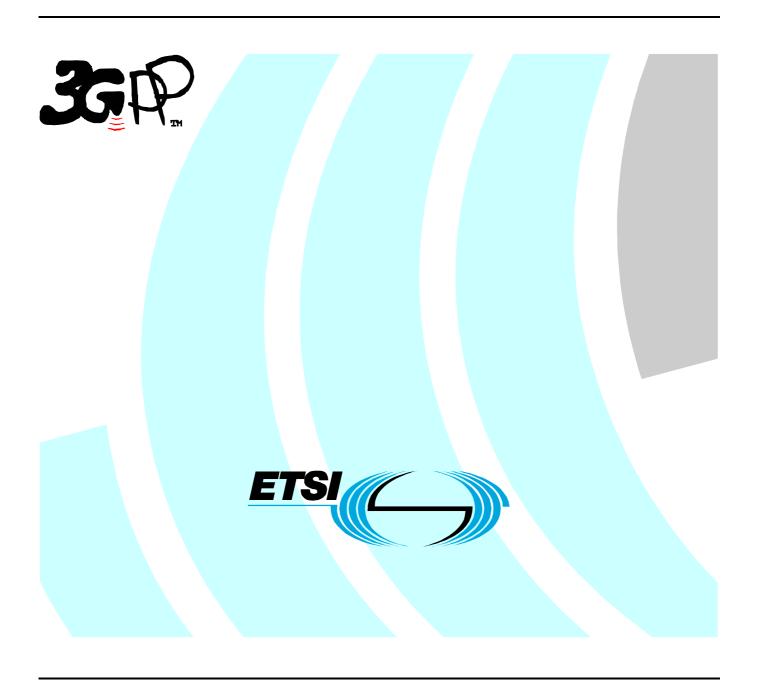
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| Contents of RRC CONNECTION SETUP COMPLETE message: AM | |
| Contents of RRC STATUS message: AM | |
| Contents of SECURITY MODE COMMAND message: AM | |
| Contents of SECURITY MODE COMPLETE message: AM | |
| Contents of SECURITY MODE FAILURE message: AM | |
| Contents of TRANSPORT CHANNEL RECONFIGURATION message: AM or UM | |
| Contents of TRANSPORT CHANNEL RECONFIGURATION COMPLETE message: AM | 442 |
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| Contents of TRANSPORT FORMAT COMBINATION CONTROL message: AM or UM (in CELL_DCH) | |
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| Contents of UE CAPABILITY INFORMATION message: AM | |
| Contents of UE CAPABILITY INFORMATION CONFIRM message: UM | |
| Contents of URA UPDATE message: TM | |
| Contents of URA UPDATE CONFIRM message: UM | |
| Contents of UPLINK DIRECT TRANSFER message: AM | |
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| Contents of INITIAL DIRECT TRANSFER message: AM | |
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| Contents of RADIO BEARER RELEASE COMPLETE message: AM | |
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| Contents of RRC CONNECTION RELEASE message: UM | |
| Contents of RRC CONNECTION RELEASE COMPLETE message: AM or UM | |
| Contents of RRC CONNECTION SETUP message: UM (Transition to CELL_DCH) | |
| Contents of RRC CONNECTION SETUP COMPLETE message: AM | |
| Contents of SECURITY MODE COMMAND message: AM | |
| Contents of SECURITY MODE COMPLETE message: AM | |
| Contents of UPLINK DIRECT TRANSFER message: AM | |
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|------------------------------|--|-----|
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| | ION RELEASE message: UM | |
| | R SETUP message: AM or UM | |
| | message: TM (PS) | |
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| | ION SETUP message: UM | |
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| | R SETUP message: BTFD RMC | |
| | R SETUP message: AM or UM | |
| | message: TM (PS) | |
| | message: TM (CS) | |
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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:

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- x the first digit:
 - 1 presented to TSG for information;
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 - 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.
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Introduction

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

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

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

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

1 Scope

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

2 References

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

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.

Telephone Network (PSTN)".

• 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

| [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

Direct transfer

DT

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 |

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 Randome 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 multicell 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></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></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: - Aquisition 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 DPCCH associated with all the DPDCHs used for Layer 1 signalling. This number is for the First Cell. Additional Cells may define a lower number which should be at least 1. | | |
| PDSCH | 1 | Physical Downlink Shared Channel. | | |
| 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. | | | | |
| СССН | 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 | | | | |
| SHCCH | 1 | connected state Shared Channel Control Channel: Bi-directional channel that | | | | |
| SHOOH | 1 | transmits control information for uplink and downlink shared | | | | |
| | | channels between network and UEs. This channel is for TDD | | | | |
| | | only. | | | | |
| | T | raffic 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 |
|-------------------|----------------|--|
| ВСН | 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

| 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. The USCH as desribed 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. | | | |
| DPCH (UL) | 1 | Uplink Dedicated Physical Channel. DCH channels are mapped onto DPCH. | | | |
| PUSCH | 1 | Physical Uplink Shared Channel. The USCH as desribed 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. | | | |

4.2.1.3 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 specications [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 $2 * TTI + t_{delta}$, 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 and the raster spacing is 200KHz. Similarly the highest test frequency (downlink and uplink) needs to be offset downwardly by at least 2,6 MHz.

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.

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 |

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 table:

| | Band a | | Band b | | Band c | |
|--------------|--------|-------------|--------|-------------|--------|-------------|
| Test | UARFCN | Frequency | UARFCN | Frequency | UARFCN | Frequency |
| Frequency ID | | (UL and DL) | | (UL and DL) | | (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 | | |

5.2 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 fo | or 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 | 0011115 |
| - 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 Codesstored in the test |
| u.g. | 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 | DI MNI Value to a |
| - CHOICE Value tag | PLMN Value tag |
| - PLMN Value tag | |
| - SEG_COUNT - SIB_REP | 64 |
| - SIB_REF | 22 |
| - SIB_POS offset info | Not Present – use default |
| - SIB and SB type | System Information Type 1 |
| - Scheduling information | System information Type 1 |
| - 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 | Cell Value tag |
| - CHOICE Value tag - Cell Value tag | Cell Value tag |
| - Cell Value tag - SEG_COUNT | |
| - SIB_REP | 64 |
| - SIB_POS | 52 |
| - SIB_POS offset info | Not Present – use default |
| - SIB and SB type | System Information Type 4 |
| - Scheduling information | 71. |
| - CHOICE Value tag | Cell Value tag |
| - Cell Value tag | 1 |
| - SEG_COUNŤ | 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)

| Defendance to other social state of the state of | T |
|--|----------------------------|
| - 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 | 3,11 |
| - 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 | |
| - 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 |
| OID type OIDS OIIIY | Dystom miorination Type To |

Contents of Scheduling Block 1 (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_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 | Cyclem information Type 7 |
| - CHOICE Value tag | Cell Value tag |
| - Cell Value tag | 1 |
| - SEG_COUNT | 3 |
| | 64 |
| - SIB_REP | |
| - 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 | by Sterif information Type 17 |
| - 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 | 00 0111 |
| - CN domain identity | PS |
| - CHOICE CN Type | GSM-MAP |
| - CN domain specific NAS system information | COW WINT |
| - GSM-MAP NAS system information | 05 00H |
| - CN domain specific DRX cycle length | 7 |
| coefficient | ľ |
| - CN domain identity | CS |
| - CHOICE CN Type | GSM-MAP |
| - CN domain specific NAS system information | COW WINT |
| - GSM-MAP NAS system information | 1E 01H |
| - CN domain specific DRX cycle length | 7 |
| coefficient | |
| - 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 | Only 1 URA identity broadcasted |
|---------------------|---------------------------------|
| - URA identity | 0000 0000 0000 0001B |

Contents of System Information Block type 3 (FDD)

| - SIB4 indicator | TRUE |
|--|----------------------------------|
| - Cell identity | 0000 0000 0000 0000 0000 0001B |
| - Cell selection and re-selection info | 0000 0000 0000 0000 0000 0001D |
| - Mapping info | Not Present |
| - Cell selection and reselection quality measure | CPICH RSCP |
| - CHOICE mode | FDD |
| - Sintrasearch | 16 dB |
| - Sintersearch | 16 dB |
| - Sintersearch - SsearchHCS | Not Present |
| - RAT List | This parameter is configurable |
| - RAT identifier | GSM |
| - Ssearch,RAT | -32 dB |
| | Not Present |
| - SHCS,RAT | 0 |
| - Slimit,SearchRAT | Reference to table 6.1.1 |
| - Qqualmin | |
| - Qrxlevmin | Reference to table 6.1.1 2 dB |
| - Qhyst1s | |
| - Qhyst2s - Treselections | Not Present |
| | 0 seconds |
| - HCS Serving cell information | Not Present |
| - Maximum allowed UL TX power | Reference to table 6.1.1 |
| - Cell Access Restriction | Net be some of |
| - 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 (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 | IGSM |
| - Ssearch,RAT | -32 dB |
| - SHCS,RAT | Not present |
| - Slimit,ShearchRAT | Not Present |
| - Qrxlevmin | -103 dBm |
| - Qhyst1s | 0 dB |
| - Treselections | 0 seconds |
| - HCS Serving cell information | Not present |
| - Maximum allowed UL TX power | 30dBm |
| - Cell Access Restriction | |
| - Cell barred | Not barred |
| - Intra-frequency cell re-selection indicator | Not present |
| - T _{barred} | Not present |
| - Cell Reserved for operator use | Not reserved |
| - Cell Reservation Extension | Not reserved |
| - Access Class Barred List | |
| - 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)

| 6 11.1 11. | Tanan anna anna anna anna anna a |
|--|-------------------------------------|
| - 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 | Not present |

Contents of System Information Block type 4 in connected mode (similar to SIB type3) (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,ShearchRAT} | Not Present |
| - Qrxlevmin | -103 dBm |
| - Qhyst1s | 0 dB |
| - Treselections | 0 seconds |
| - HCS Serving cell information | Not present |
| - Maximum allowed UL TX power | 30dBm |
| - Cell Access Restriction | |
| - Cell barred | Not barred |
| - Intra-frequency cell re-selection indicator | Not present |
| - T _{barred} | Not present |
| - Cell Reserved for operator use | Not reserved |
| - Cell Reservation Extension | Not reserved |
| - Access Class Barred List | Not present |

Contents of System Information Block type 5 (FDD)

| - SIB6 indicator | TRUE |
|--|---|
| - PICH Power offset | -5 dB |
| - CHOICE Mode | FDD |
| - AICH Power offset | 5 dB |
| - Primary CCPCH info | Not present |
| | INOT 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 |
| | FDD |
| - CHOICE Mode | |
| - 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 | Johngaroa |
| | 20 mg |
| - 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 | |
| | Complete reconfiguration |
| - 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 |
| | 1. |
| - CTFC information | 1 |
| - Power offset information | |
| - CHOICE Gain Factors | Signalled Gain Factor |
| - CHOICE mode | FDD |
| - Gain factor ßc | 11 |
| - Gain factor ßd | 15 |
| - Reference TFC ID | 0 |
| - CHOICE Mode | FDD |
| | |
| - Power offset Pp-m | 0 dB |
| - PRACH partitioning | |
| - Access Service Class | |
| - ASC Setting | Not Present |
| - ASC Setting | |
| - CHOICE mode | FDD |
| - Available signature Start Index | 0 (ASC#1) |
| - Available signature End Index | 7 (ASC#1) |
| | |
| - Assigned Sub-Channel Number | '1111'B |
| | The first/ leftmost bit of the bit string contains the most |
| | significant bit of the Assigned Sub-Channel Number. |
| - ASC Setting | Not Present |

| - ASC Setting | |
|---|--|
| - CHOICE mode | FDD |
| - Available signature Start Index | 0 (ASC#3) |
| - Available signature End Index | 7 (ASC#3) |
| - Assigned Sub-Channel Number | '1111'B |
| | The first/ leftmost bit of the bit string contains the most |
| | significant bit of the Assigned Sub-Channel Number. |
| - ASC Setting | Not Present |
| - ASC Setting | |
| - CHOICE mode | FDD |
| - Available signature Start Index | 0 (ASC#5) |
| - Available signature End Index | 7 (ASC#5) |
| - Assigned Sub-Channel Number | 11111'B |
| | The first/ leftmost bit of the bit string contains the most |
| ACC Catting | significant bit of the Assigned Sub-Channel Number. Not Present |
| - ASC Setting - ASC Setting | Not Present |
| - ASC Setting - CHOICE mode | FDD |
| - Available signature Start Index | 0 (ASC#7) |
| - Available signature End Index | 7 (ASC#7) |
| - Assigned Sub-Channel Number | (A3C#7) '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. |
| - Persistence scaling factor | organicality of the 7.53 igned oub-original field indiffice. |
| - 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 10 slot |
| - NB01max - AICH info | 10 800 |
| - Channelisation code | 3 |
| - STTD indicator | FALSE |
| - AICH transmission timing | 0 |
| - Secondary CCPCH system information | |
| - Secondary CCPCH info | |
| - CHOICE mode | FDD |
| - Secondary scrambling code | Not Present |
| - STTD indicator | FALSE |
| - Spreading factor | 64 |
| - Code number | 1 |
| - Pilot symbol existence | FALSE |
| - TFCI existence | TRUE (default value) |
| - Fixed or Flexible position | Flexible (default value) |
| - Timing offset | Not Present |
| | Absence of this IE is equivalent to default value 0 |
| - TFCS | (This IE is repeated for TFC number for PCH and FACH.) |
| - CHOICE TFCI signalling | Normal |
| - TFCI Field 1 information | |
| - CHOICE TFCS representation | Complete reconfiguration |
| - TFCS complete reconfiguration information | |
| | |

- Channelisation code

| - CHOICE CTFC Size | 4 bit |
|--|---------------------------|
| - CTFC information | 0 |
| - Power offset information | Not Present |
| - CTFC information | 1 |
| - Power offset information | Not Present |
| | not i lesent |
| - CTFC information | Not Decorat |
| - 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 | |
| | Net Broomt |
| - Power offset information | Not Present |
| - FACH/PCH information | (201) |
| - 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 |
| | ALL |
| - Semi-static Transport Format information | 40 |
| - 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 | Common transport charmers |
| - RLC Size | 168 |
| | 100 |
| - 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 | r . |
| - 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 |
| | I ALGE |
| - PICH info | TALGE |
| - PICH info - CHOICE mode | FDD |

| - Number of PI per frame | 18 |
|-------------------------------|-------------|
| - STTD indicator | FALSE |
| - CBS DRX Level 1 information | Not Present |

Contents of System Information Block type 5 (TDD)

| one of System miorination Block type of (188) | | | | | |
|--|-------------------------------------|--|--|--|--|
| - 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 | THOU TOOGHT | | | | |
| - Primary CCPCH Tx Power | 30 dbm | | | | |
| - Alpha | (1/8) | | | | |
| - PRACH Constant Value | (176) -10 | | | | |
| - DPCH Constant Value | -10 | | | | |
| - PUSCH Constant Value | -10 | | | | |
| | -10 | | | | |
| - Primary CCPCH info | TDD | | | | |
| - CHOICE mode | TDD | | | | |
| - CHOICE SyncCase | Sync Case 2 | | | | |
| - Timeslot | 0 Net Bresent | | | | |
| - Cell parameters ID | Not Present | | | | |
| - SCTD indicator | FALSE | | | | |
| - PRACH system information list | | | | | |
| - PRACH system information | | | | | |
| - PRACH info | | | | | |
| - CHOICE mode | TDD | | | | |
| - 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 | | | | |
| - Available Channelisation codes indices | Not Present (Default all) | | | | |
| - CHOICE subchannel size | Size1 | | | | |
| - Available Subchannels | null | | | | |
| - ASC Settings | (ASC#1) | | | | |
| - CHOICE mode | TDD | | | | |
| - Available Channelisation codes indices | Not Present (Default all) | | | | |
| - CHOICE subchannel size | Size1 | | | | |
| - Available Subchannels | null | | | | |
| - ASC Settings | (ASC#2) | | | | |
| - CHOICE mode | TDD | | | | |
| 5.1010E 111000 | 1 | | | | |

- CHOICE CTFC Size

```
- Available Channelisation codes indices
                                                Not Present (Default all)
  - CHOICE subchannel size
                                                Size1
   - Available Subchannels
                                                null
 - ASC Settings
                                                (ASC#3)
  - CHOICE mode
                                                TDD
  - Available Channelisation codes indices
                                                Not Present (Default all)
  - CHOICE subchannel size
                                                Size1
   - Available Subchannels
                                                null
 - ASC Settings
                                                (ASC#4)
  - CHOICE mode
                                                TDD
  - 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
  - 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)
                                                0.9 (for ASC#4)
 - Persistence scaling factor
 - 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)
                                                4 (AC11)
 - AC-to-ASC mapping
 - 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
 - Common timeslot info
  - 2<sup>nd</sup> 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")
                                                Not present
  - Repetition length
 - Individual timeslot info
  - Timeslot number
  - TFCI existence
                                                Reference clause 6.10 Parameter Set
  - Midamble Shift and burst type
    - CHOICE Burst Type
                                                Type 1
    - Midamble Allocation Mode
                                                Default midamble
    - Midamble configuration burst type 1 and 3
    - Midamble Shift
                                                Not Present
 - Code List
  - Channelisation Code
                                                Reference clause 6.10 Parameter Set
- TFCS
                                                 (This IE is repeated for TFC number for PCH and
                                                FACH.)
 -CHOICE TFCI signalling
 - Normal
 - TFCI Field 1 information
  - CHOICE TFCS representation
                                                Complete reconfiguration
  - TFCS complete information
```

Number of bits used must be enough to cover all

- CTFC information
- Power offset information
- FACH/PCH information
- TFS
- CHOICE Transport channel type
- Dynamic Transport format information
- RLC Size
- Number of TB and TTI List
- Number of Transport blocks
- CHOICE Mode
- Transmission Time Interval
- CHOICE Logical Channel List
- Semi-static Transport Format information
- Transmission time interval
- Type of channel coding
- Coding Rate
- Rate matching attribute
- CRC size
- Transport Channel Identity
- CTCH indicator
- TFS
- CHOICE Transport channel type
- Dynamic Transport format information
- RLC Size
- Number of TB and TTI List
- Number of Transport blocks
- CHOICE Mode
- Transmission Time Interval
- CHOICE Logical Channel List
- Semi-static Transport Format information
- Transmission time interval
- Type of channel coding
- Coding Rate
- Rate matching attribute
- CRC size
- Transport Channel Identity
- CTCH indicator
- TFS
- CHOICE Transport channel type
- Dynamic Transport format information
- RLC Size
- Number of TB and TTI List
- Number of Transport blocks
- CHOICE Mode
- CHOICE Logical Channel List
- Semi-static Transport Format information
- Transmission time interval
- Type of channel coding
- Coding Rate
- Rate matching attribute
- CRC size
- Transport Channel Identity
- CTCH indicator
- PICH info
- CHOICE mode
 - Timeslot number
 - Midamble shift and burst type
 - CHOICE Burst Type
 - Midamble Shift
 - Channelisation code
 - Repetition period/length
- Offset
- Paging indicator length
- N_{GAP}
- N_{PCH}
- CBS DRX Level 1 information

combinations of CTFC from clause 6.10. Reference clause 6.10 Parameter Set Not Present

(PCH)

Common transport channels

Reference clause 6.10 Parameter Set Reference clause 6.10 Parameter Set Reference clause 6.10 Parameter Set

Reference clause 6.10 Parameter Set

Reference clause 6.10 Parameter Set Reference clause 6.10 Parameter Set Reference clause 6.10 Parameter Set Reference clause 6.10 Parameter Set Reference clause 6.10 Parameter Set 12 (for PCH)

FALSE (FACH)

Common transport channels

Reference clause 6.10 Parameter Set Reference clause 6.10 Parameter Set Reference clause 6.10 Parameter Set TDD

Reference clause 6.10 Parameter Set

Reference clause 6.10 Parameter Set Reference clause 6.10 Parameter Set Reference clause 6.10 Parameter Set Reference clause 6.10 Parameter Set Reference clause 6.10 Parameter Set 13 (for FACH)

FALSE (FACH)

Common transport channels

Reference clause 6.10 Parameter Set Reference clause 6.10 Parameter Set Reference clause 6.10 Parameter Set TDD

ALL

Reference clause 6.10 Parameter Set 14 (for FACH)

FALSE

TDD

Type 1 0 16/16 64/2

0 4 4

4

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) (TDD)

| DIOLED " | T. ID |
|--|-------------------------------------|
| - 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 |
| - Alpha | (1/8) |
| - PRACH Constant Value | -10 |
| - DPCH Constant Value | -10 |
| - PUSCH Constant Value | -10 |
| - Primary CCPCH info | |
| - CHOICE mode | TDD |
| - 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 |
| - Timeslot number | 14 |
| - PRACH Channelisation Code List | |
| - CHOICE SF | SF8 |
| - Choice Sr - Channelisation Code List | 550 |
| | 0/4 |
| - Channelisation Code | 8/1 8/2 |
| - Channelisation Code | 157 |
| - 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 | D () 0 (0 D) () 0 (|
| - 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 ´ |
| - Available Channelisation codes indices | Not Present (Default all) |
| - CHOICE subchannel size | Size1 |
| - Available Subchannels | null |
| - ASC Settings | (ASC#1) |
| - CHOICE mode | TDD |
| S. TOTOL MOGO | 1.55 |

- Available Channelisation codes indices
- CHOICE subchannel size
- Available Subchannels
- ASC Settings
- CHOICE mode
- Available Channelisation codes indices
- CHOICE subchannel size
- Available Subchannels
- ASC Settings
- CHOICE mode
- Available Channelisation codes indices
- CHOICE subchannel size
- Available Subchannels
- ASC Settings
- CHOICE mode
- Available Channelisation codes indices
- CHOICE subchannel size
- Available Subchannels
- ASC Settings
- CHOICE mode
- Available Channelisation codes indices
- CHOICE subchannel size
- Available Subchannels
- ASC Settings
- CHOICE mode
- Available Channelisation codes indices
- CHOICE subchannel size
- Available Subchannels
- Persistence scaling factors
- Access Service Class
- Persistence scaling factor
- AC-to-ASC mapping
- CHOICE mode
- Secondary CCPCH system information
- Secondary CCPCH system information
- Secondary CCPCH info
- CHOICE mode
- Offset
- Common timeslot info
- 2nd interleaving mode
- TFCI coding
- Puncturing limit
- Repetition period
- Repetition length
- Individual timeslot info
- Timeslot number
- TFCI existence
- Midamble Shift and burst type
- CHOICE Burst Type
- Midamble Allocation Mode
- Midamble configuration burst type 1 and 3
- Midamble Shift
- Code List
- Channelisation Code
- TFCS
- Normal
- TFCI Field 1 information
- CHOICE TFCS representation
- TFCS complete reconfiguration information
- CHOICE CTFC Size
- CTFC information
- Power offset information
- FACH/PCH information
- TFS

Not Present (Default all)

Size1 null (ASC#2) TDD

Not Present (Default all)

Size1 null (ASC#3) TDD

Not Present (Default all)

Size1 null (ASC#4) TDD

Not Present (Default all)

Size1 null (ASC#5) TDD

Not Present (Default all)

Size1 null (ASC#6) TDD

Not Present (Default all)

Size1 null

0.9 (for ASC#2) 0.9 (for ASC#3) 0.9 (for ASC#4) 0.9 (for ASC#5) 0.9 (for ASC#6) Not Present

TDD (no data)

TDD ∩

Not Present (MD "Frame")

Reference clause 6.10 Parameter Set Reference clause 6.10 Parameter Set

Not Present (MD "1")

Not present

1

Reference clause 6.10 Parameter Set

Type 1

Default midamble

4

Not Present

Reference clause 6.10 Parameter Set

(This IE is repeated for TFC number for PCH and FACH.)

Complete reconfiguration

Number of bits used must be enough to cover all combinations of CTFC from clause 6.10.

Reference clause 6.10 Parameter Set

Not Present

(PCH)

- CHOICE Transport channel type
- Dynamic Transport format information
- RLC Size
- Number of TB and TTI List
- Number of Transport blocks
- CHOICE Mode
- Transmission Time Interval
- CHOICE Logical Channel List
- Semi-static Transport Format information
- Transmission time interval
- Type of channel coding
- Coding Rate
- Rate matching attribute
- CRC size
- Transport Channel Identity
- CTCH indicator
- CHOICE Transport channel type
- Dynamic Transport format information
- RLC Size
- Number of TB and TTI List
- Number of Transport blocks
- CHOICE Mode
- Transmission Time Interval
- CHOICE Logical Channel List
- Semi-static Transport Format information
- Transmission time interval
- Type of channel coding
- Coding Rate
- Rate matching attribute
- CRC size
- Transport Channel Identity
- CHOICE Transport channel type
- Dynamic Transport format information
- RLC Size
- Number of TB and TTI List
- Number of Transport blocks
- CHOICE Mode
- CHOICE Logical Channel List
- Semi-static Transport Format information
- Transmission time interval
- Type of channel coding
- Coding Rate
- Rate matching attribute
- CRC size
- Transport Channel Identity
- CTCH indicator
- CTCH indicator
- PICH info
- CHOICE mode
- Timeslot number
- Midamble shift and burst type
- CHOICE Burst Type
- Midamble Shift
- Channelisation code
- Repetition period/length
- Offset
- Paging indicator length
- NGAP
- N_{PCH} CBS DRX Level 1 information

Common transport channels

Reference clause 6.10 Parameter Set Reference clause 6.10 Parameter Set

Reference clause 6.10 Parameter Set

TDD

Reference clause 6.10 Parameter Set

ALL

Reference clause 6.10 Parameter Set

12 (for PCH)

FALSE (FACH)

Common transport channels

Reference clause 6.10 Parameter Set

Reference clause 6.10 Parameter Set Reference clause 6.10 Parameter Set

TDD

Reference clause 6.10 Parameter Set

ALL

Reference clause 6.10 Parameter Set

Reference clause 6.10 Parameter Set

Reference clause 6.10 Parameter Set Reference clause 6.10 Parameter Set

Reference clause 6.10 Parameter Set

13 (for FACH)

(FACH)

Common transport channels

Reference clause 6.10 Parameter Set

Reference clause 6.10 Parameter Set Reference clause 6.10 Parameter Set

TDD

ALL

Reference clause 6.10 Parameter Set

14 (for FACH)

FALSE

FALSE

ITDD

Type 1

16/16

64/2

0

4

4

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.

| - SIB12 indicator | A1, A2 | TRUE |
|--|--------|---|
| - FACH measurement occasion info | · | Not Present |
| - Measurement control system information | | · · · · · · · · · · · · · · · · · · |
| | | NI (|
| - Use of HCS | | Not used |
| - Cell selection and reselection quality measure | | CPICH RSCP |
| - Intra-frequency measurement system | A1, A2 | |
| information | , | |
| | | Not Droport |
| - Intra-frequency measurement identity | | Not Present |
| | | Absence of this IE is equivalent to default value 1 |
| - Intra-frequency cell info list | | |
| - CHOICE intra-frequency cell removal | | Not present |
| Of 1010E milital inequality deli femioval | | (This IE shall be ignored by the UE for SIB11) |
| | | (This is shall be ignored by the OE for Sibir) |
| - New intra-frequency cells | | |
| - Intra-frequency cell id | | 1 |
| - Cell info | | |
| - Cell individual offset | | Not propert |
| - Cell Individual offset | | Not present |
| | | Absence of this IE is equivalent to default value 0dB |
| - Reference time difference to cell | | Not Present |
| - Read SFN indicator | | FALSE |
| - CHOICE mode | | FDD |
| | | רטט |
| - Primary CPICH info | | |
| Primary scrambling code | | Refer to clause titled "Default settings for cell No.1 |
| i i | | (FDD)" in clause 6.1.4 |
| - Primary CPICH TX power | | Not Present |
| | | |
| - TX Diversity indicator | | FALSE |
| Cell Selection and Re-selection info | | Not Present |
| | | (The IE shall be absent as this is the serving cell) |
| - Intra-frequency cell id | | 2 |
| | | 2 |
| - Cell info | | |
| - Cell individual offset | | Not present |
| | | Absence of this IE is equivalent to default value 0dB |
| - Reference time difference to cell | | Not present |
| | | |
| - Read SFN indicator | | TRUE |
| - CHOICE mode | | FDD |
| - Primary CPICH info | | |
| - Primary scrambling code | | Refer to clause titled "Default settings for cell No.2 |
| 1 milary scrambing code | | |
| | | (FDD)" in clause 6.1.4 |
| - Primary CPICH TX power | | Not Present |
| - TX Diversity indicator | | FALSE |
| - Cell Selection and Re-selection info | | Not present |
| Con Colocion and the colocion into | | |
| | | For neigbouring cell, if HCS is not used and all the |
| | | parameters in cell selection and re-selection info are |
| | | Default value, this IE is absent. |
| - Intra-frequency cell id | | 3 |
| - Cell info | | |
| - Cell IIIIO | | Same content as specified for Intra-frequency cell id=2 |
| | | with the exception that value for Primary scrambling |
| | | code shall be according to clause titled "Default |
| | | settings for cell No.3 (FDD)" in clause 6.1.4 |
| - Intra-frequency cell id | A1 | 7 |
| | Δ' | · |
| - Cell info | | Same content as specified for Intra-frequency cell id=2 |
| | | with the exception that value for Primary scrambling |
| | | code shall be according to clause titled "Default |
| | | settings for cell No.7 (FDD)" in clause 6.1.4 |
| Intro fraguancy call id | | |
| - Intra-frequency cell id | | 8 |
| - Cell info | | Same content as specified for Intra-frequency cell id=2 |
| | | with the exception that value for Primary scrambling |
| | | code shall be according to clause titled "Default |
| | | |
| | | settings for cell No.8 (FDD)" in clause 6.1.4 |
| - Cells for measurement | A1, A2 | Not Present |
| - Intra-frequency measurement quantity | A1, A2 | |
| - Filter coefficient | , | Not present |
| | | |
| 0110105 | | Absence of this IE is equivalent to the default value 0 |
| - CHOICE mode | | FDD |
| - Measurement quantity | | CPICH RSCP |
| - Intra-frequency reporting quantity for RACH | | Not Present |
| Reporting | | |
| Maximum number of reported calls on BACL | | Not Procent |
| - 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
- Cell identity reporting indicator
- CHOICE mode
- CPICH Ec/N0 reporting indicator
- CPICH RSCP reporting indicator
- Pathloss reporting indicator
- Reporting quantities for monitored set cells
- Cell synchronisation information reporting indicator
- Cell identity reporting indicator
- CHOICE mode
- CPICH Ec/N0 reporting indicator
- CPICH RSCP reporting indicator
- Pathloss reporting indicator
- Reporting quantities for detected set cells
- Measurement reporting mode
- Measurement Report Transfer Mode
- Periodic Reporting/Event Trigger Reporting Mode

- CHOICE report criteria

- Intra-frequency measurement reporting criteria
- 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 triager
- Amount of reporting
- Reporting interval
- Reporting cell status
- CHOICE reported cell
- Maximum number of reported cells
- 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
- CHOICE reported cell
- Maximum number of reported cells
- 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

```
FALSE
```

TRUE

FDD

FALSE TRUE

FALSE

TRUE

TRUE

FDD

FALSE TRUE

FALSE

Not Present

Acknowledged mode RLC

Event trigger

Intra-frequency measurement reporting criteria

3 kinds

1a

Not Present

Monitored set cells

5dB

Not Present

1.0

0.0

Not Present

2

Not Present

640

4000

Report cell within active set and/or monitored set cells on used frequency

3

1b

Active set cells

Not Present

5dB

Not Present

1.0

0.0 Not Present

Not Present

Not Present

640

Not Present

Not Present

Report cell within active set and/or monitored set cells on used frequency

3

1c

Not Present

Not Present

Not Present Not Present

Not Present Not Present

0.0

Not Present

Not Present

3

| - Time to trigger | | 640 |
|---|---------|--|
| - Amount of reporting | | 4 |
| - Reporting interval | | 4000 |
| - Reporting cell status | | Deport cell within cetive cet and/en requitered cet cells |
| - CHOICE reported cell | | Report cell within active set and/or monitored set cells on used frequency |
| - Maximum number of reported cells | | 3 |
| - Inter-frequency measurement system | A1, A2 | |
| information | 711,712 | |
| - Inter-frequency cell info list | | |
| CHOICE Inter-frequency cell removal | | Not present |
| | | (This IE shall be ignored by the UE for SIB11) |
| - New inter-frequency cells | | |
| - Inter frequency cell id | | 4 |
| - Frequency info - CHOICE mode | | FDD |
| - UARFCN uplink(Nu) | | Not present |
| or at apminary | | Absence of this IE is equivalent to apply the default |
| | | duplex distance defined for the operating frequency |
| | | according to 25.101 |
| - UARFCN downlink(Nd) | | Reference to table 6.1.2 for Cell 4 |
| - Cell info | | |
| - Cell individual offset | | Not present |
| - Reference time difference to cell | | Absence of this IE is equivalent to default value 0dB Not present |
| - Read SFN indicator | | FALSE |
| - CHOICE mode | | FDD |
| - Primary CPICH info | | |
| - Primary scrambling code | | Refer to clause titled "Default settings for cell No.4 |
| | | (FDD)" in clause 6.1.4 |
| - Primary CPICH Tx power | | Not present |
| - TX Diversity Indicator | | FALSE |
| Cell Selection and Re-selection Info Inter frequency cell id | | Not present (same values as for serving cell applies) 5 |
| - Frequency info | | Not Present |
| | | Absence of this IE is equivalent to value of the |
| | | previous "frequency info" in the list. |
| - Cell info | | Same content as specified for Inter-frequency cell id=4 |
| | | with the exception that value for Primary scrambling |
| | | code shall be according to clause titled "Default |
| - Inter frequency cell id | | settings for cell No.5 (FDD)" in clause 6.1.4 |
| - Frequency info | | Not Present |
| Troquonoy mile | | 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 |
| - Cell for measurement | | settings for cell No.6 (FDD)" in clause 6.1.4 Not present |
| - Inter-RAT measurement system information | A1 | Not Present |
| - Inter-RAT measurement system information | A2 | |
| - Inter-RAT cell info list | | |
| - CHOICE Inter-RAT cell removal | | Not Present |
| N DAT. II | | (This IE shall be ignored by the UE for SIB11) |
| - New inter-RAT cells | | |
| Inter-RAT cell id CHOICE Radio Access Technology | | 9 GSM |
| - GSM | | GOIVI |
| - Cell individual offset | | 0 |
| - Cell selection and re-selection info | | Not Present |
| - BSIC | | |
| - Base transceiver Station Identity Code | | Reference to table 6.1.10 for Cell 9 |
| (BSIC) | | A |
| - Band indicator | | According to PICS/PIXIT |
| - BCCH ARFCN - Inter-RAT cell id | | Reference to table 6.1.10 for Cell 9 10 |
| - Inter-RAT cell id - CHOICE <i>Radio Access Technology</i> | | GSM |
| STICIOL Madio Moodo Toolillology | i l | |

| - GSM | | |
|--|--------|---------------------------------------|
| Cell individual offset | | 0 |
| Cell selection and re-selection info | | Not Present |
| - BSIC | | |
| Base transceiver Station Identity Code | | Reference to table 6.1.10 for Cell 10 |
| (BSIC) | | |
| 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 | FDD cell environment | |
| A2 | FDD/GSM inter-RAT cell environment | |

Contents of System Information Block type 11 (TDD)

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 (TDD) for cell 2 to 8.

| - SIB 12 Indicator | A1, A2 | TRUE |
|--|---------|---|
| | A1, A2 | Not Present |
| - FACH measurement occasion info | | Not Present |
| - Measurement control system information | | Not used |
| - Use of HCS | | Not used |
| - Cell selection and reselection quality measure | 4.4.40 | (no data) |
| - Intra-frequency measurement system | A1, A2 | |
| information | | |
| - Intra-frequency measurement identity | | Not Present |
| | | Absence of this IE is equivalent to default value |
| - Intra-frequency cell info list | | |
| - CHOICE intra-frequency cell removal | | Not present |
| | | (This IE shall be ignored by the UE for SIB11) |
| - New intra-frequency cells | | |
| - Intra-frequency cell id | | 1 |
| - Cell info | | |
| - Cell individual offset | | Not present |
| | | Absence of this IE is equivalent to default value 0dB |
| - Reference time difference to cell | | Not Present |
| - Read SFN Indicator | | FALSE |
| - CHOICE mode | | TDD |
| - Primary CCPCH info | | |
| - Cell parameters ID | | Reference clause 6.1.4 Default settings for cell |
| - Primary CCPCH TX power | | Not Present |
| - Timeslot list | | Not Present |
| - Timeslot number | | Not Present |
| - Burst type | | Not Present |
| - Cell Selection and Re-selection info | | Not Present |
| | | (The IE shall be absent as this is the serving cell) |
| - Cells for measurement | A1, A2 | Not Present |
| - Intra-frequency measurement quantity | A1, A2 | THOU TOOON |
| - Filter coefficient | 7(1,7(2 | Not present |
| Tiller coefficient | | Absence of this IE is equivalent to the default value 0 |
| - CHOICE mode | | TDD |
| - Measurement quantity list | | |
| - Measurement quantity | | P-CCPCH RSCP |
| - Intra-frequency reporting quantity for RACH | | Not Present |
| Reporting | | INOCT TESETIC |
| - Maximum number of reported cells on RACH | | Not Present |
| - Reporting information for state CELL_DCH | | Not Fresent |
| | | |
| Intra-frequency reporting quantity Reporting quantities for active set cells | | |
| | | TDUE |
| - Cell synchronisation information reporting | | TRUE |
| indicator | | TDUE |
| - Cell identity reporting indicator | | TRUE |
| - CHOICE mode | l | TDD |

- Timeslot ISCP reporting indicator
- Proposed TSGN reporting required
- P-CCPCH RSCP reporting indicator
- Pathloss reporting indicator
- Reporting quantities for monitored set cells
- Cell synchronisation information reporting indicator
 - Cell identity reporting indicator
 - CHOICE mode
 - Timeslot ISCP reporting indicator
 - Proposed TSGN reporting required
 - P-CCPCH RSCP reporting indicator
 - Pathloss reporting indicator
 - Reporting quantities for detected set cells
- Measurement reporting mode
- Measurement Report Transfer Mode
- Periodical Reporting / Event Trigger

Reporting Mode

- -CHOICE report criteria
- Intra-frequency measurement reporting criteria
 - Parameters required for each event
 - Intra-frequency event identity
 - Triggering condition1
 - Triggering condition2
 - Reporting Range
 - cells forbidden to affect reporting range
 - W(optional in case of 1a,1b)
 - Hysteresis
 - Threshold used frequency
 - Reporting deactivation threshold
 - Replacement activation threshold
 - Time to trigger
 - Amount of reporting
 - Reporting interval
 - Reporting cell status
 - CHOICE reported cells
 - Maximum number of reported cells

- Inter-frequency measurement system information

- Inter-frequency cell info list
- CHOICE Inter-frequency cell removal
- New inter-frequency cells
- Inter frequency cell id
- Frequency info
- CHOICE mode
- UARFCN (Nt)
- Cell info
- Cell individual offset
- Reference time difference to cell
- Read SFN indicator
- CHOICE mode
- Primary CCPCH info
- Primary CCPCH Tx power
- TX Diversity Indicator
- Cell Selection and Re-selection Info
- Inter frequency cell id
- Frequency info
- Cell info
- Inter frequency cell id

FALSE

FALSE TRUE

FALSE

FALSE

TRUE

TDD

FALSE

FALSE

TRUE

IKUE

FALSE

Not Present

Acknowledged mode RLC

Event trigger

1g

Not Present

Not Present

Not Present

Not Present

Not Present

0.0

Not Present

3

Not Present

640

4

4000

Report cell within active set and/or monitored cells on used frequency

3

A1, A2

Not present

(This IE shall be ignored by the UE for SIB11)

4

חחד

Reference to table 6.1.2 for Cell 4

Not present

Absence of this IE is equivalent to default value 0dB

Not present

FALSE

TDD

Refer to clause titled "Default settings for cell No.4

(TDD)" in clause 6.1.4

Not present

FALSE

Not present (same values as for serving cell applies)

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 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

ETSI

| - Frequency info | | Not Present |
|--|--------|---|
| - Cell info | | 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 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 | |
| - Inter-RAT cell info list | | |
| - CHOICE Inter-RAT cell removal | | Not Present |
| | | (This IE shall be ignored by the UE for SIB11) |
| - New inter-RAT cells | | |
| - Inter-RAT cell id | | 9 |
| - CHOICE Radio Access Technology | | GSM |
| - GSM | | |
| - Cell individual offset | | 0 |
| - Cell selection and re-selection info | | Not Present |
| - BSIC | | |
| - Base transceiver Station Identity Code | | Reference to table 6.1.10 for Cell 9 |
| (BSIC) | | |
| - BCCH ARFCN | | Reference to table 6.1.10 for Cell 9 |
| - Inter-RAT cell id | | 10 |
| - CHOICE Radio Access Technology - GSM | | GSM |
| - Cell individual offset | | 0 |
| Cell selection and re-selection info | | Not Present |
| - BSIC | | |
| - Base transceiver Station Identity Code | | Reference to table 6.1.10 for Cell 10 |
| (BSIC) | | |
| - 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 | A1, A2 | Not Present |
| information | | |

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

Contents of System Information Block type 12 in connected mode (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 | Not Present |
| information | |
| - Inter-RAT measurement system information | Not Present |
| - Traffic volume measurement system | Not Present |
| information | |

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

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

Contents of System Information Block type 14 (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 |
| | |
| UL Timeslot Interference Individual Timeslot interference | -90 dbm |

| - 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 type17 (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 | |
| | FDD |
| - 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 | Common transport charmolo |
| | 400 |
| - 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 | 11011113 |
| | Complete reconfiguration |
| - CHOICE TFCS representation | Complete reconfiguration |
| TFCS complete reconfiguratio information | |
| - CHOICE CTFC Size | 2 bit |
| - CTFC information | 0 |
| - Power offset information | ľ |
| | One manufact Online Francisco |
| - 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 | 0 |
| - CHOICE Gain Factors | Signalled Gain Factor |
| - CHOICE mode | FDD |
| - Gain factor ßc | 11 |
| - Gain factor ßd | 15 |
| | |
| - Reference TFC ID | 0 |
| - CHOICE Mode | FDD |
| - Power offset Pp-m | 0 dB |
| - PRACH partitioning | |
| - Access Service Class | |
| | Not Procent |
| - ASC Setting | Not Present |
| - ASC Setting | |
| - CHOICE mode | FDD |
| - Available signature Start Index | 0 (ASC#1) |
| - Available signature End Index | 7 (ASC#1) |
| | |
| - Assigned Sub-Channel Number | '1111'B |
| | The first/ leftmost bit of the bit string contains the most |
| | significant bit of the Assigned Sub-Channel Number. |
| - ASC Setting | Not Present |
| • | · |

- ASC Setting
- CHOICE mode
- Available signature Start Index
- Available signature End Index
- Assigned Sub-Channel Number
- ASC Setting
- ASC Setting
- CHOICE mode
- Available signature Start Index
- Available signature End Index
- Assigned Sub-Channel Number
- ASC Setting
- ASC Setting
- CHOICE mode
- Available signature Start Index
- Available signature End Index
- Assigned Sub-Channel Number
- Persistence scaling factor
- Persistence scaling factor - Persistence scaling factor
- AC-to-ASC mapping table
- AC-to-ASC mapping
- AC-to-ASC mapping
- AC-to-ASC mapping
- AC-to-ASC mapping - AC-to-ASC mapping
- AC-to-ASC mapping
- AC-to-ASC mapping
- CHOICE mode
- Primary CPICH TX power
- Constant value
- PRACH power offset
- Power Ramp Step
- Preamble Retrans Max
- RACH transmission parameters
- Mmax
- NB01min
- NB01max
- AICH info
- Channelisation code
- STTD indicator
- AICH transmission timing
- Secondary CCPCH system information
- Secondary CCPCH info
- CHOICE mode
- Secondary scrambling code
- STTD indicator
- Spreading factor
- Code number
- Pilot symbol existence
- TFCI existence
- Fixed or Flexible position
- Timing offset
- TFCS
- CHOICE TFCI signalling
- TFCI Field 1 information
- CHOICE TFCS representation
- TFCS complete reconfiguration information
- CHOICE CTFC Size

FDD

0 (ASC#3)

7 (ASC#3)

'1111'B

The first/ leftmost bit of the bit string contains the most significant bit of the Assigned Sub-Channel Number.

FDD

0 (ASC#5)

7 (ASC#5)

'1111'B

The first/ leftmost bit of the bit string contains the most significant bit of the Assigned Sub-Channel Number.

Not Present

FDD

0 (ASC#7)

7 (ASC#7)

'1111'B

The first/ leftmost bit of the bit string contains the most significant bit of the Assigned Sub-Channel Number.

- 0.9 (for ASC#2)
- 0.9 (for ASC#3)
- 0.9 (for ASC#4)
- 0.9 (for ASC#5)
- 0.9 (for ASC#6)
- 0.9 (for ASC#7)
- 6 (AC0-9)
- 5 (AC10)
- 4 (AC11)
- 3 (AC12) 2 (AC13)
- 1 (AC14)
- 0 (AC15)
- FDD
- 31
- -10
- 3dB
- 4
- 3 slot
- 10 slot
- 3
- **FALSE**

(For 2 SCCPCHs)

(SCCPCH for standalone PCH)

FDD Not Present

FALSE

128

FALSE

FALSE Fixed

30

Normal

Complete reconfiguration

2 bit

| S 34.108 version 3.14.0 Release 1999 |
|--|
| - CTFC information - Power offset information - CTFC information - Power offset information FACH/PCH information TFS CHOICE Transport channel type - Dynamic Transport format information - RLC Size - Number of TB and TTI List - Number of Transport blocks - Number of Transport blocks - Number of Transport blocks - CHOICE Mode - CHOICE Logical Channel List - Semi-static Transport Format information - Transmission time interval - Type of channel coding - Coding Rate - Rate matching attribute - CRC size Transport Channel Identity CTCH indicator PICH info CHOICE mode - Channelisation code - Number of PI per frame - STTD indicator Secondary CCPCH info CHOICE mode - Secondary scrambling code - STTD indicator - Spreading factor - Code number - Pilot symbol existence - TFCI existence |
| - Fixed or Flexible position |
| - Timing offset |
| TFCS |

- CHOICE TFCI signalling

- TFCI Field 1 information

- CHOICE TFCS representation

- TFCS complete reconfiguration information

- CHOICE CTFC Size - CTFC information

- Power offset information

- CTFC information

- Power offset information - CTFC information

- Power offset information

- CTFC information

- Power offset information

- CTFC information

- Power offset information

- FACH/PCH information

- CHOICE Transport channel type

- Dynamic Transport format information

- RLC Size

- Number of TB and TTI List

- Number of Transport blocks

- Number of Transport blocks

- Number of Transport blocks

- CHOICE Mode

- CHOICE Logical Channel List

- Semi-static Transport Format information

- Transmission time interval

Not Present

Not Present

(PCH)

Common transport channels

240

0 FDD ALL

10 ms Convolutional

230 16 bit 12 (for PCH) **FALSE**

FDD 2 18 **FALSE**

(SCCPCH including two FACHs)

FDD Not Present **FALSE** 64 **FALSE** Not Present

Absence of this IE is equivalent to default value "TRUE"

Not Present

Absence of this IE is equivalent to default value "Flexible"

Not Present

Absence of this IE is equivalent to default value 0

Normal

Complete reconfiguration

4 bit 0

Not Present

Not Present

Not Present

Not Present

Not Present

(FACH)

Common transport channels

168

0 1 2

FDD

ALL

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 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>

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 | |
| | FDD |
| - CHOICE mode | FDD |
| - Available Signature | '0000 0000 1111 1111'B |
| - Available SF | 64 |
| Preamble scrambling code number | 0 |
| - Puncturing Limit | 1.00 |
| | '1111 1111 1111'B |
| - Available Sub Channel number | |
| - Transport Channel Identity | 15 |
| - RACH TFS | |
| - CHOICE Transport channel type | Common transport channels |
| - Dynamic Transport format information | |
| - RLC size | 168 |
| | 100 |
| - Number of TB and TTI List | |
| Number of Transport blocks | 1 |
| - CHOICE Mode | FDD |
| - CHOICE Logical Channel List | Configured |
| - RLC size | 360 |
| | J00 |
| - Number of TB and TTI List | |
| Number of Transport blocks | 1 |
| - CHOICE Mode | FDD |
| - CHOICE Logical Channel List | Configured |
| - Semi-static Transport Format information | Comigarou |
| | 00 |
| - Transmission time interval | 20 ms |
| - Type of channel coding | Convolutional |
| - Coding Rate | 1/2 |
| - Rate matching attribute | 150 |
| - CRC size | 16 |
| | 10 |
| - 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 |
| - Griorez mode - Gain factor ßc | 11 |
| | |
| - Gain factor ßd | 15 |
| - Reference TFC ID | 0 |
| - CHOICE Mode | FDD |
| - Power offset Pp-m | 0 dB |
| - PRACH partitioning | |
| - Access Service Class | |
| | l N / B |
| - ASC Setting | Not Present |
| - ASC Setting | |
| - CHOICE mode | FDD |
| - Available signature Start Index | 0 (ASC#1) |
| | 7 (ASC#1) |
| - Available signature End Index | |
| - Assigned Sub-Channel Number | '1111'B |
| | The first/ leftmost bit of the bit string contains the most |
| | significant bit of the Assigned Sub-Channel Number. |
| - ASC Setting | Not Present |
| • | · |

- ASC Setting
- CHOICE mode
- Available signature Start Index
- Available signature End Index
- Assigned Sub-Channel Number
- ASC Setting
- ASC Setting
- CHOICE mode
- Available signature Start Index
- Available signature End Index
- Assigned Sub-Channel Number
- ASC Setting
- ASC Setting
- CHOICE mode
- Available signature Start Index
- Available signature End Index
- Assigned Sub-Channel Number
- Persistence scaling factor
- Persistence scaling factor - Persistence scaling factor
- AC-to-ASC mapping table
- AC-to-ASC mapping
- AC-to-ASC mapping
- AC-to-ASC mapping
- AC-to-ASC mapping
- AC-to-ASC mapping - AC-to-ASC mapping
- AC-to-ASC mapping
- CHOICE mode
- Primary CPICH TX power
- Constant value
- PRACH power offset
- Power Ramp Step
- Preamble Retrans Max
- RACH transmission parameters
- Mmax
- NB01min
- NB01max
- AICH info
- Channelisation code
- STTD indicator
- AICH transmission timing
- Secondary CCPCH system information
- Secondary CCPCH info
- CHOICE mode
- Secondary scrambling code
- STTD indicator
- Spreading factor
- Code number
- Pilot symbol existence
- TFCI existence
- Fixed or Flexible position
- Timing offset
- TFCS
- CHOICE TFCI signalling
- TFCI Field 1 information
- CHOICE TFCS representation
- TFCS conplete reconfiguration information
- CHOICE CTFC Size

FDD

0 (ASC#3)

7 (ASC#3)

'1111'B

The first/ leftmost bit of the bit string contains the most significant bit of the Assigned Sub-Channel Number.

