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**Universal Mobile Telecommunications System (UMTS);
Common test environments for User Equipment (UE)
conformance testing
(3GPP TS 34.108 version 4.9.0 Release 4)**



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Foreword

This Technical Specification (TS) 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:

Version x.y.z

where:

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

Introduction

The 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".
- [8] 3GPP TS 25.214: "Physical layer procedures (FDD)".
- [7] 3GPP TS 25.301 "Radio Interface Protocol Architecture".
- [9] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".
- [10] 3GPP TR 25.990: "Vocabulary".
- [11] 3GPP TS 25.101: "UE Radio transmission and reception (FDD)".
- [12] 3GPP TS 25.102: "UTRA (UE) TDD; Radio transmission and reception".
- [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: "UTRA (BS) FDD; Radio Transmission and Reception".
- [21] 3GPP TS 25.105: "UTRA (BS) TDD; Radio Transmission and Reception".
- [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: "3G Security; 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: "GSM/EDGE Radio Access Network; Digital cellular telecommunications system (Phase 2+); 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".

3 Definitions and abbreviations

3.1 Definitions

For the purposes of the present document, the terms and definitions given in [9], [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 [9], [10] and the following 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.
AFC	Automatic Frequency Control
AM	Acknowledgement mode
ATT	Attenuator
BCCH	Broadcast Control Channel
CBS	Cell Broadcast Service
CC	Convolutional coding
CCCH	Common Control Channel
CCTrCH	Coded Composite Transport Channel
CS	Circuit switching
DCCH	Dedicated Control Channel
DL	Downlink
DPCH	Dedicated Physical Channel
DT	Direct transfer

DTCH	Dedicated Traffic Channel
FTM	File tunnelling mode
HYB	Hybrid
NAS	Non-access stratum
OBW	Occupied Bandwidth
OCNS	Orthogonal Channel Noise Simulator, a mechanism used to simulate the users or control signals on the other orthogonal channels of a downlink.
PRACH	Physical Random Access Channel
PS	Packet switching
RAB	Radio Access Bearer
RB	Radio Bearer
RRC	Radio Resource Control (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 RB
SS	System Simulator
SSD	Source statistics descriptor
TC	Turbo coding
TM	Transparent mode
UL	Uplink
UM	Unacknowledgement mode

4 Common requirements of test equipment

Mobile conformance testing can be categorised 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 [1] (Signalling), [2] (RF-FDD) and [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 [7]. Similarly the mapping between Transport channels and Physical channels is as described in 3GPP TS 25.211 for the FDD mode, and 3GPP TS 25.221 for the TDD mode. The reference measurement channels (mapping between Transport channels and Physical channels for DTCH/DCCH to be tested) are defined in [2] annex C for FDD and [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 TS 34.123-1)

4.2.1.1.2 Transport Channels

Transport Channel	Minimum Number	Comments
BCH	1	
FACH	1	
PCH	1	
DCH	n <FFS>	
DSCH	1	
RACH	2	
CPCH	1	
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	Synchronisation 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: - Acquisition Indicator Channel, for PRACH - Access Preamble Acquisition Indicator Channel (AP-ICH), for PCPCH - Collision-Detection/Channel-Assignment Indicator Channel (CD/CA-ICH), for PCPCH
DPDCH	3	Downlink Physical Data Channel. There will be a single DPCH 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.
DPCH	1	Uplink Dedicated Physical Channel
PRACH	2	Physical Random Access Channel.
PCPCH	1	Physical Common Packet Channel.
CSICH	1	CPCH Status Indicator Channel

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 subclause 4.2 is mapped onto the P-CCPCH. The position (time slot / code) of the P-CCPCH is known from PSCH.
SCH	1	Synchronisation Channel. Code group of a cell can be derived from the synchronisation 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 subclause 4.2 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 described in subclause 4.2 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 described in subclause 4.2 is mapped onto one or more PUSCH. Timing advance, as described in TS-25.224, subclause 4.3, is applied to the PUSCH.
PRACH	2	Physical Random Access Channel. The RACH as described in subclause 4.2 is mapped onto PRACH
PNBSCH	1	Physical node B synchronisation channel: In case cell sync bursts are used for Node B synchronisation the PNBSCH shall be used for the transmission of the cell sync burst TS 25.223. 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 section 4.1.2 "Common Transport Channels" is mapped onto the P-CCPCH1 and P-CCPCH2. The position (time slot / code) of the P-CCPCHs is fixed in the 1.28Mcps TDD. The P-CCPCHs are mapped onto the first two code channels of timeslot#0 with spreading factor of 16.
DwPCH	1	Synchronisation Channel for DL. Present in each 5 ms subframe.
UpPCH	1	Synchronisation Channel for UL. Present in each 5 ms subframe.
S-CCPCH	2	Secondary Common Control Physical Channel. PCH and FACH as described in subclause 4.1.2 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 subclause 4.2 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 38399, to allow for extensibility. However, the system simulator is required only to support a maximum T_{cell} value of 2304, with a step resolution of 256. The SS may limit a T_{cell} value of greater than 2304, 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 specifications [20] for FDD and [21] for TDD.

For RF tests, the requirement of Test Equipment is described in [2] annex F for FDD and [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 [2] annex F for FDD and [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 [11] and for TDD mode by a Power Class 2 UE transmitting at the maximum power level permitted in [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 [11] for FDD mode, and [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 $2 * TTI + t_{\text{delta}}$, 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 [11] and the center frequencies for these channels are shifted 100kHz relative to the normal raster.

5.1.1 FDD Mode Test frequencies

UTRA/FDD is designed to operate in one of three paired bands [11]. The reference test frequencies for the common test environment for each of the 4 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

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 FDD reference test frequencies for Operating Band VI

Test Frequency ID	UARFCN	Frequency of Uplink	UARFCN	Frequency of Downlink
Low Range	812	832.5 MHz	1 037	877.5 MHz
Mid Range	825	835.1MHz	1 050	880.1 MHz
High Range	837	837.5 MHz	1 062	882.5 MHz

5.1.2 TDD Mode Test frequencies

UTRA/TDD is designed to operate in one of three unpaired bands [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	9563	1912.6 MHz
Mid Range	9 550	1 910 MHz	9 400	1 880 MHz	9600	1920 MHz
High Range	9 587	1 917.4 MHz	9 537	1 907.4 MHz	9637	1927.4 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	9504	1 900.8 MHz	9254	1850.8 MHz	9554	1910.8 MHz
Mid Range	9550	1 910 MHz	9400	1880 MHz	9600	1920 MHz
High Range	9596	1 919.2 MHz	9546	1909.2 MHz	9646	1929.2 MHz
Low Range	10 054	2 010.8 MHz	9654	1930.8 MHz		
Mid Range	10 087	2 017.4 MHz	9800	1960 MHz		
High Range	10 121	2 024.2 MHz	9946	1989.2 MHz		

5.2 Radio conditions

There are a number of radio propagation conditions defined in [2] for FDD mode and [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 [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 [2] annex D for FDD and [5] annex D for TDD.

5.2.4 Moving Propagation Conditions

See [2] annex D for FDD. There are no currently defined Moving propagation conditions for TDD.

5.2.5 Birth-Death propagation conditions

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

5.3 Standard test signals

Reference [11] and [12] for definitions of standard test signals.

5.4 Signal levels

The power levels given in the following clauses (5.4.1 and 5.4.2) apply for Signalling tests only. For RF tests power levels are given in [2] annex E for FDD and [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 and Cell 8 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 FDD and TDD intra- and inter-frequency cell environment Cell 1 to Cell 8 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		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		SIB16
Mandatory for Cell reselection		SIB18

6.1.0a.2 SIB configurations

Currently three SIB configurations are used, Configuration 1 is default for both UTRAN/FDD SYSTEM and UTRAN/FDD + GERAN SYSTEM, or both UTRAN/TDD SYSTEM and UTRAN/TDD + GERAN SYSTEM.

Configuration 2 is for test cases which need two S_CCPCH or two PRACH. Configuration 3 is for inter-RAT handover 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	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		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	1
- Supported PLMN types	
- PLMN type	GSM-MAP
- PLMN identity	
- MCC digit	Set to the same Mobile Country Codes stored in the test USIM card (TS 34.108 clause 8.3.2.2 EF IMSI(IMSI)).
- MNC digit	Set to the same Mobile Network Codes stored in the test USIM card (TS 34.108 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	1
- 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	1
- 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	1
- 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	1
- 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	1
- 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	1
- 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	1
- 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	1
- 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	1
- 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	1
- 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	1
- 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	1
- 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	1
- 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	1
- 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

FFS

6.1.0a.4.2 SIB schedule for Inter-Rat Handover Test

FFS

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	
- 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
- UE Timers and constants in idle mode	
-T300	4000 milliseconds
-N300	3
-T312	10 seconds
- N312	1
- UE Timers and constants in connected mode	
- T301	Not Present (2000 milliseconds: default value)
- N301	Not Present (2: default value)
- T302	Not Present (4000 milliseconds: default value)
- N302	Not Present (3: default value)
- T304	Not Present (2000 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 (2000 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)

Contents of System Information Block type 2

- URA identity list	<i>Only 1 URA identity broadcasted</i>
- 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
- 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
- Slimit,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	
- 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	(no data)
- CHOICE mode	TDD
- Sintrasearch	10 dB
- Sintersearch	10 dB
- SsearchHCS	Not present
- RAT List	This parameter is configurable
- RAT identifier	GSM
- Ssearch,RAT	-32 dB
- SHCS,RAT	Not present
- Slimit,SsearchRAT	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	
- 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	(no data)
- CHOICE mode	TDD
- Sintrasearch	10 dB
- Sintersearch	10 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
- 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 TFCl signalling	Normal
- TFCl 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 β_c	11
- Gain factor β_d	15
- Reference TFC ID	0
- CHOICE Mode	FDD
- Power offset Pp-m	0 dB
- PRACH partitioning	
- Access Service Class	
- ASC Setting	Not Present
- 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	FDD
- CHOICE mode	0 (ASC#3)
- Available signature Start Index	7 (ASC#3)
- Available signature End Index	'1111'B
- Assigned Sub-Channel Number	The first/ leftmost bit of the bit string contains the most significant bit of the Assigned Sub-Channel Number.
	Not Present
- ASC Setting	FDD
- ASC Setting	0 (ASC#5)
- CHOICE mode	7 (ASC#5)
- Available signature Start Index	'1111'B
- Available signature End Index	The first/ leftmost bit of the bit string contains the most significant bit of the Assigned Sub-Channel Number.
- Assigned Sub-Channel Number	Not Present
- ASC Setting	FDD
- ASC Setting	0 (ASC#7)
- CHOICE mode	7 (ASC#7)
- Available signature Start Index	'1111'B
- Available signature End Index	The first/ leftmost bit of the bit string contains the most significant bit of the Assigned Sub-Channel Number.
- Assigned Sub-Channel Number	Not Present
- 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
	(This IE is repeated for TFC number for PCH and FACH.)
- TFCS	Normal
- CHOICE TFCI signalling	
- 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	
- 2 nd 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 <i>TDD option</i>	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 <i>TFCI signalling</i>	
- 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 <i>mode</i>	TDD
- CHOICE TDD option	3.84 Mcps TDD
- Timeslot number	0
- Midamble shift and burst type	
- CHOICE <i>TDD option</i>	3.84 Mcps TDD
- CHOICE Burst Type	Type 1
- Midamble Shift	0
- 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 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	"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 system information	
- Secondary CCPCH info	
- CHOICE mode	TDD
- Offset	0
- Common timeslot info	
- 2 nd 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 <i>TDD option</i>	1.28 Mcps TDD
- Timeslot number	0
- TFCI existence	Reference clause 6.10 Parameter Set
- Midamble Shift and burst type	
- CHOICE <i>TDD option</i>	1.28 Mcps TDD
- Midamble Allocation Mode	Default midamble
- Midamble configuration	4
- Midamble Shift	Not Present
- CHOICE <i>TDD option</i>	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 <i>TFCS signalling</i>	
- Normal	
- TFCS Field 1 information	Addition
- CHOICE <i>TFCS representation</i>	
- TFCS addition information	Number of bits used must be enough to cover all combinations of CTFC from clause 6.10.
- CHOICE <i>CTFC Size</i>	Reference clause 6.10 Parameter Set
- CTFC information	Not Present
- Power offset information	
- FACH/PCH information	
- Transport Channel Identity	12 (for PCH)
- TFS	(PCH)
- CHOICE <i>Transport channel type</i>	Common transport channels
- Dynamic <i>Transport format information</i>	(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 <i>Mode</i>	TDD
- Transmission Time Interval	Not Present
- CHOICE <i>Logical Channel List</i>	ALL
- Semi-static <i>Transport Format information</i>	
- 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 <i>Transport channel type</i>	Common transport channels
- Dynamic <i>Transport format information</i>	(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 <i>Mode</i>	TDD
- Transmission Time Interval	Not Present
- CHOICE <i>Logical Channel List</i>	ALL
- Semi-static <i>Transport Format information</i>	
- 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 <i>mode</i>	TDD
- CHOICE <i>TDD option</i>	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	
- 2 nd 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	Type 1
- CHOICE Burst Type	Default midamble
- Midamble Allocation Mode	4
- Midamble configuration burst type 1 and 3	Not Present
- Midamble Shift	
- Code List	Reference clause 6.10 Parameter Set
- Channelisation Code	(This IE is repeated for TFC number for PCH and FACH.)
- TFCS	
- Normal	
- TFCI Field 1 information	Complete reconfiguration
- CHOICE TFCS representation	
- TFCS complete reconfiguration information	Number of bits used must be enough to cover all combinations of CTFC from clause 6.10.
- CHOICE CTFC Size	Reference clause 6.10 Parameter Set
- CTFC information	Not Present
- Power offset information	
- FACH/PCH information	(PCH)
- TFS	Common transport channels
- CHOICE Transport channel type	
- Dynamic Transport format information	Reference clause 6.10 Parameter Set
- 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 <i>mode</i>	TDD
- CHOICE TDD option	3.84 Mcps TDD
- Timeslot number	0
- Midamble shift and burst type	
- CHOICE Burst Type	Type 1
- Midamble Shift	0
- 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#0)
- ASC Settings	TDD
- CHOICE mode	1.28 Mcps TDD
- CHOICE TDD option	"111111111"
- Available SYNC_UL codes indices	Size1
- CHOICE subchannel size	Null
- Available Subchannels	(ASC#1)
- ASC Settings	TDD
- CHOICE mode	1.28 Mcps TDD
- CHOICE TDD option	"111111111"
- Available SYNC_UL codes indices	Size1
- CHOICE subchannel size	Null
- Available Subchannels	(ASC#2)
- ASC Settings	TDD
- CHOICE mode	1.28 Mcps TDD
- CHOICE TDD option	"111111111"
- Available SYNC_UL codes indices	Size1
- CHOICE subchannel size	Null
- Available Subchannels	(ASC#3)
- ASC Settings	TDD
- CHOICE mode	1.28 Mcps TDD
- CHOICE TDD option	"111111111"
- Available SYNC_UL codes indices	Size1
- CHOICE subchannel size	Null
- Available Subchannels	(ASC#4)
- ASC Settings	TDD
- CHOICE mode	1.28 Mcps TDD
- CHOICE TDD option	"111111111"
- Available SYNC_UL codes indices	Size1
- CHOICE subchannel size	Null
- Available Subchannels	(ASC#5)
- ASC Settings	TDD
- CHOICE mode	1.28 Mcps TDD
- CHOICE TDD option	"111111111"
- Available SYNC_UL codes indices	Size1
- CHOICE subchannel size	Null
- Available Subchannels	(ASC#6)
- ASC Settings	TDD
- CHOICE mode	1.28 Mcps TDD
- CHOICE TDD option	"111111111"
- Available SYNC_UL codes indices	Size1
- CHOICE subchannel size	Null
- Available Subchannels	
- Access Service Class	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	TDD
- CHOICE mode	0
- Offset	
- Common timeslot info	Frame
- 2 nd interleaving mode	Reference clause 6.10 Parameter Set
- TFCI coding	Reference clause 6.10 Parameter Set
- Puncturing limit	1
- Repetition period	0
- Repetition length	
- 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 <i>TDD option</i>	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 <i>mode</i>	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	-100dBm
- PRACHs listed in system information block type5	
- Dynamic persistence level	2
- PRACHs listed in system information block type6	
- Dynamic persistence level	2
- Expiration Time Factor	Not Present – use default value of 1

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)

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)

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

<ul style="list-style-type: none"> - SIB12 indicator - FACH measurement occasion info - Measurement control system information - Use of HCS - Cell selection and reselection quality measure 	A1, A2	TRUE Not Present
<ul style="list-style-type: none"> - Intra-frequency measurement system information - Intra-frequency measurement identity - Intra-frequency cell info list - CHOICE intra-frequency cell removal - New intra-frequency cells - Intra-frequency cell id - Cell info - Cell individual offset - Reference time difference to cell - Read SFN indicator - CHOICE mode - Primary CPICH info - Primary scrambling code - Primary CPICH TX power - TX Diversity indicator - Cell Selection and Re-selection info - Intra-frequency cell id - Cell info - Cell individual offset - Reference time difference to cell - Read SFN indicator - CHOICE mode - Primary CPICH info - Primary scrambling code - Primary CPICH TX power - TX Diversity indicator - Cell Selection and Re-selection info - Intra-frequency cell id - Cell info 	A1, A2	<ul style="list-style-type: none"> Not used CPICH RSCP Not Present Absence of this IE is equivalent to default value 1 Not present (This IE shall be ignored by the UE for SIB11) 1 Not present Absence of this IE is equivalent to default value 0dB Not Present FALSE FDD Refer to clause titled "Default settings for cell No.1 (FDD)" in clause 6.1.4 Not Present FALSE Not Present (The IE shall be absent as this is the serving cell) 2 Not present Absence of this IE is equivalent to default value 0dB Not present TRUE FDD Refer to clause titled "Default settings for cell No.2 (FDD)" in clause 6.1.4 Not Present FALSE Not present For neighbouring cell, if HCS is not used and all the parameters in cell selection and re-selection info are Default value, this IE is absent. 3 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
<ul style="list-style-type: none"> - Intra-frequency cell id - Cell info 	A1	<ul style="list-style-type: none"> 7 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 8 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
<ul style="list-style-type: none"> - Cells for measurement - Intra-frequency measurement quantity - Filter coefficient - CHOICE mode - Measurement quantity - Intra-frequency reporting quantity for RACH Reporting - Maximum number of reported cells on RACH 	A1, A2 A1, A2	<ul style="list-style-type: none"> Not Present Not present Absence of this IE is equivalent to the default value 0 FDD CPICH RSCP Not Present Not Present

- Reporting information for state CELL_DCH	
- Intra-frequency reporting quantity	No report
- Reporting quantities for active set cells	FALSE
- SFN-SFN observed time difference type	
- Cell synchronisation information reporting indicator	TRUE
- Cell identity reporting indicator	FDD
- CHOICE mode	FALSE
- CPICH Ec/N0 reporting indicator	TRUE
- CPICH RSCP reporting indicator	FALSE
- Pathloss reporting indicator	
- Reporting quantities for monitored set cells	No report
- SFN-SFN observed time difference type	TRUE
- Cell synchronisation information reporting indicator	
- 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	4000
- Reporting cell status	
- CHOICE reported cell	Report cell within active set and/or monitored set cells on used frequency
- Maximum number of reported cells	3
- Intra-frequency event identity	1b
- Triggering condition 1	Active set cells
- Triggering condition 2	Not Present
- Reporting Range Constant	5dB
- Cells forbidden to affect Reporting range	Not Present
- W	1.0
- Hysteresis	0.0
- Threshold Used Frequency	Not Present
- Reporting deactivation threshold	Not Present
- Replacement activation threshold	Not Present
- Time to trigger	640
- Amount of reporting	Not Present
- Reporting interval	Not Present
- Reporting cell status	
- CHOICE reported cell	Report cell within active set and/or monitored set cells on used frequency
- Maximum number of reported cells	3
- Intra-frequency event identity	1c
- Triggering condition 1	Not Present
- Triggering condition 2	Not Present
- Reporting Range Constant	Not Present
- Cells forbidden to affect Reporting range	Not Present
- W	Not Present

- Intra-frequency reporting quantity for RACH Reporting	Not Present
- Maximum number of reported cells on RACH	Not Present
- Reporting information for state CELL_DCH	
- Intra-frequency reporting quantity	
- Reporting quantities for active set cells	
- Cell synchronisation information reporting indicator	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 synchronisation 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	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		Not present
- CHOICE Inter-frequency cell removal		(This IE shall be ignored by the UE for SIB11)
- New inter-frequency cells		
- Inter frequency cell id		4
- Frequency info		TDD
- CHOICE mode		Reference to table 6.1.2 for Cell 4
- UARFCN (Nt)		
- Cell info		Not present
- Cell individual offset		Absence of this IE is equivalent to default value 0dB
- Reference time difference to cell		Not present
- Cell individual offset		Not present
- Reference time difference to cell		Absence of this IE is equivalent to default value 0dB
- Read SFN indicator		Not present
- CHOICE mode		FALSE
- Primary CCPCH info		TDD
- Primary CCPCH Tx power		Refer to clause titled "Default settings for cell No.4 (TDD)" in clause 6.1.4
- TX Diversity Indicator		Not present
- Cell Selection and Re-selection Info		FALSE
- Inter frequency cell id		Not present (same values as for serving cell applies)
- Frequency info		5
- Cell info		Not Present
- Inter frequency cell id		Absence of this IE is equivalent to value of the previous "frequency info" in the list.
- Frequency 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 (TDD)" in clause 6.1.4
- Cell info		6
- Inter frequency cell id		Not Present
- Frequency info		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 (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	Not Present
- Inter-RAT cell info list		Not Present
- CHOICE <i>Inter-RAT cell removal</i>		(This IE shall be ignored by the UE for SIB11)
- New inter-RAT cells		
- Inter-RAT cell id		9
- CHOICE <i>Radio Access Technology</i>		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 <i>Radio Access Technology</i>		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 sub-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 sub-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	(no data)
- 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	<i>For Packet-Switched domain</i>
- 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	<i>For Circuit-Switched domain</i>
- 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

- Predefined RB configuration	[FFS]
- Predefined TrCh configuration	[FFS]
- Predefined Phy configuration	[FFS]

Contents of System Information Block type 17 (3.84 Mcps 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	
- PLMN identity	Set to the same value as indicated in MIB
- 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 chapter 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	$\frac{1}{2}$
- 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 β_c	11
- Gain factor β_d	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	FDD
- CHOICE mode	0 (ASC#3)
- Available signature Start Index	7 (ASC#3)
- Available signature End Index	'1111'B
- Assigned Sub-Channel Number	The first/ leftmost bit of the bit string contains the most significant bit of the Assigned Sub-Channel Number.
	Not Present
- ASC Setting	FDD
- ASC Setting	0 (ASC#5)
- CHOICE mode	7 (ASC#5)
- Available signature Start Index	'1111'B
- Available signature End Index	The first/ leftmost bit of the bit string contains the most significant bit of the Assigned Sub-Channel Number.
- Assigned Sub-Channel Number	Not Present
- ASC Setting	FDD
- ASC Setting	0 (ASC#7)
- CHOICE mode	7 (ASC#7)
- Available signature Start Index	'1111'B
- Available signature End Index	The first/ leftmost bit of the bit string contains the most significant bit of the Assigned Sub-Channel Number.
- Assigned Sub-Channel Number	Not Present
- 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	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	3dB
- Power Ramp Step	4
- Preamble Retrans Max	
- 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 TFCS signalling	Normal
- TFCS 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	½
- 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	Not Present
	Absence of this IE is equivalent to default value "TRUE"
- Fixed or Flexible position	Not Present
	Absence of this IE is equivalent to default value "Flexible"
- 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)

<FFS>

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)

<FFS>

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 chapter 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 β_c	11
- Gain factor β_d	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	FDD
- CHOICE mode	0 (ASC#3)
- Available signature Start Index	7 (ASC#3)
- Available signature End Index	'1111'B
- Assigned Sub-Channel Number	The first/ leftmost bit of the bit string contains the most significant bit of the Assigned Sub-Channel Number.
	Not Present
- ASC Setting	FDD
- ASC Setting	0 (ASC#5)
- CHOICE mode	7 (ASC#5)
- Available signature Start Index	'1111'B
- Available signature End Index	The first/ leftmost bit of the bit string contains the most significant bit of the Assigned Sub-Channel Number.
- Assigned Sub-Channel Number	Not Present
- ASC Setting	FDD
- ASC Setting	0 (ASC#7)
- CHOICE mode	7 (ASC#7)
- Available signature Start Index	'1111'B
- Available signature End Index	The first/ leftmost bit of the bit string contains the most significant bit of the Assigned Sub-Channel Number.
- Assigned Sub-Channel Number	Not Present
- 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	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	3dB
- Power Ramp Step	4
- Preamble Retrans Max	
- 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 TFCS signalling	Normal
- TFCS 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	Not Present
	Absence of this IE is equivalent to default value "TRUE"
- Fixed or Flexible position	Not Present
	Absence of this IE is equivalent to default value "Flexible"
- 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	
- 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	Not Present
- Fixed or Flexible position	Absence of this IE is equivalent to default value "TRUE"
- Timing offset	Not Present
- TFCS	Absence of this IE is equivalent to default value "Flexible"
- CHOICE TFCS signalling	90
- TFCI Field 1 information	Normal
- 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	$\frac{1}{2}$
- 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 chapter 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	1
- 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	1
- 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	1
- 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	$\frac{1}{2}$
- 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 β_c	11
- Gain factor β_d	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	FDD
- CHOICE mode	0 (ASC#3)
- Available signature Start Index	7 (ASC#3)
- Available signature End Index	'1111'B
- Assigned Sub-Channel Number	The first/ leftmost bit of the bit string contains the most significant bit of the Assigned Sub-Channel Number.
	Not Present
- ASC Setting	FDD
- ASC Setting	0 (ASC#5)
- CHOICE mode	7 (ASC#5)
- Available signature Start Index	'1111'B
- Available signature End Index	The first/ leftmost bit of the bit string contains the most significant bit of the Assigned Sub-Channel Number.
- Assigned Sub-Channel Number	Not Present
- ASC Setting	FDD
- ASC Setting	0 (ASC#7)
- CHOICE mode	7 (ASC#7)
- Available signature Start Index	'1111'B
- Available signature End Index	The first/ leftmost bit of the bit string contains the most significant bit of the Assigned Sub-Channel Number.
- Assigned Sub-Channel Number	Not Present
- 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	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	3dB
- Power Ramp Step	4
- Preamble Retrans Max	
- 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 TFCS signalling	Normal
- TFCS 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	Not Present
	Absence of this IE is equivalent to default value "TRUE"
- Fixed or Flexible position	Not Present
	Absence of this IE is equivalent to default value "Flexible"
- 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	Not Present
- Fixed or Flexible position	Absence of this IE is equivalent to default value "TRUE"
- Timing offset	Not Present
- TFCS	Absence of this IE is equivalent to default value "Flexible"
- CHOICE TFCI signalling	90
- TFCI Field 1 information	Normal
- 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 sub-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 sub-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 sub-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 sub-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

<ul style="list-style-type: none"> - CHOICE <i>Radio Access Technology</i> - GSM <p>....</p>	<p>GSM Same content as specified for inter-RAT cell id=10 in SIB11 for Cell 1 in sub-clause 6.1.0b</p>
--	--

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

Default settings for cell No.2 (TDD):

<ul style="list-style-type: none"> Downlink input level Uplink output power PCCPCH/PCPICH carrier number Cell Channel Description <ul style="list-style-type: none"> - Primary CCPCH info - Cell parameters ID 	<p>Reference clause 6 Parameter Set Minimum supported by the UE's power class. Reference clause 6 Parameter Set</p> <p style="text-align: center;">4</p>
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Contents of System Information Block type 11 for cell No.2 (TDD)

<p>- Intra-frequency measurement system information</p> <p>.....</p> <ul style="list-style-type: none"> - New intra-frequency cells - Intra-frequency cell id - Cell info <ul style="list-style-type: none"> - Intra-frequency cell id - Cell info <ul style="list-style-type: none"> - Intra-frequency cell id - Cell info <ul style="list-style-type: none"> - Intra-frequency cell id - Cell info <ul style="list-style-type: none"> - Intra-frequency cell id - Cell info <p>.....</p>	<p>2</p> <p>Same content as specified for Intra-frequency cell id=1 (serving cell) in SIB11 for Cell 1 in sub-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 (TDD)" in clause 6.1.4</p> <p>1</p> <p>Same content as specified for Intra-frequency cell id=2 in SIB11 for Cell 1 in sub-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 (TDD)" in clause 6.1.4</p> <p>3</p> <p>Same content as specified for Intra-frequency cell id=3 in SIB11 for Cell 1 in sub-clause 6.1.0b</p> <p>7</p> <p>Same content as specified for Intra-frequency cell id=7 in SIB11 for Cell 1 in sub-clause 6.1.0b</p> <p>8</p> <p>Same content as specified for Intra-frequency cell id=8 in SIB11 for Cell 1 in sub-clause 6.1.0b</p>
<p>- Inter-frequency measurement system information</p> <p>.....</p> <ul style="list-style-type: none"> - New inter-frequency cells - Inter frequency cell id - Frequency info <ul style="list-style-type: none"> - Cell info <ul style="list-style-type: none"> - Inter frequency cell id - Frequency info <ul style="list-style-type: none"> - Cell info <ul style="list-style-type: none"> - Inter frequency cell id - Frequency info <ul style="list-style-type: none"> - Cell info <p>.....</p>	<p>4</p> <p>Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in sub-clasue 6.1.0b</p> <p>Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in sub-clasue 6.1.0b</p> <p>5</p> <p>Same content as specified for Inter-frequency cell id=5 in SIB11 for Cell 1 in sub-clasue 6.1.0b</p> <p>Same content as specified for Inter-frequency cell id=5 in SIB11 for Cell 1 in sub-clasue 6.1.0b</p> <p>6</p> <p>Same content as specified for Inter-frequency cell id=6 in SIB11 for Cell 1 in sub-clasue 6.1.0b</p> <p>Same content as specified for Inter-frequency cell id=6 in SIB11 for Cell 1 in sub-clasue 6.1.0b</p>

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 Uplink output power PCCPCH/PCPICH carrier number Cell Channel Description - Primary CPICH info - Primary scrambling code	Reference clause 6.10 Parameter Set Minimum supported by the UE's power class. Reference clause 6.10 Parameter Set 200
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- GSM	Same content as specified for inter-RAT cell id=10 in SIB11 for Cell 1 in sub-clause 6.1.0b
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Condition	Explanation
A1	FDD cell environment
A2	FDD/GSM inter-RAT cell environment

Default settings for cell No.3 (TDD):

Downlink input level Uplink output power PCCPCH/PCPICH carrier number Cell Channel Description - Primary CCPCH info - Cell parameters ID	Reference clause 6 Parameter Set Minimum supported by the UE's power class. Reference clause 6 Parameter Set 8
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Contents of System Information Block type 11 for cell No.3 (TDD)

<p>- Intra-frequency measurement system information</p> <p>.....</p> <ul style="list-style-type: none"> - New intra-frequency cells - Intra-frequency cell id - Cell info <ul style="list-style-type: none"> - Intra-frequency cell id - Cell info <ul style="list-style-type: none"> - Intra-frequency cell id - Cell info <ul style="list-style-type: none"> - Intra-frequency cell id - Cell info <ul style="list-style-type: none"> - Intra-frequency cell id - Cell info <p>.....</p>	<p>3</p> <p>Same content as specified for Intra-frequency cell id=1 (serving cell) in SIB11 for Cell 1 in sub-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 (TDD)" in clause 6.1.4</p> <p>1</p> <p>Same content as specified for Intra-frequency cell id=2 (neighbour cell) in SIB11 for Cell 1 in sub-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 (TDD)" in clause 6.1.4</p> <p>2</p> <p>Same content as specified for Intra-frequency cell id=2 in SIB11 for Cell 1 in sub-clause 6.1.0b</p> <p>7</p> <p>Same content as specified for Intra-frequency cell id=7 in SIB11 for Cell 1 in sub-clause 6.1.0b</p> <p>8</p> <p>Same content as specified for Intra-frequency cell id=8 in SIB11 for Cell 1 in sub-clause 6.1.0b</p>
<p>- Inter-frequency measurement system information</p> <p>.....</p> <ul style="list-style-type: none"> - New inter-frequency cells - Inter frequency cell id - Frequency info <ul style="list-style-type: none"> - Cell info <ul style="list-style-type: none"> - Inter frequency cell id - Frequency info <ul style="list-style-type: none"> - Cell info <ul style="list-style-type: none"> - Inter frequency cell id - Frequency info <ul style="list-style-type: none"> - Cell info <p>.....</p>	<p>4</p> <p>Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in sub-clasue 6.1.0b</p> <p>Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in sub-clasue 6.1.0b</p> <p>5</p> <p>Not Present</p> <p>Absence of this IE is equivalent to value of the previous "frequency info" in the list.</p> <p>Same content as specified for Inter-frequency cell id=5 in SIB11 for Cell 1 in sub-clasue 6.1.0b</p> <p>6</p> <p>Not Present</p> <p>Absence of this IE is equivalent to value of the previous "frequency info" in the list.</p> <p>Same content as specified for Inter-frequency cell id=6 in SIB11 for Cell 1 in sub-clasue 6.1.0b</p>

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 Uplink output power PCCPCH/PCPICH carrier number Cell Channel Description - Primary CPICH info - Primary scrambling code	Reference clause 6.10 Parameter Set Minimum supported by the UE's power class. Reference clause 6.10 Parameter Set 250
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<ul style="list-style-type: none"> - Frequency info - Cell info - Inter-frequency cell id - Frequency info - Cell info - Inter-RAT cell info list - New inter-RAT cells - Inter-RAT cell id - CHOICE <i>Radio Access Technology</i> - GSM - Inter-RAT cell id - CHOICE <i>Radio Access Technology</i> - GSM 	<p>A2</p>	<p>Not Present Absence of this IE is equivalent to value of the previous "frequency info" in the list. Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in sub-clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.7 (FDD)" in clause 6.1.4</p> <p>8 Not Present Absence of this IE is equivalent to value of the previous "frequency info" in the list. Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in sub-clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.8 (FDD)" in clause 6.1.4</p> <p>9 GSM Same content as specified for inter-RAT cell id=9 in SIB11 for Cell 1 in sub-clause 6.1.0b</p> <p>10 GSM Same content as specified for inter-RAT cell id=10 in SIB11 for Cell 1 in sub-clause 6.1.0b</p>
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Condition	Explanation
A1	FDD cell environment
A2	FDD/GSM inter-RAT cell environment

Default settings for cell No.4 (TDD):

<ul style="list-style-type: none"> Downlink input level Uplink output power PCCPCH/PCPICH carrier number Cell Channel Description <ul style="list-style-type: none"> - Primary CCPCH info - Cell parameters ID 	<p>Reference clause 6 Parameter Set Minimum supported by the UE's power class. Reference clause 6 Parameter Set</p> <p>12</p>
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Contents of System Information Block type 11 for cell No.4 (TDD)

<p>- Intra-frequency measurement system information</p> <p>....</p> <ul style="list-style-type: none"> - New intra-frequency cells - Intra-frequency cell id - Cell info <ul style="list-style-type: none"> - Intra-frequency cell id - Cell info <ul style="list-style-type: none"> - Intra-frequency cell id - Cell info 	<p>4</p> <p>Same content as specified for Intra-frequency cell id=1 (serving cell) in SIB11 for Cell 1 in sub-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 (TDD)" in clause 6.1.4</p> <p>5</p> <p>Same content as specified for Intra-frequency cell id=2 in SIB11 for Cell 1 in sub-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 (TDD)" in clause 6.1.4</p> <p>6</p> <p>Same content as specified for Intra-frequency cell id=2 in SIB11 for Cell 1 in sub-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</p>
<p>.....</p> <p>- Inter-frequency measurement system information</p> <p>.....</p> <ul style="list-style-type: none"> - New inter-frequency cells - Inter-frequency cell id - Frequency info <ul style="list-style-type: none"> - UARFCN downlink(Nt) - Cell info <ul style="list-style-type: none"> - Inter-frequency cell id - Frequency info <ul style="list-style-type: none"> - Cell info <ul style="list-style-type: none"> - Inter-frequency cell id - Frequency info <ul style="list-style-type: none"> - Cell info <ul style="list-style-type: none"> - Inter-frequency cell id - Frequency info <ul style="list-style-type: none"> - Cell info <ul style="list-style-type: none"> - Inter-frequency cell id - Frequency info <ul style="list-style-type: none"> - Cell info 	<p>1</p> <p>Reference to table 6.1.7 for Cell 1</p> <p>Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in sub-clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.1 (TDD)" in clause 6.1.4</p> <p>2</p> <p>Not Present</p> <p>Absence of this IE is equivalent to value of the previous "frequency info" in the list.</p> <p>Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in sub-clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.2 (FDD)" in clause 6.1.4</p> <p>3</p> <p>Not Present</p> <p>Absence of this IE is equivalent to value of the previous "frequency info" in the list.</p> <p>Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in sub-clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.3 (TDD)" in clause 6.1.4</p> <p>7</p> <p>Not Present</p> <p>Absence of this IE is equivalent to value of the previous "frequency info" in the list.</p> <p>Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in sub-clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.7 (TDD)" in clause 6.1.4</p> <p>8</p> <p>Not Present</p> <p>Absence of this IE is equivalent to value of the previous "frequency info" in the list.</p>

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

<ul style="list-style-type: none"> - Inter-frequency cell id - Frequency info - Cell info - Inter-RAT cell info list - New inter-RAT cells - Inter-RAT cell id - CHOICE <i>Radio Access Technology</i> - GSM - Inter-RAT cell id - CHOICE <i>Radio Access Technology</i> - GSM 	A2	8 Not Present Absence of this IE is equivalent to value of the previous "frequency info" in the list. Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in sub-clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.8 (FDD)" in clause 6.1.4 9 GSM Same content as specified for inter-RAT cell id=9 in SIB11 for Cell 1 in sub-clause 6.1.0b 10 GSM Same content as specified for inter-RAT cell id=10 in SIB11 for Cell 1 in sub-clause 6.1.0b
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Condition	Explanation
A1	FDD cell environment
A2	FDD/GSM inter-RAT cell environment

Default settings for cell No.5 (TDD):

Downlink input level Uplink output power PCCPCH/PCPICH carrier number Cell Channel Description <ul style="list-style-type: none"> - Primary CCPCH info - Cell parameters ID 	Reference clause 6 Parameter Set Minimum supported by the UE's power class. Reference clause 6 Parameter Set 114
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Contents of System Information Block type 11 for cell No.5 (TDD)

<p>- Intra-frequency measurement system information</p> <p>....</p> <ul style="list-style-type: none"> - New intra-frequency cells - Intra-frequency cell id - Cell info <ul style="list-style-type: none"> - Intra-frequency cell id - Cell info <ul style="list-style-type: none"> - Intra-frequency cell id - Cell info 	<p>5</p> <p>Same content as specified for Intra-frequency cell id=1 (serving cell) in SIB11 for Cell 1 in sub-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 (TDD)" in clause 6.1.4</p> <p>4</p> <p>Same content as specified for Intra-frequency cell id=2 in SIB11 for Cell 1 in sub-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 (TDD)" in clause 6.1.4</p> <p>6</p> <p>Same content as specified for Intra-frequency cell id=2 in SIB11 for Cell 1 in sub-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 (TDD)" in clause 6.1.4</p>
<p>.....</p> <p>- Inter-frequency measurement system information</p> <p>.....</p> <ul style="list-style-type: none"> - New inter-frequency cells - Inter-frequency cell id - Frequency info <ul style="list-style-type: none"> - UARFCN downlink(Nt) - Cell info <ul style="list-style-type: none"> - Inter-frequency cell id - Frequency info <ul style="list-style-type: none"> - Cell info <ul style="list-style-type: none"> - Inter-frequency cell id - Frequency info <ul style="list-style-type: none"> - Cell info <ul style="list-style-type: none"> - Inter-frequency cell id - Frequency info <ul style="list-style-type: none"> - Cell info <ul style="list-style-type: none"> - Inter-frequency cell id - Frequency info <ul style="list-style-type: none"> - Cell info 	<p>1</p> <p>Reference to table 6.1.7 for Cell 1</p> <p>Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in sub-clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.1 (FDD)" in clause 6.1.4</p> <p>2</p> <p>Not Present</p> <p>Absence of this IE is equivalent to value of the previous "frequency info" in the list.</p> <p>Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in sub-clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.2 (TDD)" in clause 6.1.4</p> <p>3</p> <p>Not Present</p> <p>Absence of this IE is equivalent to value of the previous "frequency info" in the list.</p> <p>Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in sub-clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.3 (TDD)" in clause 6.1.4</p> <p>7</p> <p>Not Present</p> <p>Absence of this IE is equivalent to value of the previous "frequency info" in the list.</p> <p>Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in sub-clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.7 (TDD)" in clause 6.1.4</p> <p>8</p> <p>Not Present</p> <p>Absence of this IE is equivalent to value of the previous "frequency info" in the list.</p>

- Cell info	Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in sub-clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.8 (TDD)" in clause 6.1.4
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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)

<p>- Intra-frequency measurement system information</p> <p>....</p> <ul style="list-style-type: none"> - New intra-frequency cells - Intra-frequency cell id - Cell info <ul style="list-style-type: none"> - Intra-frequency cell id - Cell info <ul style="list-style-type: none"> - Intra-frequency cell id - Cell info <p>.....</p>	<p>A1, A2</p>	<p>6</p> <p>Same content as specified for Intra-frequency cell id=1 (serving cell) in SIB11 for Cell 1 in sub-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</p> <p>4</p> <p>Same content as specified for Intra-frequency cell id=2 in SIB11 for Cell 1 in sub-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</p> <p>5</p> <p>Same content as specified for Intra-frequency cell id=2 in SIB11 for Cell 1 in sub-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</p>
<p>- Inter-frequency measurement system information</p> <p>.....</p> <ul style="list-style-type: none"> - New inter-frequency cells - Inter-frequency cell id - Frequency info - UARFCN uplink(Nu) <ul style="list-style-type: none"> - UARFCN downlink(Nd) - Cell info <ul style="list-style-type: none"> - Inter-frequency cell id - Frequency info <ul style="list-style-type: none"> - Cell info <ul style="list-style-type: none"> - Inter-frequency cell id - Frequency info <ul style="list-style-type: none"> - Cell info <ul style="list-style-type: none"> - Inter-frequency cell id 	<p>A1, A2</p>	<p>1</p> <p>Not present</p> <p>Absence of this IE is equivalent to apply the default duplex distance defined for the operating frequency according to 25.101</p> <p>Reference to table 6.1.2 for Cell 1</p> <p>Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in sub-clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.1 (FDD)" in clause 6.1.4</p> <p>2</p> <p>Not Present</p> <p>Absence of this IE is equivalent to value of the previous "frequency info" in the list.</p> <p>Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in sub-clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.2 (FDD)" in clause 6.1.4</p> <p>3</p> <p>Not Present</p> <p>Absence of this IE is equivalent to value of the previous "frequency info" in the list.</p> <p>Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in sub-clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.3 (FDD)" in clause 6.1.4</p>
<ul style="list-style-type: none"> - Inter-frequency cell id 	<p>A1</p>	<p>7</p>

<ul style="list-style-type: none"> - Frequency info - Cell info - Inter-frequency cell id - Frequency info - Cell info - Inter-RAT cell info list - New inter-RAT cells - Inter-RAT cell id - CHOICE <i>Radio Access Technology</i> - GSM - Inter-RAT cell id - CHOICE <i>Radio Access Technology</i> - GSM 	A2	<p>Not Present Absence of this IE is equivalent to value of the previous "frequency info" in the list. Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in sub-clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.7 (FDD)" in clause 6.1.4</p> <p>8 Not Present Absence of this IE is equivalent to value of the previous "frequency info" in the list. Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in sub-clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.8 (FDD)" in clause 6.1.4</p> <p>9 GSM Same content as specified for inter-RAT cell id=9 in SIB11 for Cell 1 in sub-clause 6.1.0b</p> <p>10 GSM Same content as specified for inter-RAT cell id=10 in SIB11 for Cell 1 in sub-clause 6.1.0b</p>
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Condition	Explanation
A1	FDD cell environment
A2	FDD/GSM inter-RAT cell environment

Default settings for cell No.6 (TDD):

<ul style="list-style-type: none"> Downlink input level Uplink output power PCCPCH/PCPICH carrier number Cell Channel Description <ul style="list-style-type: none"> - Primary CCPCH info - Cell parameters ID 	<p>Reference clause 6 Parameter Set Minimum supported by the UE's power class. Reference clause 6 Parameter Set</p> <p>119</p>
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Contents of System Information Block type 11 for cell No.6 (TDD)

<p>- Intra-frequency measurement system information</p> <p>....</p> <ul style="list-style-type: none"> - New intra-frequency cells - Intra-frequency cell id - Cell info <ul style="list-style-type: none"> - Intra-frequency cell id - Cell info <ul style="list-style-type: none"> - Intra-frequency cell id - Cell info 	<p>6</p> <p>Same content as specified for Intra-frequency cell id=1 (serving cell) in SIB11 for Cell 1 in sub-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 (TDD)" in clause 6.1.4</p> <p>4</p> <p>Same content as specified for Intra-frequency cell id=2 in SIB11 for Cell 1 in sub-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 (TDD)" in clause 6.1.4</p> <p>5</p> <p>Same content as specified for Intra-frequency cell id=2 in SIB11 for Cell 1 in sub-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 (TDD)" in clause 6.1.4</p>
<p>.....</p> <p>- Inter-frequency measurement system information</p> <p>.....</p> <ul style="list-style-type: none"> - New inter-frequency cells - Inter-frequency cell id - Frequency info <ul style="list-style-type: none"> - UARFCN downlink(Nt) - Cell info <ul style="list-style-type: none"> - Inter-frequency cell id - Frequency info <ul style="list-style-type: none"> - Cell info <ul style="list-style-type: none"> - Inter-frequency cell id - Frequency info <ul style="list-style-type: none"> - Cell info <ul style="list-style-type: none"> - Inter-frequency cell id - Frequency info <ul style="list-style-type: none"> - Cell info <ul style="list-style-type: none"> - Inter-frequency cell id - Frequency info <ul style="list-style-type: none"> - Cell info <ul style="list-style-type: none"> - Inter-frequency cell id - Frequency info 	<p>1</p> <p>Reference to table 6.1.7 for Cell 1</p> <p>Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in sub-clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.1 (TDD)" in clause 6.1.4</p> <p>2</p> <p>Not Present</p> <p>Absence of this IE is equivalent to value of the previous "frequency info" in the list.</p> <p>Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in sub-clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.2 (TDD)" in clause 6.1.4</p> <p>3</p> <p>Not Present</p> <p>Absence of this IE is equivalent to value of the previous "frequency info" in the list.</p> <p>Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in sub-clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.3 (TDD)" in clause 6.1.4</p> <p>7</p> <p>Not Present</p> <p>Absence of this IE is equivalent to value of the previous "frequency info" in the list.</p> <p>Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in sub-clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.7 (TDD)" in clause 6.1.4</p> <p>8</p> <p>Not Present</p> <p>Absence of this IE is equivalent to value of the previous "frequency info" in the list.</p>

<p>- Cell info</p> <p>.....</p>	<p>Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in sub-clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.8 (TDD)" in clause 6.1.4</p>
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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:

<p>Cell identity</p> <p>URA identity</p>	<p>0000 0000 0000 0000 0000 0000 0111B</p> <p>0000 0000 0000 0100B</p>
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Default settings for cell No.7 (FDD):

<p>Downlink input level</p> <p>Uplink output power</p> <p>PCCPCH/PCPICH carrier number</p> <p>Cell Channel Description</p> <ul style="list-style-type: none"> - Primary CPICH info - Primary scrambling code 	<p>Reference clause 6.10 Parameter Set</p> <p>Minimum supported by the UE's power class.</p> <p>Reference clause 6.10 Parameter Set</p> <p>400</p>
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Contents of System Information Block type 11 for cell No.7 (FDD)

<p>- Intra-frequency measurement system information</p> <p>.....</p> <ul style="list-style-type: none"> - New intra-frequency cells - Intra-frequency cell id - Cell info <ul style="list-style-type: none"> - Intra-frequency cell id - Cell info <ul style="list-style-type: none"> - Intra-frequency cell id - Cell info <ul style="list-style-type: none"> - Intra-frequency cell id - Cell info <ul style="list-style-type: none"> - Intra-frequency cell id - Cell info <p>.....</p> <p>- Inter-frequency measurement system information</p> <p>.....</p> <ul style="list-style-type: none"> - New inter-frequency cells - Inter frequency cell id - Frequency info <ul style="list-style-type: none"> - Cell info <ul style="list-style-type: none"> - Inter frequency cell id - Frequency info <ul style="list-style-type: none"> - Cell info <ul style="list-style-type: none"> - Inter frequency cell id - Frequency info <ul style="list-style-type: none"> - Cell info <p>.....</p>	<p>7</p> <p>Same content as specified for Intra-frequency cell id=1 (serving cell) in SIB11 for Cell 1 in sub-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</p> <p>1</p> <p>Same content as specified for Intra-frequency cell id=2 (neighbour cell) in SIB11 for Cell 1 in sub-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</p> <p>2</p> <p>Same content as specified for Intra-frequency cell id=2 in SIB11 for Cell 1 in sub-clause 6.1.0b</p> <p>3</p> <p>Same content as specified for Intra-frequency cell id=3 in SIB11 for Cell 1 in sub-clause 6.1.0b</p> <p>8</p> <p>Same content as specified for Intra-frequency cell id=8 in SIB11 for Cell 1 in sub-clause 6.1.0b</p> <p>4</p> <p>Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in sub-clasue 6.1.0b</p> <p>Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in sub-clasue 6.1.0b</p> <p>5</p> <p>Same content as specified for Inter-frequency cell id=5 in SIB11 for Cell 1 in sub-clasue 6.1.0b</p> <p>Same content as specified for Inter-frequency cell id=5 in SIB11 for Cell 1 in sub-clasue 6.1.0b</p> <p>6</p> <p>Same content as specified for Inter-frequency cell id=6 in SIB11 for Cell 1 in sub-clasue 6.1.0b</p> <p>Same content as specified for Inter-frequency cell id=6 in SIB11 for Cell 1 in sub-clasue 6.1.0b</p>
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Default settings for cell No.7 (TDD):

<p>Downlink input level</p> <p>Uplink output power</p> <p>PCCPCH/PCPICH carrier number</p> <p>Cell Channel Description</p> <ul style="list-style-type: none"> - Primary CCPCH info - Cell parameters ID 	<p>Reference clause 6 Parameter Set</p> <p>Minimum supported by the UE's power class.</p> <p>Reference clause 6 Parameter Set</p> <p>123</p>
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Contents of System Information Block type 11 for cell No.7 (TDD)

<p>- Intra-frequency measurement system information</p> <p>.....</p> <ul style="list-style-type: none"> - New intra-frequency cells - Intra-frequency cell id - Cell info <ul style="list-style-type: none"> - Intra-frequency cell id - Cell info <ul style="list-style-type: none"> - Intra-frequency cell id - Cell info <ul style="list-style-type: none"> - Intra-frequency cell id - Cell info <ul style="list-style-type: none"> - Intra-frequency cell id - Cell info <p>.....</p>	<p>7</p> <p>Same content as specified for Intra-frequency cell id=1 (serving cell) in SIB11 for Cell 1 in sub-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 (TDD)" in clause 6.1.4</p> <p>1</p> <p>Same content as specified for Intra-frequency cell id=2 (neighbour cell) in SIB11 for Cell 1 in sub-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 (TDD)" in clause 6.1.4</p> <p>2</p> <p>Same content as specified for Intra-frequency cell id=2 in SIB11 for Cell 1 in sub-clause 6.1.0b</p> <p>3</p> <p>Same content as specified for Intra-frequency cell id=3 in SIB11 for Cell 1 in sub-clause 6.1.0b</p> <p>8</p> <p>Same content as specified for Intra-frequency cell id=8 in SIB11 for Cell 1 in sub-clause 6.1.0b</p>
<p>- Inter-frequency measurement system information</p> <p>.....</p> <ul style="list-style-type: none"> - New inter-frequency cells - Inter frequency cell id - Frequency info <ul style="list-style-type: none"> - Cell info <ul style="list-style-type: none"> - Inter frequency cell id - Frequency info <ul style="list-style-type: none"> - Cell info <ul style="list-style-type: none"> - Inter frequency cell id - Frequency info <ul style="list-style-type: none"> - Cell info <p>.....</p>	<p>4</p> <p>Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in sub-clasue 6.1.0b</p> <p>Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in sub-clasue 6.1.0b</p> <p>5</p> <p>Same content as specified for Inter-frequency cell id=5 in SIB11 for Cell 1 in sub-clasue 6.1.0b</p> <p>Same content as specified for Inter-frequency cell id=5 in SIB11 for Cell 1 in sub-clasue 6.1.0b</p> <p>6</p> <p>Same content as specified for Inter-frequency cell id=6 in SIB11 for Cell 1 in sub-clasue 6.1.0b</p> <p>Same content as specified for Inter-frequency cell id=6 in SIB11 for Cell 1 in sub-clasue 6.1.0b</p>

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 Uplink output power PCCPCH/PCPICH carrier number Cell Channel Description - Primary CPICH info - Primary scrambling code	Reference clause 6.10 Parameter Set Minimum supported by the UE's power class. Reference clause 6.10 Parameter Set 450
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Contents of System Information Block type 11 for cell No.8 (FDD)

<p>- Intra-frequency measurement system information</p> <p>....</p> <ul style="list-style-type: none"> - New intra-frequency cells - Intra-frequency cell id - Cell info <ul style="list-style-type: none"> - Intra-frequency cell id - Cell info <ul style="list-style-type: none"> - Intra-frequency cell id - Cell info <ul style="list-style-type: none"> - Intra-frequency cell id - Cell info <ul style="list-style-type: none"> - Intra-frequency cell id - Cell info <p>.....</p> <p>- Inter-frequency measurement system information</p> <p>.....</p> <ul style="list-style-type: none"> - New inter-frequency cells - Inter frequency cell id - Frequency info <ul style="list-style-type: none"> - Cell info <ul style="list-style-type: none"> - Inter frequency cell id - Frequency info <ul style="list-style-type: none"> - Cell info <ul style="list-style-type: none"> - Inter frequency cell id - Frequency info <ul style="list-style-type: none"> - Cell info <p>.....</p>	<p>8 Same content as specified for Intra-frequency cell id=1 (serving cell) in SIB11 for Cell 1 in sub-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</p> <p>1 Same content as specified for Intra-frequency cell id=2 (neighbour cell) in SIB11 for Cell 1 in sub-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</p> <p>2 Same content as specified for Intra-frequency cell id=2 in SIB11 for Cell 1 in sub-clause 6.1.0b</p> <p>3 Same content as specified for Intra-frequency cell id=3 in SIB11 for Cell 1 in sub-clause 6.1.0b</p> <p>7 Same content as specified for Intra-frequency cell id=7 in SIB11 for Cell 1 in sub-clause 6.1.0b</p> <p>4 Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in sub-clasue 6.1.0b</p> <p>Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in sub-clasue 6.1.0b</p> <p>5 Same content as specified for Inter-frequency cell id=5 in SIB11 for Cell 1 in sub-clasue 6.1.0b</p> <p>Same content as specified for Inter-frequency cell id=5 in SIB11 for Cell 1 in sub-clasue 6.1.0b</p> <p>6 Same content as specified for Inter-frequency cell id=6 in SIB11 for Cell 1 in sub-clasue 6.1.0b</p> <p>Same content as specified for Inter-frequency cell id=6 in SIB11 for Cell 1 in sub-clasue 6.1.0b</p>
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Default settings for cell No.8 (TDD):

Downlink input level Uplink output power PCCPCH/PCPICH carrier number Cell Channel Description - Primary CCPCH info - Cell parameters ID	Reference clause 6 Parameter Set Minimum supported by the UE's power class. Reference clause 6 Parameter Set 127
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Contents of System Information Block type 11 for cell No.8 (TDD)

<p>- Intra-frequency measurement system information</p> <p>....</p> <ul style="list-style-type: none"> - New intra-frequency cells - Intra-frequency cell id - Cell info <ul style="list-style-type: none"> - Intra-frequency cell id - Cell info <ul style="list-style-type: none"> - Intra-frequency cell id - Cell info <ul style="list-style-type: none"> - Intra-frequency cell id - Cell info <ul style="list-style-type: none"> - Intra-frequency cell id - Cell info <p>.....</p> <p>- Inter-frequency measurement system information</p> <p>.....</p> <ul style="list-style-type: none"> - New inter-frequency cells - Inter frequency cell id - Frequency info <ul style="list-style-type: none"> - Cell info <ul style="list-style-type: none"> - Inter frequency cell id - Frequency info <ul style="list-style-type: none"> - Cell info <ul style="list-style-type: none"> - Inter frequency cell id - Frequency info <ul style="list-style-type: none"> - Cell info <p>.....</p>	<p>8 Same content as specified for Intra-frequency cell id=1 (serving cell) in SIB11 for Cell 1 in sub-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 (TDD)" in clause 6.1.4</p> <p>1 Same content as specified for Intra-frequency cell id=2 (neighbour cell) in SIB11 for Cell 1 in sub-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 (TDD)" in clause 6.1.4</p> <p>2 Same content as specified for Intra-frequency cell id=2 in SIB11 for Cell 1 in sub-clause 6.1.0b</p> <p>3 Same content as specified for Intra-frequency cell id=3 in SIB11 for Cell 1 in sub-clause 6.1.0b</p> <p>7 Same content as specified for Intra-frequency cell id=7 in SIB11 for Cell 1 in sub-clause 6.1.0b</p> <p>4 Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in sub-clasue 6.1.0b</p> <p>Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in sub-clasue 6.1.0b</p> <p>5 Same content as specified for Inter-frequency cell id=5 in SIB11 for Cell 1 in sub-clasue 6.1.0b</p> <p>Same content as specified for Inter-frequency cell id=5 in SIB11 for Cell 1 in sub-clasue 6.1.0b</p> <p>6 Same content as specified for Inter-frequency cell id=6 in SIB11 for Cell 1 in sub-clasue 6.1.0b</p> <p>Same content as specified for Inter-frequency cell id=6 in SIB11 for Cell 1 in sub-clasue 6.1.0b</p>
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Cell No.9

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

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

Default settings for cell No.10 (GSM):

See table 6.1.10

6.1.5 Reference Radio Conditions for signalling test cases (FDD)

The following transmission parameters shall be used for signalling test cases only 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	-81
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 TS 25.304, 5.2.3.1.2 and TS 25.133, 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	-81	-81	
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 TS 25.304, 5.2.3.1.2 and TS 25.133, 8.1.2.2.1.				

