	A5, A6	'1010 1010 1010 1010'	
New DSCH-RNTI	A1, A2, A3, A4, A5, A6, A7, A8, A9, A10	Not Present	
New H-RNTI	A1, A2, A3, A4, A5, A6, A7, A8, A9, A10	Not Present	REL-5
RRC State indicator	A1, A2, A3, A4	CELL_DCH	
RRC State indicator	A5, A6	CELL_FACH	
RRC State indicator	A7, A8	URA_PCH	
RRC State indicator	A9, A10	CELL_PCH	
UTRAN DRX cycle length coefficient	A1, A2, A3, A4, A5, A6	Not Present	
UTRAN DRX cycle length coefficient	A7, A8, A9, A10	3	

Information Element	Condition	Value/remark	Version
CN information info		Not Present	
URA identity		Not Present	
Downlink counter synchronisation info		Not Present	
Frequency info	A1, A2, A3, A4, A5		
- Choice mode		TDD	
- UARFCN (Nt)		Reference to clause 5.1 Test frequencies	
Frequency info	A6, A7, A8, A9, A10	Not Present	
Maximum allowed UL TX power		33dBm	
CHOICE channel requirement	A5, A6, A7, A8, A9, A10	Not Present	
CHOICE channel requirement	A1, A2, A3, A4	Uplink DPCH info	
- Uplink DPCH power control info			
- CHOICE mode		TDD	
- UL target SIR		6	
- CHOICE *UL OL PC info*		Individually Signalled	
- CHOICE TDD option		3.84 Mcps TDD	REL-4
- Individual timeslot interference info		Reference to TS34.108 clause 6.10.3 Parameter Set	
- Individual timeslot interference			
- CHOICE TDD option		3.84 Mcps TDD	REL-4
- Timeslot number		As required by, Reference to TS34.108 clause 6.10.3 Parameter Set	
- TDD UL interference		As required by, Reference to TS34.108 clause 6.10.3 Parameter Set (if not specified -60 dBm)	
- Primary CCPCH Tx Power		18 Integer(6..43) (-70 dBm Received if pathloss not specified)	
- CHOICE mode		TDD	
- Uplink Timing Advance Control			
- CHOICE Timing Advance		Enabled	
- CHOICE TDD option		3.84 Mcps TDD (Default)	REL-4
- UL CCTrCH List			
- TFCS ID		1	
- UL Target SIR		Real (-11 .. 20 by step of 0.5dB) Reference to TS34.108 Parameter set.	
- Time info			
- Activation time		(256+CFN-(CFN MOD 8 + 8))MOD 256	
- Duration		Infinite	
- Common timeslot info			
- 2nd interleaving mode		Default value is "Frame"	
- TFCI coding		Reference to TS34.108 clause 6 Parameter set	
- Puncturing limit		Reference to TS34.108 clause 6 Parameter set	
- Repetition period		1	
- Repetition length		Null	
- Uplink DPCH timeslots and code			
- Dynamic SF usage		FALSE	
- First individual timeslot info			
- Timeslot number			
- CHOICE TDD option		3.84 Mcps TDD	REL-4
- Timeslot number		1 OR 2 OR 3	
- TFCI existence		TRUE	
- Midamble shift and burst type			
- CHOICE TDD option		3.84 Mcps TDD	REL-4
- Midamble allocation mode		Default midamble	
- Midamble configuration		16	
- Midamble Shift		Not Present	
- CHOICE TDD option		3.84 Mcps TDD (No Data)	REL-4
- First timeslot Code List		Repeated (1,2) for each channelisation code assigned in the slot to meet the needs of TS34.108 clause 6 Parameter	

Information Element	Condition	Value/remark	Version
- channelisation codes		Set. (SF/ i) where i denotes an unassigned code matching the SF specified in TS34.108 clause 6 Parameter Set.	
- CHOICE more timeslots		No more timeslots (No Data)	
- UL CCTrCH List to Remove		Not present	
Downlink radio resources			
CHOICE Mode	A1, A2, A3, A4, A5, A6, A7, A8, A9, A10	TDD	
- Downlink PDSCH information		No data	
Downlink HS-PDSCH Information	A1, A2, A3, A4, A5, A6, A7, A8, A9, A10	Not Present	REL-5
Downlink information common for all radio links - Downlink DPCH info common for all RL - Timing indication - CFN-targetSFN frame offset - Downlink DPCH power control information - CHOICE mode - TPC Step Size - MAC-d HFN initial value - CHOICE mode - CHOICE mode - CHOICE TDD option - Default DPCH Offset Value	A1, A2, A3	 Maintain Not Present TDD 1 Not Present TDD TDD 3.84 Mcps TDD (No Data) Not Present	 REL-4
Downlink information common for all radio links - Downlink DPCH info common for all RL - Timing indication - CFN-targetSFN frame offset - Downlink DPCH power control information - CHOICE mode - TPC Step Size - MAC-d HFN initial value - CHOICE mode - CHOICE mode - CHOICE TDD option - Default DPCH Offset Value - CHOICE mode	A4	 Initialise Not Present TDD 1 Not Present TDD TDD 3.84 Mcps TDD (No Data) TDD	 REL-4
- Default DPCH Offset Value		0 Integer(0..7)	
Downlink information common for all radio links	A5, A6, A7, A8, A9, A10	Not Present	
Downlink information per radio link list - Downlink information for each radio link - Choice mode - Primary CCPCH info - Choice mode - Choice TDD Option - CHOICE *SyncCase* - Timeslot - Cell parameters ID - SCTD indicator - Downlink DPCH info for each RL - CHOICE mode - DL CCTrCh List - TFCS ID - Time info - Activation time	A1, A2,A3	 TDD TDD 3.84 Mcps TDD Sync Case 1 Reference clause 6.1.4 Default settings for cell 1 Ref. to the Default setting in TS34.108 clause 6.1 (TDD) Integer(0..127) FALSE TDD 2 Integer(1.8) Now	 REL-4

Information Element	Condition	Value/remark	Version
- Duration		Infinite	
- Common timeslot info			
- 2nd interleaving mode		Default value is "Frame"	
- TFCI coding		Reference to TS34.108 clause 6 Parameter set	
- Puncturing limit		Reference to TS34.108 clause 6 Parameter set	
- Repetition period		1	
- Repetition length		NULL	
- Downlink DPCH timeslots and codes			
- First individual timeslot info			
- Timeslot number			
- CHOICE TDD option		3.84 Mcps TDD	REL-4
- Timeslot number		4 OR 5 OR 6	
- TFCI existence		TRUE	
- Midamble shift and burst type			
- CHOICE TDD option		3.84 Mcps TDD	REL-4
- CHOICE *Burst Type*		Type 1	
- Midamble allocation mode		Default midamble	
- Midamble configuration		16	
- Midamble Shift		Not Present	
- CHOICE TDD option		3.84 Mcps TDD	REL-4
- First timeslot channelisation codes		Repeated (1,2) for each channelisation code assigned in the slot to meet the needs of TS34.108 clause 6 Parameter Set.	
- CHOICE codes representation		Bitmap	
- Channelisation codes bitmap		Reference to TS34.108 clause 6.10 Parameter Set	
- CHOICE more timeslots		No more timeslots (No Data)	
- UL CCTrCH TPC List		Default (is previous list or all defined UL CCTrCHs.)	
- UL TPC TFCS Identity			
- TFCS ID		1	
- Shared Channel Indicator		FALSE	
- DL CCTrCH List to Remove		Not present	
- SCCPCH Information for FACH		Not Present	R99 and Rel-4 only
Downlink information per radio link list	A4		
- Downlink information for each radio link			
- Choice mode		TDD	
- Primary CCPCH info			
- Choice mode		TDD	
- Choice TDD Option		3.84 Mcps TDD	REL-4
- CHOICE *SyncCase*		Sync Case 1	
- Timeslot		Reference clause 6.1.4 Default settings for cell 1	
- Cell parameters ID		Ref. to the Default setting in TS34.108 clause 6.1 (TDD) Integer(0..127)	
- SCTD indicator		FALSE	
- Downlink DPCH info for each RL			
- CHOICE mode		TDD	
- DL CCTrCh List		Not Present	
- DL CCTrCH List to Remove		Not present	
- SCCPCH Information for FACH		Not Present	R99 and Rel-4 only
Downlink information per radio link list	A5		
- Downlink information for each radio link			
- Choice mode		TDD	
- Primary CCPCH info			
- Choice mode		TDD	
- Choice TDD Option		3.84 Mcps TDD	REL-4
- CHOICE *SyncCase*		Sync Case 1	
- Timeslot		Reference clause 6.1.4 Default settings for cell 1	
- Cell parameters ID		Ref. to the Default setting in TS34.108 clause 6.1 (TDD) Integer(0..127)	

Information Element	Condition	Value/remark	Version
- SCTD indicator		FALSE	
- Downlink DPCH info for each RL		Not Present	
- SCCPCH Information for FACH		Not Present	R99 and Rel-4 only
Downlink information per radio link list	A6, A7, A8, A9, A10	Not Present	

Condition	Explanation
A1	This IE need for "Non speech in CS"
A2	This IE need for "Speech in CS"
A3	This IE need for "Packet to CELL_DCH from CELL_DCH in PS"
A4	This IE need for "Packet to CELL_DCH from CELL_FACH in PS"
A5	This IE need for "Packet to CELL_FACH from CELL_DCH in PS"
A6	This IE need for "Packet to CELL_FACH from CELL_FACH in PS"
A7	This IE need for “Packet to URA_PCH from CELL_FACH in PS”
A8	This IE need for “Packet to URA_PCH from CELL_DCH in PS”
A9	This IE need for “Packet to CELL_PCH from CELL_FACH in PS”
A10	This IE need for “Packet to CELL_PCH from CELL_DCH in PS”

Contents of PHYSICAL CHANNEL RECONFIGURATION message: AM or UM (1.28 Mcps TDD)

Information Element	Condition	Value/remark	Version
Message Type	A1, A2, A3, A4, A5, A6		
RRC transaction identifier		Arbitrarily selects an integer between 0 and 3	
Integrity check info			
- message authentication code		SS calculates the value of MAC-I for this message and writes to this IE. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.	
- RRC message sequence number		SS provides the value of this IE, from its internal counter.	
Integrity protection mode info		Not Present	
Ciphering mode info		Not Present	
Activation time	A1, A2, A3	(256+CFN-(CFN MOD 8 + 8))MOD 256	
Activation time	A4, A5, A6	Now	
New U-RNTI		Not Present	
New C-RNTI	A1, A2, A3, A4	Not Present	
New C-RNTI	A5, A6	'1010 1010 1010 1010'	
New DSCH-RNTI	A1, A2, A3, A4, A5, A6	Not Present	
New H-RNTI	A1, A2, A3, A4, A5, A6	Not Present	REL-5
RRC State indicator	A1, A2, A3, A4	CELL_DCH	
RRC State indicator	A5, A6	CELL_FACH	
UTRAN DRX cycle length coefficient	A1, A2, A3, A4, A5, A6	Not Present	
CN information info		Not Present	
URA identity		Not Present	
Downlink counter synchronization info		Not Present	
Frequency info	A1, A2, A3, A4, A5		
- Choice mode		TDD	
- UARFCN (Nt)		Reference to clause 5.1 Test frequencies	
Frequency info	A6	Not Present	
Maximum allowed UL TX power		33dBm	
CHOICE channel requirement	A5, A6	Not Present	
CHOICE channel requirement	A1, A2, A3, A4	Uplink DPCH info	
- Uplink DPCH power control info			
- CHOICE mode		TDD	
- CHOICE TDD option		1.28 Mcps TDD	
- PRXPDPCHdes		-80 Integer(-120…-58 by step of 1)	

Information Element	Condition	Value/remark	Version
- CHOICE UL OL PC info		Individually Signalled	
- CHOICE TDD option		1.28 Mcps TDD	
- TPC step size		1	
- Primary CCPCH Tx Power		20 Integer(6..43)	
- CHOICE mode		TDD	
- Uplink Timing Advance Control			
- CHOICE Timing Advance		Enabled	
- CHOICE TDD option		1.28 Mcps TDD	
- Uplink synchronization parameters			
- Uplink synchronization step size		1	
- Uplink synchronization frequency		1	
- Synchronization parameters			
- SYNC_UL codes bitmap		01010101	
- FPACH info			
- Timeslot number		0	
- Channelisation code		16/15	
- Midamble Shift and burst type			
- CHOICE TDD option		1.28 Mcps TDD	
- Midamble Allocation Mode		Default midamble	
- Midamble configuration		16 Integer(2, 4, 6, 8, 10, 12, 14, 16)	
- WT		4 Integer(1..4)	
- PRXUpPCHdes		-80 dBm	
- SYNC_UL procedure			
- Max SYNC_UL Transmissions		2	
- Power Ramp Step		2	
- UL CCTrCH List			
- TFCS ID		1	
- UL Target SIR		Real (-11 .. 20 by step of 0.5 dB) Reference to clause 6 Parameter set.	
- Time info			
- Activation time		(256+CFN-(CFN MOD 8 + 8))MOD 256	
- Duration		Infinite	
- Common timeslot info			
- 2nd interleaving mode		Default value is "Frame"	
- TFCI coding		Reference to clause 6 Parameter set	
- Puncturing limit		Reference to clause 6 Parameter set	
- Repetition period		1	
- Repetition length		Null	
- Uplink DPCH timeslots and code			
- Dynamic SF usage		FALSE	
- First individual timeslot info			
- Timeslot number			
- CHOICE TDD option		1.28 Mcps TDD	
- Timeslot number		1 OR 2 OR 3	
- TFCI existence		TRUE	
- Midamble shift and burst type			
- CHOICE TDD option		1.28 Mcps TDD	
- Midamble allocation mode		Default midamble	
- Midamble configuration		16	
- Midamble Shift		Not Present	
- CHOICE TDD option		1.28 Mcps TDD	
- Modulation		QPSK	
- SS-TPC Symbols		1	
- Additional TPC-SS Symbols		Not present	
- First timeslot Code List		Repeated (1,2) for each channelisation code assigned in the slot to meet the needs of clause 6 Parameter Set.	
- channelisation codes		(SF/ i) where i denotes an unassigned code matching the SF specified in clause 6 Parameter Set.	
- CHOICE more timeslots		No more timeslots	
- UL CCTrCH List to Remove		Not present	
CHOICE Mode	A1, A2, A3, A4, A5, A6	TDD	
Downlink HS-PDSCH Information	A1, A2, A3, A4, A5, A6	Not Present	REL-5
Downlink information common for all radio	A1, A2, A3		

Information Element	Condition	Value/remark	Version
links			
- Downlink DPCH info common for all RL			
- Timing indication		Maintain	
- CFN-targetSFN frame offset		Not Present	
- Downlink DPCH power control information			
- CHOICE mode		TDD	
- TPC Step Size		1	
- MAC-d HFN initial value		Not Present	
- CHOICE mode		TDD	
- CHOICE mode		TDD	
- CHOICE TDD option		1.28 Mcps TDD	
- TSTD indicator		FALSE	
- Default DPCH Offset Value		Not Present	
Downlink information common for all radio links	A4		
- Downlink DPCH info common for all RL			
- Timing indication		Initialize	
- CFN-targetSFN frame offset		Not Present	
- Downlink DPCH power control information			
- CHOICE mode		TDD	
- TPC Step Size		1	
- MAC-d HFN initial value		Not Present	
- CHOICE mode		TDD	
- CHOICE mode		TDD	
- CHOICE TDD option		1.28 Mcps TDD	
- TSTD indicator		FALSE	
- Default DPCH Offset Value			
- CHOICE mode		TDD	
- Default DPCH Offset Value		0 Integer(0..7)	
Downlink information common for all radio links	A5, A6	Not Present	
Downlink information per radio link list	A1, A2,A3		
- Downlink information for each radio link			
- Choice mode		TDD	
- Primary CCPCH info			
- Choice mode		TDD	
- Choice TDD Option		1.28 Mcps TDD	
- TSTD indicator		FALSE	
- Cell parameters ID		Ref. to the Default setting in clause 6.1 (TDD) Integer(0..127)	
- SCTD indicator		FALSE	
- Downlink DPCH info for each RL			
- CHOICE mode		TDD	
- DL CCTrCh List			
- TFCS ID		2 Integer(1.8)	
- Time info			
- Activation time		Now	
- Duration		Infinite	
- Common timeslot info			
- 2nd interleaving mode		Default value is "Frame"	
- TFCI coding		Reference to clause 6 Parameter set	
- Puncturing limit		Reference to clause 6 Parameter set	
- Repetition period		1	
- Repetition length		NULL	
- Downlink DPCH timeslots and codes			
- First individual timeslot info			
- Timeslot number			
- CHOICE TDD option		1.28 Mcps TDD	
- Timeslot number		4 OR 5 OR 6	
- TFCI existence		TRUE	
- Midamble shift and burst type			
- CHOICE TDD option		1.28 Mcps TDD	
- Midamble allocation mode		Default midamble	
- Midamble configuration		16	
- Midamble Shift		Not Present	

Information Element	Condition	Value/remark	Version
- CHOICE TDD option		1.28 Mcps TDD	
- Modulation		QPSK	
- SS-TPC Symbols		1	
- Additional TPC-SS Sysbols		Not present	
- First timeslot channelisation codes		Repeated (1,2) for each channelisation code assigned in the slot to meet the needs of clause 6 Parameter Set.	
- CHOICE codes representation			
- Channelisation codes bitmap		Reference to clause 6.11 Parameter Set	
- CHOICE more timeslots		No more timeslots	
- UL CCTrCH TPC List		This list is not required for 1.28 Mcps TDD and is to be ignored by the UE.	
- UL TPC TFCS Identity			
- TFCS ID		1	
- Shared Channel Indicator		FALSE	
- DL CCTrCH List to Remove		Not present	
- SCCPCH Information for FACH		Not Present	R99 and Rel-4 only
Downlink information per radio link list	A4		
- Downlink information for each radio link			
- Choice mode		TDD	
- Primary CCPCH info			
- Choice mode		TDD	
- Choice TDD Option		1.28 Mcps TDD	
- TSTD indicator		FALSE	
- Cell parameters ID		Ref. to the Default setting in clause 6.1 (TDD) Integer(0..127)	
- SCTD indicator		FALSE	
- Downlink DPCH info for each RL			
- CHOICE mode		TDD	
- DL CCTrCh List		Not Present	
- DL CCTrCH List to Remove		Not present	
- SCCPCH Information for FACH		Not Present	R99 and Rel-4 only
Downlink information per radio link list	A5		
- Downlink information for each radio link			
- Choice mode		TDD	
- Primary CCPCH info			
- Choice mode		TDD	
- Choice TDD Option		1.28 Mcps TDD	
- TSTD indicator		FALSE	
- Cell parameters ID		Ref. to the Default setting in clause 6.1 (TDD) Integer(0..127)	
- SCTD indicator		FALSE	
- Downlink DPCH info for each RL		Not Present	
- SCCPCH Information for FACH		Not Present	R99 and Rel-4 only
Downlink information per radio link list	A6	Not Present	

Condition	Explanation
A1	This IE need for "Non speech in CS"
A2	This IE need for "Speech in CS"
A3	This IE need for "Packet to CELL_DCH from CELL_DCH in PS"
A4	This IE need for "Packet to CELL_DCH from CELL_FACH in PS"
A5	This IE need for "Packet to CELL_FACH from CELL_DCH in PS"
A6	This IE need for "Packet to CELL_FACH from CELL_FACH in PS"

Contents of PHYSICAL CHANNEL RECONFIGURATION COMPLETE message: AM (3.84 Mcps TDD)

Information Element	Value/remark	Version
Message Type		
RRC transaction identifier	Checked to see if it's set to identical value of the same IE in the downlink PHYSICAL CHANNEL RECONFIGURATION message	
Integrity check info		
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.	
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.	
Uplink integrity protection activation info	Not checked	
CHOICE mode	TDD	
- CHOICE TDD option	3.84 Mcps TDD	REL-4
- Uplink Timing Advance	0	
COUNT-C activation time	Not checked	
Radio bearer uplink ciphering activation time info	Not checked	
Uplink counter synchronisation info	Not checked	

Contents of PHYSICAL CHANNEL RECONFIGURATION COMPLETE message: AM (1.28 Mcps TDD)

Information Element	Value/remark	Version
Message Type		
RRC transaction identifier	Checked to see if it's set to identical value of the same IE in the downlink PHYSICAL CHANNEL RECONFIGURATION message	
Integrity check info		
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.	
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.	
Uplink integrity protection activation info	Not checked	
CHOICE mode	TDD	
CHOICE TDD option	1.28 Mcps TDD	REL-4
COUNT-C activation time	Not checked	
Radio bearer uplink ciphering activation time info	Not checked	
Uplink counter synchronization info	Not checked	

Contents of PHYSICAL CHANNEL RECONFIGURATION FAILURE message: AM

Information Element	Value/remark
Message Type	
RRC transaction identitifer	Checked to see if it is set to identical value of the same IE in the downlink PHYSICAL CHANNEL RECONFIGURATION message.
Integrity check info	
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.
Failure cause	Checked to see if it meets test requirement

Contents of RADIO BEARER RECONFIGURATION message: AM or UM (3.84 Mcps TDD)

Information Element	Condition	Value/remark	Version
Message Type	A1,A2,A3, A4,A5,A6		
UE Information elements			

Information Element	Condition	Value/remark	Version
RRC transaction identifier		Arbitrarily selects an integer between 0 and 3	
Integrity check info			
- message authentication code		SS calculates the value of MAC-I for this message and writes to this IE. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.	
- RRC message sequence number		SS provides the value of this IE, from its internal counter.	
Integrity protection mode info		Not Present	
Ciphering mode info		Not Present	
Activation time	A1,A2,A3	(256+CFN-(CFN MOD 8 + 8))MOD 256	
Activation time	A4, A5,A6	Not Present	
		MD Integer(0..255) default is 'now"	
New U-RNTI		Not Present	
New C-RNTI	A1, A2, A3, A4,	Not Present	
New C-RNTI	A5, A6	'1010 1010 1010 1010'	
New DSCH-RNTI	A1, A2, A3, A4, A5, A6	Not Present	
New H-RNTI	A1, A2, A3, A4, A5, A6	Not Present	REL-5
RRC State indicator	A1, A2, A3, A4	CELL_DCH Indicates to a UE the RRC state to be entered.	
RRC State indicator	A5, A6	CELL_FACH	
UTRAN DRX cycle length coefficient	A1,A2,A3, A4,A5,A6	Not Present A coefficient in the formula to count the paging occasions to be used by a specific UE	
CN information elements			
CN information info		Not Present	
UTRAN mobility information elements			
URA identity		Not Present	
CHOICE specification mode		[FFS]	REL-5
RB information elements			
RAB information to reconfigure list		Not Present	
RB information to reconfigure list	A1	TS25.331 specifies that "Although this IE is not always required, need is MP to align with ASN.1".	
- RB information to reconfigure		(UM DCCH for RRC)	
- RB identity		1	
- PDCP info		Not Present	
- PDCP SN info		Not Present	
- RLC info		Not Present	
- RB mapping info		Not Present	
- RB stop/continue		Not Present	
- RB information to reconfigure		(AM DCCH for RRC)	
- RB identity		2	
- PDCP info		Not Present	
- PDCP SN info		Not Present	
- RLC info		Not Present	
- RB mapping info		Not Present	
- RB stop/continue		Not Present	
- RB information to reconfigure		(AM DCCH for NAS_DT High priority)	
- RB identity		3	
- PDCP info		Not Present	
- PDCP SN info		Not Present	
- RLC info		Not Present	
- RB mapping info		Not Present	
- RB stop/continue		Not Present	
- RB information to reconfigure		(AM DCCH for NAS_DT Low priority)	
- RB identity		4	
- PDCP info		Not Present	
- PDCP SN info		Not Present	
- RLC info		Not Present	

Information Element	Condition	Value/remark	Version
- RB mapping info		Not Present	
- RB stop/continue		Not Present	
- RB information to reconfigure		(TM DTCH)	
- RB identity		10	
- PDCP info		Not Present	
- PDCP SN info		Not Present	
- RLC info		Not Present	
- RB mapping info		Not Present	
- RB stop/continue		Not Present	
RB information to reconfigure list	A2	TS25.331 specifies that "Although this IE is not always required, need is MP to align with ASN.1".	
- RB information to reconfigure		(UM DCCH for RRC)	
- RB identity		1	
- PDCP info		Not Present	
- PDCP SN info		Not Present	
- RLC info		Not Present	
- RB mapping info		Not Present	
- RB stop/continue		Not Present	
- RB information to reconfigure		(AM DCCH for RRC)	
- RB identity		2	
- PDCP info		Not Present	
- PDCP SN info		Not Present	
- RLC info		Not Present	
- RB mapping info		Not Present	
- RB stop/continue		Not Present	
- RB information to reconfigure		(AM DCCH for NAS_DT High priority)	
- RB identity		3	
- PDCP info		Not Present	
- PDCP SN info		Not Present	
- RLC info		Not Present	
- RB mapping info		Not Present	
- RB stop/continue		Not Present	
- RB information to reconfigure		(AM DCCH for NAS_DT Low priority)	
- RB identity		4	
- PDCP info		Not Present	
- PDCP SN info		Not Present	
- RLC info		Not Present	
- RB mapping info		Not Present	
- RB stop/continue		Not Present	
- RB information to reconfigure		(TM DTCH)	
- RB identity		10	
- PDCP info		Not Present	
- PDCP SN info		Not Present	
- RLC info		Not Present	
- RB mapping info		Not Present	
- RB stop/continue		Not Present	
- RB information to reconfigure		(TM DTCH)	
- RB identity		11	
- PDCP info		Not Present	
- PDCP SN info		Not Present	
- RLC info		Not Present	
- RB mapping info		Not Present	
- RB stop/continue		Not Present	
- RB information to reconfigure		(TM DTCH) (This IE is needed for 12.2 kbps and 10.2 kbps)	
- RB identity		12	
- PDCP info		Not Present	
- PDCP SN info		Not Present	
- RLC info		Not Present	
- RB mapping info		Not Present	
- RB stop/continue		Not Present	
RB information to reconfigure list	A3,A4,A5, A6	TS25.331 specifies that "Although this IE is not always required, need is MP to align with ASN.1".	
- RB information to reconfigure		(UM DCCH for RRC)	

Information Element	Condition	Value/remark	Version
- RB identity		1	
- PDCP info		Not Present	
- PDCP SN info		Not Present	
- RLC info		Not Present	
- RB mapping info		Not Present	
- RB stop/continue		Not Present	
- RB information to reconfigure		(AM DCCH for RRC)	
- RB identity		2	
- PDCP info		Not Present	
- PDCP SN info		Not Present	
- RLC info		Not Present	
- RB mapping info		Not Present	
- RB stop/continue		Not Present	
- RB information to reconfigure		(AM DCCH for NAS_DT High priority)	
- RB identity		3	
- PDCP info		Not Present	
- PDCP SN info		Not Present	
- RLC info		Not Present	
- RB mapping info		Not Present	
- RB stop/continue		Not Present	
- RB information to reconfigure		(AM DCCH for NAS_DT Low priority)	
- RB identity		4	
- PDCP info		Not Present	
- PDCP SN info		Not Present	
- RLC info		Not Present	
- RB mapping info		Not Present	
- RB stop/continue		Not Present	
- RB information to reconfigure		(AM DTCH)	
- RB identity		20	
- PDCP info		Not Present	
- PDCP SN info		Not Present	
- RLC info		Not Present	
- RB mapping info		Not Present	
- RB stop/continue		Not Present	
RB information to be affected	A1, A2, A3,A4,A5, A6	Not Present	
TrCH Information Elements			
Uplink transport channels			
UL Transport channel information for all transport channels	A1, A2, A5,A6	Not Present	
UL Transport channel information for all transport channels	A3, A4		
- PRACH TFCS		Not Present	
- CHOICE mode		TDD	
- Individual UL CCTrCH information			
- UL TFCS Identity			
- TFCS ID		1	
- Shared Channel Indicator		FALSE	
- UL TFCS			
- CHOICE *TFCI signalling*		Normal (another option “split” only for FDD)	
- TFCI Field 1 Information			
- CHOICE *TFCS representation*		Complete reconfiguration	
- TFCS complete reconfiguration information			
- CHOICE *CTFC Size*		Number of bits used must be enough to cover all combinations of CTFC from TS34.108 clause 6.10.3.4 Parameter Set.	
- CTFC information		This IE is repeated for TFC numbers and reference to TS34.108 clause 6.10.3.4 Parameter Set	
- CTFC		Reference to TS34.108 clause 6.10.3.4	

Information Element	Condition	Value/remark	Version
- Power offset information		Parameter Set	
- CHOICE Gain Factors		Computed Gain Factors (The last TFC is set to Signalled Gain Factors)	
- Reference TFC ID		0 Integer(0.. 3)	
- CHOICE Gain Factors		Signalled Gain Factors (Not Present if the CHOICE Gain Factors is set to ComputedGain Factors)	
- CHOICE *mode*		TDD	
- Gain Factor β_d		15	
- Reference TFC ID		0 Integer(0.. 3)	
- CHOICE *mode*		TDD	
- TFC subset			
- CHOICE *Subset representation*		Minimum allowed Transport format combination index	
- Allowed transport format combination list		Not present	
- Non-allowed transport format combination list		Not present	
- Non-allowed transport format combination list		Not present	
- Full transport format combination set		Not present	
- TFC subset list		Not present	
Deleted TrCH information list			
Deleted UL TrCH information	A1, A2, A3, A4, A5,A6	Not Present	
Added or Reconfigured TrCH information list			
Added or Reconfigured UL TrCH information	A1, A2, A5,A6	Not Present	
Added or Reconfigured UL TrCH information	A4	2 TrCHs(DCH for DCCH and DCH for DTCH)	
- Uplink transport channel type		DCH	
- UL Transport channel identity		5	
- TFS			
- CHOICE Transport channel type		Dedicated transport channels	
- Dynamic Transport format information			
- RLC Size		Reference to TS34.108 clause 6.10.3 Parameter Set	
- Number of TBs and TTI List		(This IE is repeated for TFI number.)	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to TS34.108 clause 6.10.3 Parameter Set	
- CHOICE Logical Channel list		All	
- Semi-static Transport Format information			
- Transmission time interval		Reference to TS34.108 clause 6.10.3 Parameter Set	
- Type of channel coding		Reference to TS34.108 clause 6.10.3 Parameter Set	
- Coding Rate		Reference to TS34.108 clause 6.10.3 Parameter Set	
- Rate matching attribute		Reference to TS34.108 clause 6.10.3 Parameter Set	
- CRC size		Reference to TS34.108 clause 6.10.3 Parameter Set	
- Uplink transport channel type		DCH	
- UL Transport channel identity		1	
- TFS			
- CHOICE Transport channel type		Dedicated transport channels	
- Dynamic Transport format information			
- RLC Size		Reference to TS34.108 clause 6.10.3 Parameter Set	
- Number of TBs and TTI List		(This IE is repeated for TFI number.)	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to TS34.108 clause 6.10.3 Parameter Set	

Information Element	Condition	Value/remark	Version
- CHOICE Logical Channel list - Semi-static Transport Format information - Transmission time interval - Type of channel coding - Coding Rate - Rate matching attribute - CRC size		All Reference to TS34.108 clause 6.10.3 Parameter Set Reference to TS34.108 clause 6.10.3 Parameter Set Reference to TS34.108 clause 6.10.3 Parameter Set Reference to TS34.108 clause 6.10.3 Parameter Set Reference to TS34.108 clause 6.10.3 Parameter Set	
Added or Reconfigured UL TrCH information - Uplink transport channel type - UL Transport channel identity - TFS - CHOICE Transport channel type - Dynamic Transport format information - RLC Size - Number of TBs and TTI List - Transmission Time Interval - Number of Transport blocks - CHOICE Logical Channel list - Semi-static Transport Format information - Transmission time interval - Type of channel coding - Coding Rate - Rate matching attribute - CRC size	A3	(DCH for DTCH) DCH 1 Dedicated transport channels Reference to TS34.108 clause 6.10.3 Parameter Set (This IE is repeated for TFI number.) Not Present Reference to TS34.108 clause 6.10.3 Parameter Set All Reference to TS34.108 clause 6.10.3 Parameter Set Reference to TS34.108 clause 6.10.3 Parameter Set Reference to TS34.108 clause 6.10.3 Parameter Set Reference to TS34.108 clause 6.10.3 Parameter Set Reference to TS34.108 clause 6.10.3 Parameter Set	
CHOICE mode - (no data)	A1,A2,A3, A4,A5,A6	TDD	
Downlink transport channels			
DL Transport channel information common for all transport channel	A1, A2, A5, A6	Not Present	
DL Transport channel information common for all transport channel - SCCPCH TFCS - CHOICE mode - Individual DL CCTrCH information - DL TFCS Identity - TFCS ID - Shared Channel Indicator - CHOICE *DL parameters* - DL TFCS – CHOICE *TFCI signalling* - TFCI Field 1 Information	A3,A4	 Not Present TDD Independent Normal (Normal' : meaning no split in the TFCI field either 'Logical' or 'Hard')	
- CHOICE *TFCS representation*		Complete reconfiguration	
- TFCS complete reconfiguration information - CHOICE CTFC Size - CTFC information - CTFC		 Number of bits used must be enough to cover all combinations of CTFC from clause TS34.108 clause 6.10.3.4 Parameter Set. This IE is repeated for TFC numbers and reference to TS34.108 clause 6.10.3.4 Reference to TS34.108 clause 6.10.3.4	

Information Element	Condition	Value/remark	Version
- Power offset information		Parameter Set Not Present	
Deleted TrCH information list			
Deleted DL TrCH information	A1, A2, A3, A4, A5,A6	Not Present	
Added or Reconfigured TrCH information list			
Added or Reconfigured DL TrCH information	A1, A2, A5, A6	Not Present	
Added or Reconfigured DL TrCH information - Downlink transport channel type - DL Transport channel identity - CHOICE DL parameters - Uplink transport channel type - UL TrCH identity - DCH quality target - BLER Quality value - Downlink transport channel type - DL Transport channel identity - CHOICE DL parameters - TFS - CHOICE Transport channel type - Dynamic transport format information - RLC Size - Number of TBs and TTI List - Dynamic transport format information - Transmission Time Interval - Number of Transport blocks - Semi-static Transport Format information - Transmission time interval - Type of channel coding - Coding Rate - Rate matching attribute - CRC size - DCH quality target - BLER Quality value	A4	2 TrCHs(DCH for DCCH and DCH for DTCH) DCH 10 Same as UL DCH 5 Not Present DCH 6 Explicit Dedicated transport channel Reference to TS34.108 clause 6.10.3 Parameter Set (This IE is repeated for TFI number.) Not Present Reference to TS34.108 clause 6.10.3 Parameter Set Reference to TS34.108 clause 6.10.3 Parameter Set Reference to TS34.108 clause 6.10.3 Parameter Set Reference to TS34.108 clause 6.10.3 Parameter Set Reference to TS34.108 clause 6.10.3 Parameter Set Reference to TS34.108 clause 6.10.3 Parameter Set -2.0	
Added or Reconfigured DL TrCH information - Downlink transport channel type - DL Transport channel identity - CHOICE DL parameters - TFS - CHOICE Transport channel type - Dynamic transport format information - RLC Size - Number of TBs and TTI List - Dynamic transport format information - Transmission Time Interval - Number of Transport blocks - Semi-static Transport Format information - Transmission time interval - Type of channel coding - Coding Rate - Rate matching attribute	A3	 DCH 6 Explicit Dedicated transport channel Reference to TS34.108 clause 6.10.3 Parameter Set (This IE is repeated for TFI number.) Not Present Reference to TS34.108 clause 6.10.3 Parameter Set Reference to TS34.108 clause 6.10.3 Parameter Set Reference to TS34.108 clause 6.10.3 Parameter Set Reference to TS34.108 clause 6.10.3 Parameter Set Reference to TS34.108 clause 6.10.3 Parameter Set	

Information Element	Condition	Value/remark	Version
- CRC size		Reference to TS34.108 clause 6.10.3 Parameter Set	
- DCH quality target			
- BLER Quality value		-2.0	
Preconfiguration	A1,A2,A3, A4,A5,A6	[FFS]	REL-5
PhyCH information elements			
Frequency info	A1,A2,A3, A4,A5		
- CHOICE mode		TDD	
- UARFCN (Nt)		Reference to clause 5.1 Test frequencies	
Frequency info	A6	Not Present	
Uplink radio resources			
Maximum allowed UL TX power	A1,A2,A3, A4,A5,A6	33dBm	
CHOICE channel requirement	A1, A2, A3, A4	Uplink DPCH info	
-Uplink DPCH power control info			
- CHOICE mode		TDD	
- UL target SIR		6	
- CHOICE *UL OL PC info*		Individually Signalled	
- CHOICE TDD option		3.84 Mcps TDD	REL-4
- Individual timeslot interference info		Reference to TS34.108 clause 6.10.3 Parameter Set	
- Individual timeslot interference			
- CHOICE TDD option		3.84 Mcps TDD	REL-4
- Timeslot number		As required by, Reference to TS34.108 clause 6.10.3 Parameter Set	
- TDD UL interference		As required by, Reference to TS34.108 clause 6.10.3 Parameter Set (if not specified -60 dBm)	
- Primary CCPCH Tx Power		18 Integer(6..43) (-70 dBm Received if pathloss not specified)	
- CHOICE mode		TDD	
- Uplink Timing Advance Control			
- CHOICE *Timing Advance*		Enabled	
- CHOICE *TDD option*		3.84 Mcps TDD (Default)	REL-4
- UL CCTrCH List			
- TFCS ID		1	
- UL Target SIR		Real (-11 .. 20 by step of 0.5dB) Reference to TS34.108 Parameter set.	
- Time info			
- Activation time		(256+CFN-(CFN MOD 8 + 8))MOD 256	
- Duration		infinite	
- Common timeslot info			
- 2nd interleaving mode		Default value is "Frame"	
- TFCI coding		Reference to TS34.108 clause 6 Parameter set	
- Puncturing limit		Reference to TS34.108 clause 6 Parameter set	
- Repetition period		1	
- Repetition length		empty	
- Uplink DPCH timeslots and code			
- Dynamic SF usage		FALSE	
- First individual timeslot info			
- Timeslot number			
- CHOICE TDD option		3.84 Mcps TDD	REL-4
- Timeslot number		1 OR 2 OR 3	
- TFCI existence		TRUE	
- Midamble shift and burst type			
- CHOICE TDD option		3.84 Mcps TDD	REL-4
- CHOICE *Burst Type*		Type 1	
- Midamble allocation mode		Default midamble	

Information Element	Condition	Value/remark	Version
- Midamble configuration		16	
- Midamble Shift		Not Present	
- CHOICE TDD option		3.84 Mcps TDD (No Data)	REL-4
- First timeslot Code List		Repeated (1,2) for each channelisation code assigned in the slot to meet the needs of TS34.108 clause 6 Parameter Set.	
- channelisation codes		(SF/ i) where i denotes an unassigned code matching the SF specified in TS34.108 clause 6 Parameter Set.	
- CHOICE more timeslots		No more timeslots (No Data)	
- UL CCTrCH List to Remove		Not present	
CHOICE channel requirement	A5, A6	Not Present	
Downlink radio resources			
CHOICE Mode	A1,A2,A3, A4,A5,A6	TDD	
- Downlink PDSCH information		No date	
Downlink HS-PDSCH Information	A1, A2, A3, A4, A5, A6	Not Present	REL-5
Downlink information common for all radio links	A5, A6	Not Present	
Downlink information common for all radio links	A1, A2, A3		
- Downlink DPCH info common for all RL			
- Timing indicaton		Maintain	
- CFN-targetSFN frame offset		Not Present	
- Downlink DPCH power control information			
- CHOICE *mode*		TDD	
- TPC Step Size		1	
- MAC-d HFN initial value		Not Present	
- CHOICE mode		TDD	
- CHOICE mode		TDD	
- CHOICE *TDD option*		3.84 Mcps TDD (No Data)	REL-4
- Default DPCH Offset Value		Not Present	
Downlink information common for all radio links			
- Downlink DPCH info common for all RL			
- Timing indication		Initialise	
- CFN-targetSFN frame offset		Not Present	
- Downlink DPCH power control information			
- CHOICE *mode*		TDD	
- TPC Step Size		1	
- MAC-d HFN initial value		Not Present	
- CHOICE mode		TDD	
- CHOICE mode		TDD	
- CHOICE *TDD option*		3.84 Mcps TDD (no Data)	REL-4
- Default DPCH Offset Value			
- CHOICE mode		TDD	
- Default DPCH Offset Value		0	
Downlink information per radio link list	A1, A2, A3, A4		
- Downlink information for each radio link			
- Choice mode		TDD	
- Primary CCPCH info			
- Choice mode		TDD	
- Choice TDD Option		3.84 Mcps TDD	REL-4
- CHOICE *SyncCase*		Sync Case 1	
- Timeslot		Reference clause 6.1.4 Default settings for cell 1	
- SCTD indicator		FALSE	
- Downlink DPCH info for each RL			
- CHOICE mode		TDD	
- DL CCTrCh List			
- TFCS ID	Integer(1.8)	Identity of this CCTrCh.Default value is 1	
- Time info			
- Activation time		Now	
- Duration		Infinite	

Information Element	Condition	Value/remark	Version
- Common timeslot info - 2nd interleaving mode		 Default value is "Frame"	
- TFCI coding - Puncturing limit - Repetition period - Repetition length - Downlink DPCH timeslots and codes - First individual timeslot info - Timeslot number - CHOICE TDD option		Reference to TS34.108 clause 6 Parameter set Reference to TS34.108 clause 6 Parameter set 1 empty 3.84 Mcps TDD	 REL-4
- Timeslot number - TFCI existence - Midamble shift and burst type - CHOICE TDD option - CHOICE *Burst Type* - Midamble allocation mode - Midamble configuration - Midamble Shift - CHOICE TDD option - First timeslot channelisation codes - CHOICE codes representation - Channelisation codes bitmap - CHOICE more timeslots - UL CCTrCH TPC List - UL TPC TFCS Identity - TFCS ID - Shared Channel Indicator - DL CCTrCH List to Remove - SCCPCH Information for FACH		4 OR 5 OR 6 TRUE 3.84 Mcps TDD Type 1 Default midamble 16 Not Present 3.84 Mcps TDD (No Data) Repeated (1,2) for each channelisation code assigned in the slot to meet the needs of TS34.108 clause 6 Parameter Set. Bitmap Reference to TS34.108 clause 6.10 Parameter Set No more timeslots (No Data) Default (is previous list or all defined UL CCTrCHs.) 1 FALSE Not present Not Present	 REL-4 REL-4 R99 and Rel-4 only
Downlink information per radio link list - Downlink information for each radio link - Choice mode - Primary CCPCH info - Choice mode - Choice TDD Option - TSTD indicator - Cell parameters ID - SCTD indicator	A5	 TDD TDD 3.84 Mcps TDD FALSE Reference clause 6.1.4 Default settings for cell 1 FALSE	 REL-4
- Downlink DPCH info for each RL		Not Present	
- SCCPCH Information for FACH		Not Present	R99 and Rel-4 only
Downlink information per radio link list	A6		
- Downlink information for each radio link		Not Present	

Condition	Explanation
A1	This IE need for "Non speech in CS"
A2	This IE need for "Speech in CS"
A3	This IE need for "Packet to CELL_DCH from CELL_DCH in PS"
A4	This IE need for "Packet to CELL_DCH from CELL_FACH in PS"
A5	This IE need for "Packet to CELL_FACH from CELL_DCH in PS"
A6	This IE need for "Packet to CELL_FACH from CELL_FACH in PS"

Contents of RADIO BEARER RECONFIGURATION message: AM or UM (1.28 Mcps TDD)

Information Element	Condition	Value/remark	Version
Message Type	A1,A2,A3,A4, A5,A6		
UE Information elements			
RRC transaction identifier		Arbitrarily selects an integer between 0 and 3	
Integrity check info			
- message authentication code		SS calculates the value of MAC-I for this message and writes to this IE. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.	
- RRC message sequence number		SS provides the value of this IE, from its internal counter.	
Integrity protection mode info		Not Present	
Ciphering mode info		Not Present	
Activation time	A1,A2,A3	(256+CFN-(CFN MOD 8 + 8))MOD 256	
Activation time	A4, A5,A6	Not Present MD Integer(0..255) default is 'now"	
New U-RNTI		Not Present	
New C-RNTI	A1, A2, A3, A4,	Not Present	
New C-RNTI	A5, A6	'1010 1010 1010 1010'	
New DSCH-RNTI	A1, A2, A3, A4, A5, A6	Not Present	
New H-RNTI	A1, A2, A3, A4, A5, A6	Not Present	REL-5
RRC State indicator	A1, A2, A3, A4	CELL_DCH Indicates to a UE the RRC state to be entered.	
RRC State indicator	A5, A6	CELL_FACH	
UTRAN DRX cycle length coefficient	A1,A2,A3,A4, A5,A6	Not Present A coefficient in the formula to count the paging occasions to be used by a specific UE	
CN information elements			
CN information info		Not Present	
UTRAN mobility information elements			
URA identity		Not Present	
CHOICE specification mode		[FFS]	REL-5
RB information elements			
RAB information to reconfigure list		Not Present	
RB information to reconfigure list	A1	TS25.331 specifies that "Although this IE is not always required, need is MP to align with ASN.1".	
- RB information to reconfigure		(UM DCCH for RRC)	
- RB identity		1	
- PDCP info		Not Present	
- PDCP SN info		Not Present	
- RLC info		Not Present	
- RB mapping info		Not Present	
- RB stop/continue		Not Present	
- RB information to reconfigure		(AM DCCH for RRC)	
- RB identity		2	
- PDCP info		Not Present	
- PDCP SN info		Not Present	
- RLC info		Not Present	
- RB mapping info		Not Present	
- RB stop/continue		Not Present	
- RB information to reconfigure		(AM DCCH for NAS_DT High priority)	
- RB identity		3	
- PDCP info		Not Present	
- PDCP SN info		Not Present	
- RLC info		Not Present	
- RB mapping info		Not Present	
- RB stop/continue		Not Present	
- RB information to reconfigure		(AM DCCH for NAS_DT Low priority)	
- RB identity		4	

Information Element	Condition	Value/remark	Version
- PDCP info		Not Present	
- PDCP SN info		Not Present	
- RLC info		Not Present	
- RB mapping info		Not Present	
- RB stop/continue		Not Present	
- RB information to reconfigure		(TM DTCH)	
- RB identity		10	
- PDCP info		Not Present	
- PDCP SN info		Not Present	
- RLC info		Not Present	
- RB mapping info		Not Present	
- RB stop/continue		Not Present	
RB information to reconfigure list	A2	TS25.331 specifies that "Although this IE is not always required, need is MP to align with ASN.1".	
- RB information to reconfigure		(UM DCCH for RRC)	
- RB identity		1	
- PDCP info		Not Present	
- PDCP SN info		Not Present	
- RLC info		Not Present	
- RB mapping info		Not Present	
- RB stop/continue		Not Present	
- RB information to reconfigure		(AM DCCH for RRC)	
- RB identity		2	
- PDCP info		Not Present	
- PDCP SN info		Not Present	
- RLC info		Not Present	
- RB mapping info		Not Present	
- RB stop/continue		Not Present	
- RB information to reconfigure		(AM DCCH for NAS_DT High priority)	
- RB identity		3	
- PDCP info		Not Present	
- PDCP SN info		Not Present	
- RLC info		Not Present	
- RB mapping info		Not Present	
- RB stop/continue		Not Present	
- RB information to reconfigure		(AM DCCH for NAS_DT Low priority)	
- RB identity		4	
- PDCP info		Not Present	
- PDCP SN info		Not Present	
- RLC info		Not Present	
- RB mapping info		Not Present	
- RB stop/continue		Not Present	
- RB information to reconfigure		(TM DTCH)	
- RB identity		10	
- PDCP info		Not Present	
- PDCP SN info		Not Present	
- RLC info		Not Present	
- RB mapping info		Not Present	
- RB stop/continue		Not Present	
- RB information to reconfigure		(TM DTCH)	
- RB identity		11	
- PDCP info		Not Present	
- PDCP SN info		Not Present	
- RLC info		Not Present	
- RB mapping info		Not Present	
- RB stop/continue		Not Present	
- RB information to reconfigure		(TM DTCH) (This IE is needed for 12.2 kbps and 10.2 kbps)	
- RB identity		12	
- PDCP info		Not Present	
- PDCP SN info		Not Present	
- RLC info		Not Present	
- RB mapping info		Not Present	
- RB stop/continue		Not Present	
RB information to reconfigure list	A3,A4,A5,A6	TS25.331 specifies that "Although this	

Information Element	Condition	Value/remark	Version
		IE is not always required, need is MP to align with ASN.1".	
- RB information to reconfigure		(UM DCCH for RRC)	
- RB identity		1	
- PDCP info		Not Present	
- PDCP SN info		Not Present	
- RLC info		Not Present	
- RB mapping info		Not Present	
- RB stop/continue		Not Present	
- RB information to reconfigure		(AM DCCH for RRC)	
- RB identity		2	
- PDCP info		Not Present	
- PDCP SN info		Not Present	
- RLC info		Not Present	
- RB mapping info		Not Present	
- RB stop/continue		Not Present	
- RB information to reconfigure		(AM DCCH for NAS_DT High priority)	
- RB identity		3	
- PDCP info		Not Present	
- PDCP SN info		Not Present	
- RLC info		Not Present	
- RB mapping info		Not Present	
- RB stop/continue		Not Present	
- RB information to reconfigure		(AM DCCH for NAS_DT Low priority)	
- RB identity		4	
- PDCP info		Not Present	
- PDCP SN info		Not Present	
- RLC info		Not Present	
- RB mapping info		Not Present	
- RB stop/continue		Not Present	
- RB information to reconfigure		(AM DTCH)	
- RB identity		20	
- PDCP info		Not Present	
- PDCP SN info		Not Present	
- RLC info		Not Present	
- RB mapping info		Not Present	
- RB stop/continue		Not Present	
RB information to be affected	A1, A2, A3,A4,A5,A6	Not Present	
TrCH Information Elements			
Uplink transport channels			
UL Transport channel information for all transport channels	A1, A2, A5,A6	Not Present	
UL Transport channel information for all transport channels	A3, A4		
- PRACH TFCS		Not Present	
- CHOICE mode		TDD	
- Individual UL CCTrCH information			
- UL TFCS Identity			
- TFCS ID		1	
- Shared Channel Indicator		FALSE	
- UL TFCS			
- CHOICE *TFCI signalling*		Normal (another option "split" only for FDD)	
- TFCI Field 1 Information			
- CHOICE *TFCS representation*		Complete reconfiguration	
- TFCS complete reconfiguration information			
- CHOICE *CTFC Size*		Number of bits used must be enough to cover all combinations of CTFC from clause 6.11.5.4 Parameter Set.	
- CTFC information		This IE is repeated for TFC numbers and reference to clause 6.11.5.4 Parameter Set	

Information Element	Condition	Value/remark	Version
- CTFC		Reference to clause 6.11.5.4 Parameter Set	
- Power offset information			
- CHOICE Gain Factors		Computed Gain Factors (The last TFC is set to Signalled Gain Factors)	
- Reference TFC ID		0 Integer(0.. 3)	
- CHOICE Gain Factors		Signalled Gain Factors (Not Present if the CHOICE Gain Factors is set to ComputedGain Factors)	
- CHOICE *mode*		TDD	
- Gain Factor β_d		15	
- Reference TFC ID		0 Integer(0.. 3)	
- CHOICE *mode*		TDD	
- TFC subset			
- CHOICE *Subset representation*		Minimum allowed Transport format combination index	
- Allowed transport format combination list		Not present	
- Non-allowed transport format combination list		Not present	
- Non-allowed transport format combination list		Not present	
- Full transport format combination set		Not present	
- TFC subset list		Not present	
Deleted TrCH information list			
Deleted UL TrCH information	A1, A2, A3, A4, A5,A6	Not Present	
Added or Reconfigured TrCH information list			
Added or Reconfigured UL TrCH information	A1, A2, A5,A6	Not Present	
Added or Reconfigured UL TrCH information	A4	2 TrCHs(DCH for DCCH and DCH for DTCH)	
- Uplink transport channel type		DCH	
- UL Transport channel identity		5	
- TFS			
- CHOICE Transport channel type		Dedicated transport channels	
- Dynamic Transport format information			
- RLC Size		Reference to clause 6.11.5 Parameter Set	
- Number of TBs and TTI List		(This IE is repeated for TFI number.)	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to clause 6.11.5 Parameter Set	
- CHOICE Logical channel list		All	
- Semi-static Transport Format information			
- Transmission time interval		Reference to clause 6.11.5 Parameter Set	
- Type of channel coding		Reference to clause 6.11.5 Parameter Set	
- Coding Rate		Reference to clause 6.11.5 Parameter Set	
- Rate matching attribute		Reference to clause 6.11.5 Parameter Set	
- CRC size		Reference to clause 6.11.5 Parameter Set	
- Uplink transport channel type		DCH	
- UL Transport channel identity		1	
- TFS			
- CHOICE Transport channel type		Dedicated transport channels	
- Dynamic Transport format information			
- RLC Size		Reference to clause 6.11.5 Parameter Set	
- Number of TBs and TTI List		(This IE is repeated for TFI number.)	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to clause 6.11.5 Parameter	