FDD

0 (ASC#5)

7 (ASC#5)

'1111'B

The first/ leftmost bit of the bit string contains the most significant bit of the Assigned Sub-Channel Number.

Not Present

FDD

0 (ASC#7)

7 (ASC#7)

'1111'B

The first/ leftmost bit of the bit string contains the most significant bit of the Assigned Sub-Channel Number.

0.9 (for ASC#2)

0.9 (for ASC#3)

0.9 (for ASC#4)

0.9 (for ASC#5)

0.9 (for ASC#6)

0.9 (for ASC#7)

6 (AC0-9) 5 (AC10)

4 (AC11)

3 (AC12)

2 (AC13) 1 (AC14)

0 (AC15)

FDD

31 -10

3dB 4

3 slot

10 slot

3

FALSE

(For 2 SCCPCHs)

(SCCPCH for standalone PCH)

FDD Not Present

FALSE

128

FALSE

FALSE Fixed

30

Normal

Complete reconfiguration

2 bit

- Timing offset

- CHOICE TFCI signalling

- TFCI Field 1 information - CHOICE TFCS representation

- CHOICE CTFC Size

- CTFC information - Power offset information

- CTFC information - Power offset information

- CTFC information - Power offset information

- TFCS complete reconfiguration information

- TFCS

| TS 34.108 version 3.14.0 Release 1999 | 57 | ETSI |
|--|------------------|-----------------|
| - 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 | t 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 | |
| | 2 | |
| - Channelisation code - Number of PI per frame | 18 | |
| - STTD indicator | FALSE | |
| - Secondary CCPCH info | (SCCPCH includin | a two EACHe) |
| - CHOICE mode | FDD | ig two i Acris) |
| - Secondary scrambling code | Not Present | |
| - STTD indicator | FALSE | |
| - Spreading factor | 128 | |
| - Code number | 5 | |
| - Pilot symbol existence | FALSE | |

- 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"

Not Present

Absence of this IE is equivalent to default value 0

Normal

Complete reconfiguration

2 bit Not Present

Not Present

Not Present

| EACH/DOLLinformation | ı |
|--|---------------------------|
| - FACH/PCH information - TFS | (FACH) |
| 1 | (FACH) |
| - CHOICE Transport channel type | Common transport channels |
| - Dynamic Transport format information | 400 |
| - 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 |
| ODO Hamo onoot (11) | I ~ |

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 |
| | Not i lesent |
| - Secondary CCPCH system information | (000D0H; |
| - 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 |
| - 11 Of existence | |
| Fired as Flexible specifies | 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 | 90 |
| - TFCS | |
| - CHOICE TFCI signalling | Normal |
| - TFCI Field 1 information | |
| - CHOICE TFCS representation | Complete reconfiguration |
| - TFCS complete reconfiguration information | |
| - CHOICE CTFC Size | 4 bit |
| - CTFC information | 0 |
| | |
| - Power offset information | Not Present |
| - CTFC information | 1 |
| - Power offset information | Not Present |
| - CTFC information | 2 |
| Power offset information | Not Present |
| - CTFC information | 3 |
| - Power offset information | Not Present |
| - CTFC information | 4 |
| - Power offset information | Not Present |
| - FACH/PCH information | Not i room |
| - TFS | (FACH) |
| - CHOICE Transport channel type | |
| | Common transport channels |
| - Dynamic Transport format information | 400 |
| - 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 |
| | 1/ ₂ |
| - Coding Rate | |
| - 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 |
| | 1 |
| - Number of Transport blocks | |
| - 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 | 31 |
| - 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 | System musimum rypo i r |
| - CHOICE Value tag | Cell Value tag |
| - Cell Value tag | 1 |
| - SEG_COUNT | 3 |
| - SIB_REP | 64 |
| - SIB POS | 26 |
| - SIB POS offset info | 20 |
| - SIB_OFF | 2 |
| - SIB_OFF | 2 |
| - SIB type SIBs only | System Information Type 12 |
| - Scheduling information | System memation type 12 |
| - 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_POS offset find - 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 |
| | 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 | Oomigarea |
| | 20 |
| - 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 | Normal |
| - CHOICE TFCS representation | Complete reconfiguration |
| | 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 | 0 |
| - CHOICE Gain Factors | Signalled Gain Factor |
| - CHOICE mode | FDD |
| - Gain factor ßc | 11 |
| - Gain factor ßd | 15 |
| - Reference TFC ID | 0 |
| - CHOICE Mode | FDD |
| - Power offset Pp-m | 0 dB |
| | O GD |
| - 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 |
| 7.33igiled Odb-Orialillei Nullibei | |
| | The first/ leftmost bit of the bit string contains the most |
| A00 0 " | significant bit of the Assigned Sub-Channel Number. |
| - ASC Setting | Not Present |

- ASC Setting - CHOICE mode - Available signature Start Index - Available signature End Index - Assigned Sub-Channel Number - ASC Setting
- ASC Setting - CHOICE mode
- Available signature Start Index - Available signature End Index - Assigned Sub-Channel Number
- ASC Setting - ASC Setting - CHOICE mode
- Available signature Start Index - Available signature End Index
- Assigned Sub-Channel Number

- Persistence scaling factor - AC-to-ASC mapping table - AC-to-ASC mapping

- AC-to-ASC mapping AC-to-ASC mapping AC-to-ASC mapping - AC-to-ASC mapping - AC-to-ASC mapping - AC-to-ASC mapping - CHOICE mode

- Primary CPICH TX power - Constant value - PRACH power offset - Power Ramp Step - Preamble Retrans Max

- RACH transmission parameters

- Mmax - NB01min - NB01max - AICH info

- Channelisation code - STTD indicator

- AICH transmission timing

- Secondary CCPCH system information - Secondary CCPCH info

- CHOICE mode - Secondary scrambling code - STTD indicator

- Spreading factor - Code number - Pilot symbol existence

- TFCI existence - Fixed or Flexible position

- Timing offset

- TFCS

- CHOICE TFCI signalling - TFCI Field 1 information - CHOICE TFCS representation

- TFCS complete reconfiguration information

- CHOICE CTFC Size

FDD 0 (ASC#3) 7 (ASC#3) '1111'B

The first/ leftmost bit of the bit string contains the most significant bit of the Assigned Sub-Channel Number.

FDD 0 (ASC#5) 7 (ASC#5) '1111'B

The first/ leftmost bit of the bit string contains the most significant bit of the Assigned Sub-Channel Number.

Not Present

FDD 0 (ASC#7) 7 (ASC#7) '1111'B

The first/ leftmost bit of the bit string contains the most significant bit of the Assigned Sub-Channel Number.

0.9 (for ASC#2) 0.9 (for ASC#3) 0.9 (for ASC#4) 0.9 (for ASC#5) 0.9 (for ASC#6) 0.9 (for ASC#7)

6 (AC0-9) 5 (AC10) 4 (AC11) 3 (AC12) 2 (AC13) 1 (AC14) 0 (AC15) FDD 31 -10

3dB 4

3 slot 10 slot

3 **FALSE**

(For 3 SCCPCHs)

(SCCPCH for standalone PCH)

FDD Not Present **FALSE** 128 **FALSE FALSE** Fixed 30

Normal

Complete reconfiguration

2 bit

- CTFC information - Power offset information - CTFC information - Power offset information - FACH/PCH information - TFS - CHOICE Transport channel type - Dynamic Transport format information - RLC Size - Number of TB and TTI List - Number of Transport blocks
 - Number of Transport blocks - CHOICE Mode - CHOICE Logical Channel List - Semi-static Transport Format information
 - Transmission time interval - Type of channel coding
 - Coding Rate
 - Rate matching attribute
 - CRC size
- Transport Channel Identity
- CTCH indicator - PICH info
- CHOICE mode - Channelisation code
- Number of PI per frame
- STTD indicator
- Secondary CCPCH info
- CHOICE mode
- Secondary scrambling code
- STTD indicator - Spreading factor - Code number
- Pilot symbol existence
- TFCI existence
- Fixed or Flexible position
- Timing offset
- TFCS
- CHOICE TFCI signalling
- TFCI Field 1 information
- CHOICE TFCS representation
- TFCS complete reconfiguration information
- CHOICE CTFC Size - CTFC information
- Power offset information
- FACH/PCH information
- CHOICE Transport channel type
- Dynamic Transport format information
- RÍ C Size
- Number of TB and TTI List
- Number of Transport blocks
- Number of Transport blocks
- Number of Transport blocks
- CHOICE Mode
- CHOICE Logical Channel List
- Semi-static Transport Format information
- Transmission time interval

Not Present

Not Present

(PCH)

Common transport channels

240

0 FDD ALL

> 10 ms Convolutional

230 16 bit 12 (for PCH) **FALSE**

FDD 2 18 **FALSE**

(SCCPCH including two FACHs)

FDD Not Present **FALSE** 64 **FALSE** Not Present

Absence of this IE is equivalent to default value "TRUE" Not Present

Absence of this IE is equivalent to default value "Flexible" Not Present

Absence of this IE is equivalent to default value 0

Normal

Complete reconfiguration

4 bit 0

Not Present

Not Present

Not Present

Not Present

Not Present

(FACH)

Common transport channels

168

ALL

10 ms

| - | Type of | f channe | l codina |
|---|---------|----------|----------|
| | | | |

- Coding Rate
- Rate matching attribute
- CRC size
- Transport Channel Identity
- CTCH indicator
- TFS
- CHOICE Transport channel type
- Dynamic Transport format information
- RLC Size
- Number of TB and TTI List
- Number of Transport blocks
- Number of Transport blocks
- CHOICE Mode
- CHOICE Logical Channel List
- Semi-static Transport Format information
- Transmission time interval
- Type of channel coding
- Rate matching attribute
- CRC size
- Transport Channel Identity
- CTCH indicator
- Secondary CCPCH info
- CHOICE mode
- Secondary scrambling code
- STTD indicator
- Spreading factor
- Code number
- Pilot symbol existence
- TFCI existence
- Fixed or Flexible position
- Timing offset
- TFCS
- CHOICE TFCI signalling
- TFCI Field 1 information
- CHOICE TFCS representation
- TFCS complete reconfiguration information
- CHOICE CTFC Size
- CTFC information
- Power offset information
- CTFC information
- Power offset information - CTFC information
- Power offset information - CTFC information
- Power offset information
- CTFC information
- Power offset information
- FACH/PCH information
- CHOICE Transport channel type
- Dynamic Transport format information
- RLC Size
- Number of TB and TTI List
- Number of Transport blocks
- Number of Transport blocks
- Number of Transport blocks
- CHOICE Mode
- CHOICE Logical Channel List
- Semi-static Transport Format information
- Transmission time interval
- Type of channel coding
- Coding Rate
- Rate matching attribute
- CRC size
- Transport Channel Identity
- CTCH indicator

Convolutional

220

16 bit

13 (for FACH)

FALSE

(FACH)

Common transport channels

360

0

FDD ALL

10 ms Turbo

130 16bit

14 (for FACH)

FALSE

(SCCPCH including two FACHs)

FDD Not Present **FALSE**

64

FALSE

Not Present

Absence of this IE is equivalent to default value "TRUE"

Not Present

Absence of this IE is equivalent to default value "Flexible" 90

Normal

Complete reconfiguration

4 bit n

Not Present

Not Present

2

Not Present

Not Present

Not Present

(FACH)

Common transport channels

168

0

1

FDD ALL

10 ms

Convolutional

1/2 220

16 bit

16 (for FACH)

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>

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 0010B | |
|---------------|--------------------------------|--|
| URA identity | 0000 0000 0000 0001B | |

Default settings for cell No.2 (FDD):

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

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

| - Intra-frequency measurement system | A1, A2 | |
|---|--------|---|
| information | , | |
| - New intra-frequency cells - Intra-frequency cell id - Cell info | | 2 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 |
| - Intra-frequency cell id - Cell info | | Primary scrambling code shall be according to clause titled "Default settings for cell No.2 (FDD)" in clause 6.1.4 1 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 (FDD)" in clause 6.1.4 |
| - Intra-frequency cell id - Cell info | | 3 Same content as specified for Intra-frequency cell id=3 in SIB11 for Cell 1 in sub-clause 6.1.0b |
| - Intra-frequency cell id - Cell info | A1 | 7 Same content as specified for Intra-frequency cell id=7 in SIB11 for Cell 1 in sub-clause 6.1.0b |
| - Intra-frequency cell id - Cell info | | 8 Same content as specified for Intra-frequency cell id=8 in SIB11 for Cell 1 in sub-clause 6.1.0b |
| - Inter-frequency measurement system information | A1, A2 | |
| - New inter-frequency cells - Inter frequency cell id - Frequency info - Cell info - Inter frequency cell id - Frequency info - Cell info - Inter frequency cell id - Frequency info - Cell info - Cell info - Cell info | A2 | 4 Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in sub-clasue 6.1.0b Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in sub-clasue 6.1.0b 5 Same content as specified for Inter-frequency cell id=5 in SIB11 for Cell 1 in sub-clasue 6.1.0b Same content as specified for Inter-frequency cell id=5 in SIB11 for Cell 1 in sub-clasue 6.1.0b 6 Same content as specified for Inter-frequency cell id=6 in SIB11 for Cell 1 in sub-clasue 6.1.0b Same content as specified for Inter-frequency cell id=6 in SIB11 for Cell 1 in sub-clasue 6.1.0b |
| - Inter-RAT cell info list | A2 | |
| - New inter-RAT cells - Inter-RAT cell id - CHOICE Radio Access Technology - GSM - Inter-RAT cell id - CHOICE Radio Access Technology - GSM | | 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 |

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

Default settings for cell No.2 (TDD):

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

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

| - Intra-frequency measurement system | |
|---|--|
| information | |
| Niconstant for successionally | |
| - New intra-frequency cells | |
| Intra-frequency cell id Cell info | 2 Same content as specified for Intra-frequency cell id=1 |
| - Cell IIIIO | (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 |
| - Intra-frequency cell id | 1 |
| - Cell info | 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 |
| - Intra-frequency cell id | 3 |
| - Cell info | Same content as specified for Intra-frequency cell id=3 in |
| | SIB11 for Cell 1 in sub-clause 6.1.0b |
| - Intra-frequency cell id | 7 |
| - Cell info | Same content as specified for Intra-frequency cell id=7 in |
| | SIB11 for Cell 1 in sub-clause 6.1.0b |
| - Intra-frequency cell id - Cell info | 8 |
| - Cell into | Same content as specified for Intra-frequency cell id=8 in SIB11 for Cell 1 in sub-clause 6.1.0b |
| | SIDITION CENT IN SUB-Clause C.1.00 |
| - Inter-frequency measurement system | |
| information | |
| | |
| - New inter-frequency cells | |
| - Inter frequency cell id - Frequency info | 4 Same content as specified for Inter-frequency cell id=4 in |
| - Frequency into | SIB11 for Cell 1 in sub-clasue 6.1.0b |
| - Cell info | Same content as specified for Inter-frequency cell id=4 in |
| | SIB11 for Cell 1 in sub-clasue 6.1.0b |
| - Inter frequency cell id | 5 |
| - Frequency info | Same content as specified for Inter-frequency cell id=5 in |
| Callinta | SIB11 for Cell 1 in sub-clasue 6.1.0b |
| - Cell info | Same content as specified for Inter-frequency cell id=5 in SIB11 for Cell 1 in sub-clasue 6.1.0b |
| - Inter frequency cell id | 6 |
| - Frequency info | Same content as specified for Inter-frequency cell id=6 in |
| - 1, | SIB11 for Cell 1 in sub-clasue 6.1.0b |
| - Cell info | Same content as specified for Inter-frequency cell id=6 in |
| | SIB11 for Cell 1 in sub-clasue 6.1.0b |
| | |

Cell No.3

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

| Cell identity | 0000 0000 0000 0000 0000 0000 0011B |
|---------------|-------------------------------------|
| URA identity | 0000 0000 0000 0010B |

Default settings for cell No.3 (FDD):

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

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

| - Intra-frequency measurement system information | A1, A2 | |
|---|--------|---|
| New intra-frequency cells - Intra-frequency cell id - Cell info | | 3 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 |
| - Intra-frequency cell id - Cell info | | value for Primary scrambling code shall be according to clause titled "Default settings for cell No.3 (FDD)" in clause 6.1.4 1 Same content as specified for Intra-frequency cell id=2 (neigbour 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 |
| - Intra-frequency cell id - Cell info | | cell No.1 (FDD)" in clause 6.1.4 2 Same content as specified for Intra-frequency cell id=2 in SIB11 for Cell 1 in sub-clause |
| - Intra-frequency cell id - Cell info | A1 | 6.1.0b 7 Same content as specified for Intra-frequency cell id=7 in SIB11 for Cell 1 in sub-clause 6.1.0b |
| - Intra-frequency cell id - Cell info | | 8 Same content as specified for Intra-frequency cell id=8 in SIB11 for Cell 1 in sub-clause 6.1.0b |
| - Inter-frequency measurement system information | A1, A2 | |
| - New inter-frequency cells - Inter frequency cell id - Frequency info | | 4 Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in sub-clasue |
| - Cell info | | 6.1.0b Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in sub-clasue 6.1.0b |
| - Inter frequency cell id - Frequency info | | 5 Not Present Absence of this IE is equivalent to value of the previous "frequency info" in the list. |
| - Cell info | | Same content as specified for Inter-frequency cell id=5 in SIB11 for Cell 1 in sub-clasue 6.1.0b |
| - Inter frequency cell id - Frequency info | | 6 Not Present Absence of this IE is equivalent to value of the previous "frequency info" in the list. |
| - Cell info | | Same content as specified for Inter-frequency cell id=6 in SIB11 for Cell 1 in sub-clasue 6.1.0b |
| - Inter-RAT cell info list | A2 | |
| - New inter-RAT cells - Inter-RAT cell id - CHOICE <i>Radio Access Technology</i> - GSM | | 9 GSM Same content as specified for inter-RAT cell id=9 in SIB11 for Cell 1 in sub-clause 6.1.0b |
| - Inter-RAT cell id - CHOICE <i>Radio Access Technology</i> | | 10 GSM |

| - GSM | Same content as specified for inter-RAT cell |
|-------|--|
| | id=10 in SIB11 for Cell 1 in sub-clause 6.1.0b |
| | |

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

Default settings for cell No.3 (TDD):

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

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

| - Intra-frequency measurement system information | |
|---|---|
| | |
| New intra-frequency cells Intra-frequency cell id | 3 |
| - Cell info | Same content as specified for Intra-frequency cell id=1 (serving cell) in SIB11 for Cell 1 in 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 |
| - Intra-frequency cell id - Cell info | 1 Same content as specified for Intra-frequency cell id=2 (neigbour 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 |
| - Intra-frequency cell id | 2 |
| - Cell info | Same content as specified for Intra-frequency cell id=2 in SIB11 for Cell 1 in sub-clause 6.1.0b |
| - Intra-frequency cell id | 7 |
| - Cell info | Same content as specified for Intra-frequency cell id=7 in SIB11 for Cell 1 in sub-clause 6.1.0b |
| - Intra-frequency cell id | 8 |
| - Cell info | Same content as specified for Intra-frequency cell id=8 in SIB11 for Cell 1 in sub-clause 6.1.0b |
| - Inter-frequency measurement system information | |
| - New inter-frequency cells | |
| - Inter frequency cell id | 4 |
| - Frequency info | Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in sub-clasue 6.1.0b |
| - Cell info | Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in sub-clasue 6.1.0b |
| - Inter frequency cell id | 5 |
| - Frequency info | Not Present Absence of this IE is equivalent to value of the previous "frequency info" in the list. |
| - Cell info | Same content as specified for Inter-frequency cell id=5 in SIB11 for Cell 1 in sub-clasue 6.1.0b |
| - Inter frequency cell id | 6 |
| - Frequency info | Not Present Absence of this IE is equivalent to value of the previous "frequency info" in the list. |
| - Cell info | Same content as specified for Inter-frequency cell id=6 in SIB11 for Cell 1 in sub-clasue 6.1.0b |

Cell No.4

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

| Cell identity | 0000 0000 0000 0000 0000 0100B |
|---------------|--------------------------------|
| URA identity | 0000 0000 0000 0010B |

Default settings for cell No.4 (FDD):

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

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

| - Intra-frequency measurement system | A1, A2 | |
|---|--------|--|
| information | | |
| - New intra-frequency cells - Intra-frequency cell id - Cell info - Intra-frequency cell id - Cell info - Intra-frequency cell id | | 4 Same content as specified for Intra-frequency cell id=1 (serving cell) in SIB11 for Cell 1 in subclause 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 5 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 |
| - Cell info | | 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 |
| - Inter-frequency measurement system information | A1, A2 | |
| - New inter-frequency cells - Inter-frequency cell id - Frequency info - UARFCN uplink(Nu) | | Not present Absence of this IE is equivalent to apply the default duplex distance defined for the operating |
| - UARFCN downlink(Nd) - Cell info | | frequency according to 25.101 Reference to table 6.1.2 for Cell 1 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 |
| - Inter-frequency cell id - Frequency info | | 2 Not Present Absence of this IE is equivalent to value of the previous "frequency info" in the list. |
| - Cell info | | Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in sub-clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.2 (FDD)" in clause 6.1.4 |
| - Inter-frequency cell id - Frequency info | | 3 Not Present Absence of this IE is equivalent to value of the |
| - Cell info | | 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.3 (FDD)" in clause 6.1.4 |
| - Inter-frequency cell id | A1 | 7 |

| | | l N . D |
|----------------------------------|----|--|
| - Frequency info | | Not Present |
| | | Absence of this IE is equivalent to value of the |
| | | previous "frequency info" in the list. |
| - Cell info | | Same content as specified for Inter-frequency |
| | | cell id=4 in SIB11 for Cell 1 in sub-clause 6.1.0b |
| | | with the exception that value for Primary |
| | | scrambling code shall be according to clause |
| | | titled "Default settings for cell No.7 (FDD)" in |
| | | clause 6.1.4 |
| - Inter-frequency cell id | | 8 |
| - Frequency info | | Not Present |
| | | Absence of this IE is equivalent to value of the |
| | | previous "frequency info" in the list. |
| - Cell info | | Same content as specified for Inter-frequency |
| | | cell id=4 in SIB11 for Cell 1 in 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 |
| - Inter-RAT cell info list | A2 | Clause 0.1.4 |
| - Inter-IVAT Cell IIIIO list | AZ | |
| - New inter-RAT cells | | |
| - Inter-RAT cell id | | 9 |
| | | GSM |
| - CHOICE Radio Access Technology | | , co |
| - GSM | | Same content as specified for inter-RAT cell id=9 in SIB11 for Cell 1 in sub-clause 6.1.0b |
| Inter DAT cell id | | |
| - Inter-RAT cell id | | 10 |
| - CHOICE Radio Access Technology | | GSM |
| - GSM | | Same content as specified for inter-RAT cell |
| | | id=10 in SIB11 for Cell 1 in sub-clause 6.1.0b |
| | | |

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

Default settings for cell No.4 (TDD):

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

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

- Intra-frequency measurement system information - New intra-frequency cells - Intra-frequency cell id - Cell info 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 - Intra-frequency cell id - Cell info 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 - Intra-frequency cell id - Cell info 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 - Inter-frequency measurement system information - New inter-frequency cells - Inter-frequency cell id - Frequency info - UARFCN downlink(Nt) Reference to table 6.1.7 for Cell 1 - Cell info Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in 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 - Inter-frequency cell id - Frequency info Not Present Absence of this IE is equivalent to value of the previous "frequency info" in the list. - Cell info Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in sub-clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.2 (FDD)" in clause 6.1.4 - 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 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 - Inter-frequency cell id - Frequency info 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 - Cell info 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 - Inter-frequency cell id - Frequency info Not Present Absence of this IE is equivalent to value of the previous "frequency info" in the list.

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

Cell No.5

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

| Cell identity | 0000 0000 0000 0000 0000 0000 0101B |
|---------------|-------------------------------------|
| URA identity | 0000 0000 0000 0011B |

Default settings for cell No.5 (FDD):

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

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

| - Intra-frequency measurement system | A1, A2 | |
|--|--------|--|
| information New intra-frequency cells - Intra-frequency cell id - Cell info - Intra-frequency cell id - Cell info | | 5 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 (FDD)" in clause 6.1.4 4 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 |
| - Intra-frequency cell id - Cell info | | settings for cell No.4 (FDD)" in clause 6.1.4 6 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 |
| - Inter-frequency measurement system information | A1, A2 | |
| - New inter-frequency cells - Inter-frequency cell id - Frequency info - UARFCN uplink(Nu) - UARFCN downlink(Nd) - Cell info - Inter-frequency cell id - Frequency info - Cell info | | Not present Absence of this IE is equivalent to apply the default duplex distance defined for the operating frequency according to 25.101 Reference to table 6.1.2 for Cell 1 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 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.2 (FDD)" in clause 6.1.4 |
| - Inter-frequency cell id - Frequency info - Cell info | | 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 |
| - Inter-frequency cell id - Frequency info | A1 | code shall be according to clause titled "Default settings for cell No.3 (FDD)" in clause 6.1.4 7 Not Present Absence of this IE is equivalent to value of the previous "frequency info" in the list. |

| - Cell info - Inter-frequency cell id - Frequency info - 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.7 (FDD)" in clause 6.1.4 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 |
|--|----|--|
| - Inter-RAT cell info list | A2 | |
| - New inter-RAT cells - Inter-RAT cell id - CHOICE Radio Access Technology - GSM - Inter-RAT cell id - CHOICE Radio Access Technology - GSM | | 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 |

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

Default settings for cell No.5 (TDD):

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

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

| - Intra-frequency measurement system information | |
|--|---|
| - New intra-frequency cells | |
| - Intra-frequency cell id | 5 |
| · · | |
| - Cell info | Same content as specified for Intra-frequency cell id=1 |
| | (serving cell) in SIB11 for Cell 1 in 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 |
| - Intra-frequency cell id | 4 |
| - Cell info | Same content as specified for Intra-frequency cell id=2 in |
| - Geli II II O | |
| | 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 |
| - Intra-frequency cell id | 6 |
| - Cell info | 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 |
| | |
| - Inter-frequency measurement system | |
| information | |
| | |
| - New inter-frequency cells | |
| - Inter-frequency cell id | 1 |
| - Frequency info | |
| - UARFCN downlink(Nt) | Reference to table 6.1.7 for Cell 1 |
| - Cell info | |
| - Cell Inio | 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 |
| - Inter-frequency cell id | 2 |
| - Frequency info | Not Present |
| . , | Absence of this IE is equivalent to value of the previous |
| | "frequency info" in the list. |
| - Cell info | Same content as specified for Inter-frequency cell id=4 in |
| | SIB11 for Cell 1 in 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 |
| - Inter-frequency cell id | 3 |
| - Frequency info | Not Present |
| | Absence of this IE is equivalent to value of the previous |
| | "frequency info" in the list. |
| - Cell info | Same content as specified for Inter-frequency cell id=4 in |
| | SIB11 for Cell 1 in 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 |
| | |
| lates from the many 1991 | clause 6.1.4 |
| - Inter-frequency cell id | 7 |
| - Frequency info | Not Present |
| | Absence of this IE is equivalent to value of the previous |
| | "frequency info" in the list. |
| - Cell info | Same content as specified for Inter-frequency cell id=4 in |
| | SIB11 for Cell 1 in 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 |
| - Inter-frequency cell id | 8 |
| - Frequency info | Not Present |
| | Absence of this IE is equivalent to value of the previous |
| | "frequency info" in the list. |
| <u> </u> | • • • |

| - 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 |

Cell No.6

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

| Cell identity | 0000 0000 0000 0000 0000 0000 0110B |
|---------------|-------------------------------------|
| URA identity | 0000 0000 0000 0011B |

Default settings for cell No.6 (FDD):

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

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

| - Intra-frequency measurement | A1, A2 | |
|---|--------|--|
| system information | A1, A2 | |
| - New intra-frequency cells - Intra-frequency cell id - Cell info - Intra-frequency cell id - Cell info - Intra-frequency cell id - Cell info | | 6 Same content as specified for Intra-frequency cell id=1 (serving cell) in SIB11 for Cell 1 in subclause 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 4 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 5 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 |
| - Inter-frequency measurement system information | A1, A2 | |
| - New inter-frequency cells - Inter-frequency cell id - Frequency info - UARFCN uplink(Nu) | | 1 Not present |
| - UARFCN downlink(Nd) - Cell info | | Absence of this IE is equivalent to apply the default duplex distance defined for the operating frequency according to 25.101 Reference to table 6.1.2 for Cell 1 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 |
| - Inter-frequency cell id - Frequency info | | clause 6.1.4 2 Not Present |
| - Cell info | | 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.2 (FDD)" in clause 6.1.4 |
| Inter-frequency cell id Frequency info | | 3 Not Present Absence of this IE is equivalent to value of the |
| - Cell info | | 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.3 (FDD)" in clause 6.1.4 |
| - Inter-frequency cell id | A1 | 7 |

| - Frequency info | | Not Present |
|---|----|---|
| - Cell info | | 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 |
| - Inter-frequency cell id - Frequency info | | scrambling code shall be according to clause titled "Default settings for cell No.7 (FDD)" in clause 6.1.4 8 Not Present Absence of this IE is equivalent to value of the |
| - Cell info | | 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 |
| - Inter-RAT cell info list | A2 | |
| - New inter-RAT cells - Inter-RAT cell id - CHOICE Radio Access Technology - GSM - Inter-RAT cell id - CHOICE Radio Access Technology - GSM | | 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 |

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

Default settings for cell No.6 (TDD):

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

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

- Intra-frequency measurement system information - New intra-frequency cells - Intra-frequency cell id - Cell info 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 - Intra-frequency cell id - Cell info 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 - Intra-frequency cell id - Cell info 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 - Inter-frequency measurement system information - New inter-frequency cells - Inter-frequency cell id - Frequency info - UARFCN downlink(Nt) Reference to table 6.1.7 for Cell 1 - Cell info Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in 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 - Inter-frequency cell id - Frequency info Not Present Absence of this IE is equivalent to value of the previous "frequency info" in the list. - Cell info Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in sub-clause 6.1.0b with the exception that value for Primary scrambling code shall be according to clause titled "Default settings for cell No.2 (TDD)" in clause 6.1.4 - 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 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 - Inter-frequency cell id - Frequency info 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 - Cell info 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 - Inter-frequency cell id - Frequency info Not Present Absence of this IE is equivalent to value of the previous "frequency info" in the list.

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

Cell No.7

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

| Cell identity | 0000 0000 0000 0000 0000 0000 0111B |
|---------------|-------------------------------------|
| URA identity | 0000 0000 0000 0100B |

Default settings for cell No.7 (FDD):

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

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

- Intra-frequency measurement system information - New intra-frequency cells - Intra-frequency cell id - Cell info 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 - Intra-frequency cell id - Cell info Same content as specified for Intra-frequency cell id=2 (neigbour 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 - Intra-frequency cell id - Cell info Same content as specified for Intra-frequency cell id=2 in SIB11 for Cell 1 in sub-clause 6.1.0b - Intra-frequency cell id - Cell info Same content as specified for Intra-frequency cell id=3 in SIB11 for Cell 1 in sub-clause 6.1.0b - Intra-frequency cell id - Cell info Same content as specified for Intra-frequency cell id=8 in SIB11 for Cell 1 in sub-clause 6.1.0b - Inter-frequency measurement system information - New inter-frequency cells - Inter frequency cell id - Frequency info Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in sub-clasue 6.1.0b - Cell info Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in sub-clasue 6.1.0b - Inter frequency cell id - Frequency info Same content as specified for Inter-frequency cell id=5 in SIB11 for Cell 1 in sub-clasue 6.1.0b - Cell info Same content as specified for Inter-frequency cell id=5 in SIB11 for Cell 1 in sub-clasue 6.1.0b - Inter frequency cell id - Frequency info Same content as specified for Inter-frequency cell id=6 in SIB11 for Cell 1 in sub-clasue 6.1.0b Same content as specified for Inter-frequency cell id=6 in - Cell info SIB11 for Cell 1 in sub-clasue 6.1.0b

Default settings for cell No.7 (TDD):

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

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

- Intra-frequency measurement system information - New intra-frequency cells - Intra-frequency cell id - Cell info 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 - Intra-frequency cell id - Cell info Same content as specified for Intra-frequency cell id=2 (neigbour 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 - Intra-frequency cell id - Cell info Same content as specified for Intra-frequency cell id=2 in SIB11 for Cell 1 in sub-clause 6.1.0b - Intra-frequency cell id - Cell info Same content as specified for Intra-frequency cell id=3 in SIB11 for Cell 1 in sub-clause 6.1.0b - Intra-frequency cell id Same content as specified for Intra-frequency cell id=8 in - Cell info SIB11 for Cell 1 in sub-clause 6.1.0b - Inter-frequency measurement system information - New inter-frequency cells - Inter frequency cell id - Frequency info Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in sub-clasue 6.1.0b - Cell info Same content as specified for Inter-frequency cell id=4 in SIB11 for Cell 1 in sub-clasue 6.1.0b - Inter frequency cell id - Frequency info Same content as specified for Inter-frequency cell id=5 in SIB11 for Cell 1 in sub-clasue 6.1.0b - Cell info Same content as specified for Inter-frequency cell id=5 in SIB11 for Cell 1 in sub-clasue 6.1.0b - Inter frequency cell id - Frequency info Same content as specified for Inter-frequency cell id=6 in SIB11 for Cell 1 in sub-clasue 6.1.0b Same content as specified for Inter-frequency cell id=6 in - Cell info SIB11 for Cell 1 in sub-clasue 6.1.0b

Cell No.8

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

| Cell identity | 0000 0000 0000 0000 0000 1000B |
|---------------|--------------------------------|
| URA identity | 0000 0000 0000 0100B |

Default settings for cell No.8 (FDD):

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

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

| - Intra-frequency measurement system | |
|--|--|
| information | |
| | |
| - New intra-frequency cells | |
| - Intra-frequency cell id | 8 |
| - Cell info | Same content as specified for Intra-frequency cell id=1 |
| | (serving cell) in SIB11 for Cell 1 in 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 |
| letes for sure and in | (FDD)" in clause 6.1.4 |
| - Intra-frequency cell id - Cell info | |
| - Cell info | Same content as specified for Intra-frequency cell id=2 |
| | (neigbour 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 |
| - Intra-frequency cell id | 2 |
| - Cell info | Same content as specified for Intra-frequency cell id=2 in |
| | SIB11 for Cell 1 in sub-clause 6.1.0b |
| - Intra-frequency cell id | 3 |
| - Cell info | Same content as specified for Intra-frequency cell id=3 in |
| | SIB11 for Cell 1 in sub-clause 6.1.0b |
| - Intra-frequency cell id | 7 |
| - Cell info | Same content as specified for Intra-frequency cell id=7 in |
| | SIB11 for Cell 1 in sub-clause 6.1.0b |
| Inter frequency measurement system | |
| - Inter-frequency measurement system information | |
| information | |
| - New inter-frequency cells | |
| - Inter frequency cell id | 4 |
| - Frequency info | Same content as specified for Inter-frequency cell id=4 in |
| , | SIB11 for Cell 1 in sub-clasue 6.1.0b |
| - Cell info | Same content as specified for Inter-frequency cell id=4 in |
| | SIB11 for Cell 1 in sub-clasue 6.1.0b |
| - Inter frequency cell id | 5 |
| - Frequency info | Same content as specified for Inter-frequency cell id=5 in |
| | SIB11 for Cell 1 in sub-clasue 6.1.0b |
| - Cell info | Same content as specified for Inter-frequency cell id=5 in |
| | SIB11 for Cell 1 in sub-clasue 6.1.0b |
| - Inter frequency cell id | |
| - Frequency info | Same content as specified for Inter-frequency cell id=6 in |
| - Cell info | SIB11 for Cell 1 in sub-clasue 6.1.0b |
| - Cell IIIIO | Same content as specified for Inter-frequency cell id=6 in SIB11 for Cell 1 in sub-clasue 6.1.0b |
| | SIDITION CENTRIN SUD-CIASUE 6.1.00 |
| | |

Default settings for cell No.8 (TDD):

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

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

| - New intra-frequency cells - Intra-frequency cell id - Cell info Same content as specified for Intra-frequency cell id=1 (serving cell) in SIB11 for Cell 1 in sub-clause 6.1.0b with exception that value for Primary scrambling code is be according to clause titled "Default settings for cell info" Intra-frequency cell id - Cell info Same content as specified for Intra-frequency cell id=2 (neigbour cell) in SIB11 for Cell 1 in sub-clause 6.1.0b with the exception that value for Primary scrambling consistent in the exception that value for Primary scra | hall o.8 de cell |
|--|---------------------------|
| - Intra-frequency cell id - Cell info 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 exception that value for Primary scrambling code is be according to clause titled "Default settings for cell N (TDD)" in clause 6.1.4 - Intra-frequency cell id - Cell info 8 Same content as specified for Intra-frequency cell id=2 (neigbour cell) in SIB11 for Cell 1 in sub-clause 6.1.0b with the exception that value for Primary scrambling concepts and in the exception that value for Primary scrambling concepts a | hall o.8 de cell |
| - Cell info Same content as specified for Intra-frequency cell id=1 (serving cell) in SIB11 for Cell 1 in sub-clause 6.1.0b with exception that value for Primary scrambling code is be according to clause titled "Default settings for cell N (TDD)" in clause 6.1.4 - Intra-frequency cell id - Cell info Same content as specified for Intra-frequency cell id=2 (neigbour cell) in SIB11 for Cell 1 in sub-clause 6.1.0b with the exception that value for Primary scrambling concepts with the exception that value for Primary scrambling concepts and in the exception that value for Primary scrambling concepts according to clause titled "Default settings for No.1 (TDD)" in clause 6.1.4 - Intra-frequency cell id - Cell info Same content as specified for Intra-frequency cell id=2 (SIB11 for Cell 1 in sub-clause 6.1.0b) | hall o.8 de cell |
| - Cell info Same content as specified for Intra-frequency cell id=2 (neigbour cell) in SIB11 for Cell 1 in sub-clause 6.1.0b with the exception that value for Primary scrambling content as specified to clause titled "Default settings for No.1 (TDD)" in clause 6.1.4 - Intra-frequency cell id - Cell info Same content as specified for Intra-frequency cell id=2 SIB11 for Cell 1 in sub-clause 6.1.0b | de cell |
| (neigbour cell) in SIB11 for Cell 1 in sub-clause 6.1.0b with the exception that value for Primary scrambling content shall be according to clause titled "Default settings for No.1 (TDD)" in clause 6.1.4 - Intra-frequency cell id - Cell info Same content as specified for Intra-frequency cell id=2 SIB11 for Cell 1 in sub-clause 6.1.0b | de cell |
| - Cell info Same content as specified for Intra-frequency cell id=2 SIB11 for Cell 1 in sub-clause 6.1.0b | in |
| SIB11 for Cell 1 in sub-clause 6.1.0b | in |
| l la | |
| - Intra-frequency cell id | |
| - Cell info Same content as specified for Intra-frequency cell id=3 SIB11 for Cell 1 in sub-clause 6.1.0b | ın |
| - Intra-frequency cell id 7 | |
| - Cell info Same content as specified for Intra-frequency cell id=7 SIB11 for Cell 1 in sub-clause 6.1.0b | in |
| - Inter-frequency measurement system information | |
| - New inter-frequency cells | |
| - Inter frequency cell id 4 | |
| - Frequency info Same content as specified for Inter-frequency cell id=4 SIB11 for Cell 1 in sub-clasue 6.1.0b | |
| - Cell info Same content as specified for Inter-frequency cell id=4 SIB11 for Cell 1 in sub-clasue 6.1.0b | in |
| - Inter frequency cell id 5 | |
| - Frequency info Same content as specified for Inter-frequency cell id=5 SIB11 for Cell 1 in sub-clasue 6.1.0b | |
| - Cell info Same content as specified for Inter-frequency cell id=5 SIB11 for Cell 1 in sub-clasue 6.1.0b | in |
| - Inter frequency cell id 6 | |
| - Frequency info Same content as specified for Inter-frequency cell id=6 SIB11 for Cell 1 in sub-clasue 6.1.0b | in |
| - Cell info Same content as specified for Inter-frequency cell id=6 SIB11 for Cell 1 in sub-clasue 6.1.0b | in |
| | |

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 | -60 | |
| | MHz | | |

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 | -2 | 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 | -90 |
| | MHz | |

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 | ≤ -122 |
| | MHz | |

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 | Level Connected mode | |
|---|------|--------------------|-------------------------|--|
| DPCH_Ec | dB | (NOTE) -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 400 dDm to answer the absence it associational as | | | | |

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 | -8 | 31 |
| UE_TXPWR_MAX_RACH | dBm | 21 | 2 | 1 |
| PCCPCH RSCP | dBm | -60 | -7 | 0 |
| 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 |
|-----------------|---|
| | 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</ffs></ffs> |
| | 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 |
|---------|----------------|------|-------------|
| | TSTD | STTD | Mode |
| 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

| Physical channel type | Open loop TxDiversity | | Closed loop TxDiversity |
|-----------------------|-----------------------|------|-------------------------|
| | TSTD | SCTD | |
| P-CCPCH | - | Х | _ |
| SCH | X | _ | _ |
| DPCH | ı | _ | 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 | 4 | |
| Number) | | |
| TGL1 (Transmission Gap Length 1) | 7 | |
| TGL2 (Transmission Gap Length 2) | - | Only one gap in use. |
| TGD (Transmission Gap Distance) | 0 | |
| TGPL1 (Transmission Gap Pattern | 3 | |
| Length) | | |
| TGPL2 (Transmission Gap Pattern | - | Only one pattern in use. |
| Length) | | |
| TGCFN (Transmission Gap Connection | (Current CFN + (256 – | |
| Frame Number): | 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 | 0 | |
| mode) | | |
| ITP (Initial transmission power control | 0 | |
| mode) | | |

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): | (Current CFN + (256 – TTI/10msec))mod 256 | |
| UL/DL compressed mode selection | DL, UL or DL & UL | 3 configurations possible. DL, UL or both DL and UL |
| UL compressed mode method | SF/2 | |
| DL compressed mode method | Puncturing | |
| Scrambling code change | No | |
| RPP (Recovery period power control mode) | 0 | |
| ITP (Initial transmission power control mode) | 0 | |

6.8.1.3 Inter RAT measurement (GSM - Carrier RSSI)

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

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

| Parameter | Value | Note |
|---|-----------------------|----------------------------|
| TGSN (Transmission Gap Starting Slot | 4 | |
| Number) | | |
| 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 | 12 | |
| Length) | | |
| TGPL2 (Transmission Gap Pattern | - | Only one pattern in use. |
| Length) | | |
| TGCFN (Transmission Gap Connection | (Current CFN + (256 – | |
| Frame Number): | 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 | 0 | |
| mode) | | |
| ITP (Initial transmission power control | 0 | |
| mode) | | |

6.8.1.4 Inter RAT measurement (GSM – Initial BSIC Identification)

The configuration parameters for an inter RAT measurement (GSM – Init BSIC Identify) 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 | 4 | |
| Number) | | |
| 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 | 8 | |
| Length) | | |
| TGPL2 (Transmission Gap Pattern | - | Only one pattern in use. |
| Length) | | |
| TGCFN (Transmission Gap Connection | (Current CFN + (256 – | |
| Frame Number): | 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 | 0 | |
| mode) | | |
| ITP (Initial transmission power control | 0 | |
| mode) | | |

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 | 4 | |
| Number) | | |
| 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 | 8 | |
| Length) | | |
| TGPL2 (Transmission Gap Pattern | - | Only one pattern in use. |
| Length) | | |
| TGCFN (Transmission Gap Connection | (Current CFN + (256 – | |
| Frame Number): | 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 | 0 | |
| mode) | | |
| ITP (Initial transmission power control | 0 | |
| mode) | | |

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 | |

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

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 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.

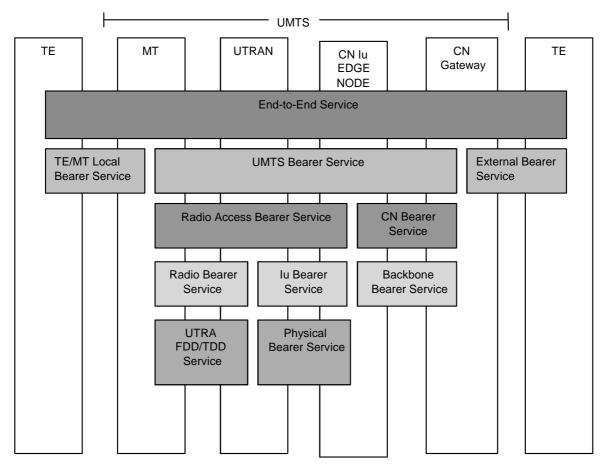


Figure 6.10.1.1: UMTS QoS Architecture

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;

background

download of

emails

- SSD;

Example of the

application

- 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.

Traffic class **Conversational class** Interactive class **Background** Streaming class streaming RT conversational RT Interactive best effort Background best effort **Fundamental** Preserve time relation Preserve time Request response Destination is not characteristics (variation) between relation (variation) pattern expecting the information entities of between information data within a Preserve payload entities of the stream the stream certain time content (i.e. some but Conversational pattern Preserve constant delay) (stringent and low payload content

facsimile (NT)

video

streaming audio and

Web browsing

Table 6.10.1.1: Traffic classes

6.10.2 RAB and signalling RB for FDD

delay)

speech, video, ...

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 | CS CS |
| | | | 4.75) DL:(12.2 | |
| | | | 7.95 5.9 4.75) | |
| 2 | Conversational | Speech | UL:10.2 DL:10.2 | CS |
| 2a | Conversational | Speech | UL:(10.2, 6.7, 5.9, | CS |
| | | | 4.75) DL:(10.2, | |
| | | | 6.7, 5.9, 4.75) | |
| 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, | CS |
| | | | 4.75) DL:(7.4, 6.7, | |
| | | | 5.9, 4.75) | |
| 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 | Void | | | |
| 15a | Streaming | Unknown | UL:16 DL:64 | PS |
| 16 | Void | | | |
| 17 | Void | | | |
| 18 | Void | | | |
| 19 | Void | . | 111 00 DI 0 | |
| 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 | N1/A | LII 00 DI 04 | 50 |
| 22 | Interactive or Background | N/A | UL:32 DL:64 | PS |
| 23 | Interactive or Background | N/A | UL:64 DL:64 | PS 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 PS |
| 27 | Interactive or Background | N/A | UL:128 DL:384 | PS PC |
| 28 | Interactive or Background | N/A | UL:384 DL:384 | PS PC |
| 29 | Interactive or Background | N/A | UL:64 DL:2048 | PS PS |
| 30 | Interactive or Background | N/A | UL:128 DL:2048 | P3 |
| 31 | Void | NI/A | LILIGA DI 10EG | DC |
| 32 | Interactive or Background | N/A N/A | UL:64 DL:256 UL:0 DL:32 | PS PS |
| | Interactive or Background | | UL:32 DL: 0 | |
| 34 | Interactive or Background | N/A | | PS pe |
| 35 | Interactive or Background | N/A | UL:64 DL:144 | PS DS |
| 36 | Interactive or Background | N/A | UL:144 DL:144 | 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.