Table 6.1.3: Default settings for a non-suitable cell

Parameter	Unit	Level
Qqualmin	dB	-24
Qrxlevmin	dBm	-81
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 TS 25.304, 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	-81
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 TS 25.304, 5.2.3.1.2.		

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

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

6.1.6 Reference Radio Conditions for signalling test cases (TDD)

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

Table 6.1.6: 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 TS 25.304, 5.2.3.1.2 and TS 25.123.		

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 TS 25.304, 5.2.3.1.2 and TS 25.123.				

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 TS 25.304, 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 TS 25.304, 5.2.3.1.2.		

6.1.7 Reference Radio Conditions for signalling test cases (GSM)

The following transmission parameters shall be used for signalling test cases only 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
GSM RF Channel Number		Channel 1	Channel 2
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 TS 25.304, 5.2.6.1.4 and TS 25.133, 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 1:	The cell is not suitable according to TS 25.304, 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 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

Physical channel type	Open loop TxDiversity		Closed loop TxDiversity
	TSTD	SCTD	
P-CCPCH	–	X	–
SCH	X	–	–
DPCH	–	–	X

6.7.2.2.2 1.28 Mcps option

Physical channel type	Open loop TxDiversity		Closed loop TxDiversity
	TSTD	Block STTD	
P-CCPCH	X	X	–
DwPCH	X	–	–
DPCH	X	–	X

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 specified [1]. These parameters are defined in [30] for measurement 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 [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 sub-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)	-	Only one pattern in use.
TGCFN (Transmission Gap Connection Frame Number):	$(\text{Current CFN} + (256 - \text{TTI}/10\text{msec})) \bmod 256$	
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)	-	Only one pattern in use.
TGCFN (Transmission Gap Connection Frame Number):	$(\text{Current CFN} + (256 - \text{TTI}/10\text{msec})) \bmod 256$	
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	
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 frequency 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)	-	Only one pattern in use.
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)	-	Only one pattern in use.
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)	-	Only one pattern in use.
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 sub-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 & Initial BSIC identification & 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)	-	-	-	Only one pattern in use.
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	
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

FFS

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 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.

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 TS 23.107.

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 realised by a Radio Bearer Service and an Iu-Bearer Service. The relationship between the services is illustrated in figure 6.10.1.1.

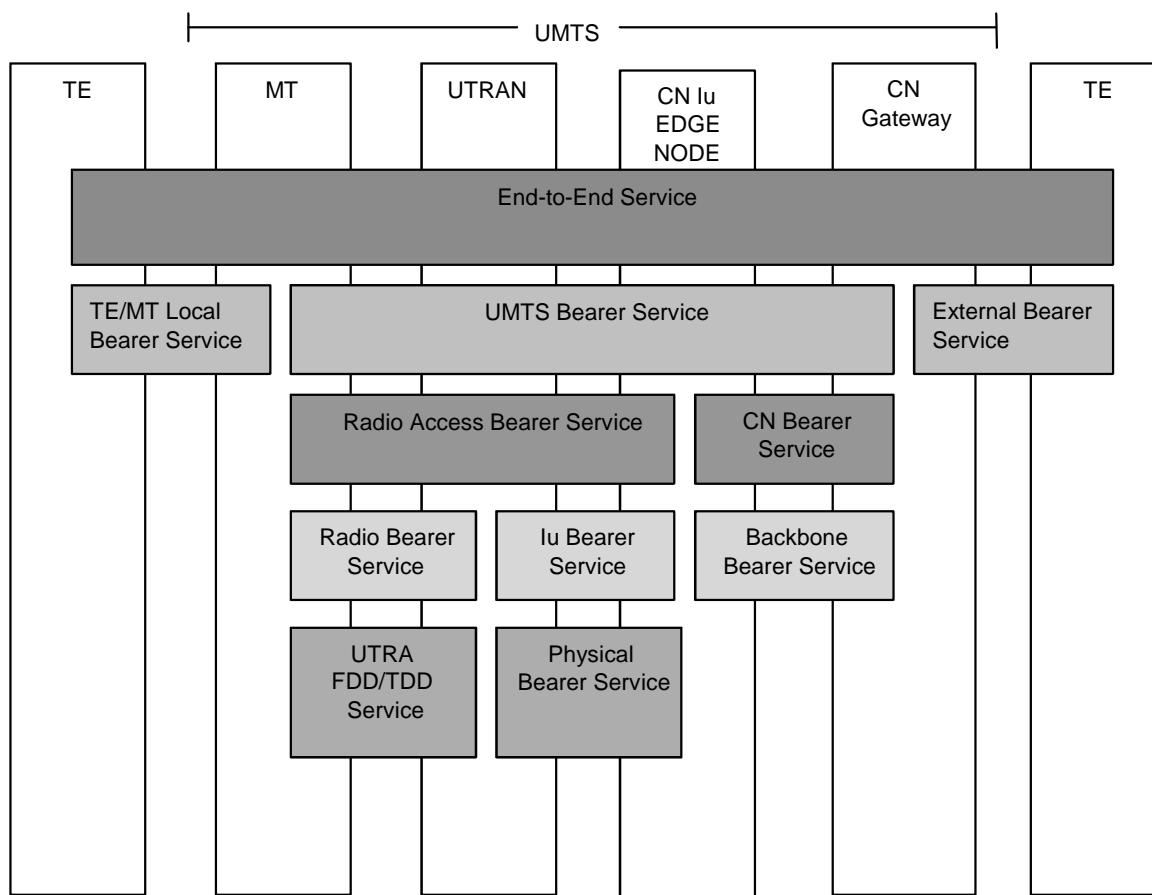


Figure 6.10.1.1: UMTS QoS Architecture

The Radio Access Bearer Service is characterised 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 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 6.10.2.4 for FDD mode and 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 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, ...	- 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: Prioritised RABs.

#	Traffic class [15]	SSD [15]	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:(7.4, 6.7, 5.9, 4.75) DL:(7.4, 6.7, 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	PS
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
37	Reserved for future use			
38	Reserved for future use			
39	Interactive or Background	N/A	UL:64 DL:768	PS

Table 6.10.2.1.2: 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. 40.8)	DCCH	SCCPCH
5	UL:16.6	CCCH	PRACH
6	DL:30.4 (alt. 45.6)	CCCH	SCCPCH
7	DL:33.2 (alt. 49.8)	BCCH:	SCCPCH
8	DL:24 (alt. 6.4)	PCCH	SCCPCH

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.
- 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: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:2048 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:2048 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
- 62) Reserved for future use.

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.
- 3) Interactive or background / UL:64 DL:2048 kbps / PS RAB
+ UL:3.4 DL: 3.4 kbps SRBs for DCCH.
- 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.
- 6) Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB
+ Interactive or background / UL:64 DL:2048 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

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.

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

Traffic class [15]	RAB			Residual BER [15]	Services
	SSD [15]	Max. rate, kbps	CS/PS		
Conversational	Speech	UL:4.75-12.2 DL:4.75-12.2	CS	5×10^{-4} , 1×10^{-3} , 5×10^{-3}	AMR speech
Conversational	Unknown	UL:64 DL:64	CS	1×10^{-4} or 1×10^{-6}	UDI 1B, 64k 3G-324M [15]
Conversational	Unknown	UL:32 DL:32	CS	1×10^{-4} or 1×10^{-6}	32k 3G-324M [15]
Conversational	Unknown	UL:28.8 DL:28.8	CS	1×10^{-3}	Transparent modem
Streaming	Unknown	UL:14.4 DL:14.4	CS	1×10^{-3}	FAX ^[6]
Streaming	Unknown	UL:28.8 DL:28.8	CS	1×10^{-3}	FAX [18] PIAFS 32 kbps
Streaming	Unknown	UL:57.6 DL:57.6	CS	1×10^{-3}	Modem [18], FTM [17] PIAFS 64 kbps
Streaming	Unknown	UL:64-128 or DL:64-384	CS	1×10^{-3} or 1×10^{-4}	Streaming video, uni-directional
Interactive or Background	N/A	UL:32-384 DL:8-2048	PS	1×10^{-3} or 1×10^{-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	1700	1600	1600	1600
	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	155-185			

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	1700	1600	1600	1600
	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	155-185			
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		N/A (SingleTrCH)
	Minimum 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	3400	3200	3200	3200
	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	155-185			

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	3400	3200	3200	3200
	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	155-230			
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		N/A (SingleTrCH)
	Minimum 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	13600	12800	12800	12800
	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	13600	12800	12800	12800
	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		N/A (SingleTrCH)
	Minimum 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	12200			
	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	180-220	170-210	215-256		
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 25.212).					

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	103	60	
		39			
		81			
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	103	60	
		39			
		81			
	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	180-220	170-210	215-256		
NOTE 1: The TrCH corresponding to RAB subflow #1 should be used as the guiding TrCH, (see clause 4.3 in TS 25.212).					
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 TS 25.212).					

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	12200			
	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	180-220	170-210	215-256	
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 25.212).					

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	180-220	170-210	215-256		
NOTE 1: The TrCH corresponding to RAB subflow #1 should be used as the guiding TrCH, (see clause 4.3 in TS 25.212).					
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 TS 25.212.).					

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 TFCl 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	10200			
	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	180-220	170-210	215-256		
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 25.212).					

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	99	40	
		39			
		65			
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	99	40	
		39			
		65			
	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	180-220	170-210	215-256		
NOTE 1: The TrCH corresponding to RAB subflow #1 should be used as the guiding TrCH, (see clause 4.3 in TS 25.212).					
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 TS 25.212).					

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
	Number of data bits/slot	34
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	10200			
	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 ½	
	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	180-220	170-210	215-256		
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 25.212).					

- 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	180-220	170-210	215-256	
NOTE 1: The TrCH corresponding to RAB subflow #1 should be used as the guiding TrCH, (see clause 4.3 in TS 25.212).					
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 TS 25.212).					

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	
RLC	Logical channel type	DTCH		
	RLC mode	TM	TM	
	Payload sizes, bit	39, 75 (alt. 0, 39, 75)	84	
	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	
	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	
	Uplink: Max number of bits/radio frame before rate matching	143	138	
RM attribute	180-220	170-210		
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 TS 25.212).				

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, DCCH)= (TF0, TF0, TF0), (TF1, TF0, TF0), (TF2, TF1, TF0), (TF0, TF0, TF1), (TF1, TF0, TF1), (TF2, TF1, 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	
RLC	Logical channel type	DTCH		
	RLC mode	TM	TM	
	Payload sizes, bit	0	84	
		39		
		75		
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	
	TB sizes, bit	0	84	
		39		
		75		
	TFS (note 1)	TF0, bits	1x0 (note 2)	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	
RM attribute	180-220	170-210		
NOTE 1: The TrCH corresponding to RAB subflow #1 should be used as the guiding TrCH, (see clause 4.3 in TS 25.212).				
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 TS 25.212).				

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, DCCH)= (TF0, TF0, TF0), (TF1, TF0, TF0), (TF2, TF1, TF0), (TF0, TF0, TF1), (TF1, TF0, TF1), (TF2, TF1, 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	
RLC	Logical channel type	DTCH		
	RLC mode	TM	TM	
	Payload sizes, bit	39, 61 (alt. 0, 39, 61)	87	
	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	
	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	
	Uplink: Max number of bits/radio frame before rate matching	122	143	
RM attribute	180-220	170-210		
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 TS 25.212).				

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, DCCH)= (TF0, TF0, TF0), (TF1, TF0, TF0), (TF2, TF1, TF0), (TF0, TF0, TF1), (TF1, TF0, TF1), (TF2, TF1, 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	
RLC	Logical channel type	DTCH		
	RLC mode	TM	TM	
	Payload sizes, bit	0	87	
		39		
		61		
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	
	TB sizes, bit	0	87	
		39		
		61		
	TFS (note 1)	TF0, bits	1x0 (note 2)	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	
RM attribute	180-220	170-210		
NOTE 1: The TrCH corresponding to RAB subflow #1 should be used as the guiding TrCH, (see clause 4.3 in TS 25.212).				
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 TS 25.212).				

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, DCCH)= (TF0, TF0, TF0), (TF1, TF0, TF0), (TF2, TF1, TF0), (TF0, TF0, TF1), (TF1, TF0, TF1), (TF2, TF1, 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	7400		
	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	180-220	170-210		

NOTE: In case of using this alternative, CRC parity bits are to be attached to RAB subflow#1 any time since number of TrBIs are 1 even if there is no data on RAB subflow#1 (see clause 4.2.1.1 in TS 25.212).

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	7400		
	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	180-220	170-210		
NOTE 1: The TrCH corresponding to RAB subflow #1 should be used as the guiding TrCH, (see clause 4.3 in TS 25.212).				
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 TS 25.212.).				

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 TFCl 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	
RLC	Logical channel type	DTCH		
	RLC mode	TM	TM	
	Payload sizes, bit	39, 58 (alt. 0, 39, 58)	76	
	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	
	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	
	Uplink: Max number of bits/radio frame before rate matching	117	126	
RM attribute	180-220	170-210		

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 TS 25.212).

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, DCCH)= (TF0, TF0, TF0), (TF1, TF0, TF0), (TF2, TF1, TF0), (TF0, TF0, TF1), (TF1, TF0, TF1), (TF2, TF1, 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	
RLC	Logical channel type	DTCH		
	RLC mode	TM	TM	
	Payload sizes, bit	0	76	
		39		
		58		
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	
	TB sizes, bit	0	76	
		39		
		58		
	TFS (note 1)	TF0, bits	1x0 (note 2)	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	
RM attribute	180-220	170-210		
NOTE 1: The TrCH corresponding to RAB subflow #1 should be used as the guiding TrCH, (see clause 4.3 in TS 25.212).				
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 TS 25.212).				

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, DCCH)= (TF0, TF0, TF0), (TF1, TF0, TF0), (TF2, TF1, TF0), (TF0, TF0, TF1), (TF1, TF0, TF1), (TF2, TF1, 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	
RLC	Logical channel type	DTCH		
	RLC mode	TM	TM	
	Payload sizes, bit	39, 55 (alt. 0, 39, 55)	63	
	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	
	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	
	Uplink: Max number of bits/radio frame before rate matching	113	107	
RM attribute	180-220	170-210		
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 TS 25.212).				

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, DCCH)= (TF0, TF0, TF0), (TF1, TF0, TF0), (TF2, TF1, TF0), (TF0, TF0, TF1), (TF1, TF0, TF1), (TF2, TF1, 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	
RLC	Logical channel type	DTCH		
	RLC mode	TM	TM	
	Payload sizes, bit	0	63	
		39		
		55		
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	
	TB sizes, bit	0	63	
		39		
		55		
	TFS (note 1)	TF0, bits	1x0 (note 2)	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	
RM attribute	180-220	170-210		
NOTE 1: The TrCH corresponding to RAB subflow #1 should be used as the guiding TrCH, (see clause 4.3 in TS 25.212).				
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 TS 25.212).				

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, DCCH)= (TF0, TF0, TF0), (TF1, TF0, TF0), (TF2, TF1, TF0), (TF0, TF0, TF1), (TF1, TF0, TF1), (TF2, TF1, TF1)

6.10.2.4.1.9.2.2 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	

6.10.2.4.1.10 Conversational / speech / UL:5.15 DL:5.15 kbps / CS RAB + UL:1.7 DL:1.7 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	
RLC	Logical channel type	DTCH		
	RLC mode	TM	TM	
	Payload sizes, bit	39, 49 (alt. 0, 39, 49)	54	
	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	
	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	
	Uplink: Max number of bits/radio frame before rate matching	104	93	
RM attribute	180-220	170-210		
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 TS 25.212).				

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

See clause 6.10.2.4.1.1.1.1.1

6.10.2.4.1.10.1.1.3 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)

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	0.84

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	
RLC	Logical channel type	DTCH		
	RLC mode	TM	TM	
	Payload sizes, bit	0	54	
		39		
		49		
	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	
	TB sizes, bit	0	54	
		39		
		49		
	TFS (note 1)	TF0, bits	1x0 (note 2)	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	
RM attribute	180-220	170-210		
NOTE 1: The TrCH corresponding to RAB subflow #1 should be used as the guiding TrCH, (see clause 4.3 in TS 25.212).				
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 TS 25.212).				

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

See clause 6.10.2.4.1.1.2.1.1

6.10.2.4.1.10.2.1.3 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)

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:1.7 DL:1.7 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	
RLC	Logical channel type	DTCH		
	RLC mode	TM	TM	
	Payload sizes, bit	39, 42 (alt. 0, 39, 42)	53	
	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	
	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	
	Uplink: Max number of bits/radio frame before rate matching	93	92	
RM attribute	180-220	170-210		
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 TS 25.212).				

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

See clause 6.10.2.4.1.1.1.1.1

6.10.2.4.1.11.1.1.3 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)

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	0.92

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	
RLC	Logical channel type	DTCH		
	RLC mode	TM	TM	
	Payload sizes, bit	0	53	
		39		
		42		
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	
	TB sizes, bit	0	53	
		39		
		42		
	TFS (note 1)	TF0, bits	1x0 (note 2)	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	
RM attribute	180-220	170-210		
NOTE 1: The TrCH corresponding to RAB subflow #1 should be used as the guiding TrCH, (see clause 4.3 in TS 25.212).				
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 TS 25.212).				

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

See clause 6.10.2.4.1.1.2.1.1

6.10.2.4.1.11.2.1.3 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)

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	28800	
	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	3564	
	Uplink: Max number of bits/radio frame before rate matching	891	
RM attribute	160-200		

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	1200
	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	28800	
	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	3564	
	RM attribute	160-200	

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	DTX position	Flexible	
Downlink	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	64000		
	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	3948(alt. 7884)		
	Uplink: Max number of bits/radio frame before rate matching	1974(alt. 1971)		
	RM attribute	150-195		

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	2400
	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	64000	
	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	3948(alt. 7884)	
	RM attribute	150-195	

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	2100

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	32000	
	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	1980(alt. 3948)	
	Uplink: Max number of bits/radio frame before rate matching	990(alt. 987)	
	RM attribute	165-210	

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	1200
	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	32000	
	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	1980(alt. 3948)	
	RM attribute	165-210	

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	DTX position	Flexible	
Downlink	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	14400	
	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	1788	
	Uplink: Max number of bits/radio frame before rate matching	447	
	RM attribute	145-185	

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	14400	
	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	1788	
	RM attribute	145-185	

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	DTX position	Flexible	
Downlink	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	28800	
	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	3564	
	Uplink: Max number of bits/radio frame before rate matching	891	
RM attribute	135-175		

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	(28.8kbps 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	1200
	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	28800	
	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	3564	
RM attribute	135-175		

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	(28.8kbps 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	DTX position	Flexible	
Downlink	Spreading factor	64	
	DPCCH	Number of TFCl 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	57600	
	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	7116		
Uplink: Max number of bits/radio frame before rate matching	1779		

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	2400
	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	57600	
	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	7116		
RM attribute	125-165		

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	DTX position	Flexible	
Downlink	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	2100	

- 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	32000	
	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	2124 (alt. 1080)	
	Uplink: Max number of bits/radio frame before rate matching	1062 (alt. 1080)	
	RM attribute	135-175	

- 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	1200
	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	8000		
	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	1068 (alt. 1080)		
	RM attribute	135-175		

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	DTX position	Flexible	
Downlink	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	8000	
	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	1080 (alt. 1068)	
	Uplink: Max number of bits/radio frame before rate matching	270 (alt. 267)	
	RM attribute	135-175	

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	8000	
	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	1080 (alt. 1068)	
	RM attribute	135-175	

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	16000	
	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	2124	
	Uplink: Max number of bits/radio frame before rate matching	531	
RM attribute	135-175		

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	1200
	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	16000	
	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	2124	
	RM attribute	135-175	

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	32000	
	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	4236	
	Uplink: Max number of bits/radio frame before rate matching	1059	
RM attribute	135-175		

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	1200
	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	32000	
	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	4236	
RM attribute	135-175		

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	32000	
	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	2124	
	Uplink: Max number of bits/radio frame before rate matching	1062	
	RM attribute	135-175	

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	1200
	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	32000	
	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	2124	
	RM attribute	135-175	

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
DPCCH	Spreading factor	64
	Number of bits/slot	8
		4
		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	64000	
	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	4236	
RM attribute	130-170		

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	DTX position	Flexible	
Downlink	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		2100	

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	64000	
	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	4236	
	Uplink: Max number of bits/radio frame before rate matching	2118	
RM attribute	130-170		

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	2400
	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	128000	
	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	4 x336
		TF4, bits	8 x336
	TTI, ms	20	
	Coding type	TC	
	CRC, bit	16	
Max number of bits/TTI after channel coding	8460		
RM attribute	120-160		

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
	Number of data bits/slot	288
DPDCH	Number of data bits/slot	288
	Number of data bits/frame	4320

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	128000	
	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	4 x336
		TF4, bits	8 x336
	TTI, ms	20	
	Coding type	TC	
	CRC, bit	16	
	Max number of bits/TTI after channel coding	8460	
	Uplink: Max number of bits/radio frame before rate matching	4230	
RM attribute	120-160		

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	4800
	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	144000	
	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	4 x336
		TF4, bits	8 x336
	TF5, bits	9x336	
	TTI, ms	20	
	Coding type	TC	
	CRC, bit	16	
Max number of bits/TTI after channel coding	9516		
RM attribute	140-180		

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	DTX position	Flexible	
Downlink	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		4320	

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	144000	
	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	4 x336
		TF4, bits	8 x336
	TF5, bits	9 x336	
	TTI, ms	20	
	Coding type	TC	
	CRC, bit	16	
	Max number of bits/TTI after channel coding	9516	
Uplink: Max number of bits/radio frame before rate matching	4758		
RM attribute	140-180		

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	4800
	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	256000	
	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	4 x336
		TF4, bits	8 x336
		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	8460(alt. 16920)		
RM attribute	135-175		

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 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		9120	

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	384000	
	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	4 x336
		TF4, bits	8 x336
		TF5, bits	12x336
		TF6, bits	N/A (alt. 16 x336)
		TF7, bits	N/A (alt. 20 x336)
		TF8, bits	N/A (alt. 24 x336)
	TTI, ms	10(alt. 20)	
	Coding type	TC	
CRC, bit	16		
Max number of bits/TTI after channel coding	12684(alt. 25368)		
RM attribute	110-150		

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	9120

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	384000	
	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	4 x336
		TF4, bits	8 x336
		TF5, bits	12x336
		TF6, bits	16x336(alt. N/A)
		TF7, bits	20x336(alt. N/A)
	TF8, bits	24 x336 (alt. N/A)	
	TTI, ms	20 (alt. 10)	
	Coding type	TC	
	CRC, bit	16	
	Max number of bits/TTI after channel coding	25368	
Uplink: Max number of bits/radio frame before rate matching	12684		
RM attribute	110-150		

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	9600
	Number of DPDCH	1
	Puncturing Limit	0.72

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:2048 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:2048 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	2048000	
	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	4 x656
		TF4, bits	8 x656
		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	64575 (alt. 129141)		
RM attribute	130-170		

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	(2048 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	DTX position	Flexible	
Downlink	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	1248
Number of data bits/frame		18720	

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, TF1, 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	2400
	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	130-170

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		130-170

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 TFCl 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	8000	
	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	1068	
	Uplink: Max number of bits/radio frame before rate matching	267	
	RM attribute	135-175	

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	1200
	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	8000	
	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	1068	
	RM attribute	135-175	

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 TFCl 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	2400
	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	
DPCCH	Number of TFCl 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		2100

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	64000	64000	
	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	4284		
Uplink: Max number of bits/radio frame before rate matching	2142			
RM attribute	130-170			

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	2400
	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	
RLC	Logical channel type	DTCH	DTCH	
	RLC mode	AM	AM	
	Payload sizes, bit	320	320	
	Max data rate, bps	64000	64000	
	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	4284		
RM attribute	130-170			

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		2100	

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 TFCl 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	1200
	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	1200
	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 TFCl 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	2400
	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 TFCl 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	2100

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	2400
	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	2100

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	4320

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	2100

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	2400
	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 TFCl 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	4320

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, TF1, 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		9120	

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, TF1, 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, TF0, 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	DTX position	Flexible	
Downlink	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	9120

6.10.2.4.1.44 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:128 DL:2048 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

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	4800
	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:2048 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.

6.10.2.4.1.44.2.2 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	1248
Number of data bits/frame		18720	

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	2400
	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 6.10.2.4.1.2.2.11.

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	2100

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	2400
	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		2100	

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	2400
	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 TFCl 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		2100	

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	4800
	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 TF0 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	4320

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	4800
	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		4320	

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

6.10.2.4.1.51a.1.2 Physical channel parameters

DPCH Uplink	Min spreading factor	16
	Max number of DPDCH data bits/radio frame	2400
	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), (TF0, TF1, TF0), (TF0, TF0, TF1), (TF0, TF1, TF1), (TF1, TF0, TF0), (TF1, TF1, TF0), (TF1, TF0, TF1), (TF1, TF1, TF1)

6.10.2.4.1.51a.2.2 Physical channel parameters

DPCCH Downlink	DTX position		Flexible
	Spreading factor		32
	DPCCH	Number of TF0 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	2100

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	16000	
	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	2124	
	Uplink: Max number of bits/radio frame before rate matching	531	
RM attribute	135-175		

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	2400
	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		9120	

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	9600
	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	8000	8000	
	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	1080		
	Uplink: Max number of bits/radio frame before rate matching	270		
	RM attribute	135-175		

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	8000	8000	
	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	1080		
RM attribute	135-175			

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	DTX position	Flexible	
Downlink	Spreading factor	128	
	DPCCH	Number of TFCl 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	64000	64000	
	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	4284		
Uplink: Max number of bits/radio frame before rate matching	2142			
RM attribute	130-170			

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	2400
	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	64000	64000	
	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	4284		
RM attribute	130-170			

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		
DPCCH	Number of TFCl 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		2100

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	16000	
	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	1068	
	Uplink: Max number of bits/radio frame before rate matching	534	
	RM attribute	135-175	

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	1200
	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	64000	
	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	8076	
RM attribute	125-165		

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 TFCl 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	2100

- 6.10.2.4.1.59 Reserved for future use
- 6.10.2.4.1.60 Reserved for future use
- 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	8000	
	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	1044	
	Uplink: Max number of bits/radio frame before rate matching	261	
RM attribute	135-175		
NOTE: In case of using this alternative, CRC parity bits are to be attached any time since number of TrBIs are 1 even if there is no data on the RAB (see clause 4.2.1.1 in TS 25.212).			

- 6.10.2.4.1.61.1.1.2 Transport channel parameters for Interactive or Background / UL:8 kbps / PS RAB

See section 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 section 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	1200
	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	8000	
	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	1044	
RM attribute	135-175		
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 TS 25.212).			

6.10.2.4.1.61.2.1.2 Transport channel parameters for Interactive or Background / DL:8 kbps / PS RAB

See section 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 section 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 Reserved for future use

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

6.10.2.4.2.2.1 Transport channel parameters

6.10.2.4.2.2.1.1 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		384000	
	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		13332(alt. 26664)		
RM attribute		110-150		

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

See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.2.2.1.3 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:2048 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:2048 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		2048000
	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		

Higher layer	RAB/Signalling RB	RAB
	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	66300 (alt. 132588)
	RM attribute	130-170

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	2048 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 / 2048 kbps / PS RAB, DSCH	
	DTX position		N/A (SingleTrCH)	
	Minimum spreading factor		4	
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		

6.10.2.4.2.4 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 6.10.2.4.2.2.2.1.1.

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:2048 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:2048 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	2048 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 / 2048 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		24000 (alt. 8000)
	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		210-250

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	N/A (SingleTrCH)
	Spreading factor	128(alt. 256)
	Number of TFCl 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 User of Radio Bearer	RAB Interactive/ Background RAB	
RLC	Logical channel type	DTCH	
	RLC mode	AM	
	Payload sizes, bit	320	
	Max data rate, bps	32000	
	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	1140	
	RM attribute	110-150	

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 User of Radio Bearer	SRB#0 RRC	SRB#1 RRC	SRB#2 RRC	SRB#3 NAS_DT High prio	SRB#4 NAS_DT Low prio	SRB#5 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	30400 (alt. 45600)	27200 or 2400 (alt. 40800 or 36000)	25600 (alt. 38400)	25600 (alt. 38400)	25600 (alt. 38400)	33200 (alt. 49800)	
	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					
		TF1, bits	1x168					
		TF2, bits	2x168					
		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. 1136)						
RM attribute	200-240							

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	1080

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	32000	32000	
	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	
		TF1, bits	1x360	
	TTI, ms	10		
	Coding type	TC		
	CRC, bit	16		
	Max number of bits/TTI after channel coding	1140		
RM attribute	110- 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	1080

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	1080

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		15200
	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, 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		200-240	

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	15200	16600	
	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	200-240		

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 TFCl 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	32000	16600	13600	12800	12800	12800
	AMD/UMD/TrD PDU header, bit	16	0	8	16	16	16

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	
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					
		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. 1200)
	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 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	320	320	166	136	128	128	128
	Max data rate, bps	32000	32000	16600	13600	12800	12800	12800
	AMD/UMD/TrD PDU header, bit	16	16	0	8	16	16	16

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	
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						
		TF1, bits	1x360						
	TTI, ms	20 (alt. 10)							
	Coding type	CC ½							
	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. 1200)
	Puncturing Limit	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: Prioritised RABs.

#	Traffic class ^[3]	SSD ^[3]	Max. rate, kbps	CS/PS
1	Conversational	Speech	UL:12.2 DL:12.2	CS
2	Conversational	Speech	UL:10.2 DL:10.2	CS
3	Conversational	Speech	UL:7.95 DL:7.95	CS
4	Conversational	Speech	UL:7.4 DL:7.4	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
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	Streaming	Unknown	UL:0 DL:64	CS
16	Streaming	Unknown	UL:64 DL:0	CS
17	Streaming	Unknown	UL:0 DL:128	CS
18	Streaming	Unknown	UL:128 DL:0	CS
19	Streaming	Unknown	UL:0 DL:384	CS
20	Interactive or Background	N/A	UL:32 DL:8	PS
21	Interactive or Background	N/A	UL:64 DL:8	PS
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	Interactive or Background	N/A	UL:384 DL:2048	PS
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. 40.8)	DCCH	SCCPCH
5	UL:16.6	CCCH	PRACH
6	DL:30.4 (alt. 45.6)	CCCH	SCCPCH
7	DL:33.2 (alt. 49.8)	BCCH:	SCCPCH
8	DL:24 (alt. 6.4)	PCCH	SCCPCH
9	UL:16.8	SHCCH	PRACH
10	UL:16.8	SHCCH	PRACH or PUSCH
11	DL: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.
- 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.
- 5) Conversational / speech / UL:10.2 DL:10.2 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.
- 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) Streaming / unknown / UL:0 DL:64 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.
- 19) Streaming / unknown / UL:64 DL:0 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.
- 20) Streaming / unknown / UL:0 DL:128 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.
- 21) Streaming / unknown / UL:128 DL:0 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.

- 22) Streaming / unknown / UL:0 DL:384 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.
- 23) Interactive or background / UL:32 DL:8 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.
- 24) Interactive or background / UL:64 DL:8 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.
- 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:2048 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.
- 36) Interactive or background / UL:128 DL:2048 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.
- 37) Interactive or background / UL:384 DL:2048 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.
- 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:2048 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) Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB
+ Streaming / unknown / UL:0 DL:64 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.
- 47) Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB
+ Streaming / unknown / UL:0 DL:128 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.
- 48) Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB
+ Streaming / unknown / UL:0 DL:384 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.
- 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.
- 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.
- 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) Interactive or /background / UL:64 kbps DL:128 kbps / PS RAB
+ Streaming / unknown / UL:0 DL:64 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.
- 55) Interactive or /background / UL:64 kbps DL:128 kbps / PS RAB
+ Streaming / unknown / UL:0 DL:128 kbps / CS 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: 16.8 DL: 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: 16.8 DL: 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:2048 kbps / PS RAB
+ UL:3.4 DL: 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:2048 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 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.

Combinations on PRACH

- 1) Interactive or background / UL:32 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	5×10^{-4} , 1×10^{-3} , 5×10^{-3}	AMR speech
Conversational	Unknown	UL:64 DL:64	CS	1×10^{-4} or 1×10^{-6}	UDI 1B, 64k 3G-324M ^[4]
Conversational	Unknown	UL:32 DL:32	CS	1×10^{-4} or 1×10^{-6}	32k 3G-324M ^[4]
Conversational	Unknown	UL:28.8 DL:28.8	CS	1×10^{-3}	Transparent modem
Streaming	Unknown	UL:14.4 DL:14.4	CS	1×10^{-3}	FAX ^[6]
Streaming	Unknown	UL:28.8 DL:28.8	CS	1×10^{-3}	FAX ^[6]
Streaming	Unknown	UL:57.6 DL:57.6	CS	1×10^{-3}	PIAFS 32 kbps Modem ^[6] , FTM ^[5] , PIAFS 64 kbps
Streaming	Unknown	UL:64-128 or DL:64-384	CS	1×10^{-3} or 1×10^{-4}	Streaming video, uni-directional
Interactive or Background	N/A	UL:32-384 DL:8-2048	PS	1×10^{-3} or 1×10^{-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

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

Higher layer	RAB/signalling RB User of Radio Bearer	SRB#1	SRB#2	SRB#3	SRB#4
		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	1700	1600	1600	1600
	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	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			

6.10.3.4.1.1.1.1.2 TFCS

TFCS size	2
TFCS	SRBs for DCCH = TF0, TF1

6.10.3.4.1.1.1.2 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	238
	TFCI code word	4 bit
	TPC	2 bit
	Puncturing Limit	1

6.10.3.4.1.1.2 Downlink

6.10.3.4.1.1.2.1 Transport channel parameters

6.10.3.4.1.1.2.1.1 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	1700	1600	1600	1600
	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	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			

6.10.3.4.1.1.2.1.2 TFCS

TFCS size	2
TFCS	SRBs for DCCH = TF0, TF1

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	240 bits
	TFCI code word	4 bits
	Puncturing limit	1

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 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	3400	3200	3200	3200
	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	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	155-165			

6.10.3.4.1.2.1.1.2 TFCS

TFCS size	2
TFCS	SRBs for DCCH = TF0, TF1

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	238 bits
	TFCI code word	4 bits
	TPC	2 bit
	Puncturing Limit	1

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 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	3400	3200	3200	3200
	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	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	155-165			

6.10.3.4.1.2.2.1.2 TFCS

TFCS size	2
TFCS	SRBs for DCCH = TF0, TF1

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	240
	TFCI code word	4 bits
	Puncturing limit	1

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 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	13600	12800	12800	12800
	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	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			

6.10.3.4.1.3.1.1.2 TFCS

TFCS size	2
TFCS	SRBs for DCCH = TF0, TF1

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	476 bits
	TFCI code word	4 bits
	TPC	2 bits
	Puncturing Limit	0.92

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 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	13600	12800	12800	12800
	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	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			

6.10.3.4.1.3.2.1.2 TFCS

TFCS size	2
TFCS	SRBs for DCCH = TF0, TF1

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	484 bits
	TFCI code word	4 bits
	Puncturing limit	0.92

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	12200			
	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	180-220	170-210	215-256		
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 25.212).				

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.

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)

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	0.84

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	0, 39, 81	103	60	
	Max data rate, bps	12200			
	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	103	60	
		39			
		81			
	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	
Max number of bits/radio frame before rate matching	152	167	68		
RM attribute	180-220	170-210	215-256		
NOTE 1: The TrCH corresponding to RAB subflow #1 should be used as the guiding TrCH, (see clause 4.3 in TS 25.212).					
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 TS 25.212).					

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)

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	0.88

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	10200			
	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	180-220	170-210	215-256		
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 25.212).					

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)

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	0.48

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	0, 39, 65	99	40	
	Max data rate, bps	10200			
	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	99	40	
		39			
		65			
	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	
Max number of bits/radio frame before rate matching	128	161	48		
RM attribute	180-220	170-210	215-256		
NOTE 1: The TrCH corresponding to RAB subflow #1 should be used as the guiding TrCH, (see clause 4.3 in TS 25.212).					
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 TS 25.212).					

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)

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	0,48

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	7950		
	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)	
		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	180-220	170-210	
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 TS 25.212).				

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)

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	0.52

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	0, 39, 75	84	
	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	
	TB sizes, bit	0, 39, 75	84	
	TFS (note 1)	TF0, bits	1x0 (note 2)	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	180-220	170-210	
NOTE 1: The TrCH corresponding to RAB subflow #1 should be used as the guiding TrCH, (see clause 4.3 in TS 25.212).				
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 TS 25.212).				

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)

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	0,52

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	7400		
	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	180-220	170-210	
NOTE: CRC parity bits are to be attached to RAB subflow#1 any time since number of TrBIs are 1 even if there is no data on RAB subflow#1 (see clause 4.2.1.1 in TS 25.212).				

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)

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	0.56

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	0, 39, 61	87	
	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	
	TB sizes, bit	0, 39, 61	87	
	TFS (note 1)	TF0, bits	1x0 (note 2)	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	180-220	170-210	
NOTE 1: The TrCH corresponding to RAB subflow #1 should be used as the guiding TrCH, (see clause 4.3 in TS 25.212).				
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 TS 25.212).				

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)

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	0,56

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	6700		
	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)	
		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	180-220	170-210	
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 TS 25.212).				

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.

6.10.3.4.8.1.1.3 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)

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	0.60

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	0, 39, 58	76	
	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	
	TB sizes, bit	0	76	
		39		
		58		
	TFS (note 1)	TF0, bits	1x0 (note 2)	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	180-220	170-210		
NOTE 1: The TrCH corresponding to RAB subflow #1 should be used as the guiding TrCH, (see clause 4.3 in TS 25.212).				
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 TS 25.212).				

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)

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	0,6

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	5900		
	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	180-220	170-210	
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 TS 25.212).				

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)

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
	TFCl code word	16 bits
	TPC	2 bits
	Puncturing Limit	0.64

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	0, 39, 55	63	
	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	
	TB sizes, bit	0, 39, 55	63	
	TFS (note 1)	TF0, bits	1x0 (note 2)	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	180-220	170-210	
NOTE 1: The TrCH corresponding to RAB subflow #1 should be used as the guiding TrCH, (see clause 4.3 in TS 25.212).				
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 TS 25.212).				

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)

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	0,64

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 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	5150		
	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)	
		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	180-220	170-210	
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 TS 25.212).				

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

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.10.1.1.3 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)

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	0.68

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	0, 39, 49	54	
	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	
	TB sizes, bit	0, 39, 49	54	
	TFS (note 1)	TF0, bits	1x0 (note 2)	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	180-220	170-210	
NOTE 1: The TrCH corresponding to RAB subflow #1 should be used as the guiding TrCH, (see clause 4.3 in TS 25.212).				
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 TS 25.212).				

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

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.10.2.1.3 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)

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	0.68

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	4750		
	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)	
		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	180-220	170-210	

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 TS 25.212).

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

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.11.1.1.3 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)

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	0.68

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	0, 39, 42	53	
	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	
	TB sizes, bit	0, 39, 42	53	
	TFS (note 1)	TF0, bits	1x0 (note 2)	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	180-220	170-210	
NOTE 1: The TrCH corresponding to RAB subflow #1 should be used as the guiding TrCH, (see clause 4.3 in TS 25.212).				
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 TS 25.212).				

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

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.11.2.1.3 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)

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	0,72

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	28800	
	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	3564	
	Max number of bits/radio frame before rate matching	891	
	RM attribute	160-200	

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

6.10.3.4.1.12.1.2 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

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	28800	
	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	3564	
	Max number of bits/radio frame before rate matching	891	
RM attribute	160-200		

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

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	0,44

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	64000		
	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	3948(alt. 7884)		
	Max number of bits/radio frame before rate matching	1974(alt. 1971)		
	RM attribute	150-195		

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)

6.10.3.4.1.13.1.2 Physical channel parameters

DPCH Uplink	Midamble	512 chips
	Codes and time slots	{SF16 x 1 code + SF4 x 1 code} x 1 time slot
	Max. Number of data	1210 bits
	TFCI code word	8 bits
	TPC	2 bits
	Puncturing Limit	0.56

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	64000	
	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	3948(alt. 7884)	
	Max number of bits/radio frame before rate matching	1974(alt. 1971)	
	RM attribute	150-195	

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)

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	1212 bits
	TFCI code word	8 bits
	Puncturing limit	0,56

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	32000	
	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	1980(alt. 3948)	
	Max number of bits/radio frame before rate matching	990(alt. 987)	
	RM attribute	165-210	

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.

6.10.3.4.1.13.1.1.3 TFCS

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

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	936 bits
	TFCI code word	8 bits
	TPC	2 bits
	Puncturing Limit	0.80

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	32000	
	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	1980(alt. 3948)	
	Max number of bits/radio frame before rate matching	990(alt. 987)	
	RM attribute	165-210	

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)

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	724 bits
	TFCI code word	8 bits
	Puncturing limit	0,64

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	14400	
	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	1788	
	Max number of bits/radio frame before rate matching	447	
	RM attribute	145-185	

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)

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	468 bits
	TFCI code word	8 bits
	TPC	2 bits
	Puncturing Limit	0.80

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	14400	
	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	1788	
	Max number of bits/radio frame before rate matching	447	
	RM attribute	145-185	

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)

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	480 bits
	TFCI code word	8 bits
	Puncturing limit	0,8

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	28800	
	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	3564	
	Max number of bits/radio frame before rate matching	891	
RM attribute	135-175		

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

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

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	28800	
	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	3564	
	Max number of bits/radio frame before rate matching	891	
RM attribute	135-175		

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

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

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	57600	
	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	7116	
	Max number of bits/radio frame before rate matching	1779	
RM attribute	125-165		

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)

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	57600	
	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	7116	
	Max number of bits/radio frame before rate matching	1779	
RM attribute	125-165		

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)

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 Streaming / unknown / UL:0 DL:64 kbps / CS or PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH
- 6.10.3.4.1.18.1 Uplink
- 6.10.3.4.1.18.1.1 Transport channel parameters
- 6.10.3.4.1.18.1.1.1 Transport channel parameters for Streaming / unknown / UL:0 kbps / CS or PS RAB
N/A
- 6.10.3.4.1.18.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH
See clause 6.10.3.4.1.2.1.1.1.
- 6.10.3.4.1.18.1.1.3 TFCS
See clause 6.10.3.4.1.2.1.1.2.
- 6.10.3.4.1.18.1.2 Physical channel parameters
See clause 6.10.3.4.1.2.1.2.
- 6.10.3.4.1.18.2 Downlink
- 6.10.3.4.1.18.2.1 Transport channel parameters
- 6.10.3.4.1.18.2.1.1 Transport channel parameters for Streaming / unknown / DL:64 kbps / CS or PS RAB

Higher Layer	RAB/Signalling RB	RAB	
RLC	Logical channel type	DTCH	
	RLC mode	TM	
	Payload sizes, bit	320	
	Max data rate, bps	64000	
	TrD PDU header, bit	0	
MAC	MAC header, bit	0	
	MAC multiplexing	N/A	
Layer 1	TrCH type	DCH	
	TB sizes, bit	320	
	TFS	TF0, bits	0x320
		TF1, bits	1x320
		TF2, bits	2x320
		TF3, bits	4x320
		TF4, bits	8x320
	TTI, ms	40	
	Coding type	TC	
	CRC, bit	16	
	Max number of bits/TTI after channel coding	8076	
	Max number of bits/radio frame before rate matching	2019	
RM attribute	125-165		

- 6.10.3.4.1.18.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.18.2.1.3 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)

6.10.3.4.1.18.2.2 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	1204 bits
	TFCI code word	16 bits
	Puncturing limit	0,56

6.10.3.4.1.19 Streaming / unknown / UL:64 DL:0 kbps / CS or PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.3.4.1.19.1 Uplink

6.10.3.4.1.19.1.1 Transport channel parameters

6.10.3.4.1.19.1.1.1 Transport channel parameters for Streaming / unknown / UL:64 kbps / CS or PS RAB

Higher Layer	RAB/Signalling RB	RAB	
RLC	Logical channel type	DTCH	
	RLC mode	TM	
	Payload sizes, bit	320	
	Max data rate, bps	64000	
	TrD PDU header, bit	0	
MAC	MAC header, bit	0	
	MAC multiplexing	N/A	
Layer 1	TrCH type	DCH	
	TB sizes, bit	320	
	TFS	TF0, bits	0x320
		TF1, bits	1x320
		TF2, bits	2x320
		TF3, bits	4x320
		TF4, bits	8x320
	TTI, ms	40	
	Coding type	TC	
	CRC, bit	16	
	Max number of bits/TTI after channel coding	8076	
	Max number of bits/radio frame before rate matching	2019	
	RM attribute	125-165	

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

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.19.1.1.3 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)

6.10.3.4.1.19.1.2 Physical channel parameters

DPCH Uplink	Midamble	512 chips
	Codes and time slots	{SF16 x 1 code + SF4 x 1 code} x 1 time slot
	Max. Number of data bits/radio frame	1202 bits
	TFCI code word	16 bits
	TPC	2 bits
	Puncturing Limit	0.52

6.10.3.4.1.19.2 Downlink

6.10.3.4.1.19.2.1 Transport channel parameters

6.10.3.4.1.19.2.1.1 Transport channel parameters for Streaming / unknown / DL:0 kbps / CS or PS RAB

N/A

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

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.19.2.1.3 TFCS

See clause 6.10.3.4.1.2.2.1.2.

6.10.3.4.1.19.2.2 Physical channel parameters

See clause 6.10.3.4.1.2.2.2.

6.10.3.4.1.20 Streaming / unknown / UL:0 DL:128 kbps / CS or PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.3.4.1.20.1 Uplink

6.10.3.4.1.20.1.1 Transport channel parameters

6.10.3.4.1.20.1.1.1 Transport channel parameters for Streaming / unknown / UL:0 kbps / CS or PS RAB

N/A

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

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.20.1.1.3 TFCS

See clause 6.10.3.4.1.2.1.1.2.

6.10.3.4.1.20.1.2 Physical channel parameters

See clause 6.10.3.4.1.2.1.2.

6.10.3.4.1.20.2 Downlink

6.10.3.4.1.20.2.1 Transport channel parameters

6.10.3.4.1.20.2.1.1 Transport channel parameters for Streaming / unknown / DL:128 kbps / CS or PS RAB

Higher Layer	RAB/Signalling RB	RAB	
RLC	Logical channel type	DTCH	
	RLC mode	TM	
	Payload sizes, bit	320	
	Max data rate, bps	128000	
	TrD PDU header, bit	0	
MAC	MAC header, bit	0	
	MAC multiplexing	N/A	
Layer 1	TrCH type	DCH	
	TB sizes, bit	320	
	TFS	TF0, bits	0x320
		TF1, bits	1x320
		TF2, bits	2x320
		TF3, bits	4x320
		TF4, bits	8x320
		TF5, bits	16x320
	TTI, ms	40	
	Coding type	TC	
	CRC, bit	16	
	Max number of bits/TTI after channel coding	16152	
	Max number of bits/radio frame before rate matching	4038	
RM attribute	125-165		

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

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.20.2.1.3 TFCS

TFCS size	12
TFCS	(128 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)

6.10.3.4.1.20.2.2 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	2192 bits
	TFCI code word	16 bits
	Puncturing limit	0,52

6.10.3.4.1.21 Streaming / unknown / UL:128 DL:0 kbps / CS or PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.3.4.1.21.1 Uplink

6.10.3.4.1.21.1.1 Transport channel parameters

6.10.3.4.1.21.1.1.1 Transport channel parameters for Streaming / unknown / UL:128 kbps / CS or PS RAB

Higher Layer	RAB/Signalling RB	RAB	
RLC	Logical channel type	DTCH	
	RLC mode	TM	
	Payload sizes, bit	320	
	Max data rate, bps	128000	
	TrD PDU header, bit	0	
MAC	MAC header, bit	0	
	MAC multiplexing	N/A	
Layer 1	TrCH type	DCH	
	TB sizes, bit	320	
	TFS	TF0, bits	0x320
		TF1, bits	1x320
		TF2, bits	2x320
		TF3, bits	4x320
		TF4, bits	8x320
	TF5, bits	16x320	
	TTI, ms	40	
	Coding type	TC	
	CRC, bit	16	
	Max number of bits/TTI after channel coding	16152	
	Uplink: Max number of bits/radio frame before rate matching	4038	
RM attribute	125-165		

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

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.21.1.1.3 TFCS

TFCS size	12
TFCS	(128 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)

6.10.3.4.1.21.1.2 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	2064 bits
	TFCI code word	16 bit
	TPC	2 bits
	Puncturing Limit	0.48

6.10.3.4.1.21.2 Downlink

6.10.3.4.1.21.2.1 Transport channel parameters

6.10.3.4.1.21.2.1.1 Transport channel parameters for Streaming / unknown / DL:0 kbps / CS or PS RAB
N/A

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

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.21.2.1.3 TFCS

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.21.2.2 Physical channel parameters

See clause 6.10.3.4.1.2.2.2.

6.10.3.4.1.22 Streaming / unknown / UL:0 DL:384 kbps / CS or PS RAB + UL:3.4 DL:3.4 kbps SRBs
for DCCH

6.10.3.4.1.22.1 Uplink

6.10.3.4.1.22.1.1 Transport channel parameters

6.10.3.4.1.22.1.1.1 Transport channel parameters for Streaming / unknown / UL:0 kbps / CS or PS RAB
N/A

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

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.22.1.1.3 TFCS

See clause 6.10.3.4.1.2.1.1.2.

6.10.3.4.1.22.1.2 Physical channel parameters

See clause 6.10.3.4.1.2.1.2.

6.10.3.4.1.22.2 Downlink

6.10.3.4.1.22.2.1 Transport channel parameters

6.10.3.4.1.22.2.1.1 Transport channel parameters for Streaming / unknown / DL:384 kbps / CS or PS RAB

Higher Layer	RAB/Signalling RB	RAB	
RLC	Logical channel type	DTCH	
	RLC mode	TM	
	Payload sizes, bit	320	
	Max data rate, bps	384000	
	TrD PDU header, bit	0	
MAC	MAC header, bit	0	
	MAC multiplexing	N/A	
Layer 1	TrCH type	DCH	
	TB sizes, bit	320	
	TFS	TF0, bits	0x320
		TF1, bits	1x320
		TF2, bits	2x320
		TF3, bits	4x320
		TF4, bits	8x320
		TF5, bits	16x320
		TF6, bits	32x320
		TF7, bits	48x320
	TTI, ms	40	
	Coding type	TC	
	CRC, bit	16	
	Max number of bits/TTI after channel coding	48432	
Max number of bits/radio frame before rate matching	12108		
RM attribute	110-150		

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

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.22.2.1.3 TFCS

TFCS size	16
TFCS	(384 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF2, TF0), (TF3, TF0), (TF4, TF0), (TF5, TF0), (TF6, TF0), (TF7, TF0), (TF0, TF1), (TF1, TF1), (TF2, TF1), (TF3, TF1), (TF4, TF1), (TF5, TF1), (TF6, TF1), (TF7, TF1)

6.10.3.4.1.22.2.2 Physical channel parameters

DPCH Downlink	Midamble	256 chips
	Codes and time slots	SF16 x 8 codes x 3 time slots
	Max. Number of data bits/radio frame	6608 bits
	TFCI code word	16 bits
	Puncturing limit	0,52

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	
	Max data rate, bps	32000	
	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	2124 (alt. 1080)	
	Max number of bits/radio frame before rate matching	1062 (alt. 1080)	
	RM attribute	135-175	

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 (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))

6.10.3.4.1.23.1.2 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	0.76

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	8000	
	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	1068 (alt. 1080)	
	Max number of bits/radio frame before rate matching	267 (alt. 270)	
	RM attribute	135-175	

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

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.23.2.1.3 TFCS

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

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	236 bits
	TFCI code word	8 bits
	Puncturing limit	0,56

6.10.3.4.1.24 Interactive or background / UL:64 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.3.4.1.24.1 Uplink

6.10.3.4.1.24.1.1 Transport channel parameters

6.10.3.4.1.24.1.1.1 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	64000	
	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	4236	
	Max number of bits/radio frame before rate matching	2118	
RM attribute	130-170		

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

See clause 6.10.3.4.1.2.1.1.1.

6.10.3.4.1.24.1.1.3 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)

6.10.3.4.1.24.1.2 Physical channel parameters

DPCH Uplink	Midamble	512 chips
	Codes and time slots	{SF16 x 1 code + SF4 x 1 code} x 1 time slot
	Max. Number of data bits/radio frame	1202 bits
	TFCI code word	16 bits
	TPC	2 bits
	Puncturing Limit	0.52

6.10.3.4.1.24.2 Downlink

See clause 6.10.3.4.1.23.2.

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	64000	
	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	4236	
Max number of bits/radio frame before rate matching	2118		
RM attribute	130-170		

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)

6.10.3.4.1.25.2.2 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	1204 bits
	TFCI code word	16 bits
	Puncturing limit	0,52

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

See clause 6.10.3.4.1.24.1.

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 6.10.3.4.1.24.1.