Information Element	Condition	Value/remark	Version
		Set	
- CHOICE Logical channel list		All	
- Semi-static Transport Format information			
- Transmission time interval		Reference to clause 6.11.5 Parameter Set	
- Type of channel coding		Reference to clause 6.11.5 Parameter Set	
- Coding Rate		Reference to clause 6.11.5 Parameter Set	
- Rate matching attribute		Reference to clause 6.11.5 Parameter Set	
- CRC size		Reference to clause 6.11.5 Parameter Set	
Added or Reconfigured UL TrCH information	A3	(DCH for DTCH)	
- Uplink transport channel type		DCH	
- UL Transport channel identity		1	
- TFS			
- CHOICE Transport channel type		Dedicated transport channels	
- Dynamic Transport format information			
- RLC Size		Reference to clause 6.11.5 Parameter Set	
- Number of TBs and TTI List		(This IE is repeated for TFI number.)	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to clause 6.11.5 Parameter Set	
- CHOICE Logical channel list		All	
- Semi-static Transport Format information			
- Transmission time interval		Reference to clause 6.11.5 Parameter Set	
- Type of channel coding		Reference to clause 6.11.5 Parameter Set	
- Coding Rate		Reference to clause 6.11.5 Parameter Set	
- Rate matching attribute		Reference to clause 6.11.5 Parameter Set	
- CRC size		Reference to clause 6.11.5 Parameter Set	
CHOICE mode	A1,A2,A3,A4, A5,A6	TDD	
- (no data)			
Downlink transport channels			
DL Transport channel information common for all transport channel	A1, A2, A5, A6	Not Present	
DL Transport channel information common for all transport channel	A3,A4		
- SCCPCH TFCS		Not Present	
- CHOICE mode		TDD	
- Individual DL CCTrCH information			
- DL TFCS Identity			
- TFCS ID			
- Shared Channel Indicator			
- CHOICE *DL parameters*		Independent	
- DL TFCS			
- CHOICE *TFCI signalling*		Normal (Normal' : meaning no split in the TFCI field either 'Logical' or 'Hard')	
- TFCI Field 1 Information			
- CHOICE *TFCS representation*		Complete reconfiguration	
- TFCS complete reconfiguration information			
- CHOICE CTFC Size		Number of bits used must be enough to cover all combinations of CTFC from clause 6.11.5.4 Parameter Set.	
- CTFC information		This IE is repeated for TFC numbers and reference to clause 6.11.5.4	
- CTFC		Reference to clause 6.11.5.4 Parameter Set	

Information Element	Condition	Value/remark	Version
- Power offset information		Not Present	
Deleted TrCH information list			
Deleted DL TrCH information	A1, A2, A3, A4, A5,A6	Not Present	
Added or Reconfigured TrCH information list			
Added or Reconfigured DL TrCH information	A1, A2, A5, A6	Not Present	
Added or Reconfigured DL TrCH information	A4	2 TrCHs(DCH for DCCH and DCH for DTCH)	
- Downlink transport channel type		DCH	
- DL Transport channel identity		10	
- CHOICE DL parameters		Same as UL	
- Uplink transport channel type		DCH	
- UL TrCH identity		5	
- DCH quality target			
- BLER Quality value		Not Present	
- Downlink transport channel type		DCH	
- DL Transport channel identity		6	
- CHOICE DL parameters		Explicit	
- TFS			
- CHOICE Transport channel type		Dedicated transport channel	
- Dynamic transport format information			
- RLC Size		Reference to clause 6.11.5 Parameter Set	
- Number of TBs and TTI List		(This IE is repeated for TFI number.)	
- Dynamic transport format information			
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to clause 6.11.5 Parameter Set	
- Semi-static Transport Format information			
- Transmission time interval		Reference to clause 6.11.5 Parameter Set	
- Type of channel coding		Reference to clause 6.11.5 Parameter Set	
- Coding Rate		Reference to clause 6.11.5 Parameter Set	
- Rate matching attribute		Reference to clause 6.11.5 Parameter Set	
- CRC size		Reference to clause 6.11.5 Parameter Set	
- DCH quality target			
- BLER Quality value		-2.0	
Added or Reconfigured DL TrCH information	A3		
- Downlink transport channel type		DCH	
- DL Transport channel identity		6	
- CHOICE DL parameters		Explicit	
- TFS			
- CHOICE Transport channel type		Dedicated transport channel	
- Dynamic transport format information			
- RLC Size		Reference to clause 6.11.5 Parameter Set	
- Number of TBs and TTI List		(This IE is repeated for TFI number.)	
- Dynamic transport format information			
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to clause 6.11.5 Parameter Set	
- Semi-static Transport Format information			
- Transmission time interval		Reference to clause 6.11.5 Parameter Set	
- Type of channel coding		Reference to clause 6.11.5 Parameter Set	
- Coding Rate		Reference to clause 6.11.5 Parameter Set	
- Rate matching attribute		Reference to clause 6.11.5 Parameter Set	
- CRC size		Reference to clause 6.11.5 Parameter	

Information Element	Condition	Value/remark	Version
		Set	
- DCH quality target			
- BLER Quality value		-2.0	
Preconfiguration	A1,A2,A3,A4, A5,A6	[FFS]	REL-5
PhyCH information elements			
Frequency info	A1,A2,A3,A4, A5		
- CHOICE mode		TDD	
- UARFCN (Nt)		Reference to clause 5.1 Test frequencies	
Frequency info	A6	Not Present	
Uplink radio resources			
Maximum allowed UL TX power	A1,A2,A3,A4, A5,A6	33dBm	
CHOICE channel requirement	A1, A2, A3, A4	Uplink DPCH info	
-Uplink DPCH power control info			
- CHOICE mode		TDD	
- CHOICE TDD option		1.28 Mcps TDD	REL-4
- $PRX_{PDPCHdes}$		Integer(-120…-58 by step of 1)	
- CHOICE *UL OL PC info*			
- Broadcast UL OL PC info		Null	
- CHOICE mode		TDD	
- Uplink Timing Advance Control			
- CHOICE *Timing Advance*		Enabled	
- CHOICE *TDD option*		1.28 Mcps TDD	
- Uplink synchronization parameters			
- Uplink synchronization step size		1	
- Uplink synchronization frequency		1	
- Synchronization parameters		Not Present	
- UL CCTrCH List			
- TFCS ID		1	
- UL Target SIR		Real (-11 .. 20 by step of 0.5dB) Reference to clause 6 Parameter set.	
- Time info			
- Activation time		(256+CFN-(CFN MOD 8 + 8))MOD 256	
- Duration		infinite	
- Common timeslot info			
- 2nd interleaving mode		Default value is "Frame"	
- TFCI coding		Reference to clause 6 Parameter set	
- Puncturing limit		Reference to clause 6 Parameter set	
- Repetition period		1	
- Repetition length		empty	
- Uplink DPCH timeslots and code			
- Dynamic SF usage		FALSE	
- First individual timeslot info			
- Timeslot number			
- CHOICE TDD option		1.28 Mcps TDD	
- Timeslot number		1	
- TFCI existence		TRUE	
- Midamble shift and burst type			
- CHOICE TDD option		1.28 Mcps TDD	
- Midamble allocation mode		Default midamble	
- Midamble configuration		16	
- Midamble Shift		Not Present	
- CHOICE TDD option		1.28 Mcps TDD	
- Modulation		QPSK	
- SS-TPC Symbols		1	
- Additional TPC-SS Sysbols		Not present	
- First timeslot Code List		Repeated (1,2) for each channelisation code assigned in the slot to meet the needs of clause 6 Parameter Set.	
- channelisation codes		(SF/ i) where i denotes an unassigned code matching the SF specified in clause 6 Parameter Set.	
- CHOICE more timeslots		No more timeslots	

Information Element	Condition	Value/remark	Version
- UL CCTrCH List to Remove		Not present	
CHOICE channel requirement	A5, A6	Not Present	
Downlink radio resources			
CHOICE Mode	A1,A2,A3,A4, A5,A6	TDD	
- Downlink PDSCH information		No date	
Downlink HS-PDSCH Information	A1, A2, A3, A4, A5, A6	Not Present	REL-5
Downlink information common for all radio links	A5, A6	Not Present	
Downlink information common for all radio links	A1, A2, A3		
- Downlink DPCH info common for all RL			
- Timing indicaton		Maintain	
- CFN-targetSFN frame offset		Not Present	
- Downlink DPCH power control information			
- CHOICE *mode*		TDD	
- TPC Step Size		1	
- MAC-d HFN initial value		Not Present	
- CHOICE mode		TDD	
- CHOICE mode		TDD	
- CHOICE *TDD option*		1.28 Mcps TDD	
- TSTD indicator		FALSE	
- Default DPCH Offset Value		Not Present	
Downlink information common for all radio links	A4		
- Downlink DPCH info common for all RL			
- Timing indication		Initialize	
- CFN-targetSFN frame offset		Not Present	
- Downlink DPCH power control information			
- CHOICE *mode*		TDD	
- TPC Step Size		1	
- MAC-d HFN initial value		Not Present	
- CHOICE mode		TDD	
- CHOICE mode		TDD	
- CHOICE *TDD option*		1.28 Mcps TDD	
- TSTD indicator		FALSE	
- Default DPCH Offset Value			
- CHOICE mode		TDD	
- Default DPCH Offset Value		0	
Downlink information per radio link list	A1, A2, A3, A4		
- Downlink information for each radio link			
- Choice mode		TDD	
- Primary CCPCH info			
- Choice mode		TDD	
- Choice TDD Option		1.28 Mcps TDD	
- TSTD indicator		FALSE	
- Cell parameters ID		Reference clause 6.1.4 Default settings for cell 1	
- SCTD indicator		FALSE	
- Downlink DPCH info for each RL			
- CHOICE mode		TDD	
- DL CCTrCh List			
- TFCS ID	Integer(1.8)	Identity of this CCTrCh.Default value is 1	
- Time info			
- Activation time		Now	
- Duration		Infinite	
- Common timeslot info			
- 2nd interleaving mode		Default value is "Frame"	
- TFCI coding		Reference to clause 6 Parameter set	
- Puncturing limit		Reference to clause 6 Parameter set	
- Repetition period		1	
- Repetition length		empty	
- Downlink DPCH timeslots and codes			
- First individual timeslot info			
- Timeslot number			
- CHOICE TDD option		1.28 Mcps TDD	
- Timeslot number		4 OR 5 OR 6	

Information Element	Condition	Value/remark	Version
- TFCI existence		TRUE	
- Midamble shift and burst type			
- CHOICE TDD option		1.28 Mcps TDD	
- Midamble allocation mode		Default midamble	
- Midamble configuration		16	
- Midamble Shift		Not Present	
- CHOICE TDD option		1.28 Mcps TDD	
- Modulation		QPSK	
- SS-TPC Symbols		1	
- Additional TPC-SS Sysbols		Not present	
- First timeslot channelisation codes		Repeated (1,2) for each channelisation code assigned in the slot to meet the needs of clause 6 Parameter Set.	
- CHOICE codes representation			
- Channelisation codes bitmap		Reference to clause 6.10 Parameter Set	
- CHOICE more timeslots		No more timeslots	
- UL CCTrCH TPC List		This list is not required for 1.28 Mcps TDD and is to be ignored by the UE.	
- UL TPC TFCS Identity			
- TFCS ID		1	
- Shared Channel Indicator		FALSE	
- DL CCTrCH List to Remove		Not present	
- SCCPCH Information for FACH		Not Present	R99 and Rel-4 only
Downlink information per radio link list	A5		
- Downlink information for each radio link			
- Choice mode		TDD	
- Primary CCPCH info			
- Choice mode		TDD	
- Choice TDD Option		1.28 Mcps TDD	
- TSTD indicator		FALSE	
- Cell parameters ID		Reference clause 6.1.4 Default settings for cell 1	
- SCTD indicator		FALSE	
- Downlink DPCH info for each RL		Not Present	
- SCCPCH Information for FACH		Not Present	R99 and Rel-4 only
Downlink information per radio link list	A6		
- Downlink information for each radio link		Not Present	

Condition	Explanation
A1	This IE need for "Non speech in CS"
A2	This IE need for "Speech in CS"
A3	This IE need for "Packet to CELL_DCH from CELL_DCH in PS"
A4	This IE need for "Packet to CELL_DCH from CELL_FACH in PS"
A5	This IE need for "Packet to CELL_FACH from CELL_DCH in PS"
A6	This IE need for "Packet to CELL_FACH from CELL_FACH in PS"

Contents of RADIO BEARER RECONFIGURATION COMPLETE message: AM (3.84 Mcps TDD)

Information Element	Value/remark	Version
Message Type		
RRC transaction identifier	Checked to see if the value is identical to the same IE in the downlink RADIO BEARER RECONFIGURATION message	
Integrity check info		
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.	
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.	

Uplink integrity protection activation info	Not checked	
CHOICE mode	TDD	
- CHOICE *TDD option*	3.84 Mcps TDD	REL-4
- UL Timing Advance	0	
COUNT-C activation time	Not checked	
Radio bearer uplink ciphering activation time info	Not checked	
Uplink counter synchronisation info	Not checked	

Contents of RADIO BEARER RECONFIGURATION COMPLETE message: AM (1.28 Mcps TDD)

Information Element	Value/remark	Version
Message Type		
RRC transaction identifier	Checked to see if the value is identical to the same IE in the downlink RADIO BEARER RECONFIGURATION message	
Integrity check info		
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.	
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.	
Uplink integrity protection activation info	Not checked	
CHOICE mode	TDD	
- CHOICE *TDD option*	1.28 Mcps TDD (No data)	REL-4
COUNT-C activation time	Not checked	
Radio bearer uplink ciphering activation time info	Not checked	
Uplink counter synchronization info	Not checked	

Contents of RADIO BEARER RECONFIGURATION FAILURE message: AM

Information Element	Value/remark
Message Type	
RRC transaction identitifer	Checked to see if it is set to identical value of the same IE in the downlink RADIO BEARER RECONFIGURATION message.
Integrity check info	
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.
Failure cause	Checked to see if it meets test requirement
Radio bearers for which reconfiguration would have succeeded List	Not checked

Contents of RADIO BEARER RELEASE message: AM or UM (3.84 Mcps TDD)

Information Element	Condition	Value/remark	Version
Message Type	A1, A2, A3, A4, A5, A6, A7, A8		
RRC transaction identifier		Arbitrarily selects an integer between 0 and 3	
Integrity check info			
- message authentication code		SS calculates the value of MAC-I for this message and writes to this IE. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.	
- RRC message sequence number		SS provides the value of this IE, from its internal counter.	
Integrity protection mode info		Not Present	

Information Element	Condition	Value/remark	Version
Ciphering mode info Activation time Activation time New U-RNTI	 A1, A2, A3, A7, A8 A4, A5, A6	Not Present (256+CFN-(CFN MOD 8 + 8))MOD 256 Not Present Not Present	
New C-RNTI	A1,A2,A3, A4	Not Present	
New C-RNTI	A5, A6, A7, A8	'1010 1010 1010 1010'	
New DSCH-RNTI	A1, A2, A3, A4, A5, A6, A7, A8	Not Present	
RRC State indicator	A1,A2, A3, A4	CELL_DCH	
RRC State indicator	A5, A6, A7, A8	CELL_FACH	
UTRAN DRX cycle length coefficient CN information info Signalling Connection release indication URA identity RAB information to reconfigure list	A1,A2,A3, A4,A5,A6, A7, A8	Not Present Not Present Not Present Not Present Not Present	
RB information to release list	A1, A7		
RB information to release - RB identity		 10	
RB information to release list	A2, A8		
RB information to release - RB identity		 10	
RB information to release - RB identity		 11	
RB information to release - RB identity		 12	
RB information to release list	A3, A4, A5, A6		
RB information to release - RB identity		 20	
RB information to be affected list	A1,A2, A3,A4,A5, A6, A7, A8	Not Present	
Downlink counter synchronisation info	A1,A2,A3, A4,A5,A6, A7, A8	Not Present	
UL Transport channel information common for all transport channels	A1, A2, A3, A4	TFCS reconfigured to fit the new transport channel configuration.	
UL Transport channel information common for all transport channels	A5, A6, A7, A8	Not Present	
Deleted TrCH information list	A1,A2, A3, A5, A7, A8		
Deleted UL TrCH Information - Uplink transport channel type - Transport channel identity	A1,A2, A3, A5, A7, A8	 DCH 1	
Deleted UL TrCH Information - Uplink transport channel type - Transport channel identity	A2, A8	 DCH 2	
Deleted UL TrCH Information - Uplink transport channel type - Transport channel identity	A2, A8	 DCH 3	
Deleted TrCH information list	A4, A6	Not Present	
Added or Reconfigured TrCH information list	A5, A6, A7, A8	Not Present	
Added or Reconfigured TrCH information list	A1, A2, A3, A4	TrCHs (DCH for DCCH)	
Added or Reconfigured UL TrCH information			

Information Element	Condition	Value/remark	Version
- Uplink transport channel type		DCH	
- UL Transport channel identity		5	
- TFS			
- CHOICE Transport channel type		Dedicated transport channels	
- Dynamic Transport format information			
- RLC Size		Reference to TS34.108 clause 6.10 Parameter Set	
- Number of TBs and TTI List		(This IE is repeated for TFI number.)	
- Transmission Time Interval		Not present	
- Number of Transport blocks		Reference to TS34.108 clause 6.10 Parameter Set	
- CHOICE Logical Channel list		All (NULL)	
- Semi-static Transport Format information			
- Transmission time interval		Reference to TS34.108 clause 6.10 Parameter Set	
- Type of channel coding		Reference to TS34.108 clause 6.10 Parameter Set	
- Coding Rate		Reference to TS34.108 clause 6.10 Parameter Set	
- Rate matching attribute		Reference to TS34.108 clause 6.10 Parameter Set	
- CRC size		Reference to TS34.108 clause 6.10 Parameter Set	
CHOICE *mode*		TDD (No data)	
DL Transport channel information common for all transport channels	A1, A2, A3, A4,	TFCS reconfigured to fit the new transport channel configuration.	
DL Transport channel information common for all transport channels	A5, A6, A7, A8	Not Present	
Deleted TrCH information list			
- Deleted DL TrCH Information - Downlink transport channel type - Transport channel identity	A1, A2, A3, A5,A7, A8	 DCH 6	
- Deleted DL TrCH Information - Downlink transport channel type - Transport channel identity	A2, A8	 DCH 7	
- Deleted DL TrCH Information - Downlink transport channel type - Transport channel identity	A2, A8	 DCH 8	
Deleted TrCH information list	A4, A6	Not Present	
Added or Reconfigured TrCH information list			
- Added or Reconfigured DL TrCH information	A5, A6, A7, A8	Not Present	
- Added or Reconfigured DL TrCH information	A1, A2, A3, A4	1 TrCHs (DCH for DCCH)	
- Downlink transport channel type		DCH	
- DL Transport channel identity		10	
- CHOICE DL parameters		Same as UL	
- Uplink transport channel type		DCH	
- UL TrCH identity		5	
- DCH quality target			
- BLER Quality value		-2.0 Real(-6.3..0 by step of 0.1)	
Frequency info - Choice mode - UARFCN (Nt)	A1, A2, A3, A4, A5, A7, A8	 TDD Reference to clause 5.1 Test frequencies	
Frequency info	A6	Not Present	
Maximum allowed UL TX power	A1, A2, A3, A4, A7, A8	33dBm	
Maximum allowed UL TX power	A5, A6	using the default value	
CHOICE *channel requirement*	A5, A6 , A7, A8	Not Present	

Information Element	Condition	Value/remark	Version
CHOICE *channel requirement*	A1, A2, A3, A4	Uplink DPCH info	
- Uplink DPCH power control info		Not Present	
- CHOICE mode		TDD	
- Uplink Timing Advance Control		Not Present	
- UL CCTrCH List			
- TFCS ID		1	
- UL Target SIR		Real (-11 .. 20 by step of 0.5dB) Reference to TS34.108 Parameter set.	
- Time info			
- Activation time		(256+CFN-(CFN MOD 8 + 8))MOD 256	
- Duration		Infinite	
- Common timeslot info			
- 2nd interleaving mode		Default value is "Frame"	
- TFCI coding		Reference to TS34.108 clause 6 Parameter set	
- Puncturing limit		Reference to TS34.108 clause 6 Parameter set	
- Repetition period		1	
- Repetition length			
- Uplink DPCH timeslots and code			
- Dynamic SF usage		FALSE	
- First individual timeslot info			
- Timeslot number			
- CHOICE TDD option		3.84 Mcps TDD	
- Timeslot number		1 OR 2 OR 3	
- TFCI existence		TRUE	
- Midamble shift and burst type			
- CHOICE TDD option		3.84 Mcps TDD	
- CHOICE *Burst Type*		Type 1	
- Midamble allocation mode		Default midamble	
- Midamble configuration		16	
- Midamble Shift		Not Present	
- CHOICE TDD option		3.84 Mcps TDD (no data)	
- First timeslot Code List		Repeated (1,2) for each channelisation code assigned in the slot to meet the needs of TS34.108 clause 6 Parameter Set.	
- channelisation codes		(SF/ i) where i denotes an unassigned code matching the SF specified in TS34.108 clause 6 Parameter Set.	
- CHOICE more timeslots		No more timeslots	
- UL CCTrCH List to Remove		Not present	
CHOICE Mode	A1, A2, A3, A4, A5, A6, A7, A8	TDD	
Downlink HS-PDSCH Information	A1, A2, A3, A4, A5, A6, A7, A8	Not Present	
Downlink information common for all radio links	A5, A6, A7, A8	Not Present	
Downlink information common for all radio links	A1, A2, A3		
- Downlink DPCH info common for all RL			
- Timing indication		Maintain	
- CFN-targetSFN frame offset		Not Present	
- Downlink DPCH power control information			
- CHOICE mode		TDD	
- TPC Step Size		1	
- MAC-d HFN initial value		Not Present	
- CHOICE mode		TDD	
- CHOICE mode		TDD	

Information Element	Condition	Value/remark	Version
- CHOICE TDD option		3.84 Mcps TDD	
- Default DPCH Offset Value		Not Present	
Downlink information common for all radio links	A4		
- Downlink DPCH info common for all RL			
- Timing indication		Initialise	
- CFN-targetSFN frame offset		Not Present	
- Downlink DPCH power control information			
- CHOICE mode		TDD	
- TPC Step Size		1	
- MAC-d HFN initial value		Not Present	
- CHOICE mode		TDD	
- CHOICE mode		TDD	
- CHOICE TDD option		3.84 Mcps TDD	
- Default DPCH Offset Value			
- CHOICE mode		TDD	
- Default DPCH Offset Value		0 Integer(0..7)	
Downlink information per radio link list	A1, A2, A3, A4,		
- Downlink information for each radio link			
- Choice mode		TDD	
- Primary CCPCH info			
- Choice mode		TDD	
- Choice TDD Option		3.84 Mcps TDD	
- Cell parameters ID		Ref. to the Default setting in TS34.108 clause 6.1 (TDD) Integer(0..127)	
- SCTD indicator		FALSE	
- Downlink DPCH info for each RL			
- CHOICE mode		TDD	
- DL CCTrCh List			
- TFCS ID		2 Integer(1.8)	
- Time info			
- Activation time		Now	
- Duration		Infinite	
- Common timeslot info			
- 2nd interleaving mode		Default value is "Frame"	
- TFCI coding		Reference to TS34.108 clause 6 Parameter set	
- Puncturing limit		Reference to TS34.108 clause 6 Parameter set	
- Repetition period		1	
- Repetition length		NULL	
- Downlink DPCH timeslots and codes			
- First individual timeslot info			
- Timeslot number			
- CHOICE TDD option		3.84 Mcps TDD	
- Timeslot number		4 OR 5 OR 6	
- TFCI existence		TRUE	
- Midamble shift and burst type			
- CHOICE TDD option		3.84 Mcps TDD	
- Midamble allocation mode		Default midamble	
- Midamble configuration		16	
- Midamble Shift		Not Present	
- CHOICE TDD option		3.84 Mcps TDD (no data)	
- First timeslot channelisation codes		Repeated (1,2) for each channelisation code assigned in the slot to meet the needs of TS34.108 clause 6 Parameter Set.	
- CHOICE codes representation		Bitmap	
- Channelisation codes bitmap		Reference to TS34.108 clause 6.10 Parameter Set	
- CHOICE more timeslots		No more timeslots	
- UL CCTrCH TPC List		Default is all	
- DL CCTrCH List to Remove		Not present	
- SCCPCH Information for FACH		Not Present7	R99 and Rel-4 only

Information Element	Condition	Value/remark	Version
Downlink information per radio link list - Downlink information for each radio link - Choice mode - Primary CCPCH info - Choice mode - Choice TDD Option - TSTD indicator - Cell parameters ID - SCTD indicator	A5 ,A7, A8	 TDD TDD 3.84 Mcps TDD FALSE Ref. to the Default setting in TS34.108 clause 6.1 (TDD) Integer(0..127) FALSE	
- Downlink DPCH info for each RL		Not Present	
- SCCPCH Information for FACH		Not Present	R99 and Rel-4 only
Downlink information per radio link list	A6	Not Present	

Condition	Explanation
A1	This IE need for "Non speech in CS"
A2	This IE need for "Speech in CS"
A3	This IE need for "Packet to CELL_DCH from CELL_DCH in PS"
A4	This IE need for "Packet to CELL_DCH from CELL_FACH in PS"
A5	This IE need for "Packet to CELL_FACH from CELL_DCH in PS"
A6	This IE need for "Packet to CELL_FACH from CELL_FACH in PS"
A7	This IE need for "Non speech to CELL_FACH from CELL_DCH in CS"
A8	This IE need for "Speech to CELL_FACH from CELL_DCH in CS"

Contents of RADIO BEARER RELEASE message: AM or UM (1.28 Mcps TDD)

Information Element	Condition	Value/remark	Version
Message Type	A1, A2, A3, A4, A5, A6, A7, A8		
RRC transaction identifier		Arbitrarily selects an integer between 0 and 3	
Integrity check info - message authentication code		 SS calculates the value of MAC-I for this message and writes to this IE. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.	
- RRC message sequence number		SS provides the value of this IE, from its internal counter.	
Integrity protection mode info		Not Present	
Ciphering mode info		Not Present	
Activation time	A1, A2, A3, A7, A8	(256+CFN-(CFN MOD 8 + 8))MOD 256	
Activation time	A4, A5, A6	Not Present	
New U-RNTI		Not Present	
New C-RNTI	A1,A2,A3,A4	Not Present	
New C-RNTI	A5, A6, A7, A8	'1010 1010 1010 1010'	
New DSCH-RNTI	A1, A2, A3, A4, A5, A6, A7, A8	Not Present	
RRC State indicator	A1,A2, A3, A4	CELL_DCH	
RRC State indicator	A5, A6, A7, A8	CELL_FACH	
UTRAN DRX cycle length coefficient	A1,A2,A3,A4, A5,A6, A7, A8	Not Present	
CN information info		Not Present	
Signalling Connection release indication		Not Present	
URA identity		Not Present	
RAB information to reconfigure list		Not Present	
RB information to release list	A1, A7		

Information Element	Condition	Value/remark	Version
RB information to release			
- RB identity		10	
RB information to release list	A2, A8		
RB information to release			
- RB identity		10	
RB information to release			
- RB identity		11	
RB information to release			
- RB identity		12	
RB information to release list	A3, A4, A5, A6		
RB information to release			
- RB identity		20	
RB information to be affected list	A1,A2, A3,A4,A5, A6, A7, A8	Not Present	
Downlink counter synchronization info	A1,A2,A3,A4,A5,A6, A7, A8	Not Present	
UL Transport channel information common for all transport channels	A1, A2, A3, A4	TFCS reconfigured to fit the new transport channel configuration.	
UL Transport channel information common for all transport channels	A5, A6, A7, A8	Not Present	
Deleted TrCH information list	A1,A2, A3, A5, A7, A8		
Deleted UL TrCH Information	A1,A2, A3, A5, A7, A8		
- Uplink transport channel type		DCH	
- Transport channel identity		1	
Deleted UL TrCH Information	A2, A8		
- Uplink transport channel type		DCH	
- Transport channel identity		2	
Deleted UL TrCH Information	A2, A8		
- Uplink transport channel type		DCH	
- Transport channel identity		3	
Deleted TrCH information list	A4, A6	Not Present	
Added or Reconfigured TrCH information list	A5, A6, A7, A8	Not Present	
Added or Reconfigured TrCH information list	A1, A2, A3, A4	TrCHs (DCH for DCCH)	
Added or Reconfigured UL TrCH information			
- Uplink transport channel type		DCH	
- UL Transport channel identity		5	
- TFS			
- CHOICE Transport channel type		Dedicated transport channels	
- Dynamic Transport format information			
- RLC Size		Reference to clause 6.11 Parameter Set	
- Number of TBs and TTI List		(This IE is repeated for TFI number.)	
- Transmission Time Interval		Not present	
- Number of Transport blocks		Reference to clause 6.11 Parameter Set	
- CHOICE Logical channel list		All (NULL)	
- Semi-static Transport Format information			
- Transmission time interval		Reference to clause 6.11 Parameter Set	
- Type of channel coding		Reference to clause 6.11 Parameter Set	
- Coding Rate		Reference to clause 6.11 Parameter Set	
- Rate matching attribute		Reference to clause 6.11 Parameter Set	
- CRC size		Reference to clause 6.11 Parameter Set	
CHOICE *mode*		TDD (No data)	
DL Transport channel information common for all transport channels	A1, A2, A3, A4,	TFCS reconfigured to fit the new transport channel configuration.	
DL Transport channel information common for all transport channels	A5, A6, A7, A8	Not Present	
Deleted TrCH information list			
- Deleted DL TrCH Information	A1, A2, A3, A5,A7, A8		
- Downlink transport channel type		DCH	
- Transport channel identity		6	

Information Element	Condition	Value/remark	Version
- Deleted DL TrCH Information	A2, A8		
- Downlink transport channel type		DCH	
- Transport channel identity		7	
- Deleted DL TrCH Information	A2, A8		
- Downlink transport channel type		DCH	
- Transport channel identity		8	
Deleted TrCH information list	A4, A6	Not Present	
Added or Reconfigured TrCH information list			
- Added or Reconfigured DL TrCH information	A5, A6, A7, A8	Not Present	
- Added or Reconfigured DL TrCH information	A1, A2, A3, A4	1 TrCHs (DCH for DCCH)	
- Downlink transport channel type		DCH	
- DL Transport channel identity		10	
- CHOICE DL parameters		Same as UL	
- Uplink transport channel type		DCH	
- UL TrCH identity		5	
- DCH quality target			
- BLER Quality value		-2.0 Real(-6.3..0 by step of 0.1)	
Frequency info	A1, A2, A3, A4, A5, A7, A8		
- Choice mode		TDD	
- UARFCN (Nt)		Reference to clause 5.1 Test frequencies	
Frequency info	A6	Not Present	
Maximum allowed UL TX power	A1, A2, A3, A4, A7, A8	33dBm	
Maximum allowed UL TX power	A5, A6	using the default value	
CHOICE *channel requirement*	A5, A6 , A7, A8	Not Present	
CHOICE *channel requirement*	A1, A2, A3, A4	Uplink DPCH info	
- Uplink DPCH power control info		Not Present	
- CHOICE mode		TDD	
- Uplink Timing Advance Control		Not Present	
- UL CCTrCH List			
- TFCS ID		1	
- UL Target SIR		Real (-11 .. 20 by step of 0.5dB) Reference to clause 6 Parameter set.	
- Time info			
- Activation time		(256+CFN-(CFN MOD 8 + 8))MOD 256	
- Duration		Infinite	
- Common timeslot info			
- 2nd interleaving mode		Default value is "Frame"	
- TFCI coding		Reference to clause 6 Parameter set	
- Puncturing limit		Reference to clause 6 Parameter set	
- Repetition period		1	
- Repetition length			
- Uplink DPCH timeslots and code			
- Dynamic SF usage		FALSE	
- First individual timeslot info			
- Timeslot number			
- CHOICE TDD option		1.28 Mcps TDD	
- Timeslot number		1 OR 2 OR 3	
- TFCI existence		TRUE	
- Midamble shift and burst type			
- CHOICE TDD option		1.28 Mcps TDD	
- Midamble allocation mode		Default midamble	
- Midamble configuration		16	
- Midamble Shift		Not Present	
- CHOICE TDD option		1.28 Mcps TDD	
- Modulation		QPSK	
- SS-TPC Symbols		1	
- Additional TPC-SS Symbols		Not present	

Information Element	Condition	Value/remark	Version
- First timeslot Code List		Repeated (1,2) for each channelisation code assigned in the slot to meet the needs of clause 6 Parameter Set.	
- channelisation codes		(SF/ i) where i denotes an unassigned code matching the SF specified in clause 6 Parameter Set.	
- CHOICE more timeslots		No more timeslots	
- UL CCTrCH List to Remove		Not present	
CHOICE Mode	A1, A2, A3, A4, A5, A6, A7, A8	TDD	
Downlink HS-PDSCH Information	A1, A2, A3, A4, A5, A6, A7, A8	Not Present	
Downlink information common for all radio links	A5, A6, A7, A8	Not Present	
Downlink information common for all radio links	A1, A2, A3		
- Downlink DPCH info common for all RL			
- Timing indication		Maintain	
- CFN-targetSFN frame offset		Not Present	
- Downlink DPCH power control information			
- CHOICE mode		TDD	
- TPC Step Size		1	
- MAC-d HFN initial value		Not Present	
- CHOICE mode		TDD	
- CHOICE mode		TDD	
- CHOICE TDD option		1.28 Mcps TDD	
- TSTD indicator		FALSE	
- Default DPCH Offset Value		Not Present	
Downlink information common for all radio links	A4		
- Downlink DPCH info common for all RL			
- Timing indication		Initialize	
- CFN-targetSFN frame offset		Not Present	
- Downlink DPCH power control information			
- CHOICE mode		TDD	
- TPC Step Size		1	
- MAC-d HFN initial value		Not Present	
- CHOICE mode		TDD	
- CHOICE mode		TDD	
- CHOICE TDD option		1.28 Mcps TDD	
- TSTD indicator		FALSE	
- Default DPCH Offset Value			
- CHOICE mode		TDD	
- Default DPCH Offset Value		0 Integer(0..7)	
Downlink information per radio link list	A1, A2, A3, A4,		
- Downlink information for each radio link			
- Choice mode		TDD	
- Primary CCPCH info			
- Choice mode		TDD	
- Choice TDD Option		1.28 Mcps TDD	
- TSTD indicator		FALSE	
- Cell parameters ID		Ref. to the Default setting in clause 6.1 (TDD) Integer(0..127)	
- SCTD indicator		FALSE	
- Downlink DPCH info for each RL			
- CHOICE mode		TDD	
- DL CCTrCh List			
- TFCS ID		2 Integer(1.8)	
- Time info			
- Activation time		Now	
- Duration		Infinite	
- Common timeslot info			
- 2nd interleaving mode		Default value is "Frame"	
- TFCI coding		Reference to clause 6 Parameter set	
- Puncturing limit		Reference to clause 6 Parameter set	
- Repetition period		1	

Information Element	Condition	Value/remark	Version
- Repetition length		NULL	
- Downlink DPCH timeslots and codes			
- First individual timeslot info			
- Timeslot number			
- CHOICE TDD option		1.28 Mcps TDD	
- Timeslot number		4 OR 5 OR 6	
- TFCI existence		TRUE	
- Midamble shift and burst type			
- CHOICE TDD option		1.28 Mcps TDD	
- Midamble allocation mode		Default midamble	
- Midamble configuration		16	
- Midamble Shift		Not Present	
- CHOICE TDD option		1.28 Mcps TDD	
- Modulation		QPSK	
- SS-TPC Symbols		1	
- Additional TPC-SS Sysbols		Not present	
- First timeslot channelisation codes		Repeated (1,2) for each channelisation code assigned in the slot to meet the needs of clause 6 Parameter Set.	
- CHOICE codes representation		Bitmap	
- Channelisation codes bitmap		Reference to clause 6.10 Parameter Set	
- CHOICE more timeslots		No more timeslots	
- UL CCTrCH TPC List		This list is not required for 1.28 Mcps TDD and is to be ignored by the UE.	
- DL CCTrCH List to Remove		Not present	
- SCCPCH Information for FACH		Not Present	R99 and Rel-4 only
Downlink information per radio link list	A5 ,A7, A8		
- Downlink information for each radio link			
- Choice mode		TDD	
- Primary CCPCH info			
- Choice mode		TDD	
- Choice TDD Option		1.28 Mcps TDD	
- TSTD indicator		FALSE	
- Cell parameters ID		Ref. to the Default setting in clause 6.1 (TDD) Integer(0..127)	
- SCTD indicator		FALSE	
- Downlink DPCH info for each RL		Not Present	
- SCCPCH Information for FACH		Not Present	R99 and Rel-4 only
Downlink information per radio link list	A6	Not Present	

Condition	Explanation
A1	This IE need for "Non speech in CS"
A2	This IE need for "Speech in CS"
A3	This IE need for "Packet to CELL_DCH from CELL_DCH in PS"
A4	This IE need for "Packet to CELL_DCH from CELL_FACH in PS"
A5	This IE need for "Packet to CELL_FACH from CELL_DCH in PS"
A6	This IE need for "Packet to CELL_FACH from CELL_FACH in PS"
A7	This IE need for "Non speech to CELL_FACH from CELL_DCH in CS"
A8	This IE need for "Speech to CELL_FACH from CELL_DCH in CS"

Contents of DOWNLINK DIRECT TRANSFER message: AM

Information Element	Value/remark
Message Type	
RRC transaction identifier	0
Integrity check info	
- Message authentication code	SS calculates the value of MAC-I for this message and writes to this IE. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	SS provides the value of this IE, from its internal counter.
CN domain identity	CS domain or PS domain

NAS message	See Specific Message Content for each test case

Contents of INITIAL DIRECT TRANSFER message: AM

Information Element	Value/remark	Version
Message Type		
Integrity check info		
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.	
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.	
CN domain identity	CS domain or PS domain	
Intra Domain NAS Node Selector	Set to the same octet string as in the IMSI stored in the USIM card	
NAS message	Set according to that indicated in specific message content for each test case	
START	This IE is checked to see if it is present.	
Establishment cause	See the specific test case	REL-5
Measured results on RACH	Not checked	

Contents of PAGING TYPE 1 message: TM (Speech in CS)

Information Element	Value/remark
Message Type	
Paging record list	
- Paging record	
- CHOICE Used paging identity	CN identity
- Paging cause	Terminating Conversational Call
- CN domain identity	CS domain
- CHOICE UE identity	
- IMSI (GSM-MAP)	Set to the same octet string as in the IMSI stored in the USIM card
BCCH modification info	Not Present

Contents of PAGING TYPE 1 message: TM (The others of speech in CS)

Information Element	Value/remark
Message Type	
Paging record list	
- Paging record	
- CHOICE Used paging identity	CN identity
- Paging cause	Terminating Streaming Call
- CN domain identity	CS domain
- CHOICE UE identity	
- IMSI (GSM-MAP)	Set to the same octet string as in the IMSI stored in the USIM card
BCCH modification info	Not Present

Contents of PAGING TYPE 1 message: TM (Packet in PS)

Information Element	Value/remark
Message Type	
Paging record list	
- Paging record	
- CHOICE Used paging identity	CN identity
- Paging cause	Terminating Interactive Call
- CN domain identity	PS domain
- CHOICE UE identity	
- IMSI (GSM-MAP)	Set to the same octet string as in the IMSI stored in the USIM card
BCCH modification info	Not Present

Contents of RADIO BEARER SETUP message: AM or UM (Speech in CS) (3.84 Mcps TDD option)

Information Element	Value/remark	Version
Message Type		
RRC transaction identifier	0	
Integrity check info		
- message authentication code	SS calculates the value of MAC-I for this message and writes to this IE. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.	
- RRC message sequence number	SS provides the value of this IE, from its internal counter.	
Integrity protection mode info	Not Present	
Ciphering mode info	The presence of this IE is dependent on IXIT statements in 3GPP TS 34.123-2 [3]. If ciphering is indicated to be active, this IE present with the values of the sub IEs as stated below. Else, this IE is omitted.	
- Ciphering mode command	Start/restart	
- Ciphering algorithm	Use one of the supported ciphering algorithms	
- Ciphering activation time for DPCH	(256+CFN-(CFN MOD 8 + 8))MOD 256	
- Radio bearer downlink ciphering activation time info	Not Present	
Activation time	(256+CFN-(CFN MOD 8 + 8))MOD 256	
New U-RNTI	Not Present	
New C-RNTI	Not Present	
New DSCH-RNTI	Not Present	
New H-RNTI	Not Present	REL-5
RRC State indicator	CELL_DCH	
UTRAN DRX cycle length coefficient	Not Present	
CN information info	Not Present	
URA identity	Not Present	
- Signalling RB information to setup list	Not Present	
- RAB information for setup list		
- RAB information for setup		
- RAB info		
- RAB identity	0000 0001B The first/ leftmost bit of the bit string contains the most significant bit of the RAB identity.	
- CN domain identity	CS domain	
- NAS Synchronization Indicator	Not Present	
- Re-establishment timer	UseT314	
- RB information to setup		
- RB identity	10	
- PDCP info	Not Present	
- CHOICE RLC info type	RLC info	
- CHOICE Uplink RLC mode	TM RLC	
- Transmission RLC discard	Not Present	
- Segmentation indication	FALSE	
- CHOICE Downlink RLC mode	TM RLC	
- Segmentation indication	FALSE	
- RB mapping info		
- Information for each multiplexing option		
- RLC logical channel mapping indicator	Not Present	
- Number of uplink RLC logical channels	1	
- Uplink transport channel type	DCH	
- UL Transport channel identity	1	
- Logical channel identity	Not Present	
- CHOICE RLC size list	Configured	
- MAC logical channel priority	6	
- Downlink RLC logical channel info		
- Number of downlink RLC logical channels	1	
- Downlink transport channel type	DCH	
- DL DCH Transport channel identity	6	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	Not Present	
- RB identity	11	
- PDCP info	Not Present	

Information Element	Value/remark	Version
- CHOICE RLC info type	RLC info	
- CHOICE Uplink RLC mode	TM RLC	
- Transmission RLC discard	Not Present	
- Segmentation indication	FALSE	
- CHOICE Downlink RLC mode	TM RLC	
- Segmentation indication	FALSE	
- RB mapping info		
- Information for each multiplexing option		
- RLC logical channel mapping indicator	Not Present	
- Number of uplink RLC logical channels	1	
- Uplink transport channel type	DCH	
- UL Transport channel identity	2	
- Logical channel identity	Not Present	
- CHOICE RLC size list	Configured	
- MAC logical channel priority	6	
- Downlink RLC logical channel info		
- Number of downlink RLC logical channels	1	
- Downlink transport channel type	DCH	
- DL DCH Transport channel identity	7	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	Not Present	
- RB identity	12	
- PDCP info	Not Present	
- CHOICE RLC info type	RLC info	
- CHOICE Uplink RLC mode	TM RLC	
- Transmission RLC discard	Not Present	
- Segmentation indication	FALSE	
- CHOICE Downlink RLC mode	TM RLC	
- Segmentation indication	FALSE	
- RB mapping info		
- Information for each multiplexing option		
- RLC logical channel mapping indicator	Not Present	
- Number of uplink RLC logical channels	1	
- Uplink transport channel type	DCH	
- UL Transport channel identity	3	
- Logical channel identity	Not Present	
- CHOICE RLC size list	Configured	
- MAC logical channel priority	6	
- Downlink RLC logical channel info		
- Number of downlink RLC logical channels	1	
- Downlink transport channel type	DCH	
- DL DCH Transport channel identity	8	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	Not Present	
RB information to be affected list	Not Present	
Downlink counter synchronization info	Not Present	
UL Transport channel information for all transport channels		
- PRACH TFCS	Not Present	
- CHOICE mode	TDD	
-Individual UL CCTrCH information		
- TFCS ID	(This IE is repeated for TFC number.)	
- Allowed Transport Format combination	0 to MaxTFCvalue-1 (MaxTFCValue is refer to clause 6 Parameter Set.)	
- PRACH TFCS	(This IE is repeated for TFC number.)	
- CHOICE TFCI signalling	Normal	
- TFCI Field 1 information		
- TFCS complete reconfigure information		
- CHOICE TFCS Size	Number of used bits must be enough to cover all combinations of CTFC from clauses 6. Refer to clause 6 Parameter Set	
- CTFC information	Not Present	
- CHOICE mode	TDD	
- Individual UL CCTrCH information	Not Present	
Deleted TrCH information list	Not Present	
Added or Reconfigured TrCH information list	3 DCHs	

Information Element	Value/remark	Version
- Added or Reconfigured UL TrCH information		
- Uplink transport channel type	DCH	
- UL Transport channel identity	1	
- TFS		
- CHOICE Transport channel type	Dedicated transport channels	
- Dynamic Transport format information		
- RLC Size	Reference to clause 6.10 Parameter Set	
- Number of TBs and TTI List	(This IE is repeated for TFI number.)	
- Transmission Time Interval	Not Present	
- Number of Transport blocks	Reference to clause 6.10 Parameter Set	
- CHOICE Logical channel list	All	
- Semi-static Transport Format information		
- Transmission time interval	Reference to clause 6.10 Parameter Set	
- Type of channel coding	Reference to clause 6.10 Parameter Set	
- Coding Rate	Reference to clause 6.10 Parameter Set	
- Rate matching attribute	Reference to clause 6.10 Parameter Set	
- CRC size	Reference to clause 6.10 Parameter Set	
- Uplink transport channel type	DCH	
- UL Transport channel identity	2	
- TFS		
- CHOICE Transport channel type	Dedicated transport channels	
- Dynamic Transport format information		
- RLC Size	Reference to clause 6.10 Parameter Set	
- Number of TBs and TTI List	(This IE is repeated for TFI number.)	
- Transmission Time Interval	Not Present	
- Number of Transport blocks	Reference to clause 6.10 Parameter Set	
- Transmission Time Interval	Reference to clause 6.10 Parameter Set	
- Number of Transport blocks	(This IE is repeated for TFI number.)	
- CHOICE Logical channel list	All	
- Semi-static Transport Format information		
- Transmission time interval	Reference to clause 6.10 Parameter Set	
- Type of channel coding	Reference to clause 6.10 Parameter Set	
- Coding Rate	Reference to clause 6.10 Parameter Set	
- Rate matching attribute	Reference to clause 6.10 Parameter Set	
- CRC size	Reference to clause 6.10 Parameter Set	
- Uplink transport channel type	DCH	
- UL Transport channel identity	3	
- TFS		
- CHOICE Transport channel type	Dedicated transport channels	
- Dynamic Transport format information		
- RLC Size	Reference to clause 6.10 Parameter Set	
- Number of TBs and TTI List	(This IE is repeated for TFI number.)	
- Transmission Time Interval	Not Present	
- Number of Transport blocks	Reference to clause 6.10 Parameter Set	
- Transmission Time Interval	Reference to clause 6.10 Parameter Set	
- Number of Transport blocks	(This IE is repeated for TFI number.)	
- CHOICE Logical channel list	All	
- Semi-static Transport Format information		
- Transmission time interval	Reference to clause 6.10 Parameter Set	
- Type of channel coding	Reference to clause 6.10 Parameter Set	
- Coding Rate	Reference to clause 6.10 Parameter Set	
- Rate matching attribute	Reference to clause 6.10 Parameter Set	
- CRC size	Reference to clause 6.10 Parameter Set	
CHOICE mode	TDD (no data)	
DL Transport channel information common for all transport channel		
- SCCPCH TFCS	Not Present	
- CHOICE mode	TDD	
- CHOICE DL parameters	Same as UL	
Deleted TrCH information list	Not Present	
Added or Reconfigured TrCH information list	3 DCHs	
Added or Reconfigured DL TrCH information		
- Downlink transport channel type	DCH	
- DL Transport channel identity	6	
- CHOICE DL parameters	Same as UL	
- Uplink transport channel type	DCH	
- UL TrCH identity	1	

Information Element	Value/remark	Version
- DCH quality target		
- BLER Quality value	-6.3	
- Downlink transport channel type	DCH	
- DL Transport channel identity	7	
- CHOICE DL parameters	Same as UL	
- Uplink transport channel type	DCH	
- UL TrCH identity	2	
- DCH quality target		
- BLER Quality value	Not Present	
- Downlink transport channel type	DCH	
- DL Transport channel identity	8	
- CHOICE DL parameters	Same as UL	
- Uplink transport channel type	DCH	
- UL TrCH identity	3	
- DCH quality target		
- BLER Quality value	Not Present	
Frequency info		
- UARFCN Nt)	Reference to clause 5.1 Test frequencies	
Maximum allowed UL TX power	30dBm	
CHOICE channel requirement	Uplink DPCH info	
- Uplink DPCH power control info		
- CHOICE mode	TDD	
- UL Target SIR	Reference to clause 6 Parameter set.	
- CHOICE UL OL PC info	Individually signalled	
- CHOICE TDD option	3.84 Mcps	
- Individual timeslot interference info		
- DPCH Constant Value		
- CHOICE mode	TDD	
- Uplink Timing Advance Control	Not Present	
- UL CCTrCH List		
- TFCS Id	1	
- Time info		
- Activation time	(256+CFN-(CFN MOD 8 + 8))MOD 256	
- Duration	infinite	
- Common timeslot info		
- 2nd interleaving mode	Reference to clause 6 Parameter Set.	
- TFCI coding	Reference to clause 6 Parameter set.	
- Puncturing Limit	Reference to clause 6 Parameter set.	
- Repetition Period	Reference to clause 6 Parameter set.	
- Repetition Length	Reference to clause 6 Parameter set.	
- Uplink DPCH timeslots and code		
- First individual timeslot info		
- Timeslot number	The number of an uplink timeslot that has unassigned codes.	
- TFCI existence	TRUE	
- Midamble shift and burst type		
- CHOICE TDD option	3.84 Mcps	
- Midamble allocation mode	Default	
- Midamble configuration burst type 1 and 3	16	
- CHOICE TDD option	3.84 Mcps TDD (no data)	
- First timeslot channelisation codes	Repeated (1,2) for each channelisation code assigned in the slot to meet the needs of clause 6 Parameter Set.	
- Channelisation code	(i/SF) where i denotes an unassigned code matching the SF specified in clause 6 Parameter Set.	
- CHOICE more timeslots	The presence of this IE depends upon the number of resources specified in clause 6 and the number of slots in which they are being assigned.	
Downlink HS-PDSCH Information	Not Present	REL-5
Downlink information common for all radio links		
- Downlink DPCH info common for all RL		
- Timing indication	Maintain	
- CFN-targetSFN frame offset	Not Present	
- Downlink DPCH power control		

Information Element	Value/remark	Version
information		
- CHOICE mode	TDD	
- TPC step size	1 dB	
- CHOICE mode	TDD	
- CHOICE TDD option	3.84 Mcps (no data)	
- Default DPCH offset value	0	
- Downlink information for each radio link		
- Choice mode	TDD	
- Primary CCPCH info		
- CHOICE TDD option	3.84 Mcps	
- CHOICE *SyncCase*	Sync Case 1	
- Timeslot	PCCPCH timeslot	
- Cell parameters ID	0	
- SCTD indicator		
- Downlink DPCH info for each RL		
- CHOICE mode	TDD	
- DL CCTrCH List		
- TFCS ID	1	
- Time info		
- Activation time	(256+CFN-(CFN mod 8 + 8))mod 256	
- Duration	infinite	
- Common timeslot info		
- 2nd interleaving mode	Reference to the present document	
- TFCI coding	TRUE	
- Puncturing limit	Reference to clause 6 Parameter set	
- Repetition period	1	
- Repetition length	Empty	
- Downlink DPCH timeslots and codes		
- Individual timeslot info		
- Timeslot number	The number of a downlink timeslot that has unassigned codes.	
- TFCI existence	TRUE	
- Midamble shift and burst type		
- CHOICE TDD option	3.84 Mcps	
-CHOICE Burst Type		
-Type 1		
-Midamble Allocation Mode	Default	
- Midamble configuration burst type 1 and 3	As defined in 3GPP TS 25.221 [28]	
- First timeslot channelisation codes		
- First channelisation code	(i/SF) where i is the lowest numbered code that is being assigned and SF is specified in clause 6 Parameter Set..	
- Last channelisation code	(j/SF) where j is the highest numbered code that is being assigned in the slot.	
- Bitmap	Bitmap of the codes that are being assigned in the slot.	
- CHOICE more timeslots	The presence of this IE depends upon whether the requirements of clause 6 Parameter Set could be met by the codes that have been assigned in the first timeslot.	
- UL CCTrCH TPC List	Not Present	
-SCCPCH information for FACH	Not Present	R99 and Rel-4 only

Contents of RADIO BEARER SETUP message: AM or UM (Packet to CELL_DCH from CELL_DCH in PS) (3.84 Mcps TDD option)

Information Element	Value/remark	Version
Message Type		
RRC transaction identifier	0	
Integrity check info		
- message authentication code	SS calculates the value of MAC-I for this message and writes to this IE. The first/ leftmost bit of the bit string contains the most significant bit	