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

| RAB | | | | Residual | Services |
|------------------------------|----------|------------------------------|-------|--|---------------------------------------|
| Traffic class [15] | SSD [15] | Max. rate, kbps | CS/PS | BER [15] | |
| Conversational | Speech | UL:4.75-12.2 DL:4.75-12.2 | CS | 5x10 ⁻⁴ , 1x10 ⁻³ , 5x10 ⁻³ | AMR speech |
| Conversational | Unknown | UL:64 DL:64 | CS | 1x10 ⁻⁴ or 1x10 ⁻⁶ | UDI 1B, 64k 3G-324M [15] |
| Conversational | Unknown | UL:32 DL:32 | CS | 1x10 ⁻⁴ or 1x10 ⁻⁶ | 32k 3G-324M [15] |
| Conversational | Unknown | UL:28.8 DL:28.8 | CS | 1x10 ⁻³ | Transparent modem |
| Streaming | Unknown | UL:14.4 DL:14.4 | CS | 1x10 ⁻³ | FAX ^[6] |
| Streaming | Unknown | UL:28.8 DL:28.8 | CS | 1x10 ⁻³ | FAX [18] PIAFS 32 kbps |
| Streaming | Unknown | UL:57.6 DL:57.6 | CS | 1x10 ⁻³ | Modem [18], FTM [17] PIAFS 64 kbps |
| Streaming | Unknown | UL:64-128 or DL:64-384 | CS | 1x10 ⁻³ or 1x10 ⁻⁴ | Streaming video, uni-directional |
| Interactive or Background | N/A | UL:32-384 DL:8-2048 | PS | 1x10 ⁻³ or 1x10 ⁻⁴ | Packet |

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

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

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

6.10.2.4 Typical radio parameter sets

6.10.2.4.1 Combinations on DPCH

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

6.10.2.4.1.1.1 Uplink

6.10.2.4.1.1.1 Transport channel parameters

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

| Higher layer | RAB/signalling RE | 3 | SRB#1 | SRB#2 | SRB#3 | SRB#4 | | |
|--------------|--------------------|------------------------------------|------------------|--------------------------------|-----------|----------|--|--|
| | User of Radio Bea | arer | RRC | RRC | NAS_DT | NAS_DT | | |
| | | | | | High prio | Low prio | | |
| RLC | Logical channel ty | /pe | DCCH | DCCH | DCCH | DCCH | | |
| | RLC mode | | UM | AM | AM | AM | | |
| | Payload sizes, bit | | 136 | 128 | 128 | 128 | | |
| | Max data rate, bp | S | 1700 | 1600 | 1600 | 1600 | | |
| | AMD/UMD PDU h | neader, bit | 8 | 16 | 16 | 16 | | |
| MAC | MAC header, bit | MAC header, bit | | 4 | 4 | 4 | | |
| | MAC multiplexing | MAC multiplexing | | 4 logical channel multiplexing | | | | |
| Layer 1 | TrCH type | | DCH | | | | | |
| | TB sizes, bit | | 148 (alt 0, 148) | | | | | |
| | TFS | TFS TF0, bits | | 0x148 (alt 1x0) | | | | |
| | | TF1, bits | | 1x148 | | | | |
| | TTI, ms | TTI, ms | | 80 | | | | |
| | Coding type | Coding type | | CC 1/3 | | | | |
| | CRC, bit | | | 16 | | | | |
| | Max number of bi | Max number of bits/TTI before rate | | 516 | | | | |
| | matching | matching | | | | | | |
| | Uplink: Max numb | | 65 | | | | | |
| | frame before rate | matching | | | | | | |
| | RM attribute | | | 155- | -185 | | | |

6.10.2.4.1.1.1.2 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 Bear | RRC | RRC | NAS_DT | NAS_DT | | | |
| | | | | | High prio | Low prio | | |
| RLC | Logical channel typ | е | 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 he | AMD/UMD PDU header, bit | | 16 | 16 | 16 | | |
| MAC | MAC header, bit | | 4 | 4 | 4 | 4 | | |
| | MAC multiplexing | olexing | | 4 logical channel multiplexing | | | | |
| Layer 1 | TrCH type | | DCH | | | | | |
| • | TB sizes, bit | bit | | 148 (alt 0, 148) (note) | | | | |
| | TFS | TF0, bits | 0 x148 (alt 1x0) (note) | | | | | |
| | | TF1, bits | | 1x148 | | | | |
| | TTI, ms | TTI, ms | | 80 | | | | |
| | Coding type | CC 1/3 | | | | | | |
| | CRC, bit | | | 16 | | | | |
| | Max number of bits | Max number of bits/TTI before rate | | | 516 | | | |
| | matching | | | | | | | |
| | RM attribute | | 155-185 | | | | | |
| NOTE: alterna | ative parameters enable | the measurement | transport chan | nel BLER" in th | ne 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 f | 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 f | RAB/signalling RB | | SRB#2 | SRB#3 | SRB#4 | | |
|--------------|------------------|------------------------------------|--------------------------------|-----------------|-----------|----------|--|--|
| | User of Radio B | earer | RRC | RRC | NAS_DT | NAS_DT | | |
| | | | | | High prio | Low prio | | |
| RLC | Logical channel | type | DCCH | DCCH | DCCH | DCCH | | |
| | RLC mode | | UM | AM | AM | AM | | |
| | Payload sizes, b | it | 136 | 128 | 128 | 128 | | |
| | Max data rate, b | ps | 3400 | 3200 | 3200 | 3200 | | |
| | AMD/UMD PDU | header, bit | 8 | 16 | 16 | 16 | | |
| MAC | MAC header, bi | | 4 | 4 | 4 | 4 | | |
| | MAC multiplexing | g | 4 logical channel multiplexing | | | | | |
| Layer 1 | TrCH type | TrCH type | | DCH | | | | |
| | TB sizes, bit | | 148 (alt 0, 148) | | | | | |
| | TFS | TF0, bits | 0x148 (alt 1x0) | | | | | |
| | | TF1, bits | | 1x ² | 148 | | | |
| | TTI, ms | TTI, ms | | 40 | | | | |
| | Coding type | Coding type | | CC 1/3 | | | | |
| | CRC, bit | CRC, bit | | 16 | | | | |
| | Max number of | Max number of bits/TTI before rate | | 516 | | | | |
| | matching | matching | | | | | | |
| | | Uplink: Max number of bits/radio | | 129 | | | | |
| | frame before rat | e matching | | | | | | |
| | 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 Bear | RRC | RRC | NAS_DT | NAS_DT | | | | |
| | | | | | High prio | Low prio | | | |
| RLC | Logical channel typ | е | 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 he | AMD/UMD PDU header, bit | | 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 | B sizes, bit | | 148 (alt 0, 148) (note) | | | | | |
| | TFS | TF0, bits | 0x148 (alt 1x0) (note) | | | | | | |
| | | TF1, bits | 1x148 | | | | | | |
| | TTI, ms | TTI, ms | | | 40 | | | | |
| | Coding type | Coding type | | | CC 1/3 | | | | |
| | CRC, bit | | 16 | | | | | | |
| | Max number of bits | Max number of bits/TTI before rate | | | 516 | | | | |
| | matching | | | | | | | | |
| | RM attribute | 155-230 | | | | | | | |
| NOTE: alterna | ative parameters enable | the measurement | transport chan | nel BLER" in th | ne 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 Bea | rer | RRC | RRC | NAS_DT | NAS_DT | |
| | | | | | High prio | Low prio | |
| RLC | Logical channel typ | е | 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 he | eader, bit | 8 | 16 | 16 | 16 | |
| MAC | MAC header, bit | | 4 | 4 | 4 | 4 | |
| | MAC multiplexing | MAC multiplexing | | 4 logical channel multiplexing | | | |
| Layer 1 | TrCH type | TrCH type | | DCH | | | |
| | TB sizes, bit | TB sizes, bit | | 148 (alt 0, 148) | | | |
| | TFS | TF0, bits | 0x148 (alt 1x0) | | | | |
| | | TF1, bits | | 1x | 148 | | |
| | TTI, ms | | | 1 | 0 | | |
| | Coding type | Coding type | | CC 1/3 | | | |
| | CRC, bit | | | 16 | | | |
| | Max number of bits | Max number of bits/TTI before rate | | 5 | 16 | | |
| | matching | | | | | | |
| | Uplink: Max numbe frame before rate r | | | 5 | 16 | | |

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 Beare | • | RRC | RRC | NAS_DT | NAS_DT |
| | | | | | High prio | 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 hea | der, bit | 8 | 16 | 16 | 16 |
| MAC | MAC header, bit | | 4 | 4 | 4 | 4 |
| | MAC multiplexing | | 4 logical channel multiplexing | | | |
| Layer 1 | TrCH type | rpe | | DCH | | |
| | TB sizes, bit | TB sizes, bit | | 148 (alt 0, 148) (note) | | |
| | TFS | TF0, bits | | 0x148 (alt | 1x0) (note) | |
| | | TF1, bits | | 1x1 | 48 | |
| | TTI, ms | | 10 | | | |
| | Coding type | ding type | | CC 1/3 | | |
| | CRC, bit | | | 16 | | |
| | Max number of bits/T | Max number of bits/TTI before rate | | 51 | 6 | |
| | matching | | | | | |
| NOTE: alterna | ative parameters enable t | he measurement | transport chan | nel BLER" in th | e UE. | <u>. </u> |

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/Signa | alling RB | RAB subflow #1 | RAB subflow #2 | RAB subflow #3 |
|-----------------|------------|---|----------------------------|----------------|----------------|
| RLC | Logical ch | annel type | | DTCH | |
| | RLC mode | | TM | TM | TM |
| | Payload si | zes, bit | 39, 81 (alt. 0, 39, 81) | 103 | 60 |
| | Max data | rate, bps | , , , | 12200 | |
| | TrD PDU I | neader, bit | | 0 | |
| ИАС | MAC head | ler, bit | | 0 | |
| | MAC multi | plexing | | N/A | |
| _ayer 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 typ | oe . | CC 1/3 | CC 1/3 | CC ½ |
| | CRC, bit | | 12 | N/A | N/A |
| | Max numb | er of bits/TTI after oding | 303 | 333 | 136 |
| | Uplink: Ma | ax number of bits/radio ore rate matching | 152 | 167 | 68 |
| | RM attribu | | 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 | Min spreading factor | 64 |
|--------|-------------------------------------|------|
| Uplink | Max number of DPDCH data bits/radio | 600 |
| | frame | |
| | Puncturing Limit | 0.84 |

6.10.2.4.1.4.2 Downlink

6.10.2.4.1.4.2.1 Transport channel parameters

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

| Higher layer | RAB/Signalling RB | RAB subflow #1 | RAB subflow #2 | RAB subflow #3 |
|-----------------|---|----------------|----------------|----------------|
| RLC | Logical channel type | | DTCH | |
| | RLC mode | TM | TM | TM |
| | Payload sizes, bit | 0 39 81 | 103 | 60 |
| | Max data rate, bps | | 12 200 | |
| | TrD PDU header, bit | | 0 | |
| MAC | MAC header, bit | | 0 | |
| | MAC multiplexing | | N/A | |
| Layer 1 | TrCH type | DCH | DCH | DCH |
| | TB sizes, bit | 0 39 81 | 103 | 60 |
| | TFS TF0, bits | 1x0 (note 2) | 0x103 | 0x60 |
| | (note 1) 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 ½ |
| | 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 | DTX position | | Fixed |
|----------|------------------|---------------------------|-------|
| Downlink | 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 siz | zes, bit | 39, 42, 55, 75, 81 (alt. 0, 39, 81) | 53, 63, 84, 103 | 60 | |
| | Max data ra | ate, bps | | 12200 | | |
| | TrD PDU h | eader, bit | | 0 | | |
| MAC | MAC head | er, bit | | 0 | | |
| | MAC multip | olexing | | N/A | | |
| Layer 1 | TrCH type | | DCH | DCH | DCH | |
| | Т | B 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 | |
| | | x number of came before rate | 152 | 167 | 68 | |
| | RM attribute | | 180-220 | 170-210 | 215-256 | |

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), (TF2,TF1,TF0,TF0), (TF3,TF2,TF0,TF0), |
| | (TF4,TF3,TF0,TF0), (TF5,TF4,TF1,TF0), (TF0,TF0,TF0,TF1), (TF1,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 | Min spreading factor | 64 |
|--------|-------------------------------------|------|
| Uplink | Max number of DPDCH data bits/radio | 600 |
| | frame | |
| | 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/Signa | alling RB | RAB subflow #1 | RAB subflow #2 | RAB subflow #3 |
|-----------------|---------------|-----------------------------|--------------------------|-----------------|----------------|
| RLC | Logical ch | annel type | | DTCH | |
| | RLC mode | | TM | TM | TM |
| | Payload s | izes, bit | 0, 39, 42, 55, 75, 81 | 53, 63, 84, 103 | 60 |
| | Max data | rate, bps | | 12 200 | |
| | TrD PDU I | header, bit | | 0 | |
| MAC | MAC head | der, bit | | 0 | |
| | MAC mult | iplexing | | N/A | |
| Layer 1 | TrCH type | ! | DCH | DCH | DCH |
| | TB sizes, bit | | 0, 39, 42, 55, 75, 81 | 53, 63, 84, 103 | 60 |
| | TFS | TF0, bits | 1x0 (note 2) | 0x103 | 0x60 |
| | (note 1) | 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 | oe | CC 1/3 | CC 1/3 | CC 1/2 |
| | CRC, bit | · | 12 | N/A | N/A |
| | Max numb | per of bits/TTI after oding | 303 | 333 | 136 |
| | RM attribu | ıte | 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 | DTX position | | Fixed |
|----------|------------------|---------------------------|-------|
| Downlink | Spreading factor | | 128 |
| | DPCCH | Number of TFCI bits/slot | 0 |
| | | Number of TPC bits/slot | 2 |
| | | Number of Pilot bits/slot | 4 |
| | DPDCH | Number of data bits/slot | 34 |
| | | Number of data bits/frame | 510 |

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

6.10.2.4.1.5.1 Uplink

6.10.2.4.1.5.1.1 Transport channel parameters

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

| Higher layer | RAB/Sigi | nalling RB | RAB subflow #1 | RAB subflow #2 | RAB subflow #3 |
|-----------------|---|---|----------------------------|----------------|----------------|
| RLC | Logical channel type | | | DTCH | |
| | RLC mod | | 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 hea | ader, bit | | 0 | |
| | MAC mu | Itiplexing | | N/A | |
| _ayer 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 ½ |
| | CRC, bit | | 12 | N/A | N/A |
| | Max number of bits/TTI after channel coding | | 255 | 321 | 96 |
| | Uplink: N | lax number of bits/radio fore 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 | Min spreading factor | 64 |
|--------|-------------------------------------|------|
| Uplink | Max number of DPDCH data bits/radio | 600 |
| | frame | |
| | Puncturing Limit | 0.96 |

6.10.2.4.1.5.2 Downlink

6.10.2.4.1.5.2.1 Transport channel parameters

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

| Higher layer | RAB/Signalling RB | RAB subflow #1 | RAB subflow #2 | RAB subflow #3 | |
|-----------------|---|----------------|----------------|----------------|--|
| RLC | Logical channel type | | DTCH | | |
| | RLC mode | TM | TM | TM | |
| | Payload sizes, bit | 0 39 65 | 99 | 40 | |
| | Max data rate, bps | | 10 200 | | |
| | TrD PDU header, bit | | 0 | | |
| MAC | MAC header, bit | | 0 | | |
| | MAC multiplexing | | N/A | | |
| Layer 1 | TrCH type | DCH | DCH | DCH | |
| | TB sizes, bit | 0 39 65 | 99 | 40 | |
| | TFS TF0, bits | 1x0 (note 2) | 0x99 | 0x40 | |
| | (note 1) 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 ½ | |
| | 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 | DTX position | | Fixed |
|----------|------------------|---------------------------|-------|
| Downlink | Spreading factor | | 128 |
| | DPCCH | Number of TFCI bits/slot | 0 |
| | | Number of TPC bits/slot | 2 |
| | | Number of Pilot bits/slot | 4 |
| | DPDCH | Number of data bits/slot | 34 |
| | | Number of data bits/frame | 510 |

6.10.2.4.1.5a Conversational / speech / UL:(10.2, 6.7, 5.9, 4.75) DL:(10.2, 6.7, 5.9, 4.75) kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.2.4.1.5a.1 Uplink

6.10.2.4.1.5a.1.1 Transport channel parameters

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

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 | Min spreading factor | 64 |
|--------|-------------------------------------|------|
| Uplink | Max number of DPDCH data bits/radio | 600 |
| | frame | |
| | 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/Signa | alling RB | RAB subflow #1 | RAB subflow #2 | RAB subflow #3 | |
|-----------------|---|-----------|--------------------------|-------------------|----------------|--|
| RLC | Logical channel type | | | DTCH | | |
| | RLC mode | | TM | TM | TM | |
| | Payload si | izes, 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 head | ler, bit | | 0 | | |
| | MAC multi | iplexing | | 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 | TF0, bits | 1x0 (note 2) | 0x99 | 0x40 | |
| | (note 1) | 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 | |
| | RM attribu | ite | 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 | DTX position | | Fixed |
|----------|------------------|---------------------------|-------|
| Downlink | 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 | DTO | CH |
| | RLC mode | TM | TM |
| | Payload sizes, bit | 39, 75 (alt. 0, 39, 75) | 84 |
| | Max data rate, bps | 795 | 50 |
| | 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 | 143 | 138 |
| | rate matching | | |
| | RM attribute | 180-220 | 170-210 |

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 | Min spreading factor | 64 |
|--------|-------------------------------------|------|
| Uplink | Max number of DPDCH data bits/radio | 600 |
| | frame | |
| | 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/Signa | alling RB | RAB subflow #1 | RAB subflow #2 | |
|-----------------|-----------------|--------------------------------------|----------------|----------------|--|
| RLC | Logical ch | annel type | DT | CH | |
| | RLC mode | 9 | TM | TM | |
| | Payload s | izes, bit | 0 39 | 84 | |
| | | | 75 | | |
| | Max data | rate, bps | 79: | 50 | |
| | TrD PDU I | header, bit | C |) | |
| MAC | MAC header, bit | | C | 0 | |
| | MAC mult | iplexing | N/A | | |
| Layer 1 | TrCH type | • | DCH | DCH | |
| | TB sizes, | bit | 0 | 84 | |
| | | | 39 | | |
| | | | 75 | | |
| | TFS | TF0, bits | 1x0 (note 2) | 0x84 | |
| | (note 1) | TF1, bits | 1x39 | 1x84 | |
| | | TF2, bits | 1x75 | N/A | |
| | TTI, ms | · | 20 | 20 | |
| | Coding type | ре | CC 1/3 | CC 1/3 | |
| | CRC, bit | | 12 | N/A | |
| | | per of bits/TTI after channel coding | 285 | 276 | |
| | RM attribu | ite | 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 | S (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 | DTX position | | Fixed |
|----------|------------------|---------------------------|-------|
| Downlink | 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 | 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 |
| | In case of using this alternative, CRC parity bits are of TrBlks are 1 even if there is no data on RAB subfl | | |

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 | Min spreading factor | 64 |
|--------|-------------------------------------|------|
| Uplink | Max number of DPDCH data bits/radio | 600 |
| | frame | |
| | 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/Signa | alling RB | RAB subflow #1 | RAB subflow #2 |
|-----------------|-----------------|-------------------------------------|----------------|----------------|
| RLC | Logical ch | annel type | DT | CH |
| | RLC mode | | TM | TM |
| | Payload si | zes, bit | 0 | 87 |
| | | | 39 | |
| | | | 61 | |
| | Max data | | 74 | 100 |
| | TrD PDU I | neader, bit | | 0 |
| MAC | MAC header, bit | | 0 | |
| | MAC multi | plexing | N/A | |
| Layer 1 | TrCH type | | DCH | DCH |
| | TB sizes, I | oit | 0 | 87 |
| | | | 39 | |
| | | | 61 | |
| | TFS | TF0, bits | 1x0 (note 2) | 0x87 |
| | (note 1) | TF1, bits | 1x39 | 1x87 |
| | | TF2, bits | 1x61 | N/A |
| | TTI, ms | | 20 | 20 |
| | Coding typ | pe | CC 1/3 | CC 1/3 |
| | CRC, bit | | 12 | N/A |
| | Max numb | er of bits/TTI after channel coding | 243 | 285 |
| | RM attribu | te | 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 | DTX position | | Fixed |
|----------|--------------|---------------------------|-------|
| Downlink | 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/Sig | nalling RB | RAB subflow #1 | RAB subflow #2 |
|-----------------|---|--------------------------------------|---|----------------|
| RLC | Logical channel type | | DTC | Н |
| | RLC mod | | TM | TM |
| | | Payload sizes, bit | 39, 42, 55, 58, 61 (alt. 0, 39, 42, 55, 58, 61) | 53, 63, 76, 87 |
| | Max data | a rate, bps | 7400 | 0 |
| | TrD PDU | header, bit | 0 | |
| MAC | MAC hea | ader, bit | 0 | |
| | MAC mu | Itiplexing | N/A | 1 |
| Layer 1 | TrCH typ | e | 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 num | ber 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 |

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 | Min spreading factor | 64 |
|--------|-------------------------------------|------|
| Uplink | Max number of DPDCH data bits/radio | 600 |
| | frame | |
| | 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/Sign | alling RB | RAB subflow #1 | RAB subflow #2 |
|-----------------|---|-------------|-----------------------|----------------|
| RLC | Logical channel type | | DTO | CH |
| | RLC mod | e | TM | TM |
| | Payload s | sizes, bit | 0, 39, 42, 55, 58, 61 | 53, 63, 76, 87 |
| | Max data | rate, bps | 740 | 00 |
| | TrD PDU | header, bit | 0 | |
| MAC | MAC hea | der, 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 | TF0, bits | 1x0 (note 2) | 0x87 |
| | (note 1) | 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 | DTX position | | Fixed |
|----------|------------------|---------------------------|-------|
| Downlink | Spreading factor | | 128 |
| | DPCCH | Number of TFCI bits/slot | 0 |
| | | Number of TPC bits/slot | 2 |
| | | Number of Pilot bits/slot | 4 |
| | DPDCH | Number of data bits/slot | 34 |
| | | Number of data bits/frame | 510 |

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

6.10.2.4.1.8.1 Uplink

6.10.2.4.1.8.1.1 Transport channel parameters

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

| Higher | RAB/Signalling RB | RAB subflow #1 | RAB subflow #2 |
|---------|---|-------------------------|----------------|
| layer | | | |
| RLC | Logical channel type | DTC | CH |
| | RLC mode | TM | TM |
| | Payload sizes, bit | 39, 58 (alt. 0, 39, 58) | 76 |
| | Max data rate, bps | 670 | 00 |
| | TrD PDU header, bit | 0 | |
| MAC | MAC header, bit | 0 | |
| | MAC multiplexing | N/A | 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 |

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 | Min spreading factor | 64 |
|--------|-------------------------------------|------|
| Uplink | Max number of DPDCH data bits/radio | 600 |
| | frame | |
| | 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/Sign | alling RB | RAB subflow #1 | RAB subflow #2 |
|-----------------|---|-------------|----------------|----------------|
| RLC | Logical ch | annel type | DT | CH |
| | RLC mode | | TM | TM |
| | Payload s | izes, bit | 0 39 58 | 76 |
| | Max data | rate, bps | | 700 |
| | 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 58 | 76 |
| | TFS | TF0, bits | 1x0 (note 2) | 0x76 |
| | (note 1) | 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 attribu | ute | 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 | DTX position | | Fixed |
|----------|------------------|---------------------------|-------|
| Downlink | 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 | DTC | Н |
| | RLC mode | TM | TM |
| | Payload sizes, bit | 39, 55 (alt. 0, 39, 55) | 63 |
| | Max data rate, bps | 590 | 00 |
| | TrD PDU header, bit | 0 | |
| MAC | MAC header, bit | 0 | |
| | MAC multiplexing | N/A | 4 |
| 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 | 113 | 107 |
| | rate matching | 190 220 | 170 210 |
| | RM attribute | 180-220 | 170-210 |
| | In case of using this alternative, CRC parity bits are of TrBlks are 1 even if there is no data on RAB subfl | | |

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 | Min spreading factor | 64 |
|--------|-------------------------------------|------|
| Uplink | Max number of DPDCH data bits/radio | 600 |
| | frame | |
| | 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/Signa | alling RB | RAB subflow #1 | RAB subflow #2 |
|-----------------|-------------|--------------------------------------|----------------|----------------|
| RLC | Logical ch | annel type | DT | CH |
| | RLC mode | 9 | TM | TM |
| | Payload s | izes, bit | 0 | 63 |
| | | | 39 | |
| | | | 55 | |
| | Max data | rate, bps | 59 | 00 |
| | TrD PDU I | header, bit | C | |
| MAC | MAC head | der, bit | C | |
| | MAC mult | iplexing | N/A | |
| Layer 1 | TrCH type | • | DCH | DCH |
| | TB sizes, | bit | 0 | 63 |
| | | | 39 | |
| | | | 55 | |
| | TFS | TF0, bits | 1x0 (note 2) | 0x63 |
| | (note 1) | TF1, bits | 1x39 | 1x63 |
| | | TF2, bits | 1x55 | N/A |
| | TTI, ms | | 20 | 20 |
| | Coding type | oe | CC 1/3 | CC 1/3 |
| | CRC, bit | | 12 | N/A |
| | Max numb | per of bits/TTI after channel coding | 225 | 213 |
| | RM attribu | ite | 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 | DTX position | | Fixed |
|----------|--------------|---------------------------|-------|
| Downlink | 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 | DTC | DTCH | |
| | RLC mode | TM | TM | |
| | Payload sizes, bit | 39, 49 (alt. 0, 39, 49) | 54 | |
| | Max data rate, bps | 515 | 5150 | |
| | TrD PDU header, bit | 0 | | |
| MAC | MAC header, bit | 0 | | |
| | MAC multiplexing | N/A | 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 | |
| | In case of using this alternative, CRC parity bits are of TrBlks are 1 even if there is no data on RAB subf | | | |

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

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 | Min spreading factor | 128 |
|--------|-------------------------------------|------|
| Uplink | Max number of DPDCH data bits/radio | 300 |
| | frame | |
| | 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/Signa | alling RB | RAB subflow #1 | RAB subflow #2 |
|-----------------|-------------|-------------------------------------|----------------|----------------|
| RLC | Logical ch | annel type | DT | CH |
| | RLC mode | | TM | TM |
| | Payload si | zes, bit | 0 | 54 |
| | | | 39 | |
| | | | 49 | |
| | Max data | rate, bps | 51 | 50 |
| | TrD PDU I | neader, bit | | 0 |
| MAC | MAC head | ler, bit | 0 | |
| | MAC multi | plexing | N/A | |
| Layer 1 | TrCH type | | DCH | DCH |
| | TB sizes, I | oit | 0 | 54 |
| | | | 39 | |
| | | | 49 | |
| | TFS | TF0, bits | 1x0 (note 2) | 0x54 |
| | (note 1) | TF1, bits | 1x39 | 1x54 |
| | | TF2, bits | 1x49 | N/A |
| | TTI, ms | | 20 | 20 |
| | Coding typ | pe e | CC 1/3 | CC 1/3 |
| | CRC, bit | | 12 | N/A |
| | Max numb | er of bits/TTI after channel coding | 207 | 186 |
| | RM attribu | | 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 | DTX position | | Fixed |
|----------|--------------|---------------------------|-------|
| Downlink | 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 Transport channel parameters for Conversational / speech / UL:4.75 kbps / CS RAB

| Higher layer | RAB/Signalling RB | RAB subflow #1 | RAB subflow #2 |
|-----------------|---|-------------------------|----------------|
| RĹC | Logical channel type | DTCH | |
| | RLC mode | TM | TM |
| | Payload sizes, bit | 39, 42 (alt. 0, 39, 42) | 53 |
| | Max data rate, bps | 475 | 50 |
| | TrD PDU header, bit | 0 | |
| ЛАC | MAC header, bit | 0 | |
| | MAC multiplexing | N/A | A |
| ayer 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 | 93 | 92 |
| | rate matching | | |
| | RM attribute | 180-220 | 170-210 |

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

6.10.2.4.1.11.1.3 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 | Min spreading factor | 128 |
|--------|-------------------------------------|------|
| Uplink | Max number of DPDCH data bits/radio | 300 |
| | frame | |
| | 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 ch | annel type | DT | CH |
| | RLC mode | 9 | TM | TM |
| | Payload s | izes, bit | 0 | 53 |
| | | | 39 | |
| | | | 42 | |
| | Max data | rate, bps | 47 | 50 |
| | TrD PDU I | header, bit | |) |
| MAC | MAC head | der, bit | 0 | |
| | MAC mult | iplexing | N/A | |
| Layer 1 | TrCH type | • | DCH | DCH |
| | TB sizes, | bit | 0 | 53 |
| | | | 39 | |
| | | | 42 | |
| | TFS | TF0, bits | 1x0 (note 2) | 0x53 |
| | (note 1) | TF1, bits | 1x39 | 1x53 |
| | | TF2, bits | 1x42 | N/A |
| | TTI, ms | | 20 | 20 |
| | Coding type | oe | CC 1/3 | CC 1/3 |
| | CRC, bit | | 12 | N/A |
| | Max numb | per of bits/TTI after channel coding | 186 | 183 |
| | RM attribu | ite | 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 | DTX position | | Fixed |
|----------|------------------|---------------------------|-------|
| Downlink | 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 | 891 |
| | rate matching | |
| | 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 | Min spreading factor | 32 |
|--------|---|------|
| Uplink | 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/Sig | nalling RB | RAB |
|-----------------|---|--------------|---------|
| RLC | Logical | channel type | DTCH |
| | RLC mo | de | TM |
| | Payload | sizes, bit | 576 |
| | Max data | a rate, bps | 28800 |
| | TrD PDU header, bit | | 0 |
| MAC | MAC he | ader, bit | 0 |
| | MAC mu | ultiplexing | 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 t | type | TC |
| | CRC, bit | t e | 16 |
| | Max number of bits/TTI after channel coding | | 3564 |
| | RM attril | bute | 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 | RAB/Signalling RB | | RAB |
|---------|---|-----------|-------------------|
| layer | | | |
| RLC | Logical channel type | | DTCH |
| | RLC mode | | TM |
| | Payload sizes, b | it | 640 |
| | Max data rate, b | ps | 64000 |
| | TrD PDU heade | r, 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 | | 1974(alt. 1971) |
| | rate matching | | · |
| | 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 | Min spreading factor | 16 |
|--------|-------------------------------------|------|
| Uplink | Max number of DPDCH data bits/radio | 2400 |
| | frame | |
| | 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 7 | ΓF0, bits | 0x640 |
| | | ΓF1, 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 | 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 |

6.10.2.4.1.14 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 | RAB/Signalling RB | RAB |
|---------|---|-------------------|
| layer | | |
| 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 | 990(alt. 987) |
| | rate matching | |
| | 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 | Min spreading factor | 32 |
|--------|-------------------------------------|------|
| Uplink | Max number of DPDCH data bits/radio | 1200 |
| | frame | |
| | 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 | RAB/Signalling RB | RAB |
|---------|---|---------|
| layer | | |
| 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 | 447 |
| | rate matching | |
| | 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 | Min spreading factor | 64 |
|--------|-------------------------------------|------|
| Uplink | Max number of DPDCH data bits/radio | 600 |
| | frame | |
| | 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 | Min spreading factor | 32 |
|--------|-------------------------------------|------|
| Uplink | Max number of DPDCH data bits/radio | 1200 |
| | frame | |
| | 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 transpo | ort 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 TFCI bits/slot | | 8 |
| | | Number of TPC bits/slot | 4 |
| | | Number of Pilot bits/slot | 8 |
| | DPDCH | Number of data bits/slot | 60 |
| | | Number of data bits/frame | 900 |

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

6.10.2.4.1.17.1 Uplink

6.10.2.4.1.17.1.1 Transport channel parameters

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

| Higher layer | RAB/Signalling RB | RAB |
|-----------------|---|-------|
| RLC | Logical channel type | DTCH |
| | RLC mode | TM |
| | Payload sizes, bit | 576 |
| | Max data rate, bps | 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 | Min spreading factor | 16 |
|--------|-------------------------------------|------|
| Uplink | Max number of DPDCH data bits/radio | 2400 |
| | frame | |
| | 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 posit | ion | Flexible |
|----------|-----------|---------------------------|----------|
| Downlink | Spreading | g 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 | 1062 (alt. 1080) |
| | rate matching | |
| | 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 | Min spreading factor | 32 |
|--------|-------------------------------------|------|
| Uplink | Max number of DPDCH data bits/radio | 1200 |
| | frame | |
| | 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 | RAB/Signalling RB | RAB |
|---------|---|------------------|
| layer | | |
| 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 | 270 (alt. 267) |
| | before rate matching | |
| | 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 | Min spreading factor | 64 |
|------------------|-------------------------------------|-----|
| Uplink | Max number of DPDCH data bits/radio | 600 |
| | frame | |
| Puncturing Limit | | 1.0 |

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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/Sigr | nalling RB | RAB |
|-----------------|------------------|--------------------------------------|------------------|
| RLC | Logical ch | nannel type | DTCH |
| | RLC mod | le | AM |
| | Payload s | sizes, bit | 320 |
| | Max data | rate, bps | 8000 |
| | AMD PDI | J header, bit | 16 |
| MAC | MAC header, bit | | 0 |
| | MAC multiplexing | | N/A |
| Layer 1 | TrCH type | е | 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 num | ber of bits/TTI after channel coding | 1080 (alt. 1068) |
| | RM attrib | ute | 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 | 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 |

6.10.2.4.1.23b 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 | Min spreading factor | 32 |
|--------|-------------------------------------|------|
| Uplink | Max number of DPDCH data bits/radio | 1200 |
| | frame | |
| | 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/Sig | nalling RB | RAB |
|--------------|---|---------------|---------|
| RLC | Logical | channel type | DTCH |
| | RLC mo | de | AM |
| | Payload | sizes, bit | 320 |
| | Max data | a rate, bps | 16000 |
| | AMD PD | U header, bit | 16 |
| MAC | MAC hea | ader, bit | 0 |
| | MAC mu | Iltiplexing | N/A |
| Layer 1 | TrCH typ | oe e | DCH |
| | TB sizes, bit | | 336 |
| | TFS | TF0, bits | 0x336 |
| | | TF1, bits | 1x336 |
| | | TF2, bits | 2x336 |
| | TTI, ms | | 40 |
| | Coding t | ype | TC |
| | CRC, bit | | 16 |
| | Max number of bits/TTI after channel coding | | 2124 |
| | RM attrib | oute | 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 | 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 |

6.10.2.4.1.23c 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/Sig | nalling RB | RAB |
|-----------------|---|----------------|---------|
| RLC | Logical | channel type | DTCH |
| | RLC mo | de | AM |
| | Payload | sizes, bit | 320 |
| | Max data | a rate, bps | 32000 |
| | AMD PD | OU header, bit | 16 |
| MAC | MAC he | ader, bit | 0 |
| | MAC mu | ıltiplexing | N/A |
| Layer 1 | TrCH typ | oe e | 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 attrib | | 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 | Min spreading factor | 32 |
|--------|-------------------------------------|------|
| Uplink | Max number of DPDCH data bits/radio | 1200 |
| | frame | |
| | 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/Sig | nalling RB | RAB |
|-----------------|-----------|---------------------------------------|---------|
| RLC | Logical c | hannel type | DTCH |
| | RLC mod | de | AM |
| | Payload | sizes, bit | 320 |
| | Max data | a rate, bps | 32000 |
| | AMD PD | U header, bit | 16 |
| MAC | MAC hea | ader, bit | 0 |
| | MAC mu | Itiplexing | 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 to | | TC |
| | CRC, bit | | 16 |
| | Max num | nber of bits/TTI after channel coding | 4236 |
| | RM attrib | oute | 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 | 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 |

6.10.2.4.1.23d 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/Sig | nalling RB | RAB |
|--------------|---|---------------------------------------|---------|
| RLC | Logical | channel type | DTCH |
| | RLC mo | de | AM |
| | Payload | sizes, bit | 320 |
| | Max data | a rate, bps | 32000 |
| | AMD PD | U header, bit | 16 |
| MAC | MAC he | ader, bit | 0 |
| | MAC mu | ıltiplexing | 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 nun | nber 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 Min spreading factor | | 32 |
|---------------------------|-------------------------------------|------|
| Uplink | Max number of DPDCH data bits/radio | 1200 |
| | frame | |
| | 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/Sig | nalling RB | RAB |
|-----------------|---|---------------|---------|
| RLC | Logical o | channel type | DTCH |
| | RLC mo | de | AM |
| | Payload | sizes, bit | 320 |
| | | a rate, bps | 32000 |
| | AMD PD | U 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 attrib | oute | 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 | 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 |

6.10.2.4.1.24 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 | RAB/Signalling RB | RAB |
|---------|---|---------|
| layer | | |
| 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 | Min spreading factor | 16 |
|--------|-------------------------------------|------|
| Uplink | Max number of DPDCH data bits/radio | 2400 |
| | frame | |
| | 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 | RAB/Signalling RB | RAB |
|---------|---|---------|
| layer | | |
| 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 |
| Ì | CRC, bit | 16 |
| Ì | 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 | DTX posit | ion | Flexible |
|----------|-----------|---------------------------|----------|
| Downlink | Spreading | g 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 |

6.10.2.4.1.28 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 | RAB/Signalling RB | RAB |
|--------------|---|---------|
| layer RLC | Logical channel type | DTCH |
| INLO | 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 | Min spreading factor | 8 |
|--------|-------------------------------------|------|
| Uplink | Max number of DPDCH data bits/radio | 4800 |
| | frame | |
| | 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 | RAB/Sig | gnalling RB | RAB |
|--------------|------------------|---------------------------------------|---------|
| layer RLC | Logical | channel type | DTCH |
| INLO | RLC mo | | AM |
| | | I sizes, bit | 320 |
| | | a rate, bps | 144000 |
| | | OU header, bit | 16 |
| MAC | | eader, 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, bi | t | 16 |
| | Max nui | mber 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/Sigr | nalling RB | RAB |
|-----------------|---|--------------------------------------|---------|
| RLC | Logical channel type | | DTCH |
| | RLC mod | de | AM |
| | Payload s | | 320 |
| | Max data | rate, bps | 144000 |
| | AMD PDI | U header, bit | 16 |
| MAC | MAC hea | der, bit | 0 |
| | MAC mul | ltiplexing | 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 ty | /pe | TC |
| | CRC, bit | | 16 |
| | Max num | ber 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 | Min spreading factor | 8 |
|--------|-------------------------------------|------|
| Uplink | Max number of DPDCH data bits/radio | 4800 |
| | frame | |
| | 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 | DTX position | | Flexible |
|----------|------------------|---------------------------|----------|
| Downlink | Spreading factor | | 8 |
| | Number od | DPDCH | 1 |
| | DPCCH | Number of TFCI bits/slot | 8 |
| | | Number of TPC bits/slot | 8 |
| | | Number of Pilot bits/slot | 16 |
| | DPDCH | Number of data bits/slot | 608 |
| | | Number of data bits/frame | 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 | 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 |

6.10.2.4.1.33 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 |
| i | 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 | 12684 |
| | rate matching | |
| | 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 | Min spreading factor | 4 |
|--------|---|------|
| Uplink | 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 | RAB/Signalling RB | RAB |
|---------|---|---------------------|
| layer | | |
| 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 | link 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, TF0, TF1), |
| | (TF0, TF0, TF0, TF1, TF1), (TF1, TF0, TF0, TF1, TF1), (TF2, TF1, TF1, TF1, TF1)) |

6.10.2.4.1.38.1.2 Physical channel parameters

| DPCH | Min spreading factor 16 | |
|-----------------------|--------------------------|------|
| Uplink | Max number of DPDCH data | 2400 |
| | bits/radio frame | |
| Puncturing Limit 0.96 | | 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, TF1, TF1, TF0), (TF1, 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 | 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 |

6.10.2.4.1.38a Conversational / speech / 12.2 kbps / CS RAB + Interactive or background / UL:0 DL:0 kbps / PS RAB + UL:3.4 bbps 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 | 0 |
| | before rate matching | |
| | 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 | Min spreading factor | 64 |
|--------|-------------------------------------|------|
| Uplink | Max number of DPDCH data bits/radio | 600 |
| | frame | |
| | 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 | DTX position | | Fixed |
|----------|------------------|---------------------------|-------|
| Downlink | Spreading factor | | 128 |
| | DPCCH | Number of TFCI bits/slot | 0 |
| | | Number of TPC bits/slot | 2 |
| | | Number of Pilot bits/slot | 4 |
| | DPDCH | Number of data bits/slot | 34 |
| | | Number of data bits/frame | 510 |

6.10.2.4.1.38b Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.2.4.1.38b.1 Uplink

6.10.2.4.1.38b.1.1 Transport channel parameters

6.10.2.4.1.38b.1.1.1 Transport channel parameters for Conversational / speech / UL:12.2 kbps / CS RAB See clause 6.10.2.4.1.4.1.1.1.

6.10.2.4.1.38b.1.1.2 Transport channel parameters for Interactive or background / UL:8 kbps / PS RAB

| Higher layer | RAB/Signalling RB | | RAB |
|-----------------|--|--------------------------------------|---------|
| RLC | Logical ch | nannel type | DTCH |
| | RLC mod | e | AM |
| | Payload s | sizes, bit | 320 |
| | Max data | rate, bps | 8000 |
| | AMD PDU | J header, bit | 16 |
| MAC | MAC hea | der, 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 numl | ber of bits/TTI after channel coding | 1068 |
| | Uplink: Max number of bits/radio frame | | 267 |
| | before rat | e matching | |
| | RM attribu | ute | 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), (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,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 | Min spreading factor | 32 |
|--------|-------------------------------------|------|
| Uplink | Max number of DPDCH data bits/radio | 1200 |
| | frame | |
| | 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), (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 | 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 |

6.10.2.4.1.38c 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 | Min spreading factor | 16 |
|--------|-------------------------------------|------|
| Uplink | Max number of DPDCH data bits/radio | 2400 |
| | frame | |
| | 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,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 | 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 |

6.10.2.4.1.38d 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 hea | der, bit | 4 | 4 |
| | MAC multiplexing | | 2 logical channel multiplexing | |
| Layer 1 | TrCH type | | DCH | |
| | TB sizes, bit | | 340 | |
| | TFS | TF0, bits | 0x3 ₄ | 40 |
| | | TF1, bits | 1x3 ₄ | 40 |
| | | TF2, bits | 2x3- | 40 |
| | | TF3, bits | 3x3 ₄ | 40 |
| | | 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 | | 2142 | |
| | before rate matching | | | |
| | 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), (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,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,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 | Min spreading factor | 16 |
|--------|-------------------------------------|------|
| Uplink | Max number of DPDCH data bits/radio | 2400 |
| | frame | |
| | 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 | 1x3 | 40 |
| | 2x340 | 2x3 | 40 |
| | 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,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 | DTX position | | Flexible |
|----------|--------------|---------------------------|----------|
| Downlink | Spreading | g 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,TF1), (TF5,TF4,TF1,TF0,TF1) |

6.10.2.4.1.38e.1.2 Physical channel parameters

| DPCH | Min spreading factor | 64 |
|--------|-------------------------------------|------|
| Uplink | Max number of DPDCH data bits/radio | 600 |
| | frame | |
| | 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 | DTX position | | Fixed |
|----------|--------------|---------------------------|-------|
| Downlink | Spreading | factor | 128 |
| | DPCCH | Number of TFCI bits/slot | 0 |
| | | Number of TPC bits/slot | 2 |
| | | Number of Pilot bits/slot | 4 |
| | DPDCH | Number of data bits/slot | 34 |
| | | Number of data bits/frame | 510 |

6.10.2.4.1.38f Conversational / speech / (12.2 7.95 5.9 4.75) kbps / CS RAB + Interactive or background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.2.4.1.38f.1 Uplink

6.10.2.4.1.38f.1.1 Transport channel parameters

6.10.2.4.1.38f.1.1.1 Transport channel parameters for Conversational / speech / UL: (12.2 7.95 5.9 4.75) kbps / CS RAB

See clause 6.10.2.4.1.4a.1.1.1.

6.10.2.4.1.38f.1.1.2 Transport channel parameters for Interactive or background / UL:8 kbps / PS RAB See clause 6.10.2.4.1.38b.1.1.2.

6.10.2.4.1.38f.1.1.3 Transport channel parameters for UL:3.4 kbps SRBs for DCCH See clause 6.10.2.4.1.2.1.1.1.

6.10.2.4.1.38f.1.1.4 TFCS

| TFCS size | 24 |
|-----------|--|
| TFCS | (RAB subflow#1, RAB subflow#2, RAB subflow#3, 8 kbps RAB, DCCH)= |
| | (TF0,TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0,TF0), (TF2,TF1,TF0,TF0,TF0), |
| | (TF3,TF2,TF0,TF0,TF0), (TF4,TF3,TF0,TF0,TF0), (TF5,TF4,TF1,TF0,TF0), |
| | (TF0,TF0,TF0,TF1,TF0), (TF1,TF0,TF0,TF1,TF0), (TF2,TF1,TF0,TF1,TF0), |
| | (TF3,TF2,TF0,TF1,TF0), (TF4,TF3,TF0,TF1,TF0), (TF5,TF4,TF1,TF1,TF0), |
| | (TF0,TF0,TF0,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,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 | Min spreading factor | 32 |
|--------|-------------------------------------|------|
| Uplink | Max number of DPDCH data bits/radio | 1200 |
| | frame | |
| | 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), (TF1,TF0,TF0,TF0,TF0), (TF2,TF1,TF0,TF0,TF0), |
| | (TF3,TF2,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,TF1), (TF1,TF0,TF0,TF0,TF1), (TF2,TF1,TF0,TF0,TF1), |
| | (TF3,TF2,TF0,TF1), (TF4,TF3,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 | 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 |

6.10.2.4.1.38g 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), (TF2,TF1,TF0,TF0,TF0), (TF3,TF2,TF0,TF0,TF0), (TF4,TF3,TF0,TF0), (TF5,TF4,TF1,TF0,TF0), (TF0,TF0,TF0,TF1,TF0), (TF1,TF0,TF1,TF0), (TF3,TF2,TF0,TF1,TF0), (TF4,TF3,TF0,TF1,TF0), (TF5,TF4,TF1,TF1), (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,TF1), (TF1,TF0,TF0,TF0,TF1), (TF2,TF1,TF0,TF0,TF1), (TF3,TF2,TF0,TF1), (TF4,TF3,TF0,TF0,TF1), (TF3,TF2,TF0,TF1,TF1), (TF4,TF3,TF0,TF1), (TF5,TF4,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 | Min spreading factor | 32 |
|--------|-------------------------------------|------|
| Uplink | Max number of DPDCH data bits/radio | 1200 |
| | frame | |
| | 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,TF1,TF0), (TF1,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,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 | 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 |

6.10.2.4.1.38h 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,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 | Min spreading factor | 16 |
|--------|-------------------------------------|------|
| Uplink | Max number of DPDCH data bits/radio | 2400 |
| | frame | |
| | 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,TF0,TF0,TF0,TF0,TF0,TF0,TF0), (TF0,TF0,TF0,TF4,TF1), (TF5,TF4,TF1,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,TF4,TF0), (TF4,TF3,TF0,TF0,TF0), (TF3,TF2,TF0,TF0,TF0), (TF3,TF2,TF0,TF2,TF0), (TF3,TF2,TF0,TF1,TF0), (TF3,TF2,TF0,TF1,TF0), (TF3,TF2,TF0,TF1,TF0), (TF3,TF2,TF0,TF1,TF0), (TF3,TF2,TF0,TF1,TF0), (TF3,TF2,TF1,TF0,TF1,TF0), (TF3,TF1,TF0,TF1,TF1,TF1,TF1,TF1,TF1,TF1,TF1,TF1,TF1 |
| | (TF2,TF1,TF0,TF2,TF0), (TF2,TF1,TF0,TF4,TF0), (TF1,TF0,TF0,TF0,TF0,TF0), (TF1,TF0,TF0,TF0,TF0,TF0,TF0), (TF0,TF0,TF0,TF0,TF0,TF1), (TF0,TF0,TF0,TF0,TF0,TF0,TF0,TF0,TF0,TF0, |
| | (TF0,TF0,TF0,TF4,TF1), (TF5,TF4,TF1,TF0,TF1), (TF5,TF4,TF1,TF1,TF1), (TF5,TF4,TF1,TF2,TF1), (TF5,TF4,TF1,TF2,TF1), (TF4,TF3,TF0,TF0,TF1), (TF4,TF3,TF0,TF1,TF1), (TF4,TF3,TF0,TF4,TF1), (TF4,TF3,TF0,TF4,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,TF1,TF0,TF1,TF0,TF1,TF0,TF1,TF0,TF1,TF0,TF1,TF0,TF1,TF0,TF1,TF0,TF1,TF0,TF1,TF0,TF1,TF0,TF1,TF0,TF1,TF0,TF1,TF0,TF1), (TF2,TF1,TF0,TF1,TF0,TF1,TF0,TF1,TF0,TF1,TF0,TF1,TF0,TF1,TF0,TF1,TF0,TF1,TF0,TF1,TF0,TF1,TF0,TF1,TF0,TF1,TF0,TF1,TF0,TF1,TF1,TF1,TF1,TF1,TF1,TF1,TF1,TF1,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 | 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 |

6.10.2.4.1.38i 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), (TF1,TF0,TF0,TF0,TF0), (TF2,TF1,TF0,TF0,TF0), |
| | (TF3,TF2,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,TF1), (TF1,TF0,TF0,TF0,TF1), (TF2,TF1,TF0,TF0,TF1), |
| | (TF3,TF2,TF0,TF1), (TF4,TF3,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 | Min spreading factor | 16 |
|--------|-------------------------------------|------|
| Uplink | Max number of DPDCH data bits/radio | 2400 |
| | frame | |
| | 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), (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,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,TF0,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) |
| | [(11 0,11 2,11 0,11 1,11 1,11 1,11 0,11 0, |

6.10.2.4.1.38i.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 |

6.10.2.4.1.38j 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), (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,TF1), (TF4,TF3,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 | 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 |

6.10.2.4.1.39 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), (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, TF1), (TF1, TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1), |
| | (TF0, TF0, TF1, 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 | DTX position | on | 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 |

6.10.2.4.1.40 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 | Min spreading factor | 16 |
|--------|--------------------------|------|
| Uplink | Max number of DPDCH data | 2400 |
| | bits/radio frame | |
| | 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 | 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 |

6.10.2.4.1.42 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, TF1, TF1, TF0), (TF1, TF0, TF1, TF0), (TF2, TF1, TF1, TF1, TF1), |
| | (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, TF1), (TF1, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1), (TF2, TF2, TF3, TF4, TF4, TF4, TF4, TF4, TF4, TF4, TF4 |
| | (TF0, TF0, TF0, TF1, TF1), (TF1, TF0, TF0, TF1, TF1), (TF2, TF1, TF1, TF1, TF1), (TF2, TF2, TF3, TF3, TF3, TF3, TF3, TF3, TF3, TF3 |
| | (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 | 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 |

6.10.2.4.1.43 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:384 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

6.10.2.4.1.43.1 Uplink

See clause 6.10.2.4.1.40.1.