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	128000	
	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	4 x336
		TF4, bits	8 x336
	TTI, ms	20	
	Coding type	TC	
	CRC, bit	16	
	Max number of bits/TTI after channel coding	8460	
Max number of bits/radio frame before rate matching	4230		
RM attribute	120-160		

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)

6.10.3.4.1.27.2.2 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	2192 bits
	TFCI code word	16 bits
	Puncturing limit	0,48

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	
	Max data rate, bps	128000	
	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	4 x336
		TF4, bits	8 x336
	TTI, ms	20	
	Coding type	TC	
	CRC, bit	16	
	Max number of bits/TTI after channel coding	8460	
	Max number of bits/radio frame before rate matching	4230	
RM attribute	120-160		

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	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)

6.10.3.4.1.28.1.2 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	2064 bits
	TFCI code word	16 bits
	TPC	2 bits
	Puncturing Limit	0.48

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 6.10.3.4.1.24.1.

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	144000	
	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	4 x336
		TF4, bits	8 x336
		TF5, bits	9x336
	TTI, ms	20	
	Coding type	TC	
	CRC, bit	16	
	Max number of bits/TTI after channel coding	9516	
	Max number of bits/radio frame before rate matching	4758	
RM attribute	140-180		

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)

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	
	Max data rate, bps	144000	
	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	4 x336
		TF4, bits	8 x336
	TF5, bits	9 x336	
	TTI, ms	20	
	Coding type	TC	
	CRC, bit	16	
	Max number of bits/TTI after channel coding	9516	
	Max number of bits/radio frame before rate matching	4758	
RM attribute	140-180		

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)

6.10.3.4.1.30.1.2 Physical channel parameters

DPCH Uplink	Midamble	256 chips
	Codes and time slots	{SF16 x 1 code + SF2 x 1 code} x 1 time slot
	Max. Number of data bits/radio frame	2466 bits
	TFCI code word	16 bits
	TPC	2 bits
	Puncturing Limit	0.52

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 6.10.3.4.1.24.1.

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	384000	
	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	4 x336
		TF4, bits	8 x336
		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	8460(alt. 16920)		
Max number of bits/radio frame before rate matching	8460 (alt. 8460)		
RM attribute	135-175		

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

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.31.2.1.3 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))

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	4400 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 6.10.3.4.1.24.1.

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	384000
	AMD PDU header, bit	16
MAC	MAC header, bit	0
	MAC multiplexing	N/A

Higher Layer	RAB/Signalling RB	RAB	
Layer 1	TrCH type	DCH	
	TB sizes, bit	336	
	TFS	TF0, bits	0x336
		TF1, bits	1x336
		TF2, bits	2x336
		TF3, bits	4 x336
		TF4, bits	8 x336
		TF5, bits	12x336
		TF6, bits	N/A (alt. 16 x336)
		TF7, bits	N/A (alt. 20 x336)
	TF8, bits	N/A (alt. 24 x336)	
	TTI, ms	10(alt. 20)	
	Coding type	TC	
	CRC, bit	16	
Max number of bits/TTI after channel coding	12684(alt. 25368)		
Max number of bits/radio frame before rate matching	12684 (alt. 12684)		
RM attribute	110-150		

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

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.32.2.1.3 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))

6.10.3.4.1.32.2.2 Physical channel parameters

DPCH Downlink	Midamble	256 chips
	Codes and time slots	SF16 x 8 codes x 3 time slots
	Max. Number of data bits/radio frame	6608 bits
	TFCI code word	16 bits
	Puncturing limit	0,52

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	384000	
	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	4 x336
		TF4, bits	8 x336
		TF5, bits	12x336
		TF6, bits	16x336(alt. N/A)
		TF7, bits	20x336(alt. N/A)
	TF8, bits	24 x336 (alt. N/A)	
	TTI, ms	20 (alt. 10)	
	Coding type	TC	
	CRC, bit	16	
	Max number of bits/TTI after channel coding	25368	
Max number of bits/radio frame before rate matching	12684		
RM attribute	110-150		

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	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))

6.10.3.4.1.34.1.2 Physical channel parameters

DPCH Uplink	Midamble	256 chips
	Codes and time slots	SF2 x 1 code x 3 time slots
	Max. Number of data bits/radio frame	6480 bits
	TFCI code word	16 bits
	TPC	2 bits
	Puncturing Limit	0.48

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:2048 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.3.4.1.35.1 Uplink

See clause 6.10.3.4.1.24.1.

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:2048 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	2048000	
	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	4 x656
		TF4, bits	8 x656
		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	64575 (alt. 129141)		

Higher Layer	RAB/Signalling RB	RAB
	Max number of bits/radio frame before rate matching	64575 (alt. 64571)
	RM attribute	130-170

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	22 (alt.38)
TFCS	(2048 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))

6.10.3.4.1.35.2.2 Physical channel parameters

DPCH Downlink	Midamble	256 chips
	Codes and time slots	SF1 x 1 code x 12 time slot
	Max. Number of data bits/radio frame	52976 bits
	TFCI code word	16 bits
	Puncturing limit	0,80

6.10.3.4.1.36 Interactive or background / UL:128 DL:2048 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.3.4.1.36.1 Uplink

See clause 6.10.3.4.1.28.1.

6.10.3.4.1.36.2 Downlink

See clause 6.10.3.4.1.35.2.

6.10.3.4.1.37 Interactive or background / UL:384 DL:2048 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.3.4.1.37.1 Uplink

See clause 6.10.3.4.1.34.1.

6.10.3.4.1.37.2 Downlink

See clause 6.10.3.4.1.35.2.

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

6.10.3.4.1.38.1 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 (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))

6.10.3.4.1.38.1.2 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	0.56

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)

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	0,60

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)

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	1936 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 6.10.3.4.1.24.1.1.1.

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

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)

6.10.3.4.1.40.1.2 Physical channel parameters

DPCH Uplink	Midamble	512 chips
	Codes and time slots	SF2 x 1 code x 1 time slot
	Max. Number of data bits/radio frame	1808 bits
	TFCI code word	16 bit
	TPC	2 bits
	Puncturing Limit	0.68

6.10.3.4.1.40.2 Downlink

See clause 6.10.3.4.1.39.2.

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

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)

6.10.3.4.1.41.2.2 Physical channel parameters

DPCH Downlink	Midamble	256 chips
	Codes and time slots	SF16 x 10 codes x 1 time slot
	Max. Number of data bits/radio frame	2744 bits
	TFCI code word	16 bits
	Puncturing limit	0,56

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

See clause 6.10.3.4.1.40.1.

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))

6.10.3.4.1.42.2.2 Physical channel parameters

DPCH Downlink	Midamble	256 chips
	Codes and time slots	SF16 x 10 codes x 2 time slots
	Max. Number of data bits/radio frame	5504 bits
	TFCI code word	16 bits
	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

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))

6.10.3.4.1.43.2.2 Physical channel parameters

DPCH Downlink	Midamble	256 chips
	Codes and time slots	SF16 x 8 codes x 3 time slots
	Max. Number of data bits/radio frame	6592 bits
	TFCI code word	32 bits
	Puncturing limit	0,48

6.10.3.4.1.44 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB
 + Interactive or background / UL:128 DL:2048 kbps / PS RAB
 + UL:3.4 DL:3.4 kbps SRBs for DCCH

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)

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	2724 bits
	TFCI code word	16 bits
	TPC	2 bits
	Puncturing Limit	0.56

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:2048 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.

6.10.3.4.1.44.2.2 Physical channel parameters

DPCH Downlink	Midamble	256 chips
	Codes and time slots	SF1 x 1 code x 12 time slots
	Max. Number of data bits/radio frame	36400 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)

6.10.3.4.1.45.1.2 Physical channel parameters

DPCH Uplink	Midamble	512 chips
	Codes and time slots	{SF8 x 1 code + SF4 x 1 code} x 1 time slot
	Max. Number of data bits/radio frame	1428 bits
	TFCI code word	16 bits
	TPC	2 bits
	Puncturing Limit	0.60

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 6.10.3.4.1.2.2.11.

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)

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	1448 bits
	TFCI code word	16 bits
	Puncturing limit	0,6

6.10.3.4.1.46 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB
 + Streaming / unknown / UL:0 DL:64 kbps / CS or PS RAB
 + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.3.4.1.46.1 Uplink

See clause 6.10.3.4.1.4.1.

6.10.3.4.1.46.2 Downlink

6.10.3.4.1.46.2.1 Transport channel parameters

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

See clause 6.10.3.4.1.4.2.1.1.

6.10.3.4.1.46.2.1.2 Transport channel parameters for Streaming / unknown / DL:64 kbps / CS or PS RAB

See clause 6.10.3.4.1.18.2.1.1.

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

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.46.2.1.4 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)

6.10.3.4.1.46.2.2 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	2192 bits
	TFCI code word	16 bits
	Puncturing limit	0,8

6.10.3.4.1.47 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB
 + Streaming / unknown / UL:0 DL:128 kbps / CS RAB
 + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.3.4.1.47.1 Uplink

See clause 6.10.3.4.1.4.1.

6.10.3.4.1.47.2 Downlink

6.10.3.4.1.47.2.1 Transport channel parameters

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

See clause 6.10.3.4.1.4.2.1.1.

6.10.3.4.1.47.2.1.2 Transport channel parameters for Streaming / unknown / DL:128 kbps / CS or PS RAB

See clause 6.10.3.4.1.20.2.1.1.

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

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.47.2.1.4 TFCS

TFCS size	36
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, 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)

6.10.3.4.1.47.2.2 Physical channel parameters

DPCH Downlink	Midamble	256 chips
	Codes and time slots	SF16 x 10 codes x 1 time slot
	Max. Number of data bits/radio frame	2728 bits
	TFCI code word	32 bits
	Puncturing limit	0,56

6.10.3.4.1.48 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB
 + Streaming / unknown / UL:0 DL:384 kbps / CS RAB
 + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.3.4.1.48.1 Uplink

See clause 6.10.3.4.1.4.1.

6.10.3.4.1.48.2 Downlink

6.10.3.4.1.48.2.1 Transport channel parameters

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

See clause 6.10.3.4.1.4.2.1.1.

6.10.3.4.1.48.2.1.2 Transport channel parameters for Streaming / unknown / DL:384 kbps / CS or PS RAB

See clause 6.10.3.4.1.22.2.1.1.

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

See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.48.2.1.4 TFCS

TFCS size	48
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, 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)

6.10.3.4.1.48.2.2 Physical channel parameters

DPCH Downlink	Midamble	256 chips
	Codes and time slots	SF16 x 10 codes x 3 time slots
	Max. Number of data bits/radio frame	8248 bits
	TFCI code word	32 bits
	Puncturing limit	0,64

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)

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	2064 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 6.10.3.4.1.2.2.11.

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)

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	2192 bits
	TFCI code word	16 bits
	Puncturing limit	0,88

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 6.10.3.5.4.1.13.1.1.1.

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)

6.10.3.4.1.50.1.2 Physical channel parameters

DPCH Uplink	Midamble	512 chips
	Codes and time slots	SF1 x 1 code x 1time slot
	Max. Number of data bits/radio frame	3616 bits
	TFCI code word	16 bits
	TPC	2 bits
	Puncturing Limit	0.88

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)

6.10.3.4.1.50.2.2 Physical channel parameters

DPCH Downlink	Midamble	512 chips
	Codes and time slots	SF16 x 11 codes x 1 time slot
	Max. Number of data bits/radio frame	2668 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 6.10.3.4.1.24.1.1.1.

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)

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	2064 bits
	TFCI code word	16 bits
	TPC	2 bits
	Puncturing Limit	0.44

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)

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	2192 bits
	TFCI code word	16 bits
	Puncturing limit	0,48

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)

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	3156 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)

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 1 time slot} + {SF16 x 1 code + SF4 x 1 code} x 1 time slot
	Max. Number of data bits/radio frame	3154 bits
	TFCI code word	16 bits
	TPC	2 bits
	Puncturing Limit	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 Interactive or background / UL:64 DL:128 kbps / PS RAB
 + Streaming / unknown / UL:0 DL:64 kbps / CS or PS RAB
 + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.3.4.1.54.1 Uplink

See clause 6.10.3.4.1.24.1.

6.10.3.4.1.54.2 Downlink

6.10.3.4.1.54.2.1 Transport channel parameters

6.10.3.4.1.54.2.1.1 Transport channel parameters for Interactive or background / DL:128 kbps / PS RAB
 See clause 6.10.3.4.1.27.2.1.1.

6.10.3.4.1.54.2.1.2 Transport channel parameters for Streaming / unknown / DL:64 kbps / CS or PS RAB
See clause 6.10.3.4.1.18.2.1.1.

6.10.3.4.1.54.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH
See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.54.2.1.4 TFCS

TFCS size	50
TFCS	(I/B 128 kbps RAB, Str. 64 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, TF2, TF0), (TF1, TF2, TF0), (TF2, TF2, TF0), (TF3, TF2, TF0), (TF4, TF2, TF0), (TF0, TF3, TF0), (TF1, TF3, TF0), (TF2, TF3, TF0), (TF3, TF3, TF0), (TF4, TF3, TF0), (TF0, TF4, TF0), (TF1, TF4, TF0), (TF2, TF4, TF0), (TF3, TF4, TF0), (TF4, TF4, 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), (TF0, TF2, TF1), (TF1, TF2, TF1), (TF2, TF2, TF1), (TF3, TF2, TF1), (TF4, TF2, TF1), (TF0, TF3, TF1), (TF1, TF3, TF1), (TF2, TF3, TF1), (TF3, TF3, TF1), (TF4, TF3, TF1), (TF0, TF4, TF1), (TF1, TF4, TF1), (TF2, TF4, TF1), (TF3, TF4, TF1), (TF4, TF4, TF1)

6.10.3.4.1.54.2.4 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	3140 bits
	TFCI code word	32 bits
	Puncturing limit	0,68

6.10.3.4.1.55 Interactive or background / UL:64 DL:128 kbps / PS RAB
+ Streaming / unknown / UL:0 DL:128 kbps / CS or PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.3.4.1.55.1 Uplink
See clause 6.10.3.4.1.24.1.

6.10.3.4.1.55.2 Downlink

6.10.3.4.1.55.2.1 Transport channel parameters

6.10.3.4.1.55.2.1.1 Transport channel parameters for Interactive or background / DL:128 kbps / PS RAB
See clause 6.10.3.4.1.27.2.1.1.

6.10.3.4.1.55.2.1.2 Transport channel parameters for Streaming / unknown / DL:128 kbps / CS or PS RAB
See clause 6.10.3.4.1.20.2.1.1.

6.10.3.4.1.55.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH
See clause 6.10.3.4.1.2.2.1.1.

6.10.3.4.1.55.2.1.4 TFCS

TFCS size	60
TFCS	(I/B 128 kbps RAB, Str. 128 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, TF2, TF0), (TF1, TF2, TF0), (TF2, TF2, TF0), (TF3, TF2, TF0), (TF4, TF2, TF0), (TF0, TF3, TF0), (TF1, TF3, TF0), (TF2, TF3, TF0), (TF3, TF3, TF0), (TF4, TF3, TF0), (TF0, TF4, TF0), (TF1, TF4, TF0), (TF2, TF4, TF0), (TF3, TF4, TF0), (TF4, TF4, TF0), (TF0, TF5, TF0), (TF1, TF5, TF0), (TF2, TF5, TF0), (TF3, TF5, TF0), (TF4, TF5, 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), (TF0, TF2, TF1), (TF1, TF2, TF1), (TF2, TF2, TF1), (TF3, TF2, TF1), (TF4, TF2, TF1), (TF0, TF3, TF1), (TF1, TF3, TF1), (TF2, TF3, TF1), (TF3, TF3, TF1), (TF4, TF3, TF1), (TF0, TF4, TF1), (TF1, TF4, TF1), (TF2, TF4, TF1), (TF3, TF4, TF1), (TF4, TF4, TF1), (TF0, TF5, TF1), (TF1, TF5, TF1), (TF2, TF5, TF1), (TF3, TF5, TF1), (TF4, TF5, TF1)

6.10.3.4.1.55.2.2 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	2176 bits
	TFCI code word	32 bits
	Puncturing limit	0,48

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: 16.8 DL: 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	168	
	Max data rate, bps	64000	16800	
	AMD/TrD PDU header, bit	16	0	
MAC	MAC header, bit	0	0	
	MAC multiplexing	N/A	N/A	
Layer 1	TrCH type	USCH	USCH	
	TB sizes, bit	336	168	
	TFS	TF0, bits	0x336	0x168
		TF1, bits	1x336	1x168
		TF2, bits	2x336	N/A
		TF3, bits	3x336	N/A
		TF4, bits	4x336	N/A
	TTI, ms	20	10	
	Coding type	TC	CC 1/2	
	CRC, bit	16	16	
	Max number of bits/TTI after channel coding	4236	384	
	Max number of bits/radio frame before rate matching	2118	384	
	RM attribute	135-175	180-220	

6.10.3.4.2.1.1.1.2 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)

6.10.3.4.2.1.1.1.3 Transport channel parameters for SRB for CCCH and UL SRBs for DCCH and UL SRB for SHCCH mapped on RACH

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	16800	13600	12800	12800	12800	16800
	AMD/UMD/TrD PDU header, bit	0	8	16	16	16	0

Higher layer	RAB/signalling RB User of Radio Bearer	SRB#0	SRB#1	SRB#2	SRB#3	SRB#4	SRB#5
		RRC	RRC	RRC	NAS_DT High prio	NAS_DT Low prio	RRC
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	170	170	170	170	170
	TFS	1x170					
	TF0, bits						
	TTI, ms	10					
	Coding type	CC ½					
	CRC, bit	16					
Max number of bits/TTI after channel coding	388	388	388	388	388	388	

6.10.3.4.2.1.1.2 Physical channel parameters

PUSCH	Midamble	512 chips
	Codes and time slots	{SF16 x 1 code + SF4 x 1 code} x 1 time slot
	Max. Number of data bits/radio frame	1202 bits
	TFCI code word	16 bits
	TPC	2 bits
	Puncturing Limit	0.48

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	1.0 (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	256000	16000	
	AMD/UMD PDU 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	336	168	
	TFS	TF0, bits	0x336	0x168
		TF1, bits	1x336	1x168
		TF2, bits	2x336	N/A
		TF3, bits	4x336	N/A
		TF4, bits	8x336	N/A
		TF5, bits	N/A (alt. 12x336)	N/A
		TF6, bits	N/A (alt. 16x336)	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	8460 (alt. 16908)	384	
	Downlink: Max number of bits/radio frame before rate matching	8460 (alt. 8454)	384	
RM attribute	135-175	180-220		

6.10.3.4.2.1.2.1.2 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), (TF1, TF1), (TF2, TF1), (TF3, TF1), (TF4, TF1), (TF5, TF1), (TF6, TF1))

6.10.3.4.2.1.2.1.3 Transport channel parameters for DL SRBs for DCCH and SRB for CCCH and SRB for BCCH and DL SRB for SHCCH mapped on FACH

Higher layer	RAB/signalling RB User of Radio Bearer	SRB#0	SRB#1	SRB#2	SRB#3	SRB#4	SRB#5	SRB#6	
		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	32000 (alt. 48000)	27200 or 24000 (alt. 40800 or 36000)	25600 (alt. 38400)	25600 (alt. 38400)	25600 (alt. 38400)	32000 (alt. 48000)	33600 (alt. 50400)	
	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	171	171	171	171	171	171	
	TFS	TF0, bits	0x171						
		TF1, bits	1x171						
		TF2, bits	2x171						
		TF3, bits	3x171						
		TF4, bits	4x171						
		TF5, bits	N/A (alt. 5x171)						
		TF6, bits	N/A (alt. 6x171)						
	TTI, ms	20							
	Coding type	CC 1/2							
	CRC, bit	16							
	Max number of bits/TTI after channel coding	1528 (alt. 2292)	1528 (alt. 2292)	1528 (alt. 2292)	1528 (alt. 2292)	1528 (alt. 2292)	1528 (alt. 2292)	1528 (alt. 2292)	1528 (alt. 2292)
	Max number of bits/radio frame before rate matching	764 (alt. 1146)	764 (alt. 1146)	764 (alt. 1146)	764 (alt. 1146)	764 (alt. 1146)	764 (alt. 1146)	764 (alt. 1146)	764 (alt. 1146)
	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 TFCS for FACH

TFCS size	5 (alt. 7)
TFCS	FACH = TF0, TF1, TF2, TF3, TF4 (alt. FACH = TF0, TF1, TF2, TF3, TF4, TF5, T F6)

6.10.3.4.2.1.2.2 Physical channel parameters

PDSCH	Midamble	256 chips
	Codes and time slots	SF16 x 8 codes x 2 time slots
	Max. Number of data bits/radio frame	4400 bits
	TFCI code word	16 bits
	Puncturing Limit	0.48

SCCPCH (burst type 1)	Midamble	512 chips
	Codes and time slots	SF16 x 5 codes x 1 time slot
	Max. Number of data bits/radio frame	1204 bits
	TFCI code word	16 bits
	Puncturing Limit	1

SCCPCH (burst type 2)	Midamble	256 chips
	Codes and time slots	SF16 x 5 codes x 1 time slot
	Max. Number of data bits/radio frame	1364 bits
	TFCI code word	16 bits
	Puncturing Limit	1

6.10.3.4.2.2 Interactive or background / UL: 64 DL: 384 kbps / PS RAB
+ UL: 16.8 DL: 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	384000	16000	
	AMD/UMD PDU 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	336	168	
	TFS	TF0, bits	0x336	0x168
		TF1, bits	1x336	1x168
		TF2, bits	2x336	N/A
		TF3, bits	4x336	N/A
		TF4, bits	8x336	N/A
		TF5, bits	12x336	N/A
		TF6, bits	N/A (alt. 16x336)	N/A
		TF7, bits	N/A (alt. 20x336)	N/A
	TF8, bits	N/A (alt. 24x336)	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	12684 (alt. 25356)	384	
Downlink: Max number of bits/radio frame before rate matching	12684 (alt. 12678)	384		
RM attribute	135-175	180-220		

6.10.3.4.2.2.2.1.2 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), (TF1, TF1), (TF2, TF1), (TF3, TF1), (TF4, TF1), (TF5, TF1), (TF6, TF1), (TF7, TF0), (TF8, TF0))

6.10.3.4.2.2.2.1.3 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 6.10.3.4.2.1.2.1.3.

6.10.3.4.2.2.2.1.4 TFCS for FACH

See clause 6.10.3.4.2.1.2.1.4.

6.10.3.4.2.2.2 Physical channel parameters

PDSCH	Midamble	256 chips
	Codes and time slots	SF16 x 8 codes x 3 time slots
	Max. Number of data bits/radio frame	6608 bits
	TFCI code word	16 bits
	Puncturing Limit	0.48

SCCPCH (burst type 1)	Midamble	512 chips
	Codes and time slots	SF16 x 5 codes x 1 time slot
	Max. Number of data bits/radio frame	1204 bits
	TFCI code word	16 bits
	Puncturing Limit	1

SCCPCH (burst type 2)	Midamble	256 chips
	Codes and time slots	SF16 x 5 codes x 1 time slot
	Max. Number of data bits/radio frame	1364 bits
	TFCI code word	16 bits
	Puncturing Limit	1

6.10.3.4.2.3 Interactive or background / UL: 64 DL: 2048 kbps / PS RAB
+ UL: 16.8 DL: 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: 2048 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	2048000	16000	
	AMD/UMD PDU 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	656	168	
	TFS	TF0, bits	0x656	0x168
		TF1, bits	1x656	1x168
		TF2, bits	2x656	N/A
		TF3, bits	4x656	N/A
		TF4, bits	8x656	N/A
		TF5, bits	12x656	N/A
		TF6, bits	16x656	N/A
		TF7, bits	20x656	N/A
		TF8, bits	24x656	N/A
		TF9, bits	28x656	N/A
		TF10, bits	32x656	N/A
		TF11, bits	N/A (alt. 36x656)	N/A
		TF12, bits	N/A (alt. 40x656)	N/A
		TF13, bits	N/A (alt. 44x656)	N/A
		TF14, bits	N/A (alt. 48x656)	N/A
		TF15, bits	N/A (alt. 52x656)	N/A
		TF16, bits	N/A (alt. 56x656)	N/A
	TF17, bits	N/A (alt. 60x656)	N/A	
	TF18, bits	N/A (alt. 64x656)	N/A	
	TTI, ms	10 (alt. 20)	10	
	Coding type	TC	CC ½	
CRC, bit	16	16		
Max number of bits/TTI after channel coding	64524 (alt. 129036)	384		
Downlink: Max number of bits/radio frame before rate matching	64524 (alt. 64518)	384		
RM attribute	135-175	180-220		

6.10.3.4.2.3.2.1.2 TFCS for DSCH

TFCS size	22 (alt. 38)
TFCS	(2048 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), (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, TF1), (TF12, TF1), (TF13, TF1), (TF14, TF1), (TF15, TF1), (TF16, TF1), (TF17, TF1), (TF18, TF1))

6.10.3.4.2.3.2.1.3 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 6.10.3.4.2.1.2.1.3.

6.10.3.4.2.3.2.1.4 TFCS for FACH

See clause 6.10.3.4.2.1.2.1.4.

6.10.3.4.2.3.2.2 Physical channel parameters

PDSCH	Midamble	256 chips
	Codes and time slots	SF16 x 12 codes x 11 time slots
	Max. Number of data bits/radio frame	36416 bits (alt. 36400 bits)
	TFCI code word	16 bits (alt. 32 bits)
	Puncturing Limit	0.56

SCCPCH (burst type 1)	Midamble	512 chips
	Codes and time slots	SF16 x 5 codes x 1 time slot
	Max. Number of data bits/radio frame	1204 bits
	TFCI code word	16 bits
	Puncturing Limit	1

SCCPCH (burst type 2)	Midamble	256 chips
	Codes and time slots	SF16 x 5 codes x 1 time slot
	Max. Number of data bits/radio frame	1364 bits
	TFCI code word	16 bits
	Puncturing Limit	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

See clause 6.10.3.4.2.1.1.1.2.

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	16800	16800	
	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		

6.10.3.4.3.1.1.2 Physical channel parameters

Physical channel parameters for uplink DPCH see clause 6.10.3.4.1.4.1.2.

Physical channel parameters for PUSCH see clause 6.10.3.4.2.1.1.2.

Physical channel parameters for PRACH see clause 6.10.3.4.2.1.1.2.

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

See clause 6.10.3.4.2.1.2.1.2.

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	32000	32000	33600	
	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		
		TF4, bits	4x171		
	TTI, ms	10			
	Coding type	CC 1/2			
	CRC, bit	16			
	Max number of bits/TTI after channel coding	1528			
Max number of bits/radio frame before rate matching	764				

6.10.3.4.3.1.2.1.7 TFCS for FACH

TFCS size	5
TFCS	FACH = TF0, TF1, TF2, TF3, TF4

6.10.3.4.3.1.2.2 Physical channel parameters

Physical channel parameters for downlink DPCH see clause 6.10.3.4.1.4.2.2.

Physical channel parameters for downlink PDSCH see clause 6.10.3.4.2.1.2.2.

Physical channel parameters for SCCPCH see clause 6.10.3.4.2.1.2.2.

- 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

See clause 6.10.3.4.2.2.2.1.2.

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

Physical channel parameters for downlink DPCH see clause 6.10.3.4.1.4.2.2.

Physical channel parameters for PDSCH see clause 6.10.3.4.2.2.2.2.

Physical channel parameters for SCCPCH see clause 6.10.3.4.2.1.2.2.

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: 2048 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: 2048 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

See clause 6.10.3.4.2.3.2.1.2.

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

Physical channel parameters for downlink DPCH see clause 6.10.3.4.1.4.2.2.

Physical channel parameters for PDSCH see clause 6.10.3.4.2.3.2.2.

Physical channel parameters for SCCPCH see clause 6.10.3.4.2.1.2.2.

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		24000 (alt. 8000)
	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	2x240 (alt. 2x80)
	TTI, ms		20
	Coding type		CC 1/2
	CRC, bit		16
	Max number of bits/TTI before rate matching		1056 (alt. 400)
	Max number of bits/radio frame before rate matching		528 (alt. 200)
RM attribute		210-250	

6.10.3.4.4.1.1.2 TFCS

TFCS size	3
TFCS	SRBs for PCCH = TF0, TF1, TF2

6.10.3.4.2.1.2 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	0,88

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	32000	
	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	2x 363
	TTI, ms	20	
	Coding type	TC	
	CRC, bit	16	
	Max number of bits/TTI before rate matching	2286	
	Max number of bits/radio frame before rate matching	1143	
RM attribute	110-150		

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	32000 (alt. 48000)	27200 or 2400 (alt. 40800 or 36000)	25600 (alt. 38400)	25600 (alt. 38400)	25600 (alt. 38400)	33600 (alt. 50400)	
	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					
		TF4, bits	4x171					
		TF5, bits	N/A (alt. 5x171)					
		TF6, bits	N/A (alt. 6x171)					
	TTI, ms	20						
	Coding type	CC ½						
	CRC, bit	16						
	Max number of bits/TTI before rate matching	1528 (alt. 2292)						
Max number of bits/radio frame before rate matching	764 (alt.1146)							
RM attribute	200-240							
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	15 (alt. 21)
TFCS	(32kbps RAB, 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),(TF2, TF0), (TF2, TF1), (TF2, TF2), (TF2, TF3), (TF2, TF4) (alt. (TF0, TF0), (TF0, TF1), (TF0, TF2), (TF0, TF3), (TF0, TF4), (TF0, TF5), (TF0, TF6), (TF1, TF0), (TF1, TF1), (TF1, TF2), (TF1, TF3), (TF1, TF4), (TF1, TF5), (TF1, TF6), (TF2, TF0), (TF2, TF1), (TF2, TF2), (TF2, TF3), (TF2, TF4), (TF2, TF5), (TF2, TF6))

6.10.3.4.4.2.2 Physical channel parameters

(burst type 1):

S-CCPCH	Midamble	512 chips
	Codes and time slots	SF16 x 6 codes x 1 time slot
	Max. Number of data bits/radio frame	1448 bits
	TFCI code word	16 bits
	Puncturing limit	0,6

(burst type 2):

S-CCPCH	Midamble	256 chips
	Codes and time slots	SF16 x 6 codes x 1 time slot
	Max. Number of data bits/radio frame	1640 bits
	TFCI code word	16 bits
	Puncturing limit	0,68

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 of SRB for Interactive/Background 32 kbps RAB

See clause 6.10.3.4.4.2.1.

6.10.3.4.4.3.1.2 Transport channel parameters of SRB for PCCH

See clause 6.10.3.4.4.1.1.

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	45 (alt.63)
TFCS	<p>(32 kbps RAB, SRB for PCCH, SRBs for CCCH/ DCCH/ BCCH) =</p> <p>(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), (TF0, TF2, TF0), (TF0, TF2, TF1), (TF0, TF2, TF2), (TF0, TF2, TF3), (TF0, TF2, 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), (TF1, TF2, TF0), (TF1, TF2, TF1), (TF1, TF2, TF2), (TF1, TF2, TF3), (TF1, TF2, 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), (TF2, TF2, TF0), (TF2, TF2, TF1), (TF2, TF2, TF2), (TF2, TF2, TF3), (TF2, TF2, TF4)</p> <p>(alt. (TF0, TF0, TF0), (TF0, TF0, TF1), (TF0, TF0, TF2), (TF0, TF0, TF3), (TF0, TF0, TF4), (TF0, TF0, TF5), (TF0, TF0, TF6), (TF0, TF1, TF0), (TF0, TF1, TF1), (TF0, TF1, TF2), (TF0, TF1, TF3), (TF0, TF1, TF4), (TF0, TF1, TF5), (TF0, TF1, TF6), (TF0, TF2, TF0), (TF0, TF2, TF1), (TF0, TF2, TF2), (TF0, TF2, TF3), (TF0, TF2, TF4), (TF0, TF2, TF5), (TF0, TF2, TF6), (TF1, TF0, TF0), (TF1, TF0, TF1), (TF1, TF0, TF2), (TF1, TF0, TF3), (TF1, TF0, TF4), (TF1, TF0, TF5), (TF1, TF0, TF6), (TF1, TF1, TF0), (TF1, TF1, TF1), (TF1, TF1, TF2), (TF1, TF1, TF3), (TF1, TF1, TF4), (TF1, TF1, TF5), (TF1, TF1, TF6), (TF1, TF2, TF0), (TF1, TF2, TF1), (TF1, TF2, TF2), (TF1, TF2, TF3), (TF1, TF2, TF4), (TF1, TF2, TF5), (TF1, TF2, TF6), (TF2, TF0, TF0), (TF2, TF0, TF1), (TF2, TF0, TF2), (TF2, TF0, TF3), (TF2, TF0, TF4), (TF2, TF0, TF5), (TF2, TF0, TF6), (TF2, TF1, TF0), (TF2, TF1, TF1), (TF2, TF1, TF2), (TF2, TF1, TF3), (TF2, TF1, TF4), (TF2, TF1, TF5), (TF2, TF1, TF6), (TF2, TF2, TF0), (TF2, TF2, TF1), (TF2, TF2, TF2), (TF2, TF2, TF3), (TF2, TF2, TF4), (TF2, TF2, TF5), (TF2, TF2, TF6))</p>

6.10.3.4.4.3.2 Physical channel parameters

(burst type 1):

S-CCPCH	Midamble	512 chips
	Codes and time slots	SF16 x 8 codes x 1 time slot
	Max. Number of data bits/radio frame	1920 bits
	TFCI code word	32 bits
	Puncturing limit	0,68

(burst type 2):

S-CCPCH	Midamble	256 chips
	Codes and time slots	SF16 x 7 codes x 1 time slot
	Max. Number of data bits/radio frame	1900 bits
	TFCI code word	32 bits
	Puncturing limit	0,64

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 User of Radio Bearer	SRB#0	SRB#1	SRB#2	SRB#3	SRB#4
		RRC	RRC	RRC	NAS_DT High prio	NAS_DT Low prio
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	16800	13600	12800	12800	12800
	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	170	170	170	170
	TFS TF0, bits	1x170				
	TTI, ms	10				
	Coding type	CC ½				
	CRC, bit	16				
	Max number of bits/TTI after channel coding	388	388	388	388	388
	Max number of bits/Radio frame before rate matching	388	388	388	388	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. 0.75)

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 TS 34.108 clause 6.10.2.4.1.23a) with the transport channels parameters of the RAB and TFCS defined as follows:

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	8200	
	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
		TF2, bits	2x336 (note)
		TF3, bits	3x336 (note)
		TF4, bits	4x336 (note)
	TTI, ms	40	
	Coding type	CC 1/3	
	CRC, bit	16	
	Max number of bits/TTI after channel coding	1080	
Uplink: Max number of bits/radio frame before rate matching	270		
RM attribute	135-175		

TFCS

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

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	8200	
	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
		TF2, bits	2x336 (note)
		TF3, bits	3x336 (note)
		TF4, bits	4x336 (note)
	TTI, ms	40	
	Coding type	CC 1/3	
	CRC, bit	16	
Max number of bits/TTI after channel coding	1080		
RM attribute	135-175		

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 TS 34.108 clause 6.10.2.4.1.26) with the transport channels parameters of the RAB defined as followed:

Transport channel parameters for the Uplink RAB

Higher layer	RAB/Signalling RB	RAB	
RLC	Logical channel type	DTCH	
	RLC mode	UM	
	Payload sizes, bit	1336	
	Max data rate, bps	66800	
	UMD PDU header, bit	8	
MAC	MAC header, bit	0	
	MAC multiplexing	N/A	
Layer 1	TrCH type	DCH	
	TB sizes, bit	1344	
	TFS	TF0, bits	0x1344
		TF1, bits	1x1344
	TTI, ms	20	
	Coding type	TC	
	CRC, bit	16	
	Max number of bits/TTI after channel coding	4092	
	Uplink: Max number of bits/radio frame before rate matching	2046	
	RM attribute	130-170	

Transport channel parameters for the Downlink RAB

Higher layer	RAB/Signalling RB	RAB	
RLC	Logical channel type	DTCH	
	RLC mode	UM	
	Payload sizes, bit	1336	
	Max data rate, bps	66800	
	UMD PDU header, bit	8	
MAC	MAC header, bit	0	
	MAC multiplexing	N/A	
Layer 1	TrCH type	DCH	
	TB sizes, bit	1344	
	TFS	TF0, bits	0x1344
		TF1, bits	1x1344
	TTI, ms	20	
	Coding type	TC	
	CRC, bit	16	
	Max number of bits/TTI after channel coding	4092	
	RM attribute	130-170	

6.11.3 Acknowledged Mode Radio Bearer configuration (7 bit Length Indicator)

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	6400	
	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	135-175	

TFCS

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

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	6400	
	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	135-175	

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 TS 34.108 clause 6.10.2.4.1.26) with the transport channels parameters of the RAB defined as followed.

Transport channel parameters for the Uplink RAB

Higher layer	RAB/Signalling RB	RAB	
RLC	Logical channel type	DTCH	
	RLC mode	AM	
	Payload sizes, bit	1328	
	Max data rate, bps	66400	
	AMD PDU header, bit	16	
MAC	MAC header, bit	0	
	MAC multiplexing	N/A	
Layer 1	TrCH type	DCH	
	TB sizes, bit	1344	
	TFS	TF0, bits	0x1344
		TF1, bits	1x1344
	TTI, ms	20	
	Coding type	TC	
	CRC, bit	16	
	Max number of bits/TTI after channel coding	4092	
	Uplink: Max number of bits/radio frame before rate matching	2046	
RM attribute	130-170		

Transport channel parameters for the Downlink RAB

Higher layer	RAB/Signalling RB	RAB	
RLC	Logical channel type	DTCH	
	RLC mode	AM	
	Payload sizes, bit	1328	
	Max data rate, bps	66400	
	AMD PDU header, bit	16	
MAC	MAC header, bit	0	
	MAC multiplexing	N/A	
Layer 1	TrCH type	DCH	
	TB sizes, bit	1344	
	TFS	TF0, bits	0x1344
		TF1, bits	1x1344
	TTI, ms	20	
	Coding type	TC	
	CRC, bit	16	
	Max number of bits/TTI after channel coding	4092	
	RM attribute	130-170	

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 this 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.
- 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.
- 5) Conversational / speech / UL:10.2 DL:10.2 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.
- 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) Streaming / unknown / UL:0 DL:64 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.
- 19) Streaming / unknown / UL:64 DL:0 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.
- 20) Streaming / unknown / UL:0 DL:128 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.
- 21) Streaming / unknown / UL:128 DL:0 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.
- 22) Streaming / unknown / UL:0 DL:384 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.
- 23) Interactive or background / UL:32 DL:8 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.
- 24) Interactive or background / UL:64 DL:8 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.
- 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:2048 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.
- 36) Interactive or background / UL:128 DL:2048 kbps / PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.
- 37) Interactive or background / UL:384 DL:2048 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.
- 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:2048 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) Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB
+ Streaming / unknown / UL:0 DL:64 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.
- 47) Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB
+ Streaming / unknown / UL:0 DL:128 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.
- 48) Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB
+ Streaming / unknown / UL:0 DL:384 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.
- 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.

- 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.
- 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) Interactive or /background / UL:64 kbps DL:128 kbps / PS RAB
+ Streaming / unknown / UL:0 DL:64 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH.
- 55) Interactive or /background / UL:64 kbps DL:128 kbps / PS RAB
+ Streaming / unknown / UL:0 DL:128 kbps / CS 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: 16.8 DL: 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: 16.8 DL: 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:2048 kbps / PS RAB
+ UL:3.4 DL: 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:2048 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 32 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.

Combinations on PRACH

- 1) Interactive or background / UL:32 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.

6.11.5.4.1.1.1.2 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	164 bits
	TFCI code word / radio frame	4 bits
	TPC / radio frame	2x 2 bits
	SS / radio frame	2x 2 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	164 bits
	TFCl code word / radio frame	4 bits
	TPC / radio frame	2x 2 bits
	SS / radio frame	2x 2 bits
	Puncturing Limit	1

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	164 bits
	TFCl code word / radio frame	4 bits
	TPC / radio frame	2x 2 bits
	SS / radio frame	2x 2 bits
	Puncturing Limit	1

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	164 bits
	TFCl code word / radio frame	4 bits
	TPC / radio frame	2x 2 bits
	SS / radio frame	2x 2 bits
	Puncturing Limit	1

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	340 bits
	TFCl code word / radio frame	4 bits
	TPC / radio frame	2x 2 bit
	SS / radio frame	2x 2 bit
	Puncturing Limit	0.64

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	340 bits
	TFCl code word / radio frame	4 bits
	TPC / radio frame	2x 2 bits
	SS / radio frame	2x 2 bits
	Puncturing Limit	0.64

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.

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	2x 2 bits
	SS / radio frame	2x 2 bits
	Puncturing Limit	0.60

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	2x 2 bits
	SS / radio frame	2x 2 bits
	Puncturing Limit	0.60

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	2x 2 bits
	SS / radio frame	2x 2 bits
	Puncturing Limit	0.68

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	2x 2 bits
	SS / radio frame	2x 2 bits
	Puncturing Limit	0.68

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	2x 2 bits
	SS / radio frame	2x 2 bits
Puncturing Limit		0.80

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	2x 2 bits
	SS / radio frame	2x 2 bits
Puncturing Limit		0.80

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	2x 2 bits
	SS / radio frame	2x 2 bits
	Puncturing Limit	0.80

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	2x 2 bits
	SS / radio frame	2x 2 bits
	Puncturing Limit	0.80

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	2x 2 bits
	SS / radio frame	2x 2 bits
	Puncturing Limit	0.88

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	2x 2 bits
	SS / radio frame	2x 2 bits
	Puncturing Limit	0.88

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	2x 2 bits
	SS / radio frame	2x 2 bits
	Puncturing Limit	0.92

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	2x 2 bits
	SS / radio frame	2x 2 bits
	Puncturing Limit	0.92

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:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

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	2x 2 bits
	SS / radio frame	2x 2 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:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

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	2x 2 bits
	SS / radio frame	2x 2 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:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.1.1.1.

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	2x 2 bits
	SS / radio frame	2x 2 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:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.1.1.

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	2x 2 bits
	SS / radio frame	2x 2 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	2x 2 bits
	SS / radio frame	2x 2 bits
Puncturing Limit		0.64

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	2x 2 bits
	SS / radio frame	2x 2 bits
Puncturing Limit		0.64

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	1392 bits
	TFCI code word / radio frame	8 bits
	TPC / radio frame	2x 2 bits
	SS / radio frame	2x 2 bits
Puncturing Limit		0.64

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	1392 bits
	TFCI code word / radio frame	8 bits
	TPC / radio frame	2x 2 bits
	SS / radio frame	2x 2 bits
Puncturing Limit		0.64

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	688 bits
	TFCI code word / radio frame	8 bits
	TPC / radio frame	2x 2 bits
	SS/ radio frame	2x 2 bits
	Puncturing Limit	0.60

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	699 bits
	TFCI code word / radio frame	8 bits
	TPC / radio frame	2x 2 bits
	SS / radio frame	2x 2 bits
	Puncturing Limit	0.60

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	688 bits
	TFCI code word / radio frame	8 bits
	TPC / radio frame	2x 2 bits
	SS / radio frame	2x 2 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	512 bits
	TFCI code word / radio frame	8 bits
	TPC / radio frame	2x 2 bits
	SS / radio frame	2x 2 bits
Puncturing Limit	0.88	

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	2x 2 bits
	SS / radio frame	2x 2 bits
Puncturing Limit		0.64

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	2x 2 bits
	SS / radio frame	2x 2 bits
Puncturing Limit		0.64

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	1384 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x 2 bits
	SS / radio frame	2x 2 bits
Puncturing Limit		0.72

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	1384 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x 2 bits
	SS / radio frame	2x 2 bits
Puncturing Limit		0.72

6.11.5.4.1.18 Streaming / unknown / UL:0 DL:64 kbps / CS or PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.11.5.4.1.18.1 Uplink

6.11.5.4.1.18.1.1 Transport channel parameters

6.11.5.4.1.18.1.1.1 Transport channel parameters for Streaming / unknown / UL:0 kbps / CS or PS RAB

N/A.

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

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.18.1.1.3 TFCS

See clause 6.10.3.4.1.2.1.1.2.

6.11.5.4.1.18.1.2 Physical channel parameters

See clause 6.11.5.4.1.2.1.2.

6.11.5.4.1.18.2 Downlink

6.11.5.4.1.18.2.1 Transport channel parameters

6.11.5.4.1.18.2.1.1 Transport channel parameters for Streaming / unknown / DL:64 kbps / CS or PS RAB

See clause 6.10.3.4.1.18.2.1.1.

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

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.18.2.1.3 TFCS

See clause 6.10.3.4.1.18.2.1.3.

6.11.5.4.1.18.2.2 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	1384 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x 2 bits
	SS / radio frame	2x 2 bits
	Puncturing Limit	0.64

6.11.5.4.1.19 Streaming / unknown / UL:64 DL:0 kbps / CS or PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.11.5.4.1.19.1 Uplink

6.11.5.4.1.19.1.1 Transport channel parameters

6.11.5.4.1.19.1.1.1 Transport channel parameters for Streaming / unknown / UL:64 kbps / CS or PS RAB

See clause 6.10.3.4.1.19.1.1.1.

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

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.19.1.1.3 TFCS

See clause 6.10.3.4.1.19.1.1.3.

6.11.5.4.1.19.1.2 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	1384 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2x 2 bits
	SS/ radio frame	2x 2 bits
	Puncturing Limit	0.64

- 6.11.5.4.1.19.2 Downlink
- 6.11.5.4.1.19.2.1 Transport channel parameters
- 6.11.5.4.1.19.2.1.1 Transport channel parameters for Streaming / unknown / DL:0 kbps / CS or PS RAB
N/A.
- 6.11.5.4.1.19.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH
See clause 6.10.3.4.1.2.2.1.1.
- 6.11.5.4.1.19.2.1.3 TFCS
See clause 6.10.3.4.1.2.2.1.2.
- 6.11.5.4.1.19.2.2 Physical channel parameters
See clause 6.11.5.4.1.2.1.2.
- 6.11.5.4.1.20 Streaming / unknown / UL:0 DL:128 kbps / CS or PS RAB + UL:3.4 DL:3.4 kbps SRBs
for DCCH
- 6.11.5.4.1.20.1 Uplink
- 6.11.5.4.1.20.1.1 Transport channel parameters
- 6.11.5.4.1.20.1.1.1 Transport channel parameters for Streaming / unknown / UL:0 kbps / CS or PS RAB
N/A
- 6.11.5.4.1.20.1.1.2 Transport channel parameters for UL:3.4 kbps SRBs for DCCH
See clause 6.10.3.4.1.2.1.1.1.
- 6.11.5.4.1.20.1.1.3 TFCS
See clause 6.10.3.4.1.2.1.1.2.
- 6.11.5.4.1.20.1.2 Physical channel parameters
See clause 6.11.5.4.1.2.1.2.
- 6.11.5.4.1.20.2 Downlink
- 6.11.5.4.1.20.2.1 Transport channel parameters
- 6.11.5.4.1.20.2.1.1 Transport channel parameters for Streaming / unknown / DL:128 kbps / CS or PS
RAB
See clause 6.10.3.4.1.20.2.1.1.
- 6.11.5.4.1.20.2.1.2 Transport channel parameters for DL:3.4 kbps SRBs for DCCH
See clause 6.10.3.4.1.2.2.1.1.
- 6.11.5.4.1.20.2.1.3 TFCS
See clause 6.10.3.4.1.20.2.1.3.

6.11.5.4.1.20.2.2 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	2792 bits
	TFCl code word / radio frame	16 bits
	TPC / radio frame	2x 2 bits
	SS/ radio frame	2x 2 bits
	Puncturing Limit	0.64

6.11.5.4.1.21 Streaming / unknown / UL:128 DL:0 kbps / CS or PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH

6.11.5.4.1.21.1 Uplink

6.11.5.4.1.21.1.1 Transport channel parameters

6.11.5.4.1.21.1.1.1 Transport channel parameters for Streaming / unknown / UL:128 kbps / CS or PS RAB

See clause 6.10.3.4.1.21.1.1.1.

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

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.21.1.1.3 TFCS

See clause 6.10.3.4.1.21.1.1.3.

6.11.5.4.1.21.1.2 Physical channel parameters

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	2792 bits
	TFCl code word/ radio frame	16 bits
	TPC / radio frame	2x 2 bits
	SS/ radio frame	2x 2 bits
	Puncturing Limit	0.64

6.11.5.4.1.21.2 Downlink

6.11.5.4.1.21.2.1 Transport channel parameters

6.11.5.4.1.21.2.1.1 Transport channel parameters for Streaming / unknown / DL:0 kbps / CS or PS RAB

N/A.

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

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.21.2.1.3 TFCS

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.21.2.2 Physical channel parameters

See clause 6.11.5.4.1.2.2.2.

6.11.5.4.1.22 Streaming / unknown / UL:0 DL:384 kbps / CS or PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.11.5.4.1.22.1 Uplink

6.11.5.4.1.22.1.1 Transport channel parameters

6.11.5.4.1.22.1.1.1 Transport channel parameters for Streaming / unknown / UL:0 kbps / CS or PS RAB
N/A.

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

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.22.1.1.3 TFCS

See clause 6.10.3.4.1.2.1.1.2.

6.11.5.4.1.22.1.2 Physical channel parameters

See clause 6.11.5.4.1.2.1.2.

6.11.5.4.1.22.2 Downlink

6.11.5.4.1.22.2.1 Transport channel parameters

6.11.5.4.1.22.2.1.1 Transport channel parameters for Streaming / unknown / DL:384 kbps / CS or PS RAB

See clause 6.10.3.4.1.22.2.1.1.

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

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.22.2.1.3 TFCS

See clause 6.10.3.4.1.22.2.1.3.

6.11.5.4.1.22.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK	8PSK
	Codes and time slots/ radio frame	SF 1 x 1code x 6 time slots	SF1 x 1 code x 4 time slots
Max. Number of data bits / radio frame	8424 bits	8212 bits	
TFCI code word / radio frame	16 bits	16 bits	
TPC / radio frame	2x 2 bits	2x 3 bits	
SS/ radio frame	2x 2 bits	2x 3 bits	
Puncturing Limit	0.68	0.68	

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 2 x 1 code x 2 time slots
	Max. Number of data bits/radio frame	1384 bits
	TFCI code word/ radio frame	16 bits
	TPC / radio frame	2 * 2 bits
	SS / radio frame	2 * 2 bits
	Puncturing Limit	1

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	2*2 bits
	SS/ radio frame	2*2 bits
	Puncturing Limit	0.84

6.11.5.4.1.24 Interactive or background / UL:64 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.11.5.4.1.24.1 Uplink

6.11.5.4.1.24.1.1 Transport channel parameters

6.11.5.4.1.24.1.1.1 Transport channel parameters for Interactive or background / UL:64 kbps / PS RAB

See clause 6.10.3.4.1.24.1.1.1.

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

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.24.1.1.3 TFCS

See clause 6.10.3.4.1.24.1.1.3.

6.11.5.4.1.24.1.2 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	1384 bits
	TFCI code word/ radio frame	16 bits
	TPC / radio frame	2 * 2 bits
	SS / radio frame	2 * 2 bits
	Puncturing Limit	0.6

6.11.5.4.1.24.2 Downlink

See clause 6.11.5.4.1.23.2

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	1384 bits
	TFCI code word/ radio frame	16 bits
	TPC/ radio frame	2*2 bits
	SS/ radio frame	2*2 bits
Puncturing Limit/ radio frame	0.6	

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

See clause 6.11.5.4.1.24.1.

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 6.11.5.4.1.24.1.

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	3144 bits
	TFCI code word/ radio frame	16 bits
	TPC / radio frame	2 * 2 bits
	SS / radio frame	2 * 2 bits
Puncturing Limit	0.72	

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	2792 bits
	TFCI code word/ radio frame	16 bits
	TPC/ radio frame	2*2 bits
	SS/ radio frame	2*2 bits
	Puncturing Limit	0.64

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 6.11.5.4.1.24.1.

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	3144 bits
	TFCI code word/ radio frame	16 bits
	TPC / radio frame	2 * 2 bits
	SS / radio frame	2 * 2 bits
	Puncturing Limit	0.64

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	4200 bits	4188 bits
	TFCI code word/ radio frame	16 bits	24 bits
	TPC/ radio frame	2*2 bits	2* 3bits
	SS/ radio frame	2*2 bits	2* 3bits
	Puncturing Limit	0.88	0.84

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 6.11.5.4.1.24.1.

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	5608 bits
	TFCI code word/ radio frame	16 bits
	TPC / radio frame	2 * 2 bits
	SS / radio frame	2 * 2 bits
	Puncturing Limit	0.64

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 6.11.5.4.1.24.1.

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	8424 bits	8412 bits
	TFCI code word/ radio frame	16 bits	24 bits
	TPC/ radio frame	2*2 bits	2*3 bits
	SS/ radio frame	2*2 bits	2*3 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	8424 bits	8412 bits	
TFCI code word / radio frame	16 bits	24 bits	
TPC / radio frame	2 * 2 bits	3 * 3 bits	
SS / radio frame	2 * 2 bits	3 * 3 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:2048 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.11.5.4.1.35.1 Uplink

See clause 6.11.5.4.1.24.1.

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:2048 kbps / PS RAB

Higher Layer	RAB/Signalling RB	RAB	
RLC	Logical channel type	DTCH	
	RLC mode	AM	
	Payload sizes, bit	1704	
	Max data rate, bps	2048000	
	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	8 x1720
		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	20928 (alt. 41856)	
Max number of bits/radio frame before rate matching	20928 (alt. 20928)		
RM attribute	130-170		

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	(2048 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	21084 bits
	TFCl code word/ radio frame	24 bits
	TPC/ radio frame	2*3 bits
	SS/ radio frame	2*3 bits
	Puncturing Limit	1

6.11.5.4.1.36 Interactive or background / UL:128 DL:2048 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.11.5.4.1.36.1 Uplink

See clause 6.11.5.4.1.28.1.

6.11.5.4.1.36.2 Downlink

See clause 6.11.5.4.1.35.2.

6.11.5.4.1.37 Interactive or background / UL:384 DL:2048 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.11.5.4.1.37.1 Uplink

See clause 6.11.5.4.1.34.1.

6.11.5.4.1.37.2 Downlink

See clause 6.11.5.4.1.35.2.

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

6.11.5.4.1.38.1 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	1384 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2 * 2 bits
	SS / radio frame	2 * 2 bits
	Puncturing Limit	0.84

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.

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	2*2 bits
	SS/ radio frame	2*2 bits
	Puncturing Limit	0.64

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	1736 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2 * 2 bits
	SS / radio frame	2 * 2 bits
	Puncturing Limit	0.64

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

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

See clause 6.10.3.4.1.4.1.1.1.

6.11.5.4.1.40.1.1.2 Transport channel parameters for Interactive or background / UL:64 kbps / PS RAB

See clause 6.10.3.4.1.24.1.1.1.

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

See clause 6.10.3.4.1.2.1.1.1.

6.11.5.4.1.40.1.1.4 TFCS

See clause 6.10.3.4.1.40.1.1.4.

6.11.5.4.1.40.1.2 Physical channel parameters

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	2784 bits
	TFCI code word/ radio frame	16 bits
	TPC/ radio frame	2*2 bits
	SS/ radio frame	2*2 bits
	Puncturing Limit	1

6.11.5.4.1.40.2 Downlink

See clause 6.11.5.4.1.39.2.

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

6.11.5.4.1.41.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 kbps / CS RAB
See clause 6.10.3.4.1.4.2.1.1.

6.11.5.4.1.41.2.1.2 Transport channel parameters for Interactive or background / DL:128 kbps / PS RAB
See clause 6.10.3.4.1.27.2.1.1.

6.11.5.4.1.41.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH
See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.41.2.1.4 TFCS
See clause 6.10.3.4.1.41.2.1.4.