Information Element	Value/remark	Version
	of the MAC-I.	
- RRC message sequence number	SS provides the value of this IE, from its internal counter.	
Integrity protection mode info	Not Present	
Ciphering mode info	The presence of this IE is dependent on IXIT statements in 3GPP TS 34.123-2 [3]. If ciphering is indicated to be active, this IE present with the values of the sub IEs as stated below. Else, this IE is omitted.	
- Ciphering mode command	Start/restart	
- Ciphering algorithm	Use one of the supported ciphering algorithms	
- Ciphering activation time for DPCH	(256+CFN-(CFN MOD 8 + 8))MOD 256	
- Radio bearer downlink ciphering activation time info	Not Present	
Activation time	(256+CFN-(CFN MOD 8 + 8))MOD 256	
New U-RNTI	Not Present	
New C-RNTI	Not Present	
New DSCH-RNTI	Not Present	
New H-RNTI	Not Present	REL-5
RRC State indicator	CELL_DCH	
UTRAN DRX cycle length coefficient	Not Present	
CN information info	Not Present	
URA identity	Not Present	
- Signalling RB information to setup	Not Present	
- RAB information for setup		
- RAB info		
- RAB identity	0000 0101B The first/ leftmost bit of the bit string contains the most significant bit of the RAB identity.	
- CN domain identity	PS domain	
- NAS Synchronization Indicator	Not Present	
- Re-establishment timer	UseT314	
- RB information to setup		
- RB identity	20	
- PDCP info	Not Present	
- CHOICE RLC info type	RLC info	
- CHOICE Uplink RLC mode	AM RLC	
- Transmission RLC discard		
- SDU discard mode	No Discard	
- MAX_DAT	15	
- Transmission window size	128	
- Timer_RST	500	
- Max_RST	4	
- Polling info		
- Timer_poll_prohibit	200	
- Timer_poll	200	
- Poll_PDU	Not Present	
- Poll_SDU	1	
- Last transmission PDU poll	TRUE	
- Last retransmission PDU poll	TRUE	
- Poll_Windows	99	
- Timer_poll_periodic	Not Present	
- CHOICE Downlink RLC mode	AM RLC	
- In-sequence delivery	TRUE	
- Receiving window size	128	
- Downlink RLC status info		
- Timer_status_prohibit	200	
- Timer_EPC	Not Present	
- Missing PDU indicator	TRUE	
- Timer_STATUS_periodic	Not Present	
- RB mapping info		
- Information for each multiplexing option	2 RBMuxOptions	
- RLC logical channel mapping indicator	Not Present	
- Number of uplink RLC logical channels	1	
- Uplink transport channel type	DCH	
- UL Transport channel identity	1	
- Logical channel identity	Not Present	

Information Element	Value/remark	Version
- CHOICE RLC size list	Configured	
- MAC logical channel priority	8	
- Downlink RLC logical channel info		
- Number of downlink RLC logical channels	1	
- Downlink transport channel type	DCH	
- DL DCH Transport channel identity	6	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	Not Present	
- RLC logical channel mapping indicator	Not Present	
- Number of uplink RLC logical channels	1	
- Uplink transport channel type	RACH	
- UL Transport channel identity	Not Present	
- Logical channel identity	7	
- CHOICE RLC size list	Explicit List	
- RLC size index	Reference to clause 6 Parameter Set	
- MAC logical channel priority	8	
- Downlink RLC logical channel info		
- Number of downlink RLC logical channels	1	
- Downlink transport channel type	FACH	
- DL DCH Transport channel identity	Not Present	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	7	
RB information to be affected list	Not Present	
Downlink counter synchronization info	Not Present	
UL Transport channel information for all transport channels		
- PRACH TFCS	Not Present	
- CHOICE mode	TDD	
-Individual UL CCTrCH information		
- TFCS ID	(This IE is repeated for TFC number.)	
- Allowed Transport Format combination	0 to MaxTFCvalue-1 (MaxTFCValue is refer to clause 6 Parameter Set.)	
- PRACH TFCS	(This IE is repeated for TFC number.)	
- CHOICE TFCI signalling	Normal	
- TFCI Field 1 information		
- TFCS complete reconfigure information		
- CHOICE TFCS Size	Number of used bits must be enough to cover all combinations of CTFC from clauses 6. Refer to clause 6 Parameter Set	
- CTFC information	Not Present	
- CHOICE mode	TDD	
- Individual UL CCTrCH information	Not Present	
Deleted TrCH information list	Not Present	
Added or Reconfigured TrCH information list		
- Added or Reconfigured UL TrCH information		
- Uplink transport channel type	DCH	
- UL Transport channel identity	1	
- TFS		
- CHOICE Transport channel type	Dedicated transport channels	
- Dynamic Transport format information		
- RLC Size	Reference to clause 6.10 Parameter Set	
- Number of TBs and TTI List	(This IE is repeated for TFI number.)	
- Transmission Time Interval	Not Present	
- Number of Transport blocks	Reference to clause 6.10 Parameter Set	
- CHOICE Logical channel list	All	
- Semi-static Transport Format information		
- Transmission time interval	Reference to clause 6.10 Parameter Set	
- Type of channel coding	Reference to clause 6.10 Parameter Set	
- Coding Rate	Reference to clause 6.10 Parameter Set	
- Rate matching attribute	Reference to clause 6.10 Parameter Set	
- CRC size	Reference to clause 6.10 Parameter Set	
CHOICE mode	TDD (no data)	
DL Transport channel information common for all transport channel		
- SCCPCH TFCS	Not Present	
- CHOICE mode	TDD	

Information Element	Value/remark	Version
- Individual DL CCTrCH information		
- DL TFCS Identity		
- TFCS Id	1	
- Shared Channel Indicator	FALSE	
- CHOICE DL parameters	Independent	
- DL DCH TFCS	(This IE is repeated for TFC number.)	
- CHOICE TFCI signalling	Normal	
- TFCI Field 1 information		
- CHOICE TFCS representation	Complete	
- TFCS complete reconfigure information		
- CHOICE CTFC Size	Refer to clause 6.	
- CTFC information	Refer to clause 6.	
Added or Reconfigured TrCH information list		
- Added or Reconfigured DL TrCH information		
- Downlink transport channel type	DCH	
- DL Transport channel identity	6	
- CHOICE DL parameters	Explicit	
- TFS		
- CHOICE Transport channel type	Dedicated transport channels	
- Dynamic Transport format information	(This IE is repeated for TFI number)	
- RLC Size	Reference to clause 6.10 Parameter Set	
- Number of TBs and TTI List	(This IE is repeated for TFI number.)	
- Transmission Time Interval	Not Present	
- Number of Transport blocks	Reference to clause 6.10 Parameter Set	
- CHOICE Logical channel list	ALL	
- Semi-static Transport Format information		
- Transmission time interval	Reference to clause 6.10 Parameter Set	
- Type of channel coding	Reference to clause 6.10 Parameter Set	
- Coding Rate	Reference to clause 6.10 Parameter Set	
- Rate matching attribute	Reference to clause 6.10 Parameter Set	
- CRC size	Reference to clause 6.10 Parameter Set	
- DCH quality target		
- BLER Quality value	-6.3	
Frequency info		
-CHOICE mode	TDD	
- UARFCN (Nt)	Reference to clause 5.1 Test frequencies	
Maximum allowed UL TX power	30 dBm	
CHOICE channel requirement	Uplink DPCH info	
- Uplink DPCH power control info		
- CHOICE mode	TDD	
- UL Target SIR	Reference to clause 6.10 Parameter set.	
- CHOICE UL OL PC info	Individually signalled	
- CHOICE TDD option	3.84 Mcps	
- Individual timeslot interference info		
- Individual timeslot interference		
- DPCH Constant Value	Values are used for open loop power control, clause 8 in 3GPP TS 25.331 [34]	
- CHOICE mode	TDD	
- Uplink Timing Advance Control	Not Present	
- UL CCTrCH List		
- TFCS Id	1	
- Time info		
- Activation time	(256+CFN-(CFN MOD 8 + 8))MOD 256	
- Duration	Infinite	
- Common timeslot info		
- 2nd interleaving mode	Reference to clause 6.10 Parameter Set	
- TFCI coding	Reference to clause 6.10 Parameter Set	
- Puncturing Limit	Reference to clause 6.10 Parameter Set	
- Repetition Period	Reference to clause 6.10 Parameter Set	
- Repetition Length	Reference to clause 6.10 Parameter Set	
- First individual timeslot info		
- Timeslot number	The number of an uplink timeslot that has unassigned codes.	
- TFCI existence	TRUE	
- Midamble shift and burst type		
- CHOICE TDD option	3.84 Mcps	

Information Element	Value/remark	Version
-CHOICE Burst Type		
-Type 1		
-Midamble Allocation Mode	Default	
- Midamble configuration burst type 1 and 3	As defined in 3GPP TS 25.221 [28]	
- First timeslot channelisation codes	Repeated (1,2) for each channelisation code assigned in the slot to meet the needs of clause 6 Parameter Set.	
- Channelisation code	(i/SF) where i denotes an unassigned code matching the SF specified in clause 6 Parameter Set.	
- CHOICE more timeslots	The presence of this IE depends upon the number of resources specified in clause 6 and the number of slots in which they are being assigned.	
Downlink HS-PDSCH Information	Not Present	REL-5
Downlink information common for all radio links		
- Downlink DPCH info common for all RL		
- Timing indication	Maintain	
- CFN-targetSFN frame offset	Not Present	
- Downlink DPCH power control information		
- DPC mode	0 (single)	
- CHOICE mode	TDD	
- CHOICE TDD option	3.84 Mcps (no data)	
- Default DPCH Offset Value	Not Present	
Downlink information for each radio link list		
- Downlink information for each radio link		
- Choice mode	TDD	
- Primary CCPCH info		
- CHOICE *SyncCase*	Sync Case 1	
- Timeslot	PCCPCH timeslot	
- Cell parameters ID	0	
- SCTD indicator		
- Downlink DPCH info for each RL		
- CHOICE mode	TDD	
- DL CCTrCH List		
- TFCS ID	1	
- Time info		
- Activation time	(256+CFN-(CFN mod 8 + 8))mod 256	
- Duration	infinite	
- Common timeslot info		
- 2nd interleaving mode	Reference to the present document	
- TFCI coding	TRUE	
- Puncturing limit	Reference to clause 6 Parameter set	
- Repetition period	1	
- Repetition length	Empty	
- Downlink DPCH timeslots and codes		
- Individual timeslot info		
- Timeslot number	The number of a downlink timeslot that has unassigned codes.	
- TFCI existence	TRUE	
- Midamble shift and burst type		
- CHOICE TDD option	3.84 Mcps	
-CHOICE Burst Type		
-Type 1		
-Midamble Allocation Mode	Default	
- Midamble configuration burst type 1 and 3	As defined in 3GPP TS 25.221 [28]	
- First timeslot channelisation codes		
- First channelisation code	(i/SF) where i is the lowest numbered code that is being assigned and SF is specified in clause 6 Parameter Set..	
- Last channelisation code	(j/SF) where j is the highest numbered code that is being assigned in the slot.	
- Bitmap	Bitmap of the codes that are being assigned in the slot.	
- CHOICE more timeslots	The presence of this IE depends upon whether the requirements of clause 6 Parameter Set could	

Information Element	Value/remark	Version
	be met by the codes that have been assigned in the first timeslot.	
- UL CCTrCH TPC List	Not Present	
-SCCPCH information for FACH	Not Present	

Contents of RADIO BEARER SETUP message: AM or UM (1.28 Mcps TDD)

Information Element	Condition	Value/remark	Version
Message Type	A1, A2, A3, A4, A5, A6, A7, A8		
RRC transaction identifier		Arbitrarily selects an integer between 0 and 3	
Integrity check info			
- message authentication code		SS calculates the value of MAC-I for this message and writes to this IE. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.	
- RRC message sequence number		SS provides the value of this IE, from its internal counter.	
Integrity protection mode info		Not Present	
Ciphering mode info		Not Present	
Activation time	A1, A2, A3, A7, A8	(256+CFN-(CFN MOD 8 + 8))MOD 256	
Activation time	A4, A5, A6	Now	
New U-RNTI	A1, A2, A3, A4, A5, A6, A7, A8	Not Present	
New C-RNTI	A1, A2, A3, A4, A7, A8	Not Present	
New C-RNTI	A5, A6	'1010 1010 1010 1010'	
New DSCH-RNTI	A1, A2, A3, A4, A5, A6, A7, A8	Not Present	
New H-RNTI		Not Present	REL-5
RRC State indicator	A1, A2, A3, A4, A7, A8	CELL_DCH	
RRC State indicator	A5, A6	CELL_FACH	
UTRAN DRX cycle length coefficient	A1, A2, A3, A4, A5, A6, A7, A8	Not Present	
CN information info		Not Present	
URA identity		Not Present	
- Signalling RB information to setup list		Not Present	
- RAB information for setup list	A1, A7		
- RAB info			
- RAB identity			
- CHOICE RAB identity type		RAB identity (GSM-MAP)	
- RAB identity		0000 0001B The first/ leftmost bit of the bit string contains the most significant bit of the RAB identity.	
- CN domain identity		CS domain	
- NAS Synchronization Indicator		Not Present	
- Re-establishment timer		useT314	
- RB information to setup list			
- RB information to setup			
- RB identity		10	
- PDCP info		Not Present	
- CHOICE RLC info type		RLC info	
- CHOICE Uplink RLC mode		TM RLC	
- Transmission RLC discard		Not Present	
- Segmentation indication		FALSE	
- CHOICE Downlink RLC mode		TM RLC	
- Segmentation indication		FALSE	

Information Element	Condition	Value/remark	Version
- RB mapping info			
- Information for each multiplexing option			
- RLC logical channel mapping indicator		Not Present	
- Number of uplink RLC logical channels		1	
- Uplink transport channel type		DCH	
- UL Transport channel identity		1	
- Logical channel identity		Not Present	
- CHOICE *RLC size list*		Configured	
- MAC logical channel priority		8	
- Downlink RLC logical channel info			
- Number of downlink RLC logical channels		1	
- Downlink transport channel type		DCH	
- DL DCH Transport channel identity		6	
- DL DSCH Transport channel identity		Not Present	
- Logical channel identity		Not Present	
RAB information to setup list	A2, A8		
- RAB info			
- RAB identity			
- CHOICE RAB identity type		RAB identity (GSM-MAP)	
- RAB identity		0000 0001B The first/ leftmost bit of the bit string contains the most significant bit of the RAB identity.	
- CN domain identity		CS domain	
- NAS Synchronization Indicator		Not Present	
- Re-establishment timer		useT314	
- RB information to setup list			
- RB information to setup			
- RB identity		10	
- PDCP info		Not Present	
- CHOICE RLC info type		RLC info	
- CHOICE Uplink RLC mode		TM RLC	
- Transmission RLC discard		Not Present	
- Segmentation indication		FALSE	
- CHOICE Downlink RLC mode		TM RLC	
- Segmentation indication		FALSE	
- RB mapping info			
- Information for each multiplexing option			
- RLC logical channel mapping indicator		Not Present	
- Number of uplink RLC logical channels		1	
- Uplink transport channel type		DCH	
- UL Transport channel identity		1	
- Logical channel identity		Not Present	
- CHOICE *RLC size list*		Configured	
- MAC logical channel priority		6	
- Downlink RLC logical channel info			
- Number of downlink RLC logical channels		1	
- Downlink transport channel type		DCH	
- DL DCH Transport channel identity		6	
- DL DSCH Transport channel identity		Not Present	
- Logical channel identity		Not Present	
- RB identity		11	
- PDCP info		Not Present	
- CHOICE RLC info type		RLC info	
- CHOICE Uplink RLC mode		TM RLC	
- Transmission RLC discard		Not Present	
- Segmentation indication		FALSE	
- CHOICE Downlink RLC mode		TM RLC	
- Segmentation indication		FALSE	
- RB mapping info			
- Information for each multiplexing option			
- RLC logical channel mapping indicator		Not Present	
- Number of uplink RLC logical channels		1	
- Uplink transport channel type		DCH	
- UL Transport channel identity		2	

Information Element	Condition	Value/remark	Version
- Logical channel identity		Not Present	
- CHOICE *RLC size list*		Configured	
- MAC logical channel priority		6	
- Downlink RLC logical channel info			
- Number of downlink RLC logical channels		1	
- Downlink transport channel type		DCH	
- DL DCH Transport channel identity		7	
- DL DSCH Transport channel identity		Not Present	
- Logical channel identity		Not Present	
- RB identity		12	
- PDCP info		Not Present	
- CHOICE RLC info type		RLC info	
- CHOICE Uplink RLC mode		TM RLC	
- Transmission RLC discard		Not Present	
- Segmentation indication		FALSE	
- CHOICE Downlink RLC mode		TM RLC	
- Segmentation indication		FALSE	
- RB mapping info			
- Information for each multiplexing option			
- RLC logical channel mapping indicator		Not Present	
- Number of uplink RLC logical channels		1	
- Uplink transport channel type		DCH	
- UL Transport channel identity		3	
- Logical channel identity		Not Present	
- CHOICE *RLC size list*		Configured	
- MAC logical channel priority		7	
- Downlink RLC logical channel info			
- Number of downlink RLC logical channels		1	
- Downlink transport channel type		DCH	
- DL DCH Transport channel identity		8	
- DL DSCH Transport channel identity		Not Present	
- Logical channel identity		Not Present	
RAB information for setup list	A3, A4, A5, A6		
- RAB info			
- RAB identity			
- CHOICE RAB identity type		RAB identity (GSM-MAP)	
- RAB identity		0000 0101B The first/ leftmost bit of the bit string contains the most significant bit of the RAB identity.	
- CN domain identity		PS domain	
- NAS Synchronization Indicator		Not Present	
- Re-establishment timer		useT315	
- RB information to setup list			
- RB information to setup			
- RB identity		20	
- PDCP info			
- Support for lossless SRNS relocation		FALSE	
- Max PDCP SN window size		Not present	
- PDCP PDU header		Not present	
- Header compression information		Not present	
- CHOICE RLC info type		RLC info	
- CHOICE Uplink RLC mode		AM RLC	
- Transmission RLC discard			
- CHOICE *SDU Discard Mode*		Max DAT retransmissions	
- MAX_DAT		4	
- Timer_MRW		100	
- MaxMRW		4	
- Transmission window size		128	
- Timer_RST		500	
- Max_RST		4	
- Polling info			
- Timer_poll_prohibit		200	
- Timer_poll		200	

Information Element	Condition	Value/remark	Version
- Poll_PDU		Not Present	
- Poll_SDU		1	
- Last transmission PDU poll		TRUE	
- Last retransmission PDU poll		TRUE	
- Poll_Windows		99	
- Timer_poll_periodic		Not Present	
- CHOICE Downlink RLC mode		AM RLC	
- In-sequence delivery		TRUE	
- Receiving window size		128	
- Downlink RLC status info			
- Timer_status_prohibit		200	
- Timer_EPC		200	
- Missing PDU indicator		TRUE	
- Timer_STATUS_periodic		Not Present	
- RB mapping info			
- Information for each multiplexing option		2 RBMuxOptions	
- RLC logical channel mapping indicator		Not Present	
- Number of uplink RLC logical channels		1	
- Uplink transport channel type		DCH	
- UL Transport channel identity		1	
- Logical channel identity		Not Present	
- CHOICE RLC size list		Configured	
- MAC logical channel priority		8	
- Downlink RLC logical channel info			
- Number of downlink RLC logical channels		1	
- Downlink transport channel type		DCH	
- DL DCH Transport channel identity		6	
- DL DSCH Transport channel identity		Not Present	
- Logical channel identity		Not Present	
- RLC logical channel mapping indicator		Not Present	
- Number of uplink RLC logical channels		1	
- Uplink transport channel type		RACH	
- UL Transport channel identity		Not Present	
- Logical channel identity		7	
- CHOICE RLC size list		Explicit list	
- RLC size index		Reference to clause 6 Parameter Set	
- MAC logical channel priority		8	
- Downlink RLC logical channel info			
- Number of downlink RLC logical channels		1	
- Downlink transport channel type		FACH	
- DL DCH Transport channel identity		Not Present	
- DL DSCH Transport channel identity		Not Present	
- Logical channel identity		8	
RB information to be affected list	A1, A2, A3, A4, A5, A6, A7, A8	Not Present	
Downlink counter synchronization info	A1, A2, A3, A4, A5, A6, A7, A8	Not Present	
UL Transport channel information common for all transport channels	A1, A2, A3, A4, A5, A6, A7, A8		
- PRACH TFCS		Not Present	
- CHOICE mode		TDD	
- Individual UL CCTrCH information			
- UL TFCS Identity			
- TFCS ID		1	
- Shared Channel Indicator		FALSE	
- UL TFCS			
- CHOICE *TFCI signalling*		Normal	
- TFCI Field 1 Information			
- CHOICE *TFCS representation*		Complete reconfiguration	
- TFCS complete reconfiguration information			
- CHOICE *CTFC Size*		Number of bits used must be enough	

Information Element	Condition	Value/remark	Version
		to cover all combinations of CTFC from clause 6.11.5.4 Parameter Set.	
- CTFC information		This IE is repeated for TFC numbers and reference to clause 6.11.5.4 Parameter Set	
- CTFC		Reference to clause 6.11.5.4 Parameter Set	
- Power offset information			
- CHOICE Gain Factors		Computed Gain Factors(The last TFC is set to Signalled Gain Factors)	
- Reference TFC ID		0 Integer(0.. 3)	
- CHOICE Gain Factors		Signalled Gain Factors(Not Present if the CHOICE Gain Factors is set to ComputedGain Factors)	
- CHOICE mode		TDD	
- Gain Factor β_d		15	
- Reference TFC ID		0 Integer(0.. 3)	
- CHOICE mode		TDD	
- TFC subset			
- CHOICE Subset representation		Full transport format combination set	
- TFC subset list		Not Present	
Deleted TrCH information list	A1, A2, A3, A4, A5, A6, A7, A8	Not Present	
Added or Reconfigured UL TrCH information	A1, A3 A4, A5, A6, A7	1 DCH added, 1 DCH reconfigured	
- Added or Reconfigured UL TrCH information			
- Uplink transport channel type		DCH	
- UL Transport channel identity		5	
- TFS			
- CHOICE Transport channel type		Dedicated transport channels	
- Dynamic Transport format information			
- RLC Size		Reference to clause 6.11 Parameter Set	
- Number of TBs and TTI List	1 to maxTF	(This IE is repeated for TF number.)	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to clause 6.11 Parameter Set	
- CHOICE Logical channel list		All	
- Semi-static Transport Format information			
- Transmission time interval		Reference to clause 6.11 Parameter Set	
- Type of channel coding		Reference to clause 6.11 Parameter Set	
- Coding Rate		Reference to clause 6.11 Parameter Set	
- Rate matching attribute		Reference to clause 6.11 Parameter Set	
- CRC size		Reference to clause 6.11 Parameter Set	
- Uplink transport channel type		DCH	
- UL Transport channel identity		1	
- TFS			
- CHOICE Transport channel type		Dedicated transport channels	
- Dynamic Transport format information			
- RLC Size		Reference to clause 6.11 Parameter Set	
- Number of TBs and TTI List	1 to maxTF	(This IE is repeated for TF number.)	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to clause 6.11 Parameter Set	
- CHOICE Logical channel list		All	
- Semi-static Transport Format information			
- Transmission time interval		Reference to clause 6.11 Parameter Set	

Information Element	Condition	Value/remark	Version
- Type of channel coding		Reference to clause 6.11 Parameter Set	
- Coding Rate		Reference to clause 6.11 Parameter Set	
- Rate matching attribute		Reference to clause 6.11 Parameter Set	
- CRC size		Reference to clause 6.11 Parameter Set	
Added or Reconfigured TrCH information list	A2, A8	4 TrCHs(DCH for DCCH and 3DCHs for DTCH)	
- Added or Reconfigured UL TrCH information			
- Uplink transport channel type		DCH	
- UL Transport channel identity		5	
- TFS			
- CHOICE Transport channel type		Dedicated transport channels	
- Dynamic Transport format information			
- RLC Size		Reference to clause 6.11 Parameter Set	
- Number of TBs and TTI List	1 to maxTF	(This IE is repeated for TF number.)	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to clause 6.11 Parameter Set	
- CHOICE Logical channel list		All	
- Semi-static Transport Format information			
- Transmission time interval		Reference to clause 6.11 Parameter Set	
- Type of channel coding		Reference to clause 6.11 Parameter Set	
- Coding Rate		Reference to clause 6.11 Parameter Set	
- Rate matching attribute		Reference to clause 6.11 Parameter Set	
- CRC size		Reference to clause 6.11 Parameter Set	
- Uplink transport channel type		DCH	
- UL Transport channel identity		1	
- TFS			
- CHOICE Transport channel type		Dedicated transport channels	
- Dynamic Transport format information			
- RLC Size		Reference to clause 6.11 Parameter Set	
- Number of TBs and TTI List	1 to maxTF	(This IE is repeated for TF number.)	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to clause 6.11 Parameter Set	
- CHOICE Logical channel list		All	
- Semi-static Transport Format information			
- Transmission time interval		Reference to clause 6.11 Parameter Set	
- Type of channel coding		Reference to clause 6.11 Parameter Set	
- Coding Rate		Reference to clause 6.11 Parameter Set	
- Rate matching attribute		Reference to clause 6.11 Parameter Set	
- CRC size		Reference to clause 6.11 Parameter Set	
- Uplink transport channel type		DCH	
- UL Transport channel identity		2	
- TFS			
- CHOICE Transport channel type		Dedicated transport channels	
- Dynamic Transport format information			
- RLC Size		Reference to clause 6.11 Parameter Set	
- Number of TBs and TTI List	1 to maxTF	(This IE is repeated for TF number.)	

Information Element	Condition	Value/remark	Version
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to clause 6.11 Parameter Set	
- CHOICE Logical channel list		All	
- Semi-static Transport Format information			
- Transmission time interval		Reference to clause 6.11 Parameter Set	
- Type of channel coding		Reference to clause 6.11 Parameter Set	
- Coding Rate		Reference to clause 6.11 Parameter Set	
- Rate matching attribute		Reference to clause 6.11 Parameter Set	
- CRC size		Reference to clause 6.11 Parameter Set	
- Uplink transport channel type		DCH	
- UL Transport channel identity		3	
- TFS			
- CHOICE Transport channel type		Dedicated transport channels	
- Dynamic Transport format information			
- RLC Size		Reference to clause 6.11 Parameter Set	
- Number of TBs and TTI List	1 to maxTF	(This IE is repeated for TF number.)	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to clause 6.11 Parameter Set	
- CHOICE Logical channel list		All	
- Semi-static Transport Format information			
- Transmission time interval		Reference to clause 6.11 Parameter Set	
- Type of channel coding		Reference to clause 6.11 Parameter Set	
- Coding Rate		Reference to clause 6.11 Parameter Set	
- Rate matching attribute		Reference to clause 6.11 Parameter Set	
- CRC size		Reference to clause 6.11 Parameter Set	
CHOICE mode		TDD (no data)	
DL Transport channel information common for all transport channel	A1, A2, A7, A8		
- SCCPCH TFCS		Not Present	
- CHOICE mode		TDD	
- Individual DL CCTrCH information			
- DL TFCS Identity			
- TFCS ID		2	
- Shared Channel Indicator		FALSE	
- CHOICE DL parameters		SameAsUL	
- UL DCH TFCS Identity			
- TFCS ID		1	
- Shared Channel Indicator		FALSE	
DL Transport channel information common for all transport channel	A3, A4, A5, A6		
- SCCPCH TFCS		Not Present	
- CHOICE mode		TDD	
- Individual DL CCTrCH information			
- DL TFCS Identity			
- TFCS ID		2	
- Shared Channel Indicator		FALSE	
- CHOICE DL parameters		Independent	
- DL TFCS			
- CHOICE TFCI Signalling		Normal	
- TFCI Field 1 Information			
- CHOICE TFCS representation		Complete reconfiguration	
- TFCS complete reconfiguration			

Information Element	Condition	Value/remark	Version
information			
- CHOICE CTFC Size		Number of bits used must be enough to cover all combinations of CTFC from clause 6.11.5.4 Parameter Set.	
- CTFC information		This IE is repeated for TFC numbers and reference to clause 6.11.5.4	
- CTFC		Reference to clause 6.11.5.4 Parameter Set	
- Power offset information		Not Present	
Deleted TrCH information list	A1, A2, A3, A4, A5, A6, A7, A8	Not Present	
Added or Reconfigured TrCH information list	A1	1 DCH added, 1 DCH reconfigured	
- Added or Reconfigured DL TrCH information			
- Downlink transport channel type		DCH	
- DL Transport channel identity		10	
- CHOICE DL parameters		Same as UL	
- Uplink transport channel type		DCH	
- UL TrCH identity		5	
- DCH quality target			
- BLER Quality value		-2.0 Real(-6.3..0 by step of 0.1)	
- Downlink transport channel type		DCH	
- DL Transport channel identity		6	
- CHOICE DL parameters		Same as UL	
- Uplink transport channel type		DCH	
- UL TrCH identity		1	
- DCH quality target			
- BLER Quality value		-2.0 Real(-6.3..0 by step of 0.1)	
Added or Reconfigured TrCH information list	A3, A4, A5, A6, A7	2 TrCHs(DCH for DCCH and DCH for DTCH)	
- Added or Reconfigured DL TrCH information			
- Downlink transport channel type		DCH	
- DL Transport channel identity		10	
- CHOICE DL parameters		Same as UL	
- Uplink transport channel type		DCH	
- UL TrCH identity		5	
- DCH quality target			
- BLER Quality value		-2.0 Real(-6.3..0 by step of 0.1)	
- Downlink transport channel type		DCH	
- DL Transport channel identity		6	
- CHOICE DL parameters		Explicit	
- TFS			
- CHOICE Transport channel type		Dedicated transport channels	
- Dynamic transport format information			
- RLC Size		Reference to clause 6.11 Parameter Set	
- Number of TBs and TTI List		(This IE is repeated for TF number.)	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to clause 6.11 Parameter Set	
- Semi-static Transport Format information			
- Transmission time interval		Reference to clause 6.11 Parameter Set	
- Type of channel coding		Reference to clause 6.11 Parameter Set	
- Coding Rate		Reference to clause 6.11 Parameter Set	
- Rate matching attribute		Reference to clause 6.11 Parameter Set	
- CRC size		Reference to clause 6.11 Parameter Set	
- DCH quality target			
- Transparent mode signalling info		Not Present	
Added or Reconfigured TrCH information list	A2, A8	4 TrCHs(DCH for DCCH and 3DCHs for DTCH)	
- Added or Reconfigured DL TrCH information			

Information Element	Condition	Value/remark	Version
- Downlink transport channel type		DCH	
- DL Transport channel identity		10	
- CHOICE DL parameters		Same as UL	
- Uplink transport channel type		DCH	
- UL TrCH identity		5	
- DCH quality target			
- Transparent mode signalling info		Not Present	
- Downlink transport channel type		DCH	
- DL Transport channel identity		6	
- CHOICE DL parameters		Explicit	
- TFS			
- CHOICE Transport channel type		Dedicated transport channels	
- Dynamic transport format information			
- RLC Size		Reference to clause 6.11 Parameter Set	
- Number of TBs and TTI List		(This IE is repeated for TF number.)	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to clause 6.11 Parameter Set	
- Semi-static Transport Format information			
- Transmission time interval		Reference to clause 6.11 Parameter Set	
- Type of channel coding		Reference to clause 6.11 Parameter Set	
- Coding Rate		Reference to clause 6.11 Parameter Set	
- Rate matching attribute		Reference to clause 6.11 Parameter Set	
- CRC size		Reference to clause 6.11 Parameter Set	
- DCH quality target			
- BLER Quality value		-2.0	
- Downlink transport channel type		DCH	
- DL Transport channel identity		7	
- CHOICE DL parameters		Explicit	
- TFS			
- CHOICE Transport channel type		Dedicated transport channels	
- Dynamic transport format information			
- RLC Size		Reference to clause 6.11 Parameter Set	
- Number of TBs and TTI List		(This IE is repeated for TF number.)	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to clause 6.11 Parameter Set	
- Semi-static Transport Format information			
- Transmission time interval		Reference to clause 6.11 Parameter Set	
- Type of channel coding		Reference to clause 6.11 Parameter Set	
- Coding Rate		Reference to clause 6.11 Parameter Set	
- Rate matching attribute		Reference to clause 6.11 Parameter Set	
- CRC size		Reference to clause 6.11 Parameter Set	
- DCH quality target			
- BLER Quality value		-2.0	
- Downlink transport channel type		DCH	
- DL Transport channel identity		8	
- CHOICE DL parameters		Explicit	
- TFS			
- CHOICE Transport channel type		Dedicated transport channels	
- Dynamic transport format information			
- RLC Size		Reference to clause 6.11 Parameter Set	

Information Element	Condition	Value/remark	Version
- Number of TBs and TTI List		(This IE is repeated for TF number.)	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to clause 6.11 Parameter Set	
- Semi-static Transport Format information			
- Transmission time interval		Reference to clause 6.11 Parameter Set	
- Type of channel coding		Reference to clause 6.11 Parameter Set	
- Coding Rate		Reference to clause 6.11 Parameter Set	
- Rate matching attribute		Reference to clause 6.11 Parameter Set	
- CRC size		Reference to clause 6.11 Parameter Set	
- DCH quality target			
- BLER Quality value		-2.0	
Frequency info	A1, A2, A3, A4, A5, A7, A8		
- Choice mode		TDD	
- UARFCN (Nt)		Reference to clause 5.1 Test frequencies	
Frequency info	A6	Not Present	
Maximum allowed UL TX power	A1, A2, A3, A4, A7, A8	33dBm	
Maximum allowed UL TX power	A5, A6	Not Present	
CHOICE *channel requirement*	A5, A6	Not Present	
CHOICE *channel requirement*	A1, A2, A3, A4, A7, A8	Uplink DPCH info	
- Uplink DPCH power control info			
- CHOICE mode		TDD	
- CHOICE TDD option		1.28 Mcps TDD	
- $PRX_{PDPCHdes}$		Integer (-120…-58 by step of 1)	
- CHOICE *UL OL PC info*			
- Broadcast UL OL PC info		Null	
- Uplink Timing Advance Control		Not Present	
- UL CCTrCH List			
- TFCS ID		1	
- UL Target SIR		Real (-11 .. 20 by step of 0.5 dB) Reference to clause 6 Parameter set.	
- Time info			
- Activation time		(256+CFN-(CFN MOD 8 + 8))MOD 256	
- Duration		Infinite	
- Common timeslot info			
- 2nd interleaving mode		Default value is "Frame"	
- TFCI coding		Reference to clause 6 Parameter set	
- Puncturing limit		Reference to clause 6 Parameter set	
- Repetition period		1	
- Repetition length			
- Uplink DPCH timeslots and code			
- Dynamic SF usage		FALSE	
- First individual timeslot info			
- Timeslot number			
- CHOICE TDD option		1.28 Mcps TDD	
- Timeslot number		1 OR 2 OR 3	
- TFCI existence		TRUE	
- Midamble shift and burst type			
- CHOICE TDD option		1.28 Mcps TDD	
- Midamble allocation mode		Default midamble	
- Midamble configuration		16	
- Midamble Shift		Not Present	
- CHOICE TDD option		1.28 Mcps TDD	
- Modulation		QPSK	
- SS-TPC Symbols		1	

Information Element	Condition	Value/remark	Version
- Additional TPC-SS Symbols		Not present	
- First timeslot Code List		Repeated (1,2) for each channelisation code assigned in the slot to meet the needs of clause 6 Parameter Set.	
- channelisation codes		(SF/ i) where i denotes an unassigned code matching the SF specified in clause 6 Parameter Set.	
- CHOICE more timeslots		No more timeslots	
- UL CCTrCH List to Remove		Not present	
CHOICE Mode	A1, A2, A3, A4, A5, A6, A7, A8	TDD	
Downlink HS-PDSCH Information		Not Present	REL-5
Downlink information common for all radio links	A5, A6	Not Present	
Downlink information common for all radio links	A1, A2, A3		
- Downlink DPCH info common for all RL			
- Timing indication		Maintain	
- CFN-targetSFN frame offset		Not Present	
- Downlink DPCH power control information			
- CHOICE mode		TDD	
- TPC Step Size		1	
- MAC-d HFN initial value		Not Present	
- CHOICE mode		TDD	
- CHOICE mode		TDD	
- CHOICE TDD option		1.28 Mcps TDD	
- TSTD indicator		FALSE	
- Default DPCH Offset Value		Not Present	
Downlink information common for all radio links	A4, A7, A8		
- Downlink DPCH info common for all RL			
- Timing indication		Initialize	
- CFN-targetSFN frame offset		Not Present	
- Downlink DPCH power control information			
- CHOICE mode		TDD	
- TPC Step Size		1	
- MAC-d HFN initial value		Not Present	
- CHOICE mode		TDD	
- CHOICE mode		TDD	
- CHOICE TDD option		1.28 Mcps TDD	
- TSTD indicator		FALSE	
- Default DPCH Offset Value			
- CHOICE mode		TDD	
- Default DPCH Offset Value		0 Integer(0..7)	
Downlink information per radio link list	A1, A2, A3, A4, A7, A8		
- Downlink information for each radio link			
- Choice mode		TDD	
- Primary CCPCH info			
- Choice mode		TDD	
- Choice TDD Option		1.28 Mcps TDD	
- TSTD indicator		FALSE	
- Cell parameters ID		Ref. to the Default setting in clause 6.1 (TDD) Integer(0..127)	
- SCTD indicator		FALSE	
- Downlink DPCH info for each RL			
- CHOICE mode		TDD	
- DL CCTrCh List			
- TFCS ID		2 Integer(1.8)	
- Time info			
- Activation time		Now	
- Duration		Infinite	
- Common timeslot info			
- 2nd interleaving mode		Default value is "Frame"	
- TFCI coding		Reference to clause 6 Parameter set	
- Puncturing limit		Reference to clause 6 Parameter set	
- Repetition period		1	
- Repetition length		NULL	
- Downlink DPCH timeslots and codes			

Information Element	Condition	Value/remark	Version
- First individual timeslot info			
- Timeslot number			
- CHOICE TDD option		1.28 Mcps TDD	
- Timeslot number		4 OR 5 OR 6	
- TFCI existence		TRUE	
- Midamble shift and burst type			
- CHOICE TDD option		1.28 Mcps TDD	
- Midamble allocation mode		Default midamble	
- Midamble configuration		16	
- Midamble Shift		Not Present	
- CHOICE TDD option		1.28 Mcps TDD	
- Modulation		QPSK	
- SS-TPC Symbols		1	
- Additional TPC-SS Sysbols		Not present	
- First timeslot channelisation codes		Repeated (1,2) for each channelisation code assigned in the slot to meet the needs of clause 6 Parameter Set.	
- CHOICE codes representation			
- Channelisation codes bitmap		Reference to clause 6.11 Parameter Set	
- CHOICE more timeslots		No more timeslots	
- UL CCTrCH TPC List		This list is not required for 1.28 Mcps TDD and is to be ignored by the UE.	
- UL TPC TFCS Identity			
- TFCS ID		1	
- Shared Channel Indicator		FALSE	
- DL CCTrCH List to Remove		Not present	
- SCCPCH Information for FACH		Not Present	R99 and Rel-4 only
Downlink information per radio link list	A5		
- Downlink information for each radio link			
- Choice mode		TDD	
- Primary CCPCH info			
- Choice mode		TDD	
- Choice TDD Option		1.28 Mcps TDD	
- TSTD indicator		FALSE	
- Cell parameters ID		Ref. to the Default setting in clause 6.1 (TDD) Integer(0..127)	
- SCTD indicator		FALSE	
- Downlink DPCH info for each RL		Not Present	
- SCCPCH Information for FACH		Not Present	R99 and Rel-4 only
Downlink information per radio link list	A6	Not Present	

Condition	Explanation
A1	This IE need for "Non speech to CELL_DCH from CELL_DCH in CS"
A2	This IE need for "Speech to CELL_DCH from CELL_DCH in CS"
A3	This IE need for "Packet to CELL_DCH from CELL_DCH in PS"
A4	This IE need for "Packet to CELL_DCH from CELL_FACH in PS"
A5	This IE need for "Packet to CELL_FACH from CELL_DCH in PS"
A6	This IE need for "Packet to CELL_FACH from CELL_FACH in PS"
A7	This IE need for "Non speech to CELL_DCH from CELL_FACH in CS"
A8	This IE need for "Speech to CELL_DCH from CELL_FACH in CS"

Contents of RADIO BEARER SETUP COMPLETE message: AM

Information Element	Value/remark	Version
Message Type		
RRC transaction identifier	Checked to see if the value is identical to the same IE in the downlink RADIO BEARER SETUP message.	
Integrity check info		
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.	

- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.	
Uplink integrity protection activation info	Not checked.	
CHOICE mode	TDD	
- CHOICE *TDD option*	Check that this IE is present	REL-4
START	Not checked (if ciphering is OFF), check the presence if ciphering is ON.	
COUNT-C activation time	The presence of this IE depends on the following 2 factors: (a) There exists RB(s) mapped to RLC-TM and (b) UE is transiting to CELL_DCH state after the RB establishment procedure. Else, this IE is absent.	
Radio bearer uplink ciphering activation time info	If ciphering is not activated in RADIO BEARER SETUP message, this IE must be absent. Else, SS checks this IE for the presence of activation times of all ciphered uplink RLC-UM and RLC-AM RBs.	
Uplink counter synchronization info	Not present	

Contents of RADIO BEARER SETUP FAILURE message: AM

Information Element	Value/remark
Message Type	
RRC transaction identitifer	Checked to see if it is set to identical value of the same IE in the downlink PHYSICAL CHANNEL RECONFIGURATION message.
Integrity check info	
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.
Failure cause	Checked to see if it meets test requirement
Radio bearers for which reconfiguration would have succeeded	Not Check

Contents of RADIO BEARER RELEASE COMPLETE message: AM (1.28 Mcps TDD)

Information Element	Value/remark	Version
Message Type		
RRC transaction identifier	Checked to see the value is identical to the same IE in the downlink RADIO BEARER RELEASE message.	
Integrity check info		
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.	
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.	
Uplink integrity protection activation info	Not checked.	
CHOICE mode	TDD	
- CHOICE TDD option	1.28 Mcps TDD (no data)	
COUNT-C activation time	The presence of this IE depends on the following 2 factors: (a) There exists RB(s) mapped to RLC-TM and (b) UE is transiting to CELL_DCH state after the RB release procedure. Else, this IE is absent.	
Radio bearer uplink ciphering activation time info	If ciphering is not activated in RADIO BEARER RELEASE message, this IE must be absent. Else, SS checks this IE for the presence of activation times of all ciphered uplink RLC-UM and RLC-AM RBs.	
Uplink counter synchronization info	Not checked	

Contents of RADIO BEARER RELEASE FAILURE message: AM

Information Element	Value/remark
Message Type	

RRC transaction identitifer	Checked to see if it is set to identical value of the same IE in the downlink RADIO BEARER RELEASE message.
Integrity check info	
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.
Failure cause	Checked to see if it meets test requirement
Radio bearers for which reconfiguration would have succeeded	Not checked

Contents of RRC CONNECTION REQUEST message: TM

Information Element	Value/remark	Version
Message Type		
Predefined configuration status information	To be checked against requirement if specified	REL-5
Initial UE identity		
- CHOICE UE id type		
- IMSI (GSM-MAP)	Set to the UE's IMSI (GSM-MAP) or TMSI.	
Establishment cause	To be checked against requirement if specified	
Protocol error indicator	FALSE	
UE Specific Behaviour Information 1 idle	This IE will not be checked by default behaviour, but in specific test case.	
Measured results on RACH	To be checked against requirement if specified	
Access stratum release indicator	To be checked against requirement if specified	REL-4

Contents of RRC CONNECTION REJECT message: UM

Information Element	Value/remark
Message Type	
RRC transaction identifier	Arbitrarily selects an integer between 0 and 3
Initial UE identity	Select the same type as in the IE "Initial UE Identity" in RRC CONNECTION REQUEST" message.
Rejection cause	Unspecified
Wait Time	0
Redirection info	Not Present

Contents of RRC CONNECTION RELEASE message: UM

Information Element	Value/remark	Version
Message Type		
U-RNTI	This IE is set to the following value when the message is transmitted on the CCCH. When transmitted on DCCH, this is absent.	R99, REL-4
- SRNC identity	0000 0000 0001B	
- S-RNTI	0000 0000 0000 0000 0001B	
CHOICE identity type	This IE is set to the following value when the message is transmitted on the CCCH. When transmitted on DCCH, this is absent.	REL-5
- U-RNTI		
- SRNC identity	0000 0000 0001B	
- S-RNTI	0000 0000 0000 0000 0001B	
- Group identity	[FFS]	
- Group release information	[FFS]	
RRC transaction identifier	Arbitrarily selects an integer between 0 and 3	
Integrity check info	This IE is present when this message is transmitted on downlink DCCH. Else, this IE and the sub-IEs are omitted.	
- Message authentication code	SS calculates the value of MAC-I for this message and writes to this IE. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.	
- RRC Message sequence number	SS provides the value of this IE, from its internal counter.	

N308	2 (for CELL_DCH state). Not Present (for UE in other connected mode states).	
Release cause	Normal event	
Rplmn information	Not Present	

Contents of RRC CONNECTION RELEASE COMPLETE message: AM or UM

Information Element	Semantics description
Message Type	
RRC transaction identifier	The value of this IE is checked to see that it matches the value of the same IE transmitted in the downlink RRC CONNECTION RELEASE message.
Integrity check info	
- Message authentication code	Checked to see if it's identical to the value of XMAC-I calculated by the SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	Checked to see if it is present. This number is used by the SS to compute the XMAC-I
Error indication	Not checked

Contents of RRC CONNECTION SETUP message: UM (Transition to CELL_DCH) (3.84 Mcps TDD option)

Information Element	Value/remark	Version
Message Type		
Initial UE identity	Select the same identity as in the IE "Initial UE Identity" in received RRC CONNECTION REQUEST" message	
RRC transaction identifier	0	
Activation time	Not Present(Now)	
New U-RNTI		
- SRNC identity	0000 0000 0001B	
- S-RNTI	0000 0000 0000 0000 0001B	
New C-RNTI	Not Present	
RRC State Indicator	CELL_DCH	
UTRAN DRX cycle length coefficient	9	
Capability update requirement		
- UE radio access FDD capability update requirement	FALSE	
- UE radio access TDD capability update requirement	TRUE	
- System specific capability update requirement list	GSM	
CHOICE *specification mode*	Complete specification	REL-5
- Complete specification		REL-5
- Signalling RB information to setup	(UM DCCH for RRC)	
- RB identity	Not Present	
- CHOICE RLC info type		
- RLC info		
- CHOICE Uplink RLC mode	UM RLC	
- Transmission RLC discard	Not Present	
- CHOICE Downlink RLC mode	UM RLC	
- RB mapping info		
- Information for each multiplexing option	2 RBMuxOptions	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	DCH	
- UL Transport channel identity	5	
- Logical channel identity	1	
- CHOICE RLC size list	Configured	
- MAC logical channel priority	1	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	DCH	

Information Element	Value/remark	Version
- DL DCH Transport channel identity	10	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	1	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	RACH	
- UL Transport channel identity	Not Present	
- Logical channel identity	1	
- CHOICE RLC size list	Explicit List	
- RLC size index	According to clause 6 for standalone 13.6 kbps signalling radio bearer	
- MAC logical channel priority	1	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	FACH	
- DL DCH Transport channel identity	Not Present	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	1	
- Signalling RB information to setup	(AM DCCH for RRC)	
- RB identity	Not Present	
- CHOICE RLC info type		
- RLC info		
- CHOICE Uplink RLC mode	AM RLC	
- Transmission RLC discard		
- SDU discard mode	No Discard	
- MAX_DAT	15	
- Transmission window size	128	
- Timer_RST	500	
- Max_RST	1	
- Polling info		
- Timer_poll_prohibit	200	
- Timer_poll	200	
- Poll_PDU	Not present	
- Poll_SDU	1	
- Last transmission PDU poll	TRUE	
- Last retransmission PDU poll	TRUE	
- Poll_Window	99	
- Timer_poll_periodic	Not Present	
- CHOICE Downlink RLC mode	AM RLC	
- In-sequence delivery	TRUE	
- Receiving window size	128	
- Downlink RLC status info		
- Timer_status_prohibit	200	
- Timer_EPC	Not Present	
- Missing PDU indicator	TRUE	
- Timer_STATUS_periodic	Not Present	
- RB mapping info		
- Information for each multiplexing option	2 RBMuxOptions	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	DCH	
- UL Transport channel identity	5	
- Logical channel identity	2	
- CHOICE RLC size list	Configure	
- MAC logical channel priority	2	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	DCH	

Information Element	Value/remark	Version
- DL DCH Transport channel identity	10	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	2	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	RACH	
- UL Transport channel identity	Not Present	
- Logical channel identity	2	
- CHOICE RLC size list	Explicit List	
- RLC size index	According to clause 6 for standalone 13.6 kbps signalling radio bearer	
- MAC logical channel priority	2	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	FACH	
- DL DCH Transport channel identity	Not Present	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	2	
Signalling RB information to setup	(AM DCCH for NAS_DT High priority)	
- RB identity	Not Present	
- CHOICE RLC info type		
- RLC info		
- CHOICE Uplink RLC mode	AM RLC	
- Transmission RLC discard		
- SDU discard mode	No Discard	
- MAX_DAT	15	
- Transmission window size	128	
- Timer_RST	500	
- Max_RST	1	
- Polling info		
- Timer_poll_prohibit	200	
- Timer_poll	200	
- Poll_PDU	Not present	
- Poll_SDU	1	
- Last transmission PDU poll	TRUE	
- Last retransmission PDU poll	TRUE	
- Poll_Windows	99	
- Timer_poll_periodic	Not Present	
- CHOICE Downlink RLC mode	AM RLC	
- In-sequence delivery	TRUE	
- Receiving window size	128	
- Downlink RLC status info		
- Timer_status_prohibit	200	
- Timer_EPC	Not Present	
- Missing PDU indicator	TRUE	
- Timer_STATUS_periodic	Not Present	
- RB mapping info		
- Information for each multiplexing option	2 RBMuxOptions	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	DCH	
- UL Transport channel identity	5	
- Logical channel identity	3	
- CHOICE RLC size list	Configured	
- MAC logical channel priority	3	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	DCH	

Information Element	Value/remark	Version
- DL DCH Transport channel identity	10	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	3	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	RACH	
- UL Transport channel identity	Not Present	
- Logical channel identity	3	
- CHOICE RLC size list	Explicit List	
- RLC size index	According to clause 6 for standalone 13.6 kbps signalling radio bearer	
- MAC logical channel priority	3	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	FACH	
- DL DCH Transport channel identity	Not Present	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	3	
- Signalling RB information to setup	(AM DCCH for NAS_DT Low priority)	
- RB identity	Not Present	
- CHOICE RLC info type		
- RLC info		
- CHOICE Uplink RLC mode	AM RLC	
- Transmission RLC discard		
- SDU discard mode	No discard	
- MAX_DAT	15	
- Transmission window size	128	
- Timer_RST	500	
- Max_RST	1	
- Polling info		
- Timer_poll_prohibit	200	
- Timer_poll	200	
- Poll_PDU	Not present	
- Poll_SDU	1	
- Last transmission PDU poll	TRUE	
- Last retransmission PDU poll	TRUE	
- Poll_Windows	99	
- Timer_poll_periodic	Not Present	
- CHOICE Downlink RLC mode	AM RLC	
- In-sequence delivery	TRUE	
- Receiving window size	128	
- Downlink RLC status info		
- Timer_status_prohibit	200	
- Timer_EPC	Not Present	
- Missing PDU indicator	TRUE	
- Timer_STATUS_periodic	Not Present	
- RB mapping info		
- Information for each multiplexing option	2 RBMuxOptions	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	DCH	
- UL Transport channel identity	5	
- Logical channel identity	4	
- CHOICE RLC size list	Configured	
- MAC logical channel priority	4	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	DCH	

Information Element	Value/remark	Version
- DL DCH Transport channel identity	10	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	4	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	RACH	
- UL Transport channel identity	Not Present	
- Logical channel identity	4	
- CHOICE RLC size list	Explicit List	
- RLC size index	According to clause 6 for standalone 13.6 kbps signalling radio bearer	
- MAC logical channel priority	4	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	FACH	
- DL DCH Transport channel identity	Not Present	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	4	
UL Transport channel information for all transport channels		
- PRACH TFCS	Not Present	
- CHOICE mode	TDD	
-Individual UL CCTrCH information		
- UL TFCS ID	(This IE is repeated for TFC number.)	
- UL TFCS		
- TFC subset	Default value is the complete existing set of transport format combinations	
- Allowed Transport Format combination	0 to MaxTFCvalue-1 (MaxTFCValue is refer to clause 6 Parameter Set.)	
- PRACH TFCS	(This IE is repeated for TFC number.)	
- CHOICE TFCI signalling	Normal	
- TFCI Field 1 information		
- TFCS complete reconfigure information		
- CHOICE TFCS Size	Number of used bits must be enough to cover all combinations of CTFC from clauses 6. Refer to clause 6 Parameter Set	
- CTFC information	Not Present	
- CHOICE mode	TDD	
- Individual UL CCTrCH information	Not Present	
Deleted TrCH information list	Not Present	
Added or Reconfigured UL TrCH information		
- Uplink transport channel type	DCH	
- UL Transport channel identity	5	
- TFS		
- CHOICE Transport channel type	Dedicated transport channels	
- Dynamic Transport format information		
- RLC size	According to clause 6 for standalone 13.6 kbps signalling radio bearer	
- Number of TBs and TTI lists	(This IE is repeated for TFI number)	
- CHOICE mode	TDD	
- Transmission Time Interval	According to clause 6 for standalone 13.6 kbps signalling radio bearer	
- CHOICE Logical channel list	All	
- Semi-static Transport Format information		
DL Transport channel information common for all transport channel		