6.10.2.4.1.43.2 Downlink

6.10.2.4.1.43.2.1 Transport channel parameters

6.10.2.4.1.43.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 kbps / CS RAB See clause 6.10.2.4.1.4.2.1.1.

6.10.2.4.1.43.2.1.2 Transport channel parameters for Interactive or background / DL:384 kbps / PS RAB See clause 6.10.2.4.1.32.2.1.1.

6.10.2.4.1.43.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.1.43.2.1.4 TFCS

| TFCS size | 36 (alt. 54) |
|-----------|---|
| TFCS | (RAB subflow#1, RAB subflow#2, RAB subflow#3, 384 kbps RAB, DCCH)= |
| | (TF0, TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0, TF0), (TF2, TF1, TF1, TF0, TF0), |
| | (TF0, TF0, TF0, TF1, TF0), (TF1, TF0, TF0, TF1, TF0), (TF2, TF1, TF1, TF1, TF0), |
| | (TF0, TF0, TF0, TF2, TF0), (TF1, TF0, TF0, TF2, TF0), (TF2, TF1, TF1, TF2, TF0), |
| | (TF0, TF0, TF0, TF3, TF0), (TF1, TF0, TF0, TF3, TF0), (TF2, TF1, TF1, TF3, TF0), |
| | (TF0, TF0, TF0, TF4, TF0), (TF1, TF0, TF0, TF4, TF0), (TF2, TF1, TF1, TF4, TF0), |
| | (TF0, TF0, TF0, TF5, TF0), (TF1, TF0, TF0, TF5, TF0), (TF2, TF1, TF1, TF5, TF0), |
| | (TF0, TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1), |
| | (TF0, TF0, TF0, TF1, TF1), (TF1, TF0, TF0, TF1, TF1), (TF2, TF1, TF1, TF1, TF1), |
| | (TF0, TF0, TF0, TF2, TF1), (TF1, TF0, TF0, TF2, TF1), (TF2, TF1, TF1, TF2, TF1), |
| | (TF0, TF0, TF0, TF3, TF1), (TF1, TF0, TF0, TF3, TF1), (TF2, TF1, TF1, TF3, TF1), |
| | (TF0, TF0, TF0, TF4, TF1), (TF1, TF0, TF0, TF4, TF1), (TF2, TF1, TF1, TF4, TF1) |
| | (TF0, TF0, TF0, TF5, TF1), (TF1, TF0, TF0, TF5, TF1), (TF2, TF1, TF1, TF5, TF1), |
| | (alt. (TF0, TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0, TF0), (TF2, TF1, TF1, TF0, TF0), |
| | (TF0, TF0, TF0, TF1, TF0), (TF1, TF0, TF0, TF1, TF0), (TF2, TF1, TF1, TF1, TF0), |
| | (TF0, TF0, TF0, TF2, TF0), (TF1, TF0, TF0, TF2, TF0), (TF2, TF1, TF1, TF2, TF0), |
| | (TF0, TF0, TF0, TF3, TF0), (TF1, TF0, TF0, TF3, TF0), (TF2, TF1, TF1, TF3, TF0), |
| | (TF0, TF0, TF0, TF4, TF0), (TF1, TF0, TF0, TF4, TF0), (TF2, TF1, TF1, TF4, TF0), |
| | (TF0, TF0, TF0, TF5, TF0), (TF1, TF0, TF0, TF5, TF0), (TF2, TF1, TF1, TF5, TF0), |
| | (TF0, TF0, TF0, TF6, TF0), (TF1, TF0, TF0, TF6, TF0), (TF2, TF1, TF1, TF6, TF0), (TF0, TF0, TF0, TF0, TF0, TF0, TF0, TF1, TF1, TF2, TF0) |
| | (TF0, TF0, TF0, TF7, TF0), (TF1, TF0, TF0, TF7, TF0), (TF2, TF1, TF1, TF7, TF0), (TF0, TF0, TF0, TF0, TF0, TF0, TF0, TF8, TF0), (TF1, TF0, TF0, TF8, TF0), (TF2, TF1, TF1, TF8, TF0), |
| | (TF0, TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF1), (TF2, TF1, TF1, TF1, TF0, TF1), |
| | (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, TF5, TF1), (TF1, TF0, TF5, TF1), (TF2, TF1, TF1, TF5, TF1) |
| | (TF0, TF0, TF6, TF1), (TF1, TF0, TF6, TF1), (TF2, TF1, TF1, TF6, TF1), |
| | (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 o | f 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, 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, TF1), (TF1, TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1), |
| | (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 | Min spreading factor | 8 |
|--------|--------------------------|------|
| Uplink | Max number of DPDCH data | 4800 |
| | bits/radio frame | |
| | 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.

6.10.2.4.1.44.2.1.4 TFCS

| TFCS size | 66 (alt. 114) |
|-----------|---|
| 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, TF5, TF0), (TF1, TF0, TF0, TF5, TF0), (TF2, TF1, TF1, TF5, TF0), |
| | (TF0, TF0, TF6, TF0), (TF1, TF0, TF0, TF6, TF0), (TF2, TF1, TF1, TF6, TF0), |
| | (TF0, TF0, TF0, TF7, TF0), (TF1, TF0, TF0, TF7, TF0), (TF2, TF1, TF1, TF7, TF0), |
| | (TF0, TF0, TF0, TF8, TF0), (TF1, TF0, TF0, TF8, TF0), (TF2, TF1, TF1, TF8, TF0), |
| | (TF0, TF0, TF0, TF9, TF0), (TF1, TF0, TF0, TF9, TF0), (TF2, TF1, TF1, TF9, TF0), |
| | (TF0, TF0, TF0, TF10, TF0), (TF1, TF0, TF0, TF10, TF0), (TF2, TF1, TF1, TF10, TF0), |
| | (TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1), (TF0, TF0, TF1, TF1), (TF1, TF0, TF0, TF1, TF1), (TF2, TF1, TF1, TF1, TF1), |
| | (TF0, TF0, TF2, TF1), (TF1, TF0, TF0, TF2, TF1), (TF2, TF1, TF1, TF2, TF1), |
| | (TF0, TF0, TF3, TF1), (TF1, TF0, TF0, TF3, TF1), (TF2, TF1, TF1, TF3, TF1), |
| | (TF0, TF0, TF0, TF4, TF1), (TF1, TF0, TF0, TF4, TF1), (TF2, TF1, TF1, TF4, TF1) |
| | (TF0, TF0, TF0, TF5, TF1), (TF1, TF0, TF0, TF5, TF1), (TF2, TF1, TF1, TF5, TF1), |
| | TF0, TF0, TF0, TF6, TF1), (TF1, TF0, TF0, TF6, TF1), (TF2, TF1, TF1, TF6, TF1), |
| | (TF0, TF0, TF0, TF7, TF1), (TF1, TF0, TF0, TF7, TF1), (TF2, TF1, TF1, TF7, TF1), |
| | (TF0, TF0, TF0, TF8, TF1), (TF1, TF0, TF0, TF8, TF1), (TF2, TF1, TF1, TF8, TF1), (TF0, TF0, TF0, TF9, TF1), (TF1, TF0, TF0, TF9, TF1), (TF2, TF1, TF1, TF9, TF1) |
| | (TF0, TF0, TF10, TF1), (TF1, TF0, TF0, TF1), (TF2, TF1, TF1, TF10, TF1) |
| | (alt. (TF0, TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0, TF0), (TF2, TF1, TF1, 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, TF6, TF0), (TF1, TF0, TF0, TF6, TF0), (TF2, TF1, TF1, TF6, TF0), |
| | (TF0, TF0, TF0, TF7, TF0), (TF1, TF0, TF0, TF7, TF0), (TF2, TF1, TF1, TF7, TF0), |
| | (TF0, TF0, TF0, TF8, TF0), (TF1, TF0, TF0, TF8, TF0), (TF2, TF1, TF1, TF8, TF0), |
| | (TF0, TF0, TF0, TF9, TF0), (TF1, TF0, TF0, TF9, TF0), (TF2, TF1, TF1, TF9, TF0), |
| | (TF0, TF0, TF0, TF10, TF0), (TF1, TF0, TF0, TF10, TF0), (TF2, TF1, TF1, TF10, TF0), |
| | (TF0, TF0, TF1, TF11, TF0), (TF1, TF0, TF0, TF11, TF0), (TF2, TF1, TF1, TF11, TF0), (TF0, TF0, TF0, TF12, TF0), (TF1, TF0, TF0, TF12, TF0), (TF2, TF1, TF1, TF12, TF0), |
| | (TF0, TF0, TF13, TF0), (TF1, TF0, TF0, TF13, TF0), (TF2, TF1, TF1, TF13, TF0), |
| | (TF0, TF0, TF0, TF14, TF0), (TF1, TF0, TF0, TF14, TF0), (TF2, TF1, TF1, TF14, TF0), |
| | (TF0, TF0, TF0, TF15, TF0), (TF1, TF0, TF0, TF15, TF0), (TF2, TF1, TF1, TF15, TF0), |
| | (TF0, TF0, TF0, TF16, TF0), (TF1, TF0, TF0, TF16, TF0), (TF2, TF1, TF1, TF16, TF0), |
| | (TF0, TF0, TF0, TF17, TF0), (TF1, TF0, TF0, TF17, TF0), (TF2, TF1, TF1, TF17, TF0), (TF0, TF0, TF0, TF18, TF0), (TF1, TF0, TF0, TF18, TF0), (TF2, TF1, TF1, TF18, TF0), |
| | (TF0, TF0, TF0, TF16, TF0), (TF1, TF0, TF0, TF16, TF0), (TF2, TF1, TF1, TF16, TF0), (TF0, TF0, TF0, TF1), (TF1, TF0, TF1), |
| | (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, TF1), (TF1, TF0, TF0, TF1), (TF2, TF1, TF1, TF1, TF1), (TF0, TF1), (TF0, TF1), (TF1, TF1, TF1, TF1, TF1), |
| | (TF0, TF0, TF8, TF1), (TF1, TF0, TF0, TF8, TF1), (TF2, TF1, TF1, TF8, TF1), |
| | (TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF9, TF1), (TF2, TF1, TF1, TF9, TF1), |
| | (TF0, TF0, TF10, TF1), (TF1, TF0, TF0, TF10, TF1), (TF2, TF1, TF1, TF10, TF1), |
| | (TF0, TF0, TF0, TF11, TF1), (TF1, TF0, TF0, TF11, TF1), (TF2, TF1, TF1, TF11, TF1), |
| | (TF0, TF0, TF1, TF12, TF1), (TF1, TF0, TF0, TF12, TF1), (TF2, TF1, TF1, TF12, TF1), (TF0, TF0, TF0, TF13, TF1), (TF1, TF0, TF0, TF13, TF1), (TF2, TF1, TF1, TF13, TF1), |
| | (TF0, TF0, TF1, TF13, TF1), (TF1, TF0, TF0, TF13, TF1), (TF2, TF1, TF1, TF14, TF1), |
| | (TF0, TF0, TF15, TF1), (TF1, TF0, TF0, TF15, TF1), (TF2, TF1, TF1, TF15, TF1), |
| | (TF0, TF0, TF16, TF1), (TF1, TF0, TF0, TF16, TF1), (TF2, TF1, TF1, TF16, TF1), |
| | (TF0, TF0, TF0, TF17, TF1), (TF1, TF0, TF0, TF17, TF1), (TF2, TF1, TF1, TF17, TF1), |
| | (TF0, TF0, TF0, TF18, TF1), (TF1, TF0, TF0, TF18, TF1), (TF2, TF1, TF1, TF18, TF1)) |

6.10.2.4.1.44.2.2 Physical channel parameters

| DPCH | DTX position | | Flexible |
|----------|------------------|---------------------------|----------|
| Downlink | 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 bbps 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, TF1, 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), |
| ĺ | (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 | Min spreading factor | 16 |
|--------|--------------------------|------|
| Uplink | Max number of DPDCH data | 2400 |
| | bits/radio frame | |
| | Puncturing Limit | 0.88 |

6.10.2.4.1.45.2 Downlink

6.10.2.4.1.45.2.1 Transport channel parameters

6.10.2.4.1.45.2.1.1 Transport channel parameters for Conversational / speech / DL:12.2 kbps / CS RAB See clause 6.10.2.4.1.4.2.1.1.

6.10.2.4.1.45.2.1.2 Transport channel parameters for Streaming / unknown / DL:57.6 kbps / CS RAB See clause 6.10.2.4.1.17.2.1.1.

6.10.2.4.1.45.2.1.3 Transport channel parameters for DL:3.4 kbps SRBs for DCCH See clause 6.10.2.4.1.2.2.1.1.

6.10.2.4.1.45.2.1.4 TFCS

| TFCS size | 30 |
|-----------|--|
| TFCS | (RAB subflow#1, RAB subflow#2, RAB subflow#3, 57.6 kbps RAB, DCCH)= |
| | (TF0, TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0, TF0), (TF2, TF1, TF1, TF0, TF0), |
| | (TF0, TF0, TF0, TF1, TF0), (TF1, TF0, TF0, TF1, TF0), (TF2, TF1, TF1, TF1, TF0), |
| | (TF0, TF0, TF0, TF2, TF0), (TF1, TF0, TF0, TF2, TF0), (TF2, TF1, TF1, TF2, TF0), |
| | (TF0, TF0, TF0, TF3, TF0), (TF1, TF0, TF0, TF3, TF0), (TF2, TF1, TF1, TF3, TF0), |
| | (TF0, TF0, TF0, TF4, TF0), (TF1, TF0, TF0, TF4, TF0), (TF2, TF1, TF1, TF4, TF0), |
| | (TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1), |
| | (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 | 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 |

6.10.2.4.1.46 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.

Transport channel parameters for Conversational / unknown / UL:64 kbps / CS RAB 6.10.2.4.1.49.1.1.2 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) |

Physical channel parameters 6.10.2.4.1.49.1.2

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

6.10.2.4.1.49a 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,TF1,TF0), (TF1,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,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 | Min spreading factor | 16 |
|--------|-------------------------------------|------|
| Uplink | Max number of DPDCH data bits/radio | 2400 |
| | frame | |
| | 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), (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,TF1), (TF1,TF0,TF0,TF0,TF1), (TF2,TF1,TF0,TF0,TF1), |
| | (TF3,TF2,TF0,TF1), (TF4,TF3,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 | 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 |

6.10.2.4.1.50 Conversational / unknown / UL:64 DL:64 kbps / CS RAB + Conversational / unknown / UL:64 DL:64 kbps / CS RAB + UL:3.4 bbps 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 | Min spreading factor | 8 |
|--------|--------------------------|------|
| Uplink | Max number of DPDCH data | 4800 |
| | bits/radio frame | |
| | 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 | 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 |

6.10.2.4.1.51 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 | Min spreading factor | 8 |
|--------|---|------|
| Uplink | 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 | 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 |

6.10.2.4.1.51a 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, 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 | Min spreading factor | 16 |
|--------|---|------|
| Uplink | 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, 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

| 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 |

6.10.2.4.1.51b 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/Signa | alling RB | RAB |
|--------------|---|--|---------|
| RLC | Logical channel type | | DTCH |
| | RLC mode | 9 | AM |
| | Payload s | izes, bit | 320 |
| | Max data | rate, bps | 16000 |
| | AMD PDU | header, bit | 16 |
| MAC | MAC head | der, 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: Ma | ax number of bits/radio frame before rate matching | 531 |
| | RM attribu | ite | 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 | Min spreading factor | 16 |
|--------|---|------|
| Uplink | 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 bps 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 | DTX position | | Flexible |
|----------|------------------|---------------------------|----------|
| Downlink | 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 | Min spreading factor | 4 |
|--------|--------------------------|------|
| Uplink | Max number of DPDCH data | 9600 |
| | bits/radio frame | |
| | 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 cl | nannel type | DTCH | DTCH |
| | RLC mod | e | AM | AM |
| | Payload s | sizes, bit | 320 | 320 |
| | Max data | rate, bps | 8000 | 8000 |
| | AMD PDI | J header, bit | 16 | 16 |
| MAC | MAC hea | der, bit | 4 | 4 |
| | MAC multiplexing | | 2 logical channel multiplexing | |
| Layer 1 | TrCH type | | DCH | |
| | TB sizes, | | 340 | |
| | TFS | TF0, bits | 0x3 | 40 |
| | | TF1, bits | 1x3 | 40 |
| | 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 | | 27 | 0 |
| | before rat | te matching | | |
| | 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 | Min spreading factor | 64 |
|--------|-------------------------------------|-----|
| Uplink | Max number of DPDCH data bits/radio | 600 |
| | frame | |
| | 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 | 3 | 40 |
| | TFS TF0, bits | 0x340 | |
| | TF1, bits | 1x | 340 |
| | 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 TFCI bits/slot | 2 |
| | | Number of TPC bits/slot | 2 |
| | | Number of Pilot bits/slot | 4 |
| | DPDCH | Number of data bits/slot | 32 |
| | | Number of data bits/frame | 480 |

6.10.2.4.1.57 Interactive or background / UL:64 DL:64 kbps / PS RAB + Interactive or background / UL:64 DL:64 kbps / PS RAB + UL:3.4 bps 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 channe | l multiplexing |
| Layer 1 | TrCH type | DCH | |
| | TB sizes, bit | 340 | |
| | TFS TF0, bits | 0x34 | 0 |
| | TF1, bits | 1x34 | 0 |
| | TF2, bits | 2x34 | 0 |
| | TF3, bits | 3x34 | 0 |
| | TF4, bits | 4x34 | 0 |
| | 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 | 2142 | 2 |
| | before rate matching | | |
| | RM attribute | 130-1 | 70 |

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 | Min spreading factor | 16 |
|--------|-------------------------------------|------|
| Uplink | Max number of DPDCH data bits/radio | 2400 |
| | frame | |
| | 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 mo | de | AM | AM |
| | Payload | sizes, bit | 320 | 320 |
| | Max data | a rate, bps | 64000 | 64000 |
| | AMD PD | OU 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 | 1x3 | 340 |
| | | 2x340 | 2x3 | 340 |
| | 3x340 | | 3x340 | |
| | | 4x340 | 4x3 | 340 |
| | 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 | 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 |

6.10.2.4.1.58 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 | 534 |
| | before rate matching | |
| | 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 | Min spreading factor | 32 |
|--------|-------------------------------------|------|
| Uplink | Max number of DPDCH data bits/radio | 1200 |
| | frame | |
| | 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/Sig | nalling RB | RAB |
|-----------------|-----------------|---------------------------------------|---------|
| RLC | Logical | channel type | DTCH |
| | RLC mo | | AM |
| | Payload | sizes, bit | 640 |
| | Max data | a rate, bps | 64000 |
| | AM PDU | header, bit | 16 |
| MAC | MAC header, bit | | 0 |
| | MAC mu | ıltiplexing | 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 t | ype | TC |
| | CRC, bit | | 16 |
| | Max nun | nber of bits/TTI after channel coding | 8076 |
| | RM attril | oute | 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 | 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 |

6.10.2.4.2 Combinations on PDSCH and DPCH

6.10.2.4.2.1 Void

6.10.2.4.2.2 Interactive or background / UL:64 DL:384 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs

for DCCH

6.10.2.4.2.2.1 Uplink

See clause 6.10.2.4.1.26.1.

6.10.2.4.2.2.2 Downlink

6.10.2.4.2.2.2.1 Transport channel parameters

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

| Higher layer | RAB/Signalling RB | RAB |
|-----------------|---|--|
| RLC | Logical channel type | DTCH |
| | RLC mode | AM |
| | Payload sizes, bit | 320 |
| | Max data rate, bps | 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.

6.10.2.4.2.2.2.1.3 TFCS

| PDSCH | TFCS 6 (alt.9) size | |
|-----------------------------|---------------------|--|
| | TFCS | 384 kbps RAB = TF0, TF1, TF2, TF3, TF4, TF5 |
| | | (alt. TF0, TF1, TF2, TF3, TF4, TF5, TF6, TF7, TF8) |
| DPCH | TFCS | 2 |
| Downlink | size | |
| associated with PDSCH | 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 | RAB or SRB, TrCh | | 3.4 kbps SRB for DCCH, DCH |
| Downlink associated | DTX position | | N/A (SingleTrCH) |
| | Spreading factor | | 256 |
| with | DPCCH | Number of TFCI bits/slot | 2 |
| PDSCH | | 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 | RAB/Signalling RB | RAB |
|---------|----------------------|--|
| layer | | D.T.O.L. |
| 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 |
| | 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) |

| Higher layer | RAB/Signalling RB | RAB | | |
|-----------------|---|---------------------|--|--|
| | 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 | TFCS size | 2 |
| associated with PDSCH | TFCS | SRBs for DCCH = TF0, TF1 |

6.10.2.4.2.3.2.2 Physical channel parameters

| PDSCH | RAB or SRB, TrCh DTX position | | Interactive or background / 2048 kbps / PS RAB, DSCH | |
|------------|--------------------------------|---------------------------|--|--|
| | | | N/A (SingleTrCH) | |
| | Minimum spreading factor | | 4 | |
| DPCH | RAB or SRB, TrCh | | 3.4 kbps SRB for DCCH, DCH | |
| Downlink | DTX position | | N/A (SingleTrCH) | |
| associated | Spreading factor | | 256 | |
| with | DPCCH | Number of TFCI bits/slot | 2 | |
| PDSCH | | 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) |
|------------|--------------|---|
| | | 384 kbps RAB = TF0, TF1, TF2, TF3, TF4, TF5 |
| | | (alt. TF0, TF1, TF2, TF3, TF4, TF5, TF6, TF7, TF8) |
| DPCH | TFCS | 6 |
| Downlink | size | |
| associated | TFCS | (RAB subflow#1, RAB subflow#2, RAB subflow#3, DCCH) = |
| with | | (TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0), (TF2, TF1, TF1, TF0), |
| PDSCH | | (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 | RAB or SRB, TrCh | | Conversational / speech / 12.2 kbps / CS RAB, DCH + 3.4 kbps SRBs for DCCH. DCH | |
| with | DTX position | | Fixed | |
| PDSCH | 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 Number of data bits/frame | | 32 | |
| | | | 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 | TFCS size | 6 |
| associated with PDSCH | TFCS | (RAB subflow#1, RAB subflow#2, RAB subflow#3, DCCH) = (TF0, TF0, TF0, TF0), (TF1, TF0, TF0), (TF2, TF1, TF1, TF0), (TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF1) |

6.10.2.4.2.6.2.2 Physical channel parameters

| PDSCH | CH RAB or SRB, TrCh | | Interactive or background / 2048 kbps / PS RAB, DSCH | | |
|--------------------------------|--------------------------------|---------------------------|---|--|--|
| DTX position | | | N/A (SingleTrCH) | | |
| | Minimum spreading factor | | 4 | | |
| DPCH Downlink associated | RAB or SRB, TrCh | | Conversational / speech / 12.2 kbps / CS RAB, DCH + 3.4 kbps SRBs for DCCH. DCH | | |
| with | DTX position | | Fixed | | |
| PDSCH | 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 RI | 3 | SRB | | |
|--------------|--------------------|--------------------|-------------------|--|--|
| | User of Radio Bea | arer | RRC | | |
| RLC | Logical channel ty | /pe | PCCH | | |
| | RLC mode | | TM | | |
| | Payload sizes, bit | | 240 (alt. 80) | | |
| | Max data rate, bp | S | 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 ½ | | |
| | CRC, bit | | 16 | | |
| | Max number of bi | ts/TTI before rate | 528 (alt. 208) | | |
| | matching | | | | |
| | 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 TFCI bits/slot | 0 |
| | Number of Pilot bits/slot | 0 |
| | Number of data bits/slot | 40(alt. 20) |
| | Number of data bits/frame | 600(alt. 300) |

6.10.2.4.3.2 Interactive/Background 32 kbps PS RAB + SRBs for CCCH + SRB for DCCH + SRB for BCCH

6.10.2.4.3.2.1 Transport channel parameters

6.10.2.4.3.2.1.1 Transport channel parameters for Interactive/Background 32 kbps PS RAB

| Higher | RAB/signalling RB | RAB | | |
|---------|---|-----------------------------|--|--|
| layer | 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 | 24 | | |
| IVIAC | 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 | RAB/signalling RB | | SRB#0 | SRB#1 | SRB#2 | SRB#3 | SRB#4 | SRB#5 | |
|---------|-------------------------------|--------------------|--------------------------------|--|-----------------------|-----------------------|-----------------------|-----------------------|--|
| layer | User of Rad | dio Bearer | RRC | RRC | RRC | NAS_DT | NAS_DT | RRC | |
| | | | | | | High prio | Low prio | | |
| RLC | Logical cha | nnel type | CCCH | DCCH | DCCH | DCCH | DCCH | BCCH | |
| | RLC mode | | UM | UM | AM | AM | AM | TM | |
| | Payload siz | es, bit | 152 | 136 or 120 (note) | 128 | 128 | 128 | 166 | |
| | Max data ra | ate, 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/ bit | TrD PDU header, | 8 | 8 | 16 | 16 | 16 | 0 | |
| MAC | MAC header, bit | | 8 | 24 or 40 | 24 | 24 | 24 | 2 | |
| IVIAC | MAC multiplexing | | 6 logical channel multiplexing | | | | | | |
| Layer 1 | TrCH type | | FACH | | | | | | |
| | TB sizes, bit | | 168 | | | | | | |
| | | TF0, bits | 0x168 | | | | | | |
| | TFS | TF1, bits | 1x168 | | | | | | |
| | 1173 | TF2, bits | 2x168 | | | | | | |
| | | TF3, bits | N/A (alt. 3x168) | | | | | | |
| | TTI, ms | TTI, ms | | 10 | | | | | |
| | Coding type | | CC ½ | | | | | | |
| | CRC, bit | | 16 | | | | | | |
| | Max number of bits/TTI before | | 752 (alt. 1136) | | | | | | |
| | rate matchi | ng | | , , , | | | | | |
| | RM attribute | | | | 200- | 240 | | | |
| NOTE: | MAC header | size and PLC paylo | ad size depe | nd on use of | U-RNTI or C | -RNTI. | | | |

6.10.2.4.3.2.1.3 TFCS

| TFCS siz | е | 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 TF | Cs are available only if SCCPCH can be allocated bigger Tx power than required Tx power for |
| | TFC of (T | F2, 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/Sign | alling RB | RAB | RAB | |
|-----------------|-------------------------|--------------------------------------|--------------------------------|-------|--|
| RLC | .C Logical channel type | | DTCH | DTCH | |
| | RLC mode | e | AM | AM | |
| | Payload s | izes, bit | 320 | 320 | |
| | Max data | rate, bps | 32000 | 32000 | |
| | AMD PDU | J header, bit | 16 | 16 | |
| MAC | MAC head | der, 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 ty | pe | TC | | |
| | CRC, bit | | 16 | | |
| | Max numb | per of bits/TTI after channel coding | 1140 | | |
| | RM attribu | ute | 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 siz | e 4 or 5 (alt. 4. 5 or 6) |
|----------|---|
| 1703 812 | 3 4 01 5 (alt. 4, 5 01 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, TF1), |
| | [TF1, TF0, TF1] (see note), [TF0, TF1, TF1] (see note) for 80 bits PCH TrBlk size and TF3 used) |
| NOTE: The | se 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 TF | -0, bts | 0x168 | | |
| | TF | -1, bits | 1x168 | | |
| | TTI, ms | | 10 | | |
| | Coding type | | CC 1/3 | | |
| | CRC, bit | | 16 | | |
| | Max number of bits/TT | T before rate | 576 | | |
| | matching | | | | |
| | RM attribute | | 200-240 | | |

6.10.2.4.3.4.1.2 Transport channel parameters of SRB for CCCH and SRB for BCCH

| Higher | RAB/signalling RB | | SRB#0 | SRB#5 | |
|---------|------------------------|----------------|--------------------------------|-------|--|
| layer | User of Radio Bearer | | RRC | RRC | |
| RLC | Logical channel type | | CCCH | BCCH | |
| | RLC mode | | UM | TM | |
| | Payload size | s, bit | 152 | 166 | |
| | Max data rat | e, bps | 15200 | 16600 | |
| | AMD/UMD/T | rD PDU header, | 8 | 0 | |
| | bit | | | | |
| MAC | MAC header, bit | | 8 | 2 | |
| IVIAC | MAC multiplexing | | 2 logical channel multiplexing | | |
| Layer 1 | TrCH type | | FACH | | |
| | TB sizes, bit | | 168 | | |
| | TFS | TF0, bits | 0x168 | | |
| | 115 | TF1, bits | 1x168 | | |
| | TTI, ms | | 10 | | |
| | Coding type | | CC 1/3 | | |
| | CRC, bit | | 16 | | |
| | Max number of bits/TTI | | 576 | | |
| | before rate r | natching | | | |
| | 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 TFCI bits/slot | 2 | | |
| | Number of Pilot bits/slot | 0 | | |
| | Number of data bits/slot | 38 | | |
| | Number of data bits/frame | 570 | | |

6.10.2.4.4 Combinations on PRACH

6.10.2.4.4.1 Interactive/Background 32 kbps PS RAB + SRB for CCCH + SRB for DCCH

6.10.2.4.4.1.1 Transport channel parameters

6.10.2.4.4.1.1.1 Transport channel parameter for Interactive/Background 32 kbps PS RAB, SRB for CCCH, SRB for DCCH

| Higher | RAB/signalling RB | RAB | SRB#0 | SRB#1 | SRB#2 | SRB#3 | SRB#4 |
|---------|--|-----------------------------------|-------------------|-------------------|-------------------|---------------------|--------------------|
| layer | 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 |
| 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 | | | 1x3 | 60 | | |
| | TTI, ms | 20 (alt. 10) | | | | | |
| | Coding type | CC ½ | | | | | |
| | 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 | RAB/signalling RB | RAB | RAB | SRB#0 | SRB#1 | SRB#2 | SRB#3 | SRB#4 |
|--------|--|-----------------------------------|-----------------------------------|-------------------|-------------------|-------------------|---------------------|--------------------|
| layer | 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 |
| MAC | MAC header, bit | 24 | 24 | 2 | 24 | 24 | 24 | 24 |
| | MAC multiplexing | 7 logical channel multiplexing | | | | | | |
| Layer | TrCH type | rCH type RACH | | | | | | |
| 1 | TB sizes, bit | 360 | 360 | 168 | 168 | 168 | 168 | 168 |
| | TFS TF0, bits TF1, bits | | 1x168 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 | | | | Consisses |
|------------------------------|--------------------|------------------------------|-------|--|--|
| Traffic class ^[3] | SSD ^[3] | Max. rate, kbps | CS/PS | BER ^[3] | Services |
| Conversational | Speech | UL:4.75-12.2 DL:4.75-12.2 | CS | 5x10 ⁻⁴ , 1x10 ⁻³ , 5x10 ⁻³ | AMR speech |
| Conversational | Unknown | UL:64 DL:64 | cs | 1x10 ⁻⁴ or 1x10 ⁻⁶ | UDI 1B, 64k 3G-324M ^[4] |
| Conversational | Unknown | UL:32 DL:32 | cs | 1x10 ⁻⁴ or 1x10 ⁻⁶ | 32k 3G-324M ^[4] |
| Conversational | Unknown | UL:28.8 DL:28.8 | CS | 1x10 ⁻³ | Transparent modem |
| Streaming | Unknown | UL:14.4 DL:14.4 | CS | 1x10 ⁻³ | FAX ^[6] |
| Streaming | Unknown | UL:28.8 DL:28.8 | cs | 1x10 ⁻³ | FAX ^[6] PIAFS 32 kbps |
| Streaming | Unknown | UL:57.6 DL:57.6 | CS | 1x10 ⁻³ | Modem ^[6] , FTM ^[5] , PIAFS 64 kbps |
| | | | | | |
| Streaming | Unknown | UL:64-128 or DL:64-384 | cs | 1x10 ⁻³ or 1x10 ⁻⁴ | Streaming video, uni-directional |
| Interactive or Background | N/A | UL:32-384 DL:8-2048 | PS | 1x10 ⁻³ or 1x10 ⁻⁴ | Packet |

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

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

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

6.10.3.4 Typical radio parameter sets

6.10.3.4.1 Combinations on DPCH

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

6.10.3.4.1.1.1 Uplink

6.10.3.4.1.1.1 Transport channel parameters

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

| Higher layer | RAB/signalling RB | RAB/signalling RB | | SRB#2 | SRB#3 | SRB#4 | | |
|--------------|---------------------|------------------------------------|--------------------------------|--------|-----------|----------|--|--|
| | User of Radio Bear | User of Radio Bearer | | RRC | NAS_DT | NAS_DT | | |
| | | | | | High prio | Low prio | | |
| RLC | Logical channel typ | е | 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 he | AMD/UMD PDU header, bit | | 16 | 16 | 16 | | |
| MAC | MAC header, bit | MAC header, bit | | 4 | 4 | 4 | | |
| | MAC multiplexing | | 4 logical channel multiplexing | | | | | |
| Layer 1 | TrCH type | TrCH type | | DCH | | | | |
| | TB sizes, bit | | | 148 | | | | |
| | TFS | TFS TF0, bits | | 0x1 | 48 | | | |
| | | TF1, bits | | 1x148 | | | | |
| | TTI, ms | | 80 | | | | | |
| | Coding type | Coding type | | CC 1/3 | | | | |
| | CRC, bit | | 16 | | | | | |
| | Max number of bits | Max number of bits/TTI before rate | | 516 | | | | |
| | matching | matching | | | | | | |
| | Max number of bits | /radio frame before | | 6 | 5 | | | |
| | rate matching | | | | | | | |

6.10.3.4.1.1.1.2 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 Bear | User of Radio Bearer | | | NAS_DT | NAS_DT | | | |
| | | | | | High prio | Low prio | | | |
| RLC | Logical channel typ | е | 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 he | AMD/UMD PDU header, bit | | 16 | 16 | 16 | | | |
| MAC | MAC header, bit | MAC header, bit | | 4 | 4 | 4 | | | |
| | MAC multiplexing | | 4 logical channel multiplexing | | | | | | |
| Layer 1 | TrCH type | TrCH type | | DCH | | | | | |
| | TB sizes, bit | TB sizes, bit | | | 148 | | | | |
| | TFS | TFS TF0, bits | | 0 x148 | | | | | |
| | | TF1, bits | 1x148 | | | | | | |
| | TTI, ms | TTI, ms | | | 80 | | | | |
| | Coding type | Coding type | | | CC 1/3 | | | | |
| | CRC, bit | | 16 | | | | | | |
| | Max number of bits | Max number of bits/TTI before rate | | 516 | | | | | |
| | matching | matching | | | | | | | |
| | Max number of bits | Max number of bits/radio frame before | | | 5 | | | | |
| | rate matching | | | | | | | | |

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 | RAB/signalling RB | | SRB#2 | SRB#3 | SRB#4 | |
|--------------|------------------------|----------------------|------|--------------------------------|-----------|----------|--|
| | User of Radio Bearer | User of Radio Bearer | | RRC | NAS_DT | NAS_DT | |
| | | | | | High prio | 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 heade | r, bit | 8 | 16 | 16 | 16 | |
| MAC | MAC header, bit | MAC header, bit | | 4 | 4 | 4 | |
| | MAC multiplexing | MAC multiplexing | | 4 logical channel multiplexing | | | |
| Layer 1 | TrCH type | TrCH type | | DCH | | | |
| | TB sizes, bit | TB sizes, bit | | 148 | | | |
| | TFS T | TFS TF0, bits | | 0x148 | | | |
| | T | F1, bits | | 1x1 | 48 | | |
| | TTI, ms | TTI, ms | | 40 | | | |
| | Coding type | Coding type | | CC 1/3 | | | |
| | CRC, bit | | | 16 | | | |
| | Max number of bits/TTI | before rate | 516 | | | | |
| | matching | | | | | | |
| | Max number of bits/rad | lio frame before | | 12 | 29 | | |
| | rate matching | | | | | | |
| | 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 23 | | | |
| | 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 Bear | User of Radio Bearer | | RRC | NAS_DT | NAS_DT | | |
| | | | | | High prio | Low prio | | |
| RLC | Logical channel typ | е | 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 he | ader, bit | 8 | 16 | 16 | 16 | | |
| MAC | MAC header, bit | MAC header, bit | | 4 | 4 | 4 | | |
| | MAC multiplexing | MAC multiplexing | | 4 logical channel multiplexing | | | | |
| Layer 1 | TrCH type | TrCH type | | DCH | | | | |
| | TB sizes, bit | | | 148 | | | | |
| | TFS | TF0, bits | 0x148 | | | | | |
| | | TF1, bits | 1x148 | | | | | |
| | TTI, ms | TTI, ms | | 40 | | | | |
| | Coding type | | CC 1/3 | | | | | |
| | CRC, bit | | | 16 | | | | |
| | | Max number of bits/TTI before rate | | 516 | | | | |
| | matching | | | | | | | |
| | | Max number of bits/radio frame before | | 12 | 29 | | | |
| | rate matching | | | | | | | |
| | 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 Bear | User of Radio Bearer | | RRC | NAS_DT | NAS_DT | |
| | | | | | High prio | Low prio | |
| RLC | Logical channel typ | е | 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 he | eader, bit | 8 | 16 | 16 | 16 | |
| MAC | MAC header, bit | | 4 | 4 | 4 | 4 | |
| | MAC multiplexing | MAC multiplexing | | 4 logical channel multiplexing | | | |
| Layer 1 | TrCH type | TrCH type | | DCH | | | |
| | TB sizes, bit | TB sizes, bit | | 148 | | | |
| | TFS | TF0, bits | 0x148 | | | | |
| | | TF1, bits | | 1x | 148 | | |
| | TTI, ms | | 10 | | | | |
| | Coding type | Coding type | | CC 1/3 | | | |
| | CRC, bit | | 16 | | | | |
| | Max number of bits | Max number of bits/TTI before rate | | 5 | 16 | | |
| | matching | matching | | | | | |
| | Max number of bits rate matching | Max number of bits/radio frame before rate matching | | 5 | 16 | | |

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 cips | | |
|-------------|--------------------------------------|----------------------------|--|--|
| | 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 | RAB/signalling RB | | SRB#2 | SRB#3 | SRB#4 | |
|--------------|-------------------------------------|---|--------------------------------|--------|-----------|----------|--|
| | User of Radio Bear | User of Radio Bearer | | RRC | NAS_DT | NAS_DT | |
| | | | | | High prio | Low prio | |
| RLC | Logical channel typ | е | 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 he | AMD/UMD PDU header, bit | | 16 | 16 | 16 | |
| MAC | MAC header, bit | MAC header, bit | | 4 | 4 | 4 | |
| | MAC multiplexing | | 4 logical channel multiplexing | | | | |
| Layer 1 | TrCH type | TrCH type | | DCH | | | |
| | TB sizes, bit | TB sizes, bit | | 148 | | | |
| | TFS | TFS TF0, bits | | 0x148 | | | |
| | | TF1, bits | 1x148 | | | | |
| | TTI, ms | TTI, ms | | 10 | | | |
| | Coding type | Coding type | | CC 1/3 | | | |
| | CRC, bit | | | 16 | | | |
| | Max number of bits matching | Max number of bits/TTI before rate matching | | 51 | 6 | | |
| | Max number of bits rate matching | Max number of bits/radio frame before rate matching | | 51 | 6 | | |

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 | |
| ИАС | MAC header, bit | | 0 | |
| | MAC multiplexing | | N/A | |
| _ayer 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 ½ |
| | 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/Signal | lling RB | RAB subflow #1 | RAB subflow #2 | RAB subflow #3 |
|-----------------|------------------------|---------------------------------|----------------|----------------|----------------|
| RLC | Logical cha | nnel type | | DTCH | |
| | RLC mode | • | TM | TM | TM |
| | Payload siz | es, bit | 0, 39, 81 | 103 | 60 |
| | Max data ra | ate, bps | | 12200 | |
| | TrD PDU he | eader, bit | | 0 | |
| MAC | MAC heade | er, bit | | 0 | |
| | MAC multip | lexing | | N/A | |
| Layer 1 | TrCH type | | DCH | DCH | DCH |
| | TB sizes, bi | it | 0 39 81 | 103 | 60 |
| | TFS | TF0, bits | 1x0 (note 2) | 0x103 | 0x60 |
| | (note 1) | TF1, bits | 1x39 | 1x103 | 1x60 |
| | | TF2, bits | 1x81 | N/A | N/A |
| | TTI, ms | | 20 | 20 | 20 |
| | Coding type | Э | CC 1/3 | CC 1/3 | CC ½ |
| | CRC, bit | | 12 | N/A | N/A |
| | Max number channel cod | er of bits/TTI after ding | 303 | 333 | 136 |
| | Max number before rate | er of bits/radio frame matching | 152 | 167 | 68 |
| | RM attribute | е | 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). CRC parity bits are to be attached to RAB subflow#1 any time since number of TrBlks are 1 even if NOTE 2: 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/Sigi | nalling RB | RAB subflow #1 | RAB subflow #2 | RAB subflow #3 |
|-----------------|---|-------------------------------------|----------------------------|----------------|----------------|
| RLC | Logical channel type | | | DTCH | |
| | RLC mod | | 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 hea | ader, bit | | 0 | |
| | MAC multiplexing | | | N/A | |
| _ayer 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 ½ |
| | CRC, bit | | 12 | N/A | N/A |
| | Max number of bits/TTI after channel coding | | 255 | 321 | 96 |
| | | ber of bits/radio frame te 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 39 65 | 99 | 40 |
| | TFS TF0, bits | 1x0 (note 2) | 0x99 | 0x40 |
| | (note 1) 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 ½ |
| | 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).
CRC parity bits are to be attached to RAB subflow#1 any time since number of TrBlks are 1 even if NOTE 2: 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 | DTO | CH | |
| | RLC mode | TM | TM | |
| | Payload sizes, bit | 39, 75 (alt. 0, 39, 75) | 84 | |
| | Max data rate, bps | 795 | 7950 | |
| | TrD PDU header, bit | 0 | | |
| MAC | MAC header, bit | 0 | | |
| | MAC multiplexing | N/A | A | |
| Layer 1 | TrCH type | DCH | DCH | |
| | TB sizes, bit | 39, 75 (alt. 0, 39, 75) | 84 | |
| | TFS TF0, bits | 0x75 (alt. 1x0) (note) | 0x84 | |
| | TF1, bits | 1x39 | 1x84 | |
| | TF2, bits | 1x75 | N/A | |
| | TTI, ms | 20 | 20 | |
| | Coding type | CC 1/3 | CC 1/3 | |
| | CRC, bit | 12 | N/A | |
| | Max number of bits/TTI after channel coding | 285 | 276 | |
| | Max number of bits/radio frame before rate | 143 | 138 | |
| | matching | 100,000 | 170.010 | |
| | RM attribute | 180-220 | 170-210 | |
| | In case of using this alternative, CRC parity bits are of TrBlks are 1 even if there is no data on RAB subf | | | |

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 | DT | DTCH | |
| | RLC mode | TM | TM | |
| | Payload sizes, bit | 0, 39, 75 | 84 | |
| | Max data rate, bps | 79 | 50 | |
| | TrD PDU header, bit | (|) | |
| MAC | MAC header, bit | (|) | |
| | MAC multiplexing | N/A | | |
| Layer 1 | TrCH type | DCH | DCH | |
| | TB sizes, bit | 0, 39, 75 | 84 | |
| | TFS TF0, bits | 1x0 (note 2) | 0x84 | |
| | (note 1) 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 | 143 | 138 | |
| | matching 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 | DT | DTCH | |
| | RLC mode | TM | TM | |
| | Payload sizes, bit | 39, 61 (alt. 0, 39, 61) | 87 | |
| | Max data rate, bps | 74 | 7400 | |
| | TrD PDU header, bit | |) | |
| MAC | MAC header, bit | |) | |
| | 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 coo | ding 243 | 285 | |
| | Max number of bits/radio frame before ra | ite 122 | 143 | |
| | matching | | | |
| | RM attribute | 180-220 | 170-210 | |
| | CRC parity bits are to be attached to RAB s no data on RAB subflow#1 (see clause 4.2. | | rBlks are 1 even if there is | |

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/Signa | alling RB | RAB subflow #1 | RAB subflow #2 | |
|-----------------|---|-------------------------------------|----------------|----------------|--|
| RLC | Logical ch | annel type | DT | DTCH | |
| | RLC mode | | TM | TM | |
| | Payload s | izes, bit | 0, 39, 61 | 87 | |
| | Max data | rate, bps | 74 | 00 | |
| | TrD PDU I | header, bit | (|) | |
| MAC | MAC header, bit | | (|) | |
| | MAC multiplexing | | N/ | /A | |
| Layer 1 | TrCH type | | DCH | DCH | |
| | TB sizes, bit | | 0, 39, 61 | 87 | |
| | TFS | TF0, bits | 1x0 (note 2) | 0x87 | |
| | (note 1) | 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 numb matching | per of bits/radio frame before rate | 122 | 143 | |
| | RM attribu | ite | 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 | DTO | DTCH | |
| | RLC mode | TM | TM | |
| | Payload sizes, bit | 39, 58 (alt. 0, 39, 58) | 76 | |
| | Max data rate, bps | 670 | 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 | |
| | Max number of bits/radio frame before rate | 117 | 126 | |
| | matching | | | |
| | RM attribute | 180-220 | 170-210 | |
| NOTE: | 3 · · · · · · · · · · · · · · · · · · · | | | |
| | of TrBlks are 1 even if there is no data on RAB subf | low#1 (see clause 4.2.1.1 in T | S 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/Signa | alling RB | RAB subflow #1 | RAB subflow #2 |
|-----------------|----------------------|-------------------------------------|----------------|----------------|
| RLC | Logical channel type | | DT | CH |
| | RLC mode | | TM | TM |
| | Payload si | zes, bit | 0, 39, 58 | 76 |
| | Max data i | ate, bps | 6700 | |
| | TrD PDU ł | neader, bit | | 0 |
| MAC | MAC head | ler, bit | | 0 |
| | MAC multiplexing | | N | /A |
| Layer 1 | TrCH type | | DCH | DCH |
| | TB sizes, b | | 0 | 76 |
| | | | 39 | |
| | | | 58 | |
| | TFS | TF0, bits | 1x0 (note 2) | 0x76 |
| | (note 1) | TF1, bits | 1x39 | 1x76 |
| | | TF2, bits | 1x58 | N/A |
| | TTI, ms | | 20 | 20 |
| | Coding typ | oe e | CC 1/3 | CC 1/3 |
| | CRC, bit | | 12 | N/A |
| | Max numb | er of bits/TTI after channel coding | 234 | 252 |
| | Max numb matching | er of bits/radio frame before rate | 117 | 126 |
| | RM attribu | te | 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 | DTO | DTCH | |
| | RLC mode | TM | TM | |
| | Payload sizes, bit | 39, 55 (alt. 0, 39, 55) | 63 | |
| | Max data rate, bps | 590 | 00 | |
| | 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 |
| | TFCI 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 | DTO | DTCH | |
| | RLC mode | TM | TM | |
| | Payload sizes, bit | 0, 39, 55 | 63 | |
| | Max data rate, bps | 590 | 00 | |
| | 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 TF0, bits | 1x0 (note 2) | 0x63 | |
| | (note 1) 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// | Α |
| Layer 1 | TrCH type | DCH | DCH |
| - | TB sizes, bit | 39, 49 (alt. 0, 39, 49) | 54 |
| | TFS TF0, bits | 0x49 (alt. 1x0) (note) | 0x54 |
| | TF1, bits | 1x39 | 1x54 |
| | TF2, bits | 1x49 | N/A |
| | TTI, ms | 20 | 20 |
| | Coding type | CC 1/3 | CC 1/3 |
| | CRC, bit | 12 | N/A |
| | Max number of bits/TTI after channel coding | 207 | 186 |
| | Max number of bits/radio frame before rate matching | 104 | 93 |
| i | 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 | |
| l | MAC multiplexing | N/A | |
| Layer 1 | TrCH type | DCH | DCH |
| | TB sizes, bit | 0, 39, 49 | 54 |
| | TFS TF0, bits | 1x0 (note 2) | 0x54 |
| | (note 1) 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 | RAB/Signalling RB | RAB subflow #1 | RAB subflow #2 |
|---------|---|-------------------------|----------------|
| Layer | | | |
| 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 |
| | Max number of bits/radio frame before rate | 93 | 92 |
| | matching | | |
| | 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.