6.11.5.4.1.41.2.2 Physical channel parameters

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	3144 bits	3132 bits	
TFCI code word / radio frame	16 bits	24 bits	
TPC / radio frame	2 * 2 bits	3 x 3 bits	
SS / radio frame	2 * 2 bits	3 x 3 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
See clause 6.11.5.4.1.40.1.

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 1 code x 6 time slots	SF1 x 1 code x 4 time slots
Max. Number of data bits/radio frame	8400 bits	8376 bits	
TFCI code word/ radio frame	16 bits	24 bits	
TPC/ radio frame	2*2 bits	2*3 bits	
SS/ radio frame	2*2 bits	2*3 bits	
Puncturing Limit	0.88	0.88	

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

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

See clause 6.10.3.4.1.4.2.1.1.

6.11.5.4.1.43.2.1.2 Transport channel parameters for Interactive or background / DL:384 kbps / PS RAB

See clause 6.10.3.4.1.32.2.1.1.

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

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.43.2.1.4 TFCS

See clause 6.10.3.4.1.43.2.1.4.

6.11.5.4.1.43.2.2 Physical channel parameters

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	8408 bits	8388 bits	
TFCI code word / radio frame	32 bits	48 bits	
TPC / radio frame	2 * 2 bits	3 x 3 bits	
SS / radio frame	2 * 2 bits	3 x 3 bits	
Puncturing Limit	0.60	0.60	

6.11.5.4.1.44 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB
 + Interactive or background / UL:128 DL:2048 kbps / PS RAB
 + UL:3.4 DL:3.4 kbps SRBs for DCCH

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	4188 bits
	TFCI code word/ radio frame	24 bits
	TPC/ radio frame	2*3 bits
	SS/ radio frame	2*3 bits
	Puncturing Limit	0.88

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:2048 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	33 (alt. 51)
TFCS	(RAB subflow#1, RAB subflow#2, RAB subflow#3, 2048 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), (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), (TF1, 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, TF1) , (TF2, TF1, TF1, TF5, TF1) , (TF2, TF1, TF1, 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	21060 bits
	TFCI code word / radio frame	48 bits
	TPC / radio frame	3 * 3 bits
	SS / radio frame	3 * 3 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 1code x 2 time slots
	Max. Number of data bits/radio frame	1384 bits
	TFCI code word/ radio frame	16 bits
	TPC/ radio frame	2*2 bits
	SS/ radio frame	2*2 bits
	Puncturing Limit	0.64

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 UL:3.4 kbps SRBs for DCCH

See clause 6.10.3.4.1.2.2.11.

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	1560 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2 * 2 bits
	SS / radio frame	2 * 2 bits
	Puncturing Limit	0.64

6.11.5.4.1.46 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB
+ Streaming / unknown / UL:0 DL:64 kbps / CS or PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH

6.11.5.4.1.46.1 Uplink

See clause 6.11.5.4.1.4.1.

6.11.5.4.1.46.2 Downlink

6.11.5.4.1.46.2.1 Transport channel parameters

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

See clause 6.10.3.4.1.4.2.1.1.

6.11.5.4.1.46.2.1.2 Transport channel parameters for Streaming / unknown / DL:64 kbps / CS or PS RAB

See clause 6.10.3.4.1.18.2.1.1.

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

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.46.2.1.4 TFCS

See clause 6.10.3.4.1.46.2.1.4.

6.11.5.4.1.46.2.2 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	1912 bits
	TFCI code word/ radio frame	16 bits
	TPC/ radio frame	2*2 bits
	SS/ radio frame	2*2 bits
	Puncturing Limit	0.64

6.11.5.4.1.47 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB
+ Streaming / unknown / UL:0 DL:128 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH

6.11.5.4.1.47.1 Uplink

See clause 6.11.5.4.1.4.1.

6.11.5.4.1.47.2 Downlink

6.11.5.4.1.47.2.1 Transport channel parameters

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

See clause 6.10.3.4.1.4.2.1.1.

6.11.5.4.1.47.2.1.2 Transport channel parameters for Streaming / unknown / DL:128 kbps / CS or PS RAB

See clause 6.10.3.4.1.20.2.1.1.

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

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.47.2.1.4 TFCS

See clause 6.10.3.4.1.47.2.1.4.

6.11.5.4.1.47.2.2 Physical channel parameters

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	3128 bits	3108 bits	
TFCl code word / radio frame	32 bits	48 bits	
TPC / radio frame	2 * 2 bits	3 x 3 bits	
SS / radio frame	2 * 2 bits	3 x 3 bits	
Puncturing Limit	0.68	0.68	

6.11.5.4.1.48 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB
+ Streaming / unknown / UL:0 DL:384 kbps / CS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH

6.11.5.4.1.48.1 Uplink

See clause 6.11.5.4.1.4.1.

6.11.5.4.1.48.2 Downlink

6.11.5.4.1.48.2.1 Transport channel parameters

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

See clause 6.10.3.4.1.4.2.1.1.

6.11.5.4.1.48.2.1.2 Transport channel parameters for Streaming / unknown / DL:384 kbps / CS or PS RAB

See clause 6.10.3.4.1.22.2.1.1.

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

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.48.2.1.4 TFCS

See clause 6.10.3.4.1.48.2.1.4.

6.11.5.4.1.48.2.2 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	8408 bits	8388 bits	
TFCl code word/ radio frame	32 bits	48 bits	
TPC/ radio frame	2*2 bits	2*3 bits	
SS/ radio frame	2*2 bits	2*3 bits	
Puncturing Limit	0.64	0.64	

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	2792 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2 * 2 bits
	SS / radio frame	2 * 2 bits
	Puncturing Limit	1

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 6.10.3.4.1.2.2.11.

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	1912 bits
	TFCI code word/ radio frame	16 bits
	TPC/ radio frame	2*2 bits
	SS/ radio frame	2*2 bits
	Puncturing Limit	0.64

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 6.10.3.5.4.1.13.1.1.1.

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	2792 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2 * 2 bits
	SS / radio frame	2 * 2 bits
	Puncturing Limit	0.68

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

DPCCH 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	2616 bits
	TFCI code word/ radio frame	16 bits
	TPC/ radio frame	2*2 bits
	SS/ radio frame	2*2 bits
	Puncturing Limit	0.64

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 6.10.3.4.1.24.1.1.1.

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

DPCCH 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	2792 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2 * 2 bits
	SS / radio frame	2 * 2 bits
	Puncturing Limit	0.64

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	2792 bits
	TFCI code word/ radio frame	16 bits
	TPC/ radio frame	2*2 bits
	SS/ radio frame	2*2 bits
	Puncturing Limit	0.64

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	4200 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2 * 2 bits
	SS / radio frame	2 * 2 bits
	Puncturing Limit	0.64

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	5608 bits	4188 bits	
TFCI code word/ radio frame	16 bits	24 bits	
TPC/ radio frame	2*2 bits	2*3 bits	
SS/ radio frame	2*2 bits	2*3 bits	
Puncturing Limit	0.88	0.68	

6.11.5.4.1.53.2 Downlink
See clause 6.11.5.4.1.52.2.

6.11.5.4.1.54 Interactive or background / UL:64 DL:128 kbps / PS RAB
+ Streaming / unknown / UL:0 DL:64 kbps / CS or PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH

6.11.5.4.1.54.1 Uplink
See clause 6.11.5.4.1.24.1.

6.11.5.4.1.54.2 Downlink

6.11.5.4.1.54.2.1 Transport channel parameters

6.11.5.4.1.54.2.1.1 Transport channel parameters for Interactive or background / DL:128 kbps / PS RAB
See clause 6.10.3.4.1.27.2.1.1.

6.11.5.4.1.54.2.1.2 Transport channel parameters for Streaming / unknown / DL:64 kbps / CS or PS RAB
See clause 6.10.3.4.1.18.2.1.1.

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

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.54.2.1.4 TFCS

See clause 6.10.3.4.1.54.2.1.4.

6.11.5.4.1.54.2.2 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	4184 bits
	TFCI code word / radio frame	32 bits
	TPC / radio frame	2 * 2 bits
	SS / radio frame	2 * 2 bits
	Puncturing Limit	0.64

6.11.5.4.1.55 Interactive or background / UL:64 DL:128 kbps / PS RAB
+ Streaming / unknown / UL:0 DL:128 kbps / CS or PS RAB
+ UL:3.4 DL:3.4 kbps SRBs for DCCH

6.11.5.4.1.55.1 Uplink

See clause 6.11.5.4.1.24.1.

6.11.5.4.1.55.2 Downlink

6.11.5.4.1.55.2.1 Transport channel parameters

6.11.5.4.1.55.2.1.1 Transport channel parameters for Interactive or background / DL:128 kbps / PS RAB

See clause 6.10.3.4.1.27.2.1.1.

6.11.5.4.1.55.2.1.2 Transport channel parameters for Streaming / unknown / DL:128 kbps / CS or PS RAB

See clause 6.10.3.4.1.20.2.1.1.

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

See clause 6.10.3.4.1.2.2.1.1.

6.11.5.4.1.55.2.1.4 TFCS

See clause 6.10.3.4.1.55.2.1.4.

6.11.5.4.1.55.2.2 Physical channel parameters

DPCH Downlink	Modulation	QPSK
	Codes and time slots/ radio frame	SF1 x 1 code x 4 time slots
	Max. Number of data bits/radio frame	5592 bits
	TFCI code word/ radio frame	24 bits
	TPC/ radio frame	2*2 bits
	SS/ radio frame	2*2 bits
Puncturing Limit	0.64	

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: 16.8 DL: 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 TFCS for USCH

See clause 6.10.3.4.2.1.1.1.2.

6.11.5.4.2.1.1.1.3 Transport channel parameters for SRB for CCCH and UL SRBs for DCCH and UL
 SRB for SHCCH mapped on RACH

See clause 6.10.3.4.2.1.1.1.3.

6.11.5.4.2.1.1.2 Physical channel parameters

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	2792 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2 * 2 bits
	SS / radio frame	2 * 2 bits
	Puncturing Limit	1

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 TFCS for DSCH

See clause 6.10.3.4.2.1.2.1.2.

6.11.5.4.2.1.2.1.3 Transport channel parameters for DL SRBs for DCCH and SRB for CCCH and SRB for BCCH and DL SRB for SHCCH mapped on FACH

Higher layer	RAB/signalling RB User of Radio Bearer	SRB#0	SRB#1	SRB#2	SRB#3	SRB#4	SRB#5	SRB#6	
		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	32000 (alt. 48000)	27200 or 24000 (alt. 40800 or 36000)	25600 (alt. 38400)	25600 (alt. 38400)	25600 (alt. 38400)	32000 (alt. 48000)	33600 (alt. 50400)	
	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						
		TF4, bits	4x171						
		TF5, bits	N/A (alt. 5x171)						
		TF6, bits	N/A (alt. 6x171)						
	TTI, ms	20							
	Coding type	CC ½							
CRC, bit	16								
Max number of bits/TTI after channel coding	1528 (alt. 2292)	1528 (alt. 2292)	1528 (alt. 2292)	1528 (alt. 2292)	1528 (alt. 2292)	1528 (alt. 2292)	1528 (alt. 2292)	1528 (alt. 2292)	

* 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 TFCS for FACH

TFCS size	5 (alt. 7)
TFCS	FACH = TF0, TF1, TF2, TF3, TF4 (alt. FACH = TF0, TF1, TF2, TF3, TF4, TF5, TF6)

6.11.5.4.2.1.2.2 Physical channel parameters

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	5784 bits	6511 bits	
TFCI code word/ radio frame	16 bits	24 bits	
TPC/ radio frame	2*2 bits	2*3 bits	
SS/ radio frame	2*2 bits	2*3 bits	
Puncturing Limit	0.64	0.72	

S-CCPCH	Modulation	QPSK
	Codes and time slots/ radio frame	SF16 x 5 codes x 2 time slots
Max. Number of data bits/radio frame	856 bits	
TFCI code word/ radio frame	16 bits	
TPC/ radio frame	2*2 bits	
SS/ radio frame	2*2 bits	
Puncturing Limit	0.72	

6.11.5.4.2.2 Interactive or background / UL: 64 DL: 384 kbps / PS RAB
 + UL: 16.8 DL: 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 TFCS for DSCH

See clause 6.10.3.4.2.2.2.1.2.

6.11.5.4.2.2.2.1.3 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 6.11.5.4.2.1.2.1.3.

6.11.5.4.2.2.2.1.4 TFCS for FACH

See clause 6.11.5.4.2.1.2.1.4.

6.11.5.4.2.2.2.2 Physical channel parameters

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	8424 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2 * 2 bits
	SS / radio frame	2 * 2 bits
Puncturing Limit		0.64

SCCPCH	Modulation	QPSK
	Codes and time slots/ radio frame	SF 16 x 5 codes x 2 time slots
	Max. Number of data bits/radio frame	856 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2 * 2 bits
	SS / radio frame	2 * 2 bits
Puncturing Limit		0.72

6.11.5.4.2.3 Interactive or background / UL: 64 DL: 2048 kbps / PS RAB
 + UL: 16.8 DL: 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: 2048 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	1704	160	
	Max data rate, bps	2048000	16000	
	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 ½	
	CRC, bit	24	16	
	Max number of bits/TTI after channel coding	20928 (alt. 41856)	384	
Downlink: Max number of bits/radio frame before rate matching	20928 (alt. 20928)	384		
RM attribute	135-175	180-220		

6.11.5.4.2.3.2.1.2 TFCS for DSCH

TFCS size	11 (alt.17)
TFCS	(2048 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), (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))

For better understanding of the TFCS please note that the following combinations are not included in the table above: (TF5, TF1), (TF8, TF1)

6.11.5.4.2.3.2.1.3 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 6.11.5.4.2.1.2.1.3.

6.11.5.4.2.3.2.1.4 TFCS for FACH

See clause 6.11.5.4.2.1.2.1.4.

6.11.5.4.2.3.2.2 Physical channel parameters

PDSCH	Modulation	8PSK
	Codes and time slots/ radio frame	SF1 x 1 code x 10 time slots
	Max. Number of data bits/radio frame	21084 bits
	TFCI code word/ radio frame	24 bits
	TPC/ radio frame	2*3 bits
	SS/ radio frame	2*3 bits
	Puncturing Limit	1

S-CCPCH	Modulation	QPSK
	Codes and time slots/ radio frame	SF16 x 5 codes x 2 time slots
	Max. Number of data bits/radio frame	856 bits
	TFCI code word/ radio frame	16 bits
	TPC/ radio frame	2*2 bits
	SS/ radio frame	2*2 bits
	Puncturing Limit	0.72

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 6.10.3.4.2.1.1.1.2.

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 6.10.3.4.2.1.2.1.2.

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	32000	32000	33600	
	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 ½			
	CRC, bit	16			
	Max number of bits/TTI after channel coding	1528			
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 6.10.3.4.2.2.2.1.2.

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: 2048 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: 2048 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

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		24000 (alt. 8000)
	RLC 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, bits	0x240 (alt. 0x80)
		TF1, bits	1x240 (alt. 1x80)
		TF2, bits	2x240 (alt. 2x80)
	TTI, ms		20
	Coding type		CC 1/2
	CRC, bit		16
	Max number of bits/TTI before rate matching		1056 (alt. 400)
	RM attribute		210-250

6.11.5.4.4.1.1.2 TFCS

TFCS size	3
TFCS	SRBs for PCCH = TF0, TF1, TF2

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
	Max. Number of data bits/radio frame	344 bits
	TFCI code word/ radio frame	8 bits
	TPC/ radio frame	0 bits
	SS/ radio frame	0 bits
	Puncturing Limit	0.64

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

Higher layer	RAB/signalling RB User of Radio Bearer	RAB Interactive/ Background RAB	
RLC	Logical channel type	DTCH	
	RLC mode	AM	
	Payload sizes, bit	320	
	Max data rate, bps	32000	
	RLC 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
	TTI, ms	20	
	Coding type	TC	
	CRC, bit	16	
	Max number of bits/TTI before rate matching	2286	
	RM attribute	110-150	

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 User of Radio Bearer	SRB#1	SRB#2	SRB#3	SRB#4	SRB#5	SRB#6	
		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	32000 (alt. 48000)	27200 or 2400 (alt. 40800 or 36000)	25600 (alt. 38400)	25600 (alt. 38400)	25600 (alt. 38400)	33600 (alt. 50400)	
	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					
		TF4, bits	4x171					
		TF5, bits	N/A (alt. 5x171)					
	TF6, bits	N/A (alt. 6x171)						
	TTI, ms	20						
	Coding type	CC ½						
CRC, bit	16							
Max number of bits/TTI before rate matching	1528 (alt. 2292)							
RM attribute	200-240							

* 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

TFCS size	15 (alt. 21)
TFCS	(32kbps RAB, 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), (TF2, TF0), (TF2, TF1), (TF2, TF2), (TF2, TF3), (TF2, TF4), (alt. (TF0, TF0), (TF0, TF1), (TF0, TF2), (TF0, TF3), (TF0, TF4), (TF0, TF5), (TF0, TF6), (TF1, TF0), (TF1, TF1), (TF1, TF2), (TF1, TF3), (TF1, TF4), (TF1, TF5), (TF1, TF6), (TF2, TF0), (TF2, TF1), (TF2, TF2), (TF2, TF3), (TF2, TF4), (TF2, TF5), (TF2, TF6))

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
	Max. Number of data bits/radio frame	1560 bits
	TFCI code word / radio frame	16 bits
	TPC / radio frame	2 * 2 bits
	SS / radio frame	2 * 2 bits
	Puncturing Limit	0.68

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 6.11.5.4.4.2.1.

6.11.5.4.4.3.1.2 Transport channel parameters of SRB for PCCH

See clause 6.11.5.4.4.1.1.

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

TFCS size	45 (alt. 63)
TFCS	<p>(32 kbps RAB, SRB for PCCH, SRBs for CCCH/ DCCH/ BCCH) =</p> <p>(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),(TF0, TF2, TF0), (TF0, TF2, TF1), (TF0, TF2, TF2), (TF0, TF2, TF3), (TF0, TF2, 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),(TF1, TF2, TF0), (TF1, TF2, TF1), (TF1, TF2, TF2), (TF1, TF2, TF3), (TF1, TF2, 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),(TF2, TF2, TF0), (TF2, TF2, TF1), (TF2, TF2, TF2), (TF2, TF2, TF3), (TF2, TF2, TF4)</p> <p>(alt. (TF0, TF0, TF0), (TF0, TF0, TF1), (TF0, TF0, TF2), (TF0, TF0, TF3), (TF0, TF0, TF4), (TF0, TF0, TF5), (TF0, TF0, TF6),(TF0, TF1, TF0), (TF0, TF1, TF1), (TF0, TF1, TF2), (TF0, TF1, TF3), (TF0, TF1, TF4), (TF0, TF1, TF5), (TF0, TF1, TF6),(TF0, TF2, TF0), (TF0, TF2, TF1), (TF0, TF2, TF2), (TF0, TF2, TF3), (TF0, TF2, TF4), (TF0, TF2, TF5), (TF0, TF2, TF6), (TF1, TF0, TF0), (TF1, TF0, TF1), (TF1, TF0, TF2), (TF1, TF0, TF3), (TF1, TF0, TF4), (TF1, TF0, TF5), (TF1, TF0, TF6),(TF1, TF1, TF0), (TF1, TF1, TF1), (TF1, TF1, TF2), (TF1, TF1, TF3), (TF1, TF1, TF4), (TF1, TF1, TF5), (TF1, TF1, TF6),(TF1, TF2, TF0), (TF1, TF2, TF1), (TF1, TF2, TF2), (TF1, TF2, TF3), (TF1, TF2, TF4), (TF1, TF2, TF5), (TF1, TF2, TF6),(TF2, TF0, TF0), (TF2, TF0, TF1), (TF2, TF0, TF2), (TF2, TF0, TF3), (TF2, TF0, TF4), (TF2, TF0, TF5), (TF2, TF0, TF6),(TF2, TF1, TF0), (TF2, TF1, TF1), (TF2, TF1, TF2), (TF2, TF1, TF3), (TF2, TF1, TF4), (TF2, TF1, TF5), (TF2, TF1, TF6),(TF2, TF2, TF0), (TF2, TF2, TF1), (TF2, TF2, TF2), (TF2, TF2, TF3), (TF2, TF2, TF4), (TF2, TF2, TF5) (TF2, TF2, TF6))</p>

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
	Max. Number of data bits/radio frame	1728 bits
	TFCI code word/ radio frame	32 bits
	TPC/ radio frame	0 bits
	SS/ radio frame	0 bits
	Puncturing Limit	0.64

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

Higher layer	RAB/signalling RB	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
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	16800	13600	12800	12800	12800
	RLC 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	170	170	170	170
	TFS TF0, bits	1x170				

TTI, ms	10				
Coding type	CC ½				
CRC, bit	16				
Max number of bits/TTI after channel coding	388	388	388	388	388
Max number of bits/Radio frame before rate matching	388	388	388	388	388

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 32 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 / UL: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		32000	
	AMD/UMD/TrD PDU header, bit		16	
MAC	MAC header, bit		24	
	MAC multiplexing			
Layer 1	TrCH type		RACH	
	TB sizes, bit		360	
	TFS	TF0, bits	1x360	
	TTI, ms		10	
	Coding type		CC ½	
	CRC, bit		16	
	Max number of bits/TTI after channel coding		768	
	Max number of bits/ Radio frame before rate matching		768	

6.11.5.4.5.2.1.2 Transport channel parameters for SRB for CCCH + SRBs for DCCH

See the Chapter 6.11.5.4.5.1.1.1.

6.11.5.4.5.2.1.3 TFCS

TFCS size	2
TFCS	32 kbps + SRBs for CCCH/ DCCH = TF0, TF1

6.11.5.4.5.2.2 Physical channel parameters

PRACH	Modulation	QPSK
	Codes and time slots/ radio frame	SF 4 x 1 code x 2 time slots
	Max. Number of data bits/radio frame	704 bits
	TPC / radio frame	0 bits
	SS / radio frame	0 bits
	Puncturing Limit	0.88

For physical channel parameters for SRB for CCCH + SRBs for DCCH 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 TS 34.123-1. 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.

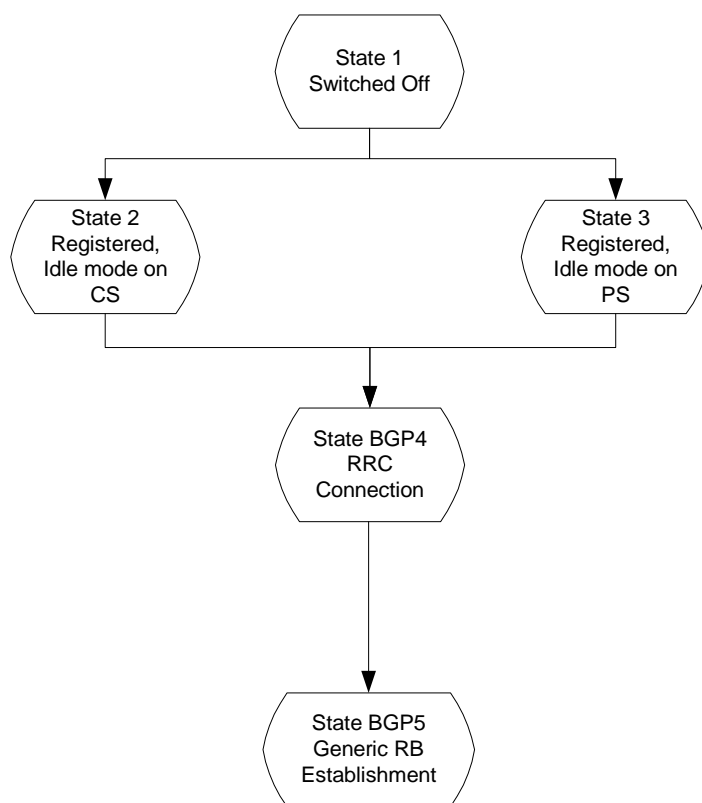


Figure 7.1.1: UE Test States for Basic Generic Procedures

In order that the UE can set up a call in UTRAN, there are a number of procedures to be undertaken in a hierarchical 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 be 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			
TrCH Information Elements			
Frequency info			As specified by default 1 cell environment
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
	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 CTrCH	Not checked
		Max no DPCH/PDSCH codes	Not checked
		Max no physical channel bits received	Not checked
		Support for SF 512	Not checked
		Support of PDSCH	Not checked
		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	Not checked

Information Element			Value/Remark
	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
		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 checked
		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 reception 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 TS 34.108 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

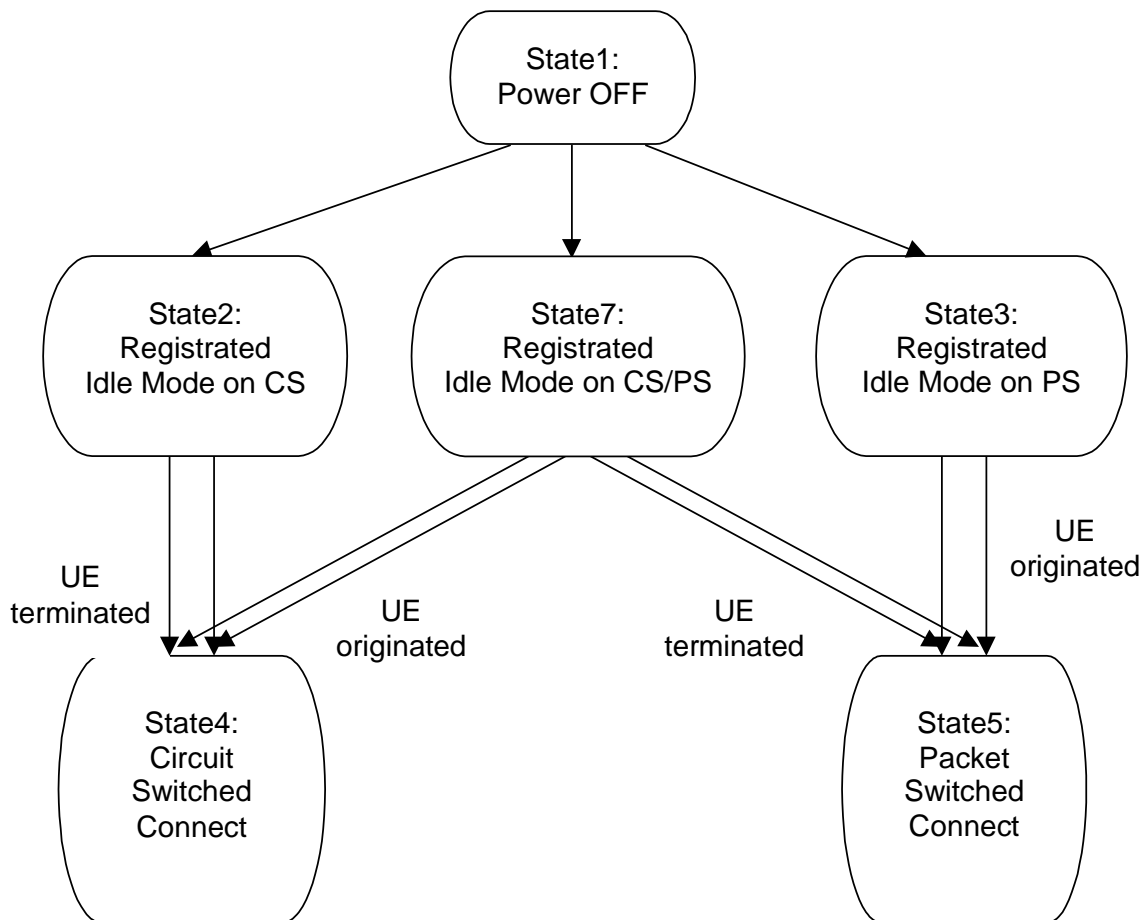


Figure 7.2.1.1: UE Test States for Generic setup procedures

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
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 sections.

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 [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 5. Reference Test Conditions.

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 "Default Message Contents of Layer3 Messages for Layer 3 Testing".

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 5. Reference Test Conditions.

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 "Default Message Contents of Layer3 Messages for Layer 3 Testing".

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 5. Reference Test Conditions.

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, see clause 7.2.2.1. Registration of UE for SS shall be established under ideal radio conditions as defined in 5. Reference Test Conditions.

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 "Default Message Contents of Layer3 Messages for Layer 3 Testing".

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 5. Reference Test Conditions.

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 "Default Message Contents of Layer3 Messages for Layer 3 Testing".

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 5. Reference Test Conditions.

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
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

7.2.3.1.4 Specific message contents

All Specific message contents shall be referred to clause 9 "Default Message Contents of Layer3 Messages for Layer 3 Testing".

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 5. Reference Test Conditions.

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 ACKNOWLEDGE	CC

7.2.3.2.4 Specific message contents

All Specific message contents shall be referred to clause 9 "Default Message Contents of Layer3 Messages for Layer 3 Testing".

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 5. Reference Test Conditions.

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 "Default Message Contents of Layer3 Messages for Layer 3 Testing".

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 5. Reference Test Conditions.

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 "Default Message Contents of Layer3 Messages for Layer 3 Testing".

7.3 Test procedures for RF test

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

7.3.2 Test procedure for TX, RX and Performance Requirement (without handover)

7.3.2.1 Initial conditions

System Simulator

- 1cell, 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 7.2.2.1

The UE has a valid P-TMSI (PS) after the execution of the procedure described in 7.2.2.2

7.3.2.2 Definition of system information messages

The default system information messages specified in clause 6.1 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

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
189	<--		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 ATTCH 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 TS 34.121[2] Annex C for FDD and TS 34.122 [5] Annex C for TDD.

7.3.2.4.3 UE test loop mode

The messages in this sub-clause are sent from the SS to the UE, determining the UE test loop mode for the RF tests.

UE test loop mode 1 without DCCH dummy transmission

Default. See clause 9.2.

UE test loop mode 1 with DCCH dummy transmission

Contents of CLOSE UE TEST LOOP: TC

Information Element	Value/remark
UE test loop mode	UE test loop mode 1 DCCH dummy transmission set to "enabled". 00000100B

UE test loop mode 2 without DCCH dummy transmission

Contents of CLOSE UE TEST LOOP: TC

Information Element	Value/remark
UE test loop mode	UE test loop mode 2 DCCH dummy transmission set to "disabled". 00000001B

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 Rx Spurious Emission

7.3.3.1 Initial conditions

System Simulator

- 1cell, 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 7.2.2.1

The UE has a valid P-TMSI (PS) after the execution of the procedure described in 7.2.2.2

7.3.3.2 Definition of system information messages

The default system information messages specified in clause 6.1 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

7.3.3.2a 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_FACH"
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_FACH"
14	-->		RADIO BEARER SETUP COMPLETE	RRC
15	<--		RRC CONNECTION RELEASE	RRC
16	-->		RRC CONNECTION RELEASE COMPLETE	RRC

7.3.3.4 Specific message contents

The default message contents specified in clause 9.2 are used with the following exceptions.

Contents of RADIO BEARER SETUP message: RRC

Information Element	Value/remark
New C-RNTI	'1010 1010 1010 1010'
RRC State indicator	CELL_FACH

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

7.3.4.1 Initial conditions

System Simulator

- Intra-frequency hard handover:
 - 2 cells, default parameters according to Cell 1 and Cell 2 in clause 6.1.4.
- Inter-frequency hard handover:
 - 2 cells, default parameters according to Cell 1 and Cell 4 in clause 6.1.4.
- Inter-system handover UTRAN FDD to GSM:
 - 2 cells, default parameters according to Cell 1 and Cell 9 in clause 6.1.4.

User Equipment

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 7.2.2.1

The UE has a valid P-TMSI (PS) after the execution of the procedure described in 7.2.2.2

7.3.4.2 Definition of system information messages

The default system information messages specified in clause 6.1 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

For the intra-frequency hard handover 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 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 FDD to GSM 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 RADIO BEARER SETUP message: RRC

Information Element	Value/remark
New C-RNTI	'1010 1010 1010 1010'
RRC State indicator	CELL_DCH

Contents of Attach Accept message: GMM

Information Element	Value/remark
Periodic RA update timer	E0 (timer is deactivated)

7.3.5 Test procedure for Measurement Performance Requirement

FFS

7.4 Common generic procedures for AS testing

7.4.1 UE RRC Test States for common procedures

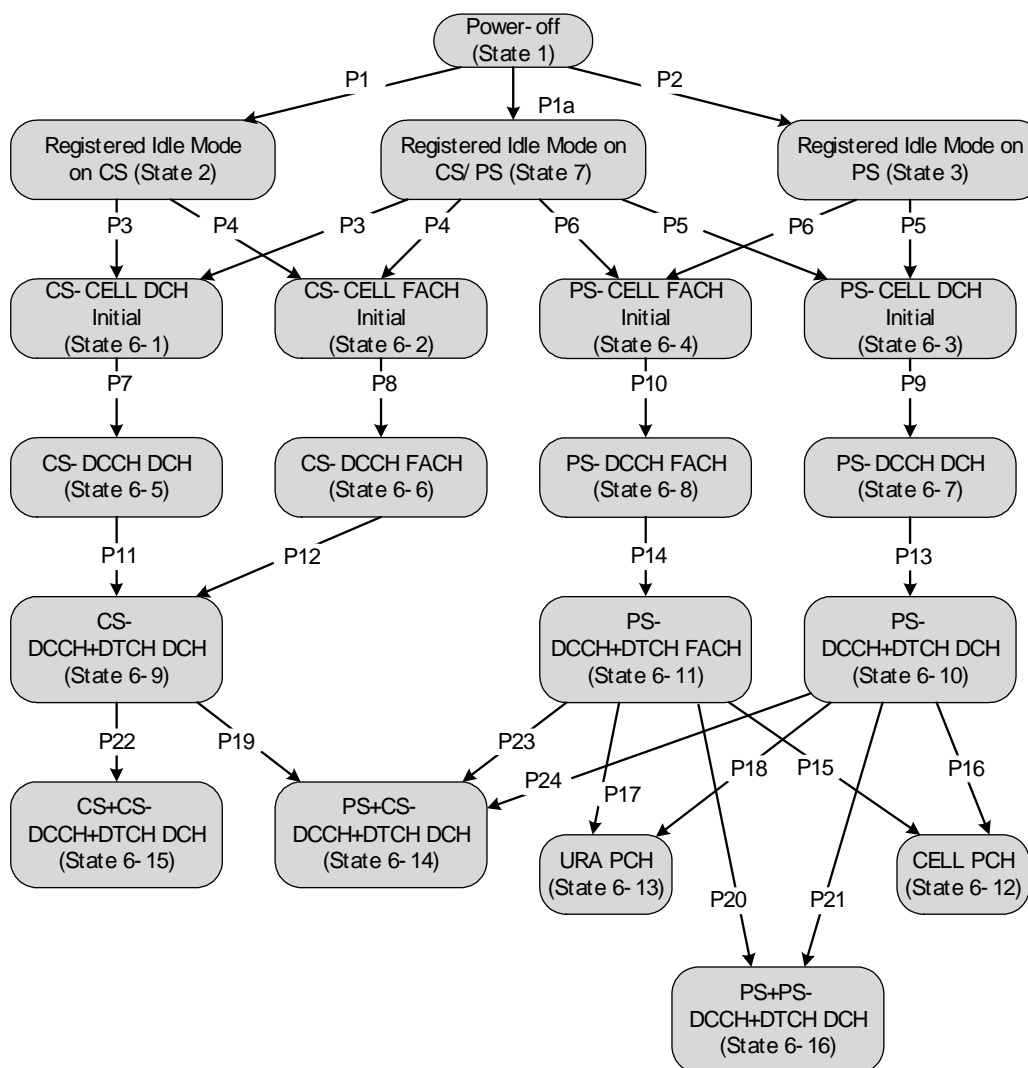


Figure 7.4.1.1: UE RRC test initial states and common procedures

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
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 BGP6-10	PS-DCCH+DTCH_DCH	Connected (CELL_DCH)	Null	As previous	Active	As previous
State BGP6-11	PS-DCCH+DTCH_FACH	Connected (CELL_FACH)	Null	As previous	Active	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 1, state 2, state 3, P1, P2 and P1a are described in TS34.108 clause 7.2. States 6-X (for X=1 to 16) 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 TS 34.108.
- 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 of TS 34.108.

7.4.2.1.1.3 Procedure

The Call Set-up procedure shall be performed under ideal radio conditions as defined in clause 5.2 and 6.1 of TS 34.108. Reference Test Conditions.

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 of TS 34.108.

To execute procedure P4, all specific message contents with the exception of step 3 shall be referred to clause 9 of TS 34.108. For step 3, the message of the same type titled "Transition to CELL_FACH" in TS 34.108 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 TS 34.108.
- 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 of TS 34.108 are used.

7.4.2.1.2.3 Procedure

The Call Set-up procedure shall be performed under ideal radio conditions as defined in clause 5.2 and 6.1 of TS 34.108. Reference Test Conditions.

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 of TS 34.108.

To execute procedure P4, all specific message contents with the exception of step 2 shall be referred to clause 9 of TS 34.108. For step 2, the message of the same type titled "Transition to CELL_FACH" in TS 34.108 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 TS 34.108.
- 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 of TS 34.108.

7.4.2.2.1.3 Procedure

The Session Set-up procedure shall be performed under Ideal radio conditions as defined in clause 5.2 and 6.1 of TS 34.108. Reference Test Conditions.

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 of TS 34.108.

To execute procedure P6, all specific message contents with the exception of step 3 shall be referred to clause 9 of TS 34.108. For step 3, the message of the same type titled "Transition to CELL_FACH" in TS 34.108 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 TS 34.108.
- 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 of TS 34.108.

7.4.2.2.2.3 Procedure

The Session Set-up procedure shall be performed under Ideal radio conditions as defined in clause 5.2 and 6.1 of TS 34.108. Reference Test Conditions.

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 of TS 34.108.

To execute procedure P6, all specific message contents with the exception of step 2 shall be referred to clause 9 of TS 34.108. For step 2, the message of the same type titled "Transition to CELL_FACH" in TS 34.108 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 of TS 34.108.

7.4.2.3.1.3 Procedure

The Call Set-up procedure shall be performed under Ideal radio conditions as defined in clause 5.2 and 6.1 of TS 34.108. Reference Test Conditions.

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 of TS 34.108.

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 6-1 or 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 of TS 34.108.

7.4.2.3.2.3 Procedure

The Call Set-up procedure shall be performed under Ideal radio conditions as defined in clause 5.2 and 6.1 of TS 34.108. Reference Test Conditions.

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 of TS 34.108.

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 of TS 34.108.

7.4.2.4.1.3 Procedure

The Session Set-up procedure shall be performed under Ideal radio conditions as defined in clause 5.2 and 6.1 of TS 34.108. Reference Test Conditions.

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 of TS 34.108.

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 of TS 34.108.

7.4.2.4.2.3 Procedure

The Session Set-up procedure shall be performed under Ideal radio conditions as defined in clause 5.2 and 6.1 of TS 34.108. Reference Test Conditions.

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 of TS34.108.

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 of TS 34.108.

7.4.2.5.1.3 Procedure

The Call Set-up procedure shall be performed under Ideal radio conditions as defined in clause 5.2 and 6.1 of TS 34.108. Reference Test Conditions.

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 of TS 34.108) for the message in step 1. To execute procedure 12, use the message "The others of speech in CS" (defined in clause 9 of TS 34.108) 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 of TS 34.108.

7.4.2.5.2.3 Procedure

The Call Set-up procedure shall be performed under Ideal radio conditions as defined in clause 5.2 and 6.1 of TS 34.108. Reference Test Conditions.

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 ACKNOWLEDGE	CC

7.4.2.5.2.4 Specific message contents

To execute procedure P11, use the message titled "CS speech" (defined in clause 9 of TS 34.108) for the message in step 1. To execute procedure 12, use the message "The others of speech in CS" (defined in clause 9 of TS 34.108) for the message in step 1.

7.4.2.6 Radio access bearer establishment procedure for packet switched sessions (procedure P13 and P14)

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 of TS 34.108.

7.4.2.6.1.3 Procedure

The Session Set-up procedure shall be performed under Ideal radio conditions as defined in clause 5.2 and 6.1 of TS 34.108. Reference Test Conditions.

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 of TS 34.108 are used. To execute procedure P13, use the message titled "Packet to CELL_DCH from CELL_DCH in PS". To execute procedure 14, use the message titled "Packet to CELL_FACH from CELL_FACH 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 of TS 34.108.

7.4.2.6.2.3 Procedure

The Session Set-up procedure shall be performed under Ideal radio conditions as defined in clause 5.2 and 6.1 of TS 34.108. Reference Test Conditions.

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 of TS 34.108 are used. To execute procedure P13, use the message titled "Packet to CELL_DCH from CELL_DCH in PS". To execute procedure 14, use the message titled "Packet to CELL_FACH from CELL_FACH in PS".

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 of TS 34.108.

7.4.2.7.1.3 Procedure

The Call Set-up procedure shall be performed under ideal radio conditions as defined in clause 5.2 and 6.1 of TS 34.108. Reference Test Conditions.

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 of TS 34.108.

7.4.2.7.2.3 Procedure

The Call Set-up procedure shall be performed under ideal radio conditions as defined in clause 5.2 and 6.1 of TS 34.108. Reference Test Conditions.

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 of TS 34.108.

7.4.2.8.1.1.3 Procedure

The Session Set-up procedure shall be performed under Ideal radio conditions as defined in clause 5.2 and 6.1 of TS 34.108. Reference Test Conditions.

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 of TS 34.108.

7.4.2.8.1.2.3 Procedure

The Session Set-up procedure shall be performed under Ideal radio conditions as defined in clause 5.2 and 6.1 of TS 34.108. Reference Test Conditions.

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 of TS 34.108.

7.4.2.8.2.1.3 Procedure

The Session Set-up procedure shall be performed under Ideal radio conditions as defined in clause 5.2 and 6.1 of TS 34.108. Reference Test Conditions.

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 of TS 34.108.

7.4.2.8.2.2.3 Procedure

The Session Set-up procedure shall be performed under Ideal radio conditions as defined in clause 5.2 and 6.1 of TS 34.108. Reference Test Conditions.

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 of TS 34.108.

7.4.2.9.1.1.3 Procedure

The Call Set-up procedure shall be performed under Ideal radio conditions as defined in clause 5.2 and 6.1 of TS 34.108. Reference Test Conditions.

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 of TS 34.108.

7.4.2.9.1.2.3 Procedure

The Call Set-up procedure shall be performed under Ideal radio conditions as defined in clause 5.2 and 6.1 of TS 34.108. Reference Test Conditions.

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 of TS 34.108.

7.4.2.9.2.1.3 Procedure

The Call Set-up procedure shall be performed under Ideal radio conditions as defined in clause 5.2 and 6.1 of TS 34.108. Reference Test Conditions.

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 of TS 34.108.

7.4.2.9.2.2.3 Procedure

The Call Set-up procedure shall be performed under Ideal radio conditions as defined in clause 5.2 and 6.1 of TS 34.108. Reference Test Conditions.

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 ACKNOWLEDGE	CC

7.4.2.9.2.2.4 Specific message contents

FFS

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 TS31.120 and 3GPP TS31.121.

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 TS 31.101 and TS 31.102.

"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 TS 33.102 [24] and 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-synchronisation 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 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 8.2), having the same bit length (128 bits) as **RAND**.

The result **XDOUT** of this is:

$$\mathbf{XDOUT}[\text{bits } 0,1, \dots 126,127] = \mathbf{K} [\text{bits } 0,1, \dots 126,127] \text{ XOR } \mathbf{RAND}[\text{bits } 0,1, \dots 126,127]$$

Step 2:

RES (test USIM), **XRES** (SS), **CK**, **IK** and **AK** are extracted from **XDOUT** this way:

$$\mathbf{RES}[\text{bits } 0,1, \dots n-1,n] = \mathbf{f2}(\mathbf{XDOUT},n) = \mathbf{XDOUT}[\text{bits } 0,1, \dots n-1,n] \quad (\text{with } 30 < n < 128)$$

NOTE: Suggested length for RES is 128 bits (i.e. $n = 127$).

In SS and AUC, the XRES calculation is identical to RES.

$$\mathbf{CK}[\text{bits } 0,1, \dots 126,127] = \mathbf{f3}(\mathbf{XDOUT}) = \mathbf{XDOUT}[\text{bits } 8,9, \dots 126,127,0,1, \dots 6,7]$$

$$\mathbf{IK}[\text{bits } 0,1, \dots 126,127] = \mathbf{f4}(\mathbf{XDOUT}) = \mathbf{XDOUT}[\text{bits } 16,17, \dots 126,127,0,1, \dots 14,15]$$

$$\mathbf{AK}[\text{bits } 0,1, \dots 46,47] = \mathbf{f4}(\mathbf{XDOUT}) = \mathbf{XDOUT}[\text{bits } 24,25, \dots 70,71]$$

For test USIM intended for inter-RAT testing the GSM ciphering key Kc shall be derived from the UMTS cipher/integrity keys:

$$\mathbf{Kc}[\text{bits } 0,1, \dots 62,63] = \mathbf{c3}(\mathbf{CK},\mathbf{IK}), \text{ see TS 33.102 clause 6.8.1.2}$$

Step 3:

Concatenate **SQN** with **AMF** to obtain **CDOUT** like this:

$$\mathbf{CDOUT}[\text{bits } 0,1, \dots 62,63] = \mathbf{SQN}[\text{bits } 0,1, \dots 46,47] \parallel \mathbf{AMF}[\text{bits } 0,1, \dots 14,15]$$

NOTE: For test USIM the $\mathbf{SQN} = \mathbf{SQN}_{\text{MS}} = \mathbf{SQN}_{\text{SS}}[\text{bits } 0,1, \dots 46,47] = \mathbf{AUTN}[\text{bits } 0,1, \dots 46,47] \text{ XOR } \mathbf{AK}[\text{bits } 0,1, \dots 46,47]$ where AUTN is the received authentication token.

Step 4:

XMAC (test USIM) and **MAC** (SS) are calculated from **XDOUT** and **CDOUT** this way:

$$\mathbf{XMAC}[\text{bits } 0,1, \dots 62, 63] = \mathbf{f1}(\mathbf{XDOUT}, \mathbf{CDOUT}) = \mathbf{XDOUT}[\text{bits } 0,1, \dots 62,63] \text{ XOR } \mathbf{CDOUT}[\text{bits } 0,1, \dots 62,63]$$

NOTE: In SS and AUC, the MAC calculation is identical to XMAC

Step 5:

The SS calculates the authentication token **AUTN**:

$$\mathbf{AUTN}[\text{bits } 0,1,\dots,126,127] = \mathbf{SQN} \oplus \mathbf{AK}[\text{bits } 0,1,\dots,46,47] \parallel \mathbf{AMF}[\text{bits } 0,1,\dots,14,15] \parallel \mathbf{MAC}[\text{bits } 0,1,\dots,62,63]$$

$$\text{Where } \mathbf{SQN} \oplus \mathbf{AK}[\text{bits } 0,1,\dots,46,47] = \mathbf{SQN}[\text{bits } 0,1,\dots,46,47] \text{ XOR } \mathbf{AK}[\text{bits } 0,1,\dots,46,47]$$

8.1.2.2 Generation of re-synchronisation parameters in the USIM

For SS to be able to initiate an authentication re-synchronisation procedure a specific AMF value has been defined.

$$\mathbf{AMF}_{\text{RESYNCH}} = \mathbf{AMF}[\text{bits } 0,1,\dots,14,15] = "1111\ 1111\ 1111\ 1111"$$

When the test USIM receives an authentication token (AUTN) having the value of AMF field equal to the $\mathbf{AMF}_{\text{RESYNCH}}$ value then the test USIM shall initiate the re-synchronisation procedure.

When the test USIM starts the re-synchronisation 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:

$$\mathbf{XDOUT}[\text{bits } 0,1,\dots,126,127] = \mathbf{K}[\text{bits } 0,1,\dots,126,127] \text{ XOR } \mathbf{RAND}[\text{bits } 0,1,\dots,126,127]$$

Step 2:

AK is extracted from **XDOUT** this way:

$$\mathbf{AK}[\text{bits } 0,1,\dots,46,47] = f5^*(\mathbf{XDOUT}) = \mathbf{XDOUT}[\text{bits } 24,25,\dots,70,71]$$

Step 3:

Concatenate \mathbf{SQN}_{MS} with \mathbf{AMF}^* to obtain **CDOUT** like this:

$$\mathbf{CDOUT}[\text{bits } 0,1,\dots,62,63] = \mathbf{SQN}_{\text{MS}}[\text{bits } 0,1,\dots,46,47] \parallel \mathbf{AMF}^*[\text{bits } 0,1,\dots,14,15]$$

Where \mathbf{AMF}^* assumes a dummy value of all zeros

NOTE: For test USIM the $\mathbf{SQN}_{\text{MS}} = \mathbf{SQN}_{\text{SS}}[\text{bits } 0,1,\dots,46,47] = \mathbf{AUTN}[\text{bits } 0,1,\dots,46,47] \text{ XOR } \mathbf{AK}[\text{bits } 0,1,\dots,46,47]$ where AUTN is the received authentication token.

For SS and AUC the $\mathbf{SQN}_{\text{MS}} = \mathbf{AUTS}[\text{bits } 0,1,\dots,46,47] \text{ XOR } \mathbf{AK}[\text{bits } 0,1,\dots,46,47]$ where AUTS is the received re-synchronisation parameter.

Step 4:

MAC-S is calculated from **XDOUT** and **CDOUT** this way:

$$\mathbf{MAC-S}[\text{bits } 0,1,\dots,62,63] = f1^*(\mathbf{XDOUT}, \mathbf{CDOUT}) = \mathbf{XDOUT}[\text{bits } 0,1,\dots,62,63] \text{ XOR } \mathbf{CDOUT}[\text{bits } 0,1,\dots,62,63]$$

NOTE: In SS and AUC, the XMAC-S calculation is identical to MAC-S.

Step 5:

The test USIM calculates the re-synchronisation parameter **AUTS**:

$$\mathbf{AUTS}[\text{bits } 0,1,\dots,110,111] = \mathbf{SQN}_{\text{MS}} \oplus \mathbf{AK}[\text{bits } 0,1,\dots,46,47] \parallel \mathbf{MAC-S}[\text{bits } 0,1,\dots,62,63]$$

$$\text{Where } \mathbf{SQN}_{\text{MS}} \oplus \mathbf{AK}[\text{bits } 0,1,\dots,46,47] = \mathbf{SQN}_{\text{MS}}[\text{bits } 0,1,\dots,46,47] \text{ XOR } \mathbf{AK}[\text{bits } 0,1,\dots,46,47]$$

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 figure 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 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 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.

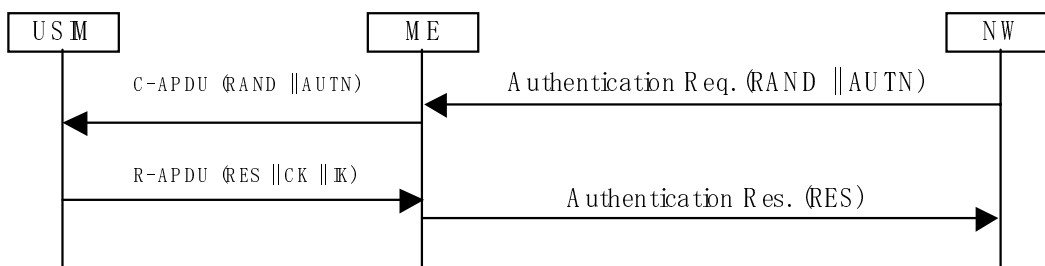


Figure 8.1.2.3.1: Network accepted by UE (USIM not supporting derivation of GSM cipher key Kc)

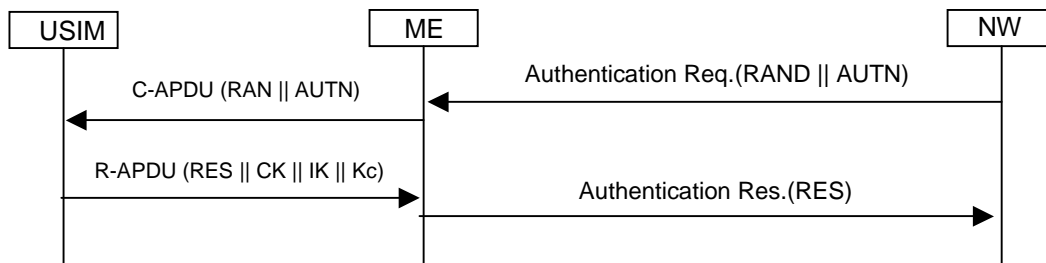


Figure 8.1.2.3.2: Network accepted by UE (USIM supporting derivation of GSM cipher key Kc)

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 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 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").

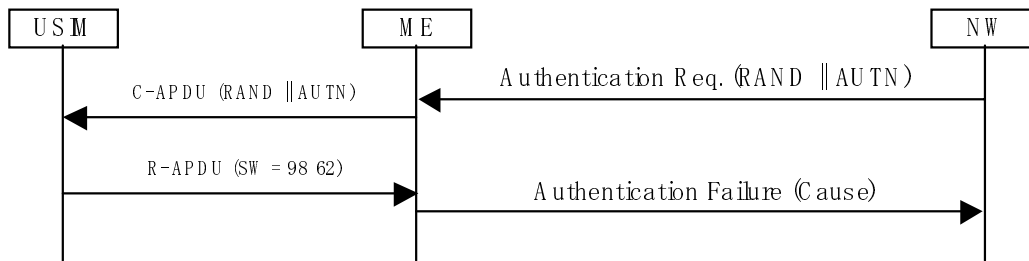


Figure 8.1.2.3.2: MAC failure cases

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 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-synchronisation parameter AUTS as specified in clause 8.1.2.2 (step 1 to 5) and forward it to the ME.

The ME sends an AUTHENTICATION FAILURE message to the SS including the AUTS parameter.

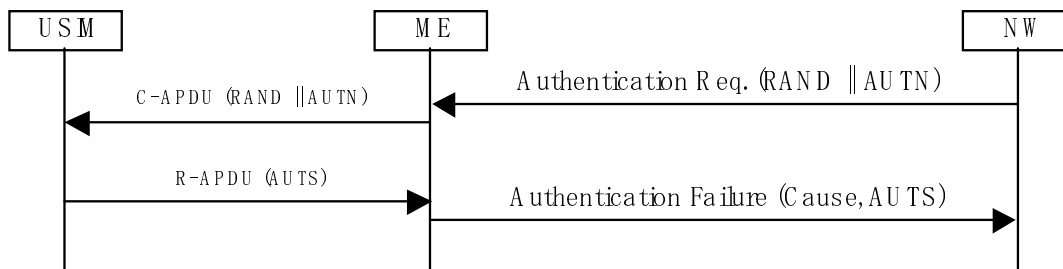


Figure 8.1.2.3.3: SQN failure case

8.2 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 TS31.101 and TS31.102. 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 TS31.102 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 TS31.102 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 2-9 (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:

063-125, 189-251, 315-377, 441-503, 567-629, 693-755, 819-881 or 945-999

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 TS31.102 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 TS31.102 Annex E.

8.3.2.5 $EF_{PLMNwAcT}$ (User controlled PLMN selector with Access Technology)

File size: 5n bytes

Default values (HEX): Bytes 1-3: 32 F4 10 (MCC, MNC) - Translates to 234, 01

Bytes 4-5: 80 00 (Access Technology) – Translates to UTRAN

Bytes 6-8: 32 F4 20 (MCC, MNC)

Bytes 9-10: 80 00 (Access Technology)

Bytes 11-13: 32 F4 30 (MCC, MNC)

....

....

....

Bytes(5n-4) - (5n-2): 32 F4 43 (MCC, MNC)

Bytes (5n-1) - 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_{HPLMN} (HPLMN search period)

File size: 1 byte

Default value (HEX): 00 (no HPLMN 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
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 Empp	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
Service n°36:	Depersonalisation Control Keys	Option
Service n°37:	Co-operative Network List	Option
Service n°38:	GSM security context	Yes
Service n°39:	CPBCCCH 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

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 TS31.102 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 TS31.102 Annex E.