Information Element	Value/remark	Version
- SCCPCH TFCS	Not Present	
- CHOICE mode	TDD	
-Individual DL CCTrCH information		
- DL TFCS Identity		
- TFCS ID	1	
- Shared Channel Indicator		
- CHOICE DL parameters	Same as UL	
Added or Reconfigured TrCH information list		
- Added or Reconfigured DL TrCH information		
- Downlink transport channel type	DCH	
- DL Transport channel identity	10	
- CHOICE DL parameters	Same as UL	
- Uplink transport channel type	DCH	
- UL Transport channel identity	5	
-DCH quality target		
- BLER Quality target	-6.3	
Frequency info	Not Present	
Maximum allowed UL TX power	Not Present	
CHOICE channel requirement	Uplink DPCH info	
- Uplink DPCH power control info		
- CHOICE mode	TDD	
- CHOICE *TDD option*	3.84 Mcps	
- UL target SIR	Reference to clause 6.10 Parameter set	
- CHOICE mode	TDD	
- CHOICE *UL OL PC info*	Individually signalled	
- CHOICE *TDD option*	3.84 Mcps	
- Individual timeslot interference info	Not Present	
- Individual timeslot interference		
- DPCH Constant Value		
- Primary CCPCH Tx Power	Not Present	
- Time info		
- Activation time	(256+CFN-(CFN MOD 8 + 8))MOD 256	
- Duration	Infinite	
- Common timeslot info		
- 2nd interleaving mode	Reference to clause 6.10 Parameter Set	
- TFCI coding	Reference to clause 6.10 Parameter Set	
- Puncturing Limit	Reference to clause 6.10 Parameter Set	
- Repetition Period	Reference to clause 6.10 Parameter Set	
- Repetition Length	Reference to clause 6.10 Parameter Set	
- Uplink DPCH timeslots and codes	Default is to use the old timeslots and codes	
- CPCH SET Info	(no data)	R99 and Rel-4 only
Downlink information common for all radio links		
- Downlink DPCH info common for all RL		
- Timing indicator	Maintain	
- CFN-targetSFN frame offset	Not Present	
- Downlink DPCH power control information		
- DPC mode	0 (single)	
- CHOICE mode	TDD	
- CHOICE TDD option	3.84 Mcps (no data)	
- Default DPCH Offset Value	Not Present	
Downlink information for each radio link list		
- Downlink information for each radio link		
- Choice mode	TDD	
- Primary CCPCH info		
- CHOICE *SyncCase*	Sync Case 1	
- Timeslot	PCCPCH timeslot	
- Cell parameters ID	0	
- SCTD indicator		
- Downlink DPCH info for each RL		

Information Element	Value/remark	Version
- CHOICE mode	TDD	
- DL CCTrCH List		
- TFCS ID	1	
- Time info		
- Activation time	(256+CFN-(CFN mod 8 + 8))mod 256	
- Duration	infinite	
- Common timeslot info		
- 2nd interleaving mode	Reference to the present document	
- TFCI coding	TRUE	
- Puncturing limit	Reference to clause 6 Parameter set	
- Repetition period	1	
- Repetition length	Empty	
- Downlink DPCH timeslots and codes		
- CHOICE *more timeslots*		
- CHOICE TDD option	3.84 Mcps	
- Timeslot number	The number of a downlink timeslot that has unassigned codes in a frame.	
- Individual timeslot info		
- TFCI existence	TRUE	
- Midamble shift and burst type		
- CHOICE TDD option	3.84 Mcps	
-CHOICE Burst Type		
-Type 1		
-Midamble Allocation Mode	Default	
- Midamble configuration burst type 1 and 3	As defined in 3GPP TS 25.221 [28]	
- First timeslot channelisation codes		
- First channelisation code	(i/SF) where i is the lowest numbered code that is being assigned and SF is specified in clause 6 Parameter Set.	
- Last channelisation code	(j/SF) where j is the highest numbered code that is being assigned in the slot.	
- CHOICE more timeslots	The presence of this IE depends upon whether the requirements of clause 6 Parameter Set could be met by the codes that have been assigned in the first timeslot.	
- UL CCTrCH TPC List	Not Present	
-SCCPCH information for FACH	Not Present	R99 and Rel-4 only

Contents of RRC CONNECTION SETUP message: UM (Transition to CELL_DCH) (1.28 Mcps TDD option)

Information Element	Value/remark	Version
Message Type		
Initial UE identity	Select the same identity as in the IE "Initial UE Identity" in received RRC CONNECTION REQUEST" message	
RRC transaction identifier	0	
Activation time	Not Present(Now)	
New U-RNTI		
- SRNC identity	0000 0000 0001B	
- S-RNTI	0000 0000 0000 0000 0001B	
New C-RNTI	Not Present	
RRC State Indicator	CELL_DCH	
UTRAN DRX cycle length coefficient	9, Integer(3...9)	
Capability update requirement		
- UE radio access FDD capability update requirement	FALSE	
- UE radio access 3.84 Mcps TDD capability update requirement	FALSE	
- UE radio access 1.28 Mcps TDD capability update requirement	TRUE	
- System specific capability update requirement list	Not Present	

Information Element	Value/remark	Version
CHOICE *specification mode*	Complete specification	REL-5
- Complete specification		REL-5
- Signalling RB information to setup list		
- Signalling RB information to setup	(UM DCCH for RRC)	
- RB identity	1	
- CHOICE RLC info type	RLC info	
- CHOICE Uplink RLC mode	UM RLC	
- Transmission RLC discard	Not Present	
- CHOICE Downlink RLC mode	UM RLC	
- RB mapping info		
- Information for each multiplexing option	2 RBMuxOptions	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	DCH	
- UL Transport channel identity	5	
- Logical channel identity	1	
- CHOICE RLC size list	Configured	
- MAC logical channel priority	1	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	DCH	
- DL DCH Transport channel identity	10	
- DL DSCH Transport channel identity	Not Present	
- DL HS-DSCH MAC-d flow identity	Not Present	
- Logical channel identity	1	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	RACH	
- UL Transport channel identity	Not Present	
- Logical channel identity	1	
- CHOICE RLC size list	Explicit List	
- RLC size index	Reference to clause 6 Parameter Set	
- MAC logical channel priority	1	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	FACH	
- DL DCH Transport channel identity	Not Present	
- DL DSCH Transport channel identity	Not Present	
- DL HS-DSCH MAC-d flow identity	Not Present	
- Logical channel identity	1	
- Signalling RB information to setup	(AM DCCH for RRC)	
- RB identity	2	
- CHOICE RLC info type	RLC info	
- CHOICE Uplink RLC mode	AM RLC	
- Transmission RLC discard		
- CHOICE SDU discard mode	No Discard	
- MAX_DAT	15	
- Transmission window size	128	
- Timer_RST	500	
- Max_RST	1	
- Polling info		
- Timer_poll_prohibit	200	
- Timer_poll	200	
- Poll_PDU	Not present	
- Poll_SDU	1	
- Last transmission PDU poll	TRUE	
- Last retransmission PDU poll	TRUE	
- Poll_Window	99	
- Timer_poll_periodic	Not Present	
- CHOICE Downlink RLC mode	AM RLC	
- In-sequence delivery	TRUE	
- Receiving window size	128	
- Downlink RLC status info		
- Timer_status_prohibit	200	
- Timer_EPC	Not Present	
- Missing PDU indicator	TRUE	
- Timer_STATUS_periodic	Not Present	

Information Element	Value/remark	Version
- RB mapping info		
- Information for each multiplexing option	2 RBMuxOptions	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	DCH	
- UL Transport channel identity	5	
- Logical channel identity	2	
- CHOICE RLC size list	Configure	
- MAC logical channel priority	2	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	DCH	
- DL DCH Transport channel identity		
- Transport channel identity	10	
- DL DSCH Transport channel identity	Not Present	
- DL HS-DSCH MAC-d flow identity	Not Present	
- Logical channel identity	2	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	RACH	
- UL Transport channel identity	Not Present	
- Logical channel identity	2	
- CHOICE RLC size list	Explicit List	
- RLC size index	Reference to clause 6 Parameter Set	
- MAC logical channel priority	2	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	FACH	
- DL DCH Transport channel identity	Not Present	
- DL DSCH Transport channel identity	Not Present	
- DL HS-DSCH MAC-d flow identity	Not Present	
- Logical channel identity	2	
Signalling RB information to setup	(AM DCCH for NAS_DT High priority)	
- RB identity	3	
- CHOICE RLC info type	RLC info	
- CHOICE Uplink RLC mode	AM RLC	
- Transmission RLC discard		
- CHOICE SDU discard mode	No Discard	
- MAX_DAT	15	
- Transmission window size	128	
- Timer_RST	500	
- Max_RST	1	
- Polling info		
- Timer_poll_prohibit	200	
- Timer_poll	200	
- Poll_PDU	Not present	
- Poll_SDU	1	
- Last transmission PDU poll	TRUE	
- Last retransmission PDU poll	TRUE	
- Poll_Windows	99	
- Timer_poll_periodic	Not Present	
- CHOICE Downlink RLC mode	AM RLC	
- In-sequence delivery	TRUE	
- Receiving window size	128	
- Downlink RLC status info		
- Timer_status_prohibit	200	
- Timer_EPC	Not Present	
- Missing PDU indicator	TRUE	
- Timer_STATUS_periodic	Not Present	
- RB mapping info		
- Information for each multiplexing option	2 RBMuxOptions	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	DCH	
- UL Transport channel identity	5	
- Logical channel identity	3	
- CHOICE RLC size list	Configured	

Information Element	Value/remark	Version
- MAC logical channel priority	3	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	DCH	
- DL DCH Transport channel identity		
- Transport channel identity	10	
- DL DSCH Transport channel identity	Not Present	
- DL HS-DSCH MAC-d flow identity	Not Present	
- Logical channel identity	3	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	RACH	
- UL Transport channel identity	Not Present	
- Logical channel identity	3	
- CHOICE RLC size list	Explicit List	
- RLC size index	Reference to clause 6 Parameter Set	
- MAC logical channel priority	3	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	FACH	
- DL DCH Transport channel identity	Not Present	
- DL DSCH Transport channel identity	Not Present	
- DL HS-DSCH MAC-d flow identity	Not Present	
- Logical channel identity	3	
- Signalling RB information to setup	(AM DCCH for NAS_DT Low priority)	
- RB identity	4	
- CHOICE RLC info type	RLC info	
- CHOICE Uplink RLC mode	AM RLC	
- Transmission RLC discard		
- CHOICE SDU discard mode	No discard	
- MAX_DAT	15	
- Transmission window size	128	
- Timer_RST	500	
- Max_RST	1	
- Polling info		
- Timer_poll_prohibit	200	
- Timer_poll	200	
- Poll_PDU	Not present	
- Poll_SDU	1	
- Last transmission PDU poll	TRUE	
- Last retransmission PDU poll	TRUE	
- Poll_Windows	99	
- Timer_poll_periodic	Not Present	
- CHOICE Downlink RLC mode	AM RLC	
- In-sequence delivery	TRUE	
- Receiving window size	128	
- Downlink RLC status info		
- Timer_status_prohibit	200	
- Timer_EPC	Not Present	
- Missing PDU indicator	TRUE	
- Timer_STATUS_periodic	Not Present	
- RB mapping info		
- Information for each multiplexing option	2 RBMuxOptions	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	DCH	
- UL Transport channel identity	5	
- Logical channel identity	4	
- CHOICE RLC size list	Configured	
- MAC logical channel priority	4	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	DCH	
- DL DCH Transport channel identity		
- Transport channel identity	10	
- DL DSCH Transport channel identity	Not Present	
- DL HS-DSCH MAC-d flow identity	Not Present	

Information Element	Value/remark	Version
- Logical channel identity	4	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	RACH	
- UL Transport channel identity	Not Present	
- Logical channel identity	4	
- CHOICE RLC size list	Explicit List	
- RLC size index	Reference to clause 6 Parameter Set	
- MAC logical channel priority	4	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	FACH	
- DL DCH Transport channel identity	Not Present	
- DL DSCH Transport channel identity	Not Present	
- DL HS-DSCH MAC-d flow identity	Not Present	
- Logical channel identity	4	
- UL Transport channel information for all transport channels		
- PRACH TFCS	Not Present	
- CHOICE mode	TDD	
-Individual UL CCTrCH information		
- UL TFCS ID	(This IE is repeated for TFC number.)	
- TFCS ID	1	
- Shared Channel Indicator	FALSE	
- UL TFCS		
- CHOICE TFCI signalling	Normal	
- TFCI Field 1 Information		
- CHOICE TFCS representation	Complete reconfiguration	
- TFCS complete reconfiguration information		
- CHOICE CTFC Size	Configured, Number of bits used must be enough to cover all combinations of CTFC from clause 6.11.5.4 Parameter Set.	
- CTFC information	This IE is repeated for TFC numbers and reference to clause 6.11.5.4 Parameter Set	
- CTFC	Reference to clause 6.11.5.4 Parameter Set	
- Power offset Information		
- CHOICE Gain Factors	Computed Gain Factors(The last TFC is set to Signalled Gain Factors)	
- Reference TFC ID	0, Integer(0.. 3)	
- CHOICE Gain Factors	Signalled Gain Factors(Not Present if the CHOICE Gain Factors is set to ComputedGain Factors)	
- CHOICE mode	TDD	
- Gain Factor d	15	
- Reference TFC ID	0, Integer (0..3)	
- CHOICE mode	TDD	
- TFC subset	Default value is the complete existing set of transport format combinations	
- CHOICE *Subset representation*	Allowed transport format combination list	
- Allowed Transport Format combination	0 to MaxTFCvalue-1 (MaxTFCValue is refer to clause 6 Parameter Set.)	
- Transport format combination	Integer (0.. 1023)	
- TFC subset list	Not present	
- Added or Reconfigured UL TrCH information list		
- Added or Reconfigured UL TrCH information		
- Uplink transport channel type	DCH	
- UL Transport channel identity	5	
- TFS		
- CHOICE Transport channel type	Dedicated transport channels	
- Dynamic Transport format information		
- RLC size	According to clause 6 for standalone 13.6 kbps signalling radio bearer	
- Number of TBs and TTI lists	(This IE is repeated for TFI number)	
- Transmission Time Interval	Not Present	
- Number of Transport blocks	Reference to clause 6.11 Parameter Set	
- CHOICE Logical channel list	All	
- Semi-static Transport Format information		

Information Element	Value/remark	Version
- Transmission time interval	Reference to clause 6.11 Parameter Set	
- Type of channel coding	Reference to clause 6.11 Parameter Set	
- Coding Rate	Reference to clause 6.11 Parameter Set	
- Rate matching attribute	Reference to clause 6.11 Parameter Set	
DL Transport channel information common for all transport channel		
- SCCPCH TFCS	Not Present	
- CHOICE mode	TDD	
-Individual DL CCTrCH information		
- DL TFCS Identity		
- TFCS ID	1	
- Shared Channel Indicator	FALSE	
- CHOICE DL parameters	Same as UL	
- Added or Reconfigured TrCH information list		
- Added or Reconfigured DL TrCH information		
- Downlink transport channel type	DCH	
- DL Transport channel identity	10	
- CHOICE DL parameters	Same as UL	
- Uplink transport channel type	DCH	
- UL Transport channel identity	5	
-DCH quality target		
- BLER Quality target	-6.3	
Frequency info	Not Present	
Maximum allowed UL TX power	33dBm	
CHOICE channel requirement	Uplink DPCH info	
- Uplink DPCH power control info		
- CHOICE mode	TDD	
- CHOICE *TDD option*	1.28 Mcps TDD	
- $PRX_{PDPCHdes}$	Reference to clause 6.11 Parameter set	
- CHOICE *UL OL PC info*	Individually signalled	
- CHOICE *TDD option*	1.28 Mcps TDD	
- TPC step size	1 dB	
- Primary CCPCH Tx Power	Not Present	
- CHOICE mode	TDD	
- Uplink Timing Advance Control		
- CHOICE Timing Advance	Enabled	
- CHOICE TDD option	1.28 Mcps TDD	
- Uplink synchronization parameters		
- Uplink synchronization step size	1	
- Uplink synchronization frequency	1	
- Synchronization parameters	Not present	
- UL CCTrCH List		
- TFCS ID	1	
- UL Target SIR	Real (-11 .. 20 by step of 0.5 dB) Reference to clause 6.11 Parameter set.	
- Time info		
- Activation time	(256+CFN-(CFN MOD 8 + 8))MOD 256	
- Duration	Infinite	
- Common timeslot info		
- 2nd interleaving mode	Reference to clause 6 Parameter Set	
- TFCI coding	Reference to clause 6 Parameter Set	
- Puncturing Limit	Reference to clause 6 Parameter Set	
- Repetition Period		
- Repetition Length	null	
- Uplink DPCH timeslots and codes		
- Dynamic SF usage	FALSE	
- First individual timeslot info		
- Timeslot number		
- CHOICE TDD option	1.28 Mcps TDD	
- Timeslot number	1 OR 2 OR 3	
- TFCI existence	TRUE	
- Midamble shift and burst type		
- CHOICE TDD option	1.28 Mcps TDD	
- Midamble allocation mode	Default midamble	
- Midamble configuration	16	
- Midamble Shift	Not Present	
- CHOICE TDD option	1.28 Mcps TDD	

Information Element	Value/remark	Version
- Modulation	QPSK	
- SS-TPC Symbols	1	
- Additional TPC-SS Sysbols	Not present	
- First timeslot Code List	Repeated (1,2) for each channelisation code assigned in the slot to meet the needs of clause 6 Parameter Set.	
- channelisation codes	(SF/ i) where i denotes an unassigned code matching the SF specified in clause 6 Parameter Set.	
- CHOICE more timeslots	No more timeslots	
- UL CCTrCH List to Remove	Not present	
Downlink information common for all radio links		
- Downlink DPCH info common for all RL		
- Timing indication	Initialize	
- CFN-targetSFN frame offset	Not Present	
- Downlink DPCH power control information		
- CHOICE *mode*	TDD	
- TPC Step Size	1 dB	
- MAC-d HFN initial value	Not Present	
- CHOICE mode	TDD (no data)	
- CHOICE mode	TDD	
- CHOICE TDD option	1.28 Mcps TDD	
- TSTD indicator	FALSE	
- Default DPCH Offset Value	Not Present	
Downlink information for each radio link list		
- Downlink information for each radio link		
- Choice mode	TDD	
- Primary CCPCH info		
- CHOICE *mode*	TDD	
- CHOICE TDD option	1.28 Mcps TDD	
- TSTD indicator	FALSE	
- Cell parameters ID	Not present	
- SCTD indicator	FALSE	
- Downlink DPCH info for each RL		
- CHOICE mode	TDD	
- DL CCTrCH List		
- TFCS ID	1	
- Time info		
- Activation time	(256+CFN-(CFN mod 8 + 8))mod 256	
- Duration	infinite	
- Common timeslot info		
- 2nd interleaving mode	Reference to clause 6.11 Parameter set	
- TFCI coding	Reference to clause 6.11 Parameter set	
- Puncturing limit	Reference to clause 6.11 Parameter set	
- Repetition period	1	
- Repetition length	NULL	
- Downlink DPCH timeslots and codes		
- First Individual timeslot info		
- Timeslot number		
- CHOICE *more timeslots*		
- CHOICE TDD option	1.28 McpsTDD	
- Timeslot number	4 OR 5 OR 6	
- Individual timeslot info		
- TFCI existence	TRUE	
- Midamble shift and burst type		
- CHOICE TDD option	1.28 Mcps TDD	
-Midamble Allocation Mode	Default	
- Midamble configuration	16 Integer(2, 4, 6, 8, 10, 12, 14, 16)	
- Midamble Shift	Not present	
- CHOICE TDD option	1.28 Mcps TDD	
- Modulation	QPSK	
- SS-TPC Symbols	1	
- Additional TPC-SS Symbols	Not present	
- First timeslot channelisation		

Information Element	Value/remark	Version
codes		
- CHOICE codes representation	Consecutive codes	
- First channelisation code	(i/SF) where i is the lowest numbered code that is being assigned and SF is specified in clause 6 Parameter Set..	
- Last channelisation code	(j/SF) where j is the highest numbered code that is being assigned in the slot.	
- CHOICE more timeslots	The presence of this IE depends upon whether the requirements of clause 6 Parameter Set could be met by the codes that have been assigned in the first timeslot.	
- UL CCTrCH TPC List		
- UL TPC TFCS Identity	1	
- DL CCTrCH List to Remove	Not present	
-SCCPCH information for FACH	Not Present	R99 and Rel-4 only

Contents of RRC CONNECTION SETUP message: UM (Transition to CELL_FACH) (3.84 Mcps TDD)

Information Element	Value/remark	Version
Message Type		
Initial UE identity	Select the same identity as in the IE "Initial UE Identity" in received RRC CONNECTION REQUEST" message	
RRC transaction identifier	Arbitrarily selects an integer between 0 and 3	
Activation time	Not Present(Now)	
New U-RNTI		
- SRNC identity	0000 0000 0001B	
- S-RNTI	0000 0000 0000 0000 0001B	
New C-RNTI	Not Present	
RRC State Indicator	CELL_FACH	
UTRAN DRX cycle length coefficient	9 , Integer(3...9)	
Capability update requirement		
- UE radio access FDD capability update requirement	FALSE	
- UE radio access 3.84 Mcps TDD capability update requirement	FALSE	
- UE radio access 1.28 Mcps TDD capability update requirement	TRUE	
- System specific capability update requirement list	GSM	
CHOICE *specification mode*	Complete specification	REL-5
- Complete specification		REL-5
- Signalling RB information to setup list		
- Signalling RB information to setup	(UM DCCH for RRC)	
- RB identity	1	
- CHOICE RLC info type	RLC info	
- CHOICE Uplink RLC mode	UM RLC	
- Transmission RLC discard	Not Present	
- CHOICE Downlink RLC mode	UM RLC	
- RB mapping info		
- Information for each multiplexing option	2 RBMuxOptions	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	DCH	
- UL Transport channel identity	5	
- Logical channel identity	1	
- CHOICE RLC size list	Configure	
- MAC logical channel priority	1	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	DCH	
- DL DCH Transport channel identity		
- Transport channel identity	10	
- DL DSCH Transport channel identity	Not Present	
- DL HS-DSCH MAC-d flow identity	Not Present	
- Logical channel identity	1	

Information Element	Value/remark	Version
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	RACH	
- UL Transport channel identity		
- Logical channel identity	1	
- CHOICE RLC size list	Explicit List	
- RLC size index	Reference to clause 6 Parameter Set	
- MAC logical channel priority	1	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	FACH	
- DL DCH Transport channel identity	Not Present	
- DL DSCH Transport channel identity	Not Present	
- DL HS-DSCH MAC-d flow identity	Not Present	
- Logical channel identity	1	
- Signalling RB information to setup	(AM DCCH for RRC)	
- RB identity	2	
- CHOICE RLC info type	RLC info	
- CHOICE Uplink RLC mode	AM RLC	
- Transmission RLC discard		
- CHOICE SDU discard mode	No Discard	
- MAX_DAT	15	
- Transmission window size	32	
- Timer_RST	500	
- Max_RST	1	
- Polling info		
- Timer_poll_prohibit	200	
- Timer_poll	200	
- Poll_PDU	Not present	
- Poll_SDU	1	
- Last transmission PDU poll	TRUE	
- Last retransmission PDU poll	TRUE	
- Poll_Window	99	
- Timer_poll_periodic	Not Present	
- CHOICE Downlink RLC mode	AM RLC	
- In-sequence delivery	TRUE	
- Receiving window size	32	
- Downlink RLC status info		
- Timer_status_prohibit	200	
- Timer_EPC	Not Present	
- Missing PDU indicator	TRUE	
- Timer_STATUS_periodic	Not Present	
- RB mapping info		
- Information for each multiplexing option	2 RBMuxOptions	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	DCH	
- UL Transport channel identity	5	
- Logical channel identity	2	
- CHOICE RLC size list	Configure	
- MAC logical channel priority	2	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	DCH	
- DL DCH Transport channel identity		
- Transport channel identity	10	
- DL DSCH Transport channel identity	Not Present	
- DL HS-DSCH MAC-d flow identity	Not Present	
- Logical channel identity	2	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	RACH	
- UL Transport channel identity	Not Present	
- Logical channel identity	2	
- CHOICE RLC size list	Explicit List	
- RLC size index	Reference to clause 6 Parameter Set	
- MAC logical channel priority	2	

Information Element	Value/remark	Version
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	FACH	
- DL DCH Transport channel identity	Not Present	
- DL DSCH Transport channel identity	Not Present	
- DL HS-DSCH MAC-d flow identity	Not Present	
- Logical channel identity	2	
- Signalling RB information to setup	(AM DCCH for NAS_DT High priority)	
- RB identity	3	
- CHOICE RLC info type	RLC info	
- CHOICE Uplink RLC mode	AM RLC	
- Transmission RLC discard		
- CHOICE SDU discard mode	No Discard	
- MAX_DAT	15	
- Transmission window size	32	
- Timer_RST	500	
- Max_RST	1	
- Polling info		
- Timer_poll_prohibit	200	
- Timer_poll	200	
- Poll_PDU	Not present	
- Poll_SDU	1	
- Last transmission PDU poll	TRUE	
- Last retransmission PDU poll	TRUE	
- Poll_Window	99	
- Timer_poll_periodic	Not Present	
- CHOICE Downlink RLC mode	AM RLC	
- In-sequence delivery	TRUE	
- Receiving window size	32	
- Downlink RLC status info		
- Timer_status_prohibit	200	
- Timer_EPC	Not Present	
- Missing PDU indicator	TRUE	
- Timer_STATUS_periodic	Not Present	
- RB mapping info		
- Information for each multiplexing option	2 RBMuxOptions	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	DCH	
- UL Transport channel identity	5	
- Logical channel identity	3	
- CHOICE RLC size list	Configure	
- MAC logical channel priority	3	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	DCH	
- DL DCH Transport channel identity		
- Transport channel identity	10	
- DL DSCH Transport channel identity	Not Present	
- DL HS-DSCH MAC-d flow identity	Not Present	
- Logical channel identity	3	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	RACH	
- UL Transport channel identity	Not Present	
- Logical channel identity	3	
- CHOICE RLC size list	Explicit List	
- RLC size index	Reference to clause 6 Parameter Set	
- MAC logical channel priority	3	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	FACH	
- DL DCH Transport channel identity	Not Present	
- DL DSCH Transport channel identity	Not Present	
- DL HS-DSCH MAC-d flow identity	Not Present	
- Logical channel identity	3	
- Signalling RB information to setup	(AM DCCH for NAS_DT Low priority)	

Information Element	Value/remark	Version
- RB identity	4	
- CHOICE RLC info type	RLC info	
- CHOICE Uplink RLC mode	AM RLC	
- Transmission RLC discard		
- CHOICE SDU discard mode	No discard	
- MAX_DAT	15	
- Transmission window size	32	
- Timer_RST	500	
- Max_RST	1	
- Polling info		
- Timer_poll_prohibit	200	
- Timer_poll	200	
- Poll_PDU	Not present	
- Poll_SDU	1	
- Last transmission PDU poll	TRUE	
- Last retransmission PDU poll	TRUE	
- Poll_Window	99	
- Timer_poll_periodic	Not Present	
- CHOICE Downlink RLC mode	AM RLC	
- In-sequence delivery	TRUE	
- Receiving window size	32	
- Downlink RLC status info		
- Timer_status_prohibit	200	
- Timer_EPC	Not Present	
- Missing PDU indicator	TRUE	
- Timer_STATUS_periodic	Not Present	
- RB mapping info		
- Information for each multiplexing option	2 RBMuxOptions	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	DCH	
- UL Transport channel identity	5	
- Logical channel identity	4	
- CHOICE RLC size list	Configure	
- MAC logical channel priority	4	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	DCH	
- DL DCH Transport channel identity		
- Transport channel identity	10	
- DL DSCH Transport channel identity	Not Present	
- DL HS-DSCH MAC-d flow identity	Not Present	
- Logical channel identity	4	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	RACH	
- UL Transport channel identity	Not Present	
- Logical channel identity	4	
- CHOICE RLC size list	Explicit List	
- RLC size index	Reference to clause 6 Parameter Set	
- MAC logical channel priority	4	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	FACH	
- DL DCH Transport channel identity	Not Present	
- DL DSCH Transport channel identity	Not Present	
- DL HS-DSCH MAC-d flow identity	Not Present	
- Logical channel identity	4	
- UL Transport channel information for all transport channels		
- PRACH TFCS	Not Present	
- CHOICE mode	TDD	
-Individual UL CCTrCH information		
- UL TFCS Identity		
- TFCS ID	1	
- Shared Channel Indicator	FALSE	
- UL TFCS		

Information Element	Value/remark	Version
- CHOICE TFCI signalling	Normal	
- TFCI Field 1 Information		
- CHOICE TFCS representation	Complete reconfiguration	
- TFCS complete reconfiguration information		
- CHOICE CTFC Size	Configured, Number of bits used must be enough to cover all combinations of CTFC from clause 6.10.3.4 Parameter Set.	
- CTFC information	This IE is repeated for TFC numbers and reference to clause 6.10.3.4 Parameter Set	
- CTFC	Reference to clause 6.10.3.4 Parameter Set	
- Power offset Information		
- CHOICE Gain Factors	Computed Gain Factors(The last TFC is set to Signalled Gain Factors)	
- Reference TFC ID	0, Integer(0.. 3)	
- CHOICE mode	TDD	
- TFC subset	Not present Default value is the complete existing set of transport format combinations	
- TFC subset list	Not present	
- Added or Reconfigured UL TrCH information list		
- Added or Reconfigured UL TrCH information		
- Uplink transport channel type	DCH	
- UL Transport channel identity	5	
- TFS		
- CHOICE Transport channel type	Dedicated transport channels	
- Dynamic Transport format information		
- RLC size	According to clause 6 for standalone 13.6 kbps signalling radio bearer	
- Number of TBs and TTI lists	(This IE is repeated for TFI number)	
- Transmission Time Interval	According to clause 6 for standalone 13.6 kbps signalling radio bearer	
- Number of Transport blocks	Reference to clause 6.10 Parameter Set	
- CHOICE Logical channel list	All	
- Semi-static Transport Format information		
- Transmission time interval	Reference to clause 6.10 Parameter Set	
- Type of channel coding	Reference to clause 6.10 Parameter Set	
- Coding Rate	Reference to clause 6.10 Parameter Set	
- Rate matching attribute	Reference to clause 6.10 Parameter Set	
- CRC size	Reference to clause 6.10 Parameter Set	
- DL Transport channel information common for all transport channel		
- SCCPCH TFCS	Not Present	
- CHOICE mode	TDD	
-Individual DL CCTrCH information		
- DL TFCS Identity		
- TFCS ID	1	
- Shared Channel Indicator	FALSE	
- CHOICE DL parameters	Same as UL	
- UL DCH TFCS Identity	1	
- Shared Channel Indicator	FALSE	
- Added or Reconfigured TrCH information list		
- Added or Reconfigured DL TrCH information		
- Downlink transport channel type	DCH	
- DL Transport channel identity	10	
- CHOICE DL parameters	Same as UL	
- Uplink transport channel type	DCH	
- UL Transport channel identity	5	
-DCH quality target		
- BLER Quality target	-6.3	
Frequency info	Not Present	

Information Element	Value/remark	Version
Maximum allowed UL TX power	Not Present Default value is the existing maximum UL TX power	
CHOICE channel requirement	Not present	
Downlink information common for all radio links	Not present	
Downlink information for each radio link list	Not present	

Contents of RRC CONNECTION SETUP message: UM (Transition to CELL_FACH) (1.28 Mcps TDD)

Information Element	Value/remark	Version
Message Type		
Initial UE identity	Select the same identity as in the IE "Initial UE Identity" in received RRC CONNECTION REQUEST" message	
RRC transaction identifier	Arbitrarily selects an integer between 0 and 3	
Activation time	Not Present(Now)	
New U-RNTI		
- SRNC identity	0000 0000 0001B	
- S-RNTI	0000 0000 0000 0000 0001B	
New C-RNTI	0000 0000 0000 0001B	
RRC State Indicator	CELL_FACH	
UTRAN DRX cycle length coefficient	9 , Integer(3...9)	
Capability update requirement		
- UE radio access FDD capability update requirement		
- UE radio access 3.84 Mcps TDD capability update requirement		
- UE radio access 1.28 Mcps TDD capability update requirement		
- System specific capability update requirement list		
CHOICE specification mode		
- Complete specification		
- Signalling RB information to setup list		
- Signalling RB information to setup	(UM DCCH for RRC)	
- RB identity	1	
- CHOICE RLC info type	RLC info	
- CHOICE Uplink RLC mode	UM RLC	
- Transmission RLC discard	Not Present	
- CHOICE Downlink RLC mode	UM RLC	
- RB mapping info		
- Information for each multiplexing option	2 RBMuxOptions	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	DCH	
- UL Transport channel identity	5	
- Logical channel identity	1	
- CHOICE RLC size list	Configure	
- MAC logical channel priority	1	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	DCH	
- DL DCH Transport channel identity		
- Transport channel identity	10	
- DL DSCH Transport channel identity	Not Present	
- DL HS-DSCH MAC-d flow identity	Not Present	
- Logical channel identity	1	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	RACH	
- UL Transport channel identity		
- Logical channel identity	1	
- CHOICE RLC size list	Explicit List	
- RLC size index	Reference to clause 6 Parameter Set	
- MAC logical channel priority	1	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	FACH	

Information Element	Value/remark	Version
- DL DCH Transport channel identity	Not Present	
- DL DSCH Transport channel identity	Not Present	
- DL HS-DSCH MAC-d flow identity	Not Present	
- Logical channel identity	1	
- Signalling RB information to setup	(AM DCCH for RRC)	
- RB identity	2	
- CHOICE RLC info type	RLC info	
- CHOICE Uplink RLC mode	AM RLC	
- Transmission RLC discard		
- CHOICE SDU discard mode	No Discard	
- MAX_DAT	15	
- Transmission window size	32	
- Timer_RST	500	
- Max_RST	1	
- Polling info		
- Timer_poll_prohibit	200	
- Timer_poll	200	
	Not present	
- Poll_SDU	1	
- Last transmission PDU poll	TRUE	
- Last retransmission PDU poll	TRUE	
- Poll_Window	99	
- Timer_poll_periodic	Not Present	
- CHOICE Downlink RLC mode	AM RLC	
- In-sequence delivery	TRUE	
- Receiving window size	32	
- Downlink RLC status info		
- Timer_status_prohibit	200	
- Timer_EPC	Not Present	
- Missing PDU indicator	TRUE	
- Timer_STATUS_periodic	Not Present	
- RB mapping info		
- Information for each multiplexing option	2 RBMuxOptions	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	DCH	
- UL Transport channel identity	5	
- Logical channel identity	2	
- CHOICE RLC size list	Configure	
- MAC logical channel priority	2	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	DCH	
- DL DCH Transport channel identity		
- Transport channel identity	10	
- DL DSCH Transport channel identity	Not Present	
- DL HS-DSCH MAC-d flow identity	Not Present	
- Logical channel identity	2	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	RACH	
- UL Transport channel identity	Not Present	
- Logical channel identity	2	
- CHOICE RLC size list	Explicit List	
- RLC size index	Reference to clause 6 Parameter Set	
- MAC logical channel priority	2	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	FACH	
- DL DCH Transport channel identity	Not Present	
- DL DSCH Transport channel identity	Not Present	
- DL HS-DSCH MAC-d flow identity	Not Present	
- Logical channel identity	2	
- Signalling RB information to setup	(AM DCCH for NAS_DT High priority)	
- RB identity	3	
- CHOICE RLC info type	RLC info	
- CHOICE Uplink RLC mode	AM RLC	

Information Element	Value/remark	Version
- Transmission RLC discard		
- CHOICE SDU discard mode	No Discard	
- MAX_DAT	15	
- Transmission window size	32	
- Timer_RST	500	
- Max_RST	1	
- Polling info		
- Timer_poll_prohibit	200	
- Timer_poll	200	
- Poll_SDU	1	
- Last transmission PDU poll	TRUE	
- Last retransmission PDU poll	TRUE	
- Poll_Window	99	
- Timer_poll_periodic	Not Present	
- CHOICE Downlink RLC mode	AM RLC	
- In-sequence delivery	TRUE	
- Receiving window size	32	
- Downlink RLC status info		
- Timer_status_prohibit	200	
- Timer_EPC	Not Present	
- Missing PDU indicator	TRUE	
- Timer_STATUS_periodic	Not Present	
- RB mapping info		
- Information for each multiplexing option	2 RBMuxOptions	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	DCH	
- UL Transport channel identity	5	
- Logical channel identity	3	
- CHOICE RLC size list	Configure	
- MAC logical channel priority	3	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	DCH	
- DL DCH Transport channel identity		
- Transport channel identity	10	
- DL DSCH Transport channel identity	Not Present	
- DL HS-DSCH MAC-d flow identity	Not Present	
- Logical channel identity	3	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	RACH	
- UL Transport channel identity	Not Present	
- Logical channel identity	3	
- CHOICE RLC size list	Explicit List	
- RLC size index	Reference to clause 6 Parameter Set	
- MAC logical channel priority	3	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	FACH	
- DL DCH Transport channel identity	Not Present	
- DL DSCH Transport channel identity	Not Present	
- DL HS-DSCH MAC-d flow identity	Not Present	
- Logical channel identity	3	
- Signalling RB information to setup	(AM DCCH for NAS_DT Low priority)	
- RB identity	4	
- CHOICE RLC info type	RLC info	
- CHOICE Uplink RLC mode	AM RLC	
- Transmission RLC discard		
- CHOICE SDU discard mode	No discard	
- MAX_DAT	15	
- Transmission window size	32	
- Timer_RST	500	
- Max_RST	1	
- Polling info		
- Timer_poll_prohibit	200	

Information Element	Value/remark	Version
- Timer_poll	200	
- Poll_SDU	1	
- Last transmission PDU poll	TRUE	
- Last retransmission PDU poll	TRUE	
- Poll_Window	99	
- Timer_poll_periodic	Not Present	
- CHOICE Downlink RLC mode	AM RLC	
- In-sequence delivery	TRUE	
- Receiving window size	32	
- Downlink RLC status info		
- Timer_status_prohibit	200	
- Timer_EPC	Not Present	
- Missing PDU indicator	TRUE	
- Timer_STATUS_periodic	Not Present	
- RB mapping info		
- Information for each multiplexing option	2 RBMuxOptions	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	DCH	
- UL Transport channel identity	5	
- Logical channel identity	4	
- CHOICE RLC size list	Configure	
- MAC logical channel priority	4	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	DCH	
- DL DCH Transport channel identity		
- Transport channel identity	10	
- DL DSCH Transport channel identity	Not Present	
- DL HS-DSCH MAC-d flow identity	Not Present	
- Logical channel identity	4	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	RACH	
- UL Transport channel identity	Not Present	
- Logical channel identity	4	
- CHOICE RLC size list	Explicit List	
- RLC size index	Reference to clause 6 Parameter Set	
- MAC logical channel priority	4	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	FACH	
- DL DCH Transport channel identity	Not Present	
- DL DSCH Transport channel identity	Not Present	
- DL HS-DSCH MAC-d flow identity	Not Present	
- Logical channel identity	4	
- UL Transport channel information for all transport channels		
- PRACH TFCS	Not Present	
- CHOICE mode	TDD	
-Individual UL CCTrCH information		
- UL TFCS Identity		
- TFCS ID	1	
- Shared Channel Indicator	FALSE	
- UL TFCS		
- CHOICE TFCI signalling	Normal	
- TFCI Field 1 Information		
- CHOICE TFCS representation	Complete reconfiguration	
- TFCS complete reconfiguration information		
- CHOICE CTFC Size	Configured, Number of bits used must be enough to cover all combinations of CTFC from clause 6.11.5.4 Parameter Set.	
- CTFC information	This IE is repeated for TFC numbers and reference to clause 6.11.5.4 Parameter Set	
- CTFC	Reference to clause 6.11.5.4 Parameter Set	

Information Element	Value/remark	Version
- Power offset Information		
- CHOICE Gain Factors	Computed Gain Factors(The last TFC is set to Signalled Gain Factors)	
- Reference TFC ID	0, Integer(0.. 3)	
- CHOICE mode	TDD	
- TFC subset	Not present. Default value is the complete existing set of transport format combinations	
- TFC subset list	Not present	
- Added or Reconfigured UL TrCH information list		
- Added or Reconfigured UL TrCH information		
- Uplink transport channel type	DCH	
- UL Transport channel identity	5	
- TFS		
- CHOICE Transport channel type	Dedicated transport channels	
- Dynamic Transport format information		
- RLC size	According to clause 6 for standalone 13.6 kbps signalling radio bearer	
- Number of TBs and TTI lists	(This IE is repeated for TFI number)	
- Transmission Time Interval	According to clause 6 for standalone 13.6 kbps signalling radio bearer	
- Number of Transport blocks	Reference to clause 6.11 Parameter Set	
- CHOICE Logical channel list	All	
- Semi-static Transport Format information		
- Transmission time interval	Reference to clause 6.11 Parameter Set	
- Type of channel coding	Reference to clause 6.11 Parameter Set	
- Coding Rate	Reference to clause 6.11 Parameter Set	
- Rate matching attribute	Reference to clause 6.11 Parameter Set	
- CRC size	Reference to clause 6.11 Parameter Set	
- DL Transport channel information common for all transport channel		
- SCCPCH TFCS	Not Present	
- CHOICE mode	TDD	
-Individual DL CCTrCH information		
- DL TFCS Identity		
- TFCS ID	1	
- Shared Channel Indicator	FALSE	
- CHOICE DL parameters	Same as UL	
- UL DCH TFCS Identity	1	
- Shared Channel Indicator	FALSE	
- Added or Reconfigured TrCH information list		
- Added or Reconfigured DL TrCH information		
- Downlink transport channel type	DCH	
- DL Transport channel identity	10	
- CHOICE DL parameters	Same as UL	
- Uplink transport channel type	DCH	
- UL Transport channel identity	5	
-DCH quality target		
- BLER Quality target	-6.3	
Frequency info	Not Present	
Maximum allowed UL TX power	Not Present. Default value is the existing maximum UL TX power	
CHOICE channel requirement	Not present	
Downlink information common for all radio links	Not present	
Downlink information for each radio link list	Not Present	

Contents of RRC CONNECTION SETUP COMPLETE message: AM

Information Element	Value/remark
Message Type	
RRC transaction identifier	The value of this IE is checked to see that it matches the value of the same IE transmitted in the downlink RRC CONNECTION SETUP message.

START list	This IE is checked to see if it is present.
UE radio access capability	Not checked
UE radio access capability extension	Not checked
UE system specific capability	Not checked

Contents of SECURITY MODE COMMAND message: AM

Information Element	Condition	Value/remark
Message Type	A1, A2	
RRC transaction identifier		Arbitrarily selects an integer between 0 and 3
Integrity check info		
- Message authentication code		Set to an arbitrarily selected 32-bits integer. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message Sequence Number		Set to an arbitrarily selected integer between 0 and 15
Security capability		
- Ciphering algorithm capability		
- UEA0		If ciphering is not indicated to be active on IXIT statements in 3GPP TS 34.123-2 [3], set this IE to TRUE.
- UEA1		If ciphering is indicated to be active on IXIT statements in 3GPP TS 34.123-2 [3], set this IE to TRUE.
- Spare		FALSE
- Integrity protection algorithm capability		0000000000000010B (UIA1)
- UIA1		TRUE
- Spare		FALSE
Ciphering mode info		This presence of this IE is dependent on IXIT statements in 3GPP TS 34.123-2 [3]. If ciphering is indicated to be active, this IE present with the values of the sub IEs as stated below. Else, this IE is omitted.
- Ciphering mode command		Start/restart
- Ciphering algorithm		Use the same ciphering algorithm specified in "ciphering algorithm capability" IE in this message.
- Ciphering activation time for DPCH		Not Present
- Radio bearer downlink ciphering activation time info		
- Radio bearer activation time		
- RB identity		1
- RLC sequence number		Current RLC SN+2
- RB identity		2
- RLC sequence number		Current RLC SN+2
- RB identity		3
- RLC sequence number		Current RLC SN + 2
- RB identity		4
- RLC sequence number		Current RLC SN + 2
Integrity protection mode info		
- Integrity protection mode command		Start
- Downlink integrity protection activation info		Not Present
- Integrity protection algorithm		UIA1
- Integrity protection initialisation number		SS selects an arbitrary 32 bits number for FRESH
CN domain identity		Supported domain
UE system specific security capability	A1	Not Checked
UE system specific security capability	A2	
- Inter-RAT UE security capability		
- CHOICE *system*		GSM
- GSM security capability		The indicated algorithms must be the same as the algorithms supported by the UE as indicated in the IE " UE system specific capability " in the RRC CONNECTION SETUP COMPLETE message.

Condition	Explanation

A1	UE not supporting GSM
A2	UE supporting GSM

Contents of SECURITY MODE COMPLETE message: AM

Information Element	Value/remark
Message Type	
RRC transaction identifier	The value of this IE is checked to see that it matches the value of the same IE transmitted in the downlink SECURITY MODE COMMAND message.
Integrity check info	
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.
Uplink integrity protection activation info	Not checked.
Radio bearer uplink ciphering activation time info	If ciphering is not activated in SECURITY MODE COMMAND message, this IE must be absent. Else, SS checks this IE for the presence of activation times for all ciphered uplink RLC-UM and RLC-AM RBs.

Contents of UPLINK DIRECT TRANSFER message: AM

Information Element	Value/remark
Message Type	
Integrity check info	
- Message authentication code	This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message sequence number	This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.
CN domain identity	Checked to see if set to supported CN domain as specified in the IXIT statements
NAS message	Set according to that indicated in specific message content clause
Measured results on RACH	Not checked

9.2 Default Message Contents for RF

This clause contains the default values of common messages for RF test. The parameters of the UL/DL reference measurement channel 12.2 kbps, the DL reference measurement channel for BTFD, UE test loop mode 1 without Dummy DCCH transmission and UE test loop mode 2 with Dummy DCCH transmission are set to default message contents.