6.10.3.4.1.11.1.3 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 TF0, bits | 1x0 (note 2) | 0x53 |
| | (note 1) 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 | RAB/Signalling F | RB | RAB |
|--------------|---|-----------------------------|-------------------|
| Layer RLC | Logical channel t | N/DA | DTCH |
| KLC | RLC mode | уре | TM |
| | Payload sizes, bi | t | 640 |
| | Max data rate, by | | 64000 |
| | TrD PDU header | | 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 b | its/radio frame before rate | 1974(alt. 1971) |
| | matching | | |
| | 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, k | oit | 640 |
| | Max data rate, b | | 64000 |
| | TrD PDU heade | | 0 |
| MAC | MAC header, bi | t | 0 |
| | MAC multiplexing | ng | 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 | 1974(alt. 1971) |
| | matching | | • |
| | 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 | RAB/Signalling RB | RAB |
|---------|---|-------------------|
| Layer | | |
| 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 | 990(alt. 987) |
| | matching | |
| | 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 | RAB/Signalling RB | RAB |
|--------------|---|-------------------|
| Layer RLC | Logical channel type | DTCH |
| KLC | 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 | 990(alt. 987) |
| | matching | |
| | 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 | RAB/Signalling RB | RAB |
|---------|---|---------|
| Layer | | |
| 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 | 447 |
| | matching | |
| | 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 |
| INLO | 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 | 447 |
| | matching | |
| | 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 | RAB/Signalling RB | RAB |
|--------------|---|---------|
| Layer 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 | RAB/Signalling RB | RAB |
|--------------|---|---------|
| Layer RLC | Logical channel type | DTCH |
| IXLO | 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 |
|-----------|---|
| | (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 | 1779 |
| | matching | |
| | 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

Transport channel parameters for Streaming / unknown / UL:0 kbps / CS or PS RAB 6.10.3.4.1.18.1.1.1

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

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/Sig | nalling RB | RAB |
|-----------------|---|---------------|---------|
| RLC | Logical channel type | | DTCH |
| | RLC mo | | TM |
| | Payload | sizes, bit | 320 |
| | Max data | a rate, bps | 64000 |
| | TrD PDU | J 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 | | 2019 |
| | matching | | |
| | 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 | 4038 |
| | matching | |
| | 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 | 4038 |
| | rate matching | |
| | 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 |

6.10.3.4.1.21.2.1 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 |

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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/Sig | nalling RB | RAB |
|-----------------|---|----------------|------------------|
| RLC | Logical channel type | | DTCH |
| | RLC mo | | AM |
| | Payload | sizes, bit | 320 |
| | Max data | a rate, bps | 8000 |
| | AMD PD | OU header, bit | 16 |
| MAC | MAC he | ader, bit | 0 |
| | MAC multiplexing | | N/A |
| Layer 1 | TrCH type | | DCH |
| | TB sizes | | 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 | | 267 (alt. 270) |
| | matching | | |
| | RM attril | bute | 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

6.10.3.4.1.24.1.1 Transport channel parameters

Uplink

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

| Higher Layer | RAB/Sig | nalling RB | RAB |
|-----------------|---|---------------|---------|
| RLC | Logical channel type | | DTCH |
| | RLC mod | de | AM |
| | Payload | sizes, bit | 320 |
| | Max data | a rate, bps | 64000 |
| | AMD PD | U header, bit | 16 |
| MAC | MAC hea | ader, bit | 0 |
| | MAC mu | Itiplexing | 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 ty | | 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 |
|-----------|---|
| | (64 kbps RAB, DCCH)= (TEO, TEO), (TEO, TEO), (TEO, TEO), (TEO, TEO) |
| | (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 | 4230 |
| | matching | |
| | 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 | 4758 |
| | matching | |
| | 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 | RAB/Signalling RB | RAB |
|--------|----------------------|--------|
| Layer | | |
| 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 | 12684 |
| | matching | |
| | 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 | RAB/Signalling RB | RAB |
|---------|---|---------------------|
| Layer | | |
| 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

01\D3 101 DC

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, TF1, 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, 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, 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, TF1), (TF1, TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1), |
| | (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, TF0, TF0, TF0, TF0, TF0, |
| | (TF0, TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1), (TF0, TF1), (TF1, TF0, TF1), |
| | (TF0, TF0, TF1, TF1), (TF1, TF0, TF0, TF1, TF1), (TF2, TF1, TF1, TF1, TF1), |
| | (TF0, TF0, TF2, TF1), (TF1, TF0, TF0, TF2, TF1), (TF2, TF1, TF1, TF2, TF1), |
| | (TF0, TF0, TF3, TF1), (TF1, TF0, TF0, TF3, TF1), (TF2, TF1, TF1, TF3, TF1), |
| | (TF0, TF0, TF4, TF1), (TF1, TF0, TF0, TF4, TF1), (TF2, TF1, TF1, TF4, TF1) |
| | (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, TF7, TF1), (TF1, TF0, TF0, TF7, TF1), (TF2, TF1, TF1, TF7, TF1) |
| | (TF0, TF0, TF8, TF1), (TF1, TF0, TF0, TF8, TF1), (TF2, TF1, TF1, TF8, TF1)) |
| | [(11 0, 11 0, 11 0, 11 0, 11 1), (11 1, 11 0, 11 0, 11 1), (11 2, 11 1, 11 1, 11 0, 11 1)] |

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.

6.10.3.4.1.44.2.1.4 TFCS

| TFCS size | 66 (alt. 114) |
|-----------|---|
| 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, TF5, TF0), (TF1, TF0, TF0, TF5, TF0), (TF2, TF1, TF1, TF5, TF0), |
| | (TF0, TF0, TF6, TF0), (TF1, TF0, TF0, TF6, TF0), (TF2, TF1, TF1, TF6, TF0), |
| | (TF0, TF0, TF0, TF7, TF0), (TF1, TF0, TF0, TF7, TF0), (TF2, TF1, TF1, TF7, TF0), |
| | (TF0, TF0, TF0, TF8, TF0), (TF1, TF0, TF0, TF8, TF0), (TF2, TF1, TF1, TF8, TF0), |
| | (TF0, TF0, TF0, TF9, TF0), (TF1, TF0, TF0, TF9, TF0), (TF2, TF1, TF1, TF9, TF0), |
| | (TF0, TF0, TF0, TF10, TF0), (TF1, TF0, TF0, TF10, TF0), (TF2, TF1, TF1, TF10, TF0), |
| | (TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1), (TF0, TF0, TF1, TF1), (TF1, TF0, TF0, TF1, TF1), (TF2, TF1, TF1, TF1, TF1), |
| | (TF0, TF0, TF2, TF1), (TF1, TF0, TF0, TF2, TF1), (TF2, TF1, TF1, TF2, TF1), |
| | (TF0, TF0, TF3, TF1), (TF1, TF0, TF0, TF3, TF1), (TF2, TF1, TF1, TF3, TF1), |
| | (TF0, TF0, TF0, TF4, TF1), (TF1, TF0, TF0, TF4, TF1), (TF2, TF1, TF1, TF4, TF1) |
| | (TF0, TF0, TF0, TF5, TF1), (TF1, TF0, TF0, TF5, TF1), (TF2, TF1, TF1, TF5, TF1), |
| | TF0, TF0, TF0, TF6, TF1), (TF1, TF0, TF0, TF6, TF1), (TF2, TF1, TF1, TF6, TF1), |
| | (TF0, TF0, TF0, TF7, TF1), (TF1, TF0, TF0, TF7, TF1), (TF2, TF1, TF1, TF7, TF1), |
| | (TF0, TF0, TF0, TF8, TF1), (TF1, TF0, TF0, TF8, TF1), (TF2, TF1, TF1, TF8, TF1), (TF0, TF0, TF0, TF9, TF1), (TF1, TF0, TF0, TF9, TF1), (TF2, TF1, TF1, TF9, TF1) |
| | (TF0, TF0, TF10, TF1), (TF1, TF0, TF0, TF1), (TF2, TF1, TF1, TF10, TF1) |
| | (alt. (TF0, TF0, TF0, TF0, TF0), (TF1, TF0, TF0, TF0, TF0), (TF2, TF1, TF1, 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, TF6, TF0), (TF1, TF0, TF0, TF6, TF0), (TF2, TF1, TF1, TF6, TF0), |
| | (TF0, TF0, TF0, TF7, TF0), (TF1, TF0, TF0, TF7, TF0), (TF2, TF1, TF1, TF7, TF0), |
| | (TF0, TF0, TF0, TF8, TF0), (TF1, TF0, TF0, TF8, TF0), (TF2, TF1, TF1, TF8, TF0), |
| | (TF0, TF0, TF0, TF9, TF0), (TF1, TF0, TF0, TF9, TF0), (TF2, TF1, TF1, TF9, TF0), |
| | (TF0, TF0, TF0, TF10, TF0), (TF1, TF0, TF0, TF10, TF0), (TF2, TF1, TF1, TF10, TF0), |
| | (TF0, TF0, TF1, TF11, TF0), (TF1, TF0, TF0, TF11, TF0), (TF2, TF1, TF1, TF11, TF0), (TF0, TF0, TF0, TF12, TF0), (TF1, TF0, TF0, TF12, TF0), (TF2, TF1, TF1, TF12, TF0), |
| | (TF0, TF0, TF13, TF0), (TF1, TF0, TF0, TF13, TF0), (TF2, TF1, TF1, TF13, TF0), |
| | (TF0, TF0, TF0, TF14, TF0), (TF1, TF0, TF0, TF14, TF0), (TF2, TF1, TF1, TF14, TF0), |
| | (TF0, TF0, TF0, TF15, TF0), (TF1, TF0, TF0, TF15, TF0), (TF2, TF1, TF1, TF15, TF0), |
| | (TF0, TF0, TF0, TF16, TF0), (TF1, TF0, TF0, TF16, TF0), (TF2, TF1, TF1, TF16, TF0), |
| | (TF0, TF0, TF0, TF17, TF0), (TF1, TF0, TF0, TF17, TF0), (TF2, TF1, TF1, TF17, TF0), (TF0, TF0, TF0, TF18, TF0), (TF1, TF0, TF0, TF18, TF0), (TF2, TF1, TF1, TF18, TF0), |
| | (TF0, TF0, TF0, TF16, TF0), (TF1, TF0, TF0, TF16, TF0), (TF2, TF1, TF1, TF16, TF0), (TF0, TF0, TF0, TF1), (TF1, TF0, TF1), |
| | (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, TF1), (TF1, TF0, TF0, TF1), (TF2, TF1, TF1, TF1, TF1), (TF0, TF1), (TF0, TF1), (TF1, TF1, TF1, TF1, TF1), |
| | (TF0, TF0, TF8, TF1), (TF1, TF0, TF0, TF8, TF1), (TF2, TF1, TF1, TF8, TF1), |
| | (TF0, TF0, TF0, TF1), (TF1, TF0, TF0, TF9, TF1), (TF2, TF1, TF1, TF9, TF1), |
| | (TF0, TF0, TF10, TF1), (TF1, TF0, TF0, TF10, TF1), (TF2, TF1, TF1, TF10, TF1), |
| | (TF0, TF0, TF0, TF11, TF1), (TF1, TF0, TF0, TF11, TF1), (TF2, TF1, TF1, TF11, TF1), |
| | (TF0, TF0, TF1, TF12, TF1), (TF1, TF0, TF0, TF12, TF1), (TF2, TF1, TF1, TF12, TF1), (TF0, TF0, TF0, TF13, TF1), (TF1, TF0, TF0, TF13, TF1), (TF2, TF1, TF1, TF13, TF1), |
| | (TF0, TF0, TF1, TF13, TF1), (TF1, TF0, TF0, TF13, TF1), (TF2, TF1, TF1, TF14, TF1), |
| | (TF0, TF0, TF15, TF1), (TF1, TF0, TF0, TF15, TF1), (TF2, TF1, TF1, TF15, TF1), |
| | (TF0, TF0, TF16, TF1), (TF1, TF0, TF0, TF16, TF1), (TF2, TF1, TF1, TF16, TF1), |
| | (TF0, TF0, TF0, TF17, TF1), (TF1, TF0, TF0, TF17, TF1), (TF2, TF1, TF1, TF17, TF1), |
| | (TF0, TF0, TF0, TF18, TF1), (TF1, TF0, TF0, TF18, TF1), (TF2, TF1, TF1, TF18, TF1)) |

6.10.3.4.1.44.2.2 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, TF1, TF1, TF0), (TF1, TF0, TF1, 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, 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, TF1), (TF1, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1), |
| | (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 |

Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Conversational / unknown / UL:64 DL:64 kbps / CS RAB 6.10.3.4.1.49

+ 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), (TF1, 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, TF1), (TF1, TF0, TF0, TF1), (TF2, TF1, TF1, TF0, TF1), |
| | (TEO, TEO, TEO, TE1, TE1) (TE1, TE0, TE0, TE1, TE1) (TE2, TE1, TE1, TE1, TE1) |

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)= (TEO, TEO, TEO, TEO, TEO, TEO, TEO, TEO, |
| | (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), (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/Sig | nalling RB | RAB | SRB#5 |
|-----------------|----------------------|---------------------------------------|---------|---------|
| RLC | Logical channel type | | DTCH | SHCCH |
| | RLC mo | de | AM | TM |
| | Payload | sizes, bit | 320 | 168 |
| | Max data | a rate, bps | 64000 | 16800 |
| | AMD/Trl | D PDU header, bit | 16 | 0 |
| MAC | MAC he | ader, bit | 0 | 0 |
| | MAC mu | ultiplexing | N/A | N/A |
| Layer 1 | TrCH typ | oe . | USCH | USCH |
| | TB sizes | | 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 t | type | TC | CC ½ |
| | CRC, bit | t | 16 | 16 |
| | Max nur | nber of bits/TTI after channel coding | 4236 | 384 |
| | | mber of bits/radio frame before rate | 2118 | 384 |
| | RM attril | bute | 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 SRBs for SHCCH mapped on RACH

| RAB/signalling RB | SRB#0 | SRB#1 | SRB#2 | SRB#3 | SRB#4 | SRB#5 |
|-----------------------------|---|---|--|---|---|---|
| User of Radio Bearer | RRC | RRC | RRC | NAS_DT | NAS_DT | RRC |
| | | | | High prio | Low prio | |
| 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 |
| | User of Radio Bearer Logical channel type RLC mode Payload sizes, bit Max data rate, bps | User of Radio Bearer RRC Logical channel type CCCH RLC mode TM Payload sizes, bit 168 Max data rate, bps 16800 AMD/UMD/TrD PDU 0 | User of Radio Bearer RRC RRC Logical channel type CCCH DCCH RLC mode TM UM Payload sizes, bit 168 136 Max data rate, bps 16800 13600 AMD/UMD/TrD PDU 0 8 | User of Radio Bearer RRC RRC RRC Logical channel type CCCH DCCH DCCH RLC mode TM UM AM Payload sizes, bit 168 136 128 Max data rate, bps 16800 13600 12800 AMD/UMD/TrD PDU 0 8 16 | User of Radio Bearer RRC RRC RRC NAS_DT High prio Logical channel type CCCH DCCH DCCH DCCH RLC mode TM UM AM AM Payload sizes, bit 168 136 128 128 Max data rate, bps 16800 13600 12800 12800 AMD/UMD/TrD PDU 0 8 16 16 | User of Radio Bearer RRC RRC RRC NAS_DT High prio Low prio Logical channel type CCCH DCH DCH DCH DCH 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 0 8 16 16 16 |

| Higher | RAB/signalling RB | SRB#0 | SRB#1 | SRB#2 | SRB#3 | SRB#4 | SRB#5 | | |
|---------|---|---------|--------------------------------|-------|-----------|----------|-------|--|--|
| layer | User of Radio Bearer | RRC | RRC | RRC | NAS_DT | NAS_DT | RRC | | |
| | | | | | High prio | Low prio | | | |
| MAC | MAC header, bit | 2 | 26 | 26 | 26 | 26 | 2 | | |
| | MAC multiplexing | | 6 logical channel multiplexing | | | | | | |
| Layer 1 | TrCH type | pe RACH | | | | | | | |
| | TB sizes, bit | 170 | 170 | 170 | 170 | 170 | 170 | | |
| | TFS TF0, bits | 1x170 | | | | | | | |
| | TTI, ms | 10 | | | | | | | |
| | Coding type | CC ½ | | | | | | | |
| | CRC, bit | | | 10 | 6 | | | | |
| | 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/Signal | lling RB | RAB | SRB#5 |
|-----------------|---|---|-------------------|---------|
| RLC | Logical cha | nnel type | DTCH | SHCCH |
| | RLC mode | | AM | UM |
| | Payload siz | es, bit | 320 | 160 |
| | Max data ra | ate, bps | 256000 | 16000 |
| | AMD/UMD | PDU header, bit | 16 | 8 |
| MAC | MAC heade | er, bit | 0 | 0 |
| | MAC multip | lexing | 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 | е | TC | CC ½ |
| | CRC, bit | | 16 | 16 |
| | Max number of bits/TTI after channel coding | | 8460 (alt. 16908) | 384 |
| | Downlink: No before rate | Max number of bits/radio frame 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, |
| | TE1), (TE2, TE1), (TE3, TE1), (TE4, TE1), (TE5, TE1), (TE6, TE1)) |

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 | RAB/sign | alling RB | SRB#0 | SRB#1 | SRB#2 | SRB#3 | SRB#4 | SRB#5 | SRB#6 | |
|---------|---|------------------|-----------------------|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--|
| layer | User of R | adio Bearer | RRC | RRC | RRC | NAS_DT | NAS_DT | RRC | RRC | |
| | | | | | | High prio | Low prio | | | |
| RLC | Logical ch | nannel type | CCCH | DCCH | DCCH | DCCH | DCCH | SHCCH | BCCH | |
| | RLC mod | le | UM | UM | AM | AM | AM | UM | TM | |
| | Payload s | 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/UM header, b | D/TrD PDU iit | 8 | 8 | 16 | 16 | 16 | 8 | 0 | |
| MAC | MAC hea | der, bit | 3 | 27 or 43 | 27 | 27 | 27 | 3 | 3 | |
| | MAC mul | tiplexing | | 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 | | | | I/A (alt. 5x171 | | | | |
| | | TF6, bits | N/A (alt. 6x171) | | | | | | | |
| | TTI, ms | | 20 | | | | | | | |
| | Coding ty | ре | 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) | |
| | Max num | | 764 (alt. | 764 (alt. | 764 (alt. | 764 (alt. | 764 (alt. | 764 (alt. | 764 (alt. | |
| | bits/radio frame before rate matching | | 1146) | 1146) | 1146) | 1146) | 1146) | 1146) | 1146) | |
| NOTE: | MAC hea | ader size and | RLC payload | size depend or | n use of U-RN | TI 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 | Midamble | 512 chips |
|---------------|--------------------------------------|------------------------------|
| type 1) | 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 | Midamble | 256 chips |
|---------------|--------------------------------------|------------------------------|
| type 2) | 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 ½ |
| | 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.

6.10.3.4.2.2.2.2 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 | Midamble | 512 chips |
|---------------|--------------------------------------|------------------------------|
| type 1) | 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 | Midamble | 256 chips |
|---------------|--------------------------------------|------------------------------|
| type 2) | 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 | RAB/Signalling RB | RAB | SRB#5 |
|---------|---|---------------------|---------|
| Layer | | | |
| 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 |
| Ĭ | Max number of bits/TTI after channel coding | 64524 (alt. 129036) | 384 |
| | Downlink: Max number of bits/radio frame | 64524 (alt. 64518) | 384 |
| Î | before rate matching | , , , | |
| | 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 | Midamble | 512 chips |
|---------------|--------------------------------------|------------------------------|
| type 1) | 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 | Midamble | 256 chips |
|---------------|--------------------------------------|------------------------------|
| type 2) | 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 mo | ode | TM | TM | |
| | Payload | d sizes, bit | 168 | 168 | |
| | Max da | ta rate, bps | 16800 | 16800 | |
| | TrD PD | U header, bit | 0 | 0 | |
| MAC | MAC he | eader, bit | 2 | 2 | |
| | MAC multiplexing | | 2 logical channel multiplexing | | |
| Layer 1 | TrCH ty | ре | RA | CH | |
| | TB size | s, bit | 17 | 170 | |
| | TFS | TF0, bits | 1x170 | | |
| | TTI, ms | | 10 | | |
| | Coding type | | CC ½ | | |
| | CRC, bit | | 16 | | |
| | Max number of bits/TTI after | | 38 | 38 | |
| | channe | l coding | | | |

6.10.3.4.3.1.1.2 Physical channel parameters

Physical channel parameters for uplink DPCH see 6.10.3.4.1.4.1.2.

Physical channel parameters for PUSCH see 6.10.3.4.2.1.1.2.

Physical channel parameters for PRACH see 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 | RAB/Sig | nalling RB | SRB#0 SRB#5 SRB#6 | | SRB#6 |
|---------|-----------|--------------------------|-------------------|-------------------------|-------|
| layer | User of F | Radio Bearer | RRC | RRC | RRC |
| | Logical c | channel type | CCCH | SHCCH | BCCH |
| | RLC mod | de | UM | UM | TM |
| RLC | Payload | sizes, bit | 160 | 160 | 168 |
| | Max data | a rate, bps | 32000 | 32000 | 33600 |
| | UMD/Tr | D PDU header, bit | 8 | 8 | 0 |
| MAC | MAC hea | ader, bit | | 3 | |
| WAC | MAC mu | Itiplexing | 3 lc | gical channel multiplex | ing |
| | TrCH typ | e | FACH | | |
| | TB sizes | , bit | 171 | | |
| | | TF0, bits | 0x171 | | |
| | | TF1, bits | 1x171 | | |
| | TFS | TF2, bits | 2x171 | | |
| | | TF3, bits | 3x171 | | |
| Layer 1 | | TF4, bits | 4x171 | | |
| | TTI, ms | | 10 | | |
| | Coding t | | CC ½ | | |
| | CRC, bit | | 16 | | |
| | | nber of bits/TTI after | 1528 | | |
| | channel | | | | |
| | | nber of bits/radio frame | | 764 | |
| | before ra | ate matching | | | |

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 6.10.3.4.1.4.2.2.

Physical channel parameters for downlink PDSCH see 6.10.3.4.2.1.2.2.

Physical channel parameters for SCCPCH see 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 6.10.3.4.1.4.2.2.

Physical channel parameters for PDSCH see 6.10.3.4.2.2.2.2.

Physical channel parameters for SCCPCH see 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 6.10.3.4.1.4.2.2.

Physical channel parameters for PDSCH see 6.10.3.4.2.3.2.2.

Physical channel parameters for SCCPCH see 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 | r 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, b | ots | 0x240 (alt. 0x80) | | |
| | TF1, b | oits | 1x240 (alt. 1x80) | | |
| | TF2, b | oits | 2x240 (alt.2x80) | | |
| | TTI, ms | | 20 | | |
| | Coding type | | CC ½ | | |
| | CRC, bit | | 16 | | |
| | Max number of bits/TTI be | fore rate | 1056 (alt. 400) | | |
| | matching | | | | |
| | 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 | RAB/signalling RB | | RAB | |
|---------|---|-------------------|-----------------------------|--|
| layer | 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 | MAC multiplexing | | N/A | |
| Layer 1 | TrCH type | | FACH | |
| | TB sizes, bit | | 363 | |
| | TF0, | bits | 0 x363 | |
| | TFS 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 | 1143 | |
| | matching | | | |
| | 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 | RAB/signalli | ing RB | SRB#0 | SRB#1 | SRB#2 | SRB#3 | SRB#4 | SRB#5 | |
|---------|----------------------------|-------------------------------|-----------------------|--|-----------------------|-----------------------|-----------------------|-----------------------|--|
| layer | User of Rad | io Bearer | RRC | RRC | RRC | NAS_DT High prio | NAS_DT Low prio | RRC | |
| RLC | Logical char | nnel type | CCCH | DCCH | DCCH | DCCH | DCCH | BCCH | |
| | RLC mode | RLC mode | | UM | AM | AM | AM | TM | |
| | Payload size | es, bit | 160 | 136 or 120 (note) | 128 | 128 | 128 | 168 | |
| | Max data ra | te, 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/7 bit | TrD PDU header, | 8 | 8 | 16 | 16 | 16 | 0 | |
| MAC | MAC heade | r, bit | 3 | 27 or 43 | 27 | 27 | 27 | 3 | |
| WIAC | MAC multipl | lexing | | 6 logical channel multiplexing | | | | | |
| Layer 1 | 1 TrCH type | | FACH | | | | | | |
| | TB sizes, bit | | 171 | | | | | | |
| | | TF0, bits | 0x171 | | | | | | |
| | | TF1, bits | 1x171 | | | | | | |
| | | TF2, bits | 2x171 | | | | | | |
| | TFS | 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 | | 1528 (alt. 2292) | | | | | |
| | | rate matching | | | | | | | |
| | | r of bits/radio | 764 (alt.1146) | | | | | | |
| | frame before rate matching | | 200.040 | | | | | | |
| NOTE | RM attribute | | 200-240 | | | | | | |
| NOTE: | MAC header | size and RLC paylo | oad size depe | nd 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 | (32 kbps RAB, SRB for PCCH, SRBs for CCCH/ DCCH/ BCCH) = |
| | (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, TF3), |
| | (TF2, TF2, TF4) |
| | (alt. (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) |
| | TF2), (TF0, TF2, TF3), (TF0, TF2, TF4), (TF0, TF2, TF5), (TF0, TF2, TF6), (TF1, TF2, TF3), (TF1, TF2, TF3), (TF1, TF3, TF3, TF3, TF3), (TF1, TF3, TF3, TF3, TF3, TF3, TF3, TF3, TF3 |
| | (TF1, TF0, TF0), (TF1, TF0, TF1), (TF1, TF0, TF2), (TF1, TF0, TF3), (TF1, TF0, TF4), (TF1, TF0, TF1), (TF1, TF0, TF1), (TF1, TF1, TF1, TF1), (TF1, TF1, TF1, TF1), (TF1, TF1, TF1, TF1), (TF1, TF1, TF1, TF1, TF1, TF1, TF1), (TF1, TF1, TF1, TF1, TF1, TF1, TF1, TF1, |
| | TF0, TF5), (TF1, TF0, TF6), (TF1, TF1, TF0), (TF1, TF1, TF1), (TF1, TF1, TF2), (TF1, TF1, TF3), (TF1, TF2, TF3, TF3, TF3, TF3, TF3, TF3, TF3, TF3 |
| | (TF1, TF1, TF4), (TF1, TF1, TF5), (TF1, TF1, TF6), (TF1, TF2, TF0), (TF1, TF2, TF1), (TF1, TF2, TF2) |
| | TF2), (TF1, TF2, TF3), (TF1, TF2, TF4), (TF1, TF2, TF5), (TF1, TF2, TF6), (TF3, TF0, TF3), (TF3, TF3, TF3, TF0, TF3), (TF3, TF3, TF3, TF3, TF3, TF3, TF3), (TF3, TF3, TF3, TF3, TF3, TF3, TF3, TF3, |
| | (TF2, TF0, TF0), (TF2, TF0, TF1), (TF2, TF0, TF2), (TF2, TF0, TF3), (TF2, TF0, TF4), (TF2, TF4, TF2), (TF2, TF4, TF4, TF4, TF4, TF4, TF4, TF4, TF4 |
| | TF0, TF5), (TF2, TF0, TF6), (TF2, TF1, TF0), (TF2, TF1, TF1), (TF2, TF1, TF2), (TF2, TF1, TF3), (TF2, TF3, TF3), (TF2, TF3, TF3), (TF3, TF3, TF3, TF3, TF3), (TF3, TF3, TF3, TF3, TF3, TF3, TF3), (TF3, TF3, TF3, TF3, TF3, TF3, TF3, TF3, |
| | (TF2, TF1, TF4), (TF2, TF1, TF5), (TF2, TF1, TF6), (TF2, TF2, TF0), (TF2, TF2, TF1), (TF2, TF2, TF3), (TF2, TF3, TF3), (TF3, TF3, TF3, TF3), (TF3, TF3, TF3, TF3), (TF3, TF3, TF3, TF3), (TF3, TF3, TF3, TF3, TF3, TF3), (TF3, TF3, TF3, TF3, TF3, TF3, TF3, TF3, |
| | TF2), (TF2, TF2, TF3), (TF2, TF2, TF4), (TF2, TF2, TF5) (TF2, TF2, TF6)) |
| | |

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 | RAB/signalling RB | SRB#0 | SRB#1 | SRB#2 | SRB#3 | SRB#4 |
|---------|------------------------|--------------------------------|-------|-------|-----------|----------|
| layer | User of Radio Bearer | RRC | RRC | RRC | NAS_DT | NAS_DT |
| | | | | | High prio | 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 | 0 | 8 | 16 | 16 | 16 |
| | header, bit | | | | | |
| 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 | 388 | 388 | 388 | 388 | 388 |
| | bits/TTI after channel | | | | | |
| | coding | | | | | |
| | Max number of | 388 | 388 | 388 | 388 | 388 |
| | bits/Radio frame | | | | | |
| | before rate matching | | | | | |

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 follow:

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 |
| | 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 | 270 |
| | rate matching | |
| | RM attribute | 135-175 |

TFCS

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

| 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 |
| | 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 | 2046 |
| | rate matching | |
| | RM attribute | 130-170 |

| 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 | 252 |
| | rate matching | |
| | RM attribute | 135-175 |

TFCS

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

| 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 | 2046 | |
| | rate matching | | |
| | RM attribute | 130-170 | |

| 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 | |

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.

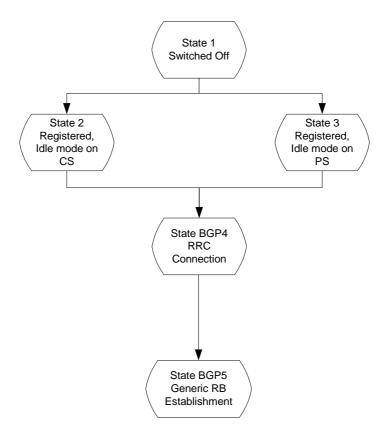


Figure 7.1.1: UE Test States for Basic Generic Procedures

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 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 | \rightarrow | RRC CONNECTION REQUEST (CCCH) | RRC |
| 4 | ← | RRC CONNECTION SETUP (CCCH) | RRC |
| 5 | \rightarrow | 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:

| | Value/Remark | | | |
|--|---------------|---------------|--------------------|---|
| Message Type | PAGING TYPE 1 | | | |
| UE Information elem | nents | | | |
| 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 el | ements | | | |
| 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 elemen | ts | | |
| 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 | er 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, but in specific test case |
| | | | case |
| Measurement informati | on 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 | S | | |
| Use default | | | |
| Frequency info | | | As specified by default 1 cell environment |
| Uplink radio resources | | | |
| Use default | | | |
| Downlink radio resources | | | |
| Use default | | | |
| | | | Otherwise, the UE Identity is selected in |
| accordance with the requirer | ments of the following | ing procedure. | |

7.1.2.4.4 RRC CONNECTION SETUP COMPLETE

 $This \ message \ is \ sent \ on \ the \ DCCH \ Logical \ channel.$

| Message Type UE Information Elements Hyper frame number UE radio access capability PDCP capability PDCP capability RLC capability RLC capability Transport channel capability Max no of bits received Maximum number of TFC in the TFCS Max no of received transport blocks Max no of bits transmitted Max convolutionally coded bits freceived Maximum number of TFC in the TFCS Max no of bits transmitted Max no of transmitted Max no of bits transmitted Max no of transmitted Max no of bits transmitted Max no of transmitted Max no of transmitted Max no of transmitted Max no bits transmitted Max no of transmitted Max no bits transmitted Max no of transmitted Max no | Information Element | | | Value/Remark |
|--|----------------------------|-----------------|--|----------------------|
| Victorial contents Victori | Message Type | | | RRC CONNECTION SETUP |
| Hyper frame number UE radio access capability Conformance test compliance PDCP capability PDCP capability PDCP capability Support for lossless SRNS Not checked RLC capability Potential RLC AM buffer size Not checked Not ch | | | | COMPLETE |
| UE radio access capability PDCP capability PDCP capability Support for lossless SRNS relocation RLC capability Fransport channel capability Max no of bits received Max convolutionally coded bits received Max turbo coded bits received Max turbo coded bits received Max no of received transport channels Max no of received transport diaminum number of simultaneous transport channels Max no of received transport blocks Maximum number of TFC in the FFCS Maximum number of the FFCS Maximum number of the following t | | | | |
| PDCP capability Support for lossless SRNS relocation Supported algorithm types RLC capability Total RLC AM buffer size Maximum number of AM ont checked Maximum number of AM ont checked Maximum number of AM ont checked Max convolutionally coded bits received Max turbo coded bits received Max turbo coded bits received Max turbo coded bits received Max no of between transport channels Max no of received transport blocks Maximum number of TFC in the FTCS Maximum number of TFC in the FTCS Maximum number of trubo decoding Not checked Uplink Max no of bits transmitted Max convolutionally coded bits received Max turbo coded bits received Max turbo coded bits received Max no of bits transmitted Max convolutionally coded bits received Max convolutionally coded bits received Max turbo coded bits received Max maximum number of TFC in the checked Maximum number of Simultaneous transport channels Max no of transmitted Max no of transmitted Max no of transmitted Max no of transmitted Max in the TFCS Maximum number of TFC in the TFC in the TFCS Maximum number of TFC in the Checked Maximum number of TFC in the TFCS Maximum number of TFC in the Checked Maximum number of TFC in the TFCS Maximum number of TFC in the Checked Maximum | 71 | T | | |
| relocation Supported algorithm types RLC capability Total RLC AM buffer size Maximum number of AM entities Transport channel capability Max no of bits received Max convolutionally coded bits received Maximum number of AM entities Max turbo coded bits received Max turbo coded bits received Max maximum number of simultaneous transport channels Max no of received transport blocks Maximum number of TFC in the TFCS Maximum number of TFC in the TFCS Maximum number of TFC in the TFCS Maximum number of TFC in the AMAX on of bits transmitted Max no of bits transmitted Max no of bits transmitted Max no of bits transmitted Max convolutionally coded bits received Max turbo coded bits received Max turbo coded bits received Max turbo coded bits received Max no fits maximum number of the TFCS Maximum number of TFC in Maximum number of Simultaneous CCTrCH Max no DPCHiPDSCH codes Max no brysical channel bits received Max no DPCHiPDSCH codes Mox to checked Support of PSSCH Maximum number of DPDCH Max no of S-CCPCH RL Uplink Maximum number of DPDCH bits transmitted per 10 ms | UE radio access capability | | compliance | |
| RLC capability Total RLC AM buffer size Maximum number of AM entities Transport channel capability Max no of bits received Max convolutionally coded bits received Max turbo coded bits received Max mo of received transport channels Max mo of received transport blocks Maximum number of TFC in the TFCS Maximum number of TF Not checked Max no of bits transmitted Max convolutionally coded bits received Max turbo coded bits received Max mo of transmitted Max no of transmitted transport blocks Maximum number of TFC in Not checked Maximum number of TFC in Not checked Maximum number of Simultaneous transport channels Max no of transmitted transport blocks Maximum number of TFC in Not checked Maximum number of Support for turbo encoding RF capability Maximum number of Simultaneous CCTrCH Max no DPCH/PDSCH codes Max no DPCH/PDSCH codes Max no DPCH/PDSCH codes Max no DPCH/PDSCH Not checked Support of PSSCH Simultaneous reception of SCCPCH and DPCH Max no of S-CCPCH RL Maximum number of DPDCH bits transmitted per 10 ms | | PDCP capability | | Not checked |
| Maximum number of AM entities Transport channel capability Max no of bits received Max convolutionally coded bits received Max turbo coded bits received Max turbo coded bits received Max turbo coded bits received Max no of received transport channels Max no of received transport blocks Maximum number of TFC in the TFCS Max no of bits transmitted Max no of bits transmitted Max no of transmitted Max no of transmitted in the TFCS Maximum number of the TFC in the TFCS Maximum number of the TFC in the TFCS Maximum number of | | | Supported algorithm types | |
| entities Transport channel capability Max no of bits received Max convolutionally coded bits received Max convolutionally coded bits received Max turbo coded bits received Mot checked Maximum number of simultaneous transport channels Max no of received transport blocks Maximum number of TFC in Mot checked Max convolutionally coded bits received Max turbo coded bits received Max turbo coded bits received Maximum number of Mot checked Maximum number of simultaneous transport channels Max no of transmitted Not checked simultaneous transport channels Maximum number of TFC in Not checked transport blocks Maximum number of TFC in Not checked Maximum number of TFC in Not checked Transport blocks Maximum number of TFC in Not checked Support for turbo encoding Not checked Maximum number of Simultaneous CCTrCH Max no DPCH/PDSCH codes Not checked Max no physical channel bits received Not checked Support of PDSCH Not checked Simultaneous reception of SCCPCH and DPCH Not checked Simultaneous reception of SCCPCH RL Not checked bits transmitted per 10 ms | | RLC capability | | Not checked |
| channel capability Max no of bits received Not checked Max convolutionally coded bits received Max turbo coded bits received Not checked Max mo of received ransport channels Max no of received transport of simultaneous transport channels Max no of received transport of the TFC in the TFCS Not checked Maximum number of TFC in the 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 convolutionally coded bits received Max no of bits ransport channels Max no of transmitted Not checked Transport blocks Maximum number of TFC in Not checked Max no of transmitted Not checked Transport blocks Maximum number of TFC in Not checked Max no of transmitted Not checked Transport blocks Maximum number of TFC in Not checked Max no of transmitted Not checked Transport blocks Maximum number of TFC in Not checked Max no of transmitted Not checked Transport blocks Maximum number of TFC in Not checked Max no of transmitted Not checked Not checked Not checked Not checked Not checked Max no of PPCHPDSCH codes Not checked Not checked Not checked Support for SF 512 Not checked Support for SCCPCH and DPCH Max no of S-CCPCH RL Uplink Maximum number of DPDCH bits transmitted per 10 ms | | | | Not checked |
| Max no of bits received Max convolutionally coded bits received Max turbo coded bits received Max turbo coded bits received Max turbo coded bits received Max mo of received transport Max no of received transport Max mo of received transport Max mo of received transport Max mo of received transport Max mum number of TFC in Maximum number of TFC in Maximum number of TFC in Maximum number of TFC in Max no of bits transmitted Max no of bits transmitted Max convolutionally coded bits Max convolutionally coded bits Max no of bits received Max urbo coded bits received Max urbo coded bits received Max max mumber of Max more of transmitted Max no physical channel Max no physical channel bits | | channel | Downlink | |
| Max turbo coded bits received Maximum number of simultaneous transport channels Max no of received transport channels Max no of received transport of the tree of the tree of the transport of the tree of the tree of the transport of the tree of | | capability | Max no of bits received | Not checked |
| Max turbo coded bits received Maximum number of simultaneous transport channels Max no of received transport blocks Maximum number of TFC in the TFCS Maximum number of TF Not checked Support for turbo decoding Uplink Max no of bits transmitted Max convolutionally coded bits received Maximum number of Mot checked Max convolutionally coded bits received Maximum number of Max turbo coded bits received Max no of transmitted Max no of transmitted Mot checked Maximum number of Simultaneous transport channels Max no of transmitted Maximum number of TFC in the TFCS 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 Physical channel capability Maximum number of Support for SF 512 Not checked Not c | | | Max convolutionally coded bits | |
| Maximum number of simultaneous transport channels Max no of received transport blocks Maximum number of TFC in the TFCS Maximum number of TF Not checked Maximum number of TF Not checked Maximum number of TF Not checked Max no of bits transmitted Max no of bits transmitted Not checked Max convolutionally coded bits received Max urbo coded bits received Max urbo coded bits received Max no of transmitted Not checked Maximum number of simultaneous transport channels Max no of transmitted Not checked Maximum number of TFC in the TFCS Maximum number of TFC in the Checked Not checked Maximum number of TFC in the Checked Not checked Maximum number of TFC in the Checked Not checked Maximum number of TFC in the Checked Not checked Maximum number of TFC in the Checked Not checked Not checked Maximum number of TFC in the Checked Not checked Support for SF 512 Not checked Not checked Support for SF 512 Not checked Not checked Support for SF 512 Not checked Simultaneous reception of SCCPCH and DPCH Max no of SCCPCH RL Not checked Not ch | | | | Not checked |
| Max no of received transport blocks Maximum number of TFC in the TFCS Maximum number of TF Not checked Support for turbo decoding Uplink Max no of bits transmitted Max convolutionally coded bits received Max turbo coded bits received Max unber of transmitted Mot checked Max turbo coded bits received Max turbo coded bits received Max number of simultaneous transport channels Max no of transmitted Max number of TFC in the TFCS Maximum number of TFC in the Support for turbo encoding Max declared for UE Tx/Rx frequency separation Not checked Physical channel capability Maximum number of Support for SF 512 Max no pPysical channel bits received Support for SF 512 Support for SCCPCH RL Max no DPCH/PDSCH Not checked | | | Maximum number of simultaneous transport | |
| Maximum number of TFC in the TFCS Maximum number of TF Not checked Support for turbo decoding Uplink Max no of bits transmitted Max convolutionally coded bits received Max urbo coded bits received Max no of transmitted Mot checked Max mum number of simultaneous transport channels Max no of transmitted Maximum number of simultaneous transport channels Max no of transmitted Maximum number of TFC in the TFCS Maximum number of TPCH Maximum number of TPCH Maximum number of DPDCH Maximum number of DPDCH Maximum number of DPDCH Not checked | | | Max no of received transport | Not checked |
| Support for turbo decoding Uplink Max no of bits transmitted Not checked Max convolutionally coded bits received Not checked Max turbo coded bits received Not checked Max mon octate bits received Not checked Maximum number of Simultaneous transport channels Nat no of transmitted transport blocks Maximum number of TFC in the TFCS Maximum number of TFC in Not checked RF capability UE power class As declared for UE Tx/Rx frequency separation Not checked Physical channel capability Maximum number of Simultaneous CCTrCH Max no DPCH/PDSCH codes Not checked Max no physical channel bits received Support for SF 512 Not checked Support of PDSCH Not checked Support of PDSCH Not checked Not checked Support of PDSCH Not checked | | | Maximum number of TFC in | Not checked |
| Uplink Max no of bits transmitted Not checked Max no of bits transmitted Not checked Max convolutionally coded bits received Not checked Max turbo coded bits received Not checked Max mumber of simultaneous transport channels Max no of transmitted transport blocks Maximum number of TFC in the TFCS Not checked Maximum number of TFC in the TFCS Not checked Maximum number of TF Not checked | | | Maximum number of TF | Not checked |
| Max no of bits transmitted Max convolutionally coded bits received Max turbo coded bits received Max mumber of simultaneous transport channels Max no of transmitted transport blocks Maximum number of TFC in the TFCS Maximum number of TF Not checked Support for turbo encoding We relass As declared for UE Tx/Rx frequency separation Not checked Physical channel capability Maximum number of simultaneous CCTrCH Max no DPCH/PDSCH codes Max no pPSCH bysical channel bits received Support of PDSCH Not checked Support of PDSCH Not checked | | | | Not checked |
| Max convolutionally coded bits received Max turbo coded bits received Max furbo coded bits received Maximum number of simultaneous transport channels Max no of transmitted transport blocks Maximum number of TFC in the TFCS Maximum number of TFC in Not checked Maximum number of TFC in Not checked Support for turbo encoding RF capability UE power class As declared for UE Tx/Rx frequency separation Not checked Physical channel capability Maximum number of simultaneous CCTrCH Max no DPCH/PDSCH codes Max no physical channel bits received Support for SF 512 Support for SF 512 Not checked Support of PDSCH Simultaneous reception of SCPCPCH and DPCH Max no of S-CCPCH RL Max no for S-CCPCH RL Maximum number of DPDCH Maximum | | | | |
| received Max turbo coded bits received Maximum number of simultaneous transport channels Max no of transmitted transport blocks Maximum number of TFC in the TFCS Maximum number of TFC in the the TFCS Maximum number of the TFCS Mot checked Not checked Support for SF 512 Not checked Support for SF 512 Not checked Support for PDSCH Not checked SCPCPCH and DPCH Max no of S-CCPCH RL Not checked | | | Max no of bits transmitted | Not checked |
| Max turbo coded bits received Maximum number of simultaneous transport channels Max no of transmitted transport blocks Maximum number of TFC in the TFCS 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 Maximum number of simultaneous CCTrCH Max no DPCH/PDSCH codes Max no physical channel bits received Support for SF 512 Support for SF 512 Not checked Support for PDSCH Not checked Max no of PCH/PDSCH Not checked Simultaneous reception of SCCPCH and DPCH Max no of S-CCPCH RL Max not checked Max no of S-CCPCH RL Maximum number of DPDCH bits transmitted per 10 ms Not checked | | | | Not checked |
| simultaneous transport channels Max no of transmitted transport blocks Maximum number of TFC in the TFCS 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 Maximum number of simultaneous CCTrCH Max no DPCH/PDSCH codes Not checked Max no physical channel bits received Support for SF 512 Not checked Support of PDSCH Not checked Simultaneous reception of SCCPCH and DPCH Max no of S-CCPCH RL Not checked Maximum number of DPDCH Not checked Support of PDSCH Not checked Max no of S-CCPCH RL Not checked Max no of S-CCPCH RL Not checked Maximum number of DPDCH Not checked | | | | Not checked |
| transport blocks Maximum number of TFC in the TFCS 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 Maximum number of simultaneous CCTrCH Max no DPCH/PDSCH codes Not checked Max no DPCH/PDSCH codes Not checked Max no physical channel bits received Support for SF 512 Not checked Support of PDSCH Not checked Simultaneous reception of SCCPCH and DPCH Max no of S-CCPCH RL Max no of S-CCPCH RL Maximum number of DPDCH Not checked Max no of S-CCPCH RL Maximum number of DPDCH Not checked | | | simultaneous transport | Not checked |
| the TFCS 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 Physical channel capability Maximum number of simultaneous CCTrCH Max no DPCH/PDSCH codes Max no DPCH/PDSCH codes Max no physical channel bits received Support for SF 512 Support of PDSCH Support of PDSCH Simultaneous reception of SCCPCH and DPCH Max no of S-CCPCH RL Max no of S-CCPCH RL Not checked Uplink Maximum number of DPDCH Max no maximum number of DPDCH Not checked | | | transport blocks | 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 Maximum number of simultaneous CCTrCH Max no DPCH/PDSCH codes Max no physical channel bits received Support for SF 512 Support for SF 512 Not checked Support of PDSCH Simultaneous reception of SCCPCH and DPCH Max no of S-CCPCH RL Not checked Uplink Maximum number of DPDCH bits transmitted per 10 ms Not checked | | | | Not checked |
| RF capability UE power class Tx/Rx frequency separation Physical channel capability Maximum number of simultaneous CCTrCH Max no DPCH/PDSCH codes Max no physical channel bits received Support for SF 512 Support of PDSCH Simultaneous reception of SCCPCH and DPCH Max no of S-CCPCH RL Max no of S-CCPCH RL Mot checked Not checked Simultaneous reception of SCCPCH RL Max no of S-CCPCH RL Mot checked Not checked | | | | Not checked |
| Tx/Rx frequency separation Not checked Physical channel capability Maximum number of simultaneous CCTrCH Max no DPCH/PDSCH codes Not checked Max no physical channel bits received Support for SF 512 Not checked Support of PDSCH Not checked Simultaneous reception of SCCPCH and DPCH Max no of S-CCPCH RL Not checked Uplink Maximum number of DPDCH Not checked Max no of S-CCPCH RL Not checked Uplink Maximum number of DPDCH Not checked | | | | |
| Physical channel capability Maximum number of simultaneous CCTrCH Max no DPCH/PDSCH codes Not checked Max no physical channel bits received Support for SF 512 Not checked Support of PDSCH Not checked Support of PDSCH Not checked Simultaneous reception of SCCPCH and DPCH Max no of S-CCPCH RL Not checked Uplink Maximum number of DPDCH bits transmitted per 10 ms Not checked | | RF capability | | |
| Maximum number of simultaneous CCTrCH Max no DPCH/PDSCH codes Not checked Max no physical channel bits received Support for SF 512 Not checked Support of PDSCH Not checked Simultaneous reception of SCCPCH and DPCH Max no of S-CCPCH RL Not checked Uplink Maximum number of DPDCH bits transmitted per 10 ms | | | Downlink | Not checked |
| Max no DPCH/PDSCH codes Not checked Max no physical channel bits received Support for SF 512 Not checked Support of PDSCH Not checked Simultaneous reception of SCCPCH and DPCH Max no of S-CCPCH RL Not checked Uplink Maximum number of DPDCH bits transmitted per 10 ms | | σαρασιιιτή | | Not checked |
| Max no physical channel bits received Support for SF 512 Not checked Support of PDSCH Not checked Simultaneous reception of SCCPCH and DPCH Max no of S-CCPCH RL Not checked Uplink Maximum number of DPDCH bits transmitted per 10 ms Not checked | | | I . | Not checked |
| Support for SF 512 Not checked Support of PDSCH Not checked Simultaneous reception of SCCPCH and DPCH Max no of S-CCPCH RL Not checked Uplink Maximum number of DPDCH bits transmitted per 10 ms | | | Max no physical channel bits | |
| Support of PDSCH Not checked Simultaneous reception of SCCPCH and DPCH Max no of S-CCPCH RL Not checked Uplink Maximum number of DPDCH bits transmitted per 10 ms | | | | |
| SCCPCH and DPCH Max no of S-CCPCH RL Not checked Uplink Maximum number of DPDCH bits transmitted per 10 ms | | | | |
| Uplink Maximum number of DPDCH Not checked bits transmitted per 10 ms | | | SCCPCH and DPCH | |
| Maximum number of DPDCH Not checked bits transmitted per 10 ms | | | | Not checked |
| bits transmitted per 10 ms | | | | |
| Support of PCPCH Not checked | | | bits transmitted per 10 ms | |
| | | | 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 checke |
| | | GSM 900 DL | Not checked |
| | | DCS 1800 DL | Not checked |
| | | GSM 1900 DL | Not checked |
| | | Multi-carrier measurement DL | Not checked |
| | | Need for uplink compressed mode | Not checked |
| | | FDD measurements UL | Not checked |
| | | TDD measurements UL | Not checked |
| | | GSM 900 UL | Not checked |
| | | DCS 1800 UL | Not checked |
| | | GSM 1900 UL | Not checked |
| | | Multi-carrier measurement UL | Not checked |
| UE system specific capability | | | Not checked |

7.1.3 Radio Bearer Setup Procedure

7.1.3.1 Initial conditions

The procedure specified in clause 7.1.2 will be run. This procedure starts from the successful completion of clause 7.1.2.