8.3.2.17 EF_{LOCI} (Location Information)

File size:	11 Bytes
Default values:	Bytes 1-4 (HEX): FF FF FF FF (TMSI)
	Bytes 5-9 (HEX): 42 F6 18 FF FE (LAI)
	Byte 10 (HEX): FF (RFU)

Byte 11 (BIN): 00000001 (Location Update Status = "not updated")

Bytes 5-9: LAI-MCC = 246 (bytes 5-6) and LAI-MNC = 81 (byte 7) are frequently used. The LAC (bytes 8-9) 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 1-4) 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 TS31.102 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 TS31.102 Annex E.

8.3.2.23 EF_{PSLOCI} (Packet Switched location information)

File size: 14 Bytes

Default values: Bytes 1-4 (HEX): FF FF FF FF (P-TMSI)

Bytes 5-7 (HEX): FF FF FF (P-TMSI signature value)

Bytes 8-13 (HEX): 42 F6 18 FF FE FF (RAI)

Byte 14 (BIN): 00000001 (Routing Area update status = "not updated")

Bytes 8-13: RAI-MCC = 246 (bytes 8-9) and RAI-MNC = 81 (byte 10) are frequently used. The LAC (bytes 11-12) 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 1-4) 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 TS 31.102 annex E.

8.3.2.25 EF_{SMS} (Short messages)

The programming of this EF follows default parameter written in TS 31.102 annex E.

8.3.2.26 EF_{MSISDN} (MSISDN)

The programming of this EF follows default parameter written in TS 31.102 annex E.

8.3.2.27 EF_{SMSP} (Short message service parameters)

The programming of this EF follows default parameter written in TS 31.102 annex E.

8.3.2.28 EF_{SMSS} (SMS status)

The programming of this EF follows default parameter written in TS 31.102 annex E.

8.3.2.29 EF_{SDN} (Service Dialling Numbers)

The programming of this EF follows default parameter written in TS 31.102 annex E.

8.3.2.30 EF_{EXT2} (Extension2)

The programming of this EF follows default parameter written in TS 31.102 annex E.

8.3.2.31 EF_{EXT3} (Extension3)

The programming of this EF follows default parameter written in TS 31.102 annex E.

8.3.2.32 EF_{SMSR} (Short message status reports)

The programming of this EF follows default parameter written in TS 31.102 annex E.

8.3.2.33 EF_{ICI} (Incoming Call Information)

The programming of this EF follows default parameter written in TS 31.102 annex E.

8.3.2.34 EF_{OCl} (Outgoing Call Information)

The programming of this EF follows default parameter written in TS 31.102 annex E.

8.3.2.35 EF_{ICT} (Incoming Call Timer)

The programming of this EF follows default parameter written in TS 31.102 annex E.

8.3.2.36 EF_{OCT} (Outgoing Call Timer)

The programming of this EF follows default parameter written in TS 31.102 annex E.

8.3.2.37 EF_{EXT5} (Extension5)

The programming of this EF follows default parameter written in TS 31.102 annex E.

8.3.2.38 EF_{CCP2} (Capability Configuration Parameters 2)

The programming of this EF follows default parameter written in TS 31.102 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 TS 31.102 annex E.

8.3.2.41 EF_{GMSI} (Group Identity)

This clause is expected to be defined in the release 2000 version of the present document.

8.3.2.42 EF_{Hiddenkey} (Key for hidden phone book entries)

The programming of this EF follows default parameter written in TS 31.102 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 TS 31.102 annex E.

8.3.2.45 EF_{EXT4} (Extension 4)

The programming of this EF follows default parameter written in TS 31.102 annex E.

8.3.2.46 EF_{CMI} (Comparison method information)

The programming of this EF follows default parameter written in TS 31.102 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 TS 31.102 annex E.

8.3.2.49 EF_{DCK} (Depersonalisation control keys)

The programming of this EF follows default parameter written in TS 31.102 annex E.

8.3.2.50 EF_{CNL} (Co-operative network list)

The programming of this EF follows default parameter written in TS 31.102 annex E.

8.3.2.51 EF_{START-HFN} (Initialisation values for Hyperframe number)

The programming of this EF follows default parameter written in TS 31.102 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_{OPLMNsel} (OPLMN selector)

The programming of this EF follows default parameter written in TS 31.102 annex E.

8.3.2.54 EF_{PHPLMNAT} (Preferred HPLMN Access Technology)

The programming of this EF follows default parameter written in TS 31.102 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 TS 31.102 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)

This clause is expected to be defined in the release 2000 version of the present document.

8.3.3.1.2 EF_{SLL} (SoLSA LSA List)

This clause is expected to be defined in the release 2000 version of the present document.

8.3.3.1.3 LSA Descriptor files

This clause is expected to be defined in the release 2000 version of the present document.

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 TS 31.102 annex E.

8.3.3.1.4.2 EF_{ORPK} (Operator Root Public Key)

The programming of this EF follows default parameter written in TS 31.102 annex E.

8.3.3.1.4.3 EF_{ARPK} (Administrator Root Public Key)

The programming of this EF follows default parameter written in TS 31.102 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 TS 31.102 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 TS 31.102 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 TS 31.102 annex E.

8.3.3.2.3 EF_{ADN} (Abbreviated dialling numbers)

The programming of this EF follows default parameter written in TS 31.102 annex E.

8.3.3.2.4 EF_{EXT1} (Extension1)

The programming of this EF follows default parameter written in TS 31.102 annex E.

8.3.3.2.5 EF_{PBC} (Phone Book Control)

The programming of this EF follows default parameter written in TS 31.102 annex E.

8.3.3.2.6 EF_{GRP} (Grouping file)

The programming of this EF follows default parameter written in TS 31.102 annex E.

8.3.3.2.7 EF_{AAS} (Additional number Alpha String)

The programming of this EF follows default parameter written in TS 31.102 annex E.

8.3.3.2.8 EF_{GAS} (Grouping information Alpha String)

The programming of this EF follows default parameter written in TS 31.102 annex E.

8.3.3.2.9 EF_{ANR} (Additional Number)

The programming of this EF follows default parameter written in TS 31.102 annex E.

8.3.3.2.10 EF_{SNE} (Second Name Entry)

The programming of this EF follows default parameter written in TS 31.102 annex E.

8.3.3.2.11 EF_{CCP1} (Capability Configuration Parameters 1)

The programming of this EF follows default parameter written in TS 31.102 annex E.

8.3.3.2.12 Phone Book Synchronisation

8.3.3.2.12.1 EF_{UID} (Unique Identifier)

The programming of this EF follows default parameter written in TS 31.102 annex E.

8.3.3.2.12.2 EF_{PSC} (Phone book Synchronisation Counter)

The programming of this EF follows default parameter written in TS 31.102 annex E.

8.3.3.2.12.3 EF_{CC} (Change Counter)

The programming of this EF follows default parameter written in TS 31.102 annex E.

8.3.3.2.12.4 EF_{PUID} (Previous Unique Identifier)

The programming of this EF follows default parameter written in TS 31.102 annex E.

8.3.3.2.13 EF_{EMAIL} (e-mail address)

The programming of this EF follows default parameter written in TS 31.102 annex E.

8.3.3.3 Contents of files at the DF GSM level (Files required for GSM Access)

8.3.3.3.1 EF_{Kc} (GSM Cipherring key Kc)

File size: 9 Bytes

Default values (HEX): Bytes 1-8: 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 Cipherring key KcGPRS)

The programming of this EF follows default parameter written in TS 31.102 annex E.

8.3.3.3.3 Void

8.3.3.3.4 EF_{CPBCCCH} (CPBCCCH Information)

The programming of this EF follows default parameter written in TS 31.102 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 TS 31.102 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 TS 31.102 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 TS 31.102 annex E.

8.3.5.1.2 Image Instance Data Files

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 TS 34.123-1, shall be transmitted and checked by the system simulator.

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
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

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
Message Type	
U-RNTI	Checked to see if it is set to the following values 0000 0000 0001B
- SRNC identity	
- 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
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	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
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 synchronisation 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
- Added or Reconfigured TrCH	Not Present
information for DRAC list	
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
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. now
Activation time	
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
- Message	GSM HANDOVER COMMAND formatted and coded according to GSM specifications as BIT STRING (1..512). The first/ leftmost/ 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
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 bits b14 through b23 of the TMSI.
	If the IE "CN domain identity" is equal to "PS domain", this bit string is set 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.
	FALSE
- Entered parameter	
NAS message	Set according to that indicated in specific message content for each test case
START	Not checked
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 TS34.108 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 synchronisation 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 synchronisation 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
- 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 sec
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
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 synchronisation information	Checked that this IE is absent
- Primary CPICH info	
- Primary scrambling code	Different from the Default setting in TS34.108 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

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 Integrity check info - message authentication code - RRC message sequence number Paging cause CN domain identity Paging record type identifier	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. Terminating Conversational Call CS domain 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
Message Type	A1, A2, A3, A4, A5, A6	Arbitrarily selects an integer between 0 and 3
RRC transaction identifier		
Integrity check info		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.
- message authentication code		SS provides the value of this IE, from its internal counter.
- RRC message sequence number		Not Present
Integrity protection mode info		Not Present
Ciphering mode info		Not Present
Activation time	A1, A2, A3	$(256 + \text{CFN} - (\text{CFN} \bmod 8 + 8)) \bmod 256$
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
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 synchronisation info		Not Present
Frequency info	A1, A2, A3, A4, A5	Reference to clause 5.1 Test frequencies
- UARFCN uplink (Nu)		Reference to clause 5.1 Test frequencies
- UARFCN downlink (Nd)		Not Present
Frequency info	A6	33dBm
Maximum allowed UL TX power		
CHOICE <i>channel requirement</i>	A5, A6	Not Present
CHOICE <i>channel requirement</i>	A1, A2, A3, A4	Uplink DPCH info
- Uplink DPCH power control info		-80dB (i.e. ASN.1 IE value of -40)
- DPCH power offset		1 frame
- PC Preamble		7 frames
- SRB delay		Algorithm1
- Power Control Algorithm		1dB
- TPC step size		Long
- Scrambling code type		0 (0 to 16777215)
- Scrambling code number		Not Present(1)
- Number of DPDCH		Reference to TS34.108 clause 6.10
- spreading factor		Parameter Set
- TFCI existence		Reference to TS34.108 clause 6.10
- Number of FBI bit		Parameter Set
- Puncturing Limit		Reference to TS34.108 clause 6.10
CHOICE Mode	A1, A2, A3, A4, A5, A6	FDD
- Downlink PDSCH information		Not Present
Downlink information common for all radio links	A1, A2, A3	Maintain
- Downlink DPCH info common for all RL		Not Present
- Timing indicator		
- CFN-targetSFN frame offset		
- Downlink DPCH power control information		
- DPC mode		0 (single)
- CHOICE mode		FDD
- Power offset $P_{\text{Pilot-DPDCH}}$		0

Information Element	Condition	Value/remark
<ul style="list-style-type: none"> - DL rate matching restriction information - Spreading factor - Fixed or Flexible Position - TFCI existence - CHOICE SF - DPCH compressed mode info - TX Diversity mode - SSDT information - Default DPCH Offset Value 		Not Present Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Not Present None Not Present Not Present
Downlink information common for all radio links <ul style="list-style-type: none"> - Downlink DPCH info common for all RL - Timing indicator - CFN-targetSFN frame offset - Downlink DPCH power control information - DPC mode - CHOICE mode - Power offset $P_{\text{Pilot-DPCH}}$ - DL rate matching restriction information - Spreading factor - Fixed or Flexible Position - TFCI existence - CHOICE SF - DPCH compressed mode info - TX Diversity mode - SSDT information - Default DPCH Offset Value 	A4	Initialise Not Present 0 (single) FDD 0 Not Present Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Not Present None Not Present Arbitrary set to value 0..306688 by step of 512
Downlink information common for all radio links	A5, A6	Not Present
Downlink information for each radio links <ul style="list-style-type: none"> - Choice mode <ul style="list-style-type: none"> - Primary CPICH info - Primary scrambling code - PDSCH with SHO DCH info - PDSCH code mapping - Downlink DPCH info for each RL - CHOICE mode - Primary CPICH usage for channel estimation - DPCH frame offset - Power offset $P_{\text{Pilot-DPCH}}$ - Secondary CPICH info - DL channelisation code - Secondary scrambling code - Spreading factor - Code number - Scrambling code change - TPC combination index - SSDT Cell Identity - Closed loop timing adjustment mode - SCCPCH information for FACH 	A1, A2,A3	FDD Ref. to the Default setting in TS34.108 clause 6.1 (FDD) Not Present Not Present FDD Primary CPICH may be used Set to value : Default DPCH Offset Value (as currently stored in SS) mod 38400 0 Not Present 5 Reference to TS34.108 clause 6.10 Parameter Set 0 No change 0 Not Present Not Present Not Present
Downlink information for each radio links <ul style="list-style-type: none"> - Choice mode <ul style="list-style-type: none"> - Primary CPICH info - Primary scrambling code - PDSCH with SHO DCH info - PDSCH code mapping 	A4	FDD Ref. to the Default setting in TS34.108 clause 6.1 (FDD) Not Present Not Present

Information Element	Condition	Value/remark
<ul style="list-style-type: none"> - Downlink DPCH info for each RL - CHOICE mode - Primary CPICH usage for channel estimation - DPCH frame offset - Power offset $P_{\text{Pilot-DPCH}}$ - Secondary CPICH info - DL channelisation code - Secondary scrambling code - Spreading factor - Code number - Scrambling code change - TPC combination index - SSdT Cell Identity - Closed loop timing adjustment mode - SCCPCH information for FACH 		FDD Primary CPICH may be used Set to value : Default DPCH Offset Value mod 38400 0 Not Present 5 Reference to TS34.108 clause 6.10 Parameter Set 0 No change 0 Not Present Not Present Not Present
<ul style="list-style-type: none"> - Downlink information for each radio link - Choice mode - Primary CPICH info - Primary scrambling code - PDSCH with SHO DCH info - PDSCH code mapping - Downlink DPCH info for each RL - SCCPCH Information for FACH 	A5	FDD Ref. to the Default setting in TS34.108 clause 6.1 (FDD) Not Present Not Present Not Present Not Present
<ul style="list-style-type: none"> - 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 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	
<ul style="list-style-type: none"> - 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.
<ul style="list-style-type: none"> - 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 synchronisation info	Not checked

Contents of PHYSICAL CHANNEL RECONFIGURATION FAILURE message: AM

Information Element	Value/remark
Message Type RRC transaction identifier	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
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 A1, A2, A3 A4, A5, A6, A7, A8 A1, A2, A3, A4, A5, A6, A7, A8	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	Not Present
New C-RNTI	A5, A6	'1010 1010 1010 1010'
New DSCH-RNTI	A1, A2, A3, A4, A5, A6, A7, A8	Not Present
RRC State indicator	A1, A2, A3, A4, A7, A8	CELL_DCH
RRC State indicator	A5, A6	CELL_FACH
UTRAN DRX cycle length coefficient CN information info URA identity Signalling RB information to setup	A1, A2, A3, A4, A5, A6, A7, A8	Not Present Not Present Not Present Not Present
RAB information for setup - RAB info - RAB identity - CN domain identity - NAS Synchronization Indicator - Re-establishment timer - RB information to setup - RB identity - PDCP info - CHOICE RLC info type - CHOICE Uplink RLC mode	A1, A7	0000 0001B The first/ leftmost bit of the bit string contains the most significant bit of the RAB identity. CS domain Not Present useT314 10 Not Present RLC info TM RLC

Information Element	Condition	Value/remark
<ul style="list-style-type: none"> - Transmission RLC discard - Segmentation indication - CHOICE Downlink RLC mode - Segmentation indication - RB mapping info - Information for each multiplexing option - RLC logical channel mapping indicator - Number of uplink RLC logical channels - Uplink transport channel type - UL Transport channel identity - Logical channel identity - CHOICE RLC size list - MAC logical channel priority - Downlink RLC logical channel info - Number of downlink RLC logical channels - Downlink transport channel type - DL DCH Transport channel identity - DL DSCH Transport channel identity - Logical channel identity 		<p>Not Present FALSE TM RLC FALSE</p> <p>Not Present 1 DCH 1 Not Present Configured 7</p> <p>1 DCH 6 Not Present Not Present</p>
<p>RAB information for setup</p> <ul style="list-style-type: none"> - RAB info - RAB identity - CN domain identity - NAS Synchronization Indicator - Re-establishment timer - RB information to setup - RB identity - PDCP info - CHOICE RLC info type - CHOICE Uplink RLC mode - Transmission RLC discard - Segmentation indication - CHOICE Downlink RLC mode - Segmentation indication - RB mapping info - Information for each multiplexing option - RLC logical channel mapping indicator - Number of uplink RLC logical channels - Uplink transport channel type - UL Transport channel identity - Logical channel identity - CHOICE RLC size list - MAC logical channel priority - Downlink RLC logical channel info - Number of downlink RLC logical channels - Downlink transport channel type - DL DCH Transport channel identity - DL DSCH Transport channel identity - Logical channel identity - RB identity - PDCP info - CHOICE RLC info type - CHOICE Uplink RLC mode - Transmission RLC discard - Segmentation indication - CHOICE Downlink RLC mode - Segmentation indication - RB mapping info - Information for each multiplexing option - RLC logical channel mapping indicator - Number of uplink RLC logical channels - Uplink transport channel type - UL Transport channel identity - Logical channel identity - CHOICE RLC size list 	A2, A8	<p>0000 0001B The first/ leftmost bit of the bit string contains the most significant bit of the RAB identity. CS domain Not Present useT314</p> <p>10 Not Present RLC info TM RLC Not Present FALSE TM RLC FALSE</p> <p>Not Present 1 DCH 1 Not Present Configured 6</p> <p>1 DCH 6 Not Present Not Present 11 Not Present RLC info TM RLC Not Present FALSE TM RLC FALSE</p> <p>Not Present 1 DCH 2 Not Present Configured</p>

Information Element	Condition	Value/remark
<ul style="list-style-type: none"> - MAC logical channel priority - Downlink RLC logical channel info - Number of downlink RLC logical channels - Downlink transport channel type - DL DCH Transport channel identity - DL DSCH Transport channel identity - Logical channel identity - RB identity - PDCP info - CHOICE RLC info type - CHOICE Uplink RLC mode - Transmission RLC discard - Segmentation indication - CHOICE Downlink RLC mode - Segmentation indication - RB mapping info - Information for each multiplexing option - RLC logical channel mapping indicator - Number of uplink RLC logical channels - Uplink transport channel type - UL Transport channel identity - Logical channel identity - CHOICE RLC size list - MAC logical channel priority - Downlink RLC logical channel info - Number of downlink RLC logical channels - Downlink transport channel type - DL DCH Transport channel identity - DL DSCH Transport channel identity - Logical channel identity 		<p>6</p> <p>1</p> <p>DCH</p> <p>7</p> <p>Not Present</p> <p>Not Present</p> <p>12</p> <p>Not Present</p> <p>RLC info</p> <p>TM RLC</p> <p>Not Present</p> <p>FALSE</p> <p>TM RLC</p> <p>FALSE</p> <p>Not Present</p> <p>1</p> <p>DCH</p> <p>3</p> <p>Not Present</p> <p>Configured</p> <p>6</p> <p>1</p> <p>DCH</p> <p>8</p> <p>Not Present</p> <p>Not Present</p>
<p>RAB information for setup</p> <ul style="list-style-type: none"> - RAB info - RAB identity - CN domain identity - NAS Synchronization Indicator - Re-establishment timer - RB information to setup - RB identity - PDCP info - Support for lossless SRNS relocation - Max PDCP SN window size - PDCP PDU header - Header compression information - CHOICE RLC info type - CHOICE Uplink RLC mode - Transmission RLC discard - CHOICE SDU discard mode - MAX_DAT - Transmission window size - Timer_RST - Max_RST - Polling info - Timer_poll_prohibit - Timer_poll - Poll_PDU - Poll_SDU - Last transmission PDU poll - Last retransmission PDU poll - Poll_Windows - Timer_poll_periodic - CHOICE Downlink RLC mode - In-sequence delivery - Receiving window size - Downlink RLC status info 	A3, A4, A5, A6	<p>(AM DTCH for PS domain)</p> <p>0000 0101B</p> <p>The first/ leftmost bit of the bit string contains the most significant bit of the RAB identity.</p> <p>PS domain</p> <p>Not Present</p> <p>useT315</p> <p>20</p> <p>FALSE</p> <p>Not present</p> <p>Absent</p> <p>Not present</p> <p>RLC info</p> <p>AM RLC</p> <p>No Discard</p> <p>15</p> <p>128</p> <p>500</p> <p>4</p> <p>200</p> <p>200</p> <p>Not Present</p> <p>1</p> <p>TRUE</p> <p>TRUE</p> <p>99</p> <p>Not Present</p> <p>AM RLC</p> <p>TRUE</p> <p>128</p>

Information Element	Condition	Value/remark
<ul style="list-style-type: none"> - Timer_status_prohibit - Timer_EPC - Missing PDU indicator - Timer_STATUS_periodic - RB mapping info - Information for each multiplexing option - RLC logical channel mapping indicator - Number of uplink RLC logical channels - Uplink transport channel type - UL Transport channel identity - Logical channel identity - CHOICE RLC size list - MAC logical channel priority - Downlink RLC logical channel info - Number of downlink RLC logical channels - Downlink transport channel type - DL DCH Transport channel identity - DL DSCH Transport channel identity - Logical channel identity - RLC logical channel mapping indicator - Number of uplink RLC logical channels - Uplink transport channel type - UL Transport channel identity - Logical channel identity - CHOICE RLC size list - RLC size index - MAC logical channel priority - Downlink RLC logical channel info - Number of downlink RLC logical channels - Downlink transport channel type - DL DCH Transport channel identity - DL DSCH Transport channel identity - Logical channel identity 		200 Not Present TRUE Not Present 2 RBMuxOptions Not Present 1 DCH 1 Not Present Configured 8 1 DCH 6 Not Present Not Present Not Present 1 RACH Not Present 7 Explicit list Reference to TS34.108 clause 6 Parameter Set 8 1 FACH Not Present Not Present 7
RB information to be affected	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 for all transport channels <ul style="list-style-type: none"> - PRACH TFCS - CHOICE mode - TFC subset - UL DCH TFCS - CHOICE TFCI signalling - TFCI Field 1 information - CHOICE TFCS representation - TFCS complete reconfigure information - CHOICE CTFC Size - CTFC information - CTFC - Power offset information - CHOICE Gain Factors - Gain factor β_c - Gain factor β_d 	A1, A2, A3, A4, A5, A6, A7, A8	Not Present FDD Not Present Normal Complete reconfiguration Number of bits used must be enough to cover all combinations of CTFC from TS34.108 clause 6.10.2.4 Parameter Set. This IE is repeated for TFC numbers and reference to TS34.108 clause 6.10.2.4 Parameter Set Reference to TS34.108 clause 6.10.2.4 Parameter Set Computed Gain Factors(The last TFC is set to Signalled Gain Factors) 11 (below 64 kbps) 9 (higher than 64 kbps) (Not Present if the CHOICE Gain Factors is set to Computed Gain Factors) 15

Information Element	Condition	Value/remark
<ul style="list-style-type: none"> - Reference TFC ID - CHOICE mode - Power offset P_{p-m} Deleted UL TrCH information Added or Reconfigured UL TrCH information <ul style="list-style-type: none"> - 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 - 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 	A1, A2, A3, A4, A5, A6, A7, A8 A1, A3 A4, A5, A6, A7	(Not Present if the CHOICE Gain Factors is set to Computed Gain Factors) 0 FDD Not Present Not Present 1 DCH added, 1 DCH reconfigured DCH 1 Dedicated transport channels Reference to TS34.108 clause 6.10 Parameter Set (This IE is repeated for TFI number.) Not Present Reference to TS34.108 clause 6.10 Parameter Set Set All Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set DCH 5 Dedicated transport channels Reference to TS34.108 clause 6.10 Parameter Set Set (This IE is repeated for TFI number.) Not Present Reference to TS34.108 clause 6.10 Parameter Set Set All Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Set
Added or Reconfigured UL TrCH information <ul style="list-style-type: none"> - 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 	A2, A8	4 TrCHs(DCH for DCCH and 3DCHs for DTCH) DCH 5 Dedicated transport channels Reference to TS34.108 clause 6.10 Parameter Set Set (This IE is repeated for TFI number.) Not Present

Information Element	Condition	Value/remark
- Number of Transport blocks		Reference to TS34.108 clause 6.10 Parameter Set
- CHOICE Logical Channel list		All
- Semi-static Transport Format information		Reference to TS34.108 clause 6.10 Parameter Set
- 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 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
- 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		2
- 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
- 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		3
- TFS		
- CHOICE Transport channel type		Dedicated transport channels
- Dynamic Transport format information		
- RLC Size		Reference to TS34.108 clause 6.10 Parameter Set

Information Element	Condition	Value/remark
<ul style="list-style-type: none"> - 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 		(This IE is repeated for TFI number.) Not Present Reference to TS34.108 clause 6.10 Parameter Set All Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set
CHOICE <i>mode</i> <ul style="list-style-type: none"> - CPCH set ID - Added or Reconfigured TrCH information for DRAC list 	A1, A2, A3, A4, A5, A6, A7, A8	FDD Not Present Not Present
DL Transport channel information common for all transport channel <ul style="list-style-type: none"> - SCCPCH TFCS - CHOICE mode - CHOICE DL parameters 	A1, A2, A7, A8	Not Present FDD SameasUL
DL Transport channel information common for all transport channel <ul style="list-style-type: none"> - SCCPCH TFCS - CHOICE mode - CHOICE DL parameters - DL DCH TFCS - CHOICE TFCI Signalling - TFCI Field 1 Information - CHOICE TFCS representation - TFCS complete reconfigure - CHOICE CTFC Size - CTFC information - CTFC - Power offset information 	A3, A4, A5, A6	Not Present FDD Explicit Normal Complete reconfiguration Number of bits used must be enough to cover all combinations of CTFC from clause TS34.108 clause 6.10.2.4 Parameter Set. This IE is repeated for TFC numbers and reference to TS34.108 clause 6.10.2.4 Reference to TS34.108 clause 6.10.2.4 Parameter Set Not Present
Deleted DL TrCH information Added or Reconfigured DL TrCH information <ul style="list-style-type: none"> - 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 - Uplink transport channel type - UL TrCH identity - DCH quality target - BLER Quality value 	A1, A2, A3, A4, A5, A6, A7, A8 A1	Not Present 1 DCH added, 1 DCH reconfigured DCH 6 Same as UL DCH 1 -2.0 DCH 10 Same as UL DCH 5 -2.0
Added or Reconfigured DL TrCH information <ul style="list-style-type: none"> - Downlink transport channel type 	A3, A4, A5, A6, A7	2 TrCHs(DCH for DCCH and DCH for DTCH) DCH

Information Element	Condition	Value/remark
<ul style="list-style-type: none"> - 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 - CHOICE Logical Channel list - 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 - 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 - CHOICE Logical Channel list - 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 		<p>Not Present DCH 7 Explicit</p> <p>Dedicated transport channel</p> <p>Reference to TS34.108 clause 6.10 Parameter Set (This IE is repeated for TFI number.)</p> <p>Not Present Reference to TS34.108 clause 6.10 Parameter Set</p> <p>All</p> <p>Reference to TS34.108 clause 6.10 Parameter Set</p> <p>Reference to TS34.108 clause 6.10 Parameter Set</p> <p>Reference to TS34.108 clause 6.10 Parameter Set</p> <p>Reference to TS34.108 clause 6.10 Parameter Set</p> <p>Reference to TS34.108 clause 6.10 Parameter Set</p> <p>Not Present DCH 8 Explicit</p> <p>Dedicated transport channel</p> <p>Reference to TS34.108 clause 6.10 Parameter Set (This IE is repeated for TFI number.)</p> <p>Not Present Reference to TS34.108 clause 6.10 Parameter Set</p> <p>All</p> <p>Reference to TS34.108 clause 6.10 Parameter Set</p> <p>Reference to TS34.108 clause 6.10 Parameter Set</p> <p>Reference to TS34.108 clause 6.10 Parameter Set</p> <p>Reference to TS34.108 clause 6.10 Parameter Set</p> <p>Reference to TS34.108 clause 6.10 Parameter Set</p> <p>Not Present</p>
<p>Frequency info</p> <ul style="list-style-type: none"> - UARFCN uplink (Nu) - UARFCN downlink (Nd) 	A1, A2, A3, A4, A5, A7, A8	<p>Reference to clause 5.1 Test frequencies if frequency is different from the current frequency otherwise set to Not Present. Reference to clause 5.1 Test frequencies if frequency is different from the current frequency otherwise set to Not Present.</p>
Frequency info	A6	Not Present
Maximum allowed UL TX power	A1, A2, A3,	33dBm

Information Element	Condition	Value/remark
	A4, A7, A8	
Maximum allowed UL TX power	A5, A6	Not Present
CHOICE channel requirement	A1, A2, A3, A4, A7, A8	Uplink DPCH info
<ul style="list-style-type: none"> - Uplink DPCH power control info - DPCCH power offset - PC Preamble - SRB delay - Power Control Algorithm - TPC step size - Scrambling code type - Scrambling code number - Number of DPDCH - spreading factor - TFCI existence - Number of FBI bit - Puncturing Limit 		-80dB (i.e. ASN.1 IE value of -40) 1 frame 7 frames Algorithm1 1dB Long 0 (0 to 16777215) Not Present(1) Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set
CHOICE channel requirement	A5,A6	Not Present
CHOICE Mode	A1, A2, A3, A4, A5, A6, A7, A8	FDD
<ul style="list-style-type: none"> - Downlink PDSCH information 		Not Present
Downlink information common for all radio links <ul style="list-style-type: none"> - Downlink DPCH info common for all RL - Timing indicator - CFN-targetSFN frame offset - Downlink DPCH power control information - DPC mode - CHOICE mode - Power offset $P_{Pilot-DPDCH}$ - DL rate matching restriction information - Spreading factor - Fixed or Flexible Position - TFCI existence - CHOICE SF - CHOICE mode - DPCH compressed mode info - TX Diversity mode - SSDT information - Default DPCH Offset Value 	A1, A2, A3,	Maintain Not Present 0 (single) FDD 0 Not Present Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set FDD Not Present None Not Present Not Present
Downlink information common for all radio links <ul style="list-style-type: none"> - Downlink DPCH info common for all RL - Timing indicator - CFN-targetSFN frame offset - Downlink DPCH power control information - DPC mode - CHOICE mode - Power offset $P_{Pilot-DPDCH}$ - DL rate matching restriction information - Spreading factor - Fixed or Flexible Position - TFCI existence - CHOICE SF - CHOICE mode - DPCH compressed mode info 	A4,A7,A8	Initialise Not Present 0 (single) FDD 0 Not Present Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set FDD Not Present

Information Element	Condition	Value/remark
<ul style="list-style-type: none"> - TX Diversity mode - SSDT information - Default DPCH Offset Value 		None Not Present Arbitrary set to value 0..306688 by step of 512
Downlink information common for all radio links	A5,A6	Not Present
Downlink information for each radio link list <ul style="list-style-type: none"> - Downlink information for each radio link <ul style="list-style-type: none"> - Choice mode - Primary CPICH info - Primary scrambling code - PDSCH with SHO DCH info - PDSCH code mapping - Downlink DPCH info for each RL - Primary CPICH usage for channel estimation - DPCH frame offset - Secondary CPICH info - DL channelisation code - Secondary scrambling code - Spreading factor - Code number - Scrambling code change - TPC combination index - SSDT Cell Identity - Closed loop timing adjustment mode - SCCPCH information for FACH 	A1, A2, A3, A4, A7, A8	FDD Ref. to the Default setting in TS34.108 clause 6.1 (FDD) Not Present Not Present Primary CPICH may be used Set to value Default DPCH Offset Value (as currently stored in SS) mod 38400 Not Present 1 Reference to TS34.108 clause 6.10 Parameter Set 0 No change 0 Not Present Not Present Not Present
Downlink information for each radio link list <ul style="list-style-type: none"> - Downlink information for each radio link - Choice mode - Primary CPICH info - Primary scrambling code - PDSCH with SHO DCH info - PDSCH code mapping - Downlink DPCH info for each RL - SCCPCH information for FACH 	A5	FDD Ref. to the Default setting in TS34.108 clause 6.1 (FDD) Not Present Not Present Not present Not Present
Downlink information for each 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

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
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 synchronisation info	Not checked

Contents of RADIO BEARER SETUP FAILURE message: AM

Information Element	Value/remark
Message Type	
RRC transaction identifier	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
Message Type	A1,A2,A3, A4,A5,A6	Arbitrarily selects an integer between 0 and 3
RRC transaction identifier		
Integrity check info		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.
- message authentication code		SS provides the value of this IE, from its internal counter.
- RRC message sequence number		Not Present
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
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
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". (UM DCCH for RRC) 1 Not Present Not Present Not Present Not Present Not Present Not Present (AM DCCH for RRC) 2 Not Present Not Present Not Present Not Present Not Present Not Present (AM DCCH for NAS_DT High priority) 3 Not Present Not Present Not Present Not Present Not Present Not Present (AM DCCH for NAS_DT Low priority) 4 Not Present Not Present Not Present Not Present Not Present (TM DTCH) 10 Not Present Not Present Not Present Not Present
- RB information to reconfigure		
- RB identity		
- PDCP info		
- PDCP SN info		
- RLC info		
- RB mapping info		
- RB stop/continue		
- RB information to reconfigure		
- RB identity		
- PDCP info		
- PDCP SN info		
- RLC info		
- RB mapping info		
- RB stop/continue		
- RB information to reconfigure		
- RB identity		
- PDCP info		
- PDCP SN info		
- RLC info		
- RB mapping info		
- RB stop/continue		
- RB information to reconfigure		
- RB identity		
- PDCP info		
- PDCP SN info		
- RLC info		
- RB mapping info		

Information Element	Condition	Value/remark
<ul style="list-style-type: none"> - PDCP info - PDCP SN info - RLC info - RB mapping info - RB stop/continue - RB information to reconfigure - RB identity - PDCP info - PDCP SN info - RLC info - RB mapping info - RB stop/continue - RB information to reconfigure - RB identity - PDCP info - PDCP SN info - RLC info - RB mapping info - RB stop/continue - RB information to reconfigure - RB identity - PDCP info - PDCP SN info - RLC info - RB mapping info - RB stop/continue 		<p>Not Present</p> <p>Not Present</p> <p>Not Present</p> <p>Not Present</p> <p>Not Present</p> <p>(AM DCCH for NAS_DT High priority)</p> <p>3</p> <p>Not Present</p> <p>Not Present</p> <p>Not Present</p> <p>Not Present</p> <p>Not Present</p> <p>(AM DCCH for NAS_DT Low priority)</p> <p>4</p> <p>Not Present</p> <p>Not Present</p> <p>Not Present</p> <p>Not Present</p> <p>Not Present</p> <p>(AM DTCH)</p> <p>20</p> <p>Not Present</p> <p>Not Present</p> <p>Not Present</p> <p>Not Present</p> <p>Not Present</p>
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 <ul style="list-style-type: none"> - PRACH TFCS - CHOICE mode - TFC subset - UL DCH TFCS - CHOICE TFCI signalling - TFCI Field 1 information - CHOICE TFCS representation - TFCS complete reconfigure information - CHOICE CTFC Size - CTFC information - CTFC - Power offset information - CHOICE Gain Factors - Gain factor β_c - Gain factor β_d - Reference TFC ID - CHOICE mode - Power offset P_{p-m} 	A3, A4	<p>Not Present</p> <p>FDD</p> <p>Not Present</p> <p>Normal</p> <p>Complete reconfiguration</p> <p>Number of bits used must be enough to cover all combinations of CTFC from TS34.108 clause 6.10.2.4 Parameter Set.</p> <p>This IE is repeated for TFC numbers and reference to TS34.108 clause 6.10.2.4 Parameter Set</p> <p>Reference to TS34.108 clause 6.10.2.4 Parameter Set</p> <p>Computed Gain Factors(The last TFC is set to Signalled Gain Factors)</p> <p>11 (below 64 kbps)</p> <p>9 (higher than 64 kbps)</p> <p>(Not Present if the CHOICE Gain Factors is set to ComputedGain Factors)</p> <p>15</p> <p>(Not Present if the CHOICE Gain Factors is set to ComputedGain Factors)</p> <p>0</p> <p>FDD</p> <p>Not Present</p>
Deleted UL TrCH information	A1, A2, A3, A4, A5,A6	Not Present
Added or Reconfigured UL TrCH information	A1, A2,	Not Present

Information Element	Condition	Value/remark
<p>Added or Reconfigured UL TrCH information</p> <ul style="list-style-type: none"> - 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 - 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 	<p>A5,A6 A4</p>	<p>2 TrCHs(DCH for DCCH and DCH for DTCH) DCH 5</p> <p>Dedicated transport channels</p> <p>Reference to TS34.108 clause 6.10 Parameter Set (This IE is repeated for TFI number.) Not Present Reference to TS34.108 clause 6.10 Parameter Set All</p> <p>Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set DCH 1</p> <p>Dedicated transport channels</p> <p>Reference to TS34.108 clause 6.10 Parameter Set (This IE is repeated for TFI number.) Not Present Reference to TS34.108 clause 6.10 Parameter Set All</p> <p>Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set</p>
<p>Added or Reconfigured UL TrCH information</p> <ul style="list-style-type: none"> - 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 	<p>A3</p>	<p>(DCH for DTCH) DCH 1</p> <p>Dedicated transport channels</p> <p>Reference to TS34.108 clause 6.10 Parameter Set (This IE is repeated for TFI number.) Not Present Reference to TS34.108 clause 6.10 Parameter Set All</p> <p>Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set</p>

Information Element	Condition	Value/remark
<ul style="list-style-type: none"> - Rate matching attribute - CRC size 		Set Reference to TS34.108 clause 6.10 Parameter Set Set Reference to TS34.108 clause 6.10 Parameter Set Set
CHOICE mode <ul style="list-style-type: none"> - CPCH set ID - Added or Reconfigured TrCH information for DRAC list 	A1,A2,A3,A4,A5,A6	FDD Not Present 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 <ul style="list-style-type: none"> - SCCPCH TFCS - CHOICE mode - CHOICE DL parameters - DL DCH TFCS - CHOICE TFCI Signalling - TFCI Field 1 Information - CHOICE TFCS representation - TFCS complete reconfigure - CHOICE CTFC Size - CTFC information - CTFC - Power offset information 	A3,A4	Not Present FDD Explicit Normal Complete reconfiguration Number of bits used must be enough to cover all combinations of CTFC from clause TS34.108 clause 6.10.2.4 Parameter Set. This IE is repeated for TFC numbers and reference to TS34.108 clause 6.10.2.4 Reference to TS34.108 clause 6.10.2.4 Parameter Set 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 <ul style="list-style-type: none"> - 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 	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 Parameter Set (This IE is repeated for TFI number.) Not Present Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set

Information Element	Condition	Value/remark
- BLER Quality value		-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 - CRC size - DCH quality target - BLER Quality value	A3	DCH 6 Explicit Dedicated transport channel Reference to TS34.108 clause 6.10 Parameter Set (This IE is repeated for TFI number.) Not Present Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set -2.0
Frequency info - UARFCN uplink (Nu) - UARFCN downlink (Nd)	A1,A2,A3, A4,A5	Reference to clause 5.1 Test frequencies 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 - Uplink DPCH power control info - DPCH power offset - PC Preamble - SRB delay - Power Control Algorithm - TPC step size - Scrambling code type - Scrambling code number - Number of DPDCH - spreading factor - TFCI existence - Number of FBI bit - Puncturing Limit	A1, A2, A3, A4	Uplink DPCH info -80dB (i.e. ASN.1 IE value of -40) 1 frame 7 frames Algorithm1 1dB Long 0 (0 to 16777215) Not Present(1) Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set
CHOICE channel requirement	A5, A6	Not Present
CHOICE Mode - Downlink PDSCH information	A1,A2,A3, A4,A5,A6	FDD Not Present
Downlink information common for all radio links	A5, A6	Not Present
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 - DPC mode - CHOICE mode	A1, A2, A3	Maintain Not Present 0 (single) FDD

Information Element	Condition	Value/remark
<ul style="list-style-type: none"> - Power offset $P_{\text{Pilot-DPCH}}$ - DL rate matching restriction information - Spreading factor - Fixed or Flexible Position - TFCI existence - CHOICE SF - DPCH compressed mode info - TX Diversity mode - SSDT information - Default DPCH Offset Value 		<p>0</p> <p>Not Present</p> <p>Reference to TS34.108 clause 6.10 Parameter Set</p> <p>Reference to TS34.108 clause 6.10 Parameter Set</p> <p>Reference to TS34.108 clause 6.10 Parameter Set</p> <p>Reference to TS34.108 clause 6.10 Parameter Set</p> <p>Reference to TS34.108 clause 6.10 Parameter Set</p> <p>Not Present</p> <p>None</p> <p>Not Present</p> <p>Not Present</p>
<p>Downlink information common for all radio links</p> <ul style="list-style-type: none"> - Downlink DPCH info common for all RL - Timing indicator - CFN-targetSFN frame offset - Downlink DPCH power control information - DPC mode - CHOICE mode - Power offset $P_{\text{Pilot-DPCH}}$ - DL rate matching restriction information - Spreading factor - Fixed or Flexible Position - TFCI existence - CHOICE SF - DPCH compressed mode info - TX Diversity mode - SSDT information - Default DPCH Offset Value 	A4	<p>Initialise</p> <p>Not Present</p> <p>0 (single)</p> <p>FDD</p> <p>0</p> <p>Not Present</p> <p>Reference to TS34.108 clause 6.10 Parameter Set</p> <p>Reference to TS34.108 clause 6.10 Parameter Set</p> <p>Reference to TS34.108 clause 6.10 Parameter Set</p> <p>Reference to TS34.108 clause 6.10 Parameter Set</p> <p>Reference to TS34.108 clause 6.10 Parameter Set</p> <p>Not Present</p> <p>None</p> <p>Not Present</p> <p>Present Arbitrary set to value 0..306688 by step of 512</p>
<p>Downlink information per radio link list</p> <ul style="list-style-type: none"> -Downlink information for each radio link <ul style="list-style-type: none"> - Choice mode - Primary CPICH info - Primary scrambling code - PDSCH with SHO DCH info - PDSCH code mapping - Downlink DPCH info for each RL - Primary CPICH usage for channel estimation - DPCH frame offset - Secondary CPICH info - Secondary scrambling code - channelisation code - DL channelisation code - Secondary scrambling code - Spreading factor - Code number - Scrambling code change - TPC combination index - SSDT Cell Identity - Closed loop timing adjustment mode - SCCPCH information for FACH 	A1, A2, A3	<p>FDD</p> <p>Ref. to the Default setting in TS34.108 clause 6.1 (FDD)</p> <p>Not Present</p> <p>Not Present</p> <p>Primary CPICH may be used</p> <p>Set to value Default DPCH Offset Value (as currently stored in SS) mod 38400</p> <p>Not Present</p> <p>2</p> <p>Reference to TS34.108 clause 6.10 Parameter Set</p> <p>0</p> <p>No change</p> <p>0</p> <p>Not Present</p> <p>Not Present</p> <p>Not Present</p>
<p>Downlink information per radio link list</p> <ul style="list-style-type: none"> -Downlink information for each radio link <ul style="list-style-type: none"> - Choice mode - Primary CPICH info - Primary scrambling code 	A4	<p>FDD</p> <p>Ref. to the Default setting in TS34.108 clause 6.1 (FDD)</p>

Information Element	Condition	Value/remark
<ul style="list-style-type: none"> - PDSCH with SHO DCH info - PDSCH code mapping - Downlink DPCH info for each RL - Primary CPICH usage for channel estimation - DPCH frame offset - Secondary CPICH info - Secondary scrambling code - channelisation code - DL channelisation code - Secondary scrambling code - Spreading factor - Code number - Scrambling code change - TPC combination index - SS DT Cell Identity - Closed loop timing adjustment mode - SCCPCH information for FACH 		Not Present Not Present Primary CPICH may be used Set to value : Default DPCH Offset Value mod 38400 Not Present 2 Reference to TS34.108 clause 6.10 Parameter Set 0 No change 0 Not Present Not Present Not Present
<ul style="list-style-type: none"> - Downlink information for each radio link - Choice mode - Primary CPICH info - Primary scrambling code - PDSCH with SHO DCH info - PDSCH code mapping - Downlink DPCH info for each RL - SCCPCH Information for FACH 	A5	FDD Ref. to the Default setting in TS34.108 clause 6.1 (FDD) Not Present Not Present Not present Not Present
<ul style="list-style-type: none"> - 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 RADIO BEARER RECONFIGURATION FAILURE message: AM

Information Element	Value/remark
Message Type RRC transaction identifier	Checked to see if it is set to identical value of the same IE in the downlink RADIO BEARER RECONFIGURATION message.
Integrity check info <ul style="list-style-type: none"> - Message authentication code - RRC Message sequence number 	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. This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.
Failure cause Radio bearers for which reconfiguration would have succeeded List	Checked to see if it meets test requirement 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 - RRC Message sequence number	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. 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 synchronisation info	Not checked

Contents of RADIO BEARER RELEASE message: AM or UM

Information Element		Value/remark
Message Type	A1, A2, A3, A4, A5, A6, A7, A8	Arbitrarily selects an integer between 0 and 3
RRC transaction identifier		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.
Integrity check info		SS provides the value of this IE, from its internal counter.
- message authentication code		Not Present
- RRC message sequence number		Not Present
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	A1,A2, A7, A8	10
- RB identity		
RB information to release	A2, A8	11
- RB identity		
RB information to release	A2, A8	12
- RB identity		
RB information to release	A3, A4, A5, A6	20
- RB identity		
RB information to be affected	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 for all transport channels	A1, A2, A3, A4, A5, A6, A7, A8	TFCS reconfigured to fit the new transport channel configuration.
Deleted UL TrCH Information	A1,A2, A3, A4, A5, A6, A7, A8	DCH 1
- Uplink transport channel type		
- Transport channel identity		
Deleted UL TrCH Information	A2, A8	DCH 2
- Uplink transport channel type		
- Transport channel identity		
Deleted UL TrCH Information	A2, A8	DCH 3
- Uplink transport channel type		
- Transport channel identity		

Information Element		Value/remark
Added or Reconfigured UL TrCH information	A5, A6, A7, A8	Not Present
Added or Reconfigured UL TrCH information	A1, A2, A3, A4	TrCHs(DCH for DCCH)
- 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 TS34.108 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 TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- Number of Transport blocks		According to TS34.108 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 TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- Type of channel coding		According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- Coding Rate		According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- Rate matching attribute		According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- CRC size		According to TS34.108 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.
Deleted DL TrCH Information	A1, A2, A3, A4, A5, A6, A7, A8	
- 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
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		Not Present
Frequency info	A1,A2,A3, A4,A5, A7, A8	
- 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
CHOICE channel requirement	A1,A2,A3, A4	Uplink DPCH info
- Uplink DPCH power control info		
- DPCH power offset		-80dB (i.e. ASN.1 IE value of -40)

Information Element		Value/remark
<ul style="list-style-type: none"> - PC Preamble - SRB delay - Power Control Algorithm - TPC step size - Scrambling code type - Scrambling code number - Number of DPDCH - spreading factor - TFCI existence - Number of FBI bit - Puncturing Limit 		1 frame 7 frames Algorithm1 1dB Long 0 (0 to 16777215) Not Present(1) Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set
CHOICE Mode	A1,A2,A3, A4,A5,A6, A7, A8	FDD
<ul style="list-style-type: none"> - Downlink PDSCH information 		Not Present
Downlink information common for all radio links	A5, A6, A7, A8	Not Present
Downlink information common for all radio links <ul style="list-style-type: none"> - Downlink DPCH info common for all RL - Timing indicator - CFN-targetSFN frame offset - Downlink DPCH power control information - DPC mode - CHOICE mode - Power offset $P_{\text{Pilot-DPCH}}$ - DL rate matching restriction information - Spreading factor - Fixed or Flexible Position - TFCI existence - CHOICE SF - DPCH compressed mode info - TX Diversity mode - SSDT information - Default DPCH Offset Value 	A1,A2, A3	Maintain Not Present 0 (single) FDD 0 Not Present Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Not Present None Not Present Not Present
Downlink information common for all radio links <ul style="list-style-type: none"> - Downlink DPCH info common for all RL - Timing indicator - CFN-targetSFN frame offset - Downlink DPCH power control information - DPC mode - CHOICE mode - Power offset $P_{\text{Pilot-DPCH}}$ - DL rate matching restriction information - Spreading factor - Fixed or Flexible Position - TFCI existence - CHOICE SF - DPCH compressed mode info - TX Diversity mode - SSDT information - Default DPCH Offset Value 	A4	Initialise Not Present 0 (single) FDD 0 Not Present Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Not Present None Not Present Arbitrary set to value 0..306688 by step of 512
Downlink information for each radio link list <ul style="list-style-type: none"> -Downlink information for each radio link <ul style="list-style-type: none"> - Choice mode - Primary CPICH info 	A1,A2,A3	FDD

Information Element		Value/remark
<ul style="list-style-type: none"> - Primary scrambling code - PDSCH with SHO DCH info - PDSCH code mapping - Downlink DPCH info for each RL - Primary CPICH usage for channel estimation - DPCH frame offset - Secondary CPICH info - Secondary scrambling code - channelisation code - DL channelisation code - Secondary scrambling code - Spreading factor - Code number - Scrambling code change - TPC combination index - SSDT Cell Identity - Closed loop timing adjustment mode - SCCPCH information for FACH 		<p>Ref. to the Default setting in TS34.108 clause 6.1 (FDD) Not Present Not Present</p> <p>Primary CPICH may be used Set to value Default DPCH Offset Value (as currently stored in SS) mod 38400 Not Present</p> <p>3 Reference to TS34.108 clause 6.10 Parameter Set</p> <p>0 No change</p> <p>0 Not Present</p> <p>Not Present Not Present Not Present</p>
<p>Downlink information for each radio link list</p> <ul style="list-style-type: none"> -Downlink information for each radio link <ul style="list-style-type: none"> - Choice mode - Primary CPICH info - Primary scrambling code - PDSCH with SHO DCH info - PDSCH code mapping - Downlink DPCH info for each RL - Primary CPICH usage for channel estimation - DPCH frame offset - Secondary CPICH info - Secondary scrambling code - channelisation code - DL channelisation code - Secondary scrambling code - Spreading factor - Code number - Scrambling code change - TPC combination index - SSDT Cell Identity - Closed loop timing adjustment mode - SCCPCH information for FACH 	A4	<p>FDD</p> <p>Ref. to the Default setting in TS34.108 clause 6.1 (FDD) Not Present Not Present</p> <p>Primary CPICH may be used Set to value : Default DPCH Offset Value mod 38400 Not Present</p> <p>3 Reference to TS34.108 clause 6.10 Parameter Set</p> <p>0 No change</p> <p>0 Not Present</p> <p>Not Present Not Present Not Present</p>
<ul style="list-style-type: none"> - Downlink information for each radio link - Choice mode - Primary CPICH info - Primary scrambling code - PDSCH with SHO DCH info - PDSCH code mapping - Downlink DPCH info for each RL - SCCPCH information for FACH 	A5, A7, A8	<p>FDD</p> <p>Ref. to the Default setting in TS34.108 clause 6.1 (FDD) Not Present Not Present Not present Not Present</p>
<ul style="list-style-type: none"> - 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"
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 COMPLETE message: AM

Message Type	Checked to see the value is identical to the same IE in the downlink RADIO BEARER RELEASE message.
RRC transaction identifier	
Integrity check info	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.
- Message authentication code	
- 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 synchronisation info	Not checked

Contents of RADIO BEARER RELEASE FAILURE message: AM

Information Element	Value/remark
Message Type	Checked to see if it is set to identical value of the same IE in the downlink RADIO BEARER RELEASE message.
RRC transaction identifier	
Integrity check info	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.
- Message authentication code	
- 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
Message Type	Set to the UE's TMSI and LAI.
Initial UE identity	
- CHOICE UE id type	To be checked against requirement if specified
- TMSI and LAI (GSM-MAP)	
Establishment cause	FALSE
Protocol error indicator	This IE will not be checked by default behaviour, but in specific test case.
UE Specific Behaviour Information 1 idle	To be checked against requirement if specified
Measured results on RACH	

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
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.
- SRNC identity	0000 0000 0001B
- S-RNTI	0000 0000 0000 0000 0001B
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. 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.
- Message authentication code	SS provides the value of this IE, from its internal counter.
- RRC Message sequence number	2 (for CELL_DCH state). Not Present (for UE in other connected mode states).
N308	
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
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
Signalling RB information to setup	(UM DCCH for RRC)
- RB identity	Not Present
- CHOICE RLC info type	
- RLC info	UM RLC
- CHOICE Uplink RLC mode	Not Present
- Transmission RLC discard	UM RLC
- CHOICE Downlink RLC mode	
- 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 TS34.108 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	
- RLC info	AM RLC
- CHOICE Uplink RLC mode	
- Transmission RLC discard	
- SDU discard mode	No discard
- MAX_DAT	15
- Transmission window size	32
- Timer_RST	500
- Max_RST	1

Information Element	Value/remark
- 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	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 TS34.108 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
- 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

Information Element	Value/remark
- 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 TS34.108 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
- 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 Element	Value/remark
- 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 TS34.108 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	Addition
- TFCS complete reconfigure	
- CHOICE CTFC Size	2bit CTFC
- CTFC information	This IE is repeated for TFC numbers according to TS 34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- CTFC	According to TS34.108 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 β_c	11 (below 64 kbps) 9 (higher than 64 kbps) (Not Present if the above is set to Computed Gain Factors)
- Gain factor β_d	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 TS 34.108 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 TS 34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)

Information Element	Value/remark
- Number of Transport blocks	According to TS 34.108 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 TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- Type of channel coding	According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- Coding Rate	According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- Rate matching attribute	According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- CRC size	According to TS34.108 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
- 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 TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- TFCI existence	According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- Number of FBI bit	According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- Puncturing Limit	According to TS34.108 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	Initialise
- CFN-targetSFN frame offset	Not Present
- CHOICE mode	FDD
- Downlink DPCH power control information	
- DPC mode	0 (single)
- Power offset $P_{\text{Pilot-DPCH}}$	0
- DL rate matching restriction information	Not Present
- Spreading factor	According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- Fixed or Flexible Position	According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- TFCI existence	According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- CHOICE SF	According to TS34.108 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

Information Element	Value/remark
- 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
- PDSCH code mapping	Not Present
- 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 38400
- Secondary CPICH info	Not Present
- DL channelisation code	
- Secondary scrambling code	1
- Spreading factor	According to TS34.108 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
- SSTD Cell Identity	Not Present
- Closed loop timing adjustment mode	Not Present
- SCCPCH information for FACH	Not Present

Contents of RRC CONNECTION SETUP message: UM (Transition to CELL_FACH)

Information Element	Value/remark
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
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
- 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

Information Element	Value/remark
- 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 TS34.108 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
- 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	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 TS34.108 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

Information Element	Value/remark
- 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	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 TS34.108 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)
- 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	32

Information Element	Value/remark
- 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 TS34.108 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
- CHOICE Mode	FDD
- TFC subset	Not Present
- UL DCH TFCS	
- CHOICE TFCI signalling	Normal
- TFCI Field 1 information	
- CHOICE TFCS representation	Addition
- TFCS complete reconfigure	
- CHOICE CTFC Size	2bit CTFC
- CTFC information	This IE is repeated for TFC numbers according to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- CTFC	According to TS34.108 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)

Information Element	Value/remark
- Gain factor β_c	11 (below 64 kbps) 9 (higher than 64 kbps) (Not Present if the above is set to Computed Gain Factors)
- Gain factor β_d	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	Value 16 results in an RLC size of 144 bits; OctetModeType1 ((8*sizeType1)+16).
- Number of TBs and TTI List	List with single entry
- Transmission Time Interval	Not Present
- Number of Transport blocks	0
- 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	160
- 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
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	Not checked
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 - RRC Message sequence number Identification of received message Protocol error information - Protocol error cause	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. This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value. Not Checked Refer to test requirement.