9.2.1 Default Message Contents for RF (FDD)

Contents of Activate RB Test Mode message

Information Element	Value/remark
Protocol discriminator	F (Length 1/2)
Skip indicator	0 (Length 1/2)
Message Type	44h

Contents of Close UE Test Loop message (UE test loop mode 1 without Dummy DCCH transmission)

Information Element	Value/remark
Protocol discriminator	F (Length 1/2)
Skip indicator	0 (Length 1/2)

Message Type	40h
UE test loop mode	00h
UE test loop mode 1 LB setup	03h 00h F4h 0Ah

Contents of Close UE Test Loop message (UE test loop mode 2 without Dummy DCCH transmission)

Information Element	Value/remark
Protocol discriminator	F (Length 1/2)
Skip indicator	0 (Length 1/2)
Message Type	40h
UE test loop mode	01h

Contents of Open UE Test Loop message

Information Element	Value/remark
Protocol discriminator	F (Length 1/2)
Skip indicator	0 (Length 1/2)
Message Type	42h

Contents of PAGING TYPE 1 message: TM (CS)

Information Element	Value/remark
Message Type	
Paging record list	
-Paging record	
- CHOICE Used paging identity	CN identity
- Paging cause	Terminating Streaming Call
- CN domain identity	CS domain
- CHOICE UE identity	
- IMSI (GSM-MAP)	Set to the same octet string as in the IMSI stored in the USIM card
BCCH modification info	Not Present

Contents of PAGING TYPE 1 message: TM (PS)

Information Element	Value/remark
Message Type	
Paging record list	
-Paging record	
- CHOICE Used paging identity	CN identity
- Paging cause	Terminating Interactive Call
- CN domain identity	PS domain
- CHOICE UE identity	
- IMSI (GSM-MAP)	Set to the same octet string as in the IMSI stored in the USIM card
BCCH modification info	Not Present

Contents of RADIO BEARER SETUP message: AM or UM (Test Loop Mode1)

Information Element	Condition	Value/remark	Version
Message Type	A1, A2, A3, A4, A5, A6, A7, A8		
RRC transaction identifier		Arbitrarily selects an integer between 0 and 3	
Integrity check info			
- message authentication code		SS calculates the value of MAC-I for this message and writes to this IE. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.	
- RRC message sequence number		SS provides the value of this IE, from its internal counter.	
Integrity protection mode info		Not Present	
Ciphering mode info		Not Present	

Information Element	Condition	Value/remark	Version
Activation time		(256+CFN-(CFN MOD 8 + 8))MOD 256	
New U-RNTI		Not Present	
New C-RNTI		Not Present	
New DSCH-RNTI		Not Present	R99 and Rel-4 only
New H-RNTI		Not Present	REL-5
RRC State indicator		CELL_DCH	
UTRAN DRX cycle length coefficient		Not Present	
CN information info		Not Present	
URA identity		Not Present	
- Signalling RB information to setup		Not Present	
- RAB information for setup list	A1, A2, A3, A4, A5		
- RAB information for setup			
- RAB info			
- RAB identity		0000 0001B The first/ leftmost bit of the bit string contains the most significant bit of the RAB identity.	
- CN domain identity		CS domain	
- NAS Synchronization Indicator		Not Present	
- Re-establishment timer		UseT314	
- RB information to setup list			
- RB information to setup			
- RAB information for setup list	A6, A7, A8		
- RAB information for setup			
- RAB info			
- RAB identity		0000 0101B The first/ leftmost bit of the bit string contains the most significant bit of the RAB identity.	
- CN domain identity		PS domain	
- NAS Synchronization Indicator		Not Present	
- Re-establishment timer		UseT315	
- RB information to setup list			
- RB information to setup			
- RB identity	A1, A2	10	
- PDCP info		Not Present	
- CHOICE RLC info type		RLC info	
- CHOICE Uplink RLC mode		TM RLC	
- Transmission RLC discard		Not Present	
- Segmentation indication		FALSE	
- CHOICE Downlink RLC mode		TM RLC	
- Segmentation indication		FALSE	
- RB mapping info			
- Information for each multiplexing option			
- RLC logical channel mapping indicator		Not Present	
- Number of uplink RLC logical channels		1	
- Uplink transport channel type		DCH	
- UL Transport channel identity		1	
- Logical channel identity		Not Present	
- CHOICE RLC size list		Configured	
- MAC logical channel priority		7	
- Downlink RLC logical channel info			
- Number of downlink RLC logical channels		1	
- Downlink transport channel type		DCH	
- DL DCH Transport channel identity		6	
- DL DSCH Transport channel identity		Not Present	
- Logical channel identity		Not Present	
- RB identity	A3, A4, A5	10	

Information Element	Condition	Value/remark	Version
- PDCP info		Not Present	
- CHOICE RLC info type		RLC info	
- CHOICE Uplink RLC mode		AM RLC	
- Transmission RLC discard			
- CHOICE SDU discard mode		No Discard	
- MAX_DAT		15	
- Transmission window size		Selected with Total RLC AM Buffer Size	
- Timer_RST		500	
- Max_RST		4	
- Polling info			
- Timer_poll_prohibit		400	
- Timer_poll		400	
- Poll_PDU		Not Present	
- Poll_SDU		1	
- Last transmission PDU poll		TRUE	
- Last retransmission PDU poll		TRUE	
- Poll_Windows		99	
- Timer_poll_periodic		Not Present	
- CHOICE Downlink RLC mode		AM RLC	
- In-sequence delivery		TRUE	
- Receiving window size		Selected with Total RLC AM Buffer Size	
- Downlink RLC status info			
- Timer_status_prohibit		330	
- Timer_EPC		Not Present	
- Missing PDU indicator		TRUE	
- Timer_STATUS_periodic		Not Present	
- RB mapping info			
- Information for each multiplexing option			
- RLC logical channel mapping indicator		Not Present	
- Number of uplink RLC logical channels		1	
- Uplink transport channel type		DCH	
- UL Transport channel identity		1	
- Logical channel identity		Not Present	
- CHOICE RLC size list		Configured	
- MAC logical channel priority		7	
- Downlink RLC logical channel info			
- Number of downlink RLC logical channels		1	
- Downlink transport channel type		DCH	
- DL DCH Transport channel identity		6	
- DL DSCH Transport channel identity		Not Present	
- Logical channel identity		Not Present	
- RB identity	A6, A7, A8	20	
- PDCP info		Not present	
- CHOICE RLC info type		RLC info	
- CHOICE Uplink RLC mode		AM RLC	
- Transmission RLC discard			
- CHOICE SDU discard mode		No Discard	
- MAX_DAT		15	
- Transmission window size		Selected with Total RLC AM Buffer Size	
- Timer_RST		500	
- Max_RST		4	
- Polling info			
- Timer_poll_prohibit		400	
- Timer_poll		400	
- Poll_PDU		Not Present	
- Poll_SDU		1	
- Last transmission PDU poll		TRUE	
- Last retransmission PDU poll		TRUE	
- Poll_Windows		99	
- Timer_poll_periodic		Not Present	
- CHOICE Downlink RLC mode		AM RLC	

Information Element	Condition	Value/remark	Version
- In-sequence delivery		TRUE	
- Receiving window size		Selected with Total RLC AM Buffer Size	
- Downlink RLC status info			
- Timer_status_prohibit		330	
- Timer_EPC		Not Present	
- Missing PDU indicator		TRUE	
- Timer_STATUS_periodic		Not Present	
- RB mapping info			
- Information for each multiplexing option		2 RBMuxOptions	
- RLC logical channel mapping indicator		Not Present	
- Number of uplink RLC logical channels		1	
- Uplink transport channel type		DCH	
- UL Transport channel identity		1	
- Logical channel identity		Not Present	
- CHOICE RLC size list		Configured	
- MAC logical channel priority		8	
- Downlink RLC logical channel info			
- Number of downlink RLC logical channels		1	
- Downlink transport channel type		DCH	
- DL DCH Transport channel identity		6	
- DL DSCH Transport channel identity		Not Present	
- Logical channel identity		Not Present	
- RLC logical channel mapping indicator		Not Present	
- Number of uplink RLC logical channels		1	
- Uplink transport channel type		RACH	
- UL Transport channel identity		Not Present	
- Logical channel identity		7	
- CHOICE RLC size list		Explicit list	
- RLC size index		Reference to clause 6 Parameter Set	
- MAC logical channel priority		8	
- Downlink RLC logical channel info			
- Number of downlink RLC logical channels		1	
- Downlink transport channel type		FACH	
- DL DCH Transport channel identity		Not Present	
- DL DSCH Transport channel identity		Not Present	
- Logical channel identity		7	
RB information to be affected list	A1, A2, A3, A4, A5, A6, A7, A8	Not Present	
Downlink counter synchronization info		Not Present	
UL Transport channel information for all transport channels			
- PRACH TFCS		Not Present	
- CHOICE mode		FDD	
- TFC subset		Not Present	
- UL DCH TFCS			
- CHOICE TFCI signalling		Normal	
- TFCI Field 1 information			
- CHOICE TFCS representation		Complete reconfiguration	
- TFCS complete reconfigure information			
- CHOICE CTFC Size		2 bit CTFC	
- CTFC information		4 TFCs	
- 2bit CTFC		0	
-Power offset Information			
- CHOICE Gain Factors		Computed Gain Factors	

Information Element	Condition	Value/remark	Version
- Reference TFC ID		0	
- CHOICE mode		FDD	
- Power offset P_{p-m}		Not Present	
- 2bit CTFC		2	
- Power offset Information			
- CHOICE Gain Factors		Computed Gain Factors	
- Reference TFC ID		0	
- CHOICE mode		FDD	
- Power offset P_{p-m}		Not Present	
- 2bit CTFC		1	
- Power offset Information			
- CHOICE Gain Factors		Computed Gain Factors	
- Reference TFC ID		0	
- CHOICE mode		FDD	
- Power offset P_{p-m}		Not Present	
- 2bit CTFC		3	
- Power offset Information			
- CHOICE Gain Factors		Signalled Gain Factors	
- CHOICE mode		FDD	
- Gain factor ßc		8	
- Gain factor ßd		15	
- Reference TFC ID		0	
- CHOICE mode		FDD	
- Power offset P_{p-m}		Not Present	
Deleted UL TrCH information list		Not Present	
Added or Reconfigured UL TrCH information list	A1	1	
- Added or Reconfigured UL TrCH information			
- Uplink transport channel type		DCH	
- UL Transport channel identity		1	
- TFS			
- CHOICE Transport channel type		Dedicated transport channels	
- Dynamic Transport Format Information			
- RLC size		244 bits	
- Number of TBs and TTI List		2	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		0	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		1	
- CHOICE Logical channel List		ALL	
- Semi-static Transport Format Information			
- Transmission time interval		20	
- Type of channel coding		Convolutional	
- Coding Rate		1/3	
- Rate matching attribute		256	
- CRC size		16	
Added or Reconfigured UL TrCH information list	A2	1	
- Added or Reconfigured UL TrCH information			
- Uplink transport channel type		DCH	
- UL Transport channel identity		1	
- TFS			
- CHOICE Transport channel type		Dedicated transport channels	
- Dynamic Transport Format Information			
- RLC size		1280 bits	
- Number of TBs and TTI List		2	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		0	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		1	
- CHOICE Logical channel List		ALL	

Information Element	Condition	Value/remark	Version
- Semi-static Transport Format Information			
- Transmission time interval		20	
- Type of channel coding		Turbo	
- Rate matching attribute		256	
- CRC size		16	
Added or Reconfigured UL TrCH information list	A3, A4, A5, A6, A7, A8	1	
- Added or Reconfigured UL TrCH information			
- Uplink transport channel type		DCH	
- UL Transport channel identity		1	
- TFS			
- CHOICE Transport channel type		Dedicated transport channels	
- Dynamic Transport Format Information			
- RLC size		240 bits	
- Number of TBs and TTI List		2	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		0	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		1	
- CHOICE Logical channel List		ALL	
- Semi-static Transport Format Information			
- Transmission time interval		20	
- Type of channel coding		Convolutional	
- Coding Rate		1/3	
- Rate matching attribute		256	
- CRC size		16	
CHOICE mode	A1, A2, A3, A4, A5, A6, A7, A8	Not Present	
DL Transport channel information common for all transport channel			
- SCCPCH TFCS		Not Present	
- CHOICE mode		FDD	
- CHOICE DL parameters		Same as UL	
Deleted DL TrCH information list		Not Present	
Added or Reconfigured DL TrCH information list	A1, A2	1	
- Added or Reconfigured DL TrCH information			
- Downlink transport channel type		DCH	
- DL Transport channel identity		6	
- CHOICE DL parameters		Same as UL	
- Uplink transport channel type		DCH	
- UL TrCH identity		1	
- DCH quality target			
- BLER Quality value		-2.0	
Added or Reconfigured DL TrCH information list	A3, A6	1	
- Added or Reconfigured DL TrCH information			
- Downlink transport channel type		DCH	
- DL Transport channel identity		6	
- CHOICE DL parameters		Explicit	
- TFS			
- CHOICE Transport channel type		Dedicated transport channels	
- Dynamic transport format information			
- RLC Size		1280 bits	
- Number of TBs and TTI List		2	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		0	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		1	

Information Element	Condition	Value/remark	Version
- CHOICE Logical channel list		ALL	
- Semi-static Transport Format information			
- Transmission time interval		20	
- Type of channel coding		Turbo	
- Rate matching attribute		256	
- CRC size		16	
- DCH quality target			
- BLER Quality value		-2.0	
Added or Reconfigured DL TrCH information list	A4, A7	1	
- Added or Reconfigured DL TrCH information			
- Downlink transport channel type		DCH	
- DL Transport channel identity		6	
- CHOICE DL parameters		Explicit	
- TFS			
- CHOICE Transport channel type		Dedicated transport channels	
- Dynamic transport format information			
- RLC Size		2880 bits	
- Number of TBs and TTI List		2	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		0	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		1	
- CHOICE Logical channel list		ALL	
- Semi-static Transport Format information			
- Transmission time interval		20	
- Type of channel coding		Turbo	
- Rate matching attribute		256	
- CRC size		16	
- DCH quality target			
- BLER Quality value		-2.0	
Added or Reconfigured DL TrCH information list	A5, A8	1	
- Added or Reconfigured DL TrCH information			
- Downlink transport channel type		DCH	
- DL Transport channel identity		6	
- CHOICE DL parameters		Explicit	
- TFS			
- CHOICE Transport channel type		Dedicated transport channels	
- Dynamic transport format information			
- RLC Size		3840 bits	
- Number of TBs and TTI List		2	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		0	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		1	
- CHOICE Logical channel list		ALL	
- Semi-static Transport Format information			
- Transmission time interval		10	
- Type of channel coding		Turbo	
- Rate matching attribute		256	
- CRC size		16	
- DCH quality target			
- BLER Quality value		-2.0	
Frequency info	A1, A2, A3, A4, A5, A6, A7, A8	Not Present	
Maximum allowed UL TX power		33dBm	
CHOICE channel requirement		Uplink DPCH info	
- Uplink DPCH power control info			

Information Element	Condition	Value/remark	Version
- CHOICE mode - DPCCH power offset - PC Preamble - SRB delay - Power Control Algorithm - TPC step size - Δ_{ACK} - Δ_{NACK} - Ack-Nack repetition factor - CHOICE mode - Scrambling code type - Scrambling code number - Number of DPDCH		FDD -6dB 1 frame 7 frames Algorithm1 1dB Not Present Not Present Not Present FDD Long 0 (0 to 16777215) 1	 REL-5 REL-5 REL-5
- spreading factor	A1, A3, A4, A5, A6, A7, A8	64	
- spreading factor	A2	16	
- TFCI existence - Number of FBI bit - Puncturing Limit CHOICE Mode - Downlink PDSCH information Downlink HS-PDSCH Information Downlink information common for all radio links - Downlink DPCH info common for all RL - Timing indicator - CFN-targetSFN frame offset - Downlink DPCH power control information - CHOICE mode - DPC mode - CHOICE mode - Power offset $P_{Pilot-DPDCH}$ - DL rate matching restriction information	A1, A2, A3, A4, A5, A6, A7, A8	TRUE Not Present(0) 1 FDD Not Present Not Present Maintain Not Present FDD 0 (single) FDD 0 Not Present	 R99 and Rel-4 only REL-5
- Spreading factor - Fixed or Flexible Position - TFCI existence - CHOICE SF - Number of bits for Pilot bits	A1	128 Fixed TRUE 128 8	
- Spreading factor - Fixed or Flexible Position - TFCI existence - CHOICE SF	A2, A3, A6	32 Fixed TRUE 32	
- Spreading factor - Fixed or Flexible Position - TFCI existence - CHOICE SF	A4, A7	16 Fixed TRUE 16	
- Spreading factor - Fixed or Flexible Position - TFCI existence - CHOICE SF	A5, A8	8 Fixed TRUE 8	
- CHOICE mode - DPCH compressed mode info - TX Diversity mode - SSDT information	A1, A2, A3, A4, A5, A6, A7, A8	FDD Not Present None Not Present	 R99 and Rel-4 only

Information Element	Condition	Value/remark	Version
- Default DPCH Offset Value		Not Present	
Downlink information per radio link list			
- Downlink information for each radio link			
- CHOICE mode		FDD	
- Primary CPICH info			
- Primary scrambling code		Reference to clause 6.1 "Default settings (FDD)"	
- PDSCH with SHO DCH info		Not Present	R99 and Rel-4 only
- PDSCH code mapping		Not Present	R99 and Rel-4 only
- Downlink DPCH info for each RL			
- CHOICE mode		FDD	
- Primary CPICH usage for channel estimation		Primary CPICH may be used	
- DPCH frame offset		Set to value Default DPCH Offset Value (as currently stored in SS) mod 38 400	
- Secondary CPICH info		Not Present	
- DL channelisation code			
- Secondary scrambling code		Not Present	
- Spreading factor	A1	128	
- Code number		96	
- Spreading factor	A2, A3, A6	32	
- Code number		24	
- Spreading factor	A4, A7	16	
- Code number		12	
- Spreading factor	A5, A8	8	
- Code number		6	
- Scrambling code change	A1, A2, A3, A4, A5, A6, A7, A8	No change	
- TPC combination index		0	
- SSDT Cell Identity		Not Present	R99 and Rel-4 only
- Closed loop timing adjustment mode		Not Present	
- SCCPCH information for FACH		Not Present	R99 and Rel-4 only

Condition	Explanation	Version
A1	This IE is needed for "UE supports CS RAB for Test Loop Mode1 RMC 12.2/12.2 (TM)"	
A2	This IE is needed for "UE supports CS RAB for Test Loop Mode1 RMC 64/64 (TM)"	
A3	This IE is needed for "UE supports CS RAB for Test Loop Mode1 AMC 12.2/64 (AM)"	
A4	This IE is needed for "UE supports CS RAB for Test Loop Mode1 AMC 12.2/144 (AM)"	
A5	This IE is needed for "UE supports CS RAB for Test Loop Mode1 AMC 12.2/384 (AM)"	
A6	This IE is needed for "UE supports PS RAB for Test Loop Mode1 AMC 12.2/64 (AM)"	
A7	This IE is needed for "UE supports PS RAB for Test Loop Mode1 AMC 12.2/144 (AM)"	
A8	This IE is needed for "UE supports PS RAB for Test Loop Mode1 AMC 12.2/384 (AM)"	

Contents of RADIO BEARER SETUP message: AM or UM (UE supports PS RAB only)

Information Element	Value/remark	Version
Message Type		
RRC transaction identifier	Arbitrarily selects an integer between 0 and 3	
Integrity check info		
- message authentication code	SS calculates the value of MAC-I for this message and writes to this IE. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.	
- RRC message sequence number	SS provides the value of this IE, from its	

Information Element	Value/remark	Version
	internal counter.	
Integrity protection mode info	Not Present	
Ciphering mode info	Not Present	
Activation time	Not Present	
New U-RNTI	Not Present	
New C-RNTI	Not Present	
New DSCH-RNTI	Not Present	R99 and Rel-4 only
New H-RNTI	Not Present	REL-5
RRC State indicator	CELL_DCH	
UTRAN DRX cycle length coefficient	Not Present	
CN information info	Not Present	
URA identity	Not Present	
- Signalling RB information to setup	Not Present	
- RAB information for setup list		
- RAB information for setup		
- RAB info	(AM DTCH for PS domain)	
- RAB identity	0000 0101B The first/ leftmost bit of the bit string contains the most significant bit of the RAB identity.	
- CN domain identity	PS domain	
- NAS Synchronization Indicator	Not Present	
- Re-establishment timer	useT315	
- RB information to setup		
- RB identity	20	
- PDCP info		
- Support for lossless SRNS relocation	FALSE	
- Max PDCP SN window size	Not present	
- PDCP PDU header	Absent	
- Header compression information	Not present	
- CHOICE RLC info type	RLC info	
- CHOICE Uplink RLC mode	AM RLC	
- Transmission RLC discard		
- CHOICE SDU discard mode	No Discard	
- MAX_DAT	15	
- Transmission window size	128	
- Timer_RST	500	
- Max_RST	4	
- Polling info		
- Timer_poll_prohibit	200	
- Timer_poll	200	
- Poll_PDU	Not Present	
- Poll_SDU	1	
- Last transmission PDU poll	TRUE	
- Last retransmission PDU poll	TRUE	
- Poll_Windows	99	
- Timer_poll_periodic	Not Present	
- CHOICE Downlink RLC mode	AM RLC	
- In-sequence delivery	TRUE	
- Receiving window size	128	
- Downlink RLC status info		
- Timer_status_prohibit	200	
- Timer_EPC	Not Present	
- Missing PDU indicator	TRUE	
- Timer_STATUS_periodic	Not Present	
- RB mapping info		
- Information for each multiplexing option	2 RBMuxOptions	
- RLC logical channel mapping indicator	Not Present	
- Number of uplink RLC logical channels	1	
- Uplink transport channel type	DCH	
- UL Transport channel identity	1	
- Logical channel identity	Not Present	
- CHOICE RLC size list	Configured	
- MAC logical channel priority	8	
- Downlink RLC logical channel info		
- Number of downlink RLC logical	1	

Information Element	Value/remark	Version
channels		
- Downlink transport channel type	DCH	
- DL DCH Transport channel identity	6	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	Not Present	
- RLC logical channel mapping indicator	Not Present	
- Number of uplink RLC logical channels	1	
- Uplink transport channel type	RACH	
- UL Transport channel identity	Not Present	
- Logical channel identity	7	
- CHOICE RLC size list	Explicit list	
- RLC size index	Reference to clause 6 Parameter Set	
- MAC logical channel priority	8	
- Downlink RLC logical channel info		
- Number of downlink RLC logical channels	1	
- Downlink transport channel type	FACH	
- DL DCH Transport channel identity	Not Present	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	7	
RB information to be affected list	Not Present	
Downlink counter synchronization info	Not Present	
UL Transport channel information for all transport channels		
- PRACH TFCS	Not Present	
- CHOICE mode	FDD	
- TFC subset	Not Present	
- UL DCH TFCS		
- CHOICE TFCI signalling	Normal	
- TFCI Field 1 information		
- CHOICE TFCS representation	Complete reconfiguration	
- TFCS complete reconfigure information		
- CHOICE CTFC Size	Number of bits used must be enough to cover all combinations of CTFC from clause 6.10.2.4 Parameter Set.	
- CTFC information	This IE is repeated for TFC numbers and reference to clause 6.10.2.4 Parameter Set	
- CTFC	Reference to clause 6.10.2.4 Parameter Set	
- Power offset information		
- CHOICE Gain Factors	Computed Gain Factors(The last TFC is set to Signalled Gain Factors)	
- Gain factor βc	11 (below 64 kbps) 9 (higher than 64 kbps) (Not Present if the CHOICE Gain Factors is set to Computed Gain Factors)	
- Gain factor βd	15 (Not Present if the CHOICE Gain Factors is set to Computed Gain Factors)	
- Reference TFC ID	0	
- CHOICE mode	FDD	
- Power offset $P_{p\text{-}m}$	Not Present	
Deleted UL TrCH information list	Not Present	
Added or Reconfigured UL TrCH information list	1	
Added or Reconfigured UL TrCH information	1 DCH added, 1 DCH reconfigured	
- Uplink transport channel type	DCH	
- UL Transport channel identity	1	
- TFS		
- CHOICE Transport channel type	Dedicated transport channels	
- Dynamic Transport format information		
- RLC Size	Reference to clause 6.10 Parameter Set	
- Number of TBs and TTI List	(This IE is repeated for TFI number.)	
- Transmission Time Interval	Not Present	
- Number of Transport blocks	Reference to clause 6.10 Parameter Set	
- CHOICE Logical channel list	All	
- Semi-static Transport Format information		

Information Element	Value/remark	Version
- Transmission time interval	Reference to clause 6.10 Parameter Set	
- Type of channel coding	Reference to clause 6.10 Parameter Set	
- Coding Rate	Reference to clause 6.10 Parameter Set	
- Rate matching attribute	Reference to clause 6.10 Parameter Set	
- CRC size	Reference to clause 6.10 Parameter Set	
- Uplink transport channel type	DCH	
- UL Transport channel identity	5	
- TFS		
- CHOICE Transport channel type	Dedicated transport channels	
- Dynamic Transport format information		
- RLC Size	Reference to clause 6.10 Parameter Set	
- Number of TBs and TTI List	(This IE is repeated for TFI number.)	
- Transmission Time Interval	Not Present	
- Number of Transport blocks	Reference to clause 6.10 Parameter Set	
- CHOICE Logical channel list	All	
- Semi-static Transport Format information		
- Transmission time interval	Reference to clause 6.10 Parameter Set	
- Type of channel coding	Reference to clause 6.10 Parameter Set	
- Coding Rate	Reference to clause 6.10 Parameter Set	
- Rate matching attribute	Reference to clause 6.10 Parameter Set	
- CRC size	Reference to clause 6.10 Parameter Set	
CHOICE mode	Not Present	
DL Transport channel information common for all transport channel		
- SCCPCH TFCS	Not Present	
- CHOICE mode	FDD	
- CHOICE DL parameters	Explicit	
- DL DCH TFCS		
- CHOICE TFCI Signalling	Normal	
- TFCI Field 1 Information		
- CHOICE TFCS representation	Complete reconfiguration	
- TFCS complete reconfigure		
- CHOICE CTFC Size	Number of bits used must be enough to cover all combinations of CTFC from clause 6.10.2.4 Parameter Set.	
- CTFC information	This IE is repeated for TFC numbers and reference to clause 6.10.2.4	
- CTFC	Reference to clause 6.10.2.4 Parameter Set	
- Power offset information	Not Present	
Added or Reconfigured DL TrCH information list	1	
Added or Reconfigured DL TrCH information	2 TrCHs(DCH for DCCH and DCH for DTCH)	
- Downlink transport channel type	DCH	
- DL Transport channel identity	10	
- CHOICE DL parameters	Same as UL	
- Uplink transport channel type	DCH	
- UL TrCH identity	5	
- DCH quality target		
- BLER Quality value	-2.0	
- Downlink transport channel type	DCH	
- DL Transport channel identity	6	
- CHOICE DL parameters	Explicit	
- TFS		
- CHOICE Transport channel type	Dedicated transport channel	
- Dynamic transport format information		
- RLC Size	Reference to clause 6.10 Parameter Set	
- Number of TBs and TTI List	(This IE is repeated for TFI number.)	
- Dynamic transport format information		
- Transmission Time Interval	Not Present	
- Number of Transport blocks	Reference to clause 6.10 Parameter Set	
- CHOICE Logical channel list	All	
- Semi-static Transport Format information		
- Transmission time interval	Reference to clause 6.10 Parameter Set	
- Type of channel coding	Reference to clause 6.10 Parameter Set	
- Coding Rate	Reference to clause 6.10 Parameter Set	
- Rate matching attribute	Reference to clause 6.10 Parameter Set	

Information Element	Value/remark	Version
- CRC size	Reference to clause 6.10 Parameter Set	
- DCH quality target		
- BLER Quality value	-2.0	
Frequency info	Not Present	
Maximum allowed UL TX power	33dBm	
CHOICE channel requirement	Uplink DPCH info	
- Uplink DPCH power control info		
- CHOICE mode	FDD	
- DPCCH power offset	-6dB	
- PC Preamble	1 frame	
- SRB delay	7 frames	
- Power Control Algorithm	Algorithm1	
- TPC step size	1dB	
- Δ_{ACK}	Not Present	REL-5
- Δ_{NACK}	Not Present	REL-5
- Ack-Nack repetition factor	Not Present	REL-5
- CHOICE mode	FDD	
- Scrambling code type	Long	
- Scrambling code number	0 (0 to 16777215)	
- Number of DPDCH	1	
- spreading factor	64	
- TFCI existence	TRUE	
- Number of FBI bit	Not Present(0)	
- Puncturing Limit	1	
CHOICE Mode	FDD	
- Downlink PDSCH information	Not Present	R99 and Rel-4 only
Downlink HS-PDSCH Information	Not Present	REL-5
Downlink information common for all radio links		
- Downlink DPCH info common for all RL		
- Timing indicator	Maintain	
- CFN-targetSFN frame offset	Not Present	
- Downlink DPCH power control information		
- CHOICE mode	FDD	
- DPC mode	0 (single)	
- CHOICE mode	FDD	
- Power offset $P_{Pilot-DPDCH}$	0	
- DL rate matching restriction information	Not Present	
- Spreading factor	Reference to clause 6.10 Parameter Set	
- Fixed or Flexible Position	Reference to clause 6.10 Parameter Set	
- TFCI existence	Reference to clause 6.10 Parameter Set	
- CHOICE SF	Reference to clause 6.10 Parameter Set	
- CHOICE mode	FDD	
- DPCH compressed mode info	Not Present	
- TX Diversity mode	None	
- SSDT information	Not Present	R99 and Rel-4 only
- Default DPCH Offset Value	Not Present	
Downlink information per radio link list		
- Downlink information for each radio link		
- CHOICE mode	FDD	
- Primary CPICH info		
- Primary scrambling code	Reference to clause 6.1 "Default settings (FDD)"	
- PDSCH with SHO DCH info	Not Present	R99 and Rel-4 only
- PDSCH code mapping	Not Present	R99 and Rel-4 only
- Downlink DPCH info for each RL		
- CHOICE mode	FDD	
- Primary CPICH usage for channel estimation	Primary CPICH may be used	
- DPCH frame offset	Set to value Default DPCH Offset Value (as currently stored in SS) mod 38 400	
- Secondary CPICH info	Not Present	
- DL channelisation code		

Information Element	Value/remark	Version
- Secondary scrambling code	Not present	
- Spreading factor	Reference to clause 6.10 Parameter Set	
- Code number	Depends upon radio bearer used.	
- Scrambling code change	No change	
- TPC combination index	0	
- SSDT Cell Identity	Not Present	R99 and Rel-4 only
- Closed loop timing adjustment mode	Not Present	
- SCCPCH information for FACH	Not Present	R99 and Rel-4 only

Contents of RADIO BEARER SETUP message: AM or UM (UE supports CS RAB for Test Loop Mode 2)

Information Element	Value/remark	Version
Message Type		
RRC transaction identifier	Arbitrarily selects an integer between 0 and 3	
Integrity check info		
- message authentication code	SS calculates the value of MAC-I for this message and writes to this IE. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.	
- RRC message sequence number	SS provides the value of this IE, from its internal counter.	
Integrity protection mode info	Not Present	
Ciphering mode info	Not Present	
Activation time	(256+CFN-(CFN MOD 8 + 8))MOD 256	
New U-RNTI	Not Present	
New C-RNTI	Not Present	
New DSCH-RNTI	Not Present	R99 and Rel-4 only
New H-RNTI	Not Present	REL-5
RRC State indicator	CELL_DCH	
UTRAN DRX cycle length coefficient	Not Present	
CN information info	Not Present	
URA identity	Not Present	
Signalling RB information to setup	Not Present	
RAB information for setup list		
- RAB information for setup		
- RAB info		
- RAB identity	0000 0001B The first/ leftmost bit of the bit string contains the most significant bit of the RAB identity.	
- CN domain identity	CS domain	
- NAS Synchronization Indicator	Not Present	
- Re-establishment timer	UseT314	
- RB information to setup list		
- RB information to setup		
- RB identity	10	
- PDCP info	Not Present	
- CHOICE RLC info type	RLC info	
- CHOICE Uplink RLC mode	TM RLC	
- Transmission RLC discard	Not Present	
- Segmentation indication	FALSE	
- CHOICE Downlink RLC mode	TM RLC	
- Segmentation indication	FALSE	
- RB mapping info		
- Information for each multiplexing option		
- RLC logical channel mapping indicator	Not Present	
- Number of uplink RLC logical channels	1	
- Uplink transport channel type	DCH	
- UL Transport channel identity	1	
- Logical channel identity	Not Present	
- CHOICE RLC size list	Configured	
- MAC logical channel priority	7	

Information Element	Value/remark	Version
- Downlink RLC logical channel info		
- Number of downlink RLC logical channels	1	
- Downlink transport channel type	DCH	
- DL DCH Transport channel identity	6	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	Not Present	
RB information to be affected list	Not Present	
Downlink counter synchronization info	Not Present	
UL Transport channel information for all transport channels		
- PRACH TFCS	Not Present	
- CHOICE mode	FDD	
- TFC subset	Not Present	
- UL DCH TFCS		
- CHOICE TFCI signalling	Normal	
- TFCI Field 1 information		
- CHOICE TFCS representation	Complete reconfiguration	
- TFCS complete reconfigure information		
- CHOICE CTFC Size	2 bit CTFC	
- CTFC information	4 TFCs	
- 2bit CTFC	0	
- Power offset Information		
- CHOICE Gain Factors	Computed Gain Factors	
- Reference TFC ID	0	
- CHOICE mode	FDD	
- Power offset P_{p-m}	Not Present	
- 2bit CTFC	2	
- Power offset Information		
- CHOICE Gain Factors	Computed Gain Factors	
- Reference TFC ID	0	
- CHOICE mode	FDD	
- Power offset P_{p-m}	Not Present	
- 2bit CTFC	1	
- Power offset Information		
- CHOICE Gain Factors	Computed Gain Factors	
- Reference TFC ID	0	
- CHOICE mode	FDD	
- Power offset P_{p-m}	Not Present	
- 2bit CTFC	3	
- Power offset Information		
- CHOICE Gain Factors	Signalled Gain Factors	
- CHOICE mode	FDD	
- Gain factor ßc	8	
- Gain factor ßd	15	
- Reference TFC ID	0	
- CHOICE mode	FDD	
- Power offset P_{p-m}	Not Present	
Deleted UL TrCH information list	Not Present	
Added or Reconfigured UL TrCH information list	1	
- Added or Reconfigured UL TrCH information		
- Uplink transport channel type	DCH	
- UL Transport channel identity	1	
- TFS		
- CHOICE Transport channel type	Dedicated transport channels	
- Dynamic Transport Format Information		
- RLC size	260 bits	
- Number of TBs and TTI List	2	
- Transmission Time Interval	Not Present	
- Number of Transport blocks	0	
- Transmission Time Interval	Not Present	
- Number of Transport blocks	1	
- CHOICE Logical channel List	ALL	
- Semi-static Transport Format Information		
- Transmission time interval	20	

Information Element	Value/remark	Version
- Type of channel coding	Convolutional	
- Coding Rate	1/3	
- Rate matching attribute	256	
- CRC size	0	
CHOICE mode	Not Present	
DL Transport channel information common for all transport channel		
- SCCPCH TFCS	Not Present	
- CHOICE mode	FDD	
- CHOICE DL parameters	Same as UL	
Deleted DL TrCH information list	Not Present	
Added or Reconfigured DL TrCH information list	1	
- Added or Reconfigured DL TrCH information		
- Downlink transport channel type	DCH	
- DL Transport channel identity	6	
- CHOICE DL parameters		
- CHOICE Transport channel type	Dedicated transport channels	
- Dynamic Transport Format Information		
- RLC size	244 bits	
- Number of TBs and TTI List	2	
- Transmission Time Interval	Not Present	
- Number of Transport blocks	0	
- Transmission Time Interval	Not Present	
- Number of Transport blocks	1	
- CHOICE Logical channel List	ALL	
- Semi-static Transport Format Information		
- Transmission time interval	20	
- Type of channel coding	Convolutional	
- Coding Rate	1/3	
- Rate matching attribute	256	
- CRC size	16	
- Uplink transport channel type	DCH	
- UL TrCH identity	1	
- DCH quality target		
- BLER Quality value	-2.0	
Frequency info	Not Present	
Maximum allowed UL TX power	33dBm	
CHOICE channel requirement	Uplink DPCH info	
- Uplink DPCH power control info		
- CHOICE mode	FDD	
- DPCCH power offset	-6dB	
- PC Preamble	1 frame	
- SRB delay	7 frames	
- Power Control Algorithm	Algorithm1	
- TPC step size	1dB	
- Δ_{ACK}	Not Present	REL-5
- Δ_{NACK}	Not Present	REL-5
- Ack-Nack repetition factor	Not Present	REL-5
- CHOICE mode	FDD	
- Scrambling code type	Long	
- Scrambling code number	0 (0 to 16777215)	
- Number of DPDCH	1	
- spreading factor	64	
- TFCI existence	TRUE	
- Number of FBI bit	Not Present(0)	
- Puncturing Limit	1	
CHOICE Mode	FDD	
- Downlink PDSCH information	Not Present	R99 and Rel-4 only
Downlink HS-PDSCH Information	Not Present	REL-5
Downlink information common for all radio links		
- Downlink DPCH info common for all RL		
- Timing indicator	Maintain	
- CFN-targetSFN frame offset	Not Present	
- Downlink DPCH power control information		
- CHOICE mode	FDD	
- DPC mode	0 (single)	

Information Element	Value/remark	Version
- CHOICE mode	FDD	
- Power offset $P_{Pilot-DPDCH}$	0	
- DL rate matching restriction information	Not Present	
- Spreading factor	128	
- Fixed or Flexible Position	Fixed	
- TFCI existence	TRUE	
- CHOICE SF	128	
- Number of bits for Pilot bits	8	
- CHOICE mode	FDD	
- DPCH compressed mode info	Not Present	
- TX Diversity mode	None	
- SSDT information	Not Present	R99 and Rel-4 only
- Default DPCH Offset Value	Not Present	
Downlink information for per radio link list		
- Downlink information for each radio link		
- CHOICE mode	FDD	
- Primary CPICH info		
- Primary scrambling code	Reference to clause 6.1 "Default settings (FDD)"	
- PDSCH with SHO DCH info	Not Present	R99 and Rel-4 only
- PDSCH code mapping	Not Present	R99 and Rel-4 only
- Downlink DPCH info for each RL		
- CHOICE mode	FDD	
- Primary CPICH usage for channel estimation	Primary CPICH may be used	
- DPCH frame offset	Set to value Default DPCH Offset Value (as currently stored in SS) mod 38 400	
- Secondary CPICH info	Not Present	
- DL channelisation code		
- Secondary scrambling code	Not Present	
- Spreading factor	128	
- Code number	96	
- Scrambling code change	No change	
- TPC combination index	0	
- SSDT Cell Identity	Not Present	R99 and Rel-4 only
- Closed loop timing adjustment mode	Not Present	
- SCCPCH information for FACH	Not Present	R99 and Rel-4 only

Contents of RADIO BEARER SETUP message: HSDPA testing (TM CS plus UM PS)

Information Element	Value/remark	Version
Message Type		
RRC transaction identifier	Arbitrarily selects an integer between 0 and 3	
Integrity check info		
- message authentication code	SS calculates the value of MAC-I for this message and writes to this IE. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.	
- RRC message sequence number	SS provides the value of this IE, from its internal counter.	
Integrity protection mode info	Not Present	
Ciphering mode info	Not Present	
Activation time	Not Present	
New U-RNTI	Not Present	
New C-RNTI	Not Present	
New H-RNTI	'1010 1010 1010 1010'	REL-5
RRC State indicator	CELL_DCH	
UTRAN DRX cycle length coefficient	Not Present	
CN information info	Not Present	
URA identity	Not Present	
Signalling RB information to setup	Not Present	
RAB information for setup list		

Information Element	Value/remark	Version
- RAB information for setup		
- RAB info	(high-speed UM DTCH for PS domain)	
- RAB identity	0000 0110B The first/ leftmost bit of the bit string contains the most significant bit of the RAB identity.	
- CN domain identity	PS domain	
- NAS Synchronization Indicator	Not Present	
- Re-establishment timer	UseT315	
- RB information to setup		
- RB identity	25	
- PDCP info	Not Present	
- CHOICE RLC info type	RLC info	
- CHOICE Uplink RLC mode	Not Present	
- CHOICE Downlink RLC mode	UM RLC	
- DL UM RLC LI size	15	Rel-5
- One sided RLC re-establishment	FALSE	Rel-5
- RB mapping info		
- Information for each multiplexing option	1 RBMuxOptions	
- RLC logical channel mapping indicator	Not Present	
- Downlink RLC logical channel info		
- Number of downlink RLC logical channels	1	
- Downlink transport channel type	HS-DSCH	
- DL DCH Transport channel identity	Not Present	
- DL DSCH Transport channel identity	Not Present	
- DL HS-DSCH MAC-d flow identity	0	
- Logical channel identity	Not Present	
- RAB information for setup		
- RAB info	(TM DTCH for CS domain)	
- RAB identity	0000 0001B The first/ leftmost bit of the bit string contains the most significant bit of the RAB identity.	
- CN domain identity	CS domain	
- NAS Synchronization Indicator	Not Present	
- Re-establishment timer	UseT314	
- RB information to setup		
- RB identity	10	
- PDCP info	Not Present	
- CHOICE RLC info type	RLC info	
- CHOICE Uplink RLC mode	TM RLC	
- Transmission RLC discard	Not Present	
- Segmentation indication	FALSE	
- CHOICE Downlink RLC mode	TM RLC	
- Segmentation indication	FALSE	
- One sided RLC re-establishment	FALSE	Rel-5
- RB mapping info		
- Information for each multiplexing option	1 RBMuxOptions	
- RLC logical channel mapping indicator	Not Present	
- Number of uplink RLC logical channels	1	
- Uplink transport channel type	DCH	
- UL Transport channel identity	1	
- Logical channel identity	Not Present	
- CHOICE RLC size list	Configured	
- MAC logical channel priority	7	
- Downlink RLC logical channel info		
- Number of downlink RLC logical channels	1	
- Downlink transport channel type	DCH	
- DL DCH Transport channel identity	6	
- DL DSCH Transport channel identity	Not Present	
- DL HS-DSCH MAC-d flow identity	Not Present	Rel-5
- Logical channel identity	Not Present	
RB information to be affected list	Not Present	
Downlink counter synchronization info	Not Present	
UL Transport channel information for all transport channels		
- PRACH TFCS	Not Present	
- CHOICE mode	FDD	
- TFC subset	Not Present	

Information Element	Value/remark	Version
- UL DCH TFCS		
- CHOICE TFCI signalling	Normal	
- TFCI Field 1 information		
- CHOICE TFCS representation	Complete reconfiguration	
- TFCS complete reconfigure information		
- CHOICE CTFC Size	2 bit CTFC	
- CTFC information	4 TFCs	
- CTFC	Reference to clause TS 34.121 clause C.2.1 Parameter Set	
- Power offset information		
- CHOICE Gain Factors	Computed Gain Factors(The last TFC is set to Signalled Gain Factors)	
- Gain factor βc	8 (Not Present if the CHOICE Gain Factors is set to Computed Gain Factors)	
- Gain factor βd	15 (Not Present if the CHOICE Gain Factors is set to Computed Gain Factors)	
- Reference TFC ID	0	
- CHOICE mode	FDD	
- Power offset P p-m	Not Present	
Deleted UL TrCH information list	Not Present	
Added or Reconfigured UL TrCH information list	1 TrCH added	
- Added or Reconfigured UL TrCH information	(DCH for DTCH)	
- Uplink transport channel type	DCH	
- UL Transport channel identity	1	
- TFS		
- CHOICE Transport channel type	Dedicated transport channels	
- Dynamic Transport format information		
- RLC Size	244	
- Number of TBs and TTI List	2	
- Transmission Time Interval	Not Present	
- Number of Transport blocks	0	
- Transmission Time Interval	Not Present	
- Number of Transport blocks	1	
- CHOICE Logical channel list	All	
- Semi-static Transport Format information		
- Transmission time interval	20 ms	
- Type of channel coding	Convolutional	
- Coding Rate	1/3	
- Rate matching attribute	256	
- CRC size	16	
CHOICE mode	Not Present	
DL Transport channel information common for all transport channel		
- SCCPCH TFCS	Not Present	
- CHOICE mode	FDD	
- CHOICE DL parameters	Explicit	
- DL DCH TFCS		
- CHOICE TFCI Signalling	Normal	
- TFCI Field 1 Information		
- CHOICE TFCS representation	Complete reconfiguration	
- TFCS complete reconfigure		
- CHOICE CTFC Size	2 bit CTFC	
- CTFC information	4 TFCs	
- CTFC	Reference to clause TS 34.121 clause C.3.1 Parameter Set	
- Power offset information	Not Present	
Deleted DL TrCH information	Not Present	
Added or Reconfigured DL TrCH information list	2 TrCHs added	
- Added or Reconfigured DL TrCH information	(DCH for DTCH)	
- Downlink transport channel type	DCH	
- DL Transport channel identity	6	
- CHOICE DL parameters	Same as UL	
- Uplink transport channel type	DCH	
- UL TrCH identity	1	
- DCH quality target		

Information Element	Value/remark	Version
- BLER Quality value	-2.0	
- Added or Reconfigured DL TrCH information	(HS-DSCH for DTCH)	
- Downlink transport channel type	HS-DSCH	Rel-5
- DL Transport channel identity	Not Present	
- CHOICE DL parameters	HS-DSCH	
- HARQ Info		Rel-5
- Number of Processes	Reference to TS34.121 [2] Annex C Fixed Reference Channels	
- CHOICE *Memory Partitioning*	Implicit	
- Added or reconfigured MAC-d flow		
- MAC-hs queue to add or reconfigure list	(one queue)	Rel-5
- MAC-hs queue Id	0	
- MAC-d Flow Identity	0	
- T1	50	
- MAC-hs window size	16	
- MAC-d PDU size Info		
- MAC-d PDU size	Reference to TS34.121 [2] Annex C Fixed Reference Channels	
- MAC-d PDU size index	0	
- MAC-hs queue to delete list	Not present	
- DCH quality target	Not present	
Frequency info	Not Present	
Maximum allowed UL TX power	33dBm	
CHOICE channel requirement	Uplink DPCH info	
- Uplink DPCH power control info		
- CHOICE mode	FDD	
- DPCCH power offset	-6dB	
- PC Preamble	1 frame	
- SRB delay	7 frames	
- Power Control Algorithm	Algorithm1	
- TPC step size	1dB	
- Δ_{ACK}	3	REL-5
- Δ_{NACK}	3	REL-5
- Ack-Nack repetition factor	1	REL-5
- CHOICE mode	FDD	
- Scrambling code type	Long	
- Scrambling code number	0 (0 to 16777215)	
- Number of DPDCH	Not Present (1)	
- spreading factor	64	
- TFCI existence	TRUE	
- Number of FBI bit	Not Present(0)	
- Puncturing Limit	1	
CHOICE Mode	FDD	
- Downlink PDSCH information	Not Present	R99 and Rel-4 only
Downlink information common for all radio links		
- Downlink DPCH info common for all RL		
- Timing indicator	Maintain	
- CFN-targetSFN frame offset	Not Present	
- Downlink DPCH power control information		
- CHOICE mode	FDD	
- DPC mode	0 (single)	
- CHOICE mode	FDD	
- Power offset $P_{Pilot-DPDCH}$	0	
- DL rate matching restriction information	Not Present	
- Spreading factor	128	
- Fixed or Flexible Position	Fixed	
- TFCI existence	TRUE	
- CHOICE SF	128	
- Number of bits for Pilot bits	8	
- CHOICE mode	FDD	
- DPCH compressed mode info	Not Present	
- TX Diversity mode	None	
- SSDT information	Not Present	R99 and Rel-4 only
- Default DPCH Offset Value	Not Present	

Information Element	Value/remark	Version
Downlink HS-PDSCH Information		
- HS-SCCH Info		
- CHOICE mode	FDD	
- DL Scrambling Code		
- HS-SCCH Channelisation Code Information		
- HS-SCCH Channelisation Code	2	
- HS-SCCH Channelisation Code	3	
- HS-SCCH Channelisation Code	6	
- HS-SCCH Channelisation Code	7	
- Measurement Feedback Info		
- CHOICE mode	FDD	
- POhsdsch	6 dB	Rel-5
- CQI Feedback cycle, k	2 ms	Rel-5
- CQI repetition factor	1	Rel-5
- Δ_{CQI}	5 (corresponds to 0dB in relative power offset)	Rel-5
- CHOICE mode	FDD (no data)	
Downlink information per radio link list		
- Downlink information for each radio link		
- CHOICE mode	FDD	
- Primary CPICH info		
- Primary scrambling code	Reference to clause 6.1 "Default settings (FDD)"	
- PDSCH with SHO DCH info	Not Present	R99 and Rel-4 only
- PDSCH code mapping	Not Present	R99 and Rel-4 only
- Serving HS-DSCH radio link indicator	TRUE	REL-5
- Downlink DPCH info for each RL		
- CHOICE mode	FDD	
- Primary CPICH usage for channel estimation	Primary CPICH may be used	
- DPCH frame offset	Set to value Default DPCH Offset Value (as currently stored in SS) mod 38 400	
- Secondary CPICH info	Not Present	
- DL channelisation code		
- Secondary scrambling code	Not present	
- Spreading factor	128	
- Code number	96	
- Scrambling code change	No change	
- TPC combination index	0	
- SSDT Cell Identity	Not Present	R99 and Rel-4 only
- Closed loop timing adjustment mode	Not Present	
- SCCPCH information for FACH	Not Present	R99 and Rel-4 only

Contents of RADIO BEARER SETUP message: BTFD RMC for Test Loop Mode 2

Information Element	Value/remark	Version
Message Type		
RRC transaction identifier	Arbitrarily selects an integer between 0 and 3	
Integrity check info		
- message authentication code	SS calculates the value of MAC-I for this message and writes to this IE. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.	
- RRC message sequence number	SS provides the value of this IE, from its internal counter.	
Integrity protection mode info	Not Present	
Ciphering mode info	Not Present. For correct operation of test loop mode 2 this IE shall be omitted.	
Activation time	Set by operator	
New U-RNTI	Not Present	
New C-RNTI	Not Present	
New DSCH-RNTI	Not Present	R99 and Rel-4 only

Information Element	Value/remark	Version
New H-RNTI	Not Present	REL-5
RRC State indicator	CELL_DCH	
UTRAN DRX cycle length coefficient	Not Present	
CN information info	Not Present	
URA identity	Not Present	
CHOICE *specification mode*	Complete specification	REL-5
- RAB information for setup		
- RAB info		
- RAB identity	0000 0001B The first/ leftmost bit of the bit string contains the most significant bit of the RAB identity.	
- CN domain identity	CS domain	
- NAS Synchronization Indicator	Not Present	
- Re-establishment timer	UseT314	
- RB information to setup		
- RB identity	10	
- PDCP info	Not Present	
- CHOICE RLC info type	RLC info	
- CHOICE Uplink RLC mode	TM RLC	
- Transmission RLC discard	Not Present	
- Segmentation indication	FALSE	
- CHOICE Downlink RLC mode	TM RLC	
- Segmentation indication	FALSE	
- RB mapping info		
- Information for each multiplexing option		
- RLC logical channel mapping indicator	Not Present	
- Number of uplink RLC logical channels	1	
- Uplink transport channel type	DCH	
- UL Transport channel identity	1	
- Logical channel identity	Not Present	
- CHOICE RLC size list	Configured	
- MAC logical channel priority	7	
- Downlink RLC logical channel info		
- Number of downlink RLC logical channels	1	
- Downlink transport channel type	DCH	
- DL DCH Transport channel identity	6	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	Not Present	
RB information to be affected	Not Present	
Downlink counter synchronization info	Not Present	
	RMC for BTFD	
UL Transport channel information for all transport channels		
- PRACH TFCS	Not Present	
- CHOICE mode	FDD	
- TFC subset	Not Present	
- UL DCH TFCS		
- CHOICE TFCI signalling	Normal	
- TFCI Field 1 information		
- CHOICE TFCS representation	Complete reconfiguration	
- TFCS complete reconfigure information		
- CHOICE CTFC Size	ctfc6Bit	
- ctfc6Bit	22	
- ctfc6	0	
-powerOffsetInformation(OP)		
-gainFactorInformation	ComputedGainFactors	
- Reference TFC ID	0	
- ctfc6	11	
-powerOffsetInformation(OP)		
-gainFactorInformation	ComputedGainFactors	
- Reference TFC ID	0	
- ctfc6	1	
-powerOffsetInformation(OP)		
-gainFactorInformation	ComputedGainFactors	
- Reference TFC ID	0	
- ctfc6	12	
-powerOffsetInformation(OP)		

Information Element	Value/remark	Version
-gainFactorInformation	SignalledGainFactors	
-modeSpecificInfo	Fdd	
-fdd		
- Gain factor ßc	8	
- Gain factor ßd	15	
- Reference TFC ID	0	
- ctfc6	2	
-powerOffsetInformation(OP)		
-gainFactorInformation	ComputedGainFactors	
- Reference TFC ID	0	
- ctfc6	13	
-powerOffsetInformation(OP)		
-gainFactorInformation	ComputedGainFactors	
- Reference TFC ID	0	
- ctfc6	3	
-powerOffsetInformation(OP)		
-gainFactorInformation	ComputedGainFactors	
- Reference TFC ID	0	
- ctfc6	14	
-powerOffsetInformation(OP)		
-gainFactorInformation	ComputedGainFactors	
- Reference TFC ID	0	
- ctfc6	4	
-powerOffsetInformation(OP)		
-gainFactorInformation	ComputedGainFactors	
- Reference TFC ID	0	
- ctfc6	15	
-powerOffsetInformation(OP)		
-gainFactorInformation	ComputedGainFactors	
- Reference TFC ID	0	
- ctfc6	5	
-powerOffsetInformation(OP)		
-gainFactorInformation	ComputedGainFactors	
- Reference TFC ID	0	
- ctfc6	16	
-powerOffsetInformation(OP)		
-gainFactorInformation	ComputedGainFactors	
- Reference TFC ID	0	
- ctfc6	6	
-powerOffsetInformation(OP)		
-gainFactorInformation	ComputedGainFactors	
- Reference TFC ID	1	
- ctfc6	17	
-powerOffsetInformation(OP)		
-gainFactorInformation	SignalledGainFactors	
-modeSpecificInfo	Fdd	
-fdd		
- Gain factor ßc	11	
- Gain factor ßd	15	
- Reference TFC ID	1	
- ctfc6	7	
-powerOffsetInformation(OP)		
-gainFactorInformation	ComputedGainFactors	
- Reference TFC ID	1	
- ctfc6	18	
-powerOffsetInformation(OP)		
-gainFactorInformation	ComputedGainFactors	
- Reference TFC ID	1	
- ctfc6	8	
-powerOffsetInformation(OP)		
-gainFactorInformation	ComputedGainFactors	
- Reference TFC ID	1	
- ctfc6	19	
-powerOffsetInformation(OP)		
-gainFactorInformation	ComputedGainFactors	
- Reference TFC ID	1	
- ctfc6	9	

Information Element	Value/remark	Version
-powerOffsetInformation(OP)		
-gainFactorInformation	ComputedGainFactors	
- Reference TFC ID	1	
- ctfc6	20	
-powerOffsetInformation(OP)		
-gainFactorInformation	ComputedGainFactors	
- Reference TFC ID	1	
- ctfc6	10	
-powerOffsetInformation(OP)		
-gainFactorInformation	ComputedGainFactors	
- Reference TFC ID	1	
- ctfc6	21	
-powerOffsetInformation(OP)		
-gainFactorInformation	ComputedGainFactors	
- Reference TFC ID	1	
Added or Reconfigured UL TrCH information list	1	
- Added or Reconfigured UL TrCH information		
- Uplink transport channel type	DCH	
- UL Transport channel identity	1	
- TFS		
- CHOICE Transport channel type	Dedicated transport channels	
-DedicatedDynamicTF-Info		
RLC size	256	
-numberOfTbSizeList		
-NumberOfTransportBlocks	Zero	
-NumberOfTransportBlocks	One	
- Choice Logical channel List	ALL	
RLC size	216	
-numberOfTbSizeList		
-NumberOfTransportBlocks	One	
- Choice Logical channel List	ALL	
RLC size	171	
-numberOfTbSizeList		
-NumberOfTransportBlocks	One	
- Choice Logical channel List	ALL	
RLC size	160	
-numberOfTbSizeList		
-NumberOfTransportBlocks	One	
- Choice Logical channel List	ALL	
RLC size	146	
-numberOfTbSizeList		
-NumberOfTransportBlocks	One	
- Choice Logical channel List	ALL	
RLC size	130	
-numberOfTbSizeList		
-NumberOfTransportBlocks	One	
- Choice Logical channel List	ALL	
RLC size	115	
-numberOfTbSizeList		
-NumberOfTransportBlocks	One	
- Choice Logical channel List	ALL	
RLC size	107	
-numberOfTbSizeList		
-NumberOfTransportBlocks	One	
- Choice Logical channel List	ALL	
RLC size	51	
-numberOfTbSizeList		
-NumberOfTransportBlocks	One	
- Choice Logical channel List	ALL	
RLC size	12	
-numberOfTbSizeList		
-NumberOfTransportBlocks	One	
- Choice Logical channel List	ALL	
-Semistatic Transport Format Information		
-Transmission Time interval	20 ms	
-channelCodingType	Convolutional	
-convolutional	1/3	

Information Element	Value/remark	Version
- Rate matching attribute	256	
- CRC size	0	
DL Transport channel information common for all transport channel		
- SCCPCH TFCS	Not Present	
- CHOICE mode	FDD	
- CHOICE DL parameters	Explicit	
- DL DCH TFCS		
- CHOICE TFCI signalling	Normal	
- TFCI Field 1 information		
- CHOICE TFCS representation	Complete reconfiguration	
- TFCS complete reconfigure information		
- CHOICE CTFC Size	Ctfc6Bit	
- ctfc6Bit	18	
- ctfc6	9	
- ctfc6	0	
- ctfc6	10	
- ctfc6	1	
- ctfc6	11	
- ctfc6	2	
- ctfc6	12	
- ctfc6	3	
- ctfc6	13	
- ctfc6	4	
- ctfc6	14	
- ctfc6	5	
- ctfc6	15	
- ctfc6	6	
- ctfc6	16	
- ctfc6	7	
- ctfc6	17	
- ctfc6	8	
Deleted DL TrCH information	Not Present	
Added or Reconfigured DL TrCH information list	1	
- Added or Reconfigured DL TrCH information		
- Downlink transport channel type	DCH	
- DL Transport channel identity	6	
- CHOICE DL parameters	Explicit	
- TFS		
- CHOICE Transport channel type	Dedicated transport channels	
-DedicatedDynamicTF-Info		
RLC size	244	
-numberOfTbSizeList		
-NumberOfTransportBlocks	One	
- Choice Logical channel List	ALL	
RLC size	204	
-numberOfTbSizeList		
-NumberOfTransportBlocks	One	
- Choice Logical channel List	ALL	
RLC size	159	
-numberOfTbSizeList		
-NumberOfTransportBlocks	One	
- Choice Logical channel List	ALL	
RLC size	148	
-numberOfTbSizeList		
-NumberOfTransportBlocks	One	
- Choice Logical channel List	ALL	
RLC size	134	
-numberOfTbSizeList		
-NumberOfTransportBlocks	One	
- Choice Logical channel List	ALL	
RLC size	118	
-numberOfTbSizeList		
-NumberOfTransportBlocks	One	
- Choice Logical channel List	ALL	
RLC size	103	
-numberOfTbSizeList		