7.1.3.2 Definition of system information messages

The default system information messages are used.

7.1.3.3 Procedure

- The SS sends a RADIO BEARER SETUP message to the UE on the DCCH established by the RRC Connection Establishment procedure.
- The SS receives a RADIO BEARER SETUP COMPLETE message from the UE in RLC Acknowledged mode on the DCCH.

On receiption of the RADIO BEARER SETUP COMPLETE the procedure is complete.

| Step | Direction | Message | Comments |
|------|---------------|------------------------------------|----------|
| | UE SS | | |
| 1 | ← | RADIO BEARER SETUP (DCCH) | RRC |
| 2 | \rightarrow | 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 speed bearer according to TS 34.108 clause 6 6.10.3.4.1.4 for 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

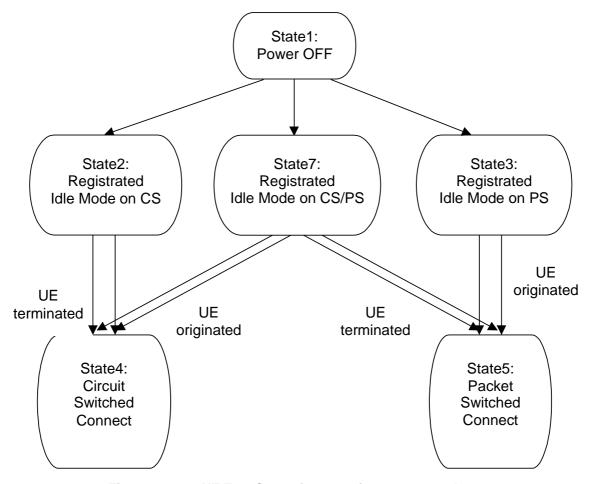


Figure 7.2.1.1: UE Test States for Generic setup procedures

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 3GPP TS 24.008 [32] clause 1.7.2.2. Table 7.2.2 shows the appropriate clause number for each combination of these two modes of operation.

Table 7.2.2: Registration Procedures for UEs Supporting Packet Services

| Netwo | ork Mode | NMO I | NMO II |
|------------|----------|---------|---------|
| | | | |
| UE Mode | PS/CS | 7.2.2.3 | 7.2.2.4 |
| Wiode | 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

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, cee 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 Layer3 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 Layer3 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

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

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 ACKOWLEDGE | 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

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

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 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 |
| 19 | < | RRC CONNECTION RELEASE | RRC |
| 20 | > | RRC CONNECTION RELEASE COMPLETE | RRC |

7.3.2.4 Specific message contents

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

7.3.2.4.1 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 |

7.3.3.3 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 | тс |
| 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

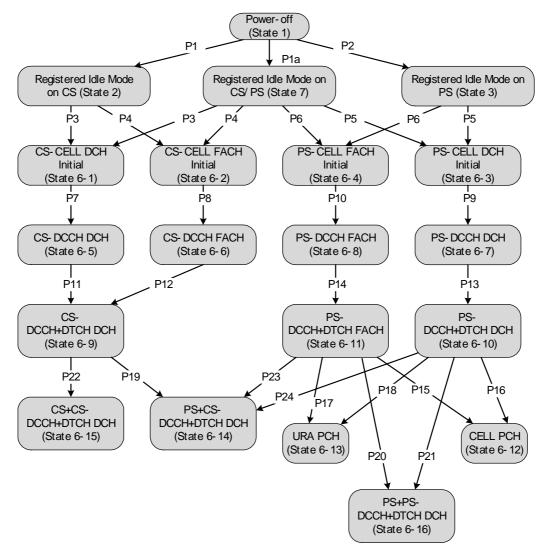


Figure 7.4.1.1: UE RRC test initial states and common procedures

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 | СС | 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 | n Message | Comments |
|------|-----------|--------------------------------------|----------|
| | UE S | | |
| 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.

7.4.2.2.3 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 | < | | 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 6-1or state 6-2.
- The Test USIM shall be inserted.

7.4.2.3.2.2 Definition of system information messages

The default system information messages are used as specified in clause 6.1 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 | Directio | n Message | Comments |
|------|----------|-----------------------------|-------------------------------|
| | UE S | 3 | |
| 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 | < | | CC |
| 4 | < | CONNECT | CC |
| 5 | > | CONNECT ACKOWLEDGE | CC |

7.4.2.5.2.4 Specific message contents

To execute procedure P11, use the message titled "CS speech" (defined in clause 9 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 | | |
| Γ | 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 | | ction | 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 | lcc |

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 | > SECUR | | 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 | > AL | | ALERTING | CC (this message is optional) |
| 12 | > | | CONNECT | CC |
| 13 | < | | CONNECT ACKNOWLEDGE | lcc |

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 ACKOWLEDGE | 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 TS 31.120 and 3GPP TS 31.121.

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 resynchronisation 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:

```
XDOUT[bits 0,1, \dots 126,127] = K [bits 0,1, \dots 126,127] XOR RAND[bits 0,1, \dots 126,127]
```

Step 2:

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

```
RES[bits 0,1, ... n-1, n] = f2(XDOUT,n) = XDOUT[bits 0,1, ... n-1, n] (with 30 < n < 128)
```

NOTE: Suggested length for RES is 128 bits (i.e. n = 127). In SS and AUC, the XRES calculation is identical to RES.

```
CK[bits 0,1,...126,127] = f3(XDOUT) = XDOUT[bits 8,9,...126,127,0,1,...6,7]
```

$$IK[bits 0,1,...126,127] = f4(XDOUT) = XDOUT[bits 16,17,...126,127,0,1,...14,15]$$

```
\mathbf{AK}[\text{bits } 0,1,\ldots 46,47] \hspace{0.5cm} = \hspace{0.5cm} \mathbf{f4}(\mathbf{XDOUT}) \hspace{0.5cm} = \hspace{0.5cm} \mathbf{XDOUT}[\text{bits } 24,25,\ldots 70,71]
```

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

```
Kc[bits 0,1,...62,63] = c3(CK,IK), see TS 33.102 clause 6.8.1.2
```

Step 3:

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

```
CDOUT[bits 0,1,...62,63] = SQN[bits 0,1,...46,47] || AMF[bits 0,1,...14,15]
```

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

Step 4:

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

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

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

Step 5:

The SS calculates the authentication token AUTN:

AUTN[bits 0,1,..126,127] = **SQN**
$$\oplus$$
 AK[bits 0,1,...46,47] || **AMF**[bits 0,1,...14,15] || **MAC**[bits 0,1,...62, 63] Where **SQN** \oplus **AK**[bits 0,1,...46,47] = **SQN**[bits 0,1,...46,47] XOR **AK**[bits 0,1,...46,47]

8.1.2.2 Generation of re-synchronisation parameters in the USIM

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

When the test USIM receives an authentication token (AUTN) having the value of AMF field equal to the AMF_{RESYNCH} value then the test USIM shall initiate the re-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:

Step 2:

AK is extracted from XDOUT this way:

$$AK[bits 0,1,...46,47] = f5*(XDOUT) = XDOUT[bits 24,25,...70,71]$$

Step 3:

Concatenate SQN_{MS} with AMF^* to obtain CDOUT like this:

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

Where AMF* assumes a dummy value of all zeros

NOTE: For test USIM the $\mathbf{SQN_{MS}} = \mathbf{SQN_{SS}}[\text{bits } 0,1,\dots46,47] = \mathbf{AUTN}[\text{bits } 0,1,\dots46,47] \text{ XOR } \mathbf{AK}[\text{bits } 0,1,\dots46,47] \text{ where AUTN is the received authentication token.}$

For SS and AUC the $\mathbf{SQN_{MS}} = \mathbf{AUTS}[\text{bits } 0,1,\dots46,47] \text{ XOR } \mathbf{AK}[\text{bits } 0,1,\dots46,47] \text{ where AUTS is the received re-synchronisation parameter.}$

Step 4:

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

```
MAC-S[bits 0,1, . . .62, 63] = f1*(XDOUT, CDOUT) = XDOUT[bits 0,1. . .62,63] XOR CDOUT[bits 0,1, . . .62,63]
```

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

Step 5:

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

AUTS[bits 0,1,..110,111] = $SQN_{MS} \oplus AK$ [bits 0,1,...46,47] $\parallel MAC-S$ [bits 0,1,...62, 63]

Where $\mathbf{SQN_{MS}} \oplus \mathbf{AK}[\text{bits } 0,1,\dots46,47] = \mathbf{SQN_{MS}}[\text{bits } 0,1,\dots46,47] \text{ XOR } \mathbf{AK}[\text{bits } 0,1,\dots46,47]$

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.

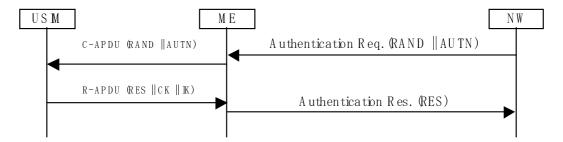


Figure 8.1.2.3.1: Network accepted by UE (USIM not supporting derivation of GSM cipher key Kc)

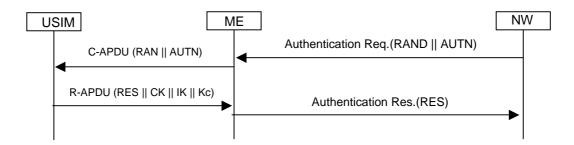


Figure 8.1.2.3.2: Network accepted by UE (USIM supporting derivation of GSM cipher key Kc)

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").

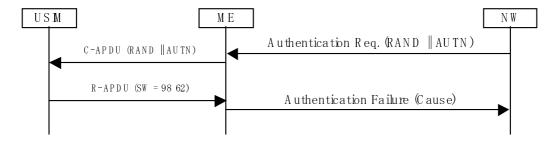


Figure 8.1.2.3.2: MAC failure cases

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.

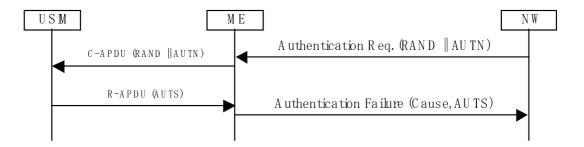


Figure 8.1.2.3.3: SQN failure case

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_{KevsPS} (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_{HPI MN} (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 Emlpp | Option |
| Service n°26: | RFU | No |
| Service n°27: | GSM Access | Yes |
| Service n°28: | Data download via SMS-PP | Option |
| Service n°29: | Data download via SMS-CB | Option |
| Service n°30: | Call Control by USIM | Option |
| Service n°31: | MO-SMS Control by USIM | Option |
| Service n°32: | RUN AT COMMAND command | Option |
| Service n°33: | Packet Switched Domain | Yes |
| Service n°34: | Enabled Services Table | Yes |
| Service n°35: | n°35: APN Control List (ACL) | |
| 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: | CPBCCH Information Yes | |
| Service n°40: | Investigation Scan | Yes |
| Service n°41: | MExE | Option |
| Service n°42 | Operator controlled PLMN selector with Access Technology | Yes |
| Service n°43 | HPLMN selector with Access Technology | Yes |

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 (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: 000000000

Byte 3: 000000000

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_{FCC} (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_{PSI OCI} (Packet Switched location information)

File size: 14 Bytes

Default values: Bytes 1-4 (HEX): 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_{OCI} (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_{eMI PP} (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_{Hiddenkev} (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_{FST} (Enabled service table)

The programming of this EF is a test house option.

8.3.2.48 EF_{ACI} (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_{OPI MNsel} (OPLMN selector)

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

8.3.2.54 EF_{PHPI MNAT} (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 Ciphering 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 Ciphering 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_{CPBCCH} (CPBCCH Information)

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

8.3.3.5 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_{SUMF} (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 |

| Information Element | Value/remark |
|--------------------------------|--------------|
| 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 |
| - SRNC identity | 0000 0000 0001B |
| - S-RNTI | 0000 0000 0000 0000 0001B |
| RRC transaction identifier | Checked to see if it is absent |
| Integrity check info | |
| - Message authentication code | This IE is checked to see if it is present. The value is |
| | compared against the XMAC-I value computed by SS. |
| | The first/ leftmost bit of the bit string contains the most |
| | significant bit of the MAC-I. |
| - RRC Message sequence number | This IE is checked to see if it is present. The value is |
| | used by SS to compute the XMAC-I value. |
| START List | Checked to see if the 'CN domain identity' and 'START' |
| | IEs are present for all CN domains supported by the UE |
| - CN domain identity | Checked to see if it is one of the supported CN domains |
| - START | Checked to see if it is present |
| 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 | Not Present |
| transport channels | Not Procent |
| Deleted TrCH information list | Not Present |
| Added or Reconfigured TrCH information list CHOICE Mode | Not Present FDD |
| - CPCH set ID | Not Present |
| - Added or Reconfigured TrCH | Not Present |
| information for DRAC list | Not Flesent |
| DL Transport channel information common for all | Not Present |
| transport channels | Not i resent |
| 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. |
| Activation time | now |
| RAB Info | |
| - RAB identity | 0000 0001B |
| | The first/ leftmost bit of the bit string contains the most significant bit of the RAB identity. |
| - CN domain identity | CS domain |
| - NAS Synchronization Indicator | Not present |
| - Re-establishment timer | Use T315 |
| Inter-system message | |
| - CHOICE System type | GSM |
| - Frequency Band | Set to "GSM/ PCS 1900" if GSM/ PCS 1900 is used in this test. Otherwise set to "GSM/DCS 1800 Band" |
| - CHOICE GSM message | Single GSM message |
| - Message | GSM HANDOVER COMMAND formatted and coded according to GSM specifications as BIT STRING (1512). 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 to bits b14 through b23 of the TMSI. If the IE "CN domain identity" is equal to "PS domain", this bit string is set to to bits b14 through b23 of the P-TMSI. The TMSI/P-TMSI consists of 4 octets (32bits). This can |
| | be represented by a string of bits numbered from b0 to b31, with bit b0 being the least significant. |
| | The "Routing parameter" bit string consists of bits b14 through b23 of the TMSI/ PTMSI. |
| | The first/ leftmost/ most significant bit of the bit string contains bit b23 of the TMSI/ PTMSI. |
| - Entered parameter | FALSE |
| 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 | O d D |
| - Cell individual offset | OdB |
| - Reference time difference to cell | Not Present |
| - Read SFN number - CHOICE mode | FALSE FDD |
| - Primary CPICH info | FDD |
| - Primary scrambling code | Different from the Default setting in TS34.108 clause 6.1 |
| | (FDD) Not Present |
| - Primary CPICH Tx power - TX Diversity indicator | FALSE |
| - Cells for measurement | Not present |
| - Intra-frequency measurement quantity | Not Present |
| - Intra-frequency reporting quantity | 1.01.1.00011 |
| - Reporting quantities for active set cells | |
| - Cell synchronisation information reporting | FALSE |
| indicator | |
| - 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 - Primary CPICH info | Checked that this IE is absent |
| - 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 | Arbitrarily selects an integer between 0 and 3 |
| Integrity check info | |
| - message authentication code | SS calculates the value of MAC-I for this message and writes to this IE. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I. |
| - RRC message sequence number | SS provides the value of this IE, from its internal counter. |
| Paging cause | Terminating Conversational Call |
| CN domain identity | CS domain |
| Paging record type identifier | Select the same type as in the IE "Initial UE Identity" in |
| | RRC CONNECTION REQUEST" message. |

Contents of PHYSICAL CHANNEL RECONFIGURATION message: AM or UM

| Information Element | Condition | Value/remark |
|--|---------------------------|--|
| Message Type | A1, A2, A3, | |
| | A4, A5, A6 | |
| RRC transaction identifier Integrity check info | | Arbitrarily selects an integer between 0 and 3 |
| - message authentication code | | SS calculates the value of MAC-I for this |
| message authentication code | | 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 | 44 40 40 | Not Present |
| Activation time | A1, A2, A3 | (256+CFN-(CFN MOD 8 + 8))MOD 256 Not Present |
| Activation time New U-RNTI | A4, A5, A6 | Not Present |
| New C-RNTI | A1, A2, A3, | Not Present |
| | A4 | |
| New C-RNTI | A5, A6 | '1010 1010 1010 1010' |
| New DSCH-RNTI | A1, A2, A3, | Not Present |
| RRC State indicator | A4, A5, A6 A1, A2, A3, | CELL_DCH |
| TATO GIALG ITIGICALOI | A1, A2, A3, A4 | OLLL_DOI1 |
| RRC State indicator | A5, A6 | CELL_FACH |
| UTRAN DRX cycle length coefficient | A1, A2, A3, | Not Present |
| 011.6 | A4, A5, A6 | |
| CN information info | | Not Present |
| URA identity Downlink counter synchronisation info | | Not Present Not Present |
| Frequency info | A1, A2, A3, | Not Flesent |
| | A1, A2, A3, A4, A5 | |
| - UARFCN uplink (Nu) | | Reference to clause 5.1 Test frequencies |
| - UARFCN downlink (Nd) | | Reference to clause 5.1 Test frequencies |
| Frequency info | A6 | Not Present |
| Maximum allowed UL TX power | | 33dBm |
| CHOICE channel requirement | A5, A6 | Not Present |
| CHOICE channel requirement | A1, A2, A3, A4 | Uplink DPCH info |
| - Uplink DPCH power control info | A4 | |
| - 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 | | Reference to TS34.108 clause 6.10 Parameter Set |
| - TFCI existence | | Reference to TS34.108 clause 6.10 |
| | | Parameter Set |
| - Number of FBI bit | | Reference to TS34.108 clause 6.10 |
| Dura etunia er Liesit | | Parameter Set |
| - Puncturing Limit | | Reference to TS34.108 clause 6.10 Parameter Set |
| CHOICE Mode | A1, A2, A3, | FDD |
| | A4, A5, A6 | |
| - Downlink PDSCH information | | Not Present |
| Downlink information common for all radio links - Downlink DPCH info common for all RL | A1, A2, A3 | |
| - Timing indicator | | Maintain |
| - CFN-targetSFN frame offset | | Not Present |
| - Downlink DPCH power control information | | |
| - DPC mode | | 0 (single) |
| - CHOICE mode | | FDD |
| - Power offset P _{Pilot-DPDCH} | | 0 |

| Information Element | Condition | Value/remark |
|--|-----------|---|
| - DL rate matching restriction information | | Not Present |
| - Spreading factor | | Reference to TS34.108 clause 6.10 |
| - Fixed or Flexible Position | | Parameter Set Reference to TS34.108 clause 6.10 Parameter Set |
| - TFCI existence | | Reference to TS34.108 clause 6.10 Parameter Set |
| - CHOICE SF | | Reference to TS34.108 clause 6.10 Parameter Set |
| - DPCH compressed mode info | | Not Present |
| - TX Diversity mode | | None |
| - SSDT information | | Not Present |
| - Default DPCH Offset Value | | Not Present |
| Downlink information common for all radio links | A4 | |
| - Downlink DPCH info common for all RL | | 1 11 |
| - Timing indicator | | Initialise |
| - CFN-targetSFN frame offset | | Not Present |
| Downlink DPCH power control information DPC mode | | O (cingle) |
| - CHOICE mode | | 0 (single) |
| | | FDD 0 |
| Power offset P_{Pilot-DPDCH} DL rate matching restriction information | | Not Present |
| - DL rate matching restriction information - Spreading factor | | Reference to TS34.108 clause 6.10 |
| - Spreading factor | | Parameter Set |
| - Fixed or Flexible Position | | Reference to TS34.108 clause 6.10 |
| - I IXEG OF FIEXIBLE FOSITION | | Parameter Set |
| - TFCI existence | | Reference to TS34.108 clause 6.10 |
| - CHOICE SF | | Parameter Set Reference to TS34.108 clause 6.10 Parameter Set |
| - DPCH compressed mode info | | Not Present |
| - TX Diversity mode | | None |
| - SSDT information | | Not Present |
| - Default DPCH Offset Value | | Arbitrary set to value 0306688 by step of |
| | | 512 |
| Downlink information common for all radio links | A5, A6 | Not Present |
| Downlink information for each radio links | A1, A2,A3 | |
| - Choice mode | , , | FDD |
| - Primary CPICH info | | |
| - Primary scrambling code | | Ref. to the Default setting in TS34.108 clause |
| | | 6.1 (FDD) |
| - PDSCH with SHO DCH info | | Not Present |
| - PDSCH code mapping | | Not Present |
| - Downlink DPCH info for each RL | | 500 |
| - CHOICE mode | | FDD |
| Primary CPICH usage for channel estimation DPCH frame offset | | Primary CPICH may be used |
| - DPGH ITAITIE Offset | | Set to value: Default DPCH Offset Value (as currently stored in SS) mod 38400 |
| - Power offset P _{Pilot-DPDCH} | | 0 |
| - Secondary CPICH info | | Not Present |
| - DL channelisation code | | |
| - Secondary scrambling code | | 5 |
| - Spreading factor | | Reference to TS34.108 clause 6.10 Parameter Set |
| - 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 |
| Downlink information for each radio links | A4 | |
| - Choice mode | | FDD |
| - Primary CPICH info | | |
| - Primary scrambling code | | Ref. to the Default setting in TS34.108 clause |
| PROOFF WE SHOULD BOLL ! | | 6.1 (FDD) |
| - PDSCH with SHO DCH info - PDSCH code mapping | | Not Present |
| | 1 | Not Present |

| Information Element | Condition | Value/remark |
|--|-----------|--|
| - 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 |
| - Power offset P _{Pilot-DPDCH} | | 0 |
| - Secondary CPICH info | | Not Present |
| - DL channelisation code | | |
| - Secondary scrambling code | | 5 |
| - Spreading factor | | Reference to TS34.108 clause 6.10 |
| | | Parameter Set |
| - 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 |
| - Downlink information for each radio link | A5 | |
| - Choice mode | | FDD |
| - Primary CPICH info | | |
| - Primary scrambling code | | Ref. to the Default setting in TS34.108 clause |
| | | 6.1 (FDD) |
| - PDSCH with SHO DCH info | | Not Present |
| - PDSCH code mapping | | Not Present |
| - Downlink DPCH info for each RL | | Not Present |
| - SCCPCH Information for FACH | | 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 PHYSICAL CHANNEL RECONFIGURATION COMPLETE message: AM

| Information Element | Value/remark |
|--|--|
| Message Type | |
| RRC transaction identifier | Checked to see if it's set to identical value of the same IE in the downlink PHYSICAL CHANNEL RECONFIGURATION message |
| Integrity check info | |
| - Message authentication code | This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I. |
| - RRC Message sequence number | This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value. |
| Uplink integrity protection activation info | Not checked |
| CHOICE mode | FDD |
| COUNT-C activation time | Not checked |
| Radio bearer uplink ciphering activation time info | Not checked |
| Uplink counter synchronisation info | Not checked |

Contents of PHYSICAL CHANNEL RECONFIGURATION FAILURE message: AM

| Information Element | Value/remark |
|-------------------------------|--|
| Message Type | |
| RRC transaction identitifer | Checked to see if it is set to identical value of the same IE in the downlink PHYSICAL CHANNEL RECONFIGURATION message. |
| Integrity check info | |
| - Message authentication code | This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I. |
| - RRC Message sequence number | This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value. |
| Failure cause | Checked to see if it meets test requirement |

Contents of RADIO BEARER SETUP message: AM or UM

| Information Element | Condition | Value/remark |
|--|----------------------------|--|
| Message Type | A1, A2, A3, | |
| | A4, A5, A6, | |
| RRC transaction identifier | A7, A8 | Arbitrarily selects an integer between 0 and 3 |
| Integrity check info | | Arbitrarily selects arriffleger between 0 and 3 |
| - 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 |
| DDC massage as guarante mumbar | | significant bit of the MAC-I. |
| - RRC message sequence number | | SS provides the value of this IE, from its internal counter. |
| Integrity protection mode info | | Not Present |
| Ciphering mode info | | Not Present |
| Activation time | A1, A2, A3 | (256+CFN-(CFN MOD 8 + 8))MOD 256 |
| Activation time | A4, A5, A6, | Not Present |
| N. U.BUT | A7, A8 | N . 5 |
| New U-RNTI | A1, A2, A3, A4, A5, A6, | Not Present |
| | A4, A5, A6, A7, A8 | |
| New C-RNTI | A1, A2, A3, | Not Present |
| | A4, A7, A8 | |
| New C-RNTI | A5, A6 | '1010 1010 1010 1010' |
| New DSCH-RNTI | A1, A2, A3, | Not Present |
| | A4, A5, A6, | |
| DDO Otata indicatan | A7, A8 | OFIL BOIL |
| 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, | Not Present |
| g. comment | A4, A5, A6, | |
| | A7, A8 | |
| CN information info | | Not Present |
| URA identity | | Not Present Not Present |
| Signalling RB information to setup RAB information for setup | A1, A7 | Not Fresent |
| - RAB info | 7(1,7() | |
| - RAB identity | | 0000 0001B |
| | | The first/ leftmost bit of the bit string contains |
| 0.11 | | the most significant bit of the RAB identity. |
| - CN domain identity | | CS domain Not Present |
| NAS Synchronization Indicator Re-establishment timer | | useT314 |
| The establishment times | | 4301014 |
| - RB information to setup | | |
| - RB identity | | 10 |
| - PDCP info | | Not Present |
| - CHOICE Unlink BLC mode | | RLC info |
| - CHOICE Uplink RLC mode - Transmission RLC discard | | TM RLC Not Present |
| - Segmentation indication | | FALSE |
| - CHOICE Downlink RLC mode | | TM RLC |
| - Segmentation indication | | FALSE |
| - RB mapping info | | |
| - Information for each multiplexing option | | Not Proceed |
| RLC logical channel mapping indicator Number of uplink RLC logical channels | | Not Present |
| - Number of uplink REC logical channels - Uplink transport channel type | | DCH |
| - UL Transport channel identity | | 1 |
| - Logical channel identity | | Not Present |
| - CHOICE RLC size list | | Configured |
| - MAC logical channel priority | | 7 |
| Downlink RLC logical channel info Number of downlink RLC logical channels | | |
| Number of downlink RLC logical channels Downlink transport channel type | | 1 DCH |
| - DL DCH Transport channel identity | | 6 |
| - DL DOT Hansport channel identity | | U |

| Information Element | Condition | Value/remark |
|--|-----------|--|
| - DL DSCH Transport channel identity | | Not Present |
| - Logical channel identity | | Not Present |
| RAB information for setup | A2, A8 | |
| - RAB info - RAB identity | | 0000 0001B |
| - IVAD 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 | | 10 |
| - RB identity - 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 Downlink transport channel type | | 1 DCH |
| - 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 FALSE |
| Segmentation indication CHOICE Downlink RLC mode | | TM RLC |
| - Segmentation indication | | FALSE |
| - RB mapping info | | 1,7,202 |
| - 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 Logical channel identity | | 2 Not Present |
| - CHOICE RLC size list | | Configured |
| - MAC logical channel priority | | 6 |
| - Downlink RLC logical channel info | | , and the second |
| - 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 identityRB identity | | Not Present |
| - 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 | 1 | |

| Information Element | Condition | Value/remark |
|--|-------------|--|
| - RLC logical channel mapping indicator | | Not Present |
| - Number of uplink RLC logical channels | | 1 |
| - Uplink transport channel type | | DCH |
| - UL Transport channel identity | | 3 |
| - Logical channel identity | | Not Present |
| - CHOICE RLC size list | | Configured |
| - MAC logical channel priority | | 6 |
| - Downlink RLC logical channel info | | |
| Number of downlink RLC logical channels | | 1 |
| - Downlink transport channel type | | DCH |
| - DL DCH Transport channel identity | | 8 |
| - DL DSCH Transport channel identity | | Not Present |
| - Logical channel identity | | Not Present |
| RAB information for setup | A3, A4, A5, | |
| The state of the s | A6 | |
| - RAB info | 7.0 | (AM DTCH for PS domain) |
| - RAB identity | | 0000 0101B |
| 10.2.00 | | The first/ leftmost bit of the bit string contains |
| | | the most significant bit of the RAB identity. |
| - CN domain identity | | PS domain |
| - NAS Synchronization Indicator | | Not Present |
| - Re-establishment timer | | useT315 |
| - RB information to setup | | |
| - RB identity | | 20 |
| - PDCP info | | |
| - Support for lossless SRNS relocation | | FALSE |
| - Max PDCP SN window size | | Not present |
| - PDCP PDU header | | Absent |
| - Header compression information | | Not present |
| - CHOICE RLC info type | | RLC info |
| - CHOICE Uplink RLC mode | | AM RLC |
| - Transmission RLC discard | | |
| - CHOICE SDU discard mode | | No Discard |
| - MAX_DAT | | 15 |
| - Transmission window size | | 128 |
| - Timer_RST | | 500 |
| - Max_RST | | 4 |
| - Polling info | | |
| - Timer_poll_prohibit | | 200 |
| - Timer_poll | | 200 |
| - Poll_PDU | | Not Present |
| - Poll_SDU | | 1 |
| Last transmission PDU poll | | TRUE |
| Last retransmission PDU poll | | TRUE |
| - Poll_Windows | | 99 |
| - Timer_poll_periodic | | Not Present |
| - CHOICE Downlink RLC mode | | AM RLC |
| - In-sequence delivery | | TRUE |
| - Receiving window size | | 128 |
| - Downlink RLC status info | | |
| - Timer_status_prohibit | | 200 |
| - Timer_EPC | | Not Present |
| - Missing PDU indicator | | TRUE |
| - Timer_STATUS_periodic | | Not Present |
| - RB mapping info | | O DDM:://Ortions |
| - Information for each multiplexing option | | 2 RBMuxOptions |
| - RLC logical channel mapping indicator | | Not Present |
| - Number of uplink RLC logical channels | | 1 DCH |
| - Uplink transport channel type | | DCH 1 |
| - UL Transport channel identity | | 1 Not Droppet |
| - 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 DCH |
| - Downlink transport channel type | | DCH |
| - DL DCH Transport channel identity | I | 6 |

| Information Element | Condition | Value/remark |
|---|----------------------------|--|
| - 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 |
| | | RACH |
| - Uplink transport channel type | | _ |
| - 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 |
| DL DCH Transport channel identity | | Not Present |
| DL DSCH Transport channel identity | | Not Present |
| - Logical channel identity | | 7 |
| RB information to be affected | A1, A2, A3, | Not Present |
| | A4, A5, A6, | |
| | A7, A8 | |
| Downlink counter synchronisation info | A1, A2, A3, | Not Present |
| Downlink Counter Synonionisation into | A1, A2, A3, A4, A5, A6, | NOCE I GOOD |
| | | |
| III Transport shows all information for all transport | A7, A8 | |
| UL Transport channel information for all transport | A1, A2, A3, | |
| channels | A4, A5, A6, | |
| | A7, A8 | |
| - PRACH TFCS | | Not Present |
| - CHOICE mode | | FDD |
| - TFC subset | | Not Present |
| - UL DCH TFCS | | |
| - CHOICE TFCI signalling | | Normal |
| - TFCI Field 1 information | | |
| - CHOICE TFCS representation | | Complete reconfiguration |
| - TFCS complete reconfigure information | | |
| - CHOICE CTFC Size | | Number of bits used must be enough to cover |
| | | all combinations of CTFC from TS34.108 |
| | | clause 6.10.2.4 Parameter Set. |
| - CTFC information | | This IE is repeated for TFC numbers and |
| OTT O IIIIOTTIALIOT | | reference to TS34.108 clause 6.10.2.4 |
| | | Parameter Set |
| - CTFC | | |
| - 01F0 | | Reference to TS34.108 clause 6.10.2.4 |
| Davis office the formation | | Parameter Set |
| - Power offset information | | |
| - CHOICE Gain Factors | | Computed Gain Factors(The last TFC is set to |
| | | Signalled Gain Factors) |
| - Gain factor βc | | 11 (below 64 kbps) |
| | | 9 (higher than 64 kbps) (Not Present if the |
| | | CHOICE Gain Factors is set to Computed |
| | | Gain Factors) |
| - Gain factor βd | | 15 |
| · · | | (Not Present if the CHOICE Gain Factors is set |
| | | to Computed Gain Factors) |
| - Reference TFC ID | | 0 |
| - CHOICE mode | | FDD |
| - Power offset P p-m | | Not Present |
| Deleted UL TrCH information | Δ1 Λ2 Λ2 | Not Present |
| Deleted OF HOLLINGHIII | A1, A2, A3, | INOL FIESEIIL |
| | A4, A5, A6, | |
| Added on Decention and III. Toold interest in | A7, A8 | 4 DOLL added 4 DOLL as a set several |
| Added or Reconfigured UL TrCH information | A1, A3 A4, | 1 DCH added, 1 DCH reconfigured |
| IL P. L. C. C. C. C. | A5, A6, A7 | DOLL |
| - 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 |

| Information Element | Condition | Value/remark |
|--|-----------|--|
| - 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 |
| Transor of Transport Stocks | | 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 |
| CDC sites | | Set |
| - CRC size | | Reference to TS34.108 clause 6.10 Parameter |
| Unlink transport shapped type | | Set DCH |
| Uplink transport channel type UL Transport channel identity | | 5 |
| - TFS | | 3 |
| - CHOICE Transport channel type | | Dedicated transport channels |
| - Dynamic Transport format information | | Bedicated transport charmers |
| - RLC Size | | Reference to TS34.108 clause 6.10 Parameter |
| 1.20 0.20 | | 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 |
| Tune of channel coding | | Set |
| - Type of channel coding | | Reference to TS34.108 clause 6.10 Parameter Set |
| - Coding Rate | | Reference to TS34.108 clause 6.10 Parameter |
| Journal Mate | | Set |
| - Rate matching attribute | | Reference to TS34.108 clause 6.10 Parameter |
| g am vara | | Set |
| - CRC size | | Reference to TS34.108 clause 6.10 Parameter |
| | | Set |
| Added or Reconfigured UL TrCH information | A2, A8 | 4 TrCHs(DCH for DCCH and 3DCHs for |
| | | DTCH) |
| - Uplink transport channel type | | DCH |
| - UL Transport channel identity | | 5 |
| - TFS | | Dedicated transport channels |
| - CHOICE Transport channel type - Dynamic Transport format information | | Dedicated transport channels |
| - RLC Size | | Reference to TS34.108 clause 6.10 Parameter |
| 1120 0120 | | 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 |
| Type of chargel coding | | Set |
| - Type of channel coding | | Reference to TS34.108 clause 6.10 Parameter |
| - Coding Rate | | Set Reference to TS34.108 clause 6.10 Parameter |
| - Couling Nate | | Set |
| - Rate matching attribute | | Reference to TS34.108 clause 6.10 Parameter |
| rate matering attribute | | Set |
| - CRC size | | Reference to TS34.108 clause 6.10 Parameter |
| | | Set |
| - Uplink transport channel type | | DCH |
| - UL Transport channel identity | | 1 |
| - TFS | | |

| Information Element | Condition | Value/remark |
|--|-------------------|---|
| - 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 |
| - Number of Transport blocks | | Set |
| - CHOICE Logical Channel list | | All |
| - Semi-static Transport Format information | | All |
| - Transmission time interval | | Reference to TS34.108 clause 6.10 Parameter |
| - Hansinission time interval | | Set |
| - Type of channel coding | | Reference to TS34.108 clause 6.10 Parameter |
| 0 1 0 1 | | Set |
| - Coding Rate | | Reference to TS34.108 clause 6.10 Parameter |
| Data mataking attributa | | Set |
| - Rate matching attribute | | Reference to TS34.108 clause 6.10 Parameter |
| ODC sine | | Set |
| - CRC size | | Reference to TS34.108 clause 6.10 Parameter |
| Unlink transport shapped type | | Set DCH |
| Uplink transport channel type UL Transport channel identity | | 2 |
| - OL Transport channel identity - TFS | | 2 |
| - TFS - CHOICE Transport channel type | | Dedicated transport channels |
| - Dynamic Transport format information | | Dedicated transport channels |
| - RLC Size | | Reference to TS34.108 clause 6.10 Parameter |
| - NEC Size | | 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 |
| - Number of Transport blocks | | Set |
| - CHOICE Logical Channel list | | All |
| - Semi-static Transport Format information | | All |
| - Transmission time interval | | Reference to TS34.108 clause 6.10 Parameter |
| - Hansinission time interval | | Set |
| - Type of channel coding | | Reference to TS34.108 clause 6.10 Parameter |
| - Type of charmer county | | Set |
| - Coding Rate | | Reference to TS34.108 clause 6.10 Parameter |
| - Coding Nate | | Set |
| - Rate matching attribute | | Reference to TS34.108 clause 6.10 Parameter |
| - Nate matching attribute | | Set |
| - CRC size | | Reference to TS34.108 clause 6.10 Parameter |
| - 0110 3126 | | Set |
| - Uplink transport channel type | | DCH |
| - UL Transport channel identity | | 3 |
| - TFS | | ~ |
| - CHOICE Transport channel type | | Dedicated transport channels |
| - Dynamic Transport format information | | Bodicated transport originates |
| - RLC Size | | Reference to TS34.108 clause 6.10 Parameter |
| 1120 0120 | | 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 |
| . ta | | 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 |
| M | | 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 |
| 3 | | Set |
| CHOICE mode | A1, A2, A3, | FDD |
| 55.5 <u>-</u> 111040 | ,, , <u></u> , ,, | 1 · |

| Information Element | Condition | Value/remark |
|---|-----------------------|--|
| | A4, A5, A6, | ** ** ** ** ** ** |
| OBOU UB | A7, A8 | N. B |
| - CPCH set ID | | Not Present Not Present |
| - Added or Reconfigured TrCH information for DRAC list | | INOLFIESEIL |
| and the broad and | | |
| DL Transport channel information common for all | A1,A2, A7, | |
| transport channel | A8 | N . B |
| - SCCPCH TFCS - CHOICE mode | | Not Present FDD |
| - CHOICE Mode - CHOICE DL parameters | | SameasUL |
| DL Transport channel information common for all | A3, A4, A5, | |
| transport channel | A6 | N. B |
| - SCCPCH TFCS - CHOICE mode | | Not Present FDD |
| - CHOICE DL parameters | | Explicit |
| - DL DCH TFCS | | |
| - CHOICE TFCI Signalling | | Normal |
| - TFCI Field 1 Information | | Operation and the second secon |
| - CHOICE TFCS representation - TFCS complete reconfigure | | Complete reconfiguration |
| - CHOICE CTFC Size | | Number of bits used must be enough to cover |
| 3 | | all combinations of CTFC from clause |
| | | TS34.108 clause 6.10.2.4 Parameter Set. |
| - CTFC information | | This IE is repeated for TFC numbers and |
| - CTFC | | reference to TS34.108 clause 6.10.2.4 Reference to TS34.108 clause 6.10.2.4 |
| -0150 | | Parameter Set |
| - Power offset information | | Not Present |
| Deleted DL TrCH information | A1, A2, A3, | Not Present |
| | A4, A5, A6, | |
| Added or Reconfigured DL TrCH information | A7, A8 A1 | 1 DCH added, 1 DCH reconfigured |
| - Downlink transport channel type | 1 | DCH |
| - DL Transport channel identity | | 6 |
| - CHOICE DL parameters | | Same as UL |
| Uplink transport channel type UL TrCH identity | | DCH 1 |
| - DCH quality target | | ' |
| - BLER Quality value | | -2.0 |
| - Downlink transport channel type | | DCH |
| - DL Transport channel identity | | 10 Some on III |
| - CHOICE DL parameters - Uplink transport channel type | | Same as UL DCH |
| - UL TrCH identity | | 5 |
| - DCH quality target | | |
| - BLER Quality value | 10000 | -2.0 |
| Added or Reconfigured DL TrCH information | A3, A4, A5, A6, A7 | 2 TrCHs(DCH for DCCH and DCH for DTCH) |
| - Downlink transport channel type | 70, 77 | DCH |
| - DL Transport channel identity | | 10 |
| - CHOICE DL parameters | | Same as UL |
| - Uplink transport channel type | | DCH |
| - UL TrCH identity - DCH quality target | | 5 |
| - BLER Quality value | | -2.0 |
| - Downlink transport channel type | | DCH |
| - DL Transport channel identity | | 6 |
| - CHOICE DL parameters - TFS | | Explicit |
| - CHOICE Transport channel type | | Dedicated transport channel |
| - Dynamic transport format information | | 2 3 3 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 |
| - RLC Size | | Reference to TS34.108 clause 6.10 Parameter |
| Number of TDs and TTLL is | | Set (This IF is reported for TFI number) |
| Number of TBs and TTI List Dynamic transport format information | | (This IE is repeated for TFI number.) |
| - Transmission Time Interval | | Not Present |
| | .1 | |

| Information Element | Condition | Value/remark |
|--|-----------|---|
| - Number of Transport blocks | Condition | 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 |
| - DCH quality target | | |
| - BLER Quality value | | -2.0 |
| Added or Reconfigured DL TrCH information | A2, A8 | 4 TrCHs(DCH for DCCH and 3DCHs for DTCH) |
| Downlink transport channel type | | DCH |
| - DL Transport channel identity | | 10 |
| - CHOICE DL parameters | | Same as UL |
| - Uplink transport channel type - UL TrCH identity | | DCH 5 |
| - DCH quality target | | S |
| - BLER Quality value | | -2.0 |
| - Downlink transport channel type | | DCH |
| - DL Transport channel identity | | 6 |
| - CHOICE DL parameters - TFS | | Explicit |
| - CHOICE Transport channel type - Dynamic transport format information | | Dedicated transport channel |
| - RLC Size | | Reference to TS34.108 clause 6.10 Parameter Set |
| - Number of TBs and TTI List | | (This IE is repeated for TFI number.) |
| Dynamic transport format information Transmission Time Interval | | Not Present |
| - Number of Transport blocks | | Reference to TS34.108 clause 6.10 Parameter Set |
| - CHOICE Logical Channel list - Semi-static Transport Format information | | All |
| - Transmission time interval | | Reference to TS34.108 clause 6.10 Parameter Set |
| - Type of channel coding | | Reference to TS34.108 clause 6.10 Parameter Set |
| - Coding Rate | | Reference to TS34.108 clause 6.10 Parameter Set |
| - Rate matching attribute | | Reference to TS34.108 clause 6.10 Parameter Set |
| - CRC size | | Reference to TS34.108 clause 6.10 Parameter Set |
| - DCH quality target | | |
| - BLER Quality value | | Not Present |
| - Downlink transport channel type | | DCH |
| - DL Transport channel identity | | 7 |
| - CHOICE DL parameters | | Explicit |
| - TFS | | |
| - CHOICE Transport channel type | | Dedicated transport channel |
| Dynamic transport format information RLC Size | | Reference to TS34.108 clause 6.10 Parameter |
| Number of TDs and TTLL ist | | Set (This IE is reported for TEI number) |
| Number of TBs and TTI List Dynamic transport format information | | (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 - Semi-static Transport Format information | | All |

| Information Flowant | Condition | Valua/ramark |
|---|---------------------------|---|
| Information Element | Condition | Value/remark |
| - Transmission time interval | | Reference to TS34.108 clause 6.10 Parameter |
| - Type of channel coding | | Set Reference to TS34.108 clause 6.10 Parameter |
| | | Set |
| - Coding Rate | | Reference to TS34.108 clause 6.10 Parameter Set |
| - Rate matching attribute | | Reference to TS34.108 clause 6.10 Parameter Set |
| - CRC size | | Reference to TS34.108 clause 6.10 Parameter Set |
| - DCH quality target | | 301 |
| - BLER Quality value | | Not Present |
| - Downlink transport channel type | | DCH |
| - DL Transport channel identity | | 8 |
| - CHOICE DL parameters | | Explicit |
| - TFS | | Exprior |
| - CHOICE Transport channel type | | Dedicated transport channel |
| - Dynamic transport format information | | Bodioatoa transport oriannoi |
| - RLC Size | | Reference to TS34.108 clause 6.10 Parameter |
| N. J. (TD. J.TTILL) | | Set |
| Number of TBs and TTI List Dynamic transport format information | | (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 |
| - Type of channel coding | | Set Reference to TS34.108 clause 6.10 Parameter Set |
| - Coding Rate | | Reference to TS34.108 clause 6.10 Parameter |
| - Rate matching attribute | | Set Reference to TS34.108 clause 6.10 Parameter Set |
| - CRC size | | Reference to TS34.108 clause 6.10 Parameter Set |
| - DCH quality target | | Oct |
| - BLER Quality value | | Not Present |
| Frequency info | A1, A2, A3, | THOU TOOSIN |
| Troquonoy mile | A4, A5, A7, A8 | |
| - UARFCN uplink (Nu) | | Reference to clause 5.1 Test frequencies if |
| | | frequency is different from the current |
| | | frequency otherwise set to Not Present. |
| - UARFCN downlink (Nd) | | Reference to clause 5.1 Test frequencies if |
| | | frequency is different from the current |
| | | frequency otherwise set to Not Present. |
| Frequency info | A6 | Not Present |
| Maximum allowed UL TX power | A1, A2, A3, | 33dBm |
| Maximum anowed OL 17 power | A1, A2, A3, A4, A7, A8 | OOGDIII |
| Maximum allowed UL TX power | A5, A6 | Not Present |
| | | Uplink DPCH info |
| CHOICE channel requirement | A1, A2, A3, | Opinik DPCH INIO |
| - Unlink DPCH power control info | A4, A7, A8 | |
| - Uplink DPCH power control info | | 20dB (i.e. ASN 1 IE value of 40) |
| - 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 | | Reference to TS34.108 clause 6.10 Parameter |
| | | Set |
| - TFCI existence | | Reference to TS34.108 clause 6.10 Parameter Set |
| | _1 | |

| Information Element | Condition | Value/remark |
|--|-------------|---|
| - Number of FBI bit | Condition | Reference to TS34.108 clause 6.10 Parameter |
| Number of February | | Set |
| - Puncturing Limit | | Reference to TS34.108 clause 6.10 Parameter |
| | | Set |
| CHOICE channel requirement | A5,A6 | Not Present |
| CHOICE Mode | A1, A2, A3, | FDD |
| | A4, A5, A6, | |
| | A7, A8 | |
| - Downlink PDSCH information | | Not Present |
| Downlink information common for all radio links | A1, A2, A3, | |
| - Downlink DPCH info common for all RL | | |
| - Timing indicator | | Maintain |
| - CFN-targetSFN frame offset | | Not Present |
| Downlink DPCH power control information DPC mode | | 0 (single) |
| - CHOICE mode | | FDD |
| - Power offset P _{Pilot-DPDCH} | | 0 |
| - DL rate matching restriction information | | Not Present |
| - Spreading factor | | Reference to TS34.108 clause 6.10 Parameter |
| 3 | | Set |
| - Fixed or Flexible Position | | Reference to TS34.108 clause 6.10 Parameter |
| | | Set |
| - TFCI existence | | Reference to TS34.108 clause 6.10 Parameter |
| 0.1010-05 | | Set |
| - CHOICE SF | | Reference to TS34.108 clause 6.10 Parameter |
| 0110105 | | Set |
| - CHOICE mode | | FDD |
| - DPCH compressed mode info | | Not Present None |
| - TX Diversity mode - SSDT information | | Not Present |
| - Default DPCH Offset Value | | Not Present |
| Downlink information common for all radio links | A4,A7,A8 | HOLLIGOOM |
| - Downlink DPCH info common for all RL | , , | |
| - Timing indicator | | Initialise |
| - CFN-targetSFN frame offset | | Not Present |
| - Downlink DPCH power control information | | |
| - DPC mode | | 0 (single) |
| - CHOICE mode | | FDD |
| - Power offset P _{Pilot-DPDCH} | | 0 Not Present |
| DL rate matching restriction information Spreading factor | | Not Present Reference to TS34.108 clause 6.10 Parameter |
| | | Set |
| - Fixed or Flexible Position | | Reference to TS34.108 clause 6.10 Parameter |
| | | Set |
| - TFCI existence | | Reference to TS34.108 clause 6.10 Parameter |
| | | Set |
| - CHOICE SF | | Reference to TS34.108 clause 6.10 Parameter |
| | | Set |
| - CHOICE mode | | FDD |
| - DPCH compressed mode info | | Not Present |
| - TX Diversity mode - SSDT information | | None Not Present |
| - SSDT Information - Default DPCH Offset Value | | Not Present Arbitrary set to value 0306688 by step of 512 |
| Downlink information common for all radio links | A5,A6 | Not Present |
| Downlink information for each radio link list | A1, A2, A3, | 110t / 1000Ht |
| 2 3 III MICHIGAN IN GOOD TO GO | A4, A7, A8 | |
| - Downlink information for each radio link | | |
| - Choice mode | | FDD |
| - Primary CPICH info | | |
| - Primary scrambling code | | Ref. to the Default setting in TS34.108 clause |
| | | 6.1 (FDD) |
| - PDSCH with SHO DCH info | | Not Present |
| - PDSCH code mapping | | Not Present |
| - Downlink DPCH info for each RL | | Primary CDICH may be used |
| Primary CPICH usage for channel estimation DPCH frame offset | | Primary CPICH may be used Set to value Default DPCH Offset Value (as |
| - Di Cittiaille oliset | | currently stored in SS) mod 38400 |
| | 1 | Joan only stored in Go) mod 50400 |

| Information Element | Condition | Value/remark |
|--|-----------|---|
| - Secondary CPICH info - DL channelisation code - Secondary scrambling code - Spreading factor | | Not Present 1 Reference to TS34.108 clause 6.10 Parameter |
| - Code number - Scrambling code change - TPC combination index - SSDT Cell Identity - Closed loop timing adjustment mode - SCCPCH information for FACH | | Set 0 No change 0 Not Present Not Present Not Present |
| Downlink information for each radio link list - Downlink information for each radio link - Choice mode - Primary CPICH info - Primary scrambling code | A5 | FDD Ref. to the Default setting in TS34.108 clause |
| - PDSCH with SHO DCH info - PDSCH code mapping - Downlink DPCH info for each RL - SCCPCH information for FACH Downlink information for each radio link list | A6 | 6.1 (FDD) Not Present Not Present Not present Not Present 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 Uplink counter synchronisation info | Not checked Not checked |