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
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	$(256+CFN-(CFN \text{ MOD } 8 + 8)) \text{ MOD } 256$
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
RRC State indicator	A1, A2, A3,	CELL_DCH

Information Element	Condition	Value/remark
	A4	
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 synchronisation 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	<p>Not Present</p> <p>FDD</p> <p>Not Present</p> <p>Normal</p> <p>Complete reconfiguration</p> <p>Number of bits used must be enough to cover all combinations of CTFC from TS34.108 clause 6.10.2.4 Parameter Set.</p> <p>This IE is repeated for TFC numbers and reference to TS34.108 clause 6.10.2.4 Parameter Set</p> <p>Reference to TS34.108 clause 6.10.2.4 Parameter Set</p> <p>Computed Gain Factors(The last TFC is set to Signalled Gain Factors)</p> <p>11 (below 64 kbps)</p> <p>9 (higher than 64 kbps)</p> <p>(Not Present if the CHOICE Gain Factors is set to ComputedGain Factors)</p> <p>15</p> <p>(Not Present if the CHOICE Gain Factors is set to ComputedGain Factors)</p> <p>0</p> <p>FDD</p> <p>Not Present</p>
<ul style="list-style-type: none"> - PRACH TFCS - CHOICE mode - TFC subset - UL DCH TFCS - CHOICE TFCI signalling - TFCI Field 1 information - CHOICE TFCS representation - TFCS complete reconfigure information - CHOICE CTFC Size - CTFC information - CTFC - Power offset information - CHOICE Gain Factors - Gain factor β_c - Gain factor β_d - Reference TFC ID - CHOICE mode - Power offset P_{p-m} 		
Added or Reconfigured UL TrCH information	A1, A2, A5, A6	Not Present

Information Element	Condition	Value/remark
Added or Reconfigured UL TrCH information <ul style="list-style-type: none"> - 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 - 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 	A4	2 TrCHs(DCH for DCCH and DCH for DTCH) DCH 5 Dedicated transport channels Reference to TS34.108 clause 6.10 Parameter Set (This IE is repeated for TFI number.) Not Present Reference to TS34.108 clause 6.10 Parameter Set All Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set DCH 1 Dedicated transport channels Reference to TS34.108 clause 6.10 Parameter Set (This IE is repeated for TFI number.) Not Present Reference to TS34.108 clause 6.10 Parameter Set All Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set
Added or Reconfigured UL TrCH information <ul style="list-style-type: none"> - 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 	A3	(DCH for DTCH) DCH 1 Dedicated transport channels Reference to TS34.108 clause 6.10 Parameter Set (This IE is repeated for TFI number.) Not Present Reference to TS34.108 clause 6.10 Parameter Set All Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set

Information Element	Condition	Value/remark
	A4,A5,A6	
CHOICE <i>channel requirement</i>	A5, A6	Not Present
CHOICE channel requirement <ul style="list-style-type: none"> - Uplink DPCH power control info - DPCCH power offset - PC Preamble - SRB delay - Power Control Algorithm - TPC step size - Scrambling code type - Scrambling code number - Number of DPDCH - spreading factor - TFCI existence - Number of FBI bit - Puncturing Limit 	A1, A2, A3, A4 Uplink DPCH info -80dB (i.e. ASN.1 IE value of -40) 1 frame 7 frames Algorithm1 1dB Long 0 (0 to 16777215) Not Present(1) Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set	
CHOICE Mode <ul style="list-style-type: none"> - Downlink PDSCH information 	A1,A2,A3, A4,A5,A6	FDD Not Present
Downlink information common for all radio links	A5, A6	Not Present
Downlink information common for all radio links <ul style="list-style-type: none"> - Downlink DPCH info common for all RL - Timing indicator - CFN-targetSFN frame offset - Downlink DPCH power control information - DPC mode - CHOICE mode - Power offset $P_{\text{Pilot-DPDCH}}$ - DL rate matching restriction information - Spreading factor - Fixed or Flexible Position - TFCI existence - CHOICE SF - DPCH compressed mode info - TX Diversity mode - SSDT information - Default DPCH Offset Value 	A1, A2, A3 Maintain Not Present 0 (single) FDD 0 Not Present Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Not Present None Not Present Not Present	
Downlink information common for all radio links <ul style="list-style-type: none"> - Downlink DPCH info common for all RL - Timing indicator - CFN-targetSFN frame offset - Downlink DPCH power control information - DPC mode - CHOICE mode - Power offset $P_{\text{Pilot-DPDCH}}$ - DL rate matching restriction information - Spreading factor - Fixed or Flexible Position - TFCI existence - CHOICE SF - DPCH compressed mode info - TX Diversity mode - SSDT information - Default DPCH Offset Value 	A4	Initialise Not Present 0 (single) FDD 0 Not Present Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Not Present None Not Present Arbitrary set to value 0..306688 by step of 512

Information Element	Condition	Value/remark
Downlink information for each radio link list - Downlink information for each radio links - CHOICE mode - Primary CPICH info - Primary scrambling code - PDSCH with SHO DCH info - PDSCH code mapping - Downlink DPCH info for each RL - Primary CPICH usage for channel estimation - DPCH frame offset - Power offset $P_{\text{Pilot-DPDCH}}$ - Secondary CPICH info - DL channelisation code - Secondary scrambling code - Spreading factor - Code number - Scrambling code change - TPC combination index - SS DT Cell Identity - Closed loop timing adjustment mode - SCCPCH information for FACH	A1, A2, A3	FDD Ref. to the Default setting in TS34.108 clause 6.1 (FDD) Not Present Not Present Primary CPICH may be used Set to value Default DPCH Offset Value (as currently stored in SS) mod 38400 0 Not Present 4 Reference to TS34.108 clause 6.10 Parameter Set Set 0 No change 0 Not Present Not Present Not Present
Downlink information for each radio link list - Downlink information for each radio links - CHOICE mode - Primary CPICH info - Primary scrambling code - PDSCH with SHO DCH info - PDSCH code mapping - Downlink DPCH info for each RL - Primary CPICH usage for channel estimation - DPCH frame offset - Power offset $P_{\text{Pilot-DPDCH}}$ - Secondary CPICH info - DL channelisation code - Secondary scrambling code - Spreading factor - Code number - Scrambling code change - TPC combination index - SS DT Cell Identity - Closed loop timing adjustment mode - SCCPCH information for FACH	A4	FDD Ref. to the Default setting in TS34.108 clause 6.1 (FDD) Not Present Not Present Primary CPICH may be used Set to value: Default DPCH Offset Value mod 38400 0 Not Present 4 Reference to TS34.108 clause 6.10 Parameter Set Set 0 No change 0 Not Present Not Present Not Present
- Downlink information for each radio link - Choice mode - Primary CPICH info - Primary scrambling code - PDSCH with SHO DCH info - PDSCH code mapping - Downlink DPCH info for each RL - SCCPCH information for FACH	A5	FDD Ref. to the Default setting in TS34.108 clause 6.1 (FDD) Not Present Not Present Not present Not Present
- 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 synchronisation info	Not checked

Contents of TRANSPORT CHANNEL RECONFIGURATION FAILURE message: AM

Information Element	Value/remark
Message Type	
RRC transaction identifier	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 <i>Subset representation</i>	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 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	
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 34.123-2 (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 34.123-2 (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 INFORMATION 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 synchronisation 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	2000 milliseconds
- N301	2
- T302	4000 milliseconds
- N302	3
- T304	1000 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	1800 seconds
CN information info	Not Present
URA identity	Not present
Downlink counter synchronisation 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 synchronisation info	Not checked

9.1.2 Default Message Contents for Signalling (TDD)

Contents of RRC STATUS message: AM

Information Element	Value/remark
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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.

Information Element	Value/remark
- 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 synchronisation 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	

Information Element	Value/remark
- T301	2000 milliseconds
- N301	2
- T302	4000 milliseconds
- N302	3
- T304	1000 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	1800 seconds
CN Information info	Not present
URA identity	Not present
Downlink counter synchronisation 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 synchronisation 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

Information Element	Value/remark
- 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	2047
- 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	6400
- Max turbo coded bits received	6400
- Max number of simultaneous transport channels	8
- Maximum number of simultaneous CCH	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	6400
- Max convolutionally coded bits transmitted	6400
- Max turbo coded bits transmitted	6400
- Max number of simultaneous transport channels	8
- Max number of simultaneous CCH 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

Information Element	Value/remark
- 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	FALSE
- Network Assisted GPS support	None
- Support for GPS timing of cell frames	FALSE
measurement	
- Support for IPDL	FALSE
- Support for RX-TX time difference type2	FALSE
measurement	
- Support for Up measurement validity 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
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 (1.28 Mcps TDD)

Information Element	Condition	Value/remark
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

Information Element	Condition	Value/remark
- RRC message sequence number Integrity protection mode info Ciphering mode info Activation time Activation time New U-RNTI	A1, A2, A3 A4, A5, A6	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 Now 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
RRC State indicator	A1, A2, A3, A4	CELL_DCH
RRC State indicator	A5, A6	CELL_FACH
UTRAN DRX cycle length coefficient CN information info URA identity Downlink counter synchronisation info	A1, A2, A3, A4,A5,A6	Not Present Not Present Not Present
UL Transport channel information for all transport channels	A1, A2, A5, A6	Not Present
UL Transport channel information for all transport channels - PRACH TFCS - CHOICE mode - Individual UL CCTrCH information - UL TFCS Identity - TFCS ID - Shared Channel Indicator - UL TFCS - CHOICE <i>TFCI signalling</i> - TFCI Field 1 Information - CHOICE <i>TFCS representation</i> - TFCS complete reconfiguration information - CHOICE <i>CTFC Size</i> - CTFC information - CTFC - Power offset information - CHOICE Gain Factors - Reference TFC ID - CHOICE Gain Factors - CHOICE mode - Gain Factor β_d - Reference TFC ID - CHOICE mode - TFC subset - CHOICE Subset representation - TFC subset list	A3, A4	Not Present TDD 1 FALSE Normal Complete reconfiguration Number of bits used must be enough to cover all combinations of CTFC from TS34.108 clause 6.11.5.4 Parameter Set. This IE is repeated for TFC numbers and reference to TS34.108 clause 6.11.5.4 Parameter Set Reference to TS34.108 clause 6.11.5.4 Parameter Set Computed Gain Factors(The last TFC is set to Signalled Gain Factors) 0 Integer(0.. 3) Signalled Gain Factors(Not Present if the CHOICE Gain Factors is set to ComputedGain Factors) TDD 15 0 Integer(0.. 3) TDD Full transport format combination set Not Present
Added or Reconfigured TrCH information list	A1, A2, A5, A6	Not Present

Information Element	Condition	Value/remark
Added or Reconfigured TrCH information list - 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 - 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	A4	2 TrCHs(DCH for DCCH and DCH for DTCH) DCH 5 Dedicated transport channels Reference to TS34.108 clause 6.11 Parameter Set This IE is repeated for maxTF number Not Present Reference to TS34.108 clause 6.11 Parameter Set All Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set DCH 1 Dedicated transport channels Reference to TS34.108 clause 6.11 Parameter Set This IE is repeated for maxTF number Not Present Reference to TS34.108 clause 6.11 Parameter Set All Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set
Added or Reconfigured TrCH information list - 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	A3 1 to maxTF	(DCH for DTCH) DCH 1 Dedicated transport channels Reference to TS34.108 clause 6.11 Parameter Set (This IE is repeated for TF number.) Not Present Reference to TS34.108 clause 6.11 Parameter Set All Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set

Information Element	Condition	Value/remark
Added or Reconfigured TrCH information list - 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 - Transparent mode signalling info - 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 - 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 - Transparent mode signalling info	A4	2 TrCHs(DCH for DCCH and DCH for DTCH) DCH 10 Same as UL DCH 5 -2.0 Real(-6.3..0 by step of 0.1) Not Present DCH 6 Explicit Dedicated transport channels Reference to TS34.108 clause 6.11 Parameter Set (This IE is repeated for TF number.) Not Present Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set -2.0 Not Present
Added or Reconfigured TrCH information list - 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 - 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 - Transparent mode signalling info	A3	DCH 6 Explicit Dedicated transport channels Reference to TS34.108 clause 6.11 Parameter Set (This IE is repeated for TF number.) Not Present Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set -2.0 Not Present
Frequency info - Choice mode	A1, A2, A3, A4, A5	TDD

Information Element	Condition	Value/remark
- 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		TDD
- CHOICE mode		1.28 Mcps TDD
- CHOICE TDD option		-80 Integer(-120...-58 by step of 1)
- PRXPDPCHdes		Individually Signalled
- CHOICE UL OL PC info		1.28 Mcps TDD
- CHOICE TDD option		1
- TPC step size		20 Integer(6..43)
- Primary CCPCH Tx Power		TDD
- CHOICE mode		Enabled
- Uplink Timing Advance Control		1.28 Mcps TDD
- CHOICE Timing Advance		
- CHOICE TDD option		
- Uplink synchronisation parameters		
- Uplink synchronisation step size		1
- Uplink synchronisation frequency		1
- Synchronisation 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 TS34.108 Parameter set.
- Time info		(256+CFN-(CFN MOD 8 + 8))MOD 256
- Activation time		Infinite
- Duration		
- Common timeslot info		Default value is "Frame"
- 2 nd interleaving mode		Reference to TS34.108 clause 6 Parameter set
- TFCI coding		Reference to TS34.108 clause 6 Parameter set
- Puncturing limit		1
- Repetition period		
- Repetition length		
- Uplink DPCH timeslots and code		FALSE
- Dynamic SF usage		
- First individual timeslot info		
- Timeslot number		1.28 Mcps TDD
- CHOICE TDD option		1 OR 2 OR 3
- Timeslot number		TRUE
- TFCI existence		
- Midamble shift and burst type		
- CHOICE TDD option		1.28 Mcps TTD
- Midamble allocation mode		Default midamble
- Midamble configuration		16

Information Element	Condition	Value/remark
<ul style="list-style-type: none"> - Midamble Shift - CHOICE TDD option - Modulation - SS-TPC Symbols - Additional TPC-SS Symbols - First timeslot Code List - channelisation codes - CHOICE more timeslots - UL CCTrCH List to Remove <p>CHOICE Mode</p> <p>Downlink HS-PDSCH Information</p> <p>Downlink information common for all radio links</p> <ul style="list-style-type: none"> - Downlink DPCH info common for all RL - Timing indication - CFN-targetSFN frame offset - Downlink DPCH power control information 	<p>A1, A2, A3, A4, A5, A6 A1, A2, A3, A4, A5, A6 A1, A2, A3</p>	<p>Not Present</p> <p>1.28 Mcps TDD</p> <p>QPSK</p> <p>1</p> <p>Not present</p> <p>Repeated (1,2) for each channelisation code assigned in the slot to meet the needs of TS34.108 clause 6 Parameter Set. (SF/ i) where i denotes an unassigned code matching the SF specified in TS34.108 clause 6 Parameter Set.</p> <p>No more timeslots</p> <p>Not present</p> <p>TDD</p> <p>Not Present</p> <p>Maintain</p> <p>Not Present</p>
<ul style="list-style-type: none"> - CHOICE mode - TPC Step Size - MAC-d HFN initial value - CHOICE mode - CHOICE mode - CHOICE TDD option - TSTD indicator - Default DPCH Offset Value <p>Downlink information common for all radio links</p> <ul style="list-style-type: none"> - Downlink DPCH info common for all RL - Timing indication - CFN-targetSFN frame offset - Downlink DPCH power control information <ul style="list-style-type: none"> - CHOICE mode - TPC Step Size - MAC-d HFN initial value - CHOICE mode - CHOICE mode - CHOICE TDD option - TSTD indicator - Default DPCH Offset Value 	<p>A4</p>	<p>TDD</p> <p>1</p> <p>Not Present</p> <p>TDD</p> <p>TDD</p> <p>1.28 Mcps TDD</p> <p>FALSE</p> <p>Not Present</p> <p>Initialise</p> <p>Not Present</p> <p>TDD</p> <p>1</p> <p>Not Present</p> <p>TDD</p> <p>TDD</p> <p>1.28 Mcps TDD</p> <p>FALSE</p>
<ul style="list-style-type: none"> - CHOICE mode - Default DPCH Offset Value <p>Downlink information common for all radio links</p> <p>Downlink information per radio link list</p> <ul style="list-style-type: none"> - Downlink information for each radio link - Choice mode - Primary CCPCH info - Choice mode - Choice TDD Option - TSTD indicator - Cell parameters ID - SCTD indicator <ul style="list-style-type: none"> - Downlink DPCH info for each RL - CHOICE mode - DL CCTrCh List - TFCS ID - Time info - Activation time - Duration - Common timeslot info - 2nd interleaving mode 	<p>A5, A6 A1, A2,A3</p>	<p>TDD</p> <p>0 Integer(0..7)</p> <p>Not Present</p> <p>TDD</p> <p>TDD</p> <p>1.28 Mcps TDD</p> <p>FALSE</p> <p>Ref. to the Default setting in TS34.108 clause 6.1 (TDD) Integer(0..127)</p> <p>FALSE</p> <p>TDD</p> <p>2 Integer(1.8)</p> <p>Now</p> <p>Infinite</p> <p>Default value is "Frame"</p>
<ul style="list-style-type: none"> - TFCI coding 		<p>Reference to TS34.108 clause 6 Parameter</p>

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 (1.28 Mcps TDD)

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	TDD
CHOICE TDD option	1.28 Mcps TDD
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 FAILURE message: AM

Information Element	Value/remark
Message Type	
RRC transaction identifier	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	1
- TFCS ID	FALSE
- Shared Channel Indicator	
DPCH/PUSCH TFCS in uplink	
- CHOICE <i>Subset representation</i>	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 identifier	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 0000 0000 0001B
- SRNC identity	
- 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
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. 0000 0000 0001B
- SRNC identity	
- 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 synchronisation 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
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"
- 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/ leftmost/ 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-frequency 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
- 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 synchronisation 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 synchronisation 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

<ul style="list-style-type: none"> - Parameters required for each event - Intra-frequency event identity - Triggering condition 1 - Triggering condition 2 - Reporting Range Constant - Cells forbidden to affect Reporting range - W - Hysteresis - Threshold used frequency - Reporting deactivation threshold - Replacement activation threshold - Time to trigger - Amount of reporting - Reporting interval - Reporting cell status <p>Physical channel information elements DPCH Compressed mode status info</p>	<p>1g Not present (this IE is MP only for event "1b" or "1f", TDD should not present)</p> <p>Not present (this IE is MP only for event "1c", TDD should not present)</p> <p>Not present (this IE is MP only for event "1a" or "1b", TDD should not present)</p> <p>Not present (this IE is MP only for event "1a" or "1b", TDD should not present)</p> <p>Not present (this IE is MP only for event "1a" or "1b", TDD should not present)</p> <p>0 dBm Not present (this IE is MP only for event "1e", "1f", "1h" or "1i")</p> <p>Not present (this IE is MP only for event '1a', TDD should not present)</p> <p>Not present (this IE is MP only for event '1c' TDD should not present)</p> <p>0 ms Not present (this IE is MP only for event '1a' or '1c' TDD should not present)</p> <p>Not present (this IE is MP only for event '1a' or '1c', TDD should not present)</p> <p>Not present</p> <p>Not Present</p>
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Contents of MEASUREMENT CONTROL Message: AM (Inter-frequency 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 <i>reporting criteria</i>	Inter-frequency reporting criteria
- Inter-frequency reporting criteria	
- Filter coefficient	Not present (use default 0)
- CHOICE <i>mode</i>	TDD
- Measurement quantity for frequency quality estimate	Primary CCPCH RSCP
- Inter-frequency reporting quantity	
- UTRA Carrier RSSI	FALSE
- Frequency quality estimate	FALSE
- Non frequency related cell reporting quantities	
- Cell synchronisation information reporting indicator	FALSE
- Cell Identity reporting indicator	FALSE
- CHOICE mode	TDD
- Timeslot ISCP reporting indicator	FALSE
- Proposed TGSN reporting indicator	FALSE
- Primary CCPCH RSCP reporting indicator	FALSE
- Pathloss reporting indicator	FALSE
- Reporting cell status	Not present
- Measurement validity	Not present
- Inter-frequency set update	Not present
- CHOICE report criteria	(this IE only for FDD) Inter-frequency measurement reporting criteria

<ul style="list-style-type: none"> - Parameters required for each event - Inter-frequency event identity - Threshold used frequency - W used frequency - Hysteresis - Time to trigger - Reporting cell status - Maximum number of reporting cells - Parameters required for each non-used frequency - Threshold non used frequency - W non-used frequency 	<p>2b -70dBm (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)</p> <p>0 (this IE is MP for event 2a, 2b, 2d or 2f Real(0, 0.1..2.0 by step of 0.1))</p> <p>1 dBm 5000 ms Within active set or within virtual active set or of the other RAT</p> <p>1</p> <p>-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)</p> <p>0 (this IE is MP if 2a, 2b, 2c or 2e Real(0, 0.1..2.0 by step of 0.1))</p>
<p>Physical channel information elements DPCH Compressed mode status info</p>	<p>Not Present</p>

Contents of MEASUREMENT CONTROL FAILURE Message: AM

Information Element	Value/remark
<p>Message Type RRC transaction identifier</p>	<p>Checked to see if it's set to the identical value for the same IE in the downlink MEASUREMENT CONTROL message</p>
<p>Integrity check info</p> <ul style="list-style-type: none"> - Message authentication code - RRC Message sequence number 	<p>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.</p> <p>This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.</p>
<p>Failure cause</p>	<p>See the test content</p>

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 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 <i>event result</i>	Intra-frequency measurement event results
- Intra-frequency measurement event results	
- Intra-frequency event identity	lg
- Cell measurement event results	
- CHOICE <i>mode</i>	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

Contents of MEASUREMENT REPORT message: AM (inter-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	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 <i>event result</i>	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	TDD
- CHOICE <i>mode</i>	TDD
- Primary CCPCH info	1.28 Mcps TDD
- CHOICE <i>mode</i>	FALSE
- CHOICE TDD option	Reference clause 6.1.4 Default settings for cell 1(TDD)
-TSTD indicator	FALSE
- Cell parameters ID	
- SCTD indicator	FALSE

Contents of PHYSICAL CHANNEL RECONFIGURATION message: AM or UM (1.28 Mcps TDD)

Information Element	Condition	Value/remark
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	$(256+CFN-(CFN \text{ MOD } 8 + 8))\text{MOD } 256$
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
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 synchronisation info		Not Present
Frequency info	A1, A2, A3,	

Information Element	Condition	Value/remark
- Choice mode - UARFCN (Nt) Frequency info Maximum allowed UL TX power	A4, A5 A6	TDD Reference to clause 5.1 Test frequencies Not Present 33dBm
CHOICE channel requirement	A5, A6	Not Present
CHOICE channel requirement - Uplink DPCH power control info - CHOICE mode - CHOICE TDD option - PRXPDPCHdes - CHOICE UL OL PC info - CHOICE TDD option - TPC step size - Primary CCPCH Tx Power - CHOICE mode - Uplink Timing Advance Control - CHOICE Timing Advance - CHOICE TDD option - Uplink synchronisation parameters - Uplink synchronisation step size - Uplink synchronisation frequency - Synchronisation parameters - SYNC_UL codes bitmap - FPACH info - Timeslot number - Channelisation code - Midamble Shift and burst type - CHOICE TDD option - Midamble Allocation Mode - Midamble configuration - WT - PRXUpPCHdes - SYNC_UL procedure - Max SYNC_UL Transmissions - Power Ramp Step - UL CCTrCH List - TFCS ID - UL Target SIR - Time info - Activation time - Duration - Common timeslot info - 2 nd 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 - CHOICE TDD option - Midamble allocation mode - Midamble configuration - Midamble Shift - CHOICE TDD option - Modulation - SS-TPC Symbols	A1, A2, A3, A4	Uplink DPCH info TDD 1.28 Mcps TDD -80 Integer(-120...-58 by step of 1) Individually Signalled 1.28 Mcps TDD 1 20 Integer(6..43) TDD Enabled 1.28 Mcps TDD 1 1 01010101 0 16/15 1.28 Mcps TDD Default midamble 16 Integer(2, 4, 6, 8, 10, 12, 14, 16) 4 Integer(1..4) -80 dBm 2 2 1 Real (-11 .. 20 by step of 0.5dB) Reference to TS34.108 Parameter set. (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 1.28 Mcps TDD 1 OR 2 OR 3 TRUE 1.28 Mcps TDD Default midamble 16 Not Present 1.28 Mcps TDD QPSK 1

Information Element	Condition	Value/remark
<ul style="list-style-type: none"> - Additional TPC-SS Symbols - First timeslot Code List - channelisation codes - CHOICE more timeslots - UL CCTrCH List to Remove 		Not present Repeated (1,2) for each channelisation code assigned in the slot to meet the needs of TS34.108 clause 6 Parameter Set. (SF/ i) where i denotes an unassigned code matching the SF specified in TS34.108 clause 6 Parameter Set. No more timeslots Not present
CHOICE Mode	A1, A2, A3, A4, A5, A6	TDD
Downlink HS-PDSCH Information	A1, A2, A3, A4, A5, A6	Not Present
Downlink information common for all radio links <ul style="list-style-type: none"> - Downlink DPCH info common for all RL - Timing indication - CFN-targetSFN frame offset - Downlink DPCH power control information - CHOICE mode <ul style="list-style-type: none"> - TPC Step Size - MAC-d HFN initial value - CHOICE mode - CHOICE mode - CHOICE TDD option <ul style="list-style-type: none"> - TSTD indicator - Default DPCH Offset Value 	A1, A2, A3	Maintain Not Present TDD 1 Not Present TDD TDD 1.28 Mcps TDD FALSE Not Present
Downlink information common for all radio links <ul style="list-style-type: none"> - Downlink DPCH info common for all RL - Timing indication - CFN-targetSFN frame offset - Downlink DPCH power control information - CHOICE mode <ul style="list-style-type: none"> - TPC Step Size - MAC-d HFN initial value - CHOICE mode - CHOICE mode - CHOICE TDD option <ul style="list-style-type: none"> - TSTD indicator - Default DPCH Offset Value - CHOICE mode 	A4	Initialise Not Present TDD 1 Not Present TDD TDD 1.28 Mcps TDD FALSE TDD
<ul style="list-style-type: none"> - 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 <ul style="list-style-type: none"> - Downlink information for each radio link <ul style="list-style-type: none"> - Choice mode - Primary CCPCH info <ul style="list-style-type: none"> - Choice mode - Choice TDD Option - TSTD indicator - Cell parameters ID - SCTD indicator - Downlink DPCH info for each RL - CHOICE mode <ul style="list-style-type: none"> - DL CCTrCh List - TFCS ID - Time info <ul style="list-style-type: none"> - Activation time - Duration - Common timeslot info <ul style="list-style-type: none"> - 2nd interleaving mode - TFCl coding - Puncturing limit - Repetition period 	A1, A2, A3	TDD TDD 1.28 Mcps TDD FALSE Ref. to the Default setting in TS34.108 clause 6.1 (TDD) Integer(0..127) FALSE TDD 2 Integer(1.8) Now Infinite Default value is "Frame" Reference to TS34.108 clause 6 Parameter set Reference to TS34.108 clause 6 Parameter set 1

A6	This IE need for "Packet to CELL_FACH from CELL_FACH in PS"
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Contents of PHYSICAL CHANNEL RECONFIGURATION COMPLETE message: AM (1.28 Mcps TDD)

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 CHOICE mode CHOICE TDD option	Not checked TDD 1.28 Mcps TDD
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 FAILURE message: AM

Information Element	Value/remark
Message Type RRC transaction identifier	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 (1.28 Mcps TDD)

Information Element	Condition	Value/remark
Message Type	A1,A2,A3, A4,A5,A6	Arbitrarily selects an integer between 0 and 3
UE Information elements RRC transaction identifier 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 Ciphering mode info Activation time Activation time	A1,A2,A3 A4, A5,A6	Not Present Not Present (256+CFN-(CFN MOD 8 + 8))MOD 256 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,	Not Present

Information Element	Condition	Value/remark
	A4, A5, A6	
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
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". (UM DCCH for RRC) 1 Not Present Not Present Not Present Not Present Not Present Not Present (AM DCCH for RRC) 2 Not Present Not Present Not Present Not Present Not Present Not Present (AM DCCH for NAS_DT High priority) 3 Not Present Not Present Not Present Not Present Not Present Not Present (AM DCCH for NAS_DT Low priority) 4 Not Present Not Present Not Present Not Present Not Present Not Present (TM DTCH) 10 Not Present Not Present Not Present Not Present 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". (UM DCCH for RRC) 1 Not Present Not Present Not Present Not Present Not Present Not Present (AM DCCH for RRC) 2 Not Present Not Present Not Present Not Present Not Present
RB information to reconfigure list		
- RB information to reconfigure		
- RB identity		
- PDCP info		
- PDCP SN info		
- RLC info		
- RB mapping info		
- RB stop/continue		
- RB information to reconfigure		
- RB identity		
- PDCP info		
- PDCP SN info		
- RLC info		
- RB mapping info		
- RB stop/continue		
- RB information to reconfigure		
- RB identity		
- PDCP info		
- PDCP SN info		
- RLC info		
- RB mapping info		
- RB stop/continue		

Information Element	Condition	Value/remark
<ul style="list-style-type: none"> - RB stop/continue - RB information to reconfigure <ul style="list-style-type: none"> - RB identity - PDCP info - PDCP SN info - RLC info - RB mapping info - RB stop/continue - RB information to reconfigure <ul style="list-style-type: none"> - RB identity - PDCP info - PDCP SN info - RLC info - RB mapping info - RB stop/continue - RB information to reconfigure <ul style="list-style-type: none"> - RB identity - PDCP info - PDCP SN info - RLC info - RB mapping info - RB stop/continue - RB information to reconfigure <ul style="list-style-type: none"> - RB identity - PDCP info - PDCP SN info - RLC info - RB mapping info - RB stop/continue - RB information to reconfigure <ul style="list-style-type: none"> - RB identity - PDCP info - PDCP SN info - RLC info - RB mapping info - RB stop/continue - RB information to reconfigure <ul style="list-style-type: none"> - RB identity - PDCP info - PDCP SN info - RLC info - RB mapping info - RB stop/continue 		<p>Not Present (AM DCCH for NAS_DT High priority) 3</p> <p>Not Present</p> <p>Not Present</p> <p>Not Present</p> <p>Not Present</p> <p>Not Present</p> <p>Not Present (AM DCCH for NAS_DT Low priority) 4</p> <p>Not Present</p> <p>Not Present</p> <p>Not Present</p> <p>Not Present</p> <p>Not Present</p> <p>Not Present (TM DTCH) 10</p> <p>Not Present</p> <p>Not Present</p> <p>Not Present</p> <p>Not Present</p> <p>Not Present (TM DTCH) 11</p> <p>Not Present</p> <p>Not Present</p> <p>Not Present</p> <p>Not Present</p> <p>Not Present (TM DTCH) (This IE is needed for 12.2 kbps and 10.2 kbps) 12</p> <p>Not Present</p> <p>Not Present</p> <p>Not Present</p> <p>Not Present</p> <p>Not Present</p>
<p>RB information to reconfigure list</p> <ul style="list-style-type: none"> - RB information to reconfigure <ul style="list-style-type: none"> - RB identity - PDCP info - PDCP SN info - RLC info - RB mapping info - RB stop/continue - RB information to reconfigure <ul style="list-style-type: none"> - RB identity - PDCP info - PDCP SN info - RLC info - RB mapping info - RB stop/continue - RB information to reconfigure <ul style="list-style-type: none"> - RB identity - PDCP info - PDCP SN info - RLC info - RB mapping info - RB stop/continue - RB information to reconfigure <ul style="list-style-type: none"> - RB identity - PDCP info - PDCP SN info - RLC info - RB mapping info - RB stop/continue 	<p>A3,A4,A5, A6</p>	<p>TS25.331 specifies that "Although this IE is not always required, need is MP to align with ASN.1". (UM DCCH for RRC) 1</p> <p>Not Present</p> <p>Not Present</p> <p>Not Present</p> <p>Not Present</p> <p>Not Present</p> <p>Not Present (AM DCCH for RRC) 2</p> <p>Not Present</p> <p>Not Present</p> <p>Not Present</p> <p>Not Present</p> <p>Not Present (AM DCCH for NAS_DT High priority) 3</p> <p>Not Present</p> <p>Not Present</p> <p>Not Present</p> <p>Not Present</p> <p>Not Present (AM DCCH for NAS_DT Low priority) 4</p> <p>Not Present</p> <p>Not Present</p> <p>Not Present</p>

Information Element	Condition	Value/remark
<ul style="list-style-type: none"> - RB mapping info - RB stop/continue - RB information to reconfigure - RB identity - PDCP info - PDCP SN info - RLC info - RB mapping info - RB stop/continue 		Not Present Not Present (AM DTCH) 20 Not Present Not Present Not Present 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 <ul style="list-style-type: none"> - PRACH TFCS - CHOICE mode - Individual UL CCTrCH information 	A3, A4	Not Present TDD
<ul style="list-style-type: none"> - UL TFCS Identity 		
<ul style="list-style-type: none"> - TFCS ID 		1
<ul style="list-style-type: none"> - Shared Channel Indicator 		FALSE
<ul style="list-style-type: none"> - UL TFCS 		
<ul style="list-style-type: none"> - CHOICE <i>TFCI signalling</i> 		Normal (another option 'split' only for FDD)
<ul style="list-style-type: none"> - TFCI Field 1 Information 		
<ul style="list-style-type: none"> - CHOICE <i>TFCS representation</i> 		Complete reconfiguration
information <ul style="list-style-type: none"> - TFCS complete reconfiguration - CHOICE <i>CTFC Size</i> - CTFC information - CTFC - Power offset information - CHOICE Gain Factors - Reference TFC ID - CHOICE Gain Factors - CHOICE <i>mode</i> <ul style="list-style-type: none"> - Gain Factor β_d - Reference TFC ID - CHOICE <i>mode</i> 		Number of bits used must be enough to cover all combinations of CTFC from TS34.108 clause 6.11.5.4 Parameter Set. This IE is repeated for TFC numbers and reference to TS34.108 clause 6.11.5.4 Parameter Set Reference to TS34.108 clause 6.11.5.4 Parameter Set Computed Gain Factors (The last TFC is set to Signalled Gain Factors) 0 Integer(0.. 3) Signalled Gain Factors (Not Present if the CHOICE Gain Factors is set to ComputedGain Factors) TDD 15 0 Integer(0.. 3) TDD
<ul style="list-style-type: none"> - TFC subset 		
<ul style="list-style-type: none"> - CHOICE <i>Subset representation</i> 		Minimum allowed Transport format combination index
<ul style="list-style-type: none"> - Allowed transport format combination list 		Not present
<ul style="list-style-type: none"> - Non-allowed transport format combination list 		Not present
<ul style="list-style-type: none"> - Non-allowed transport format combination list 		Not present
<ul style="list-style-type: none"> - Full transport format combination set 		Not present
<ul style="list-style-type: none"> - TFC subset list 		Not present
Deleted TrCH information list		
Deleted UL TrCH information	A1, A2, A3,	Not Present

Information Element	Condition	Value/remark
	A4, A5,A6	
Added or Reconfigured TrCH information list		
Added or Reconfigured UL TrCH information	A1, A2, A5,A6 A4	Not Present
Added or Reconfigured UL TrCH information <ul style="list-style-type: none"> - 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 - 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 	2 TrCHs(DCH for DCCH and DCH for DTCH) DCH 5 Dedicated transport channels Reference to TS34.108 clause 6.11.5 Parameter Set (This IE is repeated for TFI number.) Not Present Reference to TS34.108 clause 6.11.5 Parameter Set All Reference to TS34.108 clause 6.11.5 Parameter Set Reference to TS34.108 clause 6.11.5 Parameter Set Reference to TS34.108 clause 6.11.5 Parameter Set Reference to TS34.108 clause 6.11.5 Parameter Set Reference to TS34.108 clause 6.11.5 Parameter Set DCH 1 Dedicated transport channels Reference to TS34.108 clause 6.11.5 Parameter Set (This IE is repeated for TFI number.) Not Present Reference to TS34.108 clause 6.11.5 Parameter Set All Reference to TS34.108 clause 6.11.5 Parameter Set Reference to TS34.108 clause 6.11.5 Parameter Set Reference to TS34.108 clause 6.11.5 Parameter Set Reference to TS34.108 clause 6.11.5 Parameter Set Reference to TS34.108 clause 6.11.5 Parameter Set	
Added or Reconfigured UL TrCH information <ul style="list-style-type: none"> - 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 	A3	(DCH for DTCH) DCH 1 Dedicated transport channels Reference to TS34.108 clause 6.11.5 Parameter Set (This IE is repeated for TFI number.) Not Present Reference to TS34.108 clause 6.11.5 Parameter Set All Reference to TS34.108 clause 6.11.5 Parameter Set

Information Element	Condition	Value/remark
<ul style="list-style-type: none"> - Type of channel coding - Coding Rate - Rate matching attribute - CRC size 		Reference to TS34.108 clause 6.11.5 Parameter Set Reference to TS34.108 clause 6.11.5 Parameter Set Reference to TS34.108 clause 6.11.5 Parameter Set Reference to TS34.108 clause 6.11.5 Parameter Set
CHOICE mode <ul style="list-style-type: none"> - (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 <ul style="list-style-type: none"> - SCCPCH TFCS - CHOICE mode - Individual DL CCTrCH information <ul style="list-style-type: none"> - DL TFCS Identity <ul style="list-style-type: none"> - TFCS ID - Shared Channel Indicator - CHOICE <i>DL parameters</i> <ul style="list-style-type: none"> - DL TFCS <ul style="list-style-type: none"> - CHOICE <i>TFCI signalling</i> 	A3,A4	Not Present TDD Independent Normal (Normal' : meaning no split in the TFCI field either 'Logical' or 'Hard')
<ul style="list-style-type: none"> - TFCI Field 1 Information - CHOICE <i>TFCS representation</i> - TFCS complete reconfiguration information <ul style="list-style-type: none"> - CHOICE CTFC Size - CTFC information <ul style="list-style-type: none"> - CTFC - Power offset 		Complete reconfiguration
<ul style="list-style-type: none"> - TFCS complete reconfiguration information - CHOICE CTFC Size - CTFC information <ul style="list-style-type: none"> - CTFC - Power offset 		Number of bits used must be enough to cover all combinations of CTFC from clause TS34.108 clause 6.11.5.4 Parameter Set. This IE is repeated for TFC numbers and reference to TS34.108 clause 6.11.5.4 Reference to TS34.108 clause 6.11.5.4 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 <ul style="list-style-type: none"> - 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 <ul style="list-style-type: none"> - Number of TBs and TTI List - Dynamic transport format information - Transmission Time Interval - Number of Transport blocks 	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 6.11.5 Parameter Set (This IE is repeated for TFI number.) Not Present Reference to TS34.108 clause 6.11.5 Parameter Set

Information Element	Condition	Value/remark
frequency - Uplink synchronisation		1
- Synchronisation parameters		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 - Duration - Common timeslot info - 2 nd 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 empty FALSE 1.28 Mcps TDD 1 TRUE
- CHOICE TDD option - Midamble allocation mode - Midamble configuration - Midamble Shift - CHOICE TDD option - Modulation - SS-TPC Symbols - Additional TPC-SS Sysbols - First timeslot Code List - channelisation codes - CHOICE more timeslots - UL CCTrCH List to Remove CHOICE channel requirement	A5, A6	1.28 Mcps TDD Default midamble 16 Not Present 1.28 Mcps TDD QPSK 1 Not present Repeated (1,2) for each channelisation code assigned in the slot to meet the needs of TS34.108 clause 6 Parameter Set. (SF/ i) where i denotes an unassigned code matching the SF specified in TS34.108 clause 6 Parameter Set. No more timeslots Not present Not Present
Downlink radio resources		
CHOICE Mode - Downlink PDSCH information	A1,A2,A3, A4,A5,A6	TDD No date
Downlink information common for all radio links	A5, A6	Not Present
Downlink information common for all radio links - Downlink DPCH info common for all RL - Timing indicaton - CFN-targetSFN frame offset	A1, A2, A3	Maintain Not Present
- Downlink DPCH power control information - CHOICE mode - TPC Step Size - MAC-d HFN initial value - CHOICE mode - CHOICE mode - CHOICE TDD option - TSTD indicator - Default DPCH Offset Value		TDD 1 Not Present TDD TDD 1.28 Mcps TDD FALSE Not Present
Downlink information common for all radio links - Downlink DPCH info common for all RL - Timing indication	A4	Initialise

Information Element	Condition	Value/remark
- Shared Channel Indicator - DL CCTrCH List to Remove - SCCPCH Information for FACH		FALSE Not present Not Present
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 1.28 Mcps TDD FALSE Reference clause 6.1.4 Default settings for cell 1 FALSE
- Downlink DPCH info for each RL		Not Present
- SCCPCH Information for FACH		Not Present
Downlink information per radio link list - 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 RADIO BEARER RECONFIGURATION COMPLETE message: AM (1.28 Mcps TDD)

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 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 - CHOICE <i>TDD option</i>	TDD 1.28 Mcps TDD (No data)
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 FAILURE message: AM

Information Element	Value/remark
Message Type RRC transaction identifier	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
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Contents of RADIO BEARER RELEASE message: AM or UM (1.28 Mcps TDD)

Information Element		Value/remark
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	$(256+CFN-(CFN \text{ MOD } 8 + 8))\text{MOD } 256$
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
New H-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	
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,	Not Present

Information Element		Value/remark
	A4, A5, A6, A7, A8	
UL Transport channel information for all transport channels	A1, A2, A3, A4	TFCS reconfigured to fit the new transport channel configuration.
UL Transport channel information 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		
- 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 6.11 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 TS34.108 clause 6.11 Parameter Set
- CHOICE Logical Channel list		All (NULL)
- Semi-static Transport Format information		
- Transmission time interval		Reference to TS34.108 clause 6.11 Parameter Set
- Type of channel coding		Reference to TS34.108 clause 6.11 Parameter Set
- Coding Rate		Reference to TS34.108 clause 6.11 Parameter Set
- Rate matching attribute		Reference to TS34.108 clause 6.11 Parameter Set
- CRC size		Reference to TS34.108 clause 6.11 Parameter Set
CHOICE <i>mode</i>		TDD (No data)
DL Transport channel information for all transport channels	A1, A2, A3, A4,	TFCS reconfigured to fit the new transport channel configuration.
DL Transport channel information 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		

Information Element		Value/remark
- 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	Not Present
CHOICE channel requirement	A5, A6, A7, A8	Not Present
CHOICE channel requirement - Uplink DPCH power control info - CHOICE mode - Uplink Timing Advance Control	A1, A2, A3, A4	Uplink DPCH info Not Present TDD 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 - Duration - Common timeslot info - 2 nd 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 FALSE 1.28 Mcps TDD 1 OR 2 OR 3 TRUE
- CHOICE TDD option - Midamble allocation mode - Midamble configuration - Midamble Shift - CHOICE TDD option - Modulation - SS-TPC Symbols - Additional TPC-SS Symbols - First timeslot Code List		1.28 Mcps TDD Default midamble 16 Not Present 1.28 Mcps TDD QPSK 1 Not present Repeated (1,2) for each channelisation code assigned in the slot to meet the needs of TS34.108 clause 6 Parameter Set.

Information Element		Value/remark
<ul style="list-style-type: none"> - channelisation codes - CHOICE more timeslots - UL CCTrCH List to Remove CHOICE Mode Downlink HS-PDSCH Information Downlink information common for all radio links Downlink information common for all radio links <ul style="list-style-type: none"> - Downlink DPCH info common for all RL - Timing indication - CFN-targetSFN frame offset 	A1, A2, A3, A4, A5, A6, A7, A8 A1, A2, A3, A4, A5, A6, A7, A8 A5, A6 A1, A2, A3	(SF/ i) where i denotes an unassigned code matching the SF specified in TS34.108 clause 6 Parameter Set. No more timeslots Not present TDD Not Present Not Present Maintain Not Present
<ul style="list-style-type: none"> - Downlink DPCH power control information - CHOICE mode <ul style="list-style-type: none"> - TPC Step Size - MAC-d HFN initial value - CHOICE mode - CHOICE mode <ul style="list-style-type: none"> - CHOICE TDD option <ul style="list-style-type: none"> - TSTD indicator - Default DPCH Offset Value Downlink information common for all radio links <ul style="list-style-type: none"> - Downlink DPCH info common for all RL - Timing indication - CFN-targetSFN frame offset - Downlink DPCH power control information <ul style="list-style-type: none"> - CHOICE mode <ul style="list-style-type: none"> - TPC Step Size - MAC-d HFN initial value - CHOICE mode - CHOICE mode <ul style="list-style-type: none"> - CHOICE TDD option <ul style="list-style-type: none"> - TSTD indicator 	A4, A7, A8	TDD 1 Not Present TDD TDD 1.28 Mcps TDD FALSE Not Present Initialise Not Present TDD 1 Not Present TDD TDD 1.28 Mcps TDD FALSE
<ul style="list-style-type: none"> - Default DPCH Offset Value - CHOICE mode <ul style="list-style-type: none"> - Default DPCH Offset Value Downlink information per radio link list <ul style="list-style-type: none"> - Downlink information for each radio link <ul style="list-style-type: none"> - Choice mode <ul style="list-style-type: none"> - Primary CCPCH info <ul style="list-style-type: none"> - Choice mode <ul style="list-style-type: none"> - Choice TDD Option <ul style="list-style-type: none"> - TSTD indicator - Cell parameters ID - SCTD indicator - Downlink DPCH info for each RL <ul style="list-style-type: none"> - CHOICE mode <ul style="list-style-type: none"> - DL CCTrCh List <ul style="list-style-type: none"> - TFCS ID - Time info <ul style="list-style-type: none"> - Activation time - Duration - Common timeslot info <ul style="list-style-type: none"> - 2nd interleaving mode 	A1, A2, A3, A4,	TDD 0 Integer(0..7) TDD TDD 1.28 Mcps TDD FALSE Ref. to the Default setting in TS34.108 clause 6.1 (TDD) Integer(0..127) FALSE TDD 2 Integer(1.8) Now Infinite Default value is "Frame"
<ul style="list-style-type: none"> - TFCI coding - Puncturing limit - Repetition period 		Reference to TS34.108 clause 6 Parameter set Reference to TS34.108 clause 6 Parameter set 1

Information Element		Value/remark
- Repetition length - Downlink DPCH timeslots and codes - First individual timeslot info - Timeslot number - CHOICE TDD option		NULL 1.28 Mcps TDD
- Timeslot number - TFCI existence - Midamble shift and burst type - CHOICE TDD option - Midamble allocation mode - Midamble configuration - Midamble Shift - CHOICE TDD option - Modulation - SS-TPC Symbols - Additional TPC-SS Sysbols - 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 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	4 OR 5 OR 6 TRUE 1.28 Mcps TDD Default midamble 16 Not Present 1.28 Mcps TDD QPSK 1 Not present Repeated (1,2) for each channelisation code assigned in the slot to meet the needs of TS34.108 clause 6 Parameter Set. Reference to TS34.108 clause 6.10 Parameter Set No more timeslots This list is not required for 1.28 Mcps TDD and is to be ignored by the UE. 1 FALSE Not present Not Present TDD TDD 1.28 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
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
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
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 - Paging cause - CN domain identity - CHOICE UE identity - IMSI (GSM-MAP) BCCH modification info	CN identity Terminating Interactive Call PS domain Set to the same octet string as in the IMSI stored in the USIM card Not Present

Contents of RADIO BEARER SETUP message: AM or UM (Speech in CS) (3.84 Mcps TDD option)

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.
Integrity protection mode info	Not Present
Ciphering mode info	The 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	Use one of the supported ciphering algorithms
- Ciphering activation time for DPCH	$(256+CFN-(CFN \text{ MOD } 8 + 8))\text{MOD } 256$
- Radio bearer downlink ciphering activation time info	Not Present
Activation time	$(256+CFN-(CFN \text{ MOD } 8 + 8))\text{MOD } 256$
New U-RNTI	Not Present
New C-RNTI	Not Present
New DSCH-RNTI	Not Present
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
- CHOICE RLC info type	RLC info
- CHOICE Uplink RLC mode	TM RLC
- Transmission RLC discard	Not Present
- Segmentation indication	FALSE

Information Element	Value/remark
- 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 synchronisation 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 TS34.108 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.
- CTFC information	Refer to TS34.108 clause 6 Parameter Set
- CHOICE mode	Not Present
- Individual UL CCTrCH information	TDD
Deleted TrCH information list	Not Present
Added or Reconfigured TrCH information list	Not Present
- Added or Reconfigured UL TrCH information	3 DCHs
- Uplink transport channel type	DCH
- UL Transport channel identity	1
- TFS	
- CHOICE Transport channel type	Dedicated transport channels

Information Element	Value/remark
<ul style="list-style-type: none"> - 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 - Uplink transport channel type - UL Transport channel identity - TFS - CHOICE Transport channel type 	<p>Reference to TS34.108 clause 6.10 Parameter Set (This IE is repeated for TFI number.)</p> <p>Not Present</p> <p>Reference to TS34.108 clause 6.10 Parameter Set All</p> <p>Reference to TS34.108 clause 6.10 Parameter Set</p> <p>Reference to TS34.108 clause 6.10 Parameter Set</p> <p>Reference to TS34.108 clause 6.10 Parameter Set</p> <p>Reference to TS34.108 clause 6.10 Parameter Set</p> <p>Reference to TS34.108 clause 6.10 Parameter Set</p> <p>DCH</p> <p>2</p> <p>Dedicated transport channels</p>
<ul style="list-style-type: none"> - RLC Size - Number of TBs and TTI List - Transmission Time Interval - Number of Transport blocks - 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 - Uplink transport channel type - UL Transport channel identity - TFS - CHOICE Transport channel type 	<p>Reference to TS34.108 clause 6.10 Parameter Set (This IE is repeated for TFI number.)</p> <p>Not Present</p> <p>Reference to TS34.108 clause 6.10 Parameter Set</p> <p>Reference to TS34.108 clause 6.10 Parameter Set (This IE is repeated for TFI number.)</p> <p>All</p> <p>Reference to TS34.108 clause 6.10 Parameter Set</p> <p>Reference to TS34.108 clause 6.10 Parameter Set</p> <p>Reference to TS34.108 clause 6.10 Parameter Set</p> <p>Reference to TS34.108 clause 6.10 Parameter Set</p> <p>Reference to TS34.108 clause 6.10 Parameter Set</p> <p>DCH</p> <p>3</p> <p>Dedicated transport channels</p>
<ul style="list-style-type: none"> - RLC Size - Number of TBs and TTI List - Transmission Time Interval - Number of Transport blocks - 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 	<p>Reference to TS34.108 clause 6.10 Parameter Set (This IE is repeated for TFI number.)</p> <p>Not Present</p> <p>Reference to TS34.108 clause 6.10 Parameter Set</p> <p>Reference to TS34.108 clause 6.10 Parameter Set (This IE is repeated for TFI number.)</p> <p>All</p> <p>Reference to TS34.108 clause 6.10 Parameter Set</p> <p>Reference to TS34.108 clause 6.10 Parameter Set</p> <p>Reference to TS34.108 clause 6.10 Parameter Set</p> <p>Reference to TS34.108 clause 6.10 Parameter Set</p> <p>Reference to TS34.108 clause 6.10 Parameter Set</p> <p>TDD (no data)</p>
<p>CHOICE mode</p> <p>DL Transport channel information common for all transport channel</p>	
<ul style="list-style-type: none"> - SCCPCH TFCS - CHOICE mode - CHOICE DL parameters 	<p>Not Present</p> <p>TDD</p> <p>Same as UL</p>
<p>Deleted TrCH information list</p>	<p>Not Present</p>
<p>Added or Reconfigured TrCH information list</p>	<p>3 DCHs</p>
<p>Added or Reconfigured DL TrCH information</p>	
<ul style="list-style-type: none"> - Downlink transport channel type - DL Transport channel identity - CHOICE DL parameters - Uplink transport channel type - UL TrCH identity 	<p>DCH</p> <p>6</p> <p>Same as UL</p> <p>DCH</p> <p>1</p>
<ul style="list-style-type: none"> - DCH quality target - BLER Quality value 	<p>-6.3</p>
<ul style="list-style-type: none"> - Downlink transport channel type - DL Transport channel identity - CHOICE DL parameters 	<p>DCH</p> <p>7</p> <p>Same as UL</p>

Information Element	Value/remark
<ul style="list-style-type: none"> - Uplink transport channel type - UL TrCH identity - DCH quality target - BLER Quality value - Downlink transport channel type - DL Transport channel identity - CHOICE DL parameters - Uplink transport channel type - UL TrCH identity - DCH quality target - BLER Quality value 	DCH 2 Not Present DCH 8 Same as UL DCH 3 Not Present
Frequency info <ul style="list-style-type: none"> - UARFCN Nt) 	Reference to clause 5.1 Test frequencies
Maximum allowed UL TX power	30dBm
CHOICE channel requirement	Uplink DPCH info
<ul style="list-style-type: none"> - Uplink DPCH power control info - CHOICE mode - UL Target SIR - CHOICE UL OL PC info <ul style="list-style-type: none"> - CHOICE TDD option <ul style="list-style-type: none"> - Individual timeslot interference info - DPCH Constant Value 	TDD Reference to TS34.108 Parameter set. Individually signalled 3.84 Mcps
<ul style="list-style-type: none"> - CHOICE mode - Uplink Timing Advance Control - UL CCTrCH List 	TDD Not Present
<ul style="list-style-type: none"> - TFCS Id - Time info <ul style="list-style-type: none"> - Activation time - Duration - Common timeslot info <ul style="list-style-type: none"> - 2nd interleaving mode - TFCI coding - Puncturing Limit 	1 $(256+CFN-(CFN \text{ MOD } 8 + 8))\text{MOD } 256$ infinite Reference to TS34.108 clause 6 Parameter Set. Reference to TS34.108 clause 6 Parameter set. Reference to TS34.108 clause 6 Parameter set.
<ul style="list-style-type: none"> - Repetition Period - Repetition Length 	Reference to TS34.108 clause 6 Parameter set. Reference to TS34.108 clause 6 Parameter set.
<ul style="list-style-type: none"> - Uplink DPCH timeslots and code <ul style="list-style-type: none"> - First individual timeslot info - Timeslot number 	The number of an uplink timeslot that has unassigned codes.
<ul style="list-style-type: none"> - TFCI existence 	TRUE
<ul style="list-style-type: none"> - Midamble shift and burst type - CHOICE TDD option <ul style="list-style-type: none"> - Midamble allocation mode - Midamble configuration burst type 1 and 3 	3.84 Mcps Default 16
<ul style="list-style-type: none"> - CHOICE TDD option - First timeslot channelisation codes 	(no data) Repeated (1,2) for each channelisation code assigned in the slot to meet the needs of TS34.108 clause 6 Parameter Set.
<ul style="list-style-type: none"> - Channelisation code 	(i/SF) where i denotes an unassigned code matching the SF specified in TS34.108 clause 6 Parameter Set.
<ul style="list-style-type: none"> - CHOICE more timeslots 	The presence of this IE depends upon the number of resources specified in TS34.108 section 6 and the number of slots in which they are being assigned.
Downlink information common for all radio links	
<ul style="list-style-type: none"> - Downlink DPCH info common for all RL 	Maintain
<ul style="list-style-type: none"> - Timing indication 	Not Present
<ul style="list-style-type: none"> - CFN-targetSFN frame offset - Downlink DPCH power control information 	

Information Element	Value/remark
<ul style="list-style-type: none"> - CHOICE mode - TPC step size - CHOICE mode - CHOICE TDD option - Default DPCH offset value - Downlink information for each radio link <ul style="list-style-type: none"> - Choice mode - Primary CCPCH info <ul style="list-style-type: none"> - CHOICE TDD option <ul style="list-style-type: none"> - CHOICE <i>SyncCase</i> - Timeslot - Cell parameters ID - SCTD indicator - Downlink DPCH info for each RL <ul style="list-style-type: none"> - CHOICE mode <ul style="list-style-type: none"> - DL CCTrCH List - TFCS ID - Time info <ul style="list-style-type: none"> - Activation time - Duration - Common timeslot info <ul style="list-style-type: none"> - 2nd interleaving mode - TFCI coding - Puncturing limit - Repetition period - Repetition length - Downlink DPCH timeslots and codes <ul style="list-style-type: none"> - Individual timeslot info <ul style="list-style-type: none"> - Timeslot number - TFCI existence - Midamble shift and burst type <ul style="list-style-type: none"> - CHOICE TDD option <ul style="list-style-type: none"> -CHOICE Burst Type <ul style="list-style-type: none"> -Type 1 <ul style="list-style-type: none"> -Midamble Allocation Mode - Midamble configuration burst type 1 and 3 - First timeslot channelisation codes <ul style="list-style-type: none"> - First channelisation code - Last channelisation code - Bitmap - CHOICE more timeslots - UL CCTrCH TPC List -SCCPCH information for FACH 	<ul style="list-style-type: none"> TDD 1 dB TDD 3.84 Mcps (no data) 0 TDD 3.84 Mcps Sync Case 1 PCCPCH timeslot 0 TDD 1 (256+CFN-(CFN mod 8 + 8))mod 256 infinite Reference to TS34.108 TRUE Reference to TS34.108 clause 6 Parameter set 1 Empty The number of a downlink timeslot that has unassigned codes. TRUE 3.84 Mcps Default As defined in 3GPP TS 25.221 (i/SF) where i is the lowest numbered code that is being assigned and SF is specified in TS34.108 clause 6 Parameter Set.. (j/SF) where j is the highest numbered code that is being assigned in the slot. Bitmap of the codes that are being assigned in the slot. The presence of this IE depends upon whether the requirements of TS34.108 clause 6 Parameter Set could be met by the codes that have been assigned in the first timeslot.. Not Present Not Present

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
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 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	Use one of the supported ciphering algorithms
- Ciphering activation time for DPCH	$(256+CFN-(CFN \text{ MOD } 8 + 8))\text{MOD } 256$
- Radio bearer downlink ciphering activation time info	Not Present
Activation time	$(256+CFN-(CFN \text{ MOD } 8 + 8))\text{MOD } 256$
New U-RNTI	Not Present
New C-RNTI	Not Present
New DSCH-RNTI	Not Present

Information Element	Value/remark
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	0000 0101B
- RAB identity	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
- 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 TS34.108 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

Information Element	Value/remark
- 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 synchronisation 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 TS34.108 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.
- CTFC information	Refer to TS34.108 clause 6 Parameter Set
- CHOICE mode	Not Present
- Individual UL CCTrCH information	TDD
Deleted TrCH information list	Not Present
Added or Reconfigured TrCH information list	Not Present
- 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	(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
- 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 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	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 TS34.108 clause 6.