Information Element	Value/remark	Version
-NumberOfTransportBlocks	One	
- Choice Logical channel List	ALL	
RLC size	95	
-numberOfTbSizeList		
-NumberOfTransportBlocks	One	
- Choice Logical channel List	ALL	
RLC size	39	
-numberOfTbSizeList		
-NumberOfTransportBlocks	One	
- Choice Logical channel List	ALL	
-Semistatic Transport Format Information		
-Transmission Time interval	20 ms	
-channelCodingType	Convolutional	
-convolutional	1/3	
- Rate matching attribute	256	
- CRC size	12	
- DCH quality target		
- BLER Quality value	-2.0	
- Transparent mode signalling info	Not Present	
Frequency info	Not Present	
Maximum allowed UL TX power	33 dBm	
CHOICE channel requirement	Uplink DPCH info	
- Uplink DPCH power control info		
- DPCCH power offset	-6	
- PC Preamble	1 frame	
- SRB delay	7 frames	
- Power Control Algorithm	Algorithm1	
- TPC step size	1dB	
- Δ_{ACK}	Not Present	REL-5
- Δ_{NACK}	Not Present	REL-5
- Ack-Nack repetition factor	Not Present	REL-5
- Scrambling code type	Long	
- Scrambling code number	0	
- Number of DPDCH	1	
- spreading factor	64	
- TFCI existence	TRUE	
- Number of FBI bit	Not Present(0)	
- Puncturing Limit	1	
CHOICE Mode	FDD	
- Downlink PDSCH information	Not Present(0)	R99 and Rel-4 only
Downlink HS-PDSCH Information	Not Present	REL-5
Downlink information common for all radio links		
- Downlink DPCH info common for all RL	FDD	
- Timing indicator	Maintain	
- CFN-targetSFN frame offset	Not Present	
- Downlink DPCH power control information		
- DPC mode	0 (single)	
- CHOICE mode	FDD	
- Power offset $P_{Pilot-DPDCH}$	0	
- DL rate matching restriction information	Not Present	
- Spreading factor	128	
- Number of bits for Pilot bits(SF=128,256)	4	
- Fixed or Flexible Position	Fixed	
- TFCI existence	FALSE	
- DPCH compressed mode info	Not Present	
- TX Diversity mode	None	
- SSDT information	Not Present	R99 and Rel-4 only
- Default DPCH Offset Value	Not Present	
Downlink information for each radio link list		
- Primary CPICH info		
- Primary scrambling code	Reference to clause 6.1 "Default settings (FDD)"	

Information Element	Value/remark	Version
- PDSCH with SHO DCH info	Not Present	R99 and Rel-4 only
- PDSCH code mapping	Not Present	R99 and Rel-4 only
- Downlink DPCH info for each RL		
- Primary CPICH usage for channel estimation	Primary CPICH may be used	
- DPCH frame offset	Set to value Default DPCH Offset Value (as currently stored in SS) mod 38 400	
- Secondary CPICH info	Not Present	
- DL channelisation code		
- Secondary scrambling code	Not Present	
- Spreading factor	128	
- Code number	96	
- Scrambling code change	No change	
- TPC combination index	0	
- SSDT Cell Identity	Not Present	R99 and Rel-4 only
- Closed loop timing adjustment mode	Not Present	
- SCCPCH information for FACH	Not Present	R99 and Rel-4 only

Contents of RRC CONNECTION RELEASE message: UM

Information Element	Value/remark	Version
Message Type		
U-RNTI	This IE is set to the following value when the message is transmitted on the CCCH. When transmitted on DCCH, this is absent.	R99, REL-4
- SRNC identity	0000 0000 0001B	
- S-RNTI	0000 0000 0000 0000 0001B	
CHOICE identity type	This IE is set to the following value when the message is transmitted on the CCCH. When transmitted on DCCH, this is absent.	REL-5
- U-RNTI		
- SRNC identity	0000 0000 0001B	
- S-RNTI	0000 0000 0000 0000 0001B	
- Group identity	[FFS]	
- Group release information	[FFS]	
RRC transaction identifier	Arbitrarily selects an integer between 0 and 3	
Integrity check info	This IE is present when this message is transmitted on downlink DCCH. Else, this IE and the sub-IEs are omitted.	
- Message authentication code	SS calculates the value of MAC-I for this message and writes to this IE. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.	
- RRC Message sequence number	SS provides the value of this IE, from its internal counter.	
N308	2 (for CELL_DCH state). Not Present (for UE in other connected mode states).	
Release cause	Normal event	
Rplmn information	Not Present	

Contents of RRC CONNECTION SETUP message: UM

Information Element	Value/remark	Version
Message Type		
Initial UE identity	Select the same identity as in the IE "Initial UE Identity" in received "RRC CONNECTION REQUEST" message	
RRC transaction identifier	Arbitrarily selects an integer between 0 and 3	
Activation time	Not Present(Now)	
New U-RNTI		
- SRNC identity	0000 0000 0001B	
- S-RNTI	0000 0000 0000 0000 0001B	
New C-RNTI	Not Present	
RRC State Indicator	CELL_DCH	

Information Element	Value/remark	Version
UTRAN DRX cycle length coefficient	9	
Capability update requirement		
- UE radio access FDD capability update requirement	TRUE	
- UE radio access TDD capability update requirement	FALSE	
- System specific capability update requirement list	GSM	
CHOICE *specification mode*	Complete specification	REL-5
- Complete specification		REL-5
- Signalling RB information to setup list	4 SRBs	
- Signalling RB information to setup	(UM DCCH for RRC)	
- RB identity	Not Present	
- CHOICE RLC info type	RLC info	
- CHOICE Uplink RLC mode	UM RLC	
- Transmission RLC discard	Not Present	
- CHOICE Downlink RLC mode	UM RLC	
- RB mapping info		
- Information for each multiplexing option	2 RBMuxOptions	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	DCH	
- UL Transport channel identity	5	
- Logical channel identity	1	
- CHOICE RLC size list	Configured	
- MAC logical channel priority	1	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	DCH	
- DL DCH Transport channel identity	10	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	1	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	RACH	
- UL Transport channel identity	Not Present	
- Logical channel identity	1	
- CHOICE RLC size list	Explicit List	
- RLC size index	Reference to clause 6 Parameter Set	
- MAC logical channel priority	1	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	FACH	
- DL DCH Transport channel identity	Not Present	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	1	
- Signalling RB information to setup	(AM DCCH for RRC)	
- RB identity	Not Present	
- CHOICE RLC info type		
- RLC info		
- CHOICE Uplink RLC mode	AM RLC	
- Transmission RLC discard		
- SDU discard mode	No Discard	
- MAX_DAT	15	
- Transmission window size	128	
- Timer_RST	500	
- Max_RST	1	
- Polling info		
- Timer_poll_prohibit	200	
- Timer_poll	200	
- Poll_PDU	Not Present	
- Poll_SDU	1	
- Last transmission PDU poll	TRUE	
- Last retransmission PDU poll	TRUE	
- Poll_Windows	99	
- Timer_poll_periodic	Not Present	
- CHOICE Downlink RLC mode	AM RLC	
- In-sequence delivery	TRUE	
- Receiving window size	128	
- Downlink RLC status info		

Information Element	Value/remark	Version
- Timer_status_prohibit	200	
- Timer_EPC	Not Present	
- Missing PDU indicator	TRUE	
- Timer_STATUS_periodic	Not Present	
- RB mapping info		
- Information for each multiplexing option	2 RBMuxOptions	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	DCH	
- UL Transport channel identity	5	
- Logical channel identity	2	
- CHOICE RLC size list	Configured	
- MAC logical channel priority	2	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	DCH	
- DL DCH Transport channel identity	10	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	2	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	RACH	
- UL Transport channel identity	Not Present	
- Logical channel identity	2	
- CHOICE RLC size list	Explicit List	
- RLC size index	Reference to clause 6 Parameter Set	
- MAC logical channel priority	2	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	FACH	
- DL DCH Transport channel identity	Not Present	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	2	
- Signalling RB information to setup	(AM DCCH for NAS_DT High priority)	
- RB identity	Not Present	
- CHOICE RLC info type		
- RLC info		
- CHOICE Uplink RLC mode	AM RLC	
- Transmission RLC discard		
- SDU discard mode	No Discard	
- MAX_DAT	15	
- Transmission window size	128	
- Timer_RST	500	
- Max_RST	1	
- Polling info		
- Timer_poll_prohibit	200	
- Timer_poll	200	
- Poll_PDU	Not Present	
- Poll_SDU	1	
- Last transmission PDU poll	TRUE	
- Last retransmission PDU poll	TRUE	
- Poll_Windows	99	
- Timer_poll_periodic	Not Present	
- CHOICE Downlink RLC mode	AM RLC	
- In-sequence delivery	TRUE	
- Receiving window size	128	
- Downlink RLC status info		
- Timer_status_prohibit	200	
- Timer_EPC	Not Present	
- Missing PDU indicator	TRUE	
- Timer_STATUS_periodic	Not Present	
- RB mapping info		
- Information for each multiplexing option	2 RBMuxOptions	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	DCH	
-UL Transport channel identity	5	

Information Element	Value/remark	Version
- Logical channel identity	3	
- CHOICE RLC size list	Configured	
- MAC logical channel priority	3	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	DCH	
- DL DCH Transport channel identity	10	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	3	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	RACH	
- UL Transport channel identity	Not Present	
- Logical channel identity	3	
- CHOICE RLC size list	Explicit List	
- RLC size index	Reference to clause 6 Parameter Set	
- MAC logical channel priority	3	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	FACH	
- DL DCH Transport channel identity	Not Present	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	3	
- Signalling RB information to setup	(AM DCCH for NAS_DT Low priority)	
- RB identity	Not Present	
- CHOICE RLC info type		
- RLC info		
- CHOICE Uplink RLC mode	AM RLC	
- Transmission RLC discard		
- SDU discard mode	No Discard	
- MAX_DAT	15	
- Transmission window size	128	
- Timer_RST	500	
- Max_RST	1	
- Polling info		
- Timer_poll_prohibit	200	
- Timer_poll	200	
- Poll_PDU	Not Present	
- Poll_SDU	1	
- Last transmission PDU poll	TRUE	
- Last retransmission PDU poll	TRUE	
- Poll_Windows	99	
- Timer_poll_periodic	Not Present	
- CHOICE Downlink RLC mode	AM RLC	
- In-sequence delivery	TRUE	
- Receiving window size	128	
- Downlink RLC status info		
- Timer_status_prohibit	200	
- Timer_EPC	Not Present	
- Missing PDU indicator	TRUE	
- Timer_STATUS_periodic	Not Present	
- RB mapping info		
- Information for each multiplexing option	2 RBMuxOptions	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	DCH	
- UL Transport channel identity	5	
- Logical channel identity	4	
- CHOICE RLC size list	Configured	
- MAC logical channel priority	4	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	DCH	
- DL DCH Transport channel identity	10	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	4	
- RLC logical channel mapping indicator	Not Present	

Information Element	Value/remark	Version
- Number of RLC logical channels	1	
- Uplink transport channel type	RACH	
- UL Transport channel identity	Not Present	
- Logical channel identity	4	
- CHOICE RLC size list	Explicit List	
- RLC size index	Reference to clause 6 Parameter Set	
- MAC logical channel priority	4	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	FACH	
- DL DCH Transport channel identity	Not Present	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	4	
UL Transport channel information for all transport channels		
- PRACH TFCS	Not Present	
- CHOICE Mode	FDD	
- TFC subset	Not Present	
- UL DCH TFCS		
- CHOICE TFCI signalling	Normal	
- TFCI Field 1 information		
- CHOICE TFCS representation	Complete reconfiguration	
- TFCS complete reconfiguration information		
- CHOICE CTFC Size	2 bit CTFC	
- CTFC information	2 TFCs	
- 2bit CTFC	0	
- Power offset Information		
- CHOICE Gain Factors	computedGainFactors	
- Reference TFC ID	0	
- CHOICE mode	FDD	
- Power offset Pp-m	Not Present	
- 2bit CTFC	1	
- Power offset Information		
- CHOICE Gain Factors	signalledGainFactors	
- CHOICE mode	FDD	
- Gain factor ßc	15	
- Gain factor ßd	15	
- Reference TFC ID	0	
- CHOICE mode	FDD	
- Power offset Pp-m	Not Present	
Added or Reconfigured UL TrCH information list	1	
- Added or Reconfigured UL TrCH information		
- Uplink transport channel type	DCH	
- UL Transport channel identity	5	
- TFS		
- CHOICE Transport channel type	Dedicated transport channels	
- Dynamic Transport Format Information		
- RLC size	96 bits	
- Number of TBs and TTI List	2	
- Transmission Time Interval	Not Present	
- Number of Transport blocks	0	
- Transmission Time Interval	Not Present	
- Number of Transport blocks	1	
- CHOICE Logical channel List	ALL	
- Semi-static Transport Format Information		
- Transmission time interval	40	
- Type of channel coding	Convolutional	
- Coding Rate	1/3	
- Rate matching attribute	256	
- CRC size	12	
DL Transport channel information common for all transport channel		
- SCCPCH TFCS	Not Present	
- CHOICE mode	FDD	
- CHOICE DL parameters	Same as UL	
Added or Reconfigured DL TrCH information list	1	
- Added or Reconfigured DL TrCH information		
- Downlink transport channel type	DCH	
- DL Transport channel identity	10	

Information Element	Value/remark	Version
- CHOICE DL parameters	SameAasUL	
- Uplink transport channel type	DCH	
- UL TrCH Identity	5	
- DCH quality target		
- BLER Quality value	-2.0	
Frequency info	Not Present	
Maximum allowed UL TX power	Not Present	
CHOICE channel requirement	Uplink DPCH info	
- Uplink DPCH power control info		
- DPCCH power offset	-80dB	
- PC Preamble	1 frame	
- SRB delay	7 frames	
- Power Control Algorithm	Algorithm1	
- TPC step size	1dB	
- Δ_{ACK}	Not Present	REL-5
- Δ_{NACK}	Not Present	REL-5
- Ack-Nack repetition factor	Not Present	REL-5
- CHOICE mode	FDD	
- Scrambling code type	Long	
- Scrambling code number	0 (0 to 16777215)	
- Number of DPDCH	Not Present (1)	
- Spreading factor	256	
- TFCI existence	TRUE	
- Number of FBI bit	Not Present(0)	
- Puncturing Limit	1	
Downlink information common for all radio links		
- Downlink DPCH info common for all RL		
- Timing Indication	Initialize	
- CFN-targetSFN frame offset	Not Present	
- Downlink DPCH power control information		
- CHOICE mode	FDD	
- DPC mode	0 (single)	
- CHOICE mode	FDD	
- Power offset $P_{Pilot-DPDCH}$	0	
- DL rate matching restriction information	Not Present	
- Spreading factor	256	
- Fixed or Flexible Position	Fixed	
- TFCI existence	FALSE	
- CHOICE SF		
- Number of bits for Pilot bits	8	
- DPCH compressed mode info	Not Present	
- TX Diversity mode	None	
- SSDT information	Not Present	R99 and Rel-4 only
- Default DPCH Offset Value	Arbitrary set to value 0..306688 by step of 512	
Downlink information for per radio links list		
-Downlink information for each radio links		
- CHOICE mode	FDD	
- Primary CPICH info		
- Primary scrambling code	Reference to clause 6.1 "Default settings (FDD)"	
- PDSCH with SHO DCH info	Not Present	R99 and Rel-4 only
- PDSCH code mapping	Not Present	R99 and Rel-4 only
- Downlink DPCH info for each RL		
- CHOICE mode	FDD	
- Primary CPICH usage for channel estimation	Primary CPICH may be used	
- DPCH frame offset	Set to value : Default DPCH Offset Value mod 38 400	
- Secondary CPICH info	Not Present	
- DL channelisation code		
- Secondary scrambling code	Not Present	

Information Element	Value/remark	Version
- Spreading factor	256	
- Code number	192	
- Scrambling code change	Not Present	
- TPC combination index	0	
- SSDT Cell Identity	Not Present	R99 and Rel-4 only
- Closed loop timing adjustment mode	Not Present	
- SCCPCH information for FACH	Not Present	R99 and Rel-4 only

Contents of SECURITY MODE COMMAND message: AM

Information Element	Condition	Value/remark
Message Type	A1, A2	
RRC transaction identifier		Arbitrarily selects an integer between 0 and 3
Integrity check info		
- Message authentication code		Set to an arbitrarily selected 32-bits integer. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message Sequence Number		Set to an arbitrarily selected integer between 0 and 15
Security capability		
- Ciphering algorithm capability		
- UEA0		If the UE has indicated support for ciphering algorithm UEA0 in the IE "security capability" in the RRC CONNECTION SETUP COMPLETE message, this IE is set to TRUE.
- UEA1		If the UE has indicated support for ciphering algorithm UEA1 in the IE "security capability" in the RRC CONNECTION SETUP COMPLETE message, this IE is set to TRUE.
- Spare		Spare 2-15 = FALSE
- Integrity protection algorithm capability		0000000000000010B (UIA1)
- UIA1		TRUE
- Spare		Spare 0 and Spare 2-15 = FALSE
Ciphering mode info		This presence of this IE is dependent on IXIT statements in TS 34.123-2. If ciphering is indicated to be active, this IE present with the values of the sub IEs as stated below. Else, this IE is omitted.
- Ciphering mode command		Start/restart
- Ciphering algorithm		UEA0 or UEA1. The indicated algorithm must be one of the algorithms supported by the UE as indicated in the IE "security capability" in the RRC CONNECTION SETUP COMPLETE message.
- Ciphering activation time for DPCH		Not Present
- Radio bearer downlink ciphering activation time info		
- Radio bearer activation time		
- RB identity		1
- RLC sequence number		Current RLC SN+2
- RB identity		2
- RLC sequence number		Current RLC SN+2
- RB identity		3
- RLC sequence number		Current RLC SN + 2
- RB identity		4
- RLC sequence number		Current RLC SN + 2
Integrity protection mode info		
- Integrity protection mode command		Start
- Downlink integrity protection activation info		Not Present
- Integrity protection algorithm		UIA1
- Integrity protection initialisation number		SS selects an arbitrary 32 bits number for FRESH.

		The first/ leftmost bit of the bit string contains the most significant bit of the FRESH.A1
CN domain identity		CS or PS
UE system specific security capability	A1	Not Present
UE system specific security capability - Inter-RAT UE security capability - CHOICE *system* - GSM security capability	A2	 GSM The indicated algorithms must be the same as the algorithms supported by the UE as indicated in the IE " UE system specific capability " in the RRC CONNECTION SETUP COMPLETE message.

Condition	Explanation
A1	UE not supporting GSM
A2	UE supporting GSM

9.2.2 Default Message Contents for RF (TDD)

Contents of Activate RB Test Mode message

Information Element	Value/remark
Protocol discriminator	F (Length 1/2)
Skip indicator	0 (Length 1/2)
Message Type	44h

Contents of Close UE Test Loop message

Information Element	Value/remark
Protocol discriminator	F (Length 1/2)
Skip indicator	0 (Length 1/2)
Message Type	40h
UE test loop mode	00h
UE test loop mode 1 LB setup	03h 00h F4h 0Ah

Contents of Open UE Test Loop message

Information Element	Value/remark
Protocol discriminator	F (Length 1/2)
Skip indicator	0 (Length 1/2)
Message Type	42h

Contents of PAGING TYPE 1 message: TM (CS)

Information Element	Value/remark
Message Type	
Paging record list	
-Paging record	
- CHOICE Used paging identity	CN identity
- Paging cause	Terminating Streaming Call
- CN domain identity	CS domain
- CHOICE UE identity	
- IMSI (GSM-MAP)	Set to the same octet string as in the IMSI stored in the USIM card
BCCH modification info	Not Present

Contents of PAGING TYPE 1 message: TM (PS)

Information Element	Value/remark
Message Type	
Paging record list	

-Paging record	
- CHOICE Used paging identity	CN identity
- Paging cause	Terminating Interactive Call
- CN domain identity	PS domain
- CHOICE UE identity	
- IMSI (GSM-MAP)	Set to the same octet string as in the IMSI stored in the USIM card
BCCH modification info	Not Present

Contents of RADIO BEARER SETUP message: AM or UM (3.84 Mcps TDD)

Information Element	Condition	Value/remark	Version
Message Type	A1,A3		
RRC transaction identifier		Arbitrarily selects an integer between 0 and 3	
Integrity check info			
- message authentication code		SS calculates the value of MAC-I for this message and writes to this IE. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.	
- RRC message sequence number		SS provides the value of this IE, from its internal counter.	
Integrity protection mode info		Not Present	
Ciphering mode info		Not Present	
Activation time		(256+CFN-(CFN MOD 8 + 8))MOD 256	
New U-RNTI		Not Present	
New C-RNTI		Not Present	
New DSCH-RNTI		Not Present	R99 and Rel-4 only
New H-RNTI		Not Present	REL-5
RRC State indicator		CELL_DCH	
UTRAN DRX cycle length coefficient		Not Present	
CN information info		Not Present	
URA identity		Not Present	
- Signalling RB information to setup		Not Present	
- RAB information for setup list	A1		
- RAB information for setup			
- RAB info			
- RAB identity		0000 0001B The first/ leftmost bit of the bit string contains the most significant bit of the RAB identity.	
- CN domain identity		CS domain	
- NAS Synchronization Indicator		Not Present	
- Re-establishment timer		UseT314	
- RB information to setup list			
- RB information to setup			
- RB identity		10	
- PDCP info		Not Present	
- CHOICE RLC info type		RLC info	
- CHOICE Uplink RLC mode		TM RLC	
- Transmission RLC discard		Not Present	
- Segmentation indication		FALSE	
- CHOICE Downlink RLC mode		TM RLC	
- Segmentation indication		FALSE	
- RB mapping info			
- Information for each multiplexing option			
- RLC logical channel mapping indicator		Not Present	
- Number of uplink RLC logical channels		1	
- Uplink transport channel type		DCH	
- UL Transport channel identity		1	
- Logical channel identity		Not Present	
- CHOICE RLC size list		Configured	
- MAC logical channel priority		7	
- Downlink RLC logical channel info			

Information Element	Condition	Value/remark	Version
- Number of downlink RLC logical channels		1	
- Downlink transport channel type		DCH	
- DL DCH Transport channel identity		6	
- DL DSCH Transport channel identity		Not Present	
- Logical channel identity		Not Present	
RAB information for setup list - RAB information for setup - RAB info	A3		
- RAB identity		0000 0101B The first/ leftmost bit of the bit string contains the most significant bit of the RAB identity.	
- CN domain identity		PS domain	
- NAS Synchronization Indicator		Not Present	
- Re-establishment timer		UseT314	
- RB information to setup list			
- RB information to setup			
- RB identity		20	
- PDCP info		Not Present	
- CHOICE RLC info type		RLC info	
- CHOICE Uplink RLC mode		AM RLC	
- Transmission RLC discard			
- CHOICE SDU discard mode		No discard	
- MAX_DAT		15	
- Transmission window size		128	
- Timer_RST		500	
- Max_RST		4	
- Polling info			
- Timer_poll_prohibit		200	
- Timer_poll		200	
- Poll_SDU		1	
- Last transmission PDU poll		TRUE	
- Last retransmission PDU poll		TRUE	
- Poll_Windows		99	
- Timer_poll_periodic		Not Present	
- CHOICE Downlink RLC mode		AM RLC	
- In-sequence delivery		TRUE	
- Receiving window size		128	
- Downlink RLC status info			
- Timer_status_prohibit		200	
- Timer_EPC		200	
- Missing PDU indicator		TRUE	
- Timer_STATUS_periodic		Not Present	
- RB mapping info			
- Information for each multiplexing option		2RBMuxOptions	
- RLC logical channel mapping indicator		Not Present	
- Number of uplink RLC logical channels		1	
- Uplink transport channel type		DCH	
- UL Transport channel identity		1	
- Logical channel identity		Not Present	
- CHOICE RLC size list		Configured	
- MAC logical channel priority		8	
- Downlink RLC logical channel info			
- Number of downlink RLC logical channels		1	
- Downlink transport channel type		DCH	
- DL DCH Transport channel identity		6	
- DL DSCH Transport channel identity		Not Present	
- Logical channel identity		Not Present	

Information Element	Condition	Value/remark	Version
- RLC logical channel mapping indicator		Not Present	
- Number of uplink RLC logical channels		1	
- Uplink transport channel type		RACH	
- UL Transport channel identity		Not Present	
- Logical channel identity		7	
- CHOICE RLC size list		Explicit List	
- RLC size index		Reference to clause 6 Parameter Set	
- MAC logical channel priority		8	
- Downlink RLC logical channel info			
- Number of downlink RLC logical channels		1	
- Downlink transport channel type		FACH	
- DL DCH Transport channel identity		Not Present	
- DL DSCH Transport channel identity		Not Present	
- Logical channel identity		Not Present	
RB information to be affected list	A1,A3	Not Present	
Downlink counter synchronization info		Not Present	
UL Transport channel information for all transport channels	A1,A3		
- PRACH TFCS		Not Present	
- CHOICE mode		TDD	
-Individual UL CCTrCH information			
- TFCS ID		(This IE is repeated for TFC number.)	
- Allowed Transport Format combination		0 to MaxTFCvalue-1 (MaxTFCValue is refer to clause 6 Parameter Set.)	
- PRACH TFCS		(This IE is repeated for TFC number.)	
- CHOICE TFCI signalling		Normal	
- TFCI Field 1 information			
- TFCS complete reconfigure information			
- CHOICE TFCS Size		Number of used bits must be enough to cover all combinations of CTFC from clauses 6. Refer to clause 6 Parameter Set	
- CTFC information		Not Present	
- CHOICE mode		TDD	
- Individual UL CCTrCH information		Not Present	
Deleted UL TrCH information list		Not Present	
Added or Reconfigured UL TrCH information list	A1	1	
- Added or Reconfigured UL TrCH information			
- Uplink transport channel type		DCH	
- UL Transport channel identity		1	
- TFS			
- CHOICE Transport channel type		Dedicated transport channels	
- Dynamic Transport Format Information			
- RLC size		Reference to clause 6.10 Parameter Set	
- Number of TBs and TTI List		(This IE is repeated for TFI number.)	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to clause 6.10 Parameter Set	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		1	
- CHOICE Logical channel List		ALL	
- Semi-static Transport Format Information			
- Transmission time interval		Reference to clause 6.10 Parameter Set	
- Type of channel coding		Reference to clause 6.10 Parameter Set	
- Coding Rate		Reference to clause 6.10 Parameter Set	
- Rate matching attribute		Reference to clause 6.10 Parameter Set	

Information Element	Condition	Value/remark	Version
- CRC size		Reference to clause 6.10 Parameter Set	
CHOICE mode	A1, A3	TDD (no data)	
DL Transport channel information common for all transport channel	A1,A3		
- SCCPCH TFCS		Not Present	
- CHOICE mode		TDD	
- CHOICE DL parameters		Independent (Refer to clause 6)	
Deleted DL TrCH information list	A1,A3	Not Present	
Added or Reconfigured DL TrCH information list		1	
- Added or Reconfigured DL TrCH information			
- Downlink transport channel type		DCH	
- DL Transport channel identity		6	
- CHOICE DL parameters		Same as UL	
- Uplink transport channel type		DCH	
- UL TrCH identity		1	
- DCH quality target			
- BLER Quality value		Reference to clause 6	
Frequency info	A1,A3	Not Present	
Maximum allowed UL TX power		30dBm	
CHOICE channel requirement		Uplink DPCH info	
- Uplink DPCH power control info			
- CHOICE mode		TDD	
- UL Target SIR		Reference to clause 6 Parameter set.	
- CHOICE UL OL PC info		Individually signalled	
- CHOICE TDD option		3.84 Mcps	
- Individual timeslot interference info			
- Individual timeslot interference			
- DPCH Constant Value		Values are used for open loop power control, clause 8 in 3GPP TS 25.331 [34]	
- CHOICE mode		TDD	
- Uplink Timing Advance Control		Not Present	
- UL CCTrCH List			
- TFCS Id		1	
- Time info			
- Activation time		(256+CFN-(CFN MOD 8 + 8))MOD 256	
- Duration		Infinite	
- Common timeslot info			
- 2nd interleaving mode		Reference to clause 6.10 Parameter Set	
- TFCI coding		Reference to clause 6.10 Parameter Set	
- Puncturing Limit		Reference to clause 6.10 Parameter Set	
- Repetition Period		Reference to clause 6.10 Parameter Set	
- Repetition Length		Reference to clause 6.10 Parameter Set	
- First individual timeslot info			
- Timeslot number		The number of an uplink timeslot that has unassigned codes.	
- TFCI existence		TRUE	
- Midamble shift and burst type			
- CHOICE TDD option		3.84 Mcps	
-CHOICE Burst Type			
-Type 1			
-Midamble Allocation Mode		Default	
- Midamble configuration burst type 1 and 3		As defined in 3GPP TS 25.221 [28]	
- First timeslot channelisation codes		Repeated (1,2) for each channelisation code assigned in the slot to meet the needs of clause 6 Parameter Set.	
- Channelisation code		(i/SF) where i denotes an unassigned code matching the SF specified in clause 6 Parameter Set.	
- CHOICE more timeslots		The presence of this IE depends upon the number of resources specified in clause 6 and the number	

Information Element	Condition	Value/remark	Version
CHOICE Mode		of slots in which they are being assigned. TDD (no data)	
Downlink HS-PDSCH Information	A1,A3	Not Present	REL-5
Downlink information common for all radio links	A1,A3		
- Downlink DPCH info common for all RL			
- Timing indicator		Maintain	
- CFN-targetSFN frame offset		Not Present	
- Downlink DPCH power control information			
- CHOICE mode		TDD	
- DPC mode		0 (single)	
- CHOICE TDD mode		3.84 Mcps (no data)	
- Default DPCH Offset Value		Not Present	
Downlink information for per radio link list	A1,A3		
- Downlink information for each radio link			
- CHOICE mode		TDD	
- Primary CCPCH info			
- CHOICE *SyncCase*		Sync Case 1	
- Timeslot		PCCPCH timeslot	
- Cell parameters ID		0	
- SCTD indicator			
- Downlink DPCH info for each RL			
- CHOICE mode		TDD	
- DL CCTrCH List			
- TFCS ID		1	
- Time info			
- Activation time		(256+CFN-(CFN mod 8 + 8))mod 256	
- Duration		infinite	
- Common timeslot info			
- 2nd interleaving mode		Reference to the present document	
- TFCI coding		TRUE	
- Puncturing limit		Reference to clause 6 Parameter set	
- Repetition period		1	
- Repetition length		Empty	
- Downlink DPCH timeslots and codes			
- Individual timeslot info			
- Timeslot number		The number of a downlink timeslot that has unassigned codes.	
- TFCI existence		TRUE	
- Midamble shift and burst type			
- CHOICE TDD option		3.84 Mcps	
-CHOICE Burst Type			
-Type 1			
-Midamble Allocation Mode		Default	
- Midamble configuration burst type 1 and 3		As defined in 3GPP TS 25.221 [28]	
- First timeslot channelisation codes			
- First channelisation code		(i/SF) where i is the lowest numbered code that is being assigned and SF is specified in clause 6 Parameter Set..	
- Last channelisation code		(j/SF) where j is the highest numbered code that is being assigned in the slot.	
- Bitmap		Bitmap of the codes that are being assigned in the slot.	
- CHOICE more timeslots		The presence of this IE depends upon whether the requirements of clause 6 Parameter Set could be met by the codes that have been assigned in the first timeslot.	
- UL CCTrCH TPC List		Not Present	
-SCCPCH information for FACH		Not Present	R99 and Rel-4 only

Condition	Explanation
A1	This IE is needed for transparent mode. In the case of TX and RX test cases, this IE is selected.
A3	This IE is needed for acknowledged mode.
NOTE: In the case of Performance Requirement and RRM test cases, A1 or A3 is selected according to the combination of UL and DL channels or test requirements.	

Contents of RADIO BEARER SETUP message: AM or UM (1.28 Mcps TDD)

Information Element	Condition	Value/remark	Version
Message Type	A1,A3		
RRC transaction identifier		Arbitrarily selects an integer between 0 and 3	
Integrity check info			
- message authentication code		SS calculates the value of MAC-I for this message and writes to this IE. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.	
- RRC message sequence number		SS provides the value of this IE, from its internal counter.	
Integrity protection mode info		Not Present	
Ciphering mode info		Not Present	
Activation time		(256+CFN-(CFN MOD 8 + 8))MOD 256	
New U-RNTI		Not Present	
New C-RNTI		Not Present	
New DSCH-RNTI		Not Present	R99 and Rel-4 only
New H-RNTI		Not Present	REL-5
RRC State indicator		CELL_DCH	
UTRAN DRX cycle length coefficient		Not Present	
CN information info		Not Present	
URA identity		Not Present	
- Signalling RB information to setup		Not Present	
- RAB information for setup list	A1		
- RAB information for setup			
- RAB info			
- RAB identity		0000 0001B The first/ leftmost bit of the bit string contains the most significant bit of the RAB identity.	
- CN domain identity		CS domain	
- NAS Synchronization Indicator		Not Present	
- Re-establishment timer		UseT314	
- RB information to setup list			
- RB information to setup			
- RB identity		10	
- PDCP info		Not Present	
- CHOICE RLC info type		RLC info	
- CHOICE Uplink RLC mode		TM RLC	
- Transmission RLC discard		Not Present	
- Segmentation indication		FALSE	
- CHOICE Downlink RLC mode		TM RLC	
- Segmentation indication		FALSE	
- RB mapping info			
- Information for each multiplexing option			
- RLC logical channel mapping indicator		Not Present	
- Number of uplink RLC logical channels		1	
- Uplink transport channel type		DCH	
- UL Transport channel identity		1	
- Logical channel identity		Not Present	
- CHOICE RLC size list		Configured	
- MAC logical channel priority		7	
- Downlink RLC logical channel info			
- Number of downlink RLC logical channels		1	

Information Element	Condition	Value/remark	Version
- Downlink transport channel type		DCH	
- DL DCH Transport channel identity		6	
- DL DSCH Transport channel identity		Not Present	
- Logical channel identity		Not Present	
RAB information for setup list	A3		
- RAB information for setup			
- RAB info			
- RAB identity		0000 0101B The first/ leftmost bit of the bit string contains the most significant bit of the RAB identity.	
- CN domain identity		PS domain	
- NAS Synchronization Indicator		Not Present	
- Re-establishment timer		UseT315	
- RB information to setup list			
- RB information to setup			
- RB identity		20	
- PDCP info		Not Present	
- CHOICE RLC info type		RLC info	
- CHOICE Uplink RLC mode		AM RLC	
- Transmission RLC discard			
- CHOICE SDU discard mode		No discard	
- MAX_DAT		15	
- Transmission window size		128	
- Timer_RST		500	
- Max_RST		4	
- Polling info			
- Timer_poll_prohibit		200	
- Timer_poll		200	
- Poll_SDU		1	
- Last transmission PDU poll		TRUE	
- Last retransmission PDU poll		TRUE	
- Poll_Windows		99	
- Timer_poll_periodic		Not Present	
- CHOICE Downlink RLC mode		AM RLC	
- In-sequence delivery		TRUE	
- Receiving window size		128	
- Downlink RLC status info			
- Timer_status_prohibit		200	
- Timer_EPC		200	
- Missing PDU indicator		TRUE	
- Timer_STATUS_periodic		Not Present	
- RB mapping info			
- Information for each multiplexing option		2RBMuxOptions	
- RLC logical channel mapping indicator		Not Present	
- Number of uplink RLC logical channels		1	
- Uplink transport channel type		DCH	
- UL Transport channel identity		1	
- Logical channel identity		Not Present	
- CHOICE RLC size list		Configured	
- MAC logical channel priority		8	
- Downlink RLC logical channel info			
- Number of downlink RLC logical channels		1	
- Downlink transport channel type		DCH	
- DL DCH Transport channel identity		6	
- DL DSCH Transport channel identity		Not Present	
- Logical channel identity		Not Present	
- RLC logical channel mapping indicator		Not Present	
- Number of uplink RLC logical		1	

Information Element	Condition	Value/remark	Version
channels			
- Uplink transport channel type		RACH	
- UL Transport channel identity		Not Present	
- Logical channel identity		7	
- CHOICE RLC size list		Explicit List	
- RLC size index		Reference to clause 6 Parameter Set	
- MAC logical channel priority		8	
- Downlink RLC logical channel info			
- Number of downlink RLC logical channels		1	
- Downlink transport channel type		FACH	
- DL DCH Transport channel identity		Not Present	
- DL DSCH Transport channel identity		Not Present	
- Logical channel identity		Not Present	
RB information to be affected list	A1,A3	Not Present	
Downlink counter synchronization info		Not Present	
UL Transport channel information for all transport channels	A1,A3		
- PRACH TFCS		Not Present	
- CHOICE mode		TDD	
-Individual UL CCTrCH information			
- TFCS ID		(This IE is repeated for TFC number.)	
- Allowed Transport Format combination		0 to MaxTFCvalue-1 (MaxTFCValue is refer to clause 6 Parameter Set.)	
- PRACH TFCS		(This IE is repeated for TFC number.)	
- CHOICE TFCI signalling		Normal	
- TFCI Field 1 information			
- TFCS complete reconfigure information			
- CHOICE TFCS Size		Number of used bits must be enough to cover all combinations of CTFC from clauses 6. Refer to clause 6 Parameter Set	
- CTFC information		Not Present	
- CHOICE mode		TDD	
- Individual UL CCTrCH information		Not Present	
Deleted UL TrCH information list		Not Present	
Added or Reconfigured UL TrCH information list	A1,A3	1	
- Added or Reconfigured UL TrCH information			
- Uplink transport channel type		DCH	
- UL Transport channel identity		1	
- TFS			
- CHOICE Transport channel type		Dedicated transport channels	
- Dynamic Transport Format Information			
- RLC size		Reference to clause 6 Parameter Set	
- Number of TBs and TTI List		(This IE is repeated for TFI number.)	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		Reference to clause 6 Parameter Set	
- Transmission Time Interval		Not Present	
- Number of Transport blocks		1	
- CHOICE Logical channel List		ALL	
- Semi-static Transport Format Information			
- Transmission time interval		Reference to clause 6 Parameter Set	
- Type of channel coding		Reference to clause 6 Parameter Set	
- Coding Rate		Reference to clause 6 Parameter Set	
- Rate matching attribute		Reference to clause 6 Parameter Set	
- CRC size		Reference to clause 6 Parameter Set	
CHOICE mode	A1, A3	TDD (no data)	
DL Transport channel information common for all transport channel	A1,A3		
- SCCPCH TFCS		Not Present	

Information Element	Condition	Value/remark	Version
- CHOICE mode		TDD	
- CHOICE DL parameters		Independent (Refer to clause 6)	
Deleted DL TrCH information list	A1,A3	Not Present	
Added or Reconfigured DL TrCH information list		1	
- Added or Reconfigured DL TrCH information			
- Downlink transport channel type		DCH	
- DL Transport channel identity		6	
- CHOICE DL parameters		Same as UL	
- Uplink transport channel type		DCH	
- UL TrCH identity		1	
- DCH quality target			
- BLER Quality value		Reference to clause 6	
Frequency info	A1,A3	Not Present	
Maximum allowed UL TX power		30dBm	
CHOICE channel requirement		Uplink DPCH info	
- Uplink DPCH power control info			
- CHOICE mode		TDD	
- UL Target SIR		Reference to clause 6 Parameter set.	
- CHOICE UL OL PC info		Individually signalled	
- CHOICE TDD option		1.28 Mcps	
- TPC step size		1 dB	
- Primary CCPCH Tx Power		Not Present	
- CHOICE mode		TDD	
- Uplink Timing Advance Control		Not Present	
- UL CCTrCH List			
- TFCS Id		1	
- Time info			
- Activation time		(256+CFN-(CFN MOD 8 + 8))MOD 256	
- Duration		Infinite	
- Common timeslot info			
- 2nd interleaving mode		Reference to clause 6 Parameter Set	
- TFCI coding		Reference to clause 6 Parameter Set	
- Puncturing Limit		Reference to clause 6 Parameter Set	
- Repetition Period		Reference to clause 6 Parameter Set	
- Repetition Length		Reference to clause 6 Parameter Set	
- First individual timeslot info			
- Timeslot number		The number of an uplink timeslot that has unassigned codes.	
- TFCI existence		TRUE	
- Midamble shift and burst type			
- CHOICE TDD option		1.28 Mcps	
- Midamble allocation mode		Default	
- Midamble configuration		16	
- CHOICE TDD option		1.28 Mcps TDD	
- Modulation		QPSK	
- SS-TPC Symbols		1	
- CHOICE Mode		TDD	
- First timeslot channelisation codes		Repeated (1,2) for each channelisation code assigned in the slot to meet the needs of clause 6 Parameter Set.	
- Channelisation code		(i/SF) where i denotes an unassigned code matching the SF specified in clause 6 Parameter Set.	
- CHOICE more timeslots		The presence of this IE depends upon the number of resources specified in clause 6 and the number of slots in which they are being assigned.	
CHOICE Mode		TDD (no data)	
Downlink HS-PDSCH Information	A1,A3	Not Present	REL-5
Downlink information common for all radio links	A1,A3		
- Downlink DPCH info common for all RL			

Information Element	Condition	Value/remark	Version
- Timing indicator		Maintain	
- CFN-targetSFN frame offset		Not Present	
- Downlink DPCH power control information			
- CHOICE mode		TDD	
- TPC step size		1 dB	
- CHOICE TDD mode		1.28 Mcps	
- TSTD indicator		TRUE	
- Default DPCH Offset Value		Not Present	
Downlink information for per radio link list	A1,A3		
- Downlink information for each radio link			
- CHOICE mode		TDD	
- Primary CCPCH info			
- CHOICE TDD option		1.28 Mcps	
- TSTD indicator		TRUE	
- Cell parameters ID		0	
- Block STTD indicator		FALSE	
- Downlink DPCH info for each RL			
- CHOICE mode		TDD	
- DL CCTrCH List			
- TFCS ID		1	
- Time info			
- Activation time		(256+CFN-(CFN mod 8 + 8))mod 256	
- Duration		Infinite	
- Common timeslot info			
- 2nd interleaving mode		Reference to the present document	
- TFCI coding		TRUE	
- Puncturing limit		Reference to clause 6 Parameter set	
- Repetition period		1	
- Repetition length		Empty	
- Downlink DPCH timeslots and codes			
- Individual timeslot info			
- Timeslot number		The number of a downlink timeslot that has unassigned codes.	
- TFCI existence		TRUE	
- Midamble shift and burst type			
- CHOICE TDD option		1.28 Mcps	
-Midamble Allocation Mode		Default	
- Midamble configuration		16	
- Modulation		QPSK	
- SS-TPC Symbols		1	
- First timeslot channelisation codes			
- First channelisation code		(i/SF) where i is the lowest numbered code that is being assigned and SF is specified in clause 6 Parameter Set.	
- Last channelisation code		(j/SF) where j is the highest numbered code that is being assigned in the slot.	
- Bitmap		Bitmap of the codes that are being assigned in the slot.	
- CHOICE more timeslots		The presence of this IE depends upon whether the requirements of clause 6 Parameter Set could be met by the codes that have been assigned in the first timeslot.	
- UL CCTrCH TPC List		Not Present	
-SCCPCH information for FACH		Not Present	R99 and Rel-4 only

Condition	Explanation
A1	This IE is needed for CS RAB
A3	This IE is needed for PS RAB.

Contents of RRC CONNECTION RELEASE message: UM

Information Element	Value/remark	Version
Message Type		
U-RNTI	This IE is set to the following value when the message is transmitted on the DCCCH. When transmitted on CDCCH, this is absent.	R99, REL-4
- SRNC identity	0000 0000 0001B	
- S-RNTI	0000 0000 0000 0000 0001B	
CHOICE identity type	This IE is set to the following value when the message is transmitted on the CCCH. When transmitted on DCCH, this is absent.	REL-5
- U-RNTI		
- SRNC identity	0000 0000 0001B	
- S-RNTI	0000 0000 0000 0000 0001B	
- Group identity	[FFS]	
- Group release information	[FFS]	
RRC transaction identifier	Arbitrarily selects an integer between 0 and 3	
Integrity check info	This IE is present when this message is transmitted on downlink DCCH. Else, this IE and the sub-IEs are omitted.	
- Message authentication code	SS calculates the value of MAC-I for this message and writes to this IE. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.	
- RRC Message sequence number	SS provides the value of this IE, from its internal counter.	
N308	2 (for CELL_DCH state). Not Present (for UE in other connected mode states).	
Release cause	Normal event	
Rplmn information	Not Present	

Contents of RRC CONNECTION SETUP message: UM (3.84 Mcps TDD)

Information Element	Value/remark	Version
Message Type		
Initial UE identity	Select the same identity as in the IE "Initial UE Identity" in received RRC CONNECTION REQUEST" message	
RRC transaction identifier	Arbitrarily selects an integer between 0 and 3	
Activation time	Not Present(Now)	
New U-RNTI		
- SRNC identity	0000 0000 0001B	
- S-RNTI	0000 0000 0000 0000 0001B	
New C-RNTI	Not Present	
RRC State Indicator	CELL_DCH	
UTRAN DRX cycle length coefficient	9	
Capability update requirement		
- UE radio access FDD capability update requirement	FALSE	
- UE radio access TDD capability update requirement	TRUE	
- System specific capability update requirement list	GSM	
CHOICE *specification mode*	Complete specification	REL-5
- Complete specification		REL-5
- Signalling RB information to setup list	4 SRBs	
- Signalling RB information to setup	(UM DCCH for RRC)	
- RB identity	Not Present	
- CHOICE RLC info type	RLC info	
- CHOICE Uplink RLC mode	UM RLC	
- Transmission RLC discard	Not Present	
- CHOICE Downlink RLC mode	UM RLC	
- RB mapping info		
- Information for each multiplexing option	2 RBMuxOptions	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	DCH	

Information Element	Value/remark	Version
- UL Transport channel identity	5	
- Logical channel identity	1	
- CHOICE RLC size list	Configured	
- MAC logical channel priority	1	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	DCH	
- DL DCH Transport channel identity	10	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	1	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	RACH	
- UL Transport channel identity	Not Present	
- Logical channel identity	1	
- CHOICE RLC size list	Configured	
- RLC size index	Reference to clause 6 Parameter Set	
- MAC logical channel priority	1	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	FACH	
- DL DCH Transport channel identity	Not Present	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	1	
- Signalling RB information to setup	(AM DCCH for RRC)	
- RB identity	Not Present	
- CHOICE RLC info type		
- RLC info		
- CHOICE Uplink RLC mode	AM RLC	
- Transmission RLC discard		
- SDU discard mode	No Discard	
- MAX_DAT	415	
- Transmission window size	128	
- Timer_RST	500	
- Max_RST	4	
- Polling info		
- Timer_poll_prohibit	200	
- Timer_poll	200	
- Poll_PDU	Not Present	
- Poll_SDU	1	
- Last transmission PDU poll	TRUE	
- Last retransmission PDU poll	TRUE	
- Poll_Windows	99	
- Timer_poll_periodic	Not Present	
- CHOICE Downlink RLC mode	AM RLC	
- In-sequence delivery	TRUE	
- Receiving window size	128	
- Downlink RLC status info		
- Timer_status_prohibit	200	
- Timer_EPC	Not Present	
- Missing PDU indicator	TRUE	
- Timer_STATUS_periodic	Not Present	
- RB mapping info		
- Information for each multiplexing option	2 RBMuxOptions	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	DCH	
- UL Transport channel identity	5	
- Logical channel identity	2	
- CHOICE RLC size list	Configured	
- MAC logical channel priority	2	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	DCH	
- DL DCH Transport channel identity	10	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	2	

Information Element	Value/remark	Version
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	RACH	
- UL Transport channel identity	Not Present	
- Logical channel identity	2	
- CHOICE RLC size list	Explicit List	
- RLC size index	Reference to clause 6 Parameter Set	
- MAC logical channel priority	2	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	FACH	
- DL DCH Transport channel identity	Not Present	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	2	
- Signalling RB information to setup	(AM DCCH for NAS_DT High priority)	
- RB identity	Not Present	
- CHOICE RLC info type		
- RLC info		
- CHOICE Uplink RLC mode	AM RLC	
- Transmission RLC discard		
- SDU discard mode	No Discard	
- MAX_DAT	415	
- Transmission window size	128	
- Timer_RST	500	
- Max_RST	4	
- Polling info		
- Timer_poll_prohibit	200	
- Timer_poll	200	
- Poll_PDU	Not Present	
- Poll_SDU	1	
- Last transmission PDU poll	TRUE	
- Last retransmission PDU poll	TRUE	
- Poll_Windows	99	
- Timer_poll_periodic	Not Present	
- CHOICE Downlink RLC mode	AM RLC	
- In-sequence delivery	TRUE	
- Receiving window size	128	
- Downlink RLC status info		
- Timer_status_prohibit	200	
- Timer_EPC	Not Present	
- Missing PDU indicator	TRUE	
- Timer_STATUS_periodic	Not Present	
- RB mapping info		
- Information for each multiplexing option	2 RBMuxOptions	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	DCH	
-UL Transport channel identity	5	
- Logical channel identity	3	
- CHOICE RLC size list	Configured	
- MAC logical channel priority	3	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	DCH	
- DL DCH Transport channel identity	10	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	3	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	RACH	
- UL Transport channel identity	Not Present	
- Logical channel identity	3	
- CHOICE RLC size list	Explicit List	
- RLC size index	Reference to clause 6 Parameter Set	
- MAC logical channel priority	3	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	

Information Element	Value/remark	Version
- Downlink transport channel type	FACH	
- DL DCH Transport channel identity	Not Present	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	3	
- Signalling RB information to setup	(AM DCCH for NAS_DT Low priority)	
- RB identity	Not Present	
- CHOICE RLC info type		
- RLC info		
- CHOICE Uplink RLC mode	AM RLC	
- Transmission RLC discard		
- SDU discard mode	No Discard	
- MAX_DAT	15	
- Transmission window size	128	
- Timer_RST	500	
- Max_RST	4	
- Polling info		
- Timer_poll_prohibit	200	
- Timer_poll	200	
- Poll_PDU	Not Present	
- Poll_SDU	1	
- Last transmission PDU poll	TRUE	
- Last retransmission PDU poll	TRUE	
- Poll_Windows	99	
- Timer_poll_periodic	Not Present	
- CHOICE Downlink RLC mode	AM RLC	
- In-sequence delivery	TRUE	
- Receiving window size	128	
- Downlink RLC status info		
- Timer_status_prohibit	200	
- Timer_EPC	Not Present	
- Missing PDU indicator	TRUE	
- Timer_STATUS_periodic	Not Present	
- RB mapping info		
- Information for each multiplexing option	2 RBMuxOptions	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	DCH	
- UL Transport channel identity	5	
- Logical channel identity	4	
- CHOICE RLC size list	Configured	
- MAC logical channel priority	4	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	DCH	
- DL DCH Transport channel identity	10	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	4	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	RACH	
- UL Transport channel identity	Not Present	
- Logical channel identity	4	
- CHOICE RLC size list	Explicit List	
- RLC size index	Reference to clause 6 Parameter Set	
- MAC logical channel priority	4	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	FACH	
- DL DCH Transport channel identity	Not Present	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	4	
UL Transport channel information for all transport channels		
- PRACH TFCS	Not Present	
- CHOICE Mode	TDD	
-Individual UL CCTrCH information		
- UL TFCS ID	(This IE is repeated for TFC number.)	