Contents of RADIO BEARER SETUP FAILURE message: AM

| Information Element | Value/remark |
|--|--|
| Message Type | |
| RRC transaction identitifer | Checked to see if it is set to identical value of the same IE in the downlink RADIO BEARER SETUP message. |
| Integrity check info | |
| - Message authentication code | This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I. |
| - RRC Message sequence number | This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value. |
| Failure cause | Checked to see if it meets test requirement |
| Radio bearers for which reconfiguration would have succeeded | Not checked |

Contents of RADIO BEARER RECONFIGURATION message: AM or UM

| Information Element | Condition | Value/remark |
|-------------------------------------|-------------|--|
| 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 |
| DDC magaza agguanas numbar | | significant bit of the MAC-I. |
| - RRC message sequence number | | SS provides the value of this IE, from its internal counter. |
| Integrity protection mode info | | Not Present |
| Ciphering mode info | | Not Present |
| Activation time | A1,A2,A3 | (256+CFN-(CFN MOD 8 + 8))MOD 256 |
| Activation time | A4, A5,A6 | Not Present |
| New U-RNTI | , -, - | Not Present |
| New C-RNTI | A1, A2, A3, | Not Present |
| | A4, | |
| New C-RNTI | A5, A6 | '1010 1010 1010 1010' |
| New DSCH-RNTI | A1, A2, A3, | Not Present |
| | A4, A5, A6 | |
| RRC State indicator | A1, A2, A3, | CELL_DCH |
| | A4 | 0=11. =1011 |
| RRC State indicator | A5, A6 | CELL_FACH |
| UTRAN DRX cycle length coefficient | A1,A2,A3, | Not Present |
| CNI information info | A4,A5,A6 | Not Dropont |
| CN information info URA identity | | Not Present Not Present |
| RAB information to reconfigure list | | Not Present |
| RB information to reconfigure list | A1 | TS25.331 specifies that "Although this IE is not |
| Information to recornigure list | | always required, need is MP to align with |
| | | ASN.1". |
| - RB information to reconfigure | | (UM DCCH for RRC) |
| - RB identity | | 1 |
| - PDCP info | | Not Present |
| - PDCP SN info | | Not Present |
| - RLC info | | Not Present |
| - RB mapping info | | Not Present |
| - RB stop/continue | | Not Present |
| - RB information to reconfigure | | (AM DCCH for RRC) |
| - RB identity - PDCP info | | 2 Not Present |
| - PDCP IIII0 - PDCP SN info | | Not Present |
| - RLC info | | Not Present |
| - RB mapping info | | Not Present |
| - RB stop/continue | | Not Present |
| - RB information to reconfigure | | (AM DCCH for NAS_DT High priority) |
| - RB identity | | 3 |
| - PDCP info | | Not Present |
| - PDCP SN info | | Not Present |
| - RLC info | | Not Present |
| - RB mapping info | | Not Present |
| - RB stop/continue | | Not Present |
| - RB information to reconfigure | | (AM DCCH for NAS_DT Low priority) |
| - RB identity | | A Not Procent |
| - PDCP info - PDCP SN info | | Not Present Not Present |
| - PDCP SN IIII0 - RLC info | | Not Present |
| - RB mapping info | | Not Present |
| - RB stop/continue | | Not Present |
| - RB information to reconfigure | | (TM DTCH) |
| - RB identity | | 10 |
| - PDCP info | | Not Present |
| - PDCP SN info | | Not Present |
| - RLC info | | Not Present |
| - RB mapping info | | Not Present |
| | | |

| Information Element | Condition | Value/remark |
|--|------------|--|
| - RB stop/continue | | Not Present |
| RB information to reconfigure list | A2 | TS25.331 specifies that "Although this IE is not |
| , and the second | | always required, need is MP to align with |
| | | ASN.1". |
| - RB information to reconfigure | | (UM DCCH for RRC) |
| - RB identity | | 1 |
| - PDCP info | | Not Present |
| - PDCP SN info | | Not Present |
| - RLC info | | Not Present |
| - RB mapping info | | Not Present |
| - RB stop/continue | | Not Present |
| - RB information to reconfigure | | (AM DCCH for RRC) |
| - RB identity | | 2 |
| - PDCP info | | Not Present |
| - PDCP SN info | | Not Present |
| - RLC info | | Not Present |
| - RB mapping info | | Not Present |
| - RB stop/continue | | Not Present |
| - RB information to reconfigure | | (AM DCCH for NAS_DT High priority) |
| - RB identity | | 3 |
| - PDCP info | | Not Present |
| - PDCP SN info | | Not Present |
| - RLC info | | Not Present |
| - RB mapping info | | Not Present |
| - RB stop/continue | | Not Present |
| - RB information to reconfigure | | (AM DCCH for NAS_DT Low priority) |
| - RB identity | | 4 |
| - PDCP info | | Not Present |
| - PDCP SN info | | Not Present |
| - RLC info | | Not Present |
| - RB mapping info | | Not Present |
| - RB stop/continue | | Not Present |
| - RB information to reconfigure | | (TM DTCH) |
| - RB identity | | 10 |
| - PDCP info | | Not Present |
| - PDCP SN info | | Not Present |
| - RLC info | | Not Present |
| - RB mapping info | | Not Present |
| - RB stop/continue | | Not Present |
| - RB information to reconfigure | | (TM DTCH) |
| - RB identity | | 11 |
| - PDCP info | | Not Present |
| - PDCP SN info | | Not Present |
| - RLC info | | Not Present |
| - RB mapping info | | Not Present |
| - RB stop/continue | | Not Present |
| - RB information to reconfigure | | (TM DTCH) |
| | | (This IE is needed for 12.2 kbps and 10.2 |
| DD identity | | kbps) |
| - RB identity | | 12 |
| - PDCP info | | Not Present |
| - PDCP SN info | | Not Present |
| - RLC info | | Not Present |
| - RB mapping info | | Not Present |
| - RB stop/continue | 40 4 4 4 7 | Not Present |
| RB information to reconfigure list | A3,A4,A5, | TS25.331 specifies that "Although this IE is not |
| | A6 | always required, need is MP to align with |
| DD information to make " | | ASN.1". |
| - RB information to reconfigure | | (UM DCCH for RRC) |
| - RB identity | | Net Decemb |
| - PDCP info | | Not Present |
| - PDCP SN info | | Not Present |
| - RLC info | | Not Present |
| - RB mapping info | | Not Present |
| - RB stop/continue | | Not Present |
| - RB information to reconfigure | | (AM DCCH for RRC) |
| - RB identity | I | 2 |

| Information Element | Condition | Value/remark |
|---|-------------------------------------|--|
| - PDCP info | - Condition | Not Present |
| - PDCP SN info | | Not Present |
| - RLC info | | Not Present |
| - RB mapping info | | Not Present |
| - RB stop/continue | | Not Present |
| | | 1 |
| - RB information to reconfigure | | (AM DCCH for NAS_DT High priority) |
| - RB identity | | 3 Not Bresset |
| - PDCP info | | Not Present |
| - PDCP SN info | | Not Present |
| - RLC info | | Not Present |
| - RB mapping info | | Not Present |
| - RB stop/continue | | Not Present |
| RB information to reconfigure | | (AM DCCH for NAS_DT Low priority) |
| - RB identity | | 4 |
| - PDCP info | | Not Present |
| - PDCP SN info | | Not Present |
| - RLC info | | Not Present |
| - RB mapping info | | Not Present |
| - RB stop/continue | | Not Present |
| - RB information to reconfigure | | (AM DTCH) |
| - RB identity | | 20 |
| - RB identity - PDCP info | | Not Present |
| | | Not Present Not Present |
| - PDCP SN info | | |
| - RLC info | | Not Present |
| - RB mapping info | | Not Present |
| - RB stop/continue | | Not Present |
| RB information to be affected | A1, A2, | Not Present |
| | A3,A4,A5, | |
| | A6 | |
| UL Transport channel information for all transport | A1, A2, | Not Present |
| channels | A5,A6 | |
| | | |
| | | |
| UL Transport channel information for all transport | A3, A4 | |
| channels | | |
| - PRACH TFCS | | Not Present |
| - CHOICE mode | | FDD |
| - TFC subset | | Not Present |
| - UL DCH TFCS | | |
| - CHOICE TFCI signalling | | Normal |
| - TFCI Field 1 information | | |
| - CHOICE TFCS representation | | Complete reconfiguration |
| - TFCS complete reconfigure information | | Complete reconliguration |
| - CHOICE CTFC Size | | Number of bits used must be enough to cover |
| - CHOICE CIPC Size | | I Number of bits used must be endudin to cover |
| | | |
| OTFO: (| | all combinations of CTFC from TS34.108 |
| ('I E(' intermetion | | all combinations of CTFC from TS34.108 clause 6.10.2.4 Parameter Set. |
| - CTFC information | | all combinations of CTFC from TS34.108 clause 6.10.2.4 Parameter Set. This IE is repeated for TFC numbers and |
| - CIFC Information | | 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 |
| | | 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 |
| - CTFC information | | 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 |
| - CTFC | | 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 |
| - CTFC - Power offset information | | 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 |
| - CTFC | | 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 |
| - CTFC - Power offset information | | 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 |
| - CTFC - Power offset information | | 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 |
| - CTFC - Power offset information - CHOICE Gain Factors | | 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) |
| - CTFC - Power offset information - CHOICE Gain Factors | | 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) |
| - CTFC - Power offset information - CHOICE Gain Factors | | 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 |
| - CTFC - Power offset information - CHOICE Gain Factors - Gain factor βc | | 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 ComputedGain Factors) |
| - CTFC - Power offset information - CHOICE Gain Factors | | 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 ComputedGain Factors) 15 |
| - CTFC - Power offset information - CHOICE Gain Factors - Gain factor βc | | 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 ComputedGain Factors) 15 (Not Present if the CHOICE Gain Factors is set |
| - CTFC - Power offset information - CHOICE Gain Factors - Gain factor βc - Gain factor βd | | 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 ComputedGain Factors) 15 (Not Present if the CHOICE Gain Factors is set to ComputedGain Factors) |
| - CTFC - Power offset information - CHOICE Gain Factors - Gain factor βc - Gain factor βd - Reference TFC ID | | 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 ComputedGain Factors) 15 (Not Present if the CHOICE Gain Factors is set to ComputedGain Factors) 0 |
| - CTFC - Power offset information - CHOICE Gain Factors - Gain factor βc - Gain factor βd - Reference TFC ID - CHOICE mode | | 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 ComputedGain Factors) 15 (Not Present if the CHOICE Gain Factors is set to ComputedGain Factors) 0 FDD |
| - CTFC - Power offset information - CHOICE Gain Factors - Gain factor βc - Gain factor βd - Reference TFC ID - CHOICE mode - Power offset P p-m | | 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 ComputedGain Factors) 15 (Not Present if the CHOICE Gain Factors is set to ComputedGain Factors) 0 FDD Not Present |
| - CTFC - Power offset information - CHOICE Gain Factors - Gain factor βc - Gain factor βd - Reference TFC ID - CHOICE mode | A1, A2, A3, | 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 ComputedGain Factors) 15 (Not Present if the CHOICE Gain Factors is set to ComputedGain Factors) 0 FDD |
| - CTFC - Power offset information - CHOICE Gain Factors - Gain factor βc - Gain factor βd - Reference TFC ID - CHOICE mode - Power offset P p-m | A1, A2, A3, A4, A5,A6 A1, A2, | 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 ComputedGain Factors) 15 (Not Present if the CHOICE Gain Factors is set to ComputedGain Factors) 0 FDD Not Present |

| Information Element | Condition | Value/remark |
|--|-------------|---|
| Added or Reconfigured UL TrCH information - Uplink transport channel type - UL Transport channel identity | A5,A6 A4 | 2 TrCHs(DCH for DCCH and DCH for DTCH) DCH 5 |
| - TFS - CHOICE Transport channel type - Dynamic Transport format information | | Dedicated transport channels |
| - RLC Size | | Reference to TS34.108 clause 6.10 Parameter Set |
| Number of TBs and TTI ListTransmission Time Interval | | (This IE is repeated for TFI number.) Not Present |
| - Number of Transport blocks | | Reference to TS34.108 clause 6.10 Parameter Set |
| - CHOICE Logical Channel list - Semi-static Transport Format information - Transmission time interval | | All 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 - UL Transport channel identity - TFS | | DCH 1 |
| - CHOICE Transport channel type - Dynamic Transport format information | | Dedicated transport channels |
| - RLC Size | | Reference to TS34.108 clause 6.10 Parameter Set |
| Number of TBs and TTI List Transmission Time Interval Number of Transport blocks | | (This IE is repeated for TFI number.) Not Present Reference to TS34.108 clause 6.10 Parameter Set |
| - CHOICE Logical Channel list - Semi-static Transport Format information - Transmission time interval | | All Reference to TS34.108 clause 6.10 Parameter |
| - Type of channel coding | | Set Reference to TS34.108 clause 6.10 Parameter Set |
| - Coding Rate | | Reference to TS34.108 clause 6.10 Parameter Set |
| - Rate matching attribute | | Reference to TS34.108 clause 6.10 Parameter Set |
| - CRC size | | Reference to TS34.108 clause 6.10 Parameter Set |
| Added or Reconfigured UL TrCH information - Uplink transport channel type - UL Transport channel identity - TFS | A3 | (DCH for DTCH) DCH 1 |
| CHOICE Transport channel type Dynamic Transport format information | | Dedicated transport channels |
| - RLC Size | | Reference to TS34.108 clause 6.10 Parameter Set |
| Number of TBs and TTI ListTransmission Time IntervalNumber of Transport blocks | | (This IE is repeated for TFI number.) Not Present Reference to TS34.108 clause 6.10 Parameter |
| - CHOICE Logical Channel list - Semi-static Transport Format information | | Set All |
| - 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 |

| Information Element | Condition | Value/remark |
|--|--------------------------|---|
| - Rate matching attribute | | Set Reference to TS34.108 clause 6.10 Parameter |
| - | | Set |
| - CRC size | | Reference to TS34.108 clause 6.10 Parameter Set |
| CHOICE mode | A1,A2,A3, A4,A5,A6 | FDD |
| - CPCH set ID | 7 (1,7 (0,7 (0 | Not Present |
| - Added or Reconfigured TrCH information for DRAC list | | Not Present |
| DL Transport channel information common for all transport channel | A1, A2, A5, A6 | Not Present |
| DL Transport channel information common for all | A3,A4 | |
| transport channel - SCCPCH TFCS | | Not Present |
| - CHOICE mode | | FDD |
| - CHOICE DL parameters | | Explicit |
| - DL DCH TFCS | | |
| - CHOICE TFCI Signalling - TFCI Field 1 Information | | Normal |
| - CHOICE TFCS representation | | Complete reconfiguration |
| - TFCS complete reconfigure | | |
| - CHOICE CTFC Size | | Number of bits used must be enough to cover |
| | | all combinations of CTFC from clause |
| - CTFC information | | TS34.108 clause 6.10.2.4 Parameter Set. This IE is repeated for TFC numbers and |
| - OTI O IIIIOIIIIatioii | | reference to TS34.108 clause 6.10.2.4 |
| - CTFC | | Reference to TS34.108 clause 6.10.2.4 |
| | | Parameter Set |
| - Power offset information | A 4 A 9 A 9 | Not Present |
| Deleted DL TrCH information | A1, A2, A3, A4, A5,A6 | Not Present |
| Added or Reconfigured DL TrCH information | A1, A2, A5, A6 | Not Present |
| Added or Reconfigured DL TrCH information | A4 | 2 TrCHs(DCH for DCCH and DCH for DTCH) |
| - Downlink transport channel type | | DCH |
| - DL Transport channel identity | | 10 Same as UL |
| - CHOICE DL parameters - Uplink transport channel type | | DCH |
| - UL TrCH identity | | 5 |
| - DCH quality target | | |
| - BLER Quality value | | Not Present |
| - Downlink transport channel type | | DCH |
| - DL Transport channel identity - CHOICE DL parameters | | 6 Explicit |
| - TFS | | |
| CHOICE Transport channel typeDynamic transport format information | | Dedicated transport channel |
| - RLC Size | | Reference to TS34.108 clause 6.10 Parameter Set |
| - Number of TBs and TTI List | | (This IE is repeated for TFI number.) |
| Dynamic transport format information | | |
| - Transmission Time Interval | | Not Present |
| - Number of Transport blocks | | Reference to TS34.108 clause 6.10 Parameter Set |
| - Semi-static Transport Format information | | |
| - Transmission time interval | | Reference to TS34.108 clause 6.10 Parameter Set |
| - Type of channel coding | | Reference to TS34.108 clause 6.10 Parameter |
| - Coding Rate | | Set Reference to TS34.108 clause 6.10 Parameter |
| - Rate matching attribute | | Set Reference to TS34.108 clause 6.10 Parameter |
| - CRC size | | Set Reference to TS34.108 clause 6.10 Parameter |
| - DCH quality target | | Set |

| - BLER Quality value Added or Reconfigured DL TrCH information - Downlink transport channel type - DL Transport channel type - Dynamic transport channel type - Dynamic 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 - CRC Size - DCH quality target - BLER Causity value - Prequency info - VARFCN downlink (Nd) - Transmission time interval - DPCCH power control info - TFCI existence - Number of FBL bit - Puncturing Limit - Processing size by pe - Scrambling code number - Number of DPDCH - spreading factor - TFCI existence - Number of FBL bit - Puncturing Limit - Downlink IPDSCH information - TRICH Green on the power control infos - Downlink IPDSCH information - Downlink IPDSCH prover control information - DRC mode - Downlink IPDSCH prover control information - DRC mode - Downlink IPDSCH prover control information - DRC mode - Downlink IPDSCH prover control information - DRC mode - Downlink IPDSCH prover control information - DRC mode - DRC mode - Downlink I | Information Element | Condition | Value/remark |
|--|--|------------|---|
| Added or Reconfigured DL TrCH information - Downlink transport channel type - DL Transport channel dentity - CHOICE DL parameters - TFS - CHOICE 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 - 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 - CRC size - DCH quality target - BLER Quality value - CHOICE channel requirement - Uplink DPCH power control info - DPCCH power offset - PPC presentle - SRB delay - Power Control Algorithm - TPC step size - Scrambling code number - Number of PDDCH - spreading factor - TPC lexistence - Number of FB bit - Puncturing Limit - Downlink PDSCH information - Downlink information common for all radio links - Downlink information common for all radio links - Downlink information common for all radio links - Downlink information common for all RL - Timing indicator - PC mode - Downlink information common for all RL - Timing indicator - Downlink information common for all RL - Timing indicator - Downlink information common for all RL - Timing indicator - Downlink information common for all RL - Timing indicator - Downlink information common for all RL - Timing indicator - Downlink information common for all RL - Timing indicator - Downlink information common for all RL - Timing indicator - Downlink information common for all radio links - Downlink information common for all RL - Timing indicator - CPN-targetSPN frame offset - Downlink information common for all RL - Timing indicator | | | |
| DCH OLT Transport channel lentity OHOICE DL parameters FFS OHOICE Transport format information RLC Size Number of TBs and TTI List Dynamic transport format information Transmission Time Interval Number of Transport Dlocks Semi-static Transport Format information Transmission Time Interval Type of channel coding Coding Rate Reference to TS34.108 clause 6.10 Parameter Set Reference to Clause 5.1 Test frequencies Reference to TS34.108 clause 6.10 Parameter Set R | | A3 | |
| - CHOICE DL parameters - TFS - CHOICE 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 - Coding Rate - Rate matching attribute - CRC size - DCH quality target - BLER Quality value - Frequency info - UARFCN uplink (Nu) - UARFCN downlink (Nd) - Transmission time - Maximum allowed UL TX power - Maximum allowed UL TX power - CHOICE channel requirement - TPC step size - Power Control Algorithm - TPC step size - Scrambiling code type - Scrambiling code | | | DCH |
| - 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 - Number of Transport Format information - Transmission time interval - Number of Transport Format information - Transmission time interval - Semi-static Transport Format information - Transmission time interval - Type of channel coding - Coding Rate - Coding Rate - Rate matching attribute - CRC size - DCH quality target - BLER Quality value - TPC size - DCH quality target - LARFCN uplink (Nu) - UARFCN downlink (Nu) - UARFCN downlink (Nd) - TRANSMISSION (Nu) - UARFCN downlink (Nd) - TRANSMISSION (Nu) - UARFCN downlink (Nd) - Prequency info - Maximum allowed UL Tx power - AdA5,86 - CHOICE tenannel requirement - Number of DPDCH - Spreading factor - TFCI existence - Number of DPDCH - spreading factor - TFCI existence - Number of PBI bit - Puncturing Limit - Puncturing Limit - Downlink information - Downlink information common for all radio links - Downlink DPCH plower common for all radio links - Downlink information common for all radio links - Downlink information common for all radio links - Downlink DPCH plower common for all RL - Timing indicator - CFN-targetSFN frame offset - Downlink DPCH plower common for all RL - Timing indicator - CFN-targetSFN frame offset - Downlink DPCH plower common for all RL - Timing indicator - CFN-targetSFN frame offset - Downlink DPCH plower common for all RL - Timing indicator - CFN-targetSFN frame offset - Downlink DPCH power common for all RL - Timing indicator - CFN-targetSFN frame offset - Downlink DPCH plower control information - DPC mode | | | |
| - 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 - Semi-static Transport Format information - Transmission time interval - Type of channel coding - Coding Rate - Coding Rate - Coding Rate - Rate matching attribute - CRC size - DCH quality target - DLER Quality value - CRC size - DCH quality target - BLER Quality value - CHOICE Channel requirement - Uplink DPCH power control info - DPCCH power offset - PCP creamble - Stanbling code number - Number of PBI bit - Puncturing Limit - Puncturing Limit - Downlink information common for all radio links - Downlink inf | | | Explicit |
| - 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 blocks - Semi-static Transport format information - Transmission time interval - Type of channel coding - Coding Rate - Rate matching attribute - Rate matching attribute - CRC size - DCH quality target - BLER Quality value - Trequency info - UARFCN uplink (Nu) - UARFCN downlink (Nd) - Transmission time interval - UARFCN downlink (Nd) - UARFCN downlink (Nd) - Transmission time interval - Reference to TS34.108 clause 6.10 Parameter Set - CRC size - DCH quality target - Set - DCH quality target - LARFCN downlink (Nd) - UARFCN downlink (Nd) - UARFCN downlink (Nd) - Trequency info - A6 - A1,A2,A3, - A3,A5,A6 - CHOICE channel requirement - CPC reamble - SR delay - Scrambling code type - Scrambling co | | | |
| Reference to TS34.108 clause 6.10 Parameter Set (This IE is repeated for TFI number.) Number of Transmission Time Interval - Number of Transport blocks - Semi-static Transport Format information - Transmission time interval - Semi-static Transport Format information - Transmission time interval - Type of channel coding - Coding Rate - Coding Rate - Coding Rate - Coding Rate - CRC size - DCH quality target - BLER Quality target - BLER Quality target - BLER Quality Value - CHOICE channel requirement - L-Uplink DPCH power control info - DPCCH power of IFI Edit Rate - Power for IFI Edit Rate - IFI Edit Rate | | | Dedicated transport channel |
| Set Uniber of TBs and TTI List Dynamic transport format information Transmission Time Interval Number of Transport blocks Semi-static Transport Format information Transmission Time Interval Semi-static Transport Format information Transmission time interval Type of channel coding Coding Rate Type of channel coding Coding Rate Reference to TS34.108 clause 6.10 Parameter Set Reference to clause 5.1 Test frequencies Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.1 | | | D (T004 400 L |
| Number of TBs and TTI List Dynamic transport format information 1 Transmission Time Interval Semi-static Transport blocks - Semi-static 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 - Transmission time interval - UARFCN uplink (Nu) - UARFCN uplink (Nu) - UARFCN uplink (Nu) - UARFCN downlink (Nd) - | - RLC Size | | |
| - Dynamic transport format information - Transmission Time Interval - Number of Transport blocks - Semi-static Transport Format information - Transmission Time interval - Semi-static Transport Format information - Transmission time interval - Type of channel coding - Coding Rate - Cading Rate - Rate matching attribute - Rate matching attribute - CRC size - DCH quality target - BLER Quality value - Frequency Info - MaxFCN uplink (Nu) - LUARFCN downlink (Nu) - LOAD CRC size - CRC size - DCH quality value - Frequency Info - Maximum allowed UL TX power - A1,A2,A3, A4,A5,A6 - A6 - Not Present - A1,A2,A3, A4,A5,A6 | - Number of TRe 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 - UARFCN uplink (Nu) - UARFCN uplink (Nu) - UARFCN downlink (Nd) - Frequency info - Maximum allowed UL TX power - A1,A2,A3, - Uplink DPCH power control info - DPCCH power offset - PC Praamble - SR delay - Power Control Algorithm - TPC step size - Scrambling code number - Number of PBI bit - Puncturing Limit - Puncturing Limit - Downlink PDSCH information - Downlink PDSCH information - Downlink information common for all radio links - Downlink information common for all radio links - Downlink information common for all RL - Timing indicator - CFN- targetSFN frame offset - Downlink DPCH power control infomation - DPCCH power offser - Downlink DPCH power control infomation - Downlink pPCH plower control infomation - Downlink pPCH power control infommation - Downlink pPCH power control information - Downlink pPCH power control info | | | (This IL is repeated for 11 Thumber.) |
| - Number of Transport blocks - Semi-static Transport Format information - Transmission time interval - Type of channel coding - Coding Rate - Rate matching attribute - Rate matching attribute - DCH quality target - BLER Quality value - DCH quality target - BLER Quality value - CHOICE channel requirement - Uplink DPCH power control information - TPC step size - Scrambling code number - Number of PBI bit - Puncturing Limit - Downlink PDSCH information - Downlink information common for all radio links - Downlink information common for all radio links - Downlink DPCH power control information - DPCH pomde - Downlink DPCH power control information - DPCH pomde - Downlink information common for all radio links - Downlink information common for all radio links - Downlink DPCH power control information - DPCH pomde - Downlink information common for all RL - Timing indicator - CFN-4-ragedSFN frame offset - Downlink DPCH power control information - DPC mode - Downlink prochamage in the proper control information - DPCH power control of all RL - Timing indicator - CFN-4-ragedSFN frame offset - Downlink DPCH power control information - DPCH power control information - DPCH power control of all RL - Timing indicator - CFN-4-ragedSFN frame offset - Downlink DPCH prower control information - DPCH power control i | | | Not Present |
| 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 - UARFCN uplink (Nu) - UARFCN uplink (Nu) - Tequency info - UARFCN downlink (Nd) - Tequency info - DPCH power offset - PC Preamble - SR Belay - Power Control Algorithm - TPC ste p size - Scrambling code type - Scrambling code type - Scrambling code type - Number of FBI bit - Puncturing Limit - CHOICE channel requirement - Number of FBI bit - Puncturing Limit - CHOICE Mode - Downlink PDSCH information - Downlink information common for all radio links - Downlink DPCH power control inforenation - DPC mode - Downlink DPCH power control information - DPC mode - Downlink DPCH power control information - DPC mode - Downlink DPCH power control information - DPC mode - Downlink DPCH power control information - DPC mode - Downlink DPCH power control information - DPC mode - Downlink DPCH power control information - DPC mode - Downlink DPCH power control information - DPC mode - Downlink DPCH power control information - DPC mode - Downlink DPCH power control information - DPC mode - DPC mode - DPC manueler - 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 - 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 - Se | | | |
| - Transmission time interval - Type of channel coding - Coding Rate - Rate matching attribute - Rate matching attribute - CRC size - DCH quality target - BLER Quality value - UARFCN uplink (Nu) - UARFCN uplink (Nu) - UARFCN downlink (Nd) - Frequency info Maximum allowed UL TX power - Uplink DPCH power control info - DPCCH power offset - PC Preamble - SR Gelay - Power Control Algorithm - TPC step size - Scrambling code type - Scrambling code type - Number of PDCH - Number of PDCH - Number of PBI bit - Puncturing Limit Downlink INDSCH information Downlink Information common for all radio links - Downlink DPCH power control infomation - DPCH pode - CFN-targelSFN frame offset - Downlink DPCH power control infomation - DPCN power offset - Downlink DPCH power control infomation - Downlink DPCH power control of all RL - Timing indicator - CFN-targelSFN frame offset - Downlink DPCH power control infommation - DPCH power offset - Downlink DPCH power control infommation - DPCH power offset - Downlink DPCH power control infomation - DPCH power offset - Downlink DPCH power control infomation - DPCH power offset - Downlink DPCH power control infomation - DPCH power offset - DPCH power offse | 1 | | |
| - Type of channel coding - Coding Rate - Coding Rate - Rate matching attribute - Rate matching attribute - CRC size - DCH quality target - BLER Quality value - UARFCN uplink (Nu) - UARFCN uplink (Nd) - UARFCN uplink (Nd) - Prequency info - Maximum allowed UL TX power - Uplink DPCH power control info - DPCCH power offset - PC Preamble - SR Befelay - Power Control Algorithm - TPC step size - Scrambling code unmber - Number of DPDCH - Spreading factor - TFCI existence - Number of FBI bit - Puncturing Limit - Downlink PDSCH information - Downlink information common for all radio links - Downlink DPCH power control infomation - DPCH pode - O (single) - Single Reference to TS34.108 clause 6.10 Parameter - Set - Reference to TS34.108 clause 6.10 Paramet | - Semi-static Transport Format information | | |
| - Type of channel coding - Coding Rate - Coding Rate - Rate matching attribute - CRC size - DCH quality target - BLER Quality value - Frequency info - UARFCN uplink (Nu) - UARFCN downlink (Nd) - UARFCN uplink (Nd) - UARFCN downlink (Nd) - UARFCN downlink (Nd) - UARFCN downlink (Nd) - UARFCN downlink (Nd) - UARFCN uplink (Nd) - A4.A5,A6 - Not Present - Number of PDCH - Scrambling code uplink (Nd) - Downlink information common for all RL - Timing indicator - CFN-targetSPN frame offset - Downlink DPCH inforcommon for all RL - Timing indicator - Downlink DPCH power control information - Downlink DPCH power control informati | - Transmission time interval | | Reference to TS34.108 clause 6.10 Parameter |
| - Coding Rate - Rate matching attribute - Rate matching attribute - CRC size - DCH quality target - BLER Quality value - UARFCN uplink (Nu) - UARFCN downlink (Nd) - UARFCN uplink (Nu) | | | 1 |
| - Coding Rate - Rate matching attribute - CRC size - DCH quality target - BLER Quality value - Frequency info - UARFCN uplink (Nu) - UARFCN downlink (Nd) - CHOICE channel requirement - Uplink DPCH power control info - DPCCH power offset - PC Preamble - SRB delay - Power Control Algorithm - TPC step size - Scrambling code type - Special (National Companies) - Special (National Companies) - Special (National Companies) - Puncturing Limit - Downlink (National Companies) - Downlink (N | - Type of channel coding | | |
| Rate matching attribute - Rate matching attribute - CRC size - DCH quality target - BLER Quality value Frequency info - UARFCN ownlink (Nu) - UARFCN downlink (Nd) Frequency info - WarfCN downlink (Nd) Frequency info - Waximum allowed UL TX power - Maximum allowed UL TX power - CFN earbile - SRB delay - Power Control Algorithm - TPC step size - Scrambling code number - Number of DPDCH - spreading factor - TFCI existence - Number of FBI bit - Puncturing Limit CHOICE channel requirement - A5, A6 - Downlink Information common for all radio links - Downlink Information common for all RL - Timing indicator - PC mode - Downlink Information common for all RL - Timing indicator - DCF mode - Downlink Information common for all RL - Timing indicator - DCF mode - Downlink Information common for all RL - Timing indicator - DCF mode - Downlink Information common for all RA - Timing indicator - DCF mode - Downlink Information common for all RA - Timing indicator - DCF mode - Downlink Information common for all RA - Timing indicator - DCF mode - A1, A2, A3 - A4, A5, A6 - A6 - A1, A2, A3 - A4, A5, A6 - A6 - A1, A2, A3 - A4, A5, A6 - A1, A2, A3 - A2, A5, A6 - A1, A2, A3 - A2, A5, A6 - A1, A2, A3 - | | | 1 |
| Reference to TS34.108 clause 6.10 Parameter Set Reference to Clause 5.1 Test frequencies Reference to Clause 5.1 Test frequen | - Coding Rate | | |
| Set Reference to TS34.108 clause 6.10 Parameter Set Set PAREPRIOR TO TS34.108 clause 6.10 Parameter Set Set PAREPRIOR TO TS34.108 clause 6.10 Parameter Set PAREPRIOR Set PAREPRIOR TO TS34.108 clause 6.10 Parameter Set PAREPRIOR Set PAREPRIOR TO TS34.108 clause 6.10 Parameter Set PAREPRIOR TO TS34.108 clause 6.10 Para | Poto motohing attribute | | |
| - CRC size - DCH quality target - BLER Quality value - Set - Set - DCH quality target - BLER Quality value - 20 - A1,A2,A3, A4,A5 - UARFCN uplink (Nu) - UARFCN uplink (Nu) - UARFCN downlink (Nd) Frequency info Maximum allowed UL TX power A1,A2,A3, A4,A5 A6 CHOICE channel requirement - Uplink DPCH power control info - DPCCH power offset - PC Preamble - SRB delay - Power Control Algorithm - TPC step size - Scrambling code number - Number of DPDCH - spreading factor - TFCI existence - Number of FBI bit - Puncturing Limit CHOICE channel requirement - Puncturing Limit CHOICE channel requirement - A5, A6 - Downlink information common for all radio links - Downlink information common for all radio links - Downlink information common for all RL - Timing indicator - DPC mode - DRCH power control infomation - DPCH nower control infomation - DPC node - Set - | - Rate matching attribute | | |
| - DCH quality target - BLER Quality value Frequency info - UARFCN uplink (Nu) - UARFCN downlink (Nd) Frequency info Maximum allowed UL TX power A1, A2, A3, A4, A5 CHOICE channel requirement - Uplink DPCH power control info - DPCCH power offset - PC Preamble - SRB delay - Power Control Algorithm - TPC step size - Scrambling code number - Number of DPDCH - spreading factor - TFCI existence - Number of FBI bit - Puncturing Limit CHOICE channel requirement - A5, A6 - Downlink information common for all radio links - Downlink information common for all RL - Timing indicator - Reference to Tsat. 108 clause 6.10 Parameter - Set - Not Present - Not Pre | - CRC size | | |
| - DCH quality target - BLER Quality value Frequency info - UARFCN uplink (Nu) - UARFCN downlink (Nd) - A6 - Not Present - Not Present - Reference to clause 5.1 Test frequencies - Reference to clause 5.1 Test frequencies - Not Present - Not Present - A1, A2, A3, A4, A5, A6 - Uplink DPCH power control info - DPCCH 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 DPDCH - spreading factor - TFCI existence - Number of FBI bit - Puncturing Limit - Puncturing Limit - Puncturing Limit - Downlink information common for all radio links - Downlink information common for all radio links - Downlink information common for all radio links - Downlink information common for all RL - Timing indicator - DPCH power control information - DPC prode - Downlink DPCH power control information - DPC prode - Downlink DPCH power control information - DPC prode - Downlink DPCH power control information - DPC prode - Downlink DPCH power control information - DPC prode - Downlink DPCH power control information - DPC prode - Downlink DPCH power control information - DPC prode - DPC present - A6 - Not Present - A1, A2, A3, A4, A5, A6 - Not Present - A1, A2, A3 - A3, A5 - A6 - Not Present - No | - OINO SIZE | | |
| - BLER Quality value Frequency info - UARFCN uplink (Nu) - UARFCN downlink (Nd) - VARFCN downlink (Nd) - VARFCN downlink (Nd) - Reference to clause 5.1 Test frequencies Reference to clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Pa | - DCH quality target | | 001 |
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| - UARFCN downlink (Nu) - UARFCN downlink (Nd) - VARFCN downlink (Nd) - AA - AA - AB - AA - AB - AA - AB - AA - AA | | A1,A2,A3, | |
| - UARFCN downlink (Nd) Frequency info Maximum allowed UL TX power A1,A2,A3, A4,A5,A6 CHOICE channel requirement - 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 CHOICE channel requirement CHOICE channel requirement A5, A6 Downlink PDSCH information Downlink information common for all radio links - Downlink Information common for all radio links - Downlink DPCH power control information - DPC mode A6 A1,A2,A3, A4,A5,A6 A1, A2, A3 A4,A5,A6 Not Present A6 Not Present Maintain Not Present O (single) | | A4,A5 | |
| Frequency info Maximum allowed UL TX power A1,A2,A3, A4,A5,A6 CHOICE channel requirement -Uplink DPCH power control info -DPCCH power offset -PC Preamble -SRB delay -Power Control Algorithm -TPC step size -Scrambling code type -Scrambling code type -Scrambling code number -Number of DPDCH -spreading factor -TFCI existence -Number of FBI bit -Puncturing Limit CHOICE channel requirement CHOICE channel requirement CHOICE channel requirement CHOICE mode -Downlink PDSCH information Downlink information common for all radio links -Downlink DPCH info common for all RL -Timing indicator -CFN-targetSFN frame offset -Downlink DPCH power control information -DPC mode A1,A2,A3, A4,A5,A6 Not Present Maintain Not Present Maintain Not Present O (single) | | | |
| Maximum allowed UL TX power A1,A2,A3, A4,A5,A6 CHOICE channel requirement - 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 CHOICE channel requirement CHOICE channel requirement CHOICE Mode - Downlink PDSCH information Downlink information common for all radio links - Downlink information common for all radio links - Downlink DPCH power control information - DPC mode - DPC mode A1,A2,A3, A4,A5,A6 A1,A2,A3, A4,A5,A6 A1,A2,A3, A4,A5,A6 A1,A2,A3, A4,A5,A6 Not Present Maintain Not Present O (single) | | | |
| CHOICE channel requirement -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 CHOICE channel requirement CHOICE channel requirement CHOICE Mode -Downlink PDSCH information Downlink information common for all radio links -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 A1, A2, A3, A4, A5, A6 Not Present Maintain Not Present Maintain Not Present O (single) | Frequency info | _ | |
| CHOICE channel requirement -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 CHOICE channel requirement CHOICE channel requirement CHOICE Mode -Downlink PDSCH information Downlink information common for all radio links -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 -South A4, A2, A3, A4 -Demotine information -DPC mode -South A1, A2, A3, A4 -Downlink DPCH power control information -DPC mode -South A1, A2, A3, A4 -South A2, A3, A4 -Downlink DPCH power control information -DPC mode -South A1, A2, A3, A4 -South A2, A3, A4 -Downlink DPCH power control information -DPC mode -South A1, A2, A3, A4 -South A2, A3 -South A2, A3 -South A2, A3 -South A2, A3 -South A3, A4 -South A2, A3 -South A3, A4 -South A | Maximum allowed UL 1X power | | 33dBm |
| -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 CHOICE channel requirement - Downlink PDSCH information - Downlink information common for all radio links - Downlink information common for all radio links - Downlink DPCH power control information - DPC mode - SRB delay - Reference to Tsau.1 IE value of -40) 1 frame - RodB (i.e. ASN.1 IE value of -40) 1 frame - 80dB (i.e. ASN.1 IE value of -40) 1 frame - 7 frames - 80dB (i.e. ASN.1 IE value of -40) 1 frame - 7 frames - Algorithm - 10B - Stause - 10B - Algorithm - 10B - Not Present - | CHOICE channel requirement | | Unlink DPCH info |
| -Uplink DPCH power control info - DPCCH power offset - PC Preamble - SRB delay - Power Control Algorithm - TPC step size - Scrambling code type - Scrambling code type - Scrambling code number - Number of DPDCH - spreading factor - TFCI existence - Number of FBI bit - Puncturing Limit - Puncturing Limit CHOICE channel requirement - Downlink DPCH info common for all radio links - Downlink information common for all radio links - Downlink information common for all radio links - Downlink DPCH info common for all RL - Timing indicator - DPC mode - SRB delay - Reference to TSD4.1 IE value of -40) 1 frame 7 frames Algorithm1 1 dB - Long 0 (0 to 16777215) Not Present(1) Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause | CHOICE charmer requirement | | Opinik Di Ci i iiilo |
| - 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 - Puncturing Limit - Downlink PDSCH information - Downlink information common for all radio links - Downlink DPCH info common for all RL - Timing indicator - DPC mode - SRB delay - 1 frame - 7 frames - Algorithm1 1 dB - 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 - | -Uplink DPCH power control info | / | |
| - 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 - Puncturing Limit - Downlink PDSCH information - Downlink information common for all radio links - Downlink DPCH info common for all RL - Timing indicator - SRB delay - Power Control Algorithm - Tf rame - 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 - Not Present - FDD - Not Present - A5, A6 - Not Present - Not Present - Not Present - A5, A6 - Not Present | op | | |
| - 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 - Puncturing Limit - Downlink PDSCH information - Downlink information common for all radio links - Downlink DPCH info common for all RL - Timing indicator - SRB delay - Power Control Algorithm - Tf rame - 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 - Not Present - FDD - Not Present - A5, A6 - Not Present - Not Present - Not Present - A5, A6 - Not Present | - DPCCH power offset | | -80dB (i.e. ASN.1 IE value of -40) |
| - 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 - Puncturing Limit CHOICE channel requirement - Downlink PDSCH information - Downlink information common for all radio links - Downlink DPCH info common for all RL - Timing indicator - Downlink DPCH power control information - DPC mode - Scrambling code type - O (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 - Not Present - Not Pres | | | |
| - TPC step size - Scrambling code type - Scrambling code number - Number of DPDCH - spreading factor - TFCI existence - TFCI existence - Number of FBI bit - Puncturing Limit - Puncturing Limit - Puncturing Limit - Puncturing Limit - Downlink PDSCH information - Downlink information common for all radio links - Downlink DPCH info common for all RL - Timing indicator - CFN-targetSFN frame offset - Downlink DPCH power control information - DPC mode - Scrambling code type - 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 - Not Present - Oownlink DPCH info common for all RL - Timing indicator - CFN-targetSFN frame offset - Downlink DPCH power control information - DPC mode - O (single) | | | |
| - Scrambling code type - Scrambling code number - Number of DPDCH - spreading factor - TFCI existence - Number of FBI bit - Puncturing Limit CHOICE channel requirement - Downlink PDSCH information Downlink information common for all radio links - Downlink DPCH info common for all RL - Timing indicator - Downlink DPCH power control information - DPC mode - Scrambling code type - Q (0 to 16777215) Not Present(1) Reference to TS34.108 clause 6.10 Parameter Set | | | |
| - Scrambling code number - Number of DPDCH - spreading factor - TFCI existence - Number of FBI bit - Puncturing Limit CHOICE channel requirement CHOICE Mode - Downlink PDSCH information Downlink information common for all radio links - Downlink DPCH info common for all RL - Timing indicator - DPC mode O (0 to 16777215) Not Present(1) Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 cla | | | T |
| - Number of DPDCH - spreading factor - TFCI existence - Number of FBI bit - Puncturing Limit CHOICE channel requirement CHOICE Mode - Downlink PDSCH information Downlink information common for all radio links - Downlink DPCH info common for all RL - Timing indicator - DPC mode Not Present(1) Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.10 | | | |
| - spreading factor - TFCI existence - Number of FBI bit - Puncturing Limit CHOICE channel requirement CHOICE Mode - Downlink PDSCH information Downlink information common for all radio links Downlink information common for all radio links - Downlink DPCH info common for all RL - Timing indicator - Downlink DPCH power control information - DPC mode Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34 | | | |
| Set - TFCI existence - Number of FBI bit - Puncturing Limit CHOICE channel requirement CHOICE Mode - Downlink PDSCH information Downlink information common for all radio links - Downlink DPCH info common for all RL - Timing indicator - CFN-targetSFN frame offset - Downlink DPCH power control information - DPC mode Set Reference to TS34.108 clause 6.10 Parameter | | | |
| - TFCI existence - Number of FBI bit - Puncturing Limit CHOICE channel requirement CHOICE Mode - Downlink PDSCH information Downlink information common for all radio links - Downlink DPCH info common for all RL - Timing indicator - CFN-targetSFN frame offset - Downlink DPCH power control information - DPC mode Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 | - Spicauliy lactor | | |
| - Number of FBI bit - Puncturing Limit CHOICE channel requirement CHOICE Mode - Downlink PDSCH information Downlink information common for all radio links - Downlink DPCH info common for all RL - Timing indicator - CFN-targetSFN frame offset - Downlink DPCH power control information - DPC mode Set Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 Parameter Set Reference to TS34.108 Param | - TFCI existence | | |
| - Number of FBI bit - Puncturing Limit CHOICE channel requirement CHOICE Mode - Downlink PDSCH information Downlink information common for all radio links - 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 Reference to TS34.108 clause 6.10 Parameter Set Not Present Not Present Not Present Of Set Parameter Set Of Set Parameter Set Reference to TS34.108 clause 6.10 Parameter Reference to TS34.108 clause 6.10 Parameter Reference to TS34.108 clause | | | |
| - Puncturing Limit - Puncturing Limit - Puncturing Limit - Reference to TS34.108 clause 6.10 Parameter Set CHOICE channel requirement - A5, A6 - Not Present - Downlink PDSCH information - Downlink information common for all radio links - 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 - Decomposed Set - Puncturing Limit - A5, A6 - Not Present - Not Present - Maintain Not Present - O (single) | - Number of FBI bit | | |
| CHOICE channel requirement CHOICE Mode - Downlink PDSCH information Downlink information common for all radio links - 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 A1, A2, A3 Not Present A1, A2, A3 Maintain Not Present O (single) | | | |
| CHOICE channel requirement CHOICE Mode - Downlink PDSCH information Downlink information common for all radio links - 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 A5, A6 Not Present Not Present A1, A2, A3 A1, A2, A3 Maintain Not Present O (single) | - Puncturing Limit | | Reference to TS34.108 clause 6.10 Parameter |
| CHOICE Mode - Downlink PDSCH information Downlink information common for all radio links 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 A1, A2, A3 Not Present A1, A2, A3 Maintain Not Present O (single) | | | |
| - Downlink PDSCH information Downlink information common for all radio links 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 A4,A5,A6 Not Present A1, A2, A3 Maintain Not Present O (single) | | , | |
| - Downlink PDSCH information Downlink information common for all radio links 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 Not Present A1, A2, A3 Maintain Not Present 0 (single) | CHOICE Mode | | FDD |
| Downlink information common for all radio links 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 A5, A6 Not Present Maintain Not Present O (single) | Downlink DDCCH information | A4,A5,A6 | Not Procent |
| 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 A1, A2, A3 Maintain Not Present 0 (single) | | Λ5 Λ6 | |
| - Downlink DPCH info common for all RL - Timing indicator - CFN-targetSFN frame offset - Downlink DPCH power control information - DPC mode Maintain Not Present 0 (single) | | | INOU FIESEIIL |
| - Timing indicator - CFN-targetSFN frame offset - Downlink DPCH power control information - DPC mode Maintain Not Present 0 (single) | | A1, A2, A3 | |
| - CFN-targetSFN frame offset - Downlink DPCH power control information - DPC mode Not Present 0 (single) | | | Maintain |
| - Downlink DPCH power control information - DPC mode 0 (single) | | | |
| - DPC mode 0 (single) | | | |
| | | | 0 (single) |
| | - CHOICE mode | | |

| Information Element | Condition | Value/remark |
|---|------------|--|
| - Power offset P _{Pilot-DPDCH} | | 0 |
| - DL rate matching restriction information | | Not Present |
| - Spreading factor | | Reference to TS34.108 clause 6.10 Parameter |
| | | Set |
| - Fixed or Flexible Position | | Reference to TS34.108 clause 6.10 Parameter Set |
| - TFCI existence | | Reference to TS34.108 clause 6.10 Parameter Set |
| - CHOICE SF | | Reference to TS34.108 clause 6.10 Parameter Set |
| - DPCH compressed mode info | | Not Present |
| - TX Diversity mode | | None |
| - SSDT information | | Not Present |
| - Default DPCH Offset Value | | Not Present |
| Downlink information common for all radio links | A4 | Not Fresent |
| | A4 | |
| - Downlink DPCH info common for all RL | | Later to a |
| - Timing indicator | | Initialise |
| - CFN-targetSFN frame offset | | Not Present |
| - Downlink DPCH power control information | | |
| - DPC mode | | 0 (single) |
| - CHOICE mode | | FDD |
| - Power offset P _{Pilot-DPDCH} | | 0 |
| - DL rate matching restriction information | | Not Present |
| - Spreading factor | | Reference to TS34.108 clause 6.10 Parameter Set |
| - Fixed or Flexible Position | | Reference to TS34.108 clause 6.10 Parameter Set |
| - TFCI existence | | Reference to TS34.108 clause 6.10 Parameter Set |
| - CHOICE SF | | Reference to TS34.108 clause 6.10 Parameter Set |
| - DPCH compressed mode info | | Not Present |
| - TX Diversity mode | | None |
| - SSDT information | | Not Present |
| - Default DPCH Offset Value | | Present Arbitrary set to value 0306688 by step of 512 |
| Downlink information per radio link list | A1, A2, A3 | |
| -Downlink information for each radio link | ,, | |
| - Choice mode | | FDD |
| - Primary CPICH info | | |
| - Primary scrambling code | | Ref. to the Default setting in TS34.108 clause |
| Trimary solutioning code | | 6.1 (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 (as |
| Secondary CDICH info | | currently stored in SS) mod 38400 |
| - Secondary CPICH info | | Not Present |
| - Secondary scrambling code - channelisation code | | |
| | | |
| - DL channelisation code | | |
| - Secondary scrambling code | | 2 Peterones to TS24 109 eleves 6 10 Peremeter |
| - Spreading factor | | Reference to TS34.108 clause 6.10 Parameter Set |
| - 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 | 1 | Not Present |
| Downlink information per radio link list | A4 | |
| -Downlink information for each radio link | | |
| - Choice mode | | FDD |
| - Primary CPICH info | | |
| - Primary scrambling code | | Ref. to the Default setting in TS34.108 clause 6.1 (FDD) |

| Information Element | Condition | Value/remark |
|--|-----------|--|
| - 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 |
| - Secondary scrambling code | | |
| - channelisation code | | |
| - DL channelisation code | | |
| - Secondary scrambling code | | 2 |
| - Spreading factor | | Reference to TS34.108 clause 6.10 Parameter |
| | | Set |
| - 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 |
| - Downlink information for each radio link | A5, A6 | |
| - Choice mode | | FDD |
| - Primary CPICH info | | |
| - Primary scrambling code | | Ref. to the Default setting in TS34.108 clause |
| | | 6.1 (FDD) |
| - PDSCH with SHO DCH info | | Not Present |
| - PDSCH code mapping | | Not Present |
| - Downlink DPCH info for each RL | | Not present |
| - SCCPCH Information for FACH | | 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 identitifer | Checked to see if it is set to identical value of the same IE in the downlink RADIO BEARER RECONFIGURATION message. |
| Integrity check info | |
| - Message authentication code | This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I. |
| - RRC Message sequence number | This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value. |
| Failure cause | Checked to see if it meets test requirement |
| Radio bearers for which reconfiguration would have succeeded List | Not checked |