Information Element	Value/remark
<ul style="list-style-type: none"> - CTFC information Added or Reconfigured TrCH information list - Added or Reconfigured DL TrCH information <ul style="list-style-type: none"> - 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 - 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 - DCH quality target - BLER Quality value Frequency info <ul style="list-style-type: none"> -CHOICE mode - UARFCN (Nt) Maximum allowed UL TX power CHOICE channel requirement <ul style="list-style-type: none"> - Uplink DPCH power control info - CHOICE mode <ul style="list-style-type: none"> - UL Target SIR - CHOICE UL OL PC info <ul style="list-style-type: none"> - CHOICE TDD option <ul style="list-style-type: none"> - Individual timeslot interference info - Individual timeslot interference - DPCH Constant Value - CHOICE mode 	<p>Refer to TS34.108 clause 6.</p> <p>DCH 6 Explicit</p> <p>Dedicated transport channels (This IE is repeated for TFI number) Reference to TS34.108 clause 6.10 Parameter Set (This IE is repeated for TFI number.) Not Present Reference to TS34.108 clause 6.10 Parameter Set ALL</p> <p>Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set</p> <p>-6.3</p> <p>TDD Reference to clause 5.1 Test frequencies 30 dBm Uplink DPCH info</p> <p>TDD Reference to TS34.108 Parameter set. Individually signalled 3.84 Mcps</p> <p>Values are used for open loop power control, section 8 in TS 25.331 TDD</p>

Information Element	Value/remark
<ul style="list-style-type: none"> - Uplink Timing Advance Control - UL CCTrCH List <ul style="list-style-type: none"> - TFCS Id - Time info <ul style="list-style-type: none"> - Activation time - Duration - Common timeslot info <ul style="list-style-type: none"> - 2nd interleaving mode - TFCI coding - Puncturing Limit - Repetition Period - Repetition Length - First individual timeslot info - Timeslot number - TFCI existence - Midamble shift and burst type <ul style="list-style-type: none"> - CHOICE TDD option <ul style="list-style-type: none"> -CHOICE Burst Type <ul style="list-style-type: none"> -Type 1 <ul style="list-style-type: none"> -Midamble Allocation Mode - Midamble configuration burst type 1 and 3 - First timeslot channelisation codes - Channelisation code - CHOICE more timeslots 	<p>Not Present</p> <p>1</p> <p>(256+CFN-(CFN MOD 8 + 8))MOD 256</p> <p>Infinite</p> <p>Reference to TS34.108 clause 6.10 Parameter Set</p> <p>Reference to TS34.108 clause 6.10 Parameter Set</p> <p>Reference to TS34.108 clause 6.10 Parameter Set</p> <p>Reference to TS34.108 clause 6.10 Parameter Set</p> <p>Reference to TS34.108 clause 6.10 Parameter Set</p> <p>The number of an uplink timeslot that has unassigned codes.</p> <p>TRUE</p> <p>3.84 Mcps</p> <p>Default</p> <p>As defined in 3GPP TS 25.221</p> <p>Repeated (1,2) for each channelisation code assigned in the slot to meet the needs of TS34.108 clause 6 Parameter Set.</p> <p>(i/SF) where i denotes an unassigned code matching the SF specified in TS34.108 clause 6 Parameter Set.</p> <p>The presence of this IE depends upon the number of resources specified in TS34.108 section 6 and the number of slots in which they are being assigned.</p>
<p>Downlink information common for all radio links</p> <ul style="list-style-type: none"> - Downlink DPCH info common for all RL <ul style="list-style-type: none"> - Timing indication - CFN-targetSFN frame offset - Downlink DPCH power control information <ul style="list-style-type: none"> - DPC mode - CHOICE mode <ul style="list-style-type: none"> - CHOICE TDD option - Default DPCH Offset Value <p>Downlink information for each radio link list</p> <ul style="list-style-type: none"> - Downlink information for each radio link <ul style="list-style-type: none"> - Choice mode - Primary CCPCH info <ul style="list-style-type: none"> - CHOICE SyncCase <ul style="list-style-type: none"> - Timeslot - Cell parameters ID - SCTD indicator - Downlink DPCH info for each RL <ul style="list-style-type: none"> - CHOICE mode <ul style="list-style-type: none"> - DL CCTrCH List <ul style="list-style-type: none"> - TFCS ID - Time info <ul style="list-style-type: none"> - Activation time - Duration - Common timeslot info <ul style="list-style-type: none"> - 2nd interleaving mode - TFCI coding - Puncturing limit - Repetition period - Repetition length - Downlink DPCH timeslots and codes <ul style="list-style-type: none"> - Individual timeslot info <ul style="list-style-type: none"> - Timeslot number 	<p>Maintain</p> <p>Not Present</p> <p>0 (single)</p> <p>TDD</p> <p>3.84 Mcps (no data)</p> <p>Not Present</p> <p>TDD</p> <p>Sync Case 1</p> <p>PCCPCH timeslot</p> <p>0</p> <p>TDD</p> <p>1</p> <p>(256+CFN-(CFN mod 8 + 8))mod 256</p> <p>infinite</p> <p>Reference to TS34.108</p> <p>TRUE</p> <p>Reference to TS34.108 clause 6 Parameter set</p> <p>1</p> <p>Empty</p> <p>The number of a downlink timeslot that has unassigned codes.</p>

Information Element	Value/remark
- TFCI existence	TRUE
- Midamble shift and burst type	3.84 Mcps
- CHOICE TDD option	
-CHOICE Burst Type	
-Type 1	Default
-Midamble Allocation Mode	As defined in 3GPP TS 25.221
- Midamble configuration burst type 1 and 3	
- First timeslot channelisation codes	(i/SF) where i is the lowest numbered code that is being assigned and SF is specified in TS34.108 clause 6 Parameter Set..
- First channelisation code	(j/SF) where j is the highest numbered code that is being assigned in the slot.
- Last channelisation code	Bitmap of the codes that are being assigned in the slot.
- Bitmap	
- CHOICE more timeslots	The presence of this IE depends upon whether the requirements of TS34.108 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

Contents of RADIO BEARER SETUP message: AM or UM (1.28 Mcps TDD)

Information Element	Condition	Value/remark
Message Type	A1, A2, A3, A4, A5, A6, A7, A8	Arbitrarily selects an integer between 0 and 3
RRC transaction identifier		
Integrity check info		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.
- message authentication code		SS provides the value of this IE, from its internal counter.
- RRC message sequence number		Not Present
Integrity protection mode info		Not Present
Ciphering mode info		Not Present
Activation time	A1, A2, A3, A7, A8	$(256+CFN-(CFN \text{ MOD } 8 + 8)) \text{ MOD } 256$
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	A1, A2, A3, A4, A5, A6, A7, A8	Not Present
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

Information Element	Condition	Value/remark
URA identity		Not Present
Signalling RB information to setup list		Not Present
RAB information for setup list - RAB info - RAB identity - CHOICE RAB identity type - RAB identity - CN domain identity - NAS Synchronization Indicator - Re-establishment timer - RB information to setup list - RB information to setup - RB identity - PDCP info - CHOICE RLC info type - CHOICE Uplink RLC mode - Transmission RLC discard - Segmentation indication - CHOICE Downlink RLC mode - Segmentation indication - RB mapping info - Information for each multiplexing option - RLC logical channel mapping indicator - Number of uplink RLC logical channels - Uplink transport channel type - UL Transport channel identity - Logical channel identity - CHOICE <i>RLC size list</i> - MAC logical channel priority - Downlink RLC logical channel info - Number of downlink RLC logical channels - Downlink transport channel type - DL DCH Transport channel identity - DL DSCH Transport channel identity - Logical channel identity	A1, A7	RAB identity (GSM-MAP) 0000 0001B The first/ leftmost bit of the bit string contains the most significant bit of the RAB identity. CS domain Not Present useT314 10 Not Present RLC info TM RLC Not Present FALSE TM RLC FALSE Not Present 1 DCH 1 Not Present Configured 7 1 DCH 6 Not Present Not Present
RAB information to setup list - RAB info - RAB identity - CHOICE RAB identity type - RAB identity - CN domain identity - NAS Synchronization Indicator - Re-establishment timer - RB information to setup list - RB information to setup - RB identity - PDCP info - CHOICE RLC info type - CHOICE Uplink RLC mode - Transmission RLC discard - Segmentation indication - CHOICE Downlink RLC mode - Segmentation indication - RB mapping info - Information for each multiplexing option - RLC logical channel mapping indicator - Number of uplink RLC logical channels - Uplink transport channel type - UL Transport channel identity - Logical channel identity - CHOICE <i>RLC size list</i> - MAC logical channel priority - Downlink RLC logical channel info	A2, A8	RAB identity (GSM-MAP) 0000 0001B The first/ leftmost bit of the bit string contains the most significant bit of the RAB identity. CS domain Not Present useT314 10 Not Present RLC info TM RLC Not Present FALSE TM RLC FALSE Not Present 1 DCH 1 Not Present Configured 7

Information Element	Condition	Value/remark
<ul style="list-style-type: none"> - Number of downlink RLC logical channels - Downlink transport channel type - DL DCH Transport channel identity - DL DSCH Transport channel identity - Logical channel identity 		1 DCH 6 Not Present Not Present
<ul style="list-style-type: none"> - RB identity - PDCP info - CHOICE RLC info type - CHOICE Uplink RLC mode <ul style="list-style-type: none"> - Transmission RLC discard - Segmentation indication - CHOICE Downlink RLC mode <ul style="list-style-type: none"> - Segmentation indication - RB mapping info <ul style="list-style-type: none"> - Information for each multiplexing option <ul style="list-style-type: none"> - RLC logical channel mapping indicator - Number of uplink RLC logical channels <ul style="list-style-type: none"> - Uplink transport channel type - UL Transport channel identity - Logical channel identity - CHOICE RLC size list - MAC logical channel priority - Downlink RLC logical channel info <ul style="list-style-type: none"> - Number of downlink RLC logical channels - Downlink transport channel type - DL DCH Transport channel identity - DL DSCH Transport channel identity - Logical channel identity 		11 Not Present RLC info TM RLC Not Present FALSE TM RLC FALSE Not Present 1 DCH 2 Not Present Configured 7 1 DCH 7 Not Present Not Present
<ul style="list-style-type: none"> - RB identity - PDCP info - CHOICE RLC info type - CHOICE Uplink RLC mode <ul style="list-style-type: none"> - Transmission RLC discard - Segmentation indication - CHOICE Downlink RLC mode <ul style="list-style-type: none"> - Segmentation indication - RB mapping info <ul style="list-style-type: none"> - Information for each multiplexing option <ul style="list-style-type: none"> - RLC logical channel mapping indicator - Number of uplink RLC logical channels <ul style="list-style-type: none"> - Uplink transport channel type - UL Transport channel identity - Logical channel identity - CHOICE RLC size list - MAC logical channel priority - Downlink RLC logical channel info <ul style="list-style-type: none"> - Number of downlink RLC logical channels - Downlink transport channel type - DL DCH Transport channel identity - DL DSCH Transport channel identity - Logical channel identity 		12 Not Present RLC info TM RLC Not Present FALSE TM RLC FALSE Not Present 1 DCH 3 Not Present Configured 7 1 DCH 8 Not Present Not Present
RAB information for setup list <ul style="list-style-type: none"> - RAB info <ul style="list-style-type: none"> - RAB identity - CHOICE RAB identity type <ul style="list-style-type: none"> - RAB identity - CN domain identity - NAS Synchronization Indicator - Re-establishment timer - RB information to setup list <ul style="list-style-type: none"> - RB information to setup <ul style="list-style-type: none"> - RB identity - PDCP info - Support for lossless SRNS relocation 	A3, A4, A5, A6	RAB identity (GSM-MAP) 0000 0101B The first/ leftmost bit of the bit string contains the most significant bit of the RAB identity. PS domain Not Present useT315 20 FALSE

Information Element	Condition	Value/remark
<ul style="list-style-type: none"> - Max PDCP SN window size - PDCP PDU header - Header compression information - CHOICE RLC info type - CHOICE Uplink RLC mode - Transmission RLC discard - CHOICE SDU Discard Mode - MAX_DAT - Timer_MRW - MaxMRW - Transmission window size - Timer_RST - Max_RST - Polling info - Timer_poll_prohibit - Timer_poll - Poll_PDU - Poll_SDU - Last transmission PDU poll - Last retransmission PDU poll - Poll_Windows - Timer_poll_periodic - CHOICE Downlink RLC mode - In-sequence delivery - Receiving window size - Downlink RLC status info - Timer_status_prohibit - Timer_EPC - Missing PDU indicator - Timer_STATUS_periodic - RB mapping info - Information for each multiplexing option - RLC logical channel mapping indicator - Number of uplink RLC logical channels - Uplink transport channel type - UL Transport channel identity - Logical channel identity - CHOICE RLC size list - MAC logical channel priority - Downlink RLC logical channel info - Number of downlink RLC logical channels - Downlink transport channel type - DL DCH Transport channel identity - DL DSCH Transport channel identity - Logical channel identity - RLC logical channel mapping indicator - Number of uplink RLC logical channels - Uplink transport channel type - UL Transport channel identity - Logical channel identity - CHOICE RLC size list - RLC size index - MAC logical channel priority - Downlink RLC logical channel info - Number of downlink RLC logical channels - Downlink transport channel type - DL DCH Transport channel identity - DL DSCH Transport channel identity - Logical channel identity 		<ul style="list-style-type: none"> Not present Not present Not present RLC info AM RLC Max DAT retransmissions 4 100 4 128 500 4 200 200 Not Present 1 TRUE TRUE 99 Not Present AM RLC TRUE 128 200 200 TRUE Not Present 2 RBMuxOptions Not Present 1 DCH 1 Not Present Configured 8 1 DCH 6 Not Present Not Present Not Present 1 RACH Not Present 7 Explicit list Reference to TS34.108 clause 6 Parameter Set 8 1 FACH Not Present Not Present 8
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 for all transport	A1, A2, A3,	

Information Element	Condition	Value/remark
<p>channels</p> <ul style="list-style-type: none"> - PRACH TFCS - CHOICE mode <ul style="list-style-type: none"> - Individual UL CCTrCH information <ul style="list-style-type: none"> - UL TFCS Identity <ul style="list-style-type: none"> - TFCS ID - Shared Channel Indicator - UL TFCS <ul style="list-style-type: none"> - CHOICE <i>TFCI signalling</i> <ul style="list-style-type: none"> - TFCI Field 1 Information - CHOICE <i>TFCS representation</i> <ul style="list-style-type: none"> - TFCS complete reconfiguration information - CHOICE <i>CTFC Size</i> - CTFC information - CTFC <ul style="list-style-type: none"> - Power offset information - CHOICE Gain Factors <ul style="list-style-type: none"> - Reference TFC ID - CHOICE Gain Factors - CHOICE mode <ul style="list-style-type: none"> - Gain Factor β_d - Reference TFC ID - CHOICE mode - TFC subset <ul style="list-style-type: none"> - CHOICE Subset representation - TFC subset list 	<p>A4, A5, A6, A7, A8</p>	<p>Not Present TDD</p> <p>1 FALSE</p> <p>Normal</p> <p>Complete reconfiguration</p> <p>Number of bits used must be enough to cover all combinations of CTFC from TS34.108 clause 6.11.5.4 Parameter Set. <i>This IE is repeated</i> for TFC numbers and reference to TS34.108 clause 6.11.5.4 Parameter Set Reference to TS34.108 clause 6.11.5.4 Parameter Set</p> <p>Computed Gain Factors(The last TFC is set to Signalled Gain Factors) 0 Integer(0.. 3) Signalled Gain Factors(Not Present if the CHOICE Gain Factors is set to ComputedGain Factors) TDD 15 0 Integer(0.. 3) TDD</p> <p>Full transport format combination set Not Present</p>
<p>Deleted TrCH information list</p>	<p>A1, A2, A3, A4, A5, A6, A7, A8</p>	<p>Not Present</p>
<p><i>Added or Reconfigured UL TrCH information</i></p>	<p><i>A1, A3 A4, A5, A6, A7</i></p>	<p><i>1 DCH added, 1 DCH reconfigured</i></p>
<ul style="list-style-type: none"> - Added or Reconfigured UL TrCH information <ul style="list-style-type: none"> - Uplink transport channel type - UL Transport channel identity - TFS <ul style="list-style-type: none"> - CHOICE Transport channel type <ul style="list-style-type: none"> - Dynamic Transport format information <ul style="list-style-type: none"> - RLC Size - Number of TBs and TTI List <ul style="list-style-type: none"> - Transmission Time Interval - Number of Transport blocks - CHOICE Logical Channel list - Semi-static Transport Format information <ul style="list-style-type: none"> - Transmission time interval - Type of channel coding - Coding Rate - Rate matching attribute - CRC size - Uplink transport channel type - UL Transport channel identity - TFS 	<p>1 to maxTF</p>	<p>DCH 5</p> <p>Dedicated transport channels</p> <p>Reference to TS34.108 clause 6.11 Parameter Set (This IE is repeated for TF number.) Not Present Reference to TS34.108 clause 6.11 Parameter Set All</p> <p>Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set DCH 1</p>

Information Element	Condition	Value/remark
<ul style="list-style-type: none"> - CHOICE Transport channel type - Dynamic Transport format information <ul style="list-style-type: none"> - 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 	1 to maxTF	<p>Dedicated transport channels</p> <p>Reference to TS34.108 clause 6.11 Parameter Set (This IE is repeated for TF number.) Not Present Reference to TS34.108 clause 6.11 Parameter Set All</p> <p>Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set</p>
<p>Added or Reconfigured TrCH information list</p> <ul style="list-style-type: none"> - Added or Reconfigured UL TrCH information - Uplink transport channel type - UL Transport channel identity - TFS - CHOICE Transport channel type - Dynamic Transport format information <ul style="list-style-type: none"> - 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 - Uplink transport channel type - UL Transport channel identity - TFS - CHOICE Transport channel type - Dynamic Transport format information <ul style="list-style-type: none"> - 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 	A2, A8	<p>4 TrCHs(DCH for DCCH and 3DCHs for DTCH)</p> <p>DCH 5</p> <p>Dedicated transport channels</p> <p>Reference to TS34.108 clause 6.11 Parameter Set (This IE is repeated for TF number.) Not Present Reference to TS34.108 clause 6.11 Parameter Set All</p> <p>Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set</p> <p>DCH 1</p> <p>Dedicated transport channels</p> <p>Reference to TS34.108 clause 6.11 Parameter Set (This IE is repeated for TF number.) Not Present Reference to TS34.108 clause 6.11 Parameter Set All</p> <p>Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set</p>
<ul style="list-style-type: none"> - Uplink transport channel type - UL Transport channel identity - TFS - CHOICE Transport channel type - Dynamic Transport format information <ul style="list-style-type: none"> - 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 	1 to maxTF	<p>Dedicated transport channels</p> <p>Reference to TS34.108 clause 6.11 Parameter Set (This IE is repeated for TF number.) Not Present Reference to TS34.108 clause 6.11 Parameter Set All</p> <p>Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set</p>

Information Element	Condition	Value/remark
<ul style="list-style-type: none"> - CRC size - 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 - 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 	1 to maxTF	Reference to TS34.108 clause 6.11 Parameter Set DCH 2 Dedicated transport channels Reference to TS34.108 clause 6.11 Parameter Set (This IE is repeated for TF number.) Not Present Reference to TS34.108 clause 6.11 Parameter Set All Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set DCH 3 Dedicated transport channels Reference to TS34.108 clause 6.11 Parameter Set (This IE is repeated for TF number.) Not Present Reference to TS34.108 clause 6.11 Parameter Set All Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set
<ul style="list-style-type: none"> - CRC size CHOICE mode		Reference to TS34.108 clause 6.11 Parameter Set TDD (no data)
DL Transport channel information common for all transport channel <ul style="list-style-type: none"> - SCCPCH TFCS - CHOICE mode - Individual DL CCTrCH information - DL TFCS Identity - TFCS ID - Shared Channel Indicator - CHOICE DL parameters - UL DCH TFCS Identity - TFCS ID - Shared Channel Indicator 	A1, A2, A7, A8	Not Present TDD 2 FALSE SameAsUL 1 FALSE
DL Transport channel information common for all transport channel <ul style="list-style-type: none"> - SCCPCH TFCS - CHOICE mode - Individual DL CCTrCH information - DL TFCS Identity 	A3, A4, A5, A6	Not Present TDD

Information Element	Condition	Value/remark
<ul style="list-style-type: none"> - TFCS ID - Shared Channel Indicator - CHOICE DL parameters - DL TFCS <ul style="list-style-type: none"> - CHOICE TFCI Signalling - TFCI Field 1 Information - CHOICE TFCS representation - TFCS complete reconfiguration information - CHOICE CTFC Size - CTFC information - CTFC - Power offset information 		<p>2</p> <p>FALSE</p> <p>Independent</p> <p>Normal</p> <p>Complete reconfiguration</p> <p>Number of bits used must be enough to cover all combinations of CTFC from clause TS34.108 clause 6.11.5.4 Parameter Set. This IE is repeated for TFC numbers and reference to TS34.108 clause 6.11.5.4 Parameter Set</p> <p>Not Present</p>
Deleted TrCH information list	A1, A2, A3, A4, A5, A6, A7, A8	Not Present
<p>Added or Reconfigured TrCH information list</p> <ul style="list-style-type: none"> - 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 - Transparent mode signalling info - Downlink transport channel type - DL Transport channel identity - CHOICE DL parameters - Uplink transport channel type - UL TrCH identity - DCH quality target - BLER Quality value - Transparent mode signalling info 	A1	<p>1 DCH added, 1 DCH reconfigured</p> <p>DCH</p> <p>10</p> <p>Same as UL</p> <p>DCH</p> <p>5</p> <p>-2.0 Real(-6.3..0 by step of 0.1)</p> <p>Not Present</p> <p>DCH</p> <p>6</p> <p>Same as UL</p> <p>DCH</p> <p>1</p> <p>-2.0 Real(-6.3..0 by step of 0.1)</p> <p>Not Present</p>
<p>Added or Reconfigured TrCH information list</p> <ul style="list-style-type: none"> - 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 - Transparent mode signalling info - Downlink transport channel type - DL Transport channel identity - CHOICE DL parameters - TFS <ul style="list-style-type: none"> - CHOICE Transport channel type - Dynamic transport format information - RLC Size - Number of TBs and TTI List <ul style="list-style-type: none"> - Transmission Time Interval - Number of Transport blocks - Semi-static Transport Format information <ul style="list-style-type: none"> - Transmission time interval - Type of channel coding - Coding Rate 	A3, A4, A5, A6, A7	<p>2 TrCHs(DCH for DCCH and DCH for DTCH)</p> <p>DCH</p> <p>10</p> <p>Same as UL</p> <p>DCH</p> <p>5</p> <p>-2.0 Real(-6.3..0 by step of 0.1)</p> <p>Not Present</p> <p>DCH</p> <p>6</p> <p>Explicit</p> <p>Dedicated transport channels</p> <p>Reference to TS34.108 clause 6.11 Parameter Set</p> <p>(This IE is repeated for TF number.)</p> <p>Not Present</p> <p>Reference to TS34.108 clause 6.11 Parameter Set</p> <p>Reference to TS34.108 clause 6.11 Parameter Set</p> <p>Reference to TS34.108 clause 6.11 Parameter Set</p> <p>Reference to TS34.108 clause 6.11 Parameter Set</p>

Information Element	Condition	Value/remark
<ul style="list-style-type: none"> - Rate matching attribute - CRC size - DCH quality target - BLER Quality value - Transparent mode signalling info 		Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set -2.0 Not Present
Added or Reconfigured TrCH information list <ul style="list-style-type: none"> - Added or Reconfigured DL TrCH information - Downlink transport channel type - DL Transport channel identity - CHOICE DL parameters <ul style="list-style-type: none"> - Uplink transport channel type - UL TrCH identity - DCH quality target <ul style="list-style-type: none"> - BLER Quality value - Transparent mode signalling info - Downlink transport channel type - DL Transport channel identity - CHOICE DL parameters <ul style="list-style-type: none"> - TFS - CHOICE Transport channel type - Dynamic transport format information <ul style="list-style-type: none"> - RLC Size - Number of TBs and TTI List <ul style="list-style-type: none"> - Transmission Time Interval - Number of Transport blocks - Semi-static Transport Format information <ul style="list-style-type: none"> - Transmission time interval - Type of channel coding - Coding Rate - Rate matching attribute - CRC size - DCH quality target <ul style="list-style-type: none"> - BLER Quality value - Transparent mode signalling info - Downlink transport channel type - DL Transport channel identity - CHOICE DL parameters <ul style="list-style-type: none"> - TFS - CHOICE Transport channel type - Dynamic transport format information <ul style="list-style-type: none"> - RLC Size - Number of TBs and TTI List <ul style="list-style-type: none"> - Transmission Time Interval - Number of Transport blocks - Semi-static Transport Format information <ul style="list-style-type: none"> - Transmission time interval - Type of channel coding - Coding Rate - Rate matching attribute - CRC size 	A2, A8	4 TrCHs(DCH for DCCH and 3DCHs for DTCH) DCH 10 Same as UL DCH 5 -2.0 Real(-6.3..0 by step of 0.1) Not Present DCH 6 Explicit Dedicated transport channels Reference to TS34.108 clause 6.11 Parameter Set (This IE is repeated for TF number.) Not Present Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set -2.0 Not Present DCH 7 Explicit Dedicated transport channels Reference to TS34.108 clause 6.11 Parameter Set (This IE is repeated for TF number.) Not Present Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set

Information Element	Condition	Value/remark
<ul style="list-style-type: none"> - DCH quality target - BLER Quality value - Transparent mode signalling info - Downlink transport channel type - DL Transport channel identity - CHOICE DL parameters <ul style="list-style-type: none"> - TFS - CHOICE Transport channel type - Dynamic transport format information <ul style="list-style-type: none"> - RLC Size - Number of TBs and TTI List <ul style="list-style-type: none"> - Transmission Time Interval - Number of Transport blocks - Semi-static Transport Format information <ul style="list-style-type: none"> - Transmission time interval - Type of channel coding - Coding Rate - Rate matching attribute - CRC size - DCH quality target - BLER Quality value - Transparent mode signalling info 		-2.0 Not Present DCH 8 Explicit Dedicated transport channels Reference to TS34.108 clause 6.11 Parameter Set (This IE is repeated for TF number.) Not Present Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set -2.0 Not Present
Frequency info <ul style="list-style-type: none"> - 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	Not Present
CHOICE <i>channel requirement</i>	A5, A6	Not Present
CHOICE <i>channel requirement</i> <ul style="list-style-type: none"> - Uplink DPCH power control info <ul style="list-style-type: none"> - CHOICE mode - CHOICE TDD option <ul style="list-style-type: none"> - PRXPDPCHdes - CHOICE <i>UL OL PC info</i> <ul style="list-style-type: none"> - Broadcast UL OL PC info - Uplink Timing Advance Control 	A1, A2, A3, A4, A7, A8	Uplink DPCH info TDD 1.28 Mcps TDD Integer (-120...-58 by step of 1) Null Not Present
<ul style="list-style-type: none"> - UL CCTrCH List - TFCS ID 		1
<ul style="list-style-type: none"> - UL Target SIR 		Real (-11 .. 20 by step of 0.5dB) Reference to TS34.108 Parameter set.
<ul style="list-style-type: none"> - Time info <ul style="list-style-type: none"> - Activation time - Duration - Common timeslot info <ul style="list-style-type: none"> - 2nd interleaving mode - TFCI coding - Puncturing limit - Repetition period - Repetition length - Uplink DPCH timeslots and code - Dynamic SF usage 		(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 FALSE

Information Element	Condition	Value/remark
<ul style="list-style-type: none"> - First individual timeslot info - Timeslot number - CHOICE TDD option <ul style="list-style-type: none"> - Timeslot number - TFCI existence - Midamble shift and burst type 		1.28 Mcps TDD 1 OR 2 OR 3 TRUE
<ul style="list-style-type: none"> - CHOICE TDD option - Midamble allocation mode - Midamble configuration - Midamble Shift - CHOICE TDD option - Modulation - SS-TPC Symbols - Additional TPC-SS Symbols - First timeslot Code List - channelisation codes - CHOICE more timeslots - UL CCTrCH List to Remove CHOICE Mode Downlink HS-PDSCH Information Downlink information common for all radio links Downlink information common for all radio links <ul style="list-style-type: none"> - Downlink DPCH info common for all RL - Timing indication - CFN-targetSFN frame offset 	A1, A2, A3, A4, A5, A6, A7, A8 A1, A2, A3, A4, A5, A6, A7, A8 A5, A6 A1, A2, A3	1.28 Mcps TDD Default midamble 16 Not Present 1.28 Mcps TDD QPSK 1 Not present Repeated (1,2) for each channelisation code assigned in the slot to meet the needs of TS34.108 clause 6 Parameter Set. (SF/ i) where i denotes an unassigned code matching the SF specified in TS34.108 clause 6 Parameter Set. No more timeslots Not present TDD Not Present Not Present Maintain Not Present
<ul style="list-style-type: none"> - Downlink DPCH power control information - CHOICE mode <ul style="list-style-type: none"> - TPC Step Size - MAC-d HFN initial value - CHOICE mode - CHOICE mode - CHOICE TDD option <ul style="list-style-type: none"> - TSTD indicator - Default DPCH Offset Value Downlink information common for all radio links <ul style="list-style-type: none"> - Downlink DPCH info common for all RL - Timing indication - CFN-targetSFN frame offset - Downlink DPCH power control information - CHOICE mode <ul style="list-style-type: none"> - TPC Step Size - MAC-d HFN initial value - CHOICE mode - CHOICE mode - CHOICE TDD option - TSTD indicator 	A4, A7, A8	TDD 1 Not Present TDD TDD 1.28 Mcps TDD FALSE Not Present Initialise Not Present TDD 1 Not Present TDD TDD 1.28 Mcps TDD FALSE
<ul style="list-style-type: none"> - Default DPCH Offset Value - CHOICE mode <ul style="list-style-type: none"> - Default DPCH Offset Value Downlink information per radio link list <ul style="list-style-type: none"> - Downlink information for each radio link - Choice mode <ul style="list-style-type: none"> - Primary CCPCH info - Choice mode - Choice TDD Option - TSTD indicator 	A1, A2, A3, A4, A7, A8	TDD 0 Integer(0..7) TDD TDD 1.28 Mcps TDD FALSE

Information Element	Condition	Value/remark
<ul style="list-style-type: none"> - Cell parameters ID - SCTD indicator - Downlink DPCH info for each RL - CHOICE mode - DL CCTrCh List - TFCS ID - Time info - Activation time - Duration - Common timeslot info - 2nd interleaving mode 		Ref. to the Default setting in TS34.108 clause 6.1 (TDD) Integer(0..127) FALSE TDD 2 Integer(1.8) Now Infinite Default value is "Frame"
<ul style="list-style-type: none"> - 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 NULL 1.28 Mcps TDD
<ul style="list-style-type: none"> - Timeslot number - TFCI existence - Midamble shift and burst type - CHOICE TDD option - Midamble allocation mode - Midamble configuration - Midamble Shift - CHOICE TDD option - Modulation - SS-TPC Symbols - Additional TPC-SS Sysbols - 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 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	4 OR 5 OR 6 TRUE 1.28 Mcps TDD Default midamble 16 Not Present 1.28 Mcps TDD QPSK 1 Not present Repeated (1,2) for each channelisation code assigned in the slot to meet the needs of TS34.108 clause 6 Parameter Set. Reference to TS34.108 clause 6.11 Parameter Set No more timeslots This list is not required for 1.28 Mcps TDD and is to be ignored by the UE. 1 FALSE Not present Not Present TDD TDD 1.28 Mcps TDD FALSE Ref. to the Default setting in TS34.108 clause 6.1 (TDD) Integer(0..127) FALSE
<ul style="list-style-type: none"> - Downlink DPCH info for each RL 		Not Present
<ul style="list-style-type: none"> - SCCPCH Information for FACH 		Not Present
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

Message Type	Checked to see if the value is identical to the same IE in the downlink RADIO BEARER SETUP message.
RRC transaction identifier	
Integrity check info	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.
- Message authentication code	
- 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
START	Not checked
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 synchronisation info	Not checked

Contents of RADIO BEARER SETUP FAILURE message: AM

Information Element	Value/remark
Message Type	Checked to see if it is set to identical value of the same IE in the downlink PHYSICAL CHANNEL RECONFIGURATION message.
RRC transaction identifier	
Integrity check info	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.
- Message authentication code	
- 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)

<p>Message Type RRC transaction identifier</p> <p>Integrity check info - Message authentication code</p> <p>- RRC Message sequence number</p> <p>Uplink integrity protection activation info CHOICE mode - CHOICE TDD option COUNT-C activation time</p> <p>Radio bearer uplink ciphering activation time info</p> <p>Uplink counter synchronisation info</p>	<p>Checked to see the value is identical to the same IE in the downlink RADIO BEARER RELEASE message.</p> <p>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.</p> <p>This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.</p> <p>Not checked.</p> <p>TDD 1.28 Mcps TDD (no data)</p> <p>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.</p> <p>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.</p> <p>Not checked</p>
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Contents of RADIO BEARER RELEASE FAILURE message: AM

Information Element	Value/remark
<p>Message Type RRC transaction identifier</p> <p>Integrity check info - Message authentication code</p> <p>- RRC Message sequence number</p> <p>Failure cause Radio bearers for which reconfiguration would have succeeded</p>	<p>Checked to see if it is set to identical value of the same IE in the downlink RADIO BEARER RELEASE message.</p> <p>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.</p> <p>This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value.</p> <p>Checked to see if it meets test requirement</p> <p>Not checked</p>

Contents of RRC CONNECTION REQUEST message: TM

Information Element	Value/remark
<p>Message Type Initial UE identity - CHOICE UE id type - IMSI (GSM-MAP)</p> <p>Establishment cause Protocol error indicator UE Specific Behaviour Information 1 idle</p> <p>Measured results on RACH</p>	<p>Set to the UE's IMSI (GSM-MAP) or TMSI.</p> <p>To be checked against requirement if specified</p> <p>FALSE</p> <p>This IE will not be checked by default behaviour, but in specific test case.</p> <p>Not checked</p>

Contents of RRC CONNECTION RELEASE message: UM

Information Element	Value/remark
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.
- SRNC identity	0000 0000 0001B
- S-RNTI	0000 0000 0000 0000 0001B
RRC transaction identifier	0
Integrity check info	This IE is present when this message is transmitted on downlink DCCH. Else, this IE and the sub-IEs are omitted. 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.
- Message authentication code	SS provides the value of this IE, from its internal counter.
- RRC Message sequence number	2 (for CELL_DCH state). Not Present (for UE in other connected mode states).
N308	
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
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
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 TS34.108 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

Information Element	Value/remark
- 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
- 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 TS34.108 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

Information Element	Value/remark
- 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	According to TS34.108 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

Information Element	Value/remark
- 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	According to TS34.108 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 TS34.108 clause 6 Parameter Set.)
- PRACH TFCS	(This IE is repeated for TFC number.)
- CHOICE TFCS 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.
- CTFC information	Refer to TS34.108 clause 6 Parameter Set
- CHOICE mode	Not Present
- Individual UL CCTrCH information	TDD
Deleted TrCH information list	Not Present
Added or Reconfigured UL TrCH information	Not Present
- 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 TS34.108 clause 6 for standalone 13.6 kbps

Information Element	Value/remark
<ul style="list-style-type: none"> - Number of TBs and TTI lists - CHOICE mode <ul style="list-style-type: none"> - Transmission Time Interval - CHOICE Logical channel list - Semi-static Transport Format information 	signalling radio bearer (This IE is repeated for TFI number) TDD According to TS34.108 clause 6 for standalone 13.6 kbps signalling radio bearer All
DL Transport channel information common for all transport channel	
<ul style="list-style-type: none"> - SCCPCH TFCS - CHOICE mode - Individual DL CCTrCH information <ul style="list-style-type: none"> - DL TFCS Identity <ul style="list-style-type: none"> - TFCS ID - Shared Channel Indicator - CHOICE DL parameters 	Not Present TDD 1 Same as UL
Added or Reconfigured TrCH information list	
<ul style="list-style-type: none"> - Added or Reconfigured DL TrCH information <ul style="list-style-type: none"> - Downlink transport channel type - DL Transport channel identity - CHOICE DL parameters - Uplink transport channel type - UL Transport channel identity - DCH quality target <ul style="list-style-type: none"> - BLER Quality target 	DCH 10 Same as UL DCH 5 -6.3 Not Present Not Present Uplink DPCH info
Frequency info	
Maximum allowed UL TX power	Not Present
HOICE channel requirement	Uplink DPCH info
<ul style="list-style-type: none"> - Uplink DPCH power control info <ul style="list-style-type: none"> - CHOICE mode - CHOICE <i>TDD option</i> <ul style="list-style-type: none"> - UL target SIR - CHOICE mode <ul style="list-style-type: none"> - CHOICE <i>UL OL PC info</i> - CHOICE <i>TDD option</i> <ul style="list-style-type: none"> - Individual timeslot interference info <ul style="list-style-type: none"> - Individual timeslot interference - DPCH Constant Value - Primary CCPCH Tx Power - Time info <ul style="list-style-type: none"> - Activation time - Duration - Common timeslot info <ul style="list-style-type: none"> - 2nd interleaving mode - TFCI coding - Puncturing Limit - Repetition Period - Repetition Length - Uplink DPCH timeslots and codes - CPCH SET Info 	TDD 3.84 Mcps Reference to TS34.108 Parameter set TDD Individually signalled 3.84 Mcps Not Present Not Present (256+CFN-(CFN MOD 8 + 8))MOD 256 Infinite Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Default is to use the old timeslots and codes (no data)
Downlink information common for all radio links	
<ul style="list-style-type: none"> - Downlink DPCH info common for all RL - Timing indicator - CFN-targetSFN frame offset - Downlink DPCH power control information <ul style="list-style-type: none"> - DPC mode - CHOICE mode <ul style="list-style-type: none"> - CHOICE TDD option - Default DPCH Offset Value 	Maintain Not Present 0 (single) TDD 3.84 Mcps (no data) Not Present
Downlink information for each radio link list	
<ul style="list-style-type: none"> - Downlink information for each radio link <ul style="list-style-type: none"> - Choice mode - Primary CCPCH info <ul style="list-style-type: none"> - CHOICE <i>SyncCase</i> <ul style="list-style-type: none"> - Timeslot - Cell parameters ID - SCTD indicator 	TDD Sync Case 1 PCCPCH timeslot 0

Information Element	Value/remark
- Downlink DPCH info for each RL	TDD
- CHOICE mode	1
- DL CCTrCH List	(256+CFN-(CFN mod 8 + 8))mod 256
- TFCS ID	infinite
- Time info	
- Activation time	
- Duration	
- Common timeslot info	
- 2 nd interleaving mode	Reference to TS34.108
- TFCI coding	TRUE
- Puncturing limit	Reference to TS34.108 clause 6 Parameter set
- Repetition period	1
- Repetition length	Empty
- Downlink DPCH timeslots and codes	
- CHOICE <i>more timeslots</i>	
- 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
- 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 TS34.108 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 TS34.108 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

Contents of RRC CONNECTION SETUP message: UM (Transition to CELL_DCH) (1.28 Mcps TDD option)

Information Element	Value/remark
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	Not Present

Information Element	Value/remark
<p>requirement list</p> <p><i>ode</i></p> <p>tion to setup list</p> <ul style="list-style-type: none"> - 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 TS34.108 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 Not present 	

Information Element	Value/remark
- 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
- 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 TS34.108 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

Information Element	Value/remark
- 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	
- 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 TS34.108 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

Information Element	Value/remark
- 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
- 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 TS34.108 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 TFCS signalling	Normal
- TFCS 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 TS34.108 clause 6.11.5.4 Parameter Set.
- CTFC information	This IE is repeated for TFC numbers and reference to TS34.108 clause 6.11.5.4 Parameter Set
- CTFC	Reference to TS34.108 clause 6.11.5.4 Parameter Set

Information Element	Value/remark
<ul style="list-style-type: none"> - Power offset Information - CHOICE Gain Factors 	Computed Gain Factors(The last TFC is set to Signalled Gain Factors)
<ul style="list-style-type: none"> - Reference TFC ID - CHOICE Gain Factors 	0, Integer(0.. 3) Signalled Gain Factors(Not Present if the CHOICE Gain Factors is set to ComputedGain Factors)
<ul style="list-style-type: none"> - CHOICE mode - Gain Factor d - Reference TFC ID - CHOICE mode 	TDD 15 0, Integer (0..3) TDD
- TFC subset	Default value is the complete existing set of transport format combinations
<ul style="list-style-type: none"> - CHOICE <i>Subset representation</i> - Allowed Transport Format combination 	Allowed transport format combination list 0 to MaxTFCvalue-1 (MaxTFCValue is refer to TS34.108 clause 6 Parameter Set.)
<ul style="list-style-type: none"> - Transport format combination - TFC subset list 	Integer (0.. 1023) Not present
- Added or Reconfigured UL TrCH information list	
- Added or Reconfigured UL TrCH information	
<ul style="list-style-type: none"> - Uplink transport channel type - UL Transport channel identity - TFS - CHOICE Transport channel type - Dynamic Transport format information - RLC size 	DCH 5 Dedicated transport channels
<ul style="list-style-type: none"> - Number of TBs and TTI lists - Transmission Time Interval 	According to TS34.108 clause 6 for standalone 13.6 kbps signalling radio bearer (This IE is repeated for TFI number) Not Present
- Number of Transport blocks	Reference to TS34.108 clause 6.11 Parameter Set
<ul style="list-style-type: none"> - CHOICE Logical channel list - Semi-static Transport Format information - Transmission time interval - Type of channel coding - Coding Rate - Rate matching attribute 	All Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set Reference to TS34.108 clause 6.11 Parameter Set
DL Transport channel information common for all transport channel	
<ul style="list-style-type: none"> - SCCPCH TFCS - CHOICE mode - Individual DL CCTrCH information - DL TFCS Identity - TFCS ID - Shared Channel Indicator - CHOICE DL parameters 	Not Present TDD 1 FALSE Same as UL
- Added or Reconfigured TrCH information list	
- Added or Reconfigured DL TrCH information	
<ul style="list-style-type: none"> - Downlink transport channel type - DL Transport channel identity - CHOICE DL parameters - Uplink transport channel type - UL Transport channel identity 	DCH 10 Same as UL DCH 5
-DCH quality target	
- BLER Quality target	-6.3
Frequency info	Not Present
Maximum allowed UL TX power	33dBm
HOICE channel requirement	Uplink DPCH info
- Uplink DPCH power control info	
<ul style="list-style-type: none"> - CHOICE mode - CHOICE <i>TDD option</i> - PRX_{PDPCHdes} - CHOICE <i>UL OL PC info</i> - CHOICE <i>TDD option</i> - TPC step size - Primary CCPCH Tx Power 	TDD 1.28 Mcps TDD Reference to TS34.108 clause 6.11 Parameter set Individually signalled 1.28 Mcps TDD 1 dB Not Present
- CHOICE mode	TDD
- Uplink Timing Advance Control	

Information Element	Value/remark
<ul style="list-style-type: none"> - CHOICE Timing Advance - CHOICE TDD option <ul style="list-style-type: none"> - Uplink synchronisation parameters <ul style="list-style-type: none"> - Uplink synchronisation step size - Uplink synchronisation frequency - Synchronisation parameters - UL CCTrCH List - TFCS ID - UL Target SIR - Time info <ul style="list-style-type: none"> - Activation time - Duration - Common timeslot info <ul style="list-style-type: none"> - 2nd interleaving mode - TFCI coding - Puncturing Limit - Repetition Period - Repetition Length - Uplink DPCH timeslots and codes - Dynamic SF usage - First individual timeslot info <ul style="list-style-type: none"> - Timeslot number <ul style="list-style-type: none"> - CHOICE TDD option - Timeslot number - TFCI existence - Midamble shift and burst type <ul style="list-style-type: none"> - CHOICE TDD option <ul style="list-style-type: none"> - Midamble allocation mode - Midamble configuration - Midamble Shift - CHOICE TDD option <ul style="list-style-type: none"> - Modulation - SS-TPC Symbols - Additional TPC-SS Sysbols - First timeslot Code List <ul style="list-style-type: none"> - channelisation codes <ul style="list-style-type: none"> - CHOICE more timeslots - UL CCTrCH List to Remove 	<p>Enabled</p> <p>1.28 Mcps TDD</p> <p>1</p> <p>1</p> <p>Not present</p> <p>1</p> <p>Real (-11 .. 20 by step of 0.5dB)</p> <p>Reference to TS34.108 clause 6.11 Parameter set.</p> <p>(256+CFN-(CFN MOD 8 + 8))MOD 256</p> <p>Infinite</p> <p>Reference to TS34.108 clause 6 Parameter Set</p> <p>Reference to TS34.108 clause 6 Parameter Set</p> <p>Reference to TS34.108 clause 6 Parameter Set</p> <p>null</p> <p>FALSE</p> <p>1.28 Mcps TDD</p> <p>1 OR 2 OR 3</p> <p>TRUE</p> <p>1.28 Mcps TDD</p> <p>Default midamble</p> <p>16</p> <p>Not Present</p> <p>1.28 Mcps TDD</p> <p>QPSK</p> <p>1</p> <p>Not present</p> <p>Repeated (1,2) for each channelisation code assigned in the slot to meet the needs of TS34.108 clause 6 Parameter Set.</p> <p>(SF/ i) where i denotes an unassigned code matching the SF specified in TS34.108 clause 6 Parameter Set.</p> <p>No more timeslots</p> <p>Not present</p>
<p>Downlink information common for all radio links</p> <ul style="list-style-type: none"> - Downlink DPCH info common for all RL - Timing indication - CFN-targetSFN frame offset - Downlink DPCH power control information <ul style="list-style-type: none"> - CHOICE <i>mode</i> - TPC Step Size - MAC-d HFN initial value - CHOICE <i>mode</i> - CHOICE <i>mode</i> <ul style="list-style-type: none"> - CHOICE TDD option - TSTD indicator - Default DPCH Offset Value <p>Downlink information for each radio link list</p> <ul style="list-style-type: none"> - Downlink information for each radio link <ul style="list-style-type: none"> - Choice <i>mode</i> - Primary CCPCH info <ul style="list-style-type: none"> - CHOICE <i>mode</i> - CHOICE TDD option <ul style="list-style-type: none"> - TSTD indicator - Cell parameters ID - SCTD indicator - Downlink DPCH info for each RL <ul style="list-style-type: none"> - CHOICE <i>mode</i> - DL CCTrCH List 	<p>Initialize</p> <p>Not Present</p> <p>TDD</p> <p>1 dB</p> <p>Not Present</p> <p>TDD (no data)</p> <p>TDD</p> <p>1.28 Mcps TDD</p> <p>FALSE</p> <p>Not Present</p> <p>TDD</p> <p>TDD</p> <p>1.28 Mcps TDD</p> <p>FALSE</p> <p>Not present</p> <p>FALSE</p> <p>TDD</p>

Information Element	Value/remark
- TFCS ID	1
- Time info	
- Activation time	$(256+CFN-(CFN \bmod 8 + 8)) \bmod 256$
- Duration	infinite
- Common timeslot info	
- 2 nd interleaving mode	Reference to TS34.108 clause 6.11 Parameter set
- TFCI coding	Reference to TS34.108 clause 6.11 Parameter set
- Puncturing limit	Reference to TS34.108 clause 6.11 Parameter set
- Repetition period	1
- Repetition length	NULL
- Downlink DPCH timeslots and codes	
- First Individual timeslot info	
- Timeslot number	
- CHOICE <i>more timeslots</i>	1.28 McpsTDD
- CHOICE TDD option	
- 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 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 TS34.108 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 TS34.108 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

Contents of RRC CONNECTION SETUP message: UM (Transition to CELL_FACH) (1.28 Mcps TDD)

Information Element	Value/remark
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	
DD capability update requirement	

Information Element	Value/remark
3.84 Mcps TDD capability update requirement .28 Mcps TDD capability update requirement apability update requirement list ode tion to setup list - Signalling RB information to setup - RB identity - CHOICE RLC info type - CHOICE Uplink RLC mode - Transmission RLC discard - CHOICE Downlink RLC mode - RB mapping info - Information for each multiplexing option - RLC logical channel mapping indicator - Number of RLC logical channels - Uplink transport channel type - UL Transport channel identity - Logical channel identity - CHOICE RLC size list - RLC size index - MAC logical channel priority - Downlink RLC logical channel info - Number of RLC logical channels - Downlink transport channel type - DL DCH Transport channel identity - DL DSCH Transport channel identity - DL HS-DSCH MAC-d flow identity - Logical channel identity - Signalling RB information to setup - RB identity - CHOICE RLC info type - CHOICE Uplink RLC mode - Transmission RLC discard - CHOICE SDU discard mode - MAX_DAT - Transmission window size - Timer_RST - Max_RST - Polling info - Timer_poll_prohibit - Timer_poll - Poll_SDU - Last transmission PDU poll - Last retransmission PDU poll - Poll_Window - Timer_poll_periodic - CHOICE Downlink RLC mode - In-sequence delivery - Receiving window size - Downlink RLC status info - Timer_status_prohibit - Timer_EPC - Missing PDU indicator - Timer_STATUS_periodic - RB mapping info - Information for each multiplexing option - RLC logical channel mapping indicator - Number of RLC logical channels - Uplink transport channel type - UL Transport channel identity - Logical channel identity - CHOICE RLC size list - RLC size index - MAC logical channel priority - Downlink RLC logical channel info - Number of RLC logical channels	(UM DCCH for RRC) 1 RLC info UM RLC Not Present UM RLC 1 RBMuxOptions Not Present 1 RACH Not Present 1 Explicit List Reference to TS34.108 clause 6 Parameter Set 1 1 FACH Not Present Not Present Not Present 1 (AM DCCH for RRC) 2 RLC info AM RLC No Discard 15 128 500 1 200 200 Not present 1 TRUE TRUE 99 Not Present AM RLC TRUE 128 200 Not Present TRUE Not Present 1 RBMuxOptions Not Present 1 RACH Not Present 2 Explicit List Reference to TS34.108 clause 6 Parameter Set 2 1

Information Element	Value/remark
- 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	No Discard
- CHOICE SDU discard mode	15
- MAX_DAT	128
- Transmission window size	500
- Timer_RST	1
- Max_RST	1
- Polling info	200
- Timer_poll_prohibit	200
- Timer_poll	1
- 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	200
- Timer_status_prohibit	Not Present
- Timer_EPC	Not Present
- Missing PDU indicator	TRUE
- Timer_STATUS_periodic	Not Present
- RB mapping info	1 RBmuxOptions
- Information for each multiplexing option	Not Present
- 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 TS34.108 clause 6 Parameter Set
- MAC logical channel priority	3
- Downlink RLC logical channel info	1
- 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	No discard
- CHOICE SDU discard mode	15
- MAX_DAT	128
- Transmission window size	500
- Timer_RST	1
- Max_RST	1
- Polling info	200
- Timer_poll_prohibit	200
- Timer_poll	1
- Poll_SDU	1
- Last transmission PDU poll	TRUE
- Last retransmission PDU poll	TRUE
- Poll_Window	99

Information Element	Value/remark
- 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	1 RBMuxOptions
- 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 TS34.108 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 TFCS signalling	Normal
- TFCS 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 TS34.108 clause 6.11.5.4 Parameter Set.
- CTFC information	This IE is repeated for TFC numbers and reference to TS34.108 clause 6.11.5.4 Parameter Set
- CTFC	Reference to TS34.108 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 TS34.108 clause 6 Parameter Set.)
- Transport format combination	Integer (0.. 1023)
- TFC subset list	Not present
- Added or Reconfigured UL TrCH information list	Not present
- DL Transport channel information common for all transport channel	

Information Element	Value/remark
- SCCPCH TFCS	Not Present
- CHOICE mode	TDD
- Individual DL CCTrCH information	
- DL TFCS Identity	1
- TFCS ID	FALSE
- Shared Channel Indicator	Same as UL
- CHOICE DL parameters	Not present
- Added or Reconfigured TrCH information list	Not Present
Frequency info	Not Present
Maximum allowed UL TX power	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	
- 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	Not Present
- SCCPCH information for FACH	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	Not checked
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 RRC transaction identifier Integrity check info <ul style="list-style-type: none"> - Message authentication code - RRC Message Sequence Number Security capability <ul style="list-style-type: none"> - Ciphering algorithm capability - UEA0 - UEA1 - Spare - Integrity protection algorithm capability - UIA1 - Spare Ciphering mode info <ul style="list-style-type: none"> - Ciphering mode command - Ciphering algorithm - Ciphering activation time for DPCH - Radio bearer downlink ciphering activation time info - Radio bearer activation time - RB identity - RLC sequence number - RB identity - RLC sequence number - RB identity - RLC sequence number - RB identity - RLC sequence number Integrity protection mode info <ul style="list-style-type: none"> - Integrity protection mode command - Downlink integrity protection activation info - Integrity protection algorithm - Integrity protection initialisation number CN domain identity UE system specific security capability	A1, A2	Arbitrarily selects an integer between 0 and 3 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. Set to an arbitrarily selected integer between 0 and 15 If ciphering is not indicated to be active on IXIT statements in TS 34.123-2, set this IE to TRUE. If ciphering is indicated to be active on IXIT statements in TS 34.123-2, set this IE to TRUE. FALSE 0000000000000010B (UIA1) TRUE FALSE 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. Start/restart Use the same ciphering algorithm specified in "ciphering algorithm capability" IE in this message. Not Present 1 Current RLC SN+2 2 Current RLC SN+2 3 Current RLC SN + 2 4 Current RLC SN + 2 Start Not Present UIA1 SS selects an arbitrary 32 bits number for FRESH Supported domain Not Checked
UE system specific security capability <ul style="list-style-type: none"> - 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