Information Element	Value/remark	Version
- UL TFCS		
- TFC subset	Default value is the complete existing set of transport format combinations	
- Allowed Transport Format combination	0 to MaxTFCvalue-1 (MaxTFCValue is refer to clause 6 Parameter Set.)	
- PRACH TFCS	(This IE is repeated for TFC number.)	
- CHOICE TFCI signalling	Normal	
- TFCI Field 1 information		
- TFCS complete reconfigure information		
- CHOICE TFCS Size	Number of used bits must be enough to cover all combinations of CTFC from clauses 6. Refer to clause 6 Parameter Set	
- CTFC information	Not Present	
- CHOICE mode	TDD	
- Individual UL CCTrCH information	Not Present	
Deleted TrCH information list	Not Present	
Added or Reconfigured UL TrCH information list	1	
- Added or Reconfigured UL TrCH information		
- Uplink transport channel type	DCH	
- UL Transport channel identity	5	
- TFS		
- CHOICE Transport channel type	Dedicated transport channels	
- Dynamic Transport Format Information		
- RLC size	According to clause 6	
- Number of TBs and TTI List	(This IE is repeated for TFI number)	
- CHOICE mode	TDD	
- Transmission Time Interval	According to clause 6	
- CHOICE Logical channel list	All	
- Semi-static Transport Format information		
DL Transport channel information common for all transport channel		
- SCCPCH TFCS	Not Present	
- CHOICE mode	TDD	
- CHOICE DL parameters	Same as UL	
Added or Reconfigured DL TrCH information list	1	
- Added or Reconfigured DL TrCH information		
- Downlink transport channel type	DCH	
- DL Transport channel identity	10	
- CHOICE DL parameters	Same as UL	
- Uplink transport channel type	DCH	
- UL TrCH Identity	5	
- DCH quality target		
- BLER Quality value	Reference to the present document	
Frequency info	Not Present	
Maximum allowed UL TX power	Not Present	
CHOICE channel requirement	Uplink DPCH info	
- Uplink DPCH power control info		
- CHOICE mode	TDD	
- CHOICE *TDD option*	3.84 Mcps	
- UL target SIR	Reference to clause 6 Parameter set	
- CHOICE mode	TDD	
- CHOICE *UL OL PC info*	Individually signalled	
- CHOICE *TDD option*	3.84 Mcps	
- Individual timeslot interference info	Not Present	
- Individual timeslot interference		
- DPCH Constant Value		
- Primary CCPCH Tx Power	Not Present	
- Time info		
- Activation time	(256+CFN-(CFN MOD 8 + 8))MOD 256	
- Duration	Infinite	
- Common timeslot info		
- 2nd interleaving mode	Reference to clause 6.10 Parameter Set	
- TFCI coding	Reference to clause 6.10 Parameter Set	
- Puncturing Limit	Reference to clause 6.10 Parameter Set	
- Repetition Period	Reference to clause 6.10 Parameter Set	
- Repetition Length	Reference to clause 6.10 Parameter Set	

Information Element	Value/remark	Version
- Uplink DPCH timeslots and codes	Default is to use the old timeslots and codes	
- CPCH SET Info	(no data)	R99 and Rel-4 only
Downlink information common for all radio links		
- Downlink DPCH info common for all RL		
- Timing Indication	Initialize	
- CFN-targetSFN frame offset	Not Present	
- Downlink DPCH power control information		
- DPC mode	0 (single)	
- CHOICE mode	TDD	
- CHOICE TDD option	3.84 Mcps (no data)	
- Default DPCH Offset Value	Arbitrary set to value 0..306688 by step of 512	
Downlink information for per radio links list		
-Downlink information for each radio links		
- CHOICE mode	TDD	
- Primary CCPCH info		
- CHOICE *SyncCase*	Sync Case 1	
- Timeslot	PCCPCH timeslot	
- Cell parameters ID	0	
- SCTD indicator		
- Downlink DPCH info for each RL		
- CHOICE mode	TDD	
- DL CCTrCH List		
- TFCS ID	1	
- Time info		
- Activation time	(256+CFN-(CFN mod 8 + 8))mod 256	
- Duration	infinite	
- Common timeslot info		
- 2nd interleaving mode	Reference to the present document	
- TFCI coding	TRUE	
- Puncturing limit	Reference to clause 6 Parameter set	
- Repetition period	1	
- Repetition length	Empty	
- Downlink DPCH timeslots and codes		
- CHOICE *more timeslots*		
- CHOICE TDD option	3.84 Mcps	
- Timeslot number	The number of a downlink timeslot that has unassigned codes in a frame.	
- Individual timeslot info		
- TFCI existence	TRUE	
- Midamble shift and burst type		
- CHOICE TDD option	3.84 Mcps	
-CHOICE Burst Type		
-Type 1		
-Midamble Allocation Mode	Default	
- Midamble configuration burst type 1 and 3	As defined in 3GPP TS 25.221 [28]	
- First timeslot channelisation codes		
- First channelisation code	(i/SF) where i is the lowest numbered code that is being assigned and SF is specified in clause 6 Parameter Set..	
- Last channelisation code	(j/SF) where j is the highest numbered code that is being assigned in the slot.	
- CHOICE more timeslots	The presence of this IE depends upon whether the requirements of clause 6 Parameter Set could be met by the codes that have been assigned in the first timeslot.	
- UL CCTrCH TPC List	Not Present	
-SCCPCH information for FACH	Not Present	R99 and Rel-4 only

Contents of RRC CONNECTION SETUP message: UM (1.28 Mcps TDD)

Information Element	Value/remark	Version
Message Type		
Initial UE identity	Select the same identity as in the IE "Initial UE Identity" in received RRC CONNECTION REQUEST" message	
RRC transaction identifier	Arbitrarily selects an integer between 0 and 3	
Activation time	Not Present(Now)	
New U-RNTI		
- SRNC identity	0000 0000 0001B	
- S-RNTI	0000 0000 0000 0000 0001B	
New C-RNTI	Not Present	
RRC State Indicator	CELL_DCH	
UTRAN DRX cycle length coefficient	9	
Capability update requirement		
- UE radio access FDD capability update requirement	FALSE	
- UE radio access TDD capability update requirement	TRUE	
- System specific capability update requirement list	GSM	
CHOICE *specification mode*	Complete specification	REL-5
- Complete specification		REL-5
- Signalling RB information to setup list	4 SRBs	
- Signalling RB information to setup	(UM DCCH for RRC)	
- RB identity	Not Present	
- CHOICE RLC info type	RLC info	
- CHOICE Uplink RLC mode	UM RLC	
- Transmission RLC discard	Not Present	
- CHOICE Downlink RLC mode	UM RLC	
- RB mapping info		
- Information for each multiplexing option	2 RBMuxOptions	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	DCH	
- UL Transport channel identity	5	
- Logical channel identity	1	
- CHOICE RLC size list	Configured	
- MAC logical channel priority	1	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	DCH	
- DL DCH Transport channel identity	10	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	1	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	RACH	
- UL Transport channel identity	Not Present	
- Logical channel identity	1	
- CHOICE RLC size list	Configured	
- RLC size index	Reference to clause 6 Parameter Set	
- MAC logical channel priority	1	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	FACH	
- DL DCH Transport channel identity	Not Present	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	1	
- Signalling RB information to setup	(AM DCCH for RRC)	
- RB identity	Not Present	
- CHOICE RLC info type		
- RLC info		
- CHOICE Uplink RLC mode	AM RLC	
- Transmission RLC discard		
- SDU discard mode	No Discard	
- MAX_DAT	415	

Information Element	Value/remark	Version
- Transmission window size	128	
- Timer_RST	500	
- Max_RST	4	
- Polling info		
- Timer_poll_prohibit	200	
- Timer_poll	200	
- Poll_PDU	Not Present	
- Poll_SDU	1	
- Last transmission PDU poll	TRUE	
- Last retransmission PDU poll	TRUE	
- Poll_Windows	99	
- Timer_poll_periodic	Not Present	
- CHOICE Downlink RLC mode	AM RLC	
- In-sequence delivery	TRUE	
- Receiving window size	128	
- Downlink RLC status info		
- Timer_status_prohibit	200	
- Timer_EPC	Not Present	
- Missing PDU indicator	TRUE	
- Timer_STATUS_periodic	Not Present	
- RB mapping info		
- Information for each multiplexing option	2 RBMuxOptions	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	DCH	
- UL Transport channel identity	5	
- Logical channel identity	2	
- CHOICE RLC size list	Configured	
- MAC logical channel priority	2	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	DCH	
- DL DCH Transport channel identity	10	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	2	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	RACH	
- UL Transport channel identity	Not Present	
- Logical channel identity	2	
- CHOICE RLC size list	Explicit List	
- RLC size index	Reference to clause 6 Parameter Set	
- MAC logical channel priority	2	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	FACH	
- DL DCH Transport channel identity	Not Present	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	2	
- Signalling RB information to setup	(AM DCCH for NAS_DT High priority)	
- RB identity	Not Present	
- CHOICE RLC info type		
- RLC info		
- CHOICE Uplink RLC mode	AM RLC	
- Transmission RLC discard		
- SDU discard mode	No Discard	
- MAX_DAT	415	
- Transmission window size	128	
- Timer_RST	500	
- Max_RST	4	
- Polling info		
- Timer_poll_prohibit	200	
- Timer_poll	200	
- Poll_PDU	Not Present	
- Poll_SDU	1	
- Last transmission PDU poll	TRUE	
- Last retransmission PDU poll	TRUE	

Information Element	Value/remark	Version
- Poll_Windows	99	
- Timer_poll_periodic	Not Present	
- CHOICE Downlink RLC mode	AM RLC	
- In-sequence delivery	TRUE	
- Receiving window size	128	
- Downlink RLC status info		
- Timer_status_prohibit	200	
- Timer_EPC	Not Present	
- Missing PDU indicator	TRUE	
- Timer_STATUS_periodic	Not Present	
- RB mapping info		
- Information for each multiplexing option	2 RBMuxOptions	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	DCH	
-UL Transport channel identity	5	
- Logical channel identity	3	
- CHOICE RLC size list	Configured	
- MAC logical channel priority	3	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	DCH	
- DL DCH Transport channel identity	10	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	3	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	RACH	
- UL Transport channel identity	Not Present	
- Logical channel identity	3	
- CHOICE RLC size list	Explicit List	
- RLC size index	Reference to clause 6 Parameter Set	
- MAC logical channel priority	3	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	FACH	
- DL DCH Transport channel identity	Not Present	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	3	
- Signalling RB information to setup	(AM DCCH for NAS_DT Low priority)	
- RB identity	Not Present	
- CHOICE RLC info type		
- RLC info		
- CHOICE Uplink RLC mode	AM RLC	
- Transmission RLC discard		
- SDU discard mode	No Discard	
- MAX_DAT	415	
- Transmission window size	128	
- Timer_RST	500	
- Max_RST	4	
- Polling info		
- Timer_poll_prohibit	200	
- Timer_poll	200	
- Poll_PDU	Not Present	
- Poll_SDU	1	
- Last transmission PDU poll	TRUE	
- Last retransmission PDU poll	TRUE	
- Poll_Windows	99	
- Timer_poll_periodic	Not Present	
- CHOICE Downlink RLC mode	AM RLC	
- In-sequence delivery	TRUE	
- Receiving window size	128	
- Downlink RLC status info		
- Timer_status_prohibit	200	
- Timer_EPC	Not Present	
- Missing PDU indicator	TRUE	
- Timer_STATUS_periodic	Not Present	

Information Element	Value/remark	Version
- RB mapping info		
- Information for each multiplexing option	2 RBMuxOptions	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	DCH	
- UL Transport channel identity	5	
- Logical channel identity	4	
- CHOICE RLC size list	Configured	
- MAC logical channel priority	4	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	DCH	
- DL DCH Transport channel identity	10	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	4	
- RLC logical channel mapping indicator	Not Present	
- Number of RLC logical channels	1	
- Uplink transport channel type	RACH	
- UL Transport channel identity	Not Present	
- Logical channel identity	4	
- CHOICE RLC size list	Explicit List	
- RLC size index	Reference to clause 6 Parameter Set	
- MAC logical channel priority	4	
- Downlink RLC logical channel info		
- Number of RLC logical channels	1	
- Downlink transport channel type	FACH	
- DL DCH Transport channel identity	Not Present	
- DL DSCH Transport channel identity	Not Present	
- Logical channel identity	4	
UL Transport channel information for all transport channels		
- PRACH TFCS	Not Present	
- CHOICE Mode	TDD	
-Individual UL CCTrCH information		
- UL TFCS ID	(This IE is repeated for TFC number.)	
- UL TFCS		
- TFC subset	Default value is the complete existing set of transport format combinations	
- Allowed Transport Format combination	0 to MaxTFCvalue-1 (MaxTFCValue is refer to clause 6 Parameter Set.)	
- PRACH TFCS	(This IE is repeated for TFC number.)	
- CHOICE TFCI signalling	Normal	
- TFCI Field 1 information		
- TFCS complete reconfigure information		
- CHOICE TFCS Size	Number of used bits must be enough to cover all combinations of CTFC from clauses 6. Refer to clause 6 Parameter Set	
- CTFC information	Not Present	
- CHOICE mode	TDD	
- Individual UL CCTrCH information	Not Present	
Deleted TrCH information list	Not Present	
Added or Reconfigured UL TrCH information list	1	
- Added or Reconfigured UL TrCH information		
- Uplink transport channel type	DCH	
- UL Transport channel identity	5	
- TFS		
- CHOICE Transport channel type	Dedicated transport channels	
- Dynamic Transport Format Information		
- RLC size	According to clause 6	
- Number of TBs and TTI List	(This IE is repeated for TFI number)	
- CHOICE mode	TDD	
- Transmission Time Interval	According to clause 6	
- CHOICE Logical channel list	All	
- Semi-static Transport Format information		
DL Transport channel information common for all transport channel		

Information Element	Value/remark	Version
- SCCPCH TFCS	Not Present	
- CHOICE mode	TDD	
- CHOICE DL parameters	Same as UL	
Added or Reconfigured DL TrCH information list	1	
- Added or Reconfigured DL TrCH information		
- Downlink transport channel type	DCH	
- DL Transport channel identity	10	
- CHOICE DL parameters	Same as UL	
- Uplink transport channel type	DCH	
- UL TrCH Identity	5	
- DCH quality target		
- BLER Quality value	Reference to the present document	
Frequency info	Not Present	
Maximum allowed UL TX power	Not Present	
CHOICE channel requirement	Uplink DPCH info	
- Uplink DPCH power control info		
- CHOICE mode	TDD	
- CHOICE *TDD option*	1.28 Mcps	
- $PRX_{PDPCHdes}$	Reference to clause 6 Parameter set	
- CHOICE mode	TDD	
- CHOICE *UL OL PC info*	Individually signalled	
- CHOICE *TDD option*	1.28 Mcps	
- TPC step size	Not Present	
- Primary CCPCH Tx Power	Not Present	
- Primary CCPCH Tx Power	Not Present	
- Time info		
- Activation time	(256+CFN-(CFN MOD 8 + 8))MOD 256	
- Duration	Infinite	
- Common timeslot info		
- 2nd interleaving mode	Reference to clause 6 Parameter Set	
- TFCI coding	Reference to clause 6 Parameter Set	
- Puncturing Limit	Reference to clause 6 Parameter Set	
- Repetition Period	Reference to clause 6 Parameter Set	
- Repetition Length	Reference to clause 6 Parameter Set	
- Uplink DPCH timeslots and codes	Default is to use the old timeslots and codes	
- CPCH SET Info	(no data)	R99 and Rel-4 only
Downlink information common for all radio links		
- Downlink DPCH info common for all RL		
- Timing Indication	Initialize	
- CFN-targetSFN frame offset	Not Present	
- Downlink DPCH power control information		
- DPC mode	0 (single)	
- CHOICE mode	TDD	
- CHOICE TDD option	1.28 Mcps	
- TSTD indicator	TRUE	
- Default DPCH Offset Value	Arbitrary set to value 0..306688 by step of 512	
Downlink information for per radio links list		
-Downlink information for each radio links		
- CHOICE mode	TDD	
- Primary CCPCH info		
- CHOICE *SyncCase*	Sync Case 1	
- Timeslot	PCCPCH timeslot	
- Cell parameters ID	0	
- SCTD indicator		
- Downlink DPCH info for each RL		
- CHOICE mode	TDD	
- DL CCTrCH List		
- TFCS ID	1	
- Time info		
- Activation time	(256+CFN-(CFN mod 8 + 8))mod 256	
- Duration	infinite	
- Common timeslot info		
- 2nd interleaving mode	Reference to the present document	
- TFCI coding	TRUE	

Information Element	Value/remark	Version
- Puncturing limit	Reference to clause 6 Parameter set	
- Repetition period	1	
- Repetition length	Empty	
- Downlink DPCH timeslots and codes		
- CHOICE *more timeslots*		
- CHOICE TDD option	1.28 Mcps	
- Timeslot number	The number of a downlink timeslot that has unassigned codes in a subframe.	
- Individual timeslot info		
- TFCI existence	TRUE	
- Midamble shift and burst type		
- CHOICE TDD option	1.28 Mcps	
-CHOICE Burst Type		
-Midamble Allocation Mode	Default	
- Midamble configuration	As defined in 3GPP TS 25.221 [28]	
- First timeslot channelisation codes		
- First channelisation code	(i/SF) where i is the lowest numbered code that is being assigned and SF is specified in clause 6 Parameter Set.	
- Last channelisation code	(j/SF) where j is the highest numbered code that is being assigned in the slot.	
- CHOICE more timeslots	The presence of this IE depends upon whether the requirements of clause 6 Parameter Set could be met by the codes that have been assigned in the first timeslot.	
- UL CCTrCH TPC List	Not Present	
-SCCPCH information for FACH	Not Present	R99 and Rel-4 only

Contents of SECURITY MODE COMMAND message: AM

Information Element	Condition	Value/remark
Message Type	A1, A2	
RRC transaction identifier		Arbitrarily selects an integer between 0 and 3
Integrity check info		
- Message authentication code		Set to an arbitrarily selected 32-bits integer. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I.
- RRC Message Sequence Number		Set to an arbitrarily selected integer between 0 and 15
Security capability		
- Ciphering algorithm capability		
- UEA0		If the UE has indicated support for ciphering algorithm UEA0 in the IE "security capability" in the RRC CONNECTION SETUP COMPLETE message, this IE is set to TRUE.
- UEA1		If the UE has indicated support for ciphering algorithm UEA1 in the IE "security capability" in the RRC CONNECTION SETUP COMPLETE message, this IE is set to TRUE.
- Spare		Spare 2-15 = FALSE
- Integrity protection algorithm capability		0000000000000010B (UIA1)
- UIA1		TRUE
- Spare		Spare 0 and Spare 2-15 = FALSE
Ciphering mode info		This presence of this IE is dependent on IXIT statements in TS 34.123-2. If ciphering is indicated to be active, this IE present with the values of the sub IEs as stated below. Else, this IE is omitted.
- Ciphering mode command		Start/restart

Information Element	Condition	Value/remark
- Ciphering algorithm		UEA0 or UEA1. The indicated algorithm must be one of the algorithms supported by the UE as indicated in the IE "security capability" in the RRC CONNECTION SETUP COMPLETE message.Use the same ciphering algorithm specified in "ciphering
- Ciphering activation time for DPCH		Not Present
- Radio bearer downlink ciphering activation time info		
- Radio bearer activation time		
- RB identity		1
- RLC sequence number		Current RLC SN+2
- RB identity		2
- RLC sequence number		Current RLC SN+2
- RB identity		3
- RLC sequence number		Current RLC SN + 2
- RB identity		4
- RLC sequence number		Current RLC SN + 2
Integrity protection mode info		
- Integrity protection mode command		Start
- Downlink integrity protection activation info		Not Present
- Integrity protection algorithm		UIA1
- Integrity protection initialisation number		SS selects an arbitrary 32 bits number for FRESH
CN domain identity		CS or PS
UE system specific security capability	A1	Not Checked
UE system specific security capability	A2	
- Inter-RAT UE security capability		
- CHOICE *system*		GSM
- GSM security capability		The indicated algorithms must be the same as the algorithms supported by the UE as indicated in the IE " UE system specific capability " in the RRC CONNECTION SETUP COMPLETE message.

Condition	Explanation
A1	UE not supporting GSM
A2	UE supporting GSM

10 A-GPS GPS Scenarios and Assistance Data

10.1 General

This clause defines the GPS scenarios and assistance data IEs which shall be available for use as specified in all A-GPS test cases in 3GPP TS 34.171 [41] and 3GPP TS 34.123-1 [1].

The information elements are given with reference to 3GPP TS 25.331 [34], where the details are defined.

Clauses 10.2 and 10.3 list the assistance data IEs required for performance testing of UE-based mode detailed in 3GPP TS 34.171 [41], and clauses 10.4 and 10.5 list the assistance data available for performance testing of UE-assisted mode detailed in 3GPP TS 34.171 [41]. Clause 10.6 lists the values of the assistance data IE fields for performance testing detailed in 3GPP TS 34.171 [41].

Clause 10.7 details the GPS scenario and the values of the assistance data IE fields for signalling testing detailed in 3GPP TS 34.123-1 [1], clause 17.2.

The A-GPS minimum performance requirements are defined by assuming that all relevant and valid assistance data is received by the UE in order to perform GPS measurements and/or position calculation. This clause does not include nor consider delays occurring in the various signalling interfaces of the network.

10.1.1 Satellite constellations and assistance data for performance testing

The satellite constellations for performance testing shall consist of 24 satellites. Almanac assistance data shall be available for all these 24 satellites. At least 9 of the satellites shall be visible to the UE (that is above 15 degrees elevation with respect to the UE). Other assistance data shall be available for 9 of these visible satellites. In each test, signals are generated for only a sub-set of these satellites for which other assistance data is available. The number of satellites in this sub-set is specified in the test. The HDOP for the test shall be calculated using this sub-set of satellites. The selection of satellites for this sub-set shall be random and consistent with achieving the required HDOP for the test.

10.1.2 GPS Scenarios for performance testing

This section defines the GPS scenarios that shall be used for all Assisted GPS performance tests defined in TS 34.171 [41].

They have been selected to be consistent with achieving the required HDOP for the Test Cases and so that for each test instance the reference location shall change sufficiently such that the UE shall have to use the new assistance data.

The satellites to be simulated in each test case are specified in clause 10.1.2.5.

The viable running time during which the scenario maintains the required HDOP or HDOPs is given. Once this time has been reached the scenario shall be restarted from its nominal start time.

10.1.2.1 GPS Scenario #1

The following GPS scenario #1 shall be used during the TTFF tests defined in TS 34.171 [41]. The assistance data specified in the following sections for GPS scenario #1 is consistent with this GPS scenario.

Yuma Almanac data: see file GPS 1 Yuma.txt in the GPS data perf zip file specified in annex C.2.

UE location: the UE location is calculated as a random offset from the reference location using the method described in section 10.1.2.4. The reference location is: latitude: 33 degrees 45 minutes 0.019 seconds north, longitude: 84 degrees 23 minutes 0.011 seconds west, (Atlanta USA), height: = 300m.

Nominal start time: 22nd January 2005 (Saturday) 00:08:00.

Viable running time to maintain specified HDOP values: 19 minutes.

Visible satellites available for simulation: PRNs: 2, 6, 10, 17, 18, 21, 26, 29, 30.

Ionospheric model: see values in section 10.6.6.

Tropospheric model: STANAG with SRI equal to 324.8, as defined in [43].

10.1.2.2 GPS Scenario #2

The following GPS scenario #2 shall be used during the TTFF tests defined in TS 34.171 [41]. The assistance data specified in the following sections for GPS scenario #2 is consistent with this GPS scenario.

Yuma Almanac data: see file GPS 2 Yuma.txt in the GPS data perf zip file specified in annex C.2.

UE location: the UE location is calculated as a random offset from the reference location using the method described in section 10.1.2.4. The reference location is: latitude: 37 degrees 48 minutes 59.988 seconds south, longitude: 144 degrees 58 minutes 0.013 seconds east, (Melbourne Australia), height: = 100m.

Nominal start time: 22nd January 2004 (Thursday) 00:08:00.

Viable running time to maintain specified HDOP values: 19 minutes.

Visible satellites available for simulation: PRNs: 3, 11, 14, 15, 18, 22, 23, 25, 31.

Ionospheric model: see values in section 10.6.6.

Tropospheric model: STANAG with SRI equal to 324.8, as defined in [43].

10.1.2.3 GPS Scenario #3

The following GPS scenario #3 shall be used during the Moving Scenario and Periodic Update test case defined in TS 34.171 [41]. The assistance data specified in the following sections for GPS scenario #3 is consistent with this GPS scenario.

Yuma Almanac data: see file GPS 3 Yuma.txt in the GPS data perf zip file specified in annex C.2.

UE location: the UE location is given as a trajectory as shown in Figure 5.6.1 of TS 34.171 [41]. The reference location is at the centre of the trajectory and is at: latitude: 37 degrees 48 minutes 59.988 seconds south, longitude: 144 degrees 58 minutes 0.013 seconds east, (Melbourne Australia), height: = 100m.

Start time: 22nd January 2004 (Thursday) 00:08:00.

Start location: at the point betweeh l_{11} and l_{12} in Figure 5.6.1 of TS 34.171 [41], going in a clock-wise direction.

Visible satellites simulated: PRNs: 3, 14, 15, 22, 25.

Viable running time to maintain specified HDOP values: 19 minutes.

Ionospheric model: see values in section 10.6.6.

Tropospheric model: STANAG with SRI equal to 324.8, as defined in [43].

10.1.2.4 UE Location for TTFF test cases

This section defines the method for generating the random UE locations that are required to be used for the TTFF tests defined in TS 34.171 [41].

For every Test Instance in each TTFF test case, the UE location shall be randomly selected to be within 3 km of the Reference Location. The Altitude of the UE shall be randomly selected between 0 m to 1 000 m above WGS-84 reference ellipsoid. These values shall have uniform random distributions.

The UE location is calculated as an offset from the Reference Location.

10.1.2.4.1 UE Location Offset

The UE location offset shall be calculated by selecting the next pair of random numbers, representing a pair of latitude and longitude offsets in degrees, from a standard uniform random number generator, with the following properties:

The ranges of the latitude and longitude offsets values shall be such that when translated onto the surface of the earth they shall lie within a 3km radius circle, centred on the Reference location specified for the GPS scenario under consideration. For the purposes of this calculation make the following assumptions:

a) Over the 3km radius circle at the Reference location the earth is flat and the meridians and parallels form a rectangular grid

b) The earth is spherical with a radius of 6371141m (equal to the WGS 84 value at 35 degrees latitude)

The resolution used for the latitude and longitude offsets values shall be 90/2E23 for the latitude offset values and 360/2E24 for the longitude offset values, representing the coding resolution in degrees specified in TS23.032 [42].

10.1.2.4.2 UE Altitude

The UE altitude value shall be calculated by selecting the next random number from a standard uniform random number generator, in the range 0 to 1000, representing meters. The resolution used for the random number shall be 1, representing 1 meter.

10.1.2.5 Satellites to be simulated in each test case

The satellites to be simulated in each test case have been selected in order to achieve the required HDOP for that test case.

Satellites to be simulated

Test case	PRNs GPS #1	PRNs GPS #2	PRNs GPS #3
Sensitivity Coarse Time Assistance	2, 6, 10, 17, 18, 21, 26, 29	3, 11, 14, 15, 22, 23, 25, 31	-
Sensitivity Fine Time Assistance	2, 6, 10, 17, 18, 21, 26, 29	3, 11, 14, 15, 22, 23, 25, 31	-
Nominal Accuracy	2, 6, 10, 17, 18, 21, 26, 29	3, 11, 14, 15, 22, 23, 25, 31	-
Dynamic Range	2, 6, 10, 17, 26, 29	3, 11, 14, 15, 25, 31	-
Multi-path Performance	2, 6, 17, 21, 26	3, 14, 15, 22, 25	-
Moving Scenario and Periodic Update Performance	-	-	3, 14, 15, 22, 25

10.2 Information elements required for normal UE based testing

The following A-GPS assistance data IEs and fields shall be present for each test. Fields not specified shall not be present. The values of the fields are specified in clause 10.6.

a) UE positioning GPS reference time IE. This information element is defined in clause 10.3.7.96 of 3GPP TS 25.331 [34].

Name of the IE	Fields of the IE
UE positioning GPS reference time	
	GPS Week
	GPS TOW msec
	GPS TOW Assist
	SatID
	TLM Message
	TLM Reserved
	Alert
	Anti-Spoof

b) UE positioning GPS reference UE position IE. This information element is defined in clause 10.3.8.4c of 3GPP TS 25.331 [34].

Name of the IE	Fields of the IE
Reference Location	Ellipsoid point with Altitude and uncertainty ellipsoid

c) UE positioning GPS navigation model IE. This information element is defined in clause 10.3.7.94 of 3GPP TS 25.331 [34].

Name of the IE	Fields of the IE
Navigation Model	All satellite information

d) UE positioning GPS ionospheric model IE. This information element is defined in clause 10.3.7.92 of 3GPP TS 25.331 [34].

Name of the IE	Fields of the IE
Ionospheric Model	All

10.3 Information elements required for UE based Sensitivity Fine Time Assistance test case

The A-GPS assistance data IEs and fields that shall be present for the Sensitivity Fine Time Assistance test case shall be those specified in clause 10.2 with the following exception. Fields not specified shall not be present. The values of the fields are specified in clause 10.6.

UE positioning GPS reference time IE. This information element is defined in clause 10.3.7.96 of 3GPP TS 25.331 [34].

Name of the IE	Fields of the IE
UE positioning GPS reference time	
	GPS Week
	GPS TOW msec
	UTRAN GPS reference time
	>UTRAN GPS timing of cell frames
	>CHOICE mode
	>>FDD
	>>>Primary CPICH Info
	>SFN
	SFN-TOW Uncertainty
	TUTRAN-GPS drift rate
	GPS TOW Assist
	SatID
	TLM Message
	TLM Reserved
	Alert
	Anti-Spoof

10.4 Information elements available for normal UE assisted testing

The following A-GPS assistance data IEs and fields shall be available for use in each test. Fields not specified shall not be present. The values of the fields are specified in clause 10.6.

a) UE positioning GPS reference time IE. This information element is defined in clause 10.3.7.96 of 3GPP TS 25.331 [34].

Name of the IE	Fields of the IE
UE positioning GPS reference time	
	GPS Week
	GPS TOW msec
	GPS TOW Assist
	SatID
	TLM Message
	TLM Reserved
	Alert
	Anti-Spoof

b) UE positioning GPS reference UE position IE. This information element is defined in clause 10.3.8.4c of 3GPP TS 25.331 [34].

Name of the IE	Fields of the IE
Reference Location	Ellipsoid point with Altitude and uncertainty ellipsoid

c) UE positioning GPS almanac This information element is defined in clause 10.3.7.89 of 3GPP TS 25.331 [34].

Name of the IE	Fields of the IE
UE positioning GPS almanac	
	Almanac Reference Week
	All Satellite information

d) UE positioning GPS navigation model IE. This information element is defined in clause 10.3.7.94 of 3GPP TS 25.331 [34].

Name of the IE	Fields of the IE
Navigation Model	All satellite information

e) UE positioning GPS acquisition assistance IE. This information element is defined in clause 10.3.7.88 of 3GPP TS 25.331 [34].

Name of the IE	Fields of the IE
Acquisition Assistance	
	GPS TOW msec
	Satellite information
	>SatID
	>Doppler (0^{th} order term)
	>Extra Doppler
	>>Doppler (1^{st} order term)
	>>Doppler Uncertainty
	>Code Phase
	>Integer Code Phase
	>GPS Bit number
	>Code Phase Search Window
	>Azimuth and Elevation
	>> Azimuth
	>> Elevation

10.5 Information elements available for UE assisted Sensitivity Fine Time Assistance test case

The A-GPS assistance data IEs and fields that shall be available for use for the Sensitivity Fine Time Assistance test case shall be those specified in clause 10.4 with the following exceptions. Fields not specified shall not be present. The values of the fields are specified in clause 10.6.

a) UE positioning GPS reference time IE. This information element is defined in clause 10.3.7.96 of 3GPP TS 25.331 [34].

Name of the IE	Fields of the IE
UE positioning GPS reference time	
	GPS Week
	GPS TOW msec
	UTRAN GPS reference time
	>UTRAN GPS timing of cell frames
	>CHOICE mode
	>>FDD
	>>>Primary CPICH Info
	>SFN
	SFN-TOW Uncertainty

	TUTRAN-GPS drift rate
	GPS TOW Assist
	SatID
	TLM Message
	TLM Reserved
	Alert
	Anti-Spoof

b) UE positioning GPS acquisition assistance IE. This information element is defined in clause 10.3.7.88 of 3GPP TS 25.331 [34].

Name of the IE	Fields of the IE
Acquisition Assistance	
	GPS TOW msec
	UTRAN GPS reference time
	>UTRAN GPS timing of cell frames
	>CHOICE mode
	>>FDD
	>>>Primary CPICH Info
	>SFN
	Satellite information
	>SatID
	>Doppler (0^{th} order term)
	>Extra Doppler
	>>Doppler (1^{st} order term)
	>>Doppler Uncertainty
	>Code Phase
	>Integer Code Phase
	>GPS Bit number
	>Code Phase Search Window
	>Azimuth and Elevation
	>> Azimuth
	>> Elevation

10.6 Contents of Information elements for performance testing

10.6.1 General

This section defines the assistance data values that shall be used for all Assisted GPS performance tests defined in TS 34.171 [41]. It is given for GPS scenarios #1, #2 and #3 where it is different for each scenario; otherwise it is marked "All" where the same value is used for all scenarios.

Where assistance data is required on a per-satellite basis, or where the values of the data also varies with time it is specified in comma-separated-variable files with suffixes XX in the GPS data perf zip file specified in annex C.2, where XX is 01, 02 and 03 for GPS scenarios #1, #2 and #3 respectively. These files specify the values to be used for each satellite, indexed by satellite PRN, and, where applicable, the values to be used indexed by both time and satellite PRN.

Assistance data that is marked as "time varying" is specified and used in [80] ms increments. Interpolation between these values shall not be used.

Assistance data Information Elements and fields that are not specified shall not be used.

10.6.2 IE Random Offset Values

This section defines the methods for generating the random offsets that are required to be applied to one or two assistance data IEs for certain tests defined in TS 34.171 [41].

10.6.2.1 GPS TOW msec

For every Test Instance in each TTFF test case, the IE GPS TOW msec shall have a random offset, relative to GPS system time, within the allowed error range of Coarse Time Assistance defined in the test case. This offset value shall have a uniform random distribution.

Note: For the Moving Scenario and Periodic Update Test Case the value of the IE GPS TOW msec shall be set to the nominal value, i.e. no offset shall be used.

The offset value shall be calculated by selecting the next random number from a standard uniform random number generator, in the range specified for the GPS Coarse Time assistance error range in the Test Requirements, Test parameters table for the test under consideration. The resolution used for the random number shall be 0.01, representing 10ms.

10.6.2.1 UTRAN GPS timing of cell frames

In addition, for every Fine Time Assistance Test Instance the IE UTRAN GPS timing of cell frames shall have a random offset, relative to the true value of the relationship between the two time references, within the allowed error range of Fine Time Assistance defined in the test case. This offset value shall have a uniform random distribution.

The offset value shall be calculated by selecting the next random number from a standard uniform random number generator with the following properties:

The range shall be the number of UMTS chips whose duration is less than the range specified for the GPS Fine Time assistance error range in the Test Requirements, Test parameters table for the test under consideration.

The resolution used for the random number shall be 1, representing 1 UMTS chip.

10.6.3 Assistance Data Reference Time

Contents of UE positioning GPS reference time IE

Reference Time (Fields occurring once per message)

Parameter	Units	Value/remark GPS #1	Value/remark GPS #2	Value/remark GPS #3
GPS Week	weeks	282	230	230
GPS TOW msec	msec	518880000. Start time. Add number of ms as required. (Note 1)	346080000. Start time. Add number of ms as required. (Note 1)	346080000. Start time. Add number of ms as required. (Note 1)
UTRAN GPS reference time		Present for Sensitivity Fine Time Assistance test case. Absent otherwise	Present for Sensitivity Fine Time Assistance test case. Absent otherwise	Absent
>UTRAN GPS timing of cell frames		Note 2	Note 2	-
>CHOICE mode		Present for Sensitivity Fine Time Assistance test case. Absent otherwise	Present for Sensitivity Fine Time Assistance test case. Absent otherwise	-
>>FDD		-	-	-
>>>Primary CPICH Info		100	100	-
>SFN		Note 2	Note 2	-
SFN-TOW Uncertainty		lessThan10	lessThan10	-
TUTRAN-GPS drift rate		0	0	-

Note 1: GPS TOW msec

This is the value in ms of GPS TOW msec when the GPS scenario is initially started in the GPS simulator. For all TTFF test cases, each time a GPS scenario is used, the GPS start time shall be advanced by 120 seconds from the value last used so that, at the time the fix is made, it is at least 2 minutes later than the previous fix made with that scenario.

The actual value of GPS TOW msec to be used in the Reference Time IE (before the addition of the random offset, if applicable) shall be calculated at the time the IE is required by adding the elapsed time since the time the scenario was started in the GPS simulator to this value. The accuracy shall be such that the Maximum Test System Uncertainty for Coarse Time Assistance, specified in Table F.1.2 of TS 34.171 [41], shall be met.

For all TTFF test cases a random offset is then added to the value of GPS TOW msec as described in clause 10.6.2

Note 2: UTRAN GPS timing of cell frames and SFN

The values of UTRAN GPS timing of cell frames (before the addition of the random offset) and SFN shall be calculated at the time the IE is required. The accuracy of the relationship between the two fields shall be such that the Maximum Test System Uncertainty for Fine Time Assistance, specified in Table F.1.2 of TS 34.171 [41], shall be met.

A random offset is then added to the value of UTRAN GPS timing of cell frames as described in clause 10.6.2

Satellite Information

Parameter	Units	Value/remark GPS All
Number of satellites	---	9

Reference Time - GPS TOW Assist (Fields occurring once per satellite)

Parameter	Units	Value/remark GPS #1	Value/remark GPS #2	Value/remark GPS #3
SatID		PRNs: 2, 6, 10, 17, 18, 21, 26, 29, 30	PRNs: 3, 11, 14, 15, 18, 22, 23, 25, 31	PRNs: 3, 11, 14, 15, 18, 22, 23, 25, 31

Reference Time - GPS TOW Assist (Fields occurring once per satellite)

Parameter	Units	Value/remark GPS All
TLM Message	Bit string	10922
TLM Reserved	Bit string	2
Alert	Boolean	0
Anti-Spoof	Boolean	1

10.6.4 Assistance Data Reference Position

Contents of UE positioning GPS reference UE position IE

The uncertainty of the semi-major axis is 3 km. The uncertainty of the semi-minor axis is 3 km. The orientation of the major axis is 0 degrees. The uncertainty of the altitude information is 500 m. The confidence factor is 68%.

Reference Position

Parameter	Units	Value/remark GPS #1	Value/remark GPS #2	Value/remark GPS #3
Type of Shape	Bit field	Ellipsoid point with altitude and uncertainty Ellipsoid	Ellipsoid point with altitude and uncertainty Ellipsoid	Ellipsoid point with altitude and uncertainty Ellipsoid
Degrees of latitude	degrees	33.750005	-37.816663	-37.816663
Degrees of longitude	degrees	-84.383517	144.966670	144.966670
Altitude	m	+300	+100	+100
Uncertainty semi-major	m	3000	3000	3000
Uncertainty semi-minor	m	3000	3000	3000
Orientation of major axis	degrees	0	0	0
Uncertainty altitude	m	500	500	500
Confidence	%	68	68	68

10.6.5 Assistance Data Navigation Model

Contents of UE positioning GPS navigation model IE

Satellite Information

Parameter	Units	Value/remark GPS All
Number of satellites	---	9

Navigation Model (Fields occurring once per satellite)

Parameter	Units	Value/remark GPS #1	Value/remark GPS #2	Value/remark GPS #3
SatID	---	PRNs: 2, 6, 10, 17, 18, 21, 26, 29, 30	PRNs: 3, 11, 14, 15, 18, 22, 23, 25, 31	PRNs: 3, 11, 14, 15, 18, 22, 23, 25, 31
Satellite Status	Boolean	0 (Note)	0 (Note)	0 (Note)

Note: For consistency Satellite Status is also given in file: Navigation model XX.csv

Ephemeris and Clock Correction parameters (Fields occurring once per satellite)

Parameter	Units	Value/remark GPS All
C/A or P on L2	Boolean	See file: Navigation model XX.csv
URA Index	Boolean	See file: Navigation model XX.csv
SV Health	Boolean	See file: Navigation model XX.csv
IODC	---	See file: Navigation model XX.csv
L2 P Data Flag	Boolean	See file: Navigation model XX.csv
SF 1 Reserved	---	See file: Navigation model XX.csv
T_{GD}	sec	See file: Navigation model XX.csv
t_{oc}	sec	See file: Navigation model XX.csv
af_2	sec/sec^2	See file: Navigation model XX.csv
af_1	sec/sec	See file: Navigation model XX.csv
af_0	sec	See file: Navigation model XX.csv
C_{rs}	meters	See file: Navigation model XX.csv
Δn	semi-circles/sec	See file: Navigation model XX.csv
M_0	semi-circles	See file: Navigation model XX.csv
C_{uc}	radians	See file: Navigation model XX.csv
e	---	See file: Navigation model XX.csv
C_{us}	radians	See file: Navigation model XX.csv
$(A)^{1/2}$	$meters^{1/2}$	See file: Navigation model XX.csv
t_{oe}	sec	See file: Navigation model XX.csv
Fit Interval Flag	Boolean	See file: Navigation model XX.csv
AODO	sec	See file: Navigation model XX.csv
C_{ic}	radians	See file: Navigation model XX.csv
$OMEGA_0$	semi-circles	See file: Navigation model XX.csv
C_{is}	radians	See file: Navigation model XX.csv
i_0	semi-circles	See file: Navigation model XX.csv
C_{rc}	meters	See file: Navigation model XX.csv
ω	semi-circles	See file: Navigation model XX.csv
OMEGAdot	semi-circles/sec	See file: Navigation model XX.csv
Idot	semi-circles/sec	See file: Navigation model XX.csv

10.6.6 Assistance Data Ionospheric Model

Contents of UE positioning GPS ionospheric model IE

Ionospheric Model

Parameter	Units	Value/remark GPS All
α_0	seconds	4.6566129 10E-9
α_1	sec/semi-circle	1.4901161 10E-8
α_2	$sec/(semi\text{-}circle)^2$	-5.96046 10E-8
α_3	$sec/(semi\text{-}circle)^3$	-5.96046 10E-8
β_0	seconds	79872
β_1	sec/semi-circle	65536
β_2	$sec/(semi\text{-}circle)^2$	-65536
β_3	$sec/(semi\text{-}circle)^3$	-393216

10.6.7 Assistance Data Almanac

Contents of UE positioning GPS almanac

Almanac (Field occurring once per message)

Parameter	Units	Value/remark GPS #1	Value/remark GPS #2	Value/remark GPS #3
WN_a	weeks	283	230	230

Satellite Information

Parameter	Units	Value/remark GPS All
Number of satellites	---	24

Almanac (Fields occurring once per satellite)

Parameter	Units	Value/remark
DataID	---	See file: Almanac XX.csv

Almanac (Fields occurring once per satellite)

Parameter	Units	Value/remark GPS #1	Value/remark GPS #2	Value/remark GPS #3
SatID	---	PRNs: 1, 2, 4, 5, 6, 7, 9, 10, 11, 14, 15, 16, 17, 18, 19, 20, 21, 22, 24, 25, 26, 27, 29, 30	PRNs: 1, 2, 3, 4, 5, 6, 7, 8, 11, 13, 14, 15, 16, 17, 18, 20, 21, 22, 23, 25, 27, 28, 30, 31	PRNs: 1, 2, 3, 4, 5, 6, 7, 8, 11, 13, 14, 15, 16, 17, 18, 20, 21, 22, 23, 25, 27, 28, 30, 31

Almanac (Fields occurring once per satellite)

Parameter	Units	Value/remark
e	dimensionless	See file: Almanac XX.csv
t_{oa}	sec	See file: Almanac XX.csv
δi	semi-circles	See file: Almanac XX.csv
OMEGADOT	semi-circles/sec	See file: Almanac XX.csv
SV Health	Boolean	See file: Almanac XX.csv
$A^{1/2}$	$meters^{1/2}$	See file: Almanac XX.csv
$OMEGA_0$	semi-circles	See file: Almanac XX.csv
M_0	semi-circles	See file: Almanac XX.csv
ω	semi-circles	See file: Almanac XX.csv
af_0	seconds	See file: Almanac XX.csv
af_1	sec/sec	See file: Almanac XX.csv

10.6.8 Assistance Data Acquisition Assistance

Contents of UE positioning GPS acquisition assistance IE

GPS Acquisition Assistance (Fields occurring once per message)

Parameter	Units	Value/remark GPS #1	Value/remark GPS #2	Value/remark GPS #3
GPS TOW msec	msec	51888000 ms. Start time. Add number of ms as required. (Note 1)	346080000 ms. Start time. Add number of ms as required. (Note 1)	346080000 ms. Start time. Add number of ms as required. (Note 1)
UTRAN GPS reference time		Present for Sensitivity Fine Time Assistance test case. Absent otherwise	Present for Sensitivity Fine Time Assistance test case. Absent otherwise	Absent
>UTRAN GPS timing of cell frames		Note 2	Note 2	-
>CHOICE mode		Present for Sensitivity Fine Time Assistance test case. Absent otherwise	Present for Sensitivity Fine Time Assistance test case. Absent otherwise	-
>>FDD		-	-	-
>>>Primary CPICH Info		100	100	-
>SFN		Note 2	Note 2	-

Note 1: GPS TOW msec
This is the value in ms of GPS TOW msec when the GPS scenario is initially started in the GPS simulator. For all TTFF test cases, each time a GPS scenario is used, the GPS start time shall be advanced by 120 seconds from the value last used so that, at the time the fix is made, it is at least 2 minutes later than the previous fix made with that scenario.

The actual value of GPS TOW msec to be used in the Acquisition Assistance IE (before the addition of the random offset, if applicable) shall be calculated at the time the IE is required by adding the elapsed time since the time the scenario was started in the GPS simulator to this value. The accuracy shall be such that the Maximum Test System Uncertainty for Coarse Time Assistance, specified in Table F.1.2 of TS 34.171 [41], shall be met.

For all TTFF test cases a random offset is then added to the value of GPS TOW msec as described in clause 10.6.2

This “final GPS TOW msec” value is then also used to determine the value of the Acquisition Assistance parameters marked as “Time varying” in clause 10.6.8

Note 2: UTRAN GPS timing of cell frames and SFN
The values of UTRAN GPS timing of cell frames (before the addition of the random offset) and SFN shall be calculated at the time the IE is required. The accuracy of the relationship between the two fields shall be such that the Maximum Test System Uncertainty for Fine Time Assistance, specified in Table F.1.2 of TS 34.171 [41], shall be met.

A random offset is then added to the value of UTRAN GPS timing of cell frames as described in clause 10.6.2

Satellite Information

Parameter	Units	Value/remark GPS All
Number of satellites	---	9

GPS Acquisition Assistance (Fields occurring once per satellite)

Parameter	Units	Value/remark GPS #1	Value/remark GPS #2	Value/remark GPS #3
SatID	---	PRNs: 2, 6, 10, 17, 18, 21, 26, 29, 30	PRNs: 3, 11, 14, 15, 18, 22, 23, 25, 31	PRNs: 3, 11, 14, 15, 18, 22, 23, 25, 31

GPS Acquisition Assistance (Fields occurring once per satellite)

Parameter	Units	Value/remark GPS All
Doppler (0^{th} order term)	Hz	Time varying. See file: Acquisition assist XX.csv (Note)
Doppler (1^{st} order term)	Hz/sec	Time varying. See file: Acquisition assist XX.csv (Note)
Doppler Uncertainty	Hz	Time varying. See file: Acquisition assist XX.csv (Note)
Code Phase	chips	Time varying. See file: Acquisition assist XX.csv (Note)
Integer Code Phase	---	Time varying. See file: Acquisition assist XX.csv (Note)
GPS Bit number	---	Time varying. See file: Acquisition assist XX.csv (Note)
Code Phase Search Window	chips	Time varying. See file: Acquisition assist XX.csv (Note)
Azimuth	deg	Time varying. See file: Acquisition assist XX.csv (Note)
Elevation	deg	Time varying. See file: Acquisition assist XX.csv (Note)
Note: Acquisition Assistance parameters This field is “Time varying” and its value depends on the “final GPS TOW msec” as described in clause 10.6.8. The value of this field to be used shall be determined by taking the “final GPS TOW msec” value and selecting the nearest field value in the Acquisition assist.csv file corresponding to the value of “final current GPS TOW msec”.		

10.7 GPS Scenario and values of Information Elements for signalling testing

10.7.1 General

This clause defines the GPS scenario and the associated assistance data values that shall be used for all Assisted GPS signalling tests defined in 3GPP TS 34.123-1 [1] clause 17.2.

Where assistance data is required on a per-satellite basis, or where the values of the data also varies with time it is specified in comma-separated-variable files in the GPS data sig zip file specified in annex C.1. These files specify the values to be used for each satellite, indexed by satellite PRN, and, where applicable, the values to be used indexed by both time and satellite PRN.

Assistance data that is marked as "time varying", and the GPS TOW msec field are only specified and used in 1 second increments. Interpolation between these values shall not be used.

The accuracy of the GPS TOW msec and assistance data that is marked as "time varying" in the provided assistance data shall be within ±2 s relative to the GPS time in the system simulator.

Assistance data Information Elements and fields that are not specified shall not be used.

10.7.2 GPS Scenario

The following GPS scenario shall be used. The assistance data specified in the following clauses is consistent with this GPS scenario:

- Yuma Almanac data: see file Tokyo Yuma.txt in the GPS data sig zip file specified in annex C.1.
- UE location and Reference location: static at latitude: 35 degrees 40 minutes north, longitude: 139 degrees 45 minutes east, (Tokyo) height: = 50m.
- Start time: 12th September 2003 21:30:00.
- Visible satellites simulated: PRNs: 4, 6, 9, 10, 13, 22.
- Ionospheric model: see values in clause 10.7.6.

10.7.3 Assistance Data Reference Time

Contents of UE positioning GPS reference time IE

Reference Time (Fields occurring once per message)

Parameter	Units	Value/remark
GPS Week	weeks	211
GPS TOW msec	msec	509 400 s. Start time. Add integer number of 1 seconds as required (see note)
NOTE: This is the value in seconds of GPS TOW msec when the GPS scenario is started in the GPS simulator. The value of GPS TOW msec to be used in the Reference Time IE shall be calculated at the time the IE is required by adding the elapsed time since the time the scenario was started in the GPS simulator to this value, rounded up to the next 1 second interval.		

10.7.4 Assistance Data Reference Position

Contents of UE positioning GPS reference UE position IE

Reference Position

Parameter	Units	Value/remark
Type of Shape	Bit field	Ellipsoid point with altitude and uncertainty Ellipsoid
Degrees of latitude	degrees	+35.666667
Degrees of longitude	degrees	+139.75
Altitude	m	+50
Uncertainty semi-major	m	3 000
Uncertainty semi-minor	m	3 000
Orientation of major axis	degrees	0
Uncertainty altitude	m	500
Confidence	%	68

10.7.5 Assistance Data Navigation Model

Contents of UE positioning GPS navigation model IE

Satellite Information

Parameter	Units	Value/remark
Number of Satellites	---	6

Navigation Model (Fields occurring once per satellite)

Parameter	Units	Value/remark
SatID	---	PRNs: 4, 6, 9, 10, 13, 22.
Satellite Status	Boolean	0 (see note)
NOTE: For consistency Satellite Status is also given in file: Navigation model.csv.		

Ephemeris and Clock Correction parameters (Fields occurring once per satellite)

Parameter	Units	Value/remark
C/A or P on L2	Boolean	See file: Navigation model.csv
URA Index	Boolean	See file: Navigation model.csv
SV Health	Boolean	See file: Navigation model.csv
IODC	---	See file: Navigation model.csv
L2 P Data Flag	Boolean	See file: Navigation model.csv
SF 1 Reserved	---	See file: Navigation model.csv
T_{GD}	sec	See file: Navigation model.csv
t_{oc}	sec	See file: Navigation model.csv
af_2	sec/sec^2	See file: Navigation model.csv
af_1	sec/sec	See file: Navigation model.csv

af_0	sec	See file: Navigation model.csv
C_{rs}	meters	See file: Navigation model.csv
Δn	semi-circles/sec	See file: Navigation model.csv
M_0	semi-circles	See file: Navigation model.csv
C_{uc}	radians	See file: Navigation model.csv
e	---	See file: Navigation model.csv
C_{us}	radians	See file: Navigation model.csv
$(A)^{1/2}$	$meters^{1/2}$	See file: Navigation model.csv
t_{oe}	sec	See file: Navigation model.csv
Fit Interval Flag	Boolean	See file: Navigation model.csv
AODO	sec	See file: Navigation model.csv
C_{ic}	radians	See file: Navigation model.csv
$OMEGA_0$	semi-circles	See file: Navigation model.csv
C_{is}	radians	See file: Navigation model.csv
i_0	semi-circles	See file: Navigation model.csv
C_{rc}	meters	See file: Navigation model.csv
ω	semi-circles	See file: Navigation model.csv
OMEGAdot	semi-circles/sec	See file: Navigation model.csv
Idot	semi-circles/sec	See file: Navigation model.csv

10.7.6 Assistance Data Ionospheric Model

Contents of UE positioning GPS ionospheric model IE

Ionospheric Model

Parameter	Units	Value/remark
α_0	seconds	4.6566129 10E-9
α_1	sec/semi-circle	1.4901161 10E-8
α_2	$sec/(semi\text{-}circle)^2$	-5.96046 10E-8
α_3	$sec/(semi\text{-}circle)^3$	-5.96046 10E-8
β_0	seconds	79872
β_1	sec/semi-circle	65536
β_2	$sec/(semi\text{-}circle)^2$	-65536
β_3	$sec/(semi\text{-}circle)^3$	-393216

10.7.7 Assistance Data Almanac

Contents of UE positioning GPS almanac

Almanac (Field occurring once per message)

Parameter	Units	Value/remark
WN_a	weeks	212

Satellite Information

Parameter	Units	Value/remark
Number of Satellites	---	24

Almanac (Fields occurring once per satellite)

Parameter	Units	Value/remark
DataID	---	See file: Almanac.csv
SatID	---	PRNs: 1 to 24
e	dimensionless	See file: Almanac.csv

t_{oa}	sec	See file: Almanac.csv
δi	semi-circles	See file: Almanac.csv
OMEGADOT	semi-circles/sec	See file: Almanac.csv
SV Health	Boolean	See file: Almanac.csv
$A^{1/2}$	$meters^{1/2}$	See file: Almanac.csv
$OMEGA_0$	semi-circles	See file: Almanac.csv
M_0	semi-circles	See file: Almanac.csv
ω	semi-circles	See file: Almanac.csv
af_0	seconds	See file: Almanac.csv
af_1	sec/sec	See file: Almanac.csv

10.7.8 Assistance Data Acquisition Assistance

Contents of UE positioning GPS acquisition assistance IE

GPS Acquisition Assist (Field occurring once per message)

Parameter	Units	Value/remark
GPS TOW msec	msec	509 400 s. Start time. Add integer number of 1 seconds as required (see note)
NOTE: This is the value in seconds of GPS TOW msec when the GPS scenario is started in the GPS simulator. The value of GPS TOW msec to be used in the Acquisition Assistance IE shall be calculated at the time the IE is required by adding the elapsed time since the time the scenario was started in the GPS simulator to this value, rounded up to the next 1 second interval. This "current GPS TOW msec" is then also used to determine the value of the Acquisition Assistance parameters marked as "Time varying" in clause 10.7.8.		