Contents of RADIO BEARER RECONFIGURATION COMPLETE message: AM

| Information Element | Value/remark |
|--|--|
| Message Type | |
| RRC transaction identifier | Checked to see if the value is identical to the same IE in the downlink RADIO BEARER RECONFIGURATION COMPLETE message |
| Integrity check info | |
| - Message authentication code | This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I. |
| - RRC Message sequence number | This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value. |
| Uplink integrity protection activation info | Not checked |
| CHOICE mode | FDD |
| COUNT-C activation time | Not checked |
| Radio bearer uplink ciphering activation time info | Not checked |
| Uplink counter 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 | |
| RRC transaction identifier | Α, Αο | 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 Ciphering mode info | | Not Present Not Present |
| Activation time | A1, A2, A3, | (256+CFN-(CFN MOD 8 + 8))MOD 256 |
| Activation time New U-RNTI | A7, A8 A4, A5, A6 | Not Present Not Present |
| New C-RNTI | A1,A2,A3, A4 | Not Present |
| New C-RNTI | A5, A6, A7, A8 | '1010 1010 1010 1010' |
| New DSCH-RNTI | A1, A2, A3, A4, A5, A6, A7, A8 | Not Present |
| RRC State indicator | A1,A2, A3, A4 | CELL_DCH |
| RRC State indicator | A5, A6, A7, A8 | CELL_FACH |
| UTRAN DRX cycle length coefficient | A1,A2,A3, A4,A5,A6, A7, A8 | Not Present |
| CN information info Signalling Connection release indication URA identity RAB information to reconfigure list | 711,710 | Not Present Not Present Not Present Not Present Not Present |
| RB information to release | A1,A2, A7, A8 | |
| - RB identity RB information to release | A2, A8 | 10 |
| - RB identity RB information to release | A2, A8 | 11 |
| - RB identity RB information to release | A3, A4, A5, | 12 |
| - RB identity | A6 | 20 |
| 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 | |
| - Uplink transport channel type - Transport channel identity | | 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 |

| Information Element | | Value/remark |
|--|-------------------|--|
| Added or Reconfigured UL TrCH information | A5, A6, A7, | Not Present |
| | A8 | |
| 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 |
| , and the second | | (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 | A1, A2, A3, | TFCS reconfigured to fit the new transport |
| channels | A4, A5,A6, | channel configuration. |
| | A7, A8 | |
| 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, | Not Present |
| Added or Reconfigured DL TrCH information | A8 A1, A2, A3, | 1 TrCHs(DCH for DCCH) |
| Added of Neconinguled DE 110H IIIIOIIIIalion | A1, A2, A3, A4 | |
| - 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, | İ |
| | 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, | Not Present |
| | A8 | |
| CHOICE channel requirement | A1,A2,A3, A4 | Uplink DPCH info |
| - Uplink DPCH power control info | | |
| 1 1 2 2 22 22 22 22 22 | | • |

| DPCCH prover offset PPC Prepare offset PPC Step size PPOVE COntrol Algorithm PPC step size Scrambling code tumber Number of DPDCH spreading factor PPC step size PPOVE Octor of State of PPCCH PPOVE Offset Palue PPOVE Offset Prepare | Information Element | | Value/remark |
|--|---|-----------|---|
| - PC Preamble - SR8 delay - Power Control Algorithm - TPC step size - Scrambling code type - Scrambling code type - Scrambling code number - Number of DPDCH - spreading factor - TFCI existence - Number of FBI bit - Puncturing Limit - Downlink PDSCH information - Downlink Information common for all radio links - Downlink Information common for all radio links - Downlink DPCH proper control information - DPC mode - CHOICE mode | | | |
| - SRB delay - Power Control Algorithm - TPC step size - Scarambling code type - Scrambling code number - Number of DPDCH - spreading factor - TFCI existence - Number of FBI bit - Puncturing Limit - Refer | | | · · |
| - Power Control Algorithm - TPC step size - Scrambling code type - Scrambling code umber - Number of DPDCH - spreading factor - TFCI existence - Number of FBI bit - Puncturing Limit - Puncturing Limit - Puncturing Limit CHOICE Mode - Al, AS, AS, AS, AS, AS, AS, AS, AS, AS, AS | | | |
| - TFC step size - Scarmbling code number - Number of DPDCH - spreading factor - TFCI existence - Number of BPI bit - Puncturing Limit - Punctu | | | |
| - Scrambling code type - Scrambling code type - Scrambling code number - Number of DPDCH - spreading factor - FFCI existence - Number of FBI bit - Puncturing Limit - Puncturing Limit CHOICE Mode - Downlink PDSCH information - Downlink information common for all radio links - Downlink information - DPC mode - Power offset Psiko-poch - DL rate matching restriction information - Spreading factor - Fixed or Flexible Position - TFCI existence - CHOICE SF - DPCH compressed mode info - TX Diversity mode - SSDT information - DPC mode - CHOICE mode - Power offset Psiko-poch - Dut all to PCH offset Value - Downlink information common for all RL - Triming information - DPC mode - CHOICE mode - Power offset Psiko-poch - DL rate matching restriction information - Spreading factor - Fixed or Flexible Position - Fixed properties of the properties of t | | | |
| - Scrambling code number Number of DPDCH - spreading factor - TFCI existence - Number of FBI bit - Puncturing Limit CHOICE Mode - Downlink PDSCH information Downlink information common for all radio links - Downlink information common for all radio links - Downlink DPCH plower control information - DPC mode - CHOICE SF - DPCH compressed mode info - TX Diversity mode - SSDT information - DPC mode - CHOICE mode - CHOICE mode - CHOICE mode - CHOICE SF - DPCH compressed mode info - TX Diversity mode - SSDT information common for all radio links - Downlink Information common for all radio links - Downlink DPCH plower control information - Spreading factor - Fixed or Flexible Position - TFCI existence - CHOICE mode - CHOICE SF - DPCH compressed mode info - TX Diversity mode - SSDT information - Spreading factor - Fixed or Flexible Position - TFCI existence - CHOICE mode - CHOICE | | | |
| - Number of DPDCH - spreading factor - Spreading factor - TFCI existence - Number of FBI bit - Puncturing Limit CHOICE Mode - Downlink PDSCH information - Downlink information common for all radio links - Downlink information - DPC mode - Power offset Pelion Peccit - DI rate matching restriction information - Spreading factor - Fixed or Flexible Position - TFCI existence - CHOICE SF - DPCH compressed mode info - TX Diversity mode - SSDT information - DPC mode - CHOICE mode - CHO | | | |
| - spreading factor - TFCI existence - Number of FBI bit - Puncturing Limit CHOICE Mode - A1,A2,A3, FDD - A4,A5,A6,A7,A8 - Downlink PDSCH information - Downlink information common for all radio links - Downlink information - DPC mode - CHOICE mode - Power offset Ppaus-Dopcid - DL rate matching restriction information - Spreading factor - TFCI existence - CHOICE SF - DPCH compressed mode info - TX Diversity mode - SSDT information - DPC mode - CHOICE mode - Power offset Ppaus-Dopcid - DL rate matching restriction information - DPC mode - CHOICE mode - Power offset Ppaus-Dopcid - DL rate matching restriction information - DPC mode - CHOICE mode - Power offset Ppaus-Dopcid - CHOICE mode - Power offset Ppaus-Dopcid - CHOICE mode - CHOICE mode - Power offset Ppaus-Dopcid - Power offse | | | |
| - TFCI existence - Number of FBI bit - Puncturing Limit - Punctur | | | |
| - Number of FBI bit - Puncturing Limit - Puncturing Limit CHOICE Mode A1,A2,A3, A4,A5,A6, A7,A8 Downlink PDSCH information Downlink information common for all radio links - 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 - Power offset Pewschoerd - DL rate matching restriction information - Spreading factor - TFCI existence - SSDT information - DPCH compressed mode info - TX Diversity mode - SSDT information - DPCH compressed mode fise - Downlink DPCH procention for all RL - Timing indicator - CFN-targetSFN frame offset - Downlink DPCH offset value - SSDT information - Default DPCH Offset Value - Downlink information common for all radio links - Downlink information common for all RL - Timing indicator - CFN-targetSFN frame offset - Downlink DPCH infore common for all RL - Timing indicator - CFN-targetSFN frame offset - Downlink DPCH infore common for all RL - Timing indicator - CFN-targetSFN frame offset - Downlink DPCH infore common for all RL - Timing indicator - CFN-targetSFN frame offset - Downlink DPCH infore common for all RL - Timing indicator - CFN-targetSFN frame offset - Downlink DPCH infore common for all RL - Timing indicator - CFN-targetSFN frame offset - Downlink DPCH infore common for all RL - Timing indicator - CFN-targetSFN frame offset - Downlink information for each radio links - Downlink information for each radio link list - Downlink information for each radio li | - spreading factor | | |
| Puncturing Limit CHOICE Mode A1,A2,A3, A4,A5,A6, A7,A8 Downlink PDSCH information Downlink information common for all radio links Downlink information common for all RL Timing indicator CFN-targetSFN frame offset Downlink DPCH ower control information DPC mode CHOICE mode Power offset Peiscencid DPC mode CHOICE sF CHOICE SF DPCH compressed mode info TX Diversity mode SSDT information Devalink information common for all RL Timing indicator CFN-targetSFN frame offset Downlink DPCH divencement TFCI existence CHOICE SF DPCH compressed mode info TX Diversity mode SSDT information Devaluit DPCH Offset Value Downlink information common for all RL Timing indicator CFN-targetSFN frame offset Downlink information common for all RL Timing indicator CFN-targetSFN frame offset Downlink DPCH divencement DPC mode CHOICE mode Power offset Peiscenced Downlink DPC hid or expected TFCI existence TFCI existence CFN-targetSFN frame offset Downlink information Spreading factor TFCI existence TFIxed or Flexible Position TFCI existence TFIxed or Flexible Position TFCI existence TFIxed or Flexible Position TFCI existence TFIXED TYPE of TYPE | - TFCI existence | | |
| CHOICE Mode CHOICE Mode A1,A2,A3, A4,A5,A6, A7, A8 Downlink PDSCH information Downlink information common for all radio links Downlink information common for all radio links Downlink DPCH info common for all RL Timing indicator CPN-tragetSFN frame offset Downlink DPCH power control information - DPC mode Power offset Prince-proced - CHOICE SF Default DPCH Offset Value Downlink DPCH info common for all RL Timing indicator CPN-tragetSFN frame offset Downlink information common for all radio links - Downlink information - Spreading factor CHOICE SF DPCH compressed mode info TX Diversity mode SSDT information DPC mode CHOICE SF DPCH compressed mode info TFCI existence - CHOICE SF Default DPCH Offset Value Downlink information common for all radio links Downlink DPCH power control information DPC mode CHOICE mode CPN-tragetSFN frame offset Downlink DPCH power control information DPC mode CHOICE mode CPN-tragetSFN frame offset Downlink DPCH power control information Typesant Timing indicator CPN-tragetSFN frame offset Downlink DPCH power control information DPC mode CHOICE mode CPN-tragetSFN frame offset Downlink DPCH power control information Typesant Typesant Not Present A4 A4 A4 A4 A4 A4 A4 A4 A4 A | - Number of FBI bit | | |
| - Downlink PDSCH information Downlink information common for all radio links - 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 - Spreading factor - Fixed or Flexible Position - TFCI existence - CHOICE SF - DPCH compressed mode info - TX Diversity mode - CHOICE mode - Default DPCH Offset Value Downlink DPCH info common for all RL - Timing indicator - TFCI existence - CHOICE SF - DPCH compressed mode info - TX Diversity mode - SSDT information common for all radio links - Downlink DPCH info common for all RL - Timing indicator - CFN-targetSFN frame offset - Downlink DPCH power control information - Spreading factor - Fixed or Flexible Position - Fixed or Flexible Position - TCFN-targetSFN frame offset - Downlink DPCH power control information - Spreading factor - CFN-targetSFN frame offset - Downlink DPCH power control information - Spreading factor - Fixed or Flexible Position - TCFN-targetSFN frame offset - CHOICE sF - DPCH compressed mode info - TX Diversity mode - SSDT information - Spreading factor - TFCI existence - CHOICE sF - DPCH compressed mode info - TX Diversity mode - SSDT information - Spreading factor - TX Diversity mode - SSDT information - Spreading factor - TX Diversity mode - SSDT information - Default DPCH Offset Value - Downlink information for each radio link list | - Puncturing Limit | | |
| - Downlink PDSCH information Downlink information common for all radio links - 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 - Spreading factor - Fixed or Flexible Position - TFCI existence - CHOICE SF - DPCH compressed mode info - TX Diversity mode - CHOICE mode - Default DPCH Offset Value Downlink DPCH info common for all RL - Timing indicator - TFCI existence - CHOICE SF - DPCH compressed mode info - TX Diversity mode - SSDT information common for all radio links - Downlink DPCH info common for all RL - Timing indicator - CFN-targetSFN frame offset - Downlink DPCH power control information - Spreading factor - Fixed or Flexible Position - Fixed or Flexible Position - TCFN-targetSFN frame offset - Downlink DPCH power control information - Spreading factor - CFN-targetSFN frame offset - Downlink DPCH power control information - Spreading factor - Fixed or Flexible Position - TCFN-targetSFN frame offset - CHOICE sF - DPCH compressed mode info - TX Diversity mode - SSDT information - Spreading factor - TFCI existence - CHOICE sF - DPCH compressed mode info - TX Diversity mode - SSDT information - Spreading factor - TX Diversity mode - SSDT information - Spreading factor - TX Diversity mode - SSDT information - Default DPCH Offset Value - Downlink information for each radio link list | CHOICE Mode | A1.A2.A3. | |
| Downlink PDSCH information ommon for all radio links Downlink information common for all radio links Downlink information common for all radio links 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 Downlink DPCH power control information DPC mode CHOICE mode Downlink DPCH power control information TFCI existence DPCH compressed mode info TX Diversity mode CHOICE SF Downlink DPCH offset Value Downlink information common for all RL Timing indicator CFN-targetSFN frame offset Downlink DPCH power control information DPC mode CHOICE mode Downlink DPCH offset value Downlink DPCH offset value Downlink DPCH info common for all RL Timing indicator CFN-targetSFN frame offset Downlink DPCH power control information DPC mode CHOICE mode Power offset Ppido-DPCH DIT resent CFN-targetSFN frame offset Downlink DPCH power control information Type and packed processor of the pido and packed processor of the pido and packed pac | | A4,A5,A6, | |
| Downlink information common for all radio links Downlink information common for all radio links Downlink information common for all radio links Downlink DPCH info common for all RL - Timing indicator - Fixed or Flexible Position - TFCI existence - CHOICE SF - DPCH compressed mode info - TX Diversity mode - CHOICE mode - Downlink information or all radio links - Downlink information common for all RL - Timing indicator - CFN-targetSFN frame offset - Downlink information common for all RL - Timing indicator - CFN-targetSFN frame offset - Devel compressed mode info - TX Diversity mode - Spray frame offset - Downlink information common for all radio links - Downlink information for each radio link list - Downlink information or each radio link list - DPCH compressed mode info - TX Diversity mode - CHOICE SF - CHOICE SF - DPCH compressed mode info - TX Diversity mode - Spray frame offset - CHOICE SF - DPCH compressed mode info - TX Diversity mode - Spray frame offset - CHOICE SF - DPCH compressed mode info - TX Diversity mode - SDT information - Default DPCH Offset Value Downlink information for each radio link list - Downlink information for each radio link list - DPCH compressed mode info - TX Diversity mode - SDT information - Default DPCH Offset Value Downlink information for each radio link list - DPCH compressed mode info - TX Diversity mode - SDT information - Default DPCH Offset Value Downlink information for each radio link list - Downlink information for each radio link list - DPCH compressed mode info - TX Diversity mode - SDT information for each radio link list - Downlink information for each radio link list - Downl | - Downlink PDSCH information | , | Not Present |
| Downlink information common for all radio links | | A5. A6 | |
| Downlink information common for all radio links - Downlink information common for all RL - Timing indicator - CFN-targetSFN frame offset - Downlink DPCH power control information - DPC mode - CHOICE Mode - Power offset Ppilot-OPCCH - DL rate matching restriction information - Spreading factor - Fixed or Flexible Position - TFCI existence - CHOICE SF - DPCH compressed mode info - TX Diversity mode - SSDT information common for all RL - Timing indicator - Default DPCH Offset Value - Downlink information for mation - Spreading factor - Fixed or Flexible Position - TX Diversity mode - CHOICE SF - DCH compressed mode info - TX Diversity mode - CHOICE mode - Power offset Ppilot-OPCCH - DL rate matching restriction information - DPC mode - CHOICE mode - Power offset Ppilot-OPCCH - DL rate matching restriction information - Spreading factor - Fixed or Flexible Position - TFCI existence - CHOICE SF - DPCH compressed mode info - TX Diversity mode - CHOICE SF - DPCH compressed mode info - TX Diversity mode - CHOICE SF - DPCH compressed mode info - TX Diversity mode - SSDT information - Default DPCH Offset Value - Downlink information for each radio link - Downlink information for each radio link list | 25 and the second continue of 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 - Power offset Pptec-peoch - 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 - Downlink DPCH info common for all RL - Timing indicator - CFN-targetSFN frame offset - Downlink DPCH power control information - Spreading factor - Fixed or Flexible Position - TFCI existence - CHOICE mode - Power offset Pptec-ppcod - CHOICE mode - TYDIVERSITY mode - CHOICE mode - CHOICE mode - CHOICE mode - CHOICE mode - Tricl existence - CHOICE SF - CHOICE SF - DPCH compressed mode info - TX Diversity mode - CHOICE mode - CHOICE mode - CHOICE mode - TYDIVERSITY frame offset - Downlink DPCH propoch - CHOICE mode - CHOICE mode - TYDIVERSITY mode - CHOICE SF - CHOICE SF - DPCH compressed mode info - TX Diversity mode - SSDT information - Default DPCH Offset Value - Downlink information - Default DPCH Offset Value - Downlink information - Default DPCH offset Value - Downlink information for each radio link list - DPCH compressed mode info - TX Diversity mode - SSDT information - Default DPCH Offset Value - Downlink information for each radio link list - Downlink information for each radio link | Downlink information common for all radio links | A1 A2 A3 | |
| - Timing indicator - CFN-targetSFN frame offset - Downlink DPCH power control information - DPC mode - CHOICE mode - Power offset Pelepopen - 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 Downlink information common for all radio links - Downlink DPCH prover control information - DPC mode - CHOICE SF - Fixed or Flexible Position - TX Diversity mode - SSDT information - Default DPCH offset Value Downlink information common for all RL - Timing indicator - CFN-targetSFN frame offset - Downlink DPCH power control information - DPC mode - CHOICE mode - Power offset Pelepopen - DL rate matching restriction information - Spreading factor - TY Diversity mode - CHOICE SF - Fixed or Flexible Position - TY Diversity mode - CHOICE SF - Fixed or Flexible Position - TY Diversity mode - CHOICE SF - Fixed or Flexible Position - TY Diversity mode - CHOICE SF - DPCH compressed mode info - TX Diversity mode - SDT information - DPCH compressed mode info - TX Diversity mode - SDT information - DPCH compressed mode info - TX Diversity mode - SDT information - Default DPCH Offset Value Downlink information for each radio link list - Downlink information for each radio link list | | 1,,, , | |
| - CFN-targetSFN frame offset - Downlink DPCH power control information - DPC mode - CHOICE mode - Power offset P _{Plot-DPDCH} - DL rate matching restriction information - Spreading factor - Fixed or Flexible Position - Fixed or Flexible Position - TFCI existence - CHOICE SF - CHOICE SF - DPCH compressed mode info - TX Diversity mode - SSDT information common for all radio links - Downlink information common for all RL - Timing indicator - CFN-targetSFN frame offset - Downlink DPCH power control information - Spreading factor - Fixed or Flexible Position - TX Diversity mode - CHOICE SF - DPCH compressed mode info - TX Diversity mode - CHOICE SF - DPCH compressed mode info - TX Diversity mode - CHOICE SF - DPCH compressed mode info - TX Diversity mode - SSDT information - DPC mode - CHOICE SF - DPCH compressed mode info - TX Diversity mode - SSDT information - DPC mode - CHOICE SF - DPCH compressed mode info - TX Diversity mode - SSDT information - DPC mode - CHOICE SF - DPCH compressed mode info - TX Diversity mode - SSDT information - DPC mode - CHOICE SF - DPCH compressed mode info - TX Diversity mode - SSDT information - Default DPCH Offset Value Downlink information for each radio link list - Downlink information for each radio link list | | | Maintain |
| 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 - DPCH compressed mode info - TX Diversity mode - SSDT information common for all radio links - Downlink DPCH offset Value Downlink DPCH offset Value Downlink DPCH power control information - DF and the properties of the properti | | | |
| - DPC mode - CHOICE mode - Power offset PPIIot-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 Downlink information common for all radio link ist - DPC mode - CHOICE SP - Power offset PPIIot-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 Downlink DPCH info common for all radio links - Downlink DPCH power control information - DPC mode - CHOICE mode - CHOICE mode - Power offset PPIIot-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 - DPCH compressed mode info - TX Diversity mode - SSDT information - DPCH compressed mode info - TX Diversity mode - SSDT information - Default DPCH Offset Value Downlink information for each radio link list - Downlink information for each radio link list | | | Not i resent |
| - CHOICE mode - Power offset P _{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 - Downlink DPCH power control information - DPC mode - CHOICE | | | O (cinglo) |
| - Power offset PPIDI-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 Downlink DPCH power control information - DPC mode - CHOICE mode | | | |
| - 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 Downlink DPCH power control information - DPC mode - CHOICE mode - Power offset Ppilot-DPDCH - DL rate matching restriction information - Spreading factor - TFCI existence - CHOICE SF - DPCH compressed mode info - TX Diversity mode - SSDT information - DFCH offset Value Downlink DPCH info common for all RL - Timing indicator - CFN-targetSFN frame offset - Downlink DPCH power control information - DPC mode - CHOICE mode - Power offset Ppilot-DPDCH - DL rate matching restriction information - Spreading factor - TFCI existence - CHOICE SF - DPCH compressed mode info - TX Diversity mode - SSDT information - Default DPCH Offset Value Downlink information for each radio link list - Downlink information for each radio link list | | | |
| - Spreading factor - Fixed or Flexible Position - TFCI existence - CHOICE SF - DPCH compressed mode info - TX Diversity mode - SSDT information - Default DPCH Offset Value - CHOICE SF - Downlink information - DFC mode - Power offset P _{Plot} -DPDCH - TFCI existence - CHOICE SF - CPCH compressed mode info - TX Diversity mode - CPCH-targetSFN frame offset - Downlink DPCH power control information - DPC mode - Power offset P _{Plot} -DPDCH - TFCI existence - CHOICE SF - CHOICE SF - CHOICE SF - CHOICE SF - CHOICE ST - CHOICE S | | | |
| Fixed or Flexible Position - Fixed or Flexible Position - TFCI existence - CHOICE SF - DPCH compressed mode info - TX Diversity mode - SSDT information - Default DPCH Offset Value Downlink information common for all radio links - Downlink DPCH power control information - DPC mode - CHOICE mode - Power offset Ppilot-DPDCH - DL rate matching restriction information - Spreading factor - TFCI existence - CHOICE SF - CHOICE SF - CHOICE SF - TFCI existence - CHOICE SF - DPCH compressed mode info - TX Diversity mode - SSDT information - DPC mode - Power offset Ppilot-DPDCH - DL rate matching restriction information - Spreading factor - TFCI existence - CHOICE SF - CHOICE SF - DPCH compressed mode info - TX Diversity mode - SSDT information - Default DPCH Offset Value Downlink information for each radio link list - Downlink information for each radio link list | | | |
| - Fixed or Flexible Position - TFCI existence - CHOICE SF - DPCH compressed mode info - TX Diversity mode - SSDT information - Default DPCH Offset Value Downlink information common for all radio links - Downlink present for side of the process of the proces | - Spreading factor | | |
| - TFCI existence - CHOICE SF - DPCH compressed mode info - TX Diversity mode - SSDT information - Default DPCH Offset Value 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 - Power offset PPIOc-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 - DPCH compressed mode info - TX Diversity mode - SSDT information - Default DPCH Offset Value - Downlink information for each radio link list - Downlink information for each radio link | - Fixed or Flexible Position | | |
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| - DPCH compressed mode info - TX Diversity mode - SSDT information - Default DPCH Offset Value 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 - Power offset P _{PIIOI-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 Downlink information for each radio link list - Downlink information for each radio link - TSD iversity mode info motor all radio link list - Downlink information for each radio link - SDD information for each radio link - SSDT information for each radio link - SSDT information for each radio link - Downlink information for each radio link - SSDT information for each radio link | | | Set |
| - DPCH compressed mode info - TX Diversity mode - SSDT information - Default DPCH Offset Value 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 - Power offset P _{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 Downlink information for each radio link list - Downlink information for each radio link - TFCI existence Not Present - Not Present - CHOICE SF - DPCH compressed mode info - TX Diversity mode - SSDT information - Default DPCH Offset Value Downlink information for each radio link list - Downlink information for each radio link | - CHOICE SF | | |
| - TX Diversity mode - SSDT information - Default DPCH Offset Value 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 - Power offset P _{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 Downlink information for each radio link list - Downlink information for each radio link - Sent Mot Present - Not Present - 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 - Not Present | - DPCH compressed mode info | | |
| - SSDT information - Default DPCH Offset Value 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 - Power offset PPIDI-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 Downlink information for each radio link list - Downlink information for each radio link | | | |
| - Default DPCH Offset Value 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 - Power offset PPIGI-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 Downlink information for each radio link list - Downlink information for each radio link - Default DPCH Offset Value A4 A4 A4 A4 A4 A4 A4 A4 A4 A | | | |
| 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 - Power offset Ppilot-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 Downlink information for each radio link - CFN-targetSFN frame offset - Initialise Not Present Not Present - O (single) - DO (single) - DO (Not Present - PDD - O - Not Present - Reference to TS34.108 clause 6.10 Parameter - Set - Reference to TS34.108 clause 6.10 Parameter - Set - Not Present - Not Pres | | Λ.4 | Not Flesent |
| - Timing indicator - CFN-targetSFN frame offset - Downlink DPCH power control information - DPC mode - CHOICE mode - Power offset PPilot-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 Downlink information for each radio link list - Downlink information for each radio link - Default information for each radio link - Downlink information for each radio link - Default DPCH Offset Value Initialise Not Present Not Present Not Present - Not Present - Arbitrary set to value 0306688 by step of 512 | | A4 | |
| - 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 - DPCH compressed mode info - TX Diversity mode - SSDT information - Default DPCH Offset Value Downlink information for each radio link list - Downlink information for each radio link - Default information for each radio link | | | Initialia |
| - 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 - Fixed or Flexible Position - TFCI existence - CHOICE SF - DPCH compressed mode info - TX Diversity mode - SSDT information - Default DPCH Offset Value Downlink information for each radio link - Downlink information for each radio link - Downlink information for each radio link - CHOICE SF (Single) - Not Present - Atjutrary set to value 0306688 by step of 512 | | | |
| - DPC mode - CHOICE mode - Power offset P _{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 Downlink information for each radio link - CHOICE Mode - CHOICE SF - DPCH compressed mode info - TX Diversity mode - SSDT information - Default DPCH Offset Value - CHOICE SF - Downlink information for each radio link list - Downlink information for each radio link - CHOICE SE - DPCH compressed mode info - TX Diversity mode - SSDT information - Default DPCH Offset Value - CHOICE SE - DPCH compressed mode info - TX Diversity mode - SSDT information - Default DPCH Offset Value - Downlink information for each radio link list - Downlink information for each radio link | | | NOT Present |
| - CHOICE mode - Power offset P _{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 Downlink information for each radio link - CHOICE SF - CHOICE SP - DPCH Offset Value Downlink information for each radio link - CHOICE SP - CHOICE SP - DPCH compressed mode info - TX Diversity mode - SSDT information - Default DPCH Offset Value - A1,A2,A3 - Downlink information for each radio link | | | 0 (-: |
| - Power offset P _{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 Downlink information for each radio link list - Downlink information for each radio link - Downlink information for each radio link - DL 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 0306688 by step of 512 | | | |
| - 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 Downlink information for each radio link - Devalue One of the property of the propert | | | |
| - Spreading factor - Fixed or Flexible Position - Fixed or Flexible Position - TFCI existence - CHOICE SF - DPCH compressed mode info - TX Diversity mode - SSDT information - Default DPCH Offset Value Downlink information for each radio link - Downlink information for each radio link - Specific 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 - At,A2,A3 - A1,A2,A3 | | | |
| Set - Fixed or Flexible Position - TFCI existence - CHOICE SF - DPCH compressed mode info - TX Diversity mode - SSDT information - Default DPCH Offset Value Downlink information for each radio link - Downlink information for each radio link - Downlink information for each radio link - Fixed or Flexible Position 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 0306688 by step of 512 | | | |
| - Fixed or Flexible Position - TFCI existence - CHOICE SF - DPCH compressed mode info - TX Diversity mode - SSDT information - Default DPCH Offset Value Downlink information for each radio link list -Downlink information for each radio link - Downlink information for each radio link - Fixed or Flexible Position 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 0306688 by step of 512 | - Spreading factor | | |
| - TFCI existence - CHOICE SF - DPCH compressed mode info - TX Diversity mode - SSDT information - Default DPCH Offset Value Downlink information for each radio link list - Downlink information for each radio link Set Reference to TS34.108 clause 6.10 Parameter Set Not Present None Not Present Arbitrary set to value 0306688 by step of 512 | - Fixed or Flexible Position | | |
| - CHOICE SF - CHOICE SF - DPCH compressed mode info - TX Diversity mode - SSDT information - Default DPCH Offset Value Downlink information for each radio link list -Downlink information for each radio link - Downlink information for each radio link | | | |
| - CHOICE SF - DPCH compressed mode info - TX Diversity mode - SSDT information - Default DPCH Offset Value Downlink information for each radio link list -Downlink information for each radio link | - TFCI existence | | Reference to TS34.108 clause 6.10 Parameter |
| - DPCH compressed mode info - TX Diversity mode - SSDT information - Default DPCH Offset Value Downlink information for each radio link list -Downlink information for each radio link | - CHOICE SF | | Reference to TS34.108 clause 6.10 Parameter |
| - TX Diversity mode - SSDT information - Default DPCH Offset Value Downlink information for each radio link list -Downlink information for each radio link A1,A2,A3 -Downlink information for each radio link | - DPCH compressed mode info | | |
| - SSDT information - Default DPCH Offset Value Downlink information for each radio link list - Downlink information for each radio link A1,A2,A3 - Downlink information for each radio link | | | |
| - Default DPCH Offset Value Downlink information for each radio link list -Downlink information for each radio link Arbitrary set to value 0306688 by step of 512 A1,A2,A3 -Downlink information for each radio link | | | 110110 |
| Downlink information for each radio link list -Downlink information for each radio link A1,A2,A3 | | | |
| -Downlink information for each radio link | | A4 A0 A0 | Arbitrary set to value 0306688 by step of 512 |
| | | A1,A2,A3 | |
| - Choice mode FDD | | | 500 |
| | - Choice mode | | ן אטט |

| Information Element | T | Value/remark |
|--|-------------|--|
| - Primary CPICH info | | value/lellialk |
| | | Def to the Default setting in TOO4 400 |
| - Primary scrambling code | | Ref. to the Default setting in TS34.108 clause |
| BBOOK 34 ONO BOLL: (| | 6.1 (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 (as |
| | | currently stored in SS) mod 38400 |
| - Secondary CPICH info | | Not Present |
| - Secondary scrambling code | | |
| - channelisation code | | |
| - DL channelisation code | | |
| - Secondary scrambling code | | 3 |
| - Spreading factor | | Reference to TS34.108 clause 6.10 Parameter |
| Spreading there. | | Set |
| - Code number | | 0 |
| - Scrambling code change | | No change |
| - TPC combination index | | 0 |
| - SSDT Cell Identity | | Not Present |
| | | Not Present |
| - Closed loop timing adjustment mode | | |
| - SCCPCH information for FACH | | Not Present |
| Downlink information for each radio link list | A4 | |
| -Downlink information for each radio link | | |
| - Choice mode | | FDD |
| - Primary CPICH info | | |
| - Primary scrambling code | | Ref. to the Default setting in TS34.108 clause |
| | | 6.1 (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 |
| - Secondary scrambling code | | |
| - channelisation code | | |
| - DL channelisation code | | |
| - Secondary scrambling code | | 3 |
| - Spreading factor | | Reference to TS34.108 clause 6.10 Parameter |
| | | Set |
| - Code number | | 0 |
| - Scrambling code change | | |
| | | No change |
| - TPC combination index | | 0 Not Procent |
| - SSDT Cell Identity | | Not Present |
| - Closed loop timing adjustment mode | | Not Present |
| - SCCPCH information for FACH | A 5 A 7 A 6 | Not Present |
| - Downlink information for each radio link | A5, A7, A8 | |
| - Choice mode | | FDD |
| - Primary CPICH info | | |
| - Primary scrambling code | | Ref. to the Default setting in TS34.108 clause |
| | | 6.1 (FDD) |
| - PDSCH with SHO DCH info | | Not Present |
| - PDSCH code mapping | | Not Present |
| - Downlink DPCH info for each RL | | Not present |
| - SCCPCH information for FACH | | Not Present |
| - Downlink information for each radio link | A6 | Not Present |
| Downlink information for Each radio link | 1 / 10 | 1101 1 1000111 |

| 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 | |
|--|--|
| RRC transaction identifier | Checked to see the value is identical to the same IE in the downlink RADIO BEARER RELEASE message. |
| Integrity check info | |
| - Message authentication code | This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I. |
| - RRC Message sequence number | This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value. |
| Uplink integrity protection activation info | Not checked. |
| CHOICE mode | FDD |
| COUNT-C activation time | Not checked |
| Radio bearer uplink ciphering activation time info | Not checked |
| Uplink counter synchronisation info | Not checked |
| | |

Contents of RADIO BEARER RELEASE FAILURE message: AM

| Information Element | Value/remark |
|--|--|
| Message Type | |
| RRC transaction identitifer | Checked to see if it is set to identical value of the same IE in the downlink RADIO BEARER RELEASE message. |
| Integrity check info | |
| - Message authentication code | This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I. |
| - RRC Message sequence number | This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value. |
| Failure cause | Checked to see if it meets test requirement |
| Radio bearers for which reconfiguration would have succeeded | Not checked |

Contents of RRC CONNECTION REQUEST message: TM

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

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. |
| - Message authentication code | SS calculates the value of MAC-I for this message and |
| | writes to this IE. The first/ leftmost bit of the bit string |
| | contains the most significant bit of the MAC-I. |
| - RRC Message sequence number | SS provides the value of this IE, from its internal counter. |
| N308 | 2 (for CELL_DCH state). Not Present (for UE in other |
| | connected mode states). |
| Release cause | Normal event |
| Rplmn information | Not Present |

Contents of RRC CONNECTION RELEASE COMPLETE message: AM or UM

| Information Element | Semantics description |
|-------------------------------|---|
| Message Type | |
| RRC transaction identifier | The value of this IE is checked to see that it matches the value of the same IE transmitted in the downlink RRC CONNECTION RELEASE message. |
| Integrity check info | |
| - Message authentication code | Checked to see if it's identical to the value of XMAC-I calculated by the SS. The first/ leftmost bit of the bit string |
| - RRC Message sequence number | contains the most significant bit of the MAC-I. 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 | TRUE |
| requirement | E. 1.0E |
| - UE radio access TDD capability update | FALSE |
| requirement | 0014 |
| - 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 | LIM PLC |
| - 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 6.10.2.4.1.3 (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 | |
| - CHOICE Uplink RLC mode | AM RLC |
| - Transmission RLC discard | l., ., . |
| - SDU discard mode | No discard |
| - MAX_DAT | 15 |
| Transmission window size | 32 |
| | |
| - Transmission window size - Timer_RST - Max_RST | 500 1 |

| Information Element | Value/remark |
|---|---|
| - Polling info | FUIGOTOTIATA |
| - Timer_poll_prohibit | 200 |
| - Timer_poll | 200 |
| - Poll_PDU | Not present |
| - Poll_SDU | 1 TRUE |
| Last transmission PDU poll 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_status_profiloit - 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 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 PCU |
| Downlink transport channel type DL DCH Transport channel identity | DCH 10 |
| - DL DSCH Transport channel identity - 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 - Logical channel identity | Not Present 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 FACH |
| Downlink transport channel type 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 | ANN INCO |
| - SDU discard mode | No discard |
| - MAX_DAT | 15 |
| - Transmission window size | 32 |
| - Timer_RST | 500 |
| - Max_RST - Polling info | 1 |
| - Timer_poll_prohibit | 200 |
| - Timer_poll | 200 |
| - Poll_PDU | Not present |
| - Poll_SDU | 1 |
| - Last transmission PDU poll | TRUE |
| Last retransmission PDU pollPoll_Window | TRUE |
| - Poil_window - Timer_poll_periodic | 99 Not Present |
| I IIIIOI_poii_poliodio | p. 100 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |

| 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 - RB mapping info | Not Present |
| - 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 - CHOICE RLC size list | Explicit List |
| - RLC size index | According to TS34.108 clause 6.10.2.4.1.3 (standalone |
| TAZO SIZO IITAGA | 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 Not Present |
| DL DSCH Transport channel identity 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 | No diagonal |
| - SDU discard mode - MAX_DAT | No discard 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 - 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 | 200 |
| - Timer_status_prohibit- Timer_EPC | 200 Not Present |
| - Hiner_EPC - 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 | Net Dresent |
| - PRACH TFCS | Not Present FDD |
| - CHOICE Mode - TFC subset | Not Present |
| - UL DCH TFCS | NOT FIESEIT |
| - CHOICE TFCI signalling | Normal |
| - TFCI Field 1 information | Normal |
| - CHOICE TFCS representation | Addition |
| - TFCS complete reconfigure | , addition |
| - 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) |
| - Gain factor ßc | 11 (below 64 kbps) |
| | 9 (higher than 64 kbps) |
| | (Not Present if the above is set to Computed Gain Factors) |
| - Gain factor ßd | 15 |
| | (Not Present if the above is set to Computed Gain Factors) |
| - Reference TFC ID | 0 |
| - CHOICE mode | FDD |
| - Power offset Pp-m | Not Present |
| Added or Reconfigured UL TrCH information | - 0.1 |
| - Uplink transport channel type | DCH |
| - UL Transport channel identity | 5 |
| - TFS | De dieste d'une en est els envels |
| - CHOICE Transport channel type | Dedicated transport channels |
| - Dynamic Transport format information | Apparding to TC24 400 slaves 0.40 0.44 0./standelan 40.0 |
| - RLC size | According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 |
| Number of TPs and TTI lists | kbps signalling radio bearer) |
| - Number of TBs and TTI lists - Transmission Time Interval | (This IE is repeated for TFI number) |
| - Hansinission time interval | According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer) |
| | Innto signalling radio beater) |

- DPCH compressed mode info

- TX Diversity mode

- SSDT information

Information Element Value/remark - 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 - 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) According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 - Type of channel coding kbps signalling radio bearer) According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 - Coding Rate 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) According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 - CRC size 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 - 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) According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 - TFCI existence kbps signalling radio bearer) According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 - Number of FBI bit kbps signalling radio bearer) According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6) - Puncturing Limit 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 Pilot-DPDCH - DL rate matching restriction information Not Present According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 - Spreading factor 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) According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 - TFCI existence kbps signalling radio bearer) - CHOICE SF According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6) kbps signalling radio bearer)

Not Present

Not Present

None

| Information Element | Value/remark |
|--|--|
| - Default DPCH Offset Value | Arbitrary set to value 0306688 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 |
| - SSDT 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 | TRUE |
| requirement | |
| UE radio access TDD capability update | FALSE |
| requirement | |
| 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 DCH |
| - Downlink transport channel type | 10 |
| - DL DCH Transport channel identity | Not Present |
| - 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 Downlink RLC status info | 32 |
| - Timer_status_prohibit | 200 |
| - Timer_Status_profilibit | Not Present |
| - Missing PDU indicator | TRUE |
| - Timer_STATUS_periodic | Not Present |
| - RB mapping info | Not i room |
| - 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 PACH |
| - Uplink transport channel type | RACH Not Present |
| - UL Transport channel identity | Not Present |
| - Logical channel identity | 2 Explicit list |
| - CHOICE RLC size list | Explicit list |
| - RLC size index | According to TS34.108 clause 6.10.2.4.4.1 |
| - MAC logical channel priority - Downlink RLC logical channel info | <u></u> |
| Number of downlink RLC logical channels | 1 |
| - Downlink transport channel type | FACH |
| Bownink transport originior type | 17.0.1 |

| 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 - Poll_PDU | 200 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 | O DDM O G |
| - Information for each multiplexing option | 2 RBMuxOptions |
| - RLC logical channel mapping indicator | Not Present |
| Number of uplink RLC logical channels Uplink transport channel type | 1 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 Not Propert |
| UL DCH Transport channel identity Logical channel identity | Not Present 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 | No Discord |
| - SDU discard mode - MAX_DAT | No Discard |
| - MAA_DAT - Transmission window size | 32 |
| Handingdion Williauw SIZE | <u> </u> |

| Information Element | Value/remark |
|---|--|
| - Timer_RST | 500 |
| - Max_RST | 1 |
| - Polling info | 000 |
| - Timer_poll_prohibit | 200 200 |
| - Timer_poll - Poll_PDU | Not Present |
| - POII_PDU - POII_SDU | 1 |
| - Foli_SDO - 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 CHOICE RLC size list | 4 Configured |
| - MAC logical channel priority | 4 |
| - Downlink RLC logical channel info | 7 |
| - 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 | 4 |
| - Number of downlink RLC logical channels | 1 |
| Downlink transport channel type DL DCH Transport channel identity | FACH