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 Radio bearer uplink ciphering activation time info	Not checked. 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 12.2kbps, the DL reference measurement channel for BTDF, 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

Information Element	Value/remark
Message Type RRC transaction identifier Integrity check info <ul style="list-style-type: none"> - message authentication code - RRC message sequence number Integrity protection mode info Ciphering mode info Activation time New U-RNTI New C-RNTI New DSCH-RNTI RRC State indicator UTRAN DRX cycle length coefficient CN information info URA identity Signalling RB information to setup	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 Not Present CELL_DCH Not Present Not Present Not Present
RAB information for setup list <ul style="list-style-type: none"> - RAB information for setup <ul style="list-style-type: none"> - RAB info - RAB identity - CN domain identity - NAS Synchronization Indicator - Re-establishment timer - RB information to setup list - RB information to setup - RB identity <ul style="list-style-type: none"> - PDCP info - CHOICE RLC info type - CHOICE Uplink RLC mode - Transmission RLC discard - Segmentation indication - CHOICE Downlink RLC mode - Segmentation indication - RB mapping info <ul style="list-style-type: none"> - Information for each multiplexing option - RLC logical channel mapping indicator - Number of uplink RLC logical channels - Uplink transport channel type - UL Transport channel identity - Logical channel identity - CHOICE RLC size list - MAC logical channel priority - Downlink RLC logical channel info - Number of downlink RLC logical channels - Downlink transport channel type - DL DCH Transport channel identity - DL DSCH Transport channel identity - Logical channel identity 	0000 0001B The first/ leftmost bit of the bit string contains the most significant bit of the RAB identity. CS domain Not Present UseT314 10 Not Present RLC info TM RLC Not Present FALSE TM RLC FALSE Not Present 1 DCH 1 Not Present Configured 7 1 DCH 6 Not Present Not Present
RB information to be affected list Downlink counter synchronisation info	Not Present Not Present
UL Transport channel information for all transport channels <ul style="list-style-type: none"> - PRACH TFCS - CHOICE mode - TFC subset - UL DCH TFCS - CHOICE TFCI signalling - TFCI Field 1 information - CHOICE TFCS representation 	Not Present FDD Not Present Normal Complete reconfiguration

Information Element	Value/remark
<ul style="list-style-type: none"> - TFCS complete reconfigure information - CHOICE CTFC Size <ul style="list-style-type: none"> - CTFC information - 2bit CTFC -Power offset Information <ul style="list-style-type: none"> - CHOICE Gain Factors - Reference TFC ID - CHOICE mode - Power offset P_{p-m} - 2bit CTFC - Power offset Information <ul style="list-style-type: none"> - CHOICE Gain Factors - Reference TFC ID - CHOICE mode - Power offset P_{p-m} - 2bit CTFC - Power offset Information <ul style="list-style-type: none"> - CHOICE Gain Factors - Reference TFC ID - CHOICE mode - Power offset P_{p-m} - 2bit CTFC - Power offset Information <ul style="list-style-type: none"> - CHOICE Gain Factors - CHOICE mode - Gain factor β_c - Gain factor β_d - Reference TFC ID - CHOICE mode - Power offset P_{p-m} 	<p>2 bit CTFC 4 TFCs 0</p> <p>Computed Gain Factors 0 FDD Not Present 2</p> <p>Computed Gain Factors 0 FDD Not Present 1</p> <p>Computed Gain Factors 0 FDD Not Present 3</p> <p>Signalled Gain Factors FDD 8 15 0 FDD Not Present Not Present</p>
Deleted UL TrCH information list	Not Present
<ul style="list-style-type: none"> Added or Reconfigured UL TrCH information list <ul style="list-style-type: none"> - Added or Reconfigured UL TrCH information - Uplink transport channel type - UL Transport channel identity - TFS - CHOICE Transport channel type - Dynamic Transport Format Information <ul style="list-style-type: none"> - RLC size - Number of TBs and TTI List <ul style="list-style-type: none"> - Transmission Time Interval - Number of Transport blocks <ul style="list-style-type: none"> - Transmission Time Interval - Number of Transport blocks - CHOICE Logical Channel List - Semi-static Transport Format Information <ul style="list-style-type: none"> - Transmission time interval - Type of channel coding - Coding Rate - Rate matching attribute - CRC size 	<p>1</p> <p>DCH 1</p> <p>Dedicated transport channels</p> <p>244 bits 2 Not Present 0 Not Present 1 ALL</p> <p>20 Convolutional 1/3 256 16</p>
<ul style="list-style-type: none"> CHOICE mode <ul style="list-style-type: none"> - CPCH set ID - Added or Reconfigured TrCH information for DRAC list 	<p>FDD Not Present Not Present</p>
<ul style="list-style-type: none"> DL Transport channel information common for all transport channel <ul style="list-style-type: none"> - SCCPCH TFCS - CHOICE mode - CHOICE DL parameters 	<p>Not Present FDD Same as UL</p>
<ul style="list-style-type: none"> Deleted DL TrCH information list Added or Reconfigured DL TrCH information list <ul style="list-style-type: none"> - Added or Reconfigured DL TrCH information <ul style="list-style-type: none"> - Downlink transport channel type - DL Transport channel identity - CHOICE DL parameters - Uplink transport channel type 	<p>Not Present 1</p> <p>DCH 6 Same as UL DCH</p>

Information Element	Value/remark
- 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
- 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
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 $P_{\text{Pilot-DPCH}}$	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
- 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	100
- PDSCH with SHO DCH info	Not Present
- PDSCH code mapping	Not Present
- 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 38400
- Secondary CPICH info	Not Present
- DL channelisation code	
- Secondary scrambling code	1
- Spreading factor	128
- Code number	0
- Scrambling code change	No change
- TPC combination index	0
- SSDT Cell Identity	Not Present
- Closed loop timing adjustment mode	Not Present
- SCCPCH information for FACH	Not Present

Contents of RADIO BEARER SETUP message: BTFD RMC

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. SS provides the value of this IE, from its internal counter.
- RRC message sequence number	Not Present
Integrity protection mode info	Not Present
Ciphering mode info	The 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	Use one of the supported ciphering algorithms
- Ciphering activation time for DPCH	Set by operator
- Radio bearer downlink ciphering activation time info	Not Present
Activation time	Set by operator
New U-RNTI	Not Present
New C-RNTI	Not Present
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	0000 0001B
- RAB identity	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	1
- 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 synchronisation info	Not Present
	RMC for BTFD
UL Transport channel information for all transport channels	
- PRACH TFCS	Not Present
- CHOICE mode	FDD

Information Element	Value/remark
- 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)	
-gainFactorInformation	SignalledGainFactors
-modeSpecificInfo	Fdd
-fdd	
- Gain factor β_c	8
- Gain factor β_d	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	0

Information Element	Value/remark
- ctfc6	17
-powerOffsetInformation(OP)	
-gainFactorInformation	ComputedGainFactors
- Reference TFC ID	0
- ctfc6	7
-powerOffsetInformation(OP)	
-gainFactorInformation	ComputedGainFactors
- Reference TFC ID	0
- ctfc6	18
-powerOffsetInformation(OP)	
-gainFactorInformation	ComputedGainFactors
- Reference TFC ID	0
- ctfc6	8
-powerOffsetInformation(OP)	
-gainFactorInformation	ComputedGainFactors
- Reference TFC ID	0
- ctfc6	19
-powerOffsetInformation(OP)	
-gainFactorInformation	ComputedGainFactors
- Reference TFC ID	0
- ctfc6	9
-powerOffsetInformation(OP)	
-gainFactorInformation	ComputedGainFactors
- Reference TFC ID	0
- ctfc6	20
-powerOffsetInformation(OP)	
-gainFactorInformation	ComputedGainFactors
- Reference TFC ID	0
- ctfc6	10
-powerOffsetInformation(OP)	
-gainFactorInformation	ComputedGainFactors
- Reference TFC ID	0
- ctfc6	21
-powerOffsetInformation(OP)	
-gainFactorInformation	ComputedGainFactors
- Reference TFC ID	0
Added or Reconfigured UL TrCH information	
-ul-AddReconfTransChInfoList	1
- 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
RLC size	171
- Choice Logical Channel List	ALL
-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

Information Element	Value/remark
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
- 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 TFCSI signalling	Normal
- TFCSI Field 1 information	
- CHOICE TFCS representation	Complete reconfiguration
- TFCS complete reconfigure information	
- CHOICE CTFC Size	Ctfc6Bit
- ctfc6Bit	20
- ctfc6	9
- ctfc6	19
- 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
- ctfc6	18
Deleted DL TrCH information	Not Present
Added or Reconfigured DL TrCH information	
-dl-AddReconfTransChInfoList(OP)	1
- Downlink transport channel type	DCH
- DL Transport channel identity	6

Information Element	Value/remark
- 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
RLC size	159
- Choice Logical Channel List	ALL
-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	
-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
RLC size	0
-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	0
- PC Preamble	1 frame
- SRB delay	7 frames
- Power Control Algorithm	Algorithm1
- TPC step size	1dB

Information Element	Value/remark
- 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)
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 $P_{\text{Pilot-DPCH}}$	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
- Default DPCH Offset Value	Not Present
Downlink information for each radio link list	
- Primary CPICH info	Not Present
- Primary scrambling code	100
- PDSCH with SHO DCH info	Not Present
- PDSCH code mapping	Not Present
- 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 38400
- Secondary CPICH info	Not Present
- DL channelisation code	
- Secondary scrambling code	0
- Spreading factor	128
- Code number	Set to value stored in SS
- Scrambling code change	No change
- TPC combination index	0
- SSDT Cell Identity	Not Present
- Closed loop timing adjustment mode	Not Present
- SCCPCH information for FACH	Not Present

Contents of RRC CONNECTION RELEASE message: UM

Information Element	Value/remark
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.
- SRNC identity	0000 0000 0001B
- S-RNTI	0000 0000 0000 0000 0001B
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
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
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 TS34.108 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	

Information Element	Value/remark
- 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	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 TS34.108 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	

Information Element	Value/remark
- 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
- 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 TS34.108 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

Information Element	Value/remark
- Transmission RLC discard	No Discard
- SDU discard mode	15
- MAX_DAT	128
- Transmission window size	500
- Timer_RST	1
- Max_RST	200
- Polling info	200
- Timer_poll_prohibit	200
- Timer_poll	Not Present
- Poll_PDU	1
- Poll_SDU	TRUE
- Last transmission PDU poll	TRUE
- Last retransmission PDU poll	99
- Poll_Windows	Not Present
- Timer_poll_periodic	AM RLC
- CHOICE Downlink RLC mode	TRUE
- In-sequence delivery	128
- Receiving window size	200
- Downlink RLC status info	Not Present
- Timer_status_prohibit	Not Present
- Timer_EPC	TRUE
- Missing PDU indicator	Not Present
- Timer_STATUS_periodic	Not Present
- RB mapping info	2 RBMuxOptions
- Information for each multiplexing option	Not Present
- RLC logical channel mapping indicator	1
- Number of RLC logical channels	DCH
- Uplink transport channel type	5
- UL Transport channel identity	4
- Logical channel identity	Configured
- CHOICE RLC size list	4
- MAC logical channel priority	4
- Downlink RLC logical channel info	1
- Number of RLC logical channels	DCH
- Downlink transport channel type	10
- DL DCH Transport channel identity	Not Present
- 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 TS34.108 clause 6 Parameter Set
- MAC logical channel priority	4
- Downlink RLC logical channel info	1
- Number of RLC logical channels	FACH
- Downlink transport channel type	Not Present
- 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	

Information Element	Value/remark
- 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 β_c	15
- Gain factor β_d	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
- CHOICE DL parameters	SameAsUL
- 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

Information Element	Value/remark
- Uplink DPCH power control info	
- DPCCH power offset	-6dB
- PC Preamble	1 frame
- SRB delay	7 frames
- Power Control Algorithm	Algorithm1
- TPC step size	1dB
- 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	Initialise
- CFN-targetSFN frame offset	Not Present
- Downlink DPCH power control information	
- CHOICE mode	FDD
- DPC mode	0 (single)
- CHOICE mode	FDD
- Power offset $P_{\text{Pilot-DPCH}}$	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
- 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	100
- PDSCH with SHO DCH info	Not Present
- PDSCH code mapping	Not Present
- 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 38400
- Secondary CPICH info	Not Present
- DL channelisation code	
- Secondary scrambling code	1
- Spreading factor	256
- Code number	0
- Scrambling code change	Not Present
- TPC combination index	0
- SSDT Cell Identity	Not Present
- Closed loop timing adjustment mode	Not Present
- SCCPCH information for FACH	Not Present

Contents of SECURITY MODE COMMAND message: AM

Information Element	Condition	Value/remark
Message Type RRC transaction identifier Integrity check info <ul style="list-style-type: none"> - Message authentication code - RRC Message Sequence Number Security capability <ul style="list-style-type: none"> - Ciphering algorithm capability - UEA0 - UEA1 - Spare - Integrity protection algorithm capability - UIA1 - Spare Ciphering mode info <ul style="list-style-type: none"> - Ciphering mode command - Ciphering algorithm - Ciphering activation time for DPCH - Radio bearer downlink ciphering activation time info - Radio bearer activation time <ul style="list-style-type: none"> - RB identity - RLC sequence number - RB identity - RLC sequence number - RB identity - RLC sequence number - RB identity - RLC sequence number Integrity protection mode info <ul style="list-style-type: none"> - Integrity protection mode command - Downlink integrity protection activation info - Integrity protection algorithm - Integrity protection initialisation number CN domain identity UE system specific security capability	A1, A2	Arbitrarily selects an integer between 0 and 3 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. Set to an arbitrarily selected integer between 0 and 15 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. 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 2-15 = FALSE 000000000000010B (UIA1) TRUE Spare 0 and Spare 2-15 = FALSE 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. Start/restart 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 Not Present 1 Current RLC SN+2 2 Current RLC SN+2 3 Current RLC SN + 2 4 Current RLC SN + 2 Start Not Present UIA1 SS selects an arbitrary 32 bits number for FRESH CS or PS Not Present
UE system specific security capability <ul style="list-style-type: none"> - Inter-RAT UE security capability - CHOICE <i>system</i> - 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 - Paging cause - CN domain identity - CHOICE UE identity - IMSI (GSM-MAP) BCCH modification info	CN identity Terminating Interactive Call PS domain Set to the same octet string as in the IMSI stored in the USIM card Not Present

Contents of RADIO BEARER SETUP message: AM or UM (3.84 Mcps TDD)

Information Element	Condition	Value/remark
Message Type RRC transaction identifier Integrity check info <ul style="list-style-type: none"> - message authentication code - RRC message sequence number Integrity protection mode info Ciphering mode info Activation time New U-RNTI New C-RNTI New DSCH-RNTI RRC State indicator UTRAN DRX cycle length coefficient CN information info URA identity Signalling RB information to setup	A1,A3	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 Not Present CELL_DCH Not Present Not Present Not Present Not Present
RAB information for setup list <ul style="list-style-type: none"> - RAB information for setup <ul style="list-style-type: none"> - RAB info - RAB identity - CN domain identity - NAS Synchronization Indicator - Re-establishment timer - RB information to setup list - RB information to setup - RB identity <ul style="list-style-type: none"> - PDCP info - CHOICE RLC info type - CHOICE Uplink RLC mode - Transmission RLC discard - Segmentation indication - CHOICE Downlink RLC mode - Segmentation indication - RB mapping info - Information for each multiplexing option - RLC logical channel mapping indicator - Number of uplink RLC logical channels - Uplink transport channel type - UL Transport channel identity - Logical channel identity - CHOICE RLC size list - MAC logical channel priority - Downlink RLC logical channel info - Number of downlink RLC logical channels - Downlink transport channel type - DL DCH Transport channel identity - DL DSCH Transport channel identity - Logical channel identity 	A1	0000 0001B The first/ leftmost bit of the bit string contains the most significant bit of the RAB identity. CS domain Not Present UseT314 10 Not Present RLC info TM RLC Not Present FALSE TM RLC FALSE Not Present 1 DCH 1 Not Present Configured 7 1 DCH 6 Not Present Not Present
RAB information for setup list <ul style="list-style-type: none"> - RAB information for setup <ul style="list-style-type: none"> - RAB info - RAB identity - CN domain identity - NAS Synchronization Indicator - Re-establishment timer - RB information to setup list - RB information to setup 	A3	0000 0101B The first/ leftmost bit of the bit string contains the most significant bit of the RAB identity. PS domain Not Present UseT314

Information Element	Condition	Value/remark
<ul style="list-style-type: none"> - RB identity - PDCP info - CHOICE RLC info type - CHOICE Uplink RLC mode - Transmission RLC discard - CHOICE SDU discard mode - MAX_DAT - Transmission window size - Timer_RST - Max_RST - Polling info - Timer_poll_prohibit - Timer_poll - Poll_SDU - Last transmission PDU poll - Last retransmission PDU poll - Poll_Windows - Timer_poll_periodic - CHOICE Downlink RLC mode - In-sequence delivery - Receiving window size - Downlink RLC status info - Timer_status_prohibit - Timer_EPC - Missing PDU indicator - Timer_STATUS_periodic - RB mapping info - Information for each multiplexing option - RLC logical channel mapping indicator - Number of uplink RLC logical channels - Uplink transport channel type - UL Transport channel identity - Logical channel identity - CHOICE RLC size list - MAC logical channel priority - Downlink RLC logical channel info - Number of downlink RLC logical channels - Downlink transport channel type - DL DCH Transport channel identity - DL DSCH Transport channel identity - Logical channel identity - RLC logical channel mapping indicator - Number of uplink RLC logical channels - Uplink transport channel type - UL Transport channel identity - Logical channel identity - CHOICE RLC size list - RLC size index - MAC logical channel priority - Downlink RLC logical channel info - Number of downlink RLC logical channels - Downlink transport channel type - DL DCH Transport channel identity - DL DSCH Transport channel identity - Logical channel identity 		<p>20</p> <p>Not Present</p> <p>RLC info</p> <p>AM RLC</p> <p>No discard</p> <p>15</p> <p>128</p> <p>500</p> <p>4</p> <p>200</p> <p>200</p> <p>1</p> <p>TRUE</p> <p>TRUE</p> <p>99</p> <p>Not Present</p> <p>AM RLC</p> <p>TRUE</p> <p>128</p> <p>200</p> <p>200</p> <p>TRUE</p> <p>Not Present</p> <p>2RBMuxOptions</p> <p>Not Present</p> <p>1</p> <p>DCH</p> <p>1</p> <p>Not Present</p> <p>Configured</p> <p>8</p> <p>1</p> <p>DCH</p> <p>6</p> <p>Not Present</p> <p>Not Present</p> <p>Not Present</p> <p>1</p> <p>RACH</p> <p>Not Present</p> <p>7</p> <p>Explicit List</p> <p>Reference to TS34.108 clause 6 Parameter Set</p> <p>8</p> <p>1</p> <p>FACH</p> <p>Not Present</p> <p>Not Present</p> <p>Not Present</p>
<p>RB information to be affected list</p> <p>Downlink counter synchronisation info</p>	<p>A1,A3</p>	<p>Not Present</p> <p>Not Present</p>
<p>UL Transport channel information for all transport channels</p> <ul style="list-style-type: none"> - PRACH TFCS - CHOICE mode <ul style="list-style-type: none"> - Individual UL CCTrCH information - TFCS ID - Allowed Transport Format combination - PRACH TFCS 	<p>A1,A3</p>	<p>Not Present</p> <p>TDD</p> <p>(This IE is repeated for TFC number.)</p> <p>0 to MaxTFCvalue-1 (MaxTFCValue is refer to TS34.108 clause 6 Parameter Set.)</p> <p>(This IE is repeated for TFC number.)</p>

Information Element	Condition	Value/remark
<ul style="list-style-type: none"> - CHOICE TFCI signalling <ul style="list-style-type: none"> - TFCI Field 1 information - TFCS complete reconfigure information - CHOICE TFCS Size - CTFC information - CHOICE mode <ul style="list-style-type: none"> - Individual UL CCTrCH information Deleted UL TrCH information list		Normal Number of used bits must be enough to cover all combinations of CTFC from clauses 6. Refer to TS34.108 clause 6 Parameter Set Not Present TDD Not Present Not Present
Added or Reconfigured UL TrCH information list <ul style="list-style-type: none"> - 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 - 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 	A1	1 DCH 1 Dedicated transport channels Reference to TS34.108 clause 6.10 Parameter Set (This IE is repeated for TFI number.) Not Present Reference to TS34.108 clause 6.10 Parameter Set Not Present 1 ALL Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set
CHOICE mode	A1, A3	TDD (no data)
DL Transport channel information common for all transport channel <ul style="list-style-type: none"> - SCCPCH TFCS - CHOICE mode - CHOICE DL parameters 	A1,A3	Not Present TDD Independent (Refer to TS34.108 clause 6)
Deleted DL TrCH information list Added or Reconfigured DL TrCH information list <ul style="list-style-type: none"> - 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 	A1,A3	Not Present 1 DCH 6 Same as UL DCH 1 Reference to TS34.108 clause 6
Frequency info Maximum allowed UL TX power CHOICE channel requirement <ul style="list-style-type: none"> - Uplink DPCH power control info - CHOICE mode <ul style="list-style-type: none"> - UL Target SIR - CHOICE UL OL PC info - CHOICE TDD option <ul style="list-style-type: none"> - Individual timeslot interference info - Individual timeslot interference - DPCH Constant Value - CHOICE mode - Uplink Timing Advance Control 	A1,A3	Not Present 30dBm Uplink DPCH info TDD Reference to TS34.108 Parameter set. Individually signalled 3.84 Mcps Values are used for open loop power control, section 8 in TS 25.331 TDD Not Present

Information Element	Condition	Value/remark
<ul style="list-style-type: none"> - UL CCTrCH List - TFCS Id - Time info - Activation time <ul style="list-style-type: none"> - Duration - Common timeslot info <ul style="list-style-type: none"> - 2nd interleaving mode - TFCI coding - Puncturing Limit - Repetition Period - Repetition Length - First individual timeslot info - Timeslot number - TFCI existence - Midamble shift and burst type <ul style="list-style-type: none"> - CHOICE TDD option <ul style="list-style-type: none"> -CHOICE Burst Type <ul style="list-style-type: none"> -Type 1 <ul style="list-style-type: none"> -Midamble Allocation Mode - Midamble configuration burst type 1 and 3 - First timeslot channelisation codes - Channelisation code - CHOICE more timeslots 		<p>1</p> <p>$(256+CFN-(CFN \text{ MOD } 8 + 8))\text{MOD } 256$ Infinite</p> <p>Reference to TS34.108 clause 6.10 Parameter Set</p> <p>Reference to TS34.108 clause 6.10 Parameter Set</p> <p>Reference to TS34.108 clause 6.10 Parameter Set</p> <p>Reference to TS34.108 clause 6.10 Parameter Set</p> <p>Reference to TS34.108 clause 6.10 Parameter Set</p> <p>The number of an uplink timeslot that has unassigned codes. TRUE</p> <p>3.84 Mcps</p> <p>Default As defined in 3GPP TS 25.221</p> <p>Repeated (1,2) for each channelisation code assigned in the slot to meet the needs of TS34.108 clause 6 Parameter Set. (i/SF) where i denotes an unassigned code matching the SF specified in TS34.108 clause 6 Parameter Set.</p> <p>The presence of this IE depends upon the number of resources specified in TS34.108 section 6 and the number of slots in which they are being assigned. TDD (no data)</p>
<p>CHOICE Mode</p> <ul style="list-style-type: none"> Downlink information common for all radio links <ul style="list-style-type: none"> - Downlink DPCH info common for all RL - Timing indicator - CFN-targetSFN frame offset - Downlink DPCH power control information - CHOICE mode <ul style="list-style-type: none"> - DPC mode <ul style="list-style-type: none"> - CHOICE TDD mode - Default DPCH Offset Value 	A1,A3	<p>Maintain Not Present</p> <p>TDD 0 (single) 3.84 Mcps (no data) Not Present</p>
<ul style="list-style-type: none"> Downlink information for per radio link list <ul style="list-style-type: none"> - Downlink information for each radio link <ul style="list-style-type: none"> - CHOICE mode <ul style="list-style-type: none"> - Primary CCPCH info <ul style="list-style-type: none"> - CHOICE SyncCase <ul style="list-style-type: none"> - Timeslot - Cell parameters ID - SCTD indicator - Downlink DPCH info for each RL <ul style="list-style-type: none"> - CHOICE mode <ul style="list-style-type: none"> - DL CCTrCH List - TFCS ID - Time info <ul style="list-style-type: none"> - Activation time - Duration - Common timeslot info <ul style="list-style-type: none"> - 2nd interleaving mode - TFCI coding - Puncturing limit 	A1,A3	<p>TDD</p> <p>Sync Case 1 PCCPCH timeslot 0</p> <p>TDD</p> <p>1</p> <p>$(256+CFN-(CFN \text{ mod } 8 + 8))\text{mod } 256$ infinite</p> <p>Reference to TS34.108 TRUE Reference to TS34.108 clause 6 Parameter set</p>

Information Element	Condition	Value/remark
<ul style="list-style-type: none"> - Repetition period - Repetition length - Downlink DPCH timeslots and codes <ul style="list-style-type: none"> - Individual timeslot info - Timeslot number - TFCI existence - Midamble shift and burst type - CHOICE TDD option <ul style="list-style-type: none"> -CHOICE Burst Type <ul style="list-style-type: none"> -Type 1 <ul style="list-style-type: none"> -Midamble Allocation Mode - Midamble configuration burst type 1 and 3 - First timeslot channelisation codes - First channelisation code - Last channelisation code - Bitmap - CHOICE more timeslots - UL CCTrCH TPC List -SCCPCH information for FACH 		<p>1</p> <p>Empty</p> <p>The number of a downlink timeslot that has unassigned codes.</p> <p>TRUE</p> <p>3.84 Mcps</p> <p>Default</p> <p>As defined in 3GPP TS 25.221</p> <p>(i/SF) where i is the lowest numbered code that is being assigned and SF is specified in TS34.108 clause 6 Parameter Set..</p> <p>(j/SF) where j is the highest numbered code that is being assigned in the slot.</p> <p>Bitmap of the codes that are being assigned in the slot.</p> <p>The presence of this IE depends upon whether the requirements of TS34.108 clause 6 Parameter Set could be met by the codes that have been assigned in the first timeslot..</p> <p>Not Present</p> <p>Not Present</p>

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
Message Type RRC transaction identifier Integrity check info <ul style="list-style-type: none"> - message authentication code - RRC message sequence number Integrity protection mode info Ciphering mode info Activation time New U-RNTI New C-RNTI New DSCH-RNTI RRC State indicator UTRAN DRX cycle length coefficient CN information info URA identity Signalling RB information to setup	A1,A3	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 Not Present CELL_DCH Not Present Not Present Not Present Not Present
RAB information for setup list <ul style="list-style-type: none"> - RAB information for setup <ul style="list-style-type: none"> - RAB info - RAB identity - CN domain identity - NAS Synchronization Indicator - Re-establishment timer - RB information to setup list - RB information to setup - RB identity <ul style="list-style-type: none"> - PDCP info - CHOICE RLC info type - CHOICE Uplink RLC mode - Transmission RLC discard - Segmentation indication - CHOICE Downlink RLC mode - Segmentation indication - RB mapping info - Information for each multiplexing option - RLC logical channel mapping indicator - Number of uplink RLC logical channels - Uplink transport channel type - UL Transport channel identity - Logical channel identity - CHOICE RLC size list - MAC logical channel priority - Downlink RLC logical channel info - Number of downlink RLC logical channels - Downlink transport channel type - DL DCH Transport channel identity - DL DSCH Transport channel identity - Logical channel identity 	A1	0000 0001B The first/ leftmost bit of the bit string contains the most significant bit of the RAB identity. CS domain Not Present UseT314 10 Not Present RLC info TM RLC Not Present FALSE TM RLC FALSE Not Present 1 DCH 1 Not Present Configured 7 1 DCH 6 Not Present Not Present
RAB information for setup list <ul style="list-style-type: none"> - RAB information for setup <ul style="list-style-type: none"> - RAB info - RAB identity - CN domain identity - NAS Synchronization Indicator - Re-establishment timer - RB information to setup list - RB information to setup 	A3	0000 0101B The first/ leftmost bit of the bit string contains the most significant bit of the RAB identity. PS domain Not Present UseT314

Information Element	Condition	Value/remark
<ul style="list-style-type: none"> - RB identity - PDCP info - CHOICE RLC info type - CHOICE Uplink RLC mode - Transmission RLC discard - CHOICE SDU discard mode - MAX_DAT - Transmission window size - Timer_RST - Max_RST - Polling info - Timer_poll_prohibit - Timer_poll - Poll_SDU - Last transmission PDU poll - Last retransmission PDU poll - Poll_Windows - Timer_poll_periodic - CHOICE Downlink RLC mode - In-sequence delivery - Receiving window size - Downlink RLC status info - Timer_status_prohibit - Timer_EPC - Missing PDU indicator - Timer_STATUS_periodic - RB mapping info - Information for each multiplexing option - RLC logical channel mapping indicator - Number of uplink RLC logical channels - Uplink transport channel type - UL Transport channel identity - Logical channel identity - CHOICE RLC size list - MAC logical channel priority - Downlink RLC logical channel info - Number of downlink RLC logical channels - Downlink transport channel type - DL DCH Transport channel identity - DL DSCH Transport channel identity - Logical channel identity - RLC logical channel mapping indicator - Number of uplink RLC logical channels - Uplink transport channel type - UL Transport channel identity - Logical channel identity - CHOICE RLC size list - RLC size index - MAC logical channel priority - Downlink RLC logical channel info - Number of downlink RLC logical channels - Downlink transport channel type - DL DCH Transport channel identity - DL DSCH Transport channel identity - Logical channel identity 		<p>20</p> <p>Not Present</p> <p>RLC info</p> <p>AM RLC</p> <p>No discard</p> <p>15</p> <p>128</p> <p>500</p> <p>4</p> <p>200</p> <p>200</p> <p>1</p> <p>TRUE</p> <p>TRUE</p> <p>99</p> <p>Not Present</p> <p>AM RLC</p> <p>TRUE</p> <p>128</p> <p>200</p> <p>200</p> <p>TRUE</p> <p>Not Present</p> <p>2RBMuxOptions</p> <p>Not Present</p> <p>1</p> <p>DCH</p> <p>1</p> <p>Not Present</p> <p>Configured</p> <p>8</p> <p>1</p> <p>DCH</p> <p>6</p> <p>Not Present</p> <p>Not Present</p> <p>Not Present</p> <p>1</p> <p>RACH</p> <p>Not Present</p> <p>7</p> <p>Explicit List</p> <p>Reference to TS34.108 clause 6 Parameter Set</p> <p>8</p> <p>1</p> <p>FACH</p> <p>Not Present</p> <p>Not Present</p> <p>Not Present</p>
<p>RB information to be affected list</p> <p>Downlink counter synchronisation info</p>	<p>A1,A3</p>	<p>Not Present</p> <p>Not Present</p>
<p>UL Transport channel information for all transport channels</p> <ul style="list-style-type: none"> - PRACH TFCS - CHOICE mode <ul style="list-style-type: none"> - Individual UL CCTrCH information - TFCS ID - Allowed Transport Format combination - PRACH TFCS 	<p>A1,A3</p>	<p>Not Present</p> <p>TDD</p> <p>(This IE is repeated for TFC number.)</p> <p>0 to MaxTFCvalue-1 (MaxTFCValue is refer to TS34.108 clause 6 Parameter Set.)</p> <p>(This IE is repeated for TFC number.)</p>

Information Element	Condition	Value/remark
<ul style="list-style-type: none"> - CHOICE TFCI signalling <ul style="list-style-type: none"> - TFCI Field 1 information - TFCS complete reconfigure information - CHOICE TFCS Size - CTFC information - CHOICE mode <ul style="list-style-type: none"> - Individual UL CCTrCH information Deleted UL TrCH information list		Normal Number of used bits must be enough to cover all combinations of CTFC from clauses 6. Refer to TS34.108 clause 6 Parameter Set Not Present TDD Not Present Not Present
Added or Reconfigured UL TrCH information list <ul style="list-style-type: none"> - 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 - 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 	A1	1 DCH 1 Dedicated transport channels Reference to TS34.108 clause 6 Parameter Set (This IE is repeated for TFI number.) Not Present Reference to TS34.108 clause 6 Parameter Set Not Present 1 ALL Reference to TS34.108 clause 6 Parameter Set Reference to TS34.108 clause 6 Parameter Set Reference to TS34.108 clause 6 Parameter Set Reference to TS34.108 clause 6 Parameter Set Reference to TS34.108 clause 6 Parameter Set
CHOICE mode	A1, A3	TDD (no data)
DL Transport channel information common for all transport channel <ul style="list-style-type: none"> - SCCPCH TFCS - CHOICE mode - CHOICE DL parameters 	A1,A3	Not Present TDD Independent (Refer to TS34.108 clause 6)
Deleted DL TrCH information list Added or Reconfigured DL TrCH information list <ul style="list-style-type: none"> - 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 	A1,A3	Not Present 1 DCH 6 Same as UL DCH 1 Reference to TS34.108 clause 6
Frequency info Maximum allowed UL TX power CHOICE channel requirement <ul style="list-style-type: none"> - Uplink DPCH power control info - CHOICE mode <ul style="list-style-type: none"> - UL Target SIR - CHOICE UL OL PC info <ul style="list-style-type: none"> - CHOICE TDD option <ul style="list-style-type: none"> - TPC step size - Primary CCPCH Tx Power - CHOICE mode - Uplink Timing Advance Control - UL CCTrCH List - TFCS Id 	A1,A3	Not Present 30dBm Uplink DPCH info TDD Reference to TS34.108 Parameter set. Individually signalled 1.28 Mcps 1 dB Not Present TDD Not Present 1

Information Element	Condition	Value/remark
<ul style="list-style-type: none"> - Time info - Activation time <ul style="list-style-type: none"> - Duration - Common timeslot info <ul style="list-style-type: none"> - 2nd interleaving mode - TFCI coding - Puncturing Limit - Repetition Period - Repetition Length - First individual timeslot info - Timeslot number - TFCI existence - Midamble shift and burst type <ul style="list-style-type: none"> - CHOICE TDD option <ul style="list-style-type: none"> - Midamble allocation mode - Midamble configuration - CHOICE TDD option <ul style="list-style-type: none"> - Modulation - SS-TPC Symbols - CHOICE Mode - First timeslot channelisation codes - Channelisation code - CHOICE more timeslots 		<p>$(256+CFN-(CFN \text{ MOD } 8 + 8))\text{MOD } 256$ Infinite</p> <p>Reference to TS34.108 clause 6 Parameter Set</p> <p>Reference to TS34.108 clause 6 Parameter Set</p> <p>Reference to TS34.108 clause 6 Parameter Set</p> <p>Reference to TS34.108 clause 6 Parameter Set</p> <p>Reference to TS34.108 clause 6 Parameter Set</p> <p>The number of an uplink timeslot that has unassigned codes. TRUE</p> <p>1.28 Mcps Default 16 1.28 Mcps TDD QPSK 1 TDD</p> <p>Repeated (1,2) for each channelisation code assigned in the slot to meet the needs of TS34.108 clause 6 Parameter Set. (i/SF) where i denotes an unassigned code matching the SF specified in TS34.108 clause 6 Parameter Set.</p> <p>The presence of this IE depends upon the number of resources specified in TS34.108 section 6 and the number of slots in which they are being assigned.</p> <p>TDD (no data)</p>
<p>CHOICE Mode</p> <p>Downlink information common for all radio links</p> <ul style="list-style-type: none"> - Downlink DPCH info common for all RL - Timing indicator - CFN-targetSFN frame offset - Downlink DPCH power control information - CHOICE mode <ul style="list-style-type: none"> - TPC step size - CHOICE TDD mode - TSTD indicator 	A1,A3	<p>Maintain Not Present</p> <p>TDD 1 dB 1.28 Mcps TRUE</p>
<ul style="list-style-type: none"> - Default DPCH Offset Value 		Not Present
<p>Downlink information for per radio link list</p> <ul style="list-style-type: none"> - Downlink information for each radio link <ul style="list-style-type: none"> - CHOICE mode <ul style="list-style-type: none"> - Primary CCPCH info <ul style="list-style-type: none"> - CHOICE TDD option <ul style="list-style-type: none"> - TSTD indicator - Cell parameters ID - Block STTD indicator - Downlink DPCH info for each RL <ul style="list-style-type: none"> - CHOICE mode <ul style="list-style-type: none"> - DL CCTrCH List - TFCS ID - Time info <ul style="list-style-type: none"> - Activation time - Duration - Common timeslot info <ul style="list-style-type: none"> - 2nd interleaving mode - TFCI coding - Puncturing limit 	A1,A3	<p>TDD</p> <p>1.28 Mcps TRUE 0 FALSE</p> <p>TDD 1</p> <p>$(256+CFN-(CFN \text{ mod } 8 + 8))\text{mod } 256$ Infinite</p> <p>Reference to TS34.108 TRUE Reference to TS34.108 clause 6 Parameter set</p>

Information Element	Condition	Value/remark
<ul style="list-style-type: none"> - Repetition period - Repetition length - Downlink DPCH timeslots and codes <ul style="list-style-type: none"> - Individual timeslot info - Timeslot number - TFCI existence - Midamble shift and burst type - CHOICE TDD option <ul style="list-style-type: none"> - Midamble Allocation Mode - Midamble configuration - Modulation <ul style="list-style-type: none"> - SS-TPC Symbols - First timeslot channelisation codes - First channelisation code - Last channelisation code - Bitmap - CHOICE more timeslots - UL CCTrCH TPC List - SCCPCH information for FACH 		<p>1</p> <p>Empty</p> <p>The number of a downlink timeslot that has unassigned codes.</p> <p>TRUE</p> <p>1.28 Mcps</p> <p>Default</p> <p>16</p> <p>QPSK</p> <p>1</p> <p>(i/SF) where i is the lowest numbered code that is being assigned and SF is specified in TS34.108 clause 6 Parameter Set..</p> <p>(j/SF) where j is the highest numbered code that is being assigned in the slot.</p> <p>Bitmap of the codes that are being assigned in the slot.</p> <p>The presence of this IE depends upon whether the requirements of TS34.108 clause 6 Parameter Set could be met by the codes that have been assigned in the first timeslot..</p> <p>Not Present</p> <p>Not Present</p>

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 RRC CONNECTION RELEASE message: UM

Information Element	Value/remark
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.
- SRNC identity	0000 0000 0001B
- S-RNTI	0000 0000 0000 0000 0001B
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
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
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 TS34.108 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	

Information Element	Value/remark
- 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
- 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 TS34.108 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	

Information Element	Value/remark
- 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 TS34.108 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

Information Element	Value/remark
- 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 TS34.108 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
<ul style="list-style-type: none"> - UL TFCS - TFC subset - Allowed Transport Format combination - PRACH TFCS - CHOICE TFCI signalling <ul style="list-style-type: none"> - TFCI Field 1 information <ul style="list-style-type: none"> - TFCS complete reconfigure information - CHOICE TFCS Size - CTFC information - CHOICE mode <ul style="list-style-type: none"> - Individual UL CCTrCH information Deleted TrCH information list Added or Reconfigured UL TrCH information list <ul style="list-style-type: none"> - Added or Reconfigured UL TrCH information <ul style="list-style-type: none"> - 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 - CHOICE mode <ul style="list-style-type: none"> - Transmission Time Interval - CHOICE Logical channel list - Semi-static Transport Format information DL Transport channel information common for all transport channel <ul style="list-style-type: none"> - SCCPCH TFCS - CHOICE mode - CHOICE DL parameters Added or Reconfigured DL TrCH information list <ul style="list-style-type: none"> - Added or Reconfigured DL TrCH information <ul style="list-style-type: none"> - Downlink transport channel type - DL Transport channel identity - CHOICE DL parameters - Uplink transport channel type - UL TrCH Identity - DCH quality target - BLER Quality value Frequency info Maximum allowed UL TX power CHOICE channel requirement <ul style="list-style-type: none"> - Uplink DPCH power control info - CHOICE mode <ul style="list-style-type: none"> - CHOICE <i>TDD option</i> <ul style="list-style-type: none"> - UL target SIR - CHOICE mode <ul style="list-style-type: none"> - CHOICE <i>UL OL PC info</i> - CHOICE <i>TDD option</i> <ul style="list-style-type: none"> - Individual timeslot interference info - Individual timeslot interference <ul style="list-style-type: none"> - DPCH Constant Value - Primary CCPCH Tx Power - Time info - Activation time 	<p>Default value is the complete existing set of transport format combinations 0 to MaxTFCvalue-1 (MaxTFCValue is refer to TS34.108 clause 6 Parameter Set.) (This IE is repeated for TFC number.) Normal</p> <p>Number of used bits must be enough to cover all combinations of CTFC from clauses 6. Refer to TS34.108 clause 6 Parameter Set Not Present TDD Not Present Not Present 1</p> <p>DCH 5</p> <p>Dedicated transport channels</p> <p>According to TS34.108 clause 6 (This IE is repeated for TFI number) TDD According to TS34.108 clause 6 All</p> <p>Not Present TDD Same as UL 1</p> <p>DCH 10 Same as UL DCH 5</p> <p>Reference to TS 34.108 Not Present Not Present Uplink DPCH info</p> <p>TDD 3.84 Mcps Reference to TS34.108 Parameter set TDD Individually signalled 3.84 Mcps Not Present</p> <p>Not Present</p> <p>(256+CFN-(CFN MOD 8 + 8))MOD 256</p>

Information Element	Value/remark
- Duration	Infinite
- Common timeslot info	
- 2 nd interleaving mode	Reference to TS34.108 clause 6.10 Parameter Set
- TFCI coding	Reference to TS34.108 clause 6.10 Parameter Set
- Puncturing Limit	Reference to TS34.108 clause 6.10 Parameter Set
- Repetition Period	Reference to TS34.108 clause 6.10 Parameter Set
- Repetition Length	Reference to TS34.108 clause 6.10 Parameter Set
- Uplink DPCH timeslots and codes	Default is to use the old timeslots and codes
- CPCH SET Info	(no data)
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	
- 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	$(256+CFN-(CFN \bmod 8 + 8)) \bmod 256$
- Duration	infinite
- Common timeslot info	
- 2 nd interleaving mode	Reference to TS34.108
- TFCI coding	TRUE
- Puncturing limit	Reference to TS34.108 clause 6 Parameter set
- Repetition period	1
- Repetition length	Empty
- Downlink DPCH timeslots and codes	
- CHOICE <i>more timeslots</i>	
- 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
- 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 TS34.108 clause 6 Parameter Set..
- Last channelisation code	(j/SF) where j is the highest numbered code

Information Element	Value/remark
	that is being assigned in the slot.
- CHOICE more timeslots	The presence of this IE depends upon whether the requirements of TS34.108 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

Contents of RRC CONNECTION SETUP message: UM (1.28 Mcps TDD)

Information Element	Value/remark
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
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 TS34.108 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	

Information Element	Value/remark
- 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
- 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 TS34.108 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	

Information Element	Value/remark
- 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 TS34.108 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

Information Element	Value/remark
- Transmission RLC discard	No Discard
- SDU discard mode	415
- MAX_DAT	128
- Transmission window size	500
- Timer_RST	4
- Max_RST	
- Polling info	200
- Timer_poll_prohibit	200
- Timer_poll	Not Present
- Poll_PDU	1
- Poll_SDU	TRUE
- Last transmission PDU poll	TRUE
- Last retransmission PDU poll	99
- Poll_Windows	Not Present
- Timer_poll_periodic	AM RLC
- CHOICE Downlink RLC mode	TRUE
- In-sequence delivery	128
- Receiving window size	
- Downlink RLC status info	200
- Timer_status_prohibit	Not Present
- Timer_EPC	TRUE
- Missing PDU indicator	Not Present
- Timer_STATUS_periodic	
- RB mapping info	2 RBMuxOptions
- Information for each multiplexing option	Not Present
- RLC logical channel mapping indicator	1
- Number of RLC logical channels	DCH
- Uplink transport channel type	5
- UL Transport channel identity	4
- Logical channel identity	Configured
- CHOICE RLC size list	4
- MAC logical channel priority	
- Downlink RLC logical channel info	1
- Number of RLC logical channels	DCH
- Downlink transport channel type	10
- DL DCH Transport channel identity	Not Present
- DL DSCH Transport channel identity	4
- Logical channel identity	Not Present
- RLC logical channel mapping indicator	1
- Number of RLC logical channels	RACH
- Uplink transport channel type	Not Present
- UL Transport channel identity	4
- Logical channel identity	Explicit List
- CHOICE RLC size list	Reference to TS34.108 clause 6 Parameter Set
- RLC size index	4
- MAC logical channel priority	
- Downlink RLC logical channel info	1
- Number of RLC logical channels	FACH
- Downlink transport channel type	Not Present
- 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
<ul style="list-style-type: none"> - UL TFCS - TFC subset - Allowed Transport Format combination - PRACH TFCS - CHOICE TFCI signalling <ul style="list-style-type: none"> - TFCI Field 1 information <ul style="list-style-type: none"> - TFCS complete reconfigure information - CHOICE TFCS Size - CTFC information - CHOICE mode <ul style="list-style-type: none"> - Individual UL CCTrCH information Deleted TrCH information list Added or Reconfigured UL TrCH information list <ul style="list-style-type: none"> - Added or Reconfigured UL TrCH information <ul style="list-style-type: none"> - 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 - CHOICE mode <ul style="list-style-type: none"> - Transmission Time Interval - CHOICE Logical channel list - Semi-static Transport Format information DL Transport channel information common for all transport channel <ul style="list-style-type: none"> - SCCPCH TFCS - CHOICE mode - CHOICE DL parameters Added or Reconfigured DL TrCH information list <ul style="list-style-type: none"> - Added or Reconfigured DL TrCH information <ul style="list-style-type: none"> - Downlink transport channel type - DL Transport channel identity - CHOICE DL parameters - Uplink transport channel type - UL TrCH Identity - DCH quality target - BLER Quality value Frequency info Maximum allowed UL TX power CHOICE channel requirement <ul style="list-style-type: none"> - Uplink DPCH power control info - CHOICE mode <ul style="list-style-type: none"> - CHOICE <i>TDD option</i> <ul style="list-style-type: none"> - PRX_{DPCHdes} - CHOICE mode <ul style="list-style-type: none"> - CHOICE <i>UL OL PC info</i> - CHOICE <i>TDD option</i> <ul style="list-style-type: none"> - TPC step size - Primary CCPCH Tx Power - Primary CCPCH Tx Power - Time info - Activation time 	Default value is the complete existing set of transport format combinations 0 to MaxTFCvalue-1 (MaxTFCValue is refer to TS34.108 clause 6 Parameter Set.) (This IE is repeated for TFC number.) Normal Number of used bits must be enough to cover all combinations of CTFC from clauses 6. Refer to TS34.108 clause 6 Parameter Set Not Present TDD Not Present Not Present 1 DCH 5 Dedicated transport channels According to TS34.108 clause 6 (This IE is repeated for TFI number) TDD According to TS34.108 clause 6 All Not Present TDD Same as UL 1 DCH 10 Same as UL DCH 5 Reference to TS 34.108 Not Present Not Present Uplink DPCH info TDD 1.28 Mcps Reference to TS34.108 Parameter set TDD Individually signalled 1.28 Mcps Not Present Not Present Not Present (256+CFN-(CFN MOD 8 + 8))MOD 256

Information Element	Value/remark
- Duration	Infinite
- Common timeslot info	
- 2 nd interleaving mode	Reference to TS34.108 clause 6 Parameter Set
- TFCI coding	Reference to TS34.108 clause 6 Parameter Set
- Puncturing Limit	Reference to TS34.108 clause 6 Parameter Set
- Repetition Period	Reference to TS34.108 clause 6 Parameter Set
- Repetition Length	Reference to TS34.108 clause 6 Parameter Set
- Uplink DPCH timeslots and codes	Default is to use the old timeslots and codes
- CPCH SET Info	(no data)
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	
- 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	$(256+CFN-(CFN \bmod 8 + 8)) \bmod 256$
- Duration	infinite
- Common timeslot info	
- 2 nd interleaving mode	Reference to TS34.108
- TFCI coding	TRUE
- Puncturing limit	Reference to TS34.108 clause 6 Parameter set
- Repetition period	1
- Repetition length	Empty
- Downlink DPCH timeslots and codes	
- CHOICE <i>more timeslots</i>	
- 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
- 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 TS34.108 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 TS34.108 clause 6

Information Element	Value/remark
	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

Condition	Explanation
A1	UE not supporting GSM
A2	UE supporting GSM

Annex A (informative):
Void

Annex B (informative): RAB combinations for Rel-5

This annex contains information intended to be included in a future TS 34.108 Release 5. For practical reasons, it will be maintained in this Release 4 until T1 agrees to publish the Release 5 version based on the quantity of material to justify its creation.

It should be noted that the parameters of the RAB combinations were approved by RAN1 and RAN 2 and that T1 agreed that the RABs should be subjected to test coverage at the appropriate time. The fact that this annex is informative does not in any way reduce the validity of the RABs.

For ease of administration, the framework of section 6.10.2 is provided with the changes to that section with appropriate numbering in order that it can be merged into a future Release 5 version of TS 34.108.

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: Prioritised RABs.

37	Conversational	N/A	UL:42.8 DL:42.8	PS
38	Conversational	Speech	UL:(12.65 8.85 6.6) DL:(12.65 8.85 6.6)	CS

Table 6.10.2.1.2: Signalling RBs

#	Maximum rate, kbps	Logical channel	PhyCh onto which SRBs are mapped
9	DL: 0.15	DCCH	DPCH

6.10.2.2 Combinations of RABs and Signalling RBs

Combinations on DPCH

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.

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.

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.

63) Interactive or background / UL:64 DL:768 kbps / PS RAB
 + UL:3.4 DL: 3.4 kbps SRBs for DCCH.

6.10.2.4.1.59 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	46000	
	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	2844	
	Uplink: Max number of bits/radio frame before rate matching	1422	
RM attribute	180-220		

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	16000	16000	
	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	2148		
	Uplink: Max number of bits/radio frame before rate matching	537		
RM attribute	135-175			

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	2400
	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	46000	
	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	2844	
RM attribute	180-220		

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	16000	16000	
	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	2148		
RM attribute	135-175			

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		2100	

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	46000	
	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	2844	
	Uplink: Max number of bits/radio frame before rate matching	1422	
RM attribute	180-220		

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	2400
	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	46000	
	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	2844	
RM attribute	180-220		

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		2100	

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

6.10.2.4.1.62.1.1 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	12650		
	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	180-220	170-210	
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 TS 25.212).				

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	<p>0 = {(TF0,TF0,TF0), (TF1,TF0,TF0), (TF2,TF1,TF0), (TF0,TF0,TF1), (TF1,TF0,TF1), (TF2,TF1,TF1)},</p> <p>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)},</p> <p>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)}</p>

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	180-220	170-210		
NOTE 1: The TrCH corresponding to RAB subflow #1 should be used as the guiding TrCH, (see clause 4.3 in TS 25.212).				
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 TS 25.212.).				

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	155-256	
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 TFCl 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	768000	
	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	4 x336
		TF4, bits	8 x336
		TF5, bits	12x336
		TF6, bits	16 x336
		TF7, bits	20 x336
		TF8, bits	24 x336
		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	25368 (alt 50736)		
RM attribute	110-150		

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	<p>(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)</p> <p>(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))</p>

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	9120

Annex C (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

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TP-13	TP-010215	054		Clause 6.1: Default radio conditions for Signalling tests	F	3.4.0	3.5.0	T1-010281
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 section 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 TS34.108 (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		Section 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		Section 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		Section 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		Section 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	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-	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	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	A	4.3.0	4.4.0	T1-020539
TP-17	TP-020184	137	-	Removal of reference radio bearer configurations for	A	4.3.0	4.4.0	T1-020541
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	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	A	4.4.0	4.5.0	T1-020694

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				Interactive or background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH				
TP-18	TP-020293	150	-	Correction to content of sub-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 System 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	A	4.5.0	4.6.0	T1-030042
TP-19	TP-030044	179	-	Correction to TS34.108 Rel-4 ; PAGING TYPE1 message	A	4.5.0	4.6.0	T1-030044
TP-19	TP-030044	181	-	Clarification of authentication test algorithm and GSM cipher	A	4.5.0	4.6.0	T1-030046
TP-19	TP-030044	183	-	Addition of simulated network environment for inter-RAT test	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	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	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	A	4.5.0	4.6.0	T1-030058
TP-19	TP-030044	195	-	Introduction of a reference RB configuration for RMC for	A	4.5.0	4.6.0	T1-030060
TP-19	TP-030044	197	-	Update of the RRC connection request messages in 34.108	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	F	4.5.0	4.6.0	T1-030107
TP-19	TP-030043	200	-	Update of default parameters for 1 to 8 cell environments	A	4.5.0	4.6.0	T1-030208
TP-19	TP-030043	202	-	Update of Multi-cell environment for default radio conditions	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	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 TS34.108 (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 TS34.108 (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	-	Section 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
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

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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 Registered 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 section 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	51		Addition of Default message contents for TDD	F	4.8.0	4.9.0	T1-031659
TP-22	TP-030279	52		Addition of Default message contents for TDD	F	4.8.0	4.9.0	T1-031660
TP-22	TP-030279	53		Addition of Default message contents for TDD	F	4.8.0	4.9.0	T1-031661
TP-22	TP-030279	54		Addition of Default message contents for TDD	F	4.8.0	4.9.0	T1-031662
TP-22	TP-030279	55		Addition of Default message contents for TDD	F	4.8.0	4.9.0	T1-031663
TP-22	TP-030279	56		Addition of Default message contents for TDD	F	4.8.0	4.9.0	T1-031664
TP-22	TP-030279	57		Addition of Default message contents for TDD	F	4.8.0	4.9.0	T1-031665
TP-22	TP-030279	58		Addition of Default message contents for TDD	F	4.8.0	4.9.0	T1-031666
TP-22	TP-030279	60		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	62		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	64		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	66		Description and corrections of channels for minimum performance levels, TDD mode.	F	4.8.0	4.9.0	T1-031645
TP-22	TP-030279	68		Test frequencies of UMTS800MHz band VI	A	4.8.0	4.9.0	T1-031555
TP-22	TP-030279	69		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	71		Update of generic test procedure for TX, RX and Performance Requirement	A	4.8.0	4.9.0	T1-031610
TP-22	TP-030279	73		Introduction of generic test procedure for RRM handover test cases	A	4.8.0	4.9.0	T1-031608
TP-22	TP-030279	75		Correction of CM TGD parameter	A	4.8.0	4.9.0	T1-031591
TP-22	TP-030279	77		Corrections to default message contents of Radio Bearer Release	F	4.8.0	4.9.0	T1-031594
TP-22	TP-030279	79		Modification to default DPCCH_Power_offset value	A	4.8.0	4.9.0	T1-031598
TP-22	TP-030279	83		Correction of TFCS for radio bearer combination 6.10.2.4.1.51b	A	4.8.0	4.9.0	T1-031527

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