Satellite Information

Parameter	Units	Value/remark
Number of Satellites	---	6

GPS Acquisition Assist (Fields occurring once per satellite)

Parameter	Units	Value/remark
SatID	---	PRNs: 4, 6, 9, 10, 13, 22.
Doppler (0^{th} order term)	Hz	Time varying. See file: Acquisition assist .csv (see note)
Doppler (1^{st} order term)	Hz/sec	Time varying. See file: Acquisition assist .csv (see note)
Doppler Uncertainty	Hz	Time varying. See file: Acquisition assist .csv (see note)
Code Phase	chips	Time varying. See file: Acquisition assist .csv (see note)
Integer Code Phase	---	Time varying. See file: Acquisition assist .csv (see note)
GPS Bit number	---	Time varying. See file: Acquisition assist .csv (see note)
Code Phase Search Window	chips	Time varying. See file: Acquisition assist .csv (see note)
Azimuth	deg	Time varying. See file: Acquisition assist .csv (see note)
Elevation	deg	Time varying. See file: Acquisition assist .csv (see note)
NOTE: This field is "Time varying" and its value depends on the "current GPS TOW msec" as described in clause 10.7.3. The value of this field to be used shall be determined by taking the "current GPS TOW msec" value and selecting the field value in the Acquisition assist.csv file corresponding to the value of "current GPS TOW msec".		

Annex A (informative):
Void

Annex B (informative):
Void

Annex C (normative): GPS Data Files

C.1 GPS data files for signalling tests

The GPS data files for use in signalling tests defined in 3GPP TS 34.123-1 [1] are contained in archive GPS Data Sig V1.zip which accompanies the present document.

C.2 GPS data files for performance tests

The GPS data files for use in performance tests defined in 3GPP TS 34.171 [41]are contained in archive GPS Data Perf V1.zip which accompanies the present document.

Annex D (informative): Change history

Meeting-1st-Level	Doc-1st-Level	CR	Rev	Subject	Cat	Version-Current	Version-New	Doc-2nd-Level
TP-08				Approval of the specification		2.0.0	3.0.0	
TP-09	TP-000131	001		RRC Message Contents: RLCSize	C	3.0.1	3.1.0	T1-000190
TP-09	TP-000131	002		RRC Message Contents: RLCParam	C	3.0.1	3.1.0	T1-000191
TP-09	TP-000131	003		RRC Message Contents: PCPreamble	C	3.0.1	3.1.0	T1-000192
TP-09	TP-000131	004		RRC Message Contents: RBIdentity	C	3.0.1	3.1.0	T1-000193
TP-09	TP-000131	005		RRC Message Contents: TrCHParam	C	3.0.1	3.1.0	T1-000194
TP-09	TP-000131	006		RRC Message Contents: UECapability	C	3.0.1	3.1.0	T1-000195
TP-09	TP-000131	007		RRC Message Contents: RBMapping	C	3.0.1	3.1.0	T1-000196
TP-09	TP-000131	008		RRC Message Contents: PagingCause	C	3.0.1	3.1.0	T1-000197
TP-09	TP-000131	009		RRC Message Contents: CipheringAndIntegrity	C	3.0.1	3.1.0	T1-000198
TP-09	TP-000131	010		RRC Message Contents: RLCInfo	C	3.0.1	3.1.0	T1-000199
TP-09	TP-000131	011		RRC Message Contents: CompressedMode	C	3.0.1	3.1.0	T1-000200
TP-09	TP-000131	012		RRC Message Contents: SIB	C	3.0.1	3.1.0	T1-000201
TP-09	TP-000131	013		RRC Message Contents: PhyCH	D	3.0.1	3.1.0	T1-000202
TP-09	TP-000131	014		RRC Message Contents: Measurement	C	3.0.1	3.1.0	T1-000203
TP-09	TP-000131	015		RRC Message Contents: TFCS	C	3.0.1	3.1.0	T1-000204
TP-09	TP-000131	016		RRC Message Contents: DPCHFrameOffset	C	3.0.1	3.1.0	T1-000205
TP-09	TP-000131	017		Test USIM Parameters	F	3.0.1	3.1.0	T1-000215
TP-09	TP-000131	018		Correction to definition of the test algorithm for authentication (clause 8.1.2)	F	3.0.1	3.1.0	T1-000164
TP-09	TP-000131	019		Reference Radio Bearer Configurations	F	3.0.1	3.1.0	T1-000212
TP-09	TP-000131	020		TDD Single mode	F	3.0.1	3.1.0	T1-000220
TP-10	TP-000215	021		Common generic procedure for AS testing	B	3.1.0	3.2.0	T1-000294
TP-10	TP-000215	022		Requirements for the system simulator for support of Tcell parameter	F	3.1.0	3.2.0	T1-000303
TP-10	TP-000215	023		Minimum Performance Levels	F	3.1.0	3.2.0	T1-000306
TP-10	TP-000215	024		Downlink signal conditions and propagation conditions	D	3.1.0	3.2.0	T1-000307
TP-10	TP-000215	025		Updating 34.108 v3.1.0 to TDD single mode	F	3.1.0	3.2.0	T1-000281
TP-10	TP-000215	026		Application of integrity mode protection to signalling message by default	F	3.1.0	3.2.0	T1-000296
TP-10	TP-000215	027		Updates to the default message contents in clause 9	C	3.1.0	3.2.0	T1-000282
TP-10	TP-000215	028		Updates to System Information Block (SIB) and Master Information Block (MIB) messages	C	3.1.0	3.2.0	T1-000283
TP-10	TP-000215	029		Application of ciphering during conformance testing	C	3.1.0	3.2.0	T1-000285
TP-10	TP-000215	030		Addition for System Information parameters (34.108 clause 6.1)	F	3.1.0	3.2.0	T1-000304
TP-10	TP-000215	031		Correction for Generic Setup Procedures (34.108 clause 7.2)	F	3.1.0	3.2.0	T1-000305
TP-11	TP-010018	032		Default radio conditions for multi-cell environment	F	3.2.0	3.3.0	T1-010078
TP-11	TP-010018	033		Correction for Generic Setup Procedures (34.108 clause 7.2)	F	3.2.0	3.3.0	T1-010079
TP-11	TP-010018	034		Corrections for Test USIM Parameters(34.108 clause 8)	F	3.2.0	3.3.0	T1-010080
TP-11	TP-010018	035		Correction of clause number in TS 34.108.	D	3.2.0	3.3.0	T1-010081
TP-11	TP-010018	036		Update of authentication test algorithm	C	3.2.0	3.3.0	T1-010082
TP-11	TP-010018	037		Updates to clause 9 of TS 34.108 v3.2.0	F	3.2.0	3.3.0	T1-010084
TP-11	TP-010018	038		Updating to TDD single mode	F	3.2.0	3.3.0	T1-010088
TP-11	TP-010018	039		Simulated network environments for TDD mode (SIB)	F	3.2.0	3.3.0	T1-010089
TP-12	TP-010118	040		Corrections to clause 6.10 FDD parameters	F	3.3.0	3.4.0	T1-010205
TP-12	TP-010118	041		Corrections to clause 6.10 TDD parameters	F	3.3.0	3.4.0	T1-010206
TP-12	TP-010118	042		Adding section for radio bearer configurations intended for functional testing	D	3.3.0	3.4.0	T1-010210
TP-12	TP-010118	043		Update of list of abbreviations	D	3.3.0	3.4.0	T1-010211
TP-12	TP-010118	044		Updates to clause 6.1 and 9	F	3.3.0	3.4.0	T1-010212
TP-12	TP-010118	045		Updates to clause 7.4	F	3.3.0	3.4.0	T1-010213
TP-12	TP-010118	046		clause 6.1: System Information Blocks for TDD Mode	F	3.3.0	3.4.0	T1-010214
TP-12	TP-010118	047		Editorial corrections and removal of a reference document	F	3.3.0	3.4.0	T1-010215
TP-13	TP-010215	048		Correction to reference	F	3.4.0	3.5.0	T1-010275
TP-13	TP-010215	049		Editorial modification for References	F	3.4.0	3.5.0	T1-010276
TP-13	TP-010215	050		Some corrections in clause 5	F	3.4.0	3.5.0	T1-010277
TP-13	TP-010215	051		Update to Scope Statement	F	3.4.0	3.5.0	T1-010278
TP-13	TP-010215	052		Clause 6.10 Definition of RB configurations, TDD parameters	F	3.4.0	3.5.0	T1-010279
TP-13	TP-010215	053		Updates to clause 6.1, clause 7.4 and clause 9	F	3.4.0	3.5.0	T1-010280
TP-13	TP-010215	054		Clause 6.1: Default radio conditions for Signalling tests	F	3.4.0	3.5.0	T1-010281

Meeting-1st-Level	Doc-1st-Level	CR	Rev	Subject	Cat	Version-Current	Version-New	Doc-2nd-Level
TP-13	TP-010215	055		Correction of Radio Bearer Configurations for FDD Mode	F	3.4.0	3.5.0	T1-010282
TP-13	TP-010215	056		Correction of Radio Bearer Configurations for TDD Mode	F	3.4.0	3.5.0	T1-010283
TP-13	TP-010215	057		Changes to Signalling Radio Bearer (SRB) numbering	F	3.4.0	3.5.0	T1-010284
TP-13	TP-010215	058		Missing bearers in tables 6.10.2.1.1 and 6.10.3.1.1	F	3.4.0	3.5.0	T1-010285
TP-13	TP-010215	059		Correction of system information block 5	F	3.4.0	3.5.0	T1-010286
TP-13	TP-010215	060		Introducing of 1.28 Mcps TDD Mode in clauses 4, 5 and 6	F	3.4.0	4.0.0	T1-010287
TP-13	TP-010215	061		Introduction of System Information Blocks for 1.28 Mcps TDD Mode	F	3.4.0	4.0.0	T1-010288
TP-13	TP-010215	062		Introduction of typical radio parameters for 1.28 McpsTDD	F	3.4.0	4.0.0	T1-010289
TP-13	TP-010215	063		Clause 6.11 RBs for RLC and PDCP testing	F	3.4.0	3.5.0	T1-010290
TP-14	TP-010285	065	1	Correction to 6.1 Contents of System Information Blocks	A	4.0.0	4.1.0	T1-010475
TP-14	TP-010285	067	1	Corrections to clause 6.1, 7.4 and 9	A	4.0.0	4.1.0	T1-010473
TP-14	TP-010258	069		Reference Radio Conditions	A	4.0.0	4.1.0	T1-010461
TP-14	TP-010258	071		Modification of Test procedures for RF tests	A	4.0.0	4.1.0	T1-010463
TP-14	TP-010258	073		Default message contents for RF tests	A	4.0.0	4.1.0	T1-010465
TP-14	TP-010258	075		Correction to 6.10 Reference Radio Bearer configurations	A	4.0.0	4.1.0	T1-010467
TP-14	TP-010258	077		Definition of default value of rate matching attribute	A	4.0.0	4.1.0	T1-010469
TP-14	TP-010258	079		Update of clause 7.4 and 6.10	A	4.0.0	4.1.0	T1-010471
TP-14	TP-010292	081		Correction on introduction of clause 6.10	A	4.0.0	4.1.0	--
TP-15	TP-020038	083		Replacement of Block STTD by Space Code Transmit Diversity (SCTD) (Rel-4)	A	4.1.0	4.2.0	T1-020092
TP-15	TP-020038	085		Update of reference radio conditions (Rel-4)	A	4.1.0	4.2.0	T1-020098
TP-15	TP-020038	087		Update of system reference configurations and default messages (Rel-4)	A	4.1.0	4.2.0	T1-020100
TP-15	TP-020038	089		Corrections to 34108-410	A	4.1.0	4.2.0	T1-020102
TP-15	TP-020038	091		Introduction of new Reference RABs (Rel-4)	A	4.1.0	4.2.0	T1-020195
TP-15	TP-020038	094		Update of SIBs for TDD (both modes) in TS 34.108 (Rel4)	F	4.1.0	4.2.0	T1-020107
TP-15	TP-020038	095		Clarification of bit rate of Interactive/Background PS RAB function (Rel-4)	A	4.1.0	4.2.0	T1-020184
				Correction of CR implementation errors in clauses: 6.10.2.2 and 6.10.2.4.1.58.2.1.1		4.2.0	4.2.1	
TP-16	TP-020141	108		Clause 7(reference) Update of generic setup procedures to use 13.6 kbps SRB in RRC connection establishment TDD (3.84 Mcps and 1.28 Mcps)	F	4.2.1	4.3.0	T1-020289
TP-16	TP-020141	109		Correction to clause 7.3.3.4 RADIO BEARER SETUP message	A	4.2.1	4.3.0	T1-020291
TP-16	TP-020141	110		Change of RM attribute of DL:3.4 kbps SRBs for DCCH in for REL4	A	4.2.1	4.3.0	T1-020292
TP-16	TP-020141	111		New additional RAB configuration (R1-020669) for REL4	A	4.2.1	4.3.0	T1-020293
TP-16	TP-020141	112		Correction of Puncturing Limit for RABs for REL4	A	4.2.1	4.3.0	T1-020294
TP-16	TP-020141	113		Test USIM	A	4.2.1	4.3.0	T1-020295
TP-16	TP-020141	114		Clause 6.1 (SIBs)Rel 4 (3.84 Mcps and 1.28 Mcps TDD)	F	4.2.1	4.3.0	T1-020296
TP-16	TP-020141	115		Clause 6.10 References for TDD about Clarification of bit rate of Interactive/Background PS RAB	A	4.2.1	4.3.0	T1-020297
TP-16	TP-020141	116		Correction to default message in clause 9 for Rel4	A	4.2.1	4.3.0	T1-020298
TP-16	TP-020141	117		Correction to clause 6.1 for Rel4	A	4.2.1	4.3.0	T1-020299
TP-16	TP-020141	118		WCDMA1800 additions for Rel4	A	4.2.1	4.3.0	T1-020300
TP-16	TP-020141	119		Clause 9.1 Default message contents for TDD (3.84 Mcps and 1.28 Mcps) R4	F	4.2.1	4.3.0	T1-020301
TP-16	TP-020141	121		Update of generic setup procedures to use 13.6 kbps SRB in RRC connection establishment	A	4.2.1	4.3.0	T1-020434
TP-17	TP-020184	123	-	Alignment of reference configurations on S-CCPCH with default system information messages	A	4.3.0	4.4.0	T1-020503
TP-17	TP-020184	125	-	Addition of reference compressed mode pattern	A	4.3.0	4.4.0	T1-020505
TP-17	TP-020184	127	-	Corrections to default message contents as T1S-020347rev1	A	4.3.0	4.4.0	T1-020507
TP-17	TP-020184	129	-	Additional default message contents for RF Testing	A	4.3.0	4.4.0	T1-020509
TP-17	TP-020184	131	-	Corrections related to SIB11, SIB12 and to the MEASUREMENT CONTROL message	A	4.3.0	4.4.0	T1-020527
TP-17	TP-020184	133	-	Corrections to clause 6.1 (T1S-020349rev1)	A	4.3.0	4.4.0	T1-020530
TP-17	TP-020184	135	-	Introduction of reference configurations on S-CCPCH and PRACH with two interactive PS domain RABs	A	4.3.0	4.4.0	T1-020539
TP-17	TP-020184	137	-	Removal of reference radio bearer configurations for unidirectional streaming CS RABa above 64 kbps	A	4.3.0	4.4.0	T1-020541

Meeting-1st-Level	Doc-1st-Level	CR	Rev	Subject	Cat	Version-Current	Version-New	Doc-2nd-Level
TP-17	TP-020184	140	-	Some corrections and updates in clause 6.1 for TDD mode	F	4.3.0	4.4.0	T1-020576
TP-17	TP-020184	142	-	Inclusion of default message contents for RF in clause 9.2 for TDD mode	F	4.3.0	4.4.0	T1-020578
TP-18	TP-020293	144	-	Correction to default messages in 9.1 and 9.2	A	4.4.0	4.5.0	T1-020658
TP-18	TP-020293	146	-	Corrections in the TDD test frequencies according to core specs	A	4.4.0	4.5.0	T1-020674
TP-18	TP-020293	148	-	Addition of alternative configuration using Turbo Coding for Interactive or background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH	A	4.4.0	4.5.0	T1-020694
TP-18	TP-020293	150	-	Correction to content of clause 6.10.2.	A	4.4.0	4.5.0	T1-020709
TP-18	TP-020293	152	-	Correction to SIB 11/12 definition	A	4.4.0	4.5.0	T1-020712
TP-18	TP-020293	154	-	Reference Measurement Channels	A	4.4.0	4.5.0	T1-020768
TP-18	TP-020293	156	-	Transferring system information definition using ASN.1 description to PRD	A	4.4.0	4.5.0	T1-020778
TP-18	TP-020293	158	-	Correction to RLC RAB TFCS	A	4.4.0	4.5.0	T1-020780
TP-18	TP-020293	160	-	Default Message contents : Correction from CRs approved in RP17meeting	A	4.4.0	4.5.0	T1-020783
TP-18	TP-020293	162	-	Corrections to SIB1 to SIB6	A	4.4.0	4.5.0	T1-020799
TP-18	TP-020293	164	-	Correction to RAB configurations as revision of T1S020756	A	4.4.0	4.5.0	T1-020801
TP-18	TP-020293	166	-	Parameter addition for Reference RABs based on LS from RAN2	A	4.4.0	4.5.0	T1-020803
TP-18	TP-020293	168	-	Addition to clause 7.4 for multi call as T1S-020577rev2 (revision to T1S020820)	A	4.4.0	4.5.0	T1-020818
TP-18	TP-020293	169	-	RAB Combinations for IMS Services	F	4.4.0	4.5.0	T1-020819
TP-18	TP-020293	171	-	Correction to Contents of the Scheduling Block Syste Information in clause 6.1.3.	F	4.4.0	4.5.0	T1-020844
TP-19	TP-030044	173	-	RAB Removal from Rel 4 TS 34.108 as T1S030002rev1	A	4.5.0	4.6.0	T1-030037
TP-19	TP-030044	175	-	Combine all Radio Bearer Setup messages into one table	A	4.5.0	4.6.0	T1-030040
TP-19	TP-030044	177	-	Corrections to SB and SIB configurations in clause 6.1 as T1S030046rev1	A	4.5.0	4.6.0	T1-030042
TP-19	TP-030044	179	-	Correction to TS 34.108 Rel-4 ; PAGING TYPE1 message (Packet in PS)	A	4.5.0	4.6.0	T1-030044
TP-19	TP-030044	181	-	Clarification of autentication test algorithm and GSM cipher key	A	4.5.0	4.6.0	T1-030046
TP-19	TP-030044	183	-	Addition of simulated network environment for inter-RAT test cases	A	4.5.0	4.6.0	T1-030048
TP-19	TP-030044	185	-	Corrections to SIB1 to align with default values for LAC and RAC in 51.010-1.	A	4.5.0	4.6.0	T1-030050
TP-19	TP-030044	187	-	Addition of default inter-RAT handover messages	A	4.5.0	4.6.0	T1-030052
TP-19	TP-030044	189	-	Correction of activation time IEs in default messages	A	4.5.0	4.6.0	T1-030054
TP-19	TP-030044	191	-	Correction to default SECURITY MODE COMMAND message	A	4.5.0	4.6.0	T1-030056
TP-19	TP-030044	193	-	Addition of option for UL CM only in default reference CM patterns	A	4.5.0	4.6.0	T1-030058
TP-19	TP-030044	195	-	Introduction of a reference RB configuration for RMC for BTFD tests (Rel4)	A	4.5.0	4.6.0	T1-030060
TP-19	TP-030044	197	-	Update of the RRC connection request messages in 34.108 Rel4	A	4.5.0	4.6.0	T1-030063
TP-19	TP-030043	198	-	Introduction of Conversational PS RABs in Rel 4 TS 34.108 as T1S030003rev1	F	4.5.0	4.6.0	T1-030107
TP-19	TP-030043	200	-	Update of default parameters for 1 to 8 cell environments (TDD), clause 6.1.4, Rel 4	A	4.5.0	4.6.0	T1-030208
TP-19	TP-030043	202	-	Update of Multi-cell environment for default radio conditions (TDD), clause 6.1.6 (Inclusion of cell 4), Rel 4	A	4.5.0	4.6.0	T1-030210
TP-19	TP-030043	204	-	Modification to Generic Registration Procedures	A	4.5.0	4.6.0	T1-030222
TP-19	TP-030043	206	-	Update of default configurations to enable testing of low end UE	A	4.5.0	4.6.0	T1-030228
TP-20	TP-030098	208	-	Reinstate parameters for Interactive or background /UL:64 kbps / PS RAB	A	4.6.0	4.7.0	T1-030437
TP-20	TP-030098	210	-	Correction to Figure 7.4.1.1 (Rel-4)	A	4.6.0	4.7.0	T1-030483
TP-20	TP-030098	212	-	Update of SIB 11 and 12 in clause 6.1.0b in TS 34.108 (TDD)	A	4.6.0	4.7.0	T1-030507
TP-20	TP-030098	214	-	Update of Default parameters for 1 to 8 cell environments in TS 34.108 (TDD)	A	4.6.0	4.7.0	T1-030509
TP-20	TP-030098	216	-	Correction of default messages according to 25331 CR1823	A	4.6.0	4.7.0	T1-030632
TP-20	TP-030098	218	-	Clause 8.2: Definition of default values for authentication key K on test USIM	A	4.6.0	4.7.0	T1-030644
TP-20	TP-030098	219	-	Update of Reconfiguration messages	A	4.6.0	4.7.0	T1-030692

Meeting-1st-Level	Doc-1st-Level	CR	Rev	Subject	Cat	Version-Current	Version-New	Doc-2nd-Level
TP-20	TP-030098	221	-	Correction to RADIO BEARER RELEASE and RRC CONNECTION SETUP messages (Revision of T1-030569)	A	4.6.0	4.7.0	T1-030699
TP-20	TP-030140	226	-	Correction to default SIB5 (FDD)	A	4.6.0.	4.7.0	T1-030745
TP-21	TP-030191	228	-	CR to 34.108, Rel-4, Clarification of seg_count in 6.1.0a.3	A	4.7.0	4.8.0	T1-030827
TP-21	TP-030191	230	-	General correction in clause 7.4 for Common generic procedures for AS testing	A	4.7.0	4.8.0	T1-030976
TP-21	TP-030191	233	-	Incorrect activation time in CELL_FACH state .	A	4.7.0	4.8.0	T1-031064
TP-21	TP-030191	235	-	Incorrect Transport channel Parameters	A	4.7.0	4.8.0	T1-031066
TP-21	TP-030191	237	-	Corrections to TS 34.108 common procedures in clause 7.4 of Rel-4 of TS 34.108	A	4.7.0	4.8.0	T1-031095
TP-21	TP-030191	239	-	Removal of RLC AM in the Default Message Content	A	4.7.0	4.8.0	T1-031151
TP-21	TP-030191	242	-	CR 34.108 Rel-4: Manual attach in State 7 Registrated Idle Mode on CS/PS	A	4.7.0	4.8.0	T1-031175
TP-21	TP-030191	244	-	URA Identity in Cell Update Confirm and URA Update Confirm	A	4.7.0	4.8.0	T1-031179
TP-21	TP-030191	246	-	CR to 34.108 R4; Correction to specification to reflect a change already approved in TTCN CR T1-030396	A	4.7.0	4.8.0	T1-031241
TP-21	TP-030191	248	-	CR to 34.108 REL-4; Correction to clause 7.3 Test procedures for RF test	A	4.7.0	4.8.0	T1-031251
TP-21	TP-030191	240	-	RB configuration for the support of wideband AMR speech telephony services	F	4.7.0	4.8.0	T1-031154
TP-22	TP-030279	251	1	Addition of Default message contents for TDD	F	4.8.0	4.9.0	T1-031659
TP-22	TP-030279	252	1	Addition of Default message contents for TDD	F	4.8.0	4.9.0	T1-031660
TP-22	TP-030279	253	1	Addition of Default message contents for TDD	F	4.8.0	4.9.0	T1-031661
TP-22	TP-030279	254	1	Addition of Default message contents for TDD	F	4.8.0	4.9.0	T1-031662
TP-22	TP-030279	255	1	Addition of Default message contents for TDD	F	4.8.0	4.9.0	T1-031663
TP-22	TP-030279	256	1	Addition of Default message contents for TDD	F	4.8.0	4.9.0	T1-031664
TP-22	TP-030279	257	1	Addition of Default message contents for TDD	F	4.8.0	4.9.0	T1-031665
TP-22	TP-030279	258	1	Addition of Default message contents for TDD	F	4.8.0	4.9.0	T1-031666
TP-22	TP-030279	260	2	CR on PAGING TYPE 1, RRC CONNECTION REQUEST and RRC CONNECTION SETUP messages for MT RR Connection	A	4.8.0	4.9.0	T1-031596
TP-22	TP-030279	262		CR 34.108 Rel-4: EFRPLMNACT (RPLMN Last used Access Technology) removed	A	4.8.0	4.9.0	T1-031381
TP-22	TP-030279	264	1	Update of default messages for RRC CONNECTION SETUP and SECURITY MODE COMMAND	A	4.8.0	4.9.0	T1-031547
TP-22	TP-030279	266	1	Description and corrections of channels for minimum performance levels, TDD mode.	F	4.8.0	4.9.0	T1-031645
TP-22	TP-030279	268	1	Test frequencies of UMTS800MHz band VI	A	4.8.0	4.9.0	T1-031555
TP-22	TP-030279	269		CR 34.108 Rel-4: Addition of Bearer combination for Interactive/background UL 64 kbps DL 768 kbps for Rel-5	F	4.8.0	4.9.0	T1-031441
TP-22	TP-030279	271	1	Update of generic test procedure for TX, RX and Performance Requirement	A	4.8.0	4.9.0	T1-031610
TP-22	TP-030279	273	1	Introduction of generic test procedure for RRM handover test cases	A	4.8.0	4.9.0	T1-031608
TP-22	TP-030279	275	1	Correction of CM TGD parameter	A	4.8.0	4.9.0	T1-031591
TP-22	TP-030279	277	1	Corrections to default message contents of Radio Bearer Release	F	4.8.0	4.9.0	T1-031594
TP-22	TP-030279	279	1	Modification to default DPCCH_Power_offset value	A	4.8.0	4.9.0	T1-031598
TP-22	TP-030279	283		Correction of TFCS for radio bearer combination 6.10.2.4.1.51b	A	4.8.0	4.9.0	T1-031527
TP-23	TP-040037	284	-	New Radio Bearer Setup (FDD) message for RF (Revision of T1-040258)	F	4.9.0	4.10.0	T1-040417
TP-23	TP-040037	287	-	Corrections to default message contents of RRC Connection Setup message -> 2nd change not implemented (not implementable)	A	4.9.0	4.10.0	T1-040080
TP-23	TP-040037	289	-	Correction to Default parameters for Cells 1 to 8 in MultiPLMN cell environments - Rel-4	A	4.9.0	4.10.0	T1-040095
TP-23	TP-040037	291	-	Corrections to TDD HCR RABs	A	4.9.0	4.10.0	T1-040103
TP-23	TP-040037	296	-	LCR Corrections to TDD RABs merge of T1-040104 , T1-040201 and T1-040203	F	4.9.0	4.10.0	T1-040299
TP-23	TP-040037	298	-	Correction to handling of Entered Parameter IE in default contents for Initial Direct Transfer	A	4.9.0	4.10.0	T1-040411
TP-23	TP-040037	300	-	The diverse operation in TDD mode updating according to the core specification	A	4.9.0	4.10.0	T1-040368
TP-23	TP-040037	302	-	correction of measurement control default message contents for TDD -> Not implemented (not implementable)	F	4.9.0	4.10.0	T1-040370
TP-23	TP-040037	303	-	correction of RADIO BEARER SETUP default message	F	4.9.0	4.10.0	T1-040371

Meeting-1st-Level	Doc-1st-Level	CR	Rev	Subject	Cat	Version-Current	Version-New	Doc-2nd-Level
				contents for 1.28 Mcps TDD				
TP-23	TP-040037	304	-	Correction of RADIO BEARER RELEASE default message contents for TDD: AM or UM (1.28 Mcps TDD)	F	4.9.0	4.10.0	T1-040372
TP-23	TP-040037	305	-	Contents of RRC CONNECTION SETUP message: UM (Transition to CELL_DCH) (1.28 Mcps TDD) -> Not implemented (not implementable)	F	4.9.0	4.10.0	T1-040373
TP-23	TP-040037	292	-	New I/B UL:64 DL:768 kbps PS RAB misplaced	F	4.10.0	5.0.0	T1-040109
TP-23	TP-040037	294	-	Generic setup procedure and default message contents for HSDPA (as of T1-040069rev1)	F	4.10.0	5.0.0	T1-040271
TP-23	TP-040037	295	-	Baseline radio bearer combination for HSDPA support	B	4.10.0	5.0.0	T1-040273
TP-24	TP-040112	308	-	Correction to IEs "START" and "ul_CounterSynchronisationInfo".	F	5.0.0	5.1.0	T1-040512
TP-24	TP-040112	309	-	Correction to HSDPA reference radio bearer configurations	F	5.0.0	5.1.0	T1-040522
TP-24	TP-040112	310	-	Addition of test procedure for HSDPA RF testing	F	5.0.0	5.1.0	T1-040546
TP-24	TP-040112	315	-	Corrections to default RRC messages	F	5.0.0	5.1.0	T1-040593
TP-24	TP-040112	318	-	Change of default LAC/RAC for inter-RAT test cases	A	5.0.0	5.1.0	T1-040656
TP-24	TP-040112	319	-	Contents of Physical channel Reconfiguration message modified to incorporate transition to URA_PCH or CELL_PCH	F	5.0.0	5.1.0	T1-040673
TP-24	TP-040112	320	-	Correction of reference test frequencies for UMTS800(band VI)	F	5.0.0	5.1.0	T1-040701
TP-24	TP-040112	325	-	Update of generic setup procedures in clauses 7.3.4 and 7.3.5.	A	5.0.0	5.1.0	T1-040754
TP-24	TP-040112	326	-	Physical channel parameters for AM RLC 7 bit Length Indicator TestCases (Rel-5)	F	5.0.0	5.1.0	T1-040902
TP-24	TP-040112	327	-	Corrections to the default contents of Security Mode Command (Rel-5)	F	5.0.0	5.1.0	T1-040903
TP-24	TP-040112	330	-	Corrections to Contents of Scheduling Block 1 (FDD)	F	5.0.0	5.1.0	T1-040909
TP-24	TP-040112	331	-	Corrections to Contents of PHYSICAL CHANNEL RECONFIGURATION message: AM or UM	F	5.0.0	5.1.0	T1-040911
TP-24	TP-040112	332	-	Corrections to Contents of RRC CONNECTION SETUP message: UM	F	5.0.0	5.1.0	T1-040913
TP-24	TP-040112	333	-	RADIO BEARER SETUP message (FDD) for Test Loop Mode2.	F	5.0.0	5.1.0	T1-040917
TP-24	TP-040112	335	-	Changes to establish one version of 34.108 covering all releases	A	5.0.0	5.1.0	T1-040931
TP-24	TP-040112	338	-	Addition of generic test procedure for AS test cases using the test loop	A	5.0.0	5.1.0	T1-040934
TP-24	TP-040112	339	-	Corrections to LCR TDD RABs	F	5.0.0	5.1.0	T1-040935
TP-25	TP-040157	343	-	Correction to generic test procedure in clause 7.4.2.6a.	F	5.1.0	5.2.0	T1-041040
TP-25	TP-040157	344	-	Addition of default messages for Signalling (FDD)	F	5.1.0	5.2.0	T1-041044
TP-25	TP-040157	345	-	Minor change to terminology in SRB tables of clause 6.10	F	5.1.0	5.2.0	T1-041140
TP-25	TP-040157	346	-	Default Message Content for System Information Block type 5 (FDD) and type 6 (FDD)	F	5.1.0	5.2.0	T1-041154
TP-25	TP-040157	347	-	Corrections to DCCH Transport channel Parameters for HSDPA RAB	D	5.1.0	5.2.0	T1-041171
TP-25	TP-040157	348	-	Corrections to clause 9	F	5.1.0	5.2.0	T1-041223
TP-25	TP-040157	349	-	Corrections to HCR TDD RAB combinations	F	5.1.0	5.2.0	T1-041235
TP-25	TP-040157	350	-	Adding missing clause 6.10.2.4.1.62.1	F	5.1.0	5.2.0	T1-041252
TP-25	TP-040157	351	-	Modification of AICH power offset in SysInfo 5 and 6.	F	5.1.0	5.2.0	T1-041253
TP-25	TP-040157	352	-	Correction to Default Message Content for Radio Bearer Setup Message.	F	5.1.0	5.2.0	T1-041259
TP-25	TP-040157	353	-	Correction to Default Message Content for Radio Bearer Reconfiguration Message for Condition A6	F	5.1.0	5.2.0	T1-041266
TP-25	TP-040157	354	-	CR to 34.108: introduction of default RB SETUP message from cell_FACH state for HSDPA	F	5.1.0	5.2.0	T1-041298
TP-25	TP-040157	355	-	Corrections to Contents of RADIO BEARER SETUP message: BTFD RMC	F	5.1.0	5.2.0	T1-041317
TP-25	TP-040157	340	-	Resolution of downlink code conflict between OCNS DPCH and S-CCPCH	F	5.1.0	5.2.0	T1-041327
TP-25	TP-040157	361	-	Correction to test procedure for test cases using Cell_PCH or URA_PCH state	F	5.1.0	5.2.0	T1-041346
TP-25	TP-040157	362	-	Removal of DCCH dummy transmission for RF testing	F	5.1.0	5.2.0	T1-041350
TP-25	TP-040157	341	-	Correct title to test procedure for test cases using Cell_PCH or URA_PCH state	F	5.1.0	5.2.0	T1-041354
TP-25	TP-040157	363	-	Addition of intra frequency cell to cell environments	F	5.1.0	5.2.0	T1-041356
TP-25	TP-040157	342	-	Correct primary scrambling code usage in default message contents in clause 9.2.1	F	5.1.0	5.2.0	T1-041365
TP-25	TP-040157	356	-	HSDPA downlink code allocation	F	5.1.0	5.2.0	T1-041374
TP-25	TP-040157	357	-	Correction to test procedure for test cases using	F	5.1.0	5.2.0	T1-041376

Meeting-1st-Level	Doc-1st-Level	CR	Rev	Subject	Cat	Version-Current	Version-New	Doc-2nd-Level
				CELL_FACH state				
TP-25	TP-040157	358	-	Varying DPCH Power Offset according to data transmission rate	F	5.1.0	5.2.0	T1-041416
TP-25	TP-040157	359	-	Corrections to default message for RADIO BEARER SETUP message in clause 9.2.1 (HSDPA RF)	F	5.1.0	5.2.0	T1-041418
TP-25	TP-040157	360	-	Test SIB schedule for two S-CCPCH or two PRACH in 34.108	F	5.1.0	5.2.0	T1-041422
TP-25	TP-040157	364	-	Correction to Default Message Content for Radio Bearer Setup Message re: RM Attribute values	F	5.1.0	5.2.0	T1-041433
TP-26	TP-040233	365	-	CR to 34.108 Rel-5:Correction to default value of Qrxlevmin	F	5.2.0	5.3.0	T1-041532
TP-26	TP-040233	366	-	CR to 34.108 Rel-5: Corrections of the values in 6.11.5.4 for LCR TDD	F	5.2.0	5.3.0	T1-041573
TP-26	TP-040233	367	-	Alignment of Prose to TTCN for SCH power level	F	5.2.0	5.3.0	T1-041584
TP-26	TP-040233	368	-	Addition of new HSDPA RAB configurations with UL 64 kbps	F	5.2.0	5.3.0	T1-041651
TP-26	TP-040233	369	-	Correction to initial conditions and references in clause 7.3	F	5.2.0	5.3.0	T1-041654
TP-26	TP-040233	370	-	Introduction of reference radio bearer combination for PS streaming and downlink rate up to 128 kbps	F	5.2.0	5.3.0	T1-041685
TP-26	TP-040233	371	-	Correction of clause 6.1 (Simulated network environment)	F	5.2.0	5.3.0	T1-041686
TP-26	TP-040233	372	-	Correction to generic Call Setup procedure for mobile terminating circuit switched calls	F	5.2.0	5.3.0	T1-041699
TP-26	TP-040233	373	-	CR to 34.108 Rel-5; Corrections to the default RADIO BEARER SETUP message for HSDPA	F	5.2.0	5.3.0	T1-041754
TP-26	TP-040233	374	-	Physical layer multiplexing configuration in case of AMR and two PS RABs	F	5.2.0	5.3.0	T1-041801
TP-26	TP-040233	375	-	Addition of new HSDPA RAB configurations	F	5.2.0	5.3.0	T1-041802
TP-26	TP-040233	376	-	Introduction of information for tests for Performance requirements for A-GPS.	B	5.2.0	5.3.0	T1-041850
TP-26	TP-040233	377	-	Introduction of UMTS-850 MHz band V	F	5.2.0	5.3.0	T1-041874
TP-26	TP-040233	378	-	CR to TS 34.108 Rel-5; Adding a new test condition for RADIO BEARER RELEASE Procedure (Revision of T1-041716).	F	5.2.0	5.3.0	T1-041933
TP-26	TP-040233	379	-	Update of Reference Radio Bearer for Conversational / speech / UL:5.9 DL:5.9 kbps / CS RAB for DL SF=256	F	5.2.0	5.3.0	T1-041942
TP-26	TP-040233	380	-	CR to 34.108: Correction to the maximum bit rate for HS-PDSCH	F	5.2.0	5.3.0	T1-041943
TP-26	TP-040233	381	-	Alignment of Prose to TTCN for RRC Connection Release (Cell DCH state) and RRC Connection Setup Message (Cell FACH State).	F	5.2.0	5.3.0	T1-041965
TP-27	TP-050032	382	-	Updates from core specification changes	F	5.3.0	5.4.0	T1-050095
TP-27	TP-050032	383	-	Correction to Hand over test procedure in CELL_DCH	F	5.3.0	5.4.0	T1-050350
TP-27	TP-050032	384	-	CR to 34.108: Changes to test frequencies for UMTS 850 Band	B	5.3.0	5.4.0	T1-050380
TP-27	TP-050032	385	-	Correction to default SIB configurations	F	5.3.0	5.4.0	T1-050019
TP-27	TP-050032	386	-	Editorial corrections in HSDPA RAB configurations 6.10.2.4.5.2 and 6.10.2.4.5.4.	D	5.3.0	5.4.0	T1-050052
TP-27	TP-050032	387	-	CR to 34.108 Rel-5: Update to the contents of PHYSICAL CHANNEL RECONFIGURATION message for 1.28 Mcps TDD	F	5.3.0	5.4.0	T1-050064
TP-27	TP-050032	388	-	CR to 34.108 Rel-5: Update to the contents of TRANSPORT CHANNEL RECONFIGURATION message for 1.28 Mcps TDD	F	5.3.0	5.4.0	T1-050065
TP-27	TP-050032	389	-	CR to 34.108 Rel-5: Update to the contents of RRC CONNECTION REQUEST message for TDD	F	5.3.0	5.4.0	T1-050066
TP-27	TP-050032	390	-	Correction to the HSDPA RB Identity in Radio Bearer Setup & Radio Bearer Release message contents	F	5.3.0	5.4.0	T1-050072
TP-27	TP-050032	391	-	CR to TS 34.108 v5.3.0 - Correction to Default RADIO BEARER RELEASE message (FDD)	F	5.3.0	5.4.0	T1-050202
TP-27	TP-050032	392	-	Addition of reference radio bearer configuration for MAC-hs testing	F	5.3.0	5.4.0	T1-050239
TP-27	TP-050032	393	-	CR to 34.108 Rel-5: Update to the contents of RRC CONNECTION REQUEST message for TDD	F	5.3.0	5.4.0	T1-050295
TP-27	TP-050032	394	-	CR to 34.108 Rel-5: Update to the contents of Default System Information Block Messages for TDD	F	5.3.0	5.4.0	T1-050296
TP-27	TP-050032	395	-	CR to 34.108 Rel-5: Add the contents of SIB 5 & 6 for HCR TDD	F	5.3.0	5.4.0	T1-050297
TP-27	TP-050032	396	-	Correction to TFCS ordering	F	5.3.0	5.4.0	T1-050451r1
TP-27	TP-050032	397	-	Addition of GPS scenario and A-GPS assistance data values for signalling tests to 34.108	F	5.3.0	5.4.0	T1-050458

Meeting-1st-Level	Doc-1st-Level	CR	Rev	Subject	Cat	Version-Current	Version-New	Doc-2nd-Level
TP-27	TP-050032	398	-	CR to TS 34.108 Rel-5; Correction to the physical channel parameters (Revison of T1-050176)	F	5.3.0	5.4.0	T1-050469
RP-28	RP-050267	399	-	Additional call setup procedures for inter RAT RRM testing	F	5.4.0	5.5.0	R5-050618
RP-28	RP-050267	400	-	CR to 34.108: Correction to RADIO BEARER SETUP message for BTFD RMC	F	5.4.0	5.5.0	R5-050704
RP-28	RP-050267	401	-	CR to 34.108: Correction to reference radio conditions for GSM	F	5.4.0	5.5.0	R5-050811
RP-28	RP-050267	402	-	Addition of RADIO BEARER SETUP Messages for Auxiliary Measurement	F	5.4.0	5.5.0	R5-050856
RP-28	RP-050267	404	-	CR 34.108 Addition of specific message content to A-GPS performance test procedures in clause 7.5	F	5.4.0	5.5.0	R5-050709
RP-28	RP-050267	405	-	CR to 34.108 Rel-5: Clarification of generic setup procedures in section 7.3.4	F	5.4.0	5.5.0	R5-050663
RP-28	RP-050267	406	-	Removal of TGPL2	F	5.4.0	5.5.0	R5-050513
RP-28	RP-050267	407	-	Addition of compressed mode pattern for Inter Frequency FDD measurement & Inter RAT measurement GSM	F	5.4.0	5.5.0	R5-050525
RP-28	RP-050267	408	-	Correction to MIB, PLMN and Cell Value Tag Value Definition to 34.108	F	5.4.0	5.5.0	R5-050608
RP-28	RP-050267	409	-	CR to 34.108 Rel-5: Corrections to the contents of System Information Block type 11 (3.84 Mcps and 1.28 Mcps TDD) in section 6.1.0b	F	5.4.0	5.5.0	R5-050613
RP-28	RP-050267	410	-	CR to 34.108 Rel-5: Corrections to the usage of 'Cell info' IE in System Information Block type 11 in section 6.1.4 for TDD cell	F	5.4.0	5.5.0	R5-050619
RP-28	RP-050267	411	-	CR to 34.108 Rel-5: Corrections to the contents of System Information Block type 5 (1.28 Mcps TDD)	F	5.4.0	5.5.0	R5-050620
RP-28	RP-050267	412	-	Update to clause 8 Test USIM Parameters	F	5.4.0	5.5.0	R5-050638
RP-28	RP-050267	413	-	CR to 34.108 Rel-5: Update of SIB3, SIB4, SIB11 and SIB12 for TDD in section 6.1.0b	F	5.4.0	5.5.0	R5-050662
RP-28	RP-050267	414	-	CR to 34.108: Correction to TFCS	F	5.4.0	5.5.0	R5-050677
RP-28	RP-050267	415	-	CR to TS34.108 Rel-5; Correction to the physical channel parameter	F	5.4.0	5.5.0	R5-050724
RP-28	RP-050267	416	-	Correction to default SIB configurations	F	5.4.0	5.5.0	R5-050947
RP-28	RP-050267	417	-	CR to 34.108: Missing Rel-5 IE's in the default Radio Bearer Setup message at section 9.1.1.	F	5.4.0	5.5.0	R5-050600
RP-28	RP-050267	418	-	CR to TS34.108 Rel-5; Clarification of the reference TFCS for three RB multiplexing option (condition A9)	F	5.4.0	5.5.0	R5-050913
RP-28	RP-050268	419	-	Addition of new HSDPA Streaming RAB configurations	F	5.4.0	5.5.0	R5-050880
RP-28	RP-050268	420	-	CR to 34.108 Rel-5: Content Correction of RRC CONNECTION SETUP message for LCR TDD in 9.1.2	F	5.4.0	5.5.0	R5-050585
RP-28	RP-050268	421	-	Add Default RADIO BEARER RELEASE message (3.84 Mcps TDD)	F	5.4.0	5.5.0	R5-050680
RP-28	RP-050268	422	-	Add Default Contents of RADIO BEARER RECONFIGURATION COMPLETE message: AM (3.84 Mcps TDD)	F	5.4.0	5.5.0	R5-050681
RP-28	RP-050268	423	-	Add Default Contents of RADIO BEARER RECONFIGURATION message: AM or UM (3.84 Mcps TDD)	F	5.4.0	5.5.0	R5-050682
RP-28	RP-050268	424	-	Add Default Contents of PHYSICAL CHANNEL RECONFIGURATION message: AM or UM (3.84 Mcps TDD)	F	5.4.0	5.5.0	R5-050683
RP-28	RP-050268	425	-	Add Default Contents of PHYSICAL CHANNEL RECONFIGURATION COMPLETE message: AM (3.84 Mcps TDD)	F	5.4.0	5.5.0	R5-050684
RP-28	RP-050268	426	-	Add Default Contents of TRANSPORT CHANNEL RECONFIGURATION message: AM or UM (3.84 Mcps TDD)	F	5.4.0	5.5.0	R5-050685
RP-28	RP-050268	427	-	Add Default Contents of TRANSPORT CHANNEL RECONFIGURATION COMPLETE message: AM (3.84 Mcps TDD)	F	5.4.0	5.5.0	R5-050686
RP-28	RP-050268	428	-	Add Default Contents of MEASUREMENT REPORT message: AM (intra/inter-frequency measurement (3.84 Mcps TDD)	F	5.4.0	5.5.0	R5-050956
RP-28	RP-050268	430	-	Correction to RADIO BEARER SETUP message for HSDPA RF testing	F	5.4.0	5.5.0	R5-050879
RP-28	RP-050349	403	-	Addition of GPS scenario and assistance data for A-GPS performance tests in 34.108	B	5.4.0	5.5.0	R5-050836
RP-28	RP-050350	429	-	Corrections to section 10.7 and GPS data file for 34.108	F	5.4.0	5.5.0	R5-050969
RP-29	RP-050600	431	-	Feature Clean Up: Removal of DRAC from section 9 of 34.108	F	5.5.0	6.0.0	R5-051312

Meeting-1st-Level	Doc-1st-Level	CR	Rev	Subject	Cat	Version-Current	Version-New	Doc-2nd-Level
RP-29	RP-050600	432	-	Feature Clean Up: Removal of SSDT from 34.108	F	5.5.0	6.0.0	R5-051356
RP-29	RP-050600	433	-	Feature Clean Up: Removal of 80 ms TTI for DCH for all cases except when the UE supports SF512 from 34.108	F	5.5.0	6.0.0	R5-051379
RP-29	RP-050600	434	-	Feature Clean Up: Removal of CPCH from section 4 of 34.108	C	5.5.0	6.0.0	R5-051543
RP-29	RP-050600	435	-	Feature Clean Up: Removal of CPCH from section 6 of 34.108	C	5.5.0	6.0.0	R5-051544
RP-29	RP-050600	436	-	Feature Clean Up: Removal of CPCH from section 7 & 8 of 34.108	C	5.5.0	6.0.0	R5-051545
RP-29	RP-050600	437	-	Feature Clean Up: Removal of CPCH from section 9 of 34.108	C	5.5.0	6.0.0	R5-051546
RP-29	RP-050600	438	-	Feature Clean Up: Removal of DSCH (FDD mode) from 34.108	F	5.5.0	6.0.0	R5-051548
RP-29	RP-050600	439	-	Modification to PS setup procedure for inter RAT RRM testing	F	5.5.0	6.0.0	R5-051161
RP-29	RP-050600	440	-	CR to 34.108: RRC CONNECTION SETUP exception for HSDPA testing	F	5.5.0	6.0.0	R5-051430
RP-29	RP-050600	441	-	CR to 34.108: Correction to the RADIO BEARER SETUP message for HSDPA testing	F	5.5.0	6.0.0	R5-051112
RP-29	RP-050512	442	-	Changes to GPS Scenarios and Assistance data in TS 34.108	F	5.5.0	6.0.0	R5-051076
RP-29	RP-050514	443	-	CR to 34.108 Rel-5: Correction of contents of RADIO BEARER SETUP message: AM or UM (1.28 Mcps TDD) in 9.2.2	F	5.5.0	6.0.0	R5-051212
RP-29	RP-050514	444	-	CR to 34.108 Rel-5: SIB default schedule in 6.1.0a - Default Master Information Block and Scheduling Block messages	F	5.5.0	6.0.0	R5-051213
RP-29	RP-050514	445	-	CR to 34.108 Rel-5: Corrections to the IE"Midamble shift and burst type" of System Information Block type 5/6 (3.84Mcps TDD) in section 6.1.0b	F	5.5.0	6.0.0	R5-051222
RP-29	RP-050514	446	-	CR to 34.108 Rel-5: Corrections to the contents of System Information Block type 5 (3.84 Mcps TDD) in section 6.1.1	F	5.5.0	6.0.0	R5-051344
RP-29	RP-050514	447	-	CR to 34.108 Rel-5: Corrections to the value of Sintrasearch and Sintersearch in "Cell selection and reselection quality measure" of System Information Block type 3/4 (1.28Mcps TDD and 3.84Mcps TDD) in section 6.1.0b	F	5.5.0	6.0.0	R5-051536
RP-29	RP-050600	448	-	Use 'Same as UL' for the Added or Reconfigured DL TrCH information of the added or reconfigured PS RAB	F	5.5.0	6.0.0	R5-051041
RP-29	RP-050600	449	-	Correction to the default contents for Radio Bearer Setup message	F	5.5.0	6.0.0	R5-051044
RP-29	RP-050600	450	-	Corrections to default parameters of UL:384kbps PS Bearer	F	5.5.0	6.0.0	R5-051058
RP-29	RP-050600	451	-	Correction to NB AMR Radio Bearer Configurations	F	5.5.0	6.0.0	R5-051318
RP-29	RP-050600	452	-	Correction to default contents of Cell Update and Initial Direct transfer message for Rel-5	F	5.5.0	6.0.0	R5-051325
RP-29	RP-050600	453	-	Correction to DPCCH Power Offset IE in default contents for RRC Connection Setup and Radio Bearer Setup message	F	5.5.0	6.0.0	R5-051365
RP-29	RP-050515	454	-	Using Test USIM for VSTK generation of VGCS/VBS ciphering	B	5.5.0	6.0.0	R5-051553
RP-29	RP-050600	455	-	Correction to default contents of RADIO BEARER SETUP MESSAGE for the IE "Number of Processes"	F	5.5.0	6.0.0	R5-051324
RP-29	RP-050600	456	-	Correction of DL channelisation code in RADIO BEARER SETUP for HSDPA configurations	F	5.5.0	6.0.0	R5-051345
RP-29	RP-050513	457	-	Clarifiation of reference radio bearer configuration for MAC-hs test case 7.1.5.2.	F	5.5.0	6.0.0	R5-051164
RP-29	RP-050600	458	-	Replacement of the technical content of 34.108 Rel-5 by a pointer to Rel-6 document	F	5.5.0	6.0.0	R5-051584
RP-29	RP-050600	459	-	Introduction of HSDPA + Wideband AMR radio bearer combination	F	5.5.0	6.0.0	R5-051588
RP-29	RP-050600	460	-	Feature Clean Up: Removal of DRAC from section 6 of 34.108	F	5.5.0	6.0.0	R5-051311

History

Document history		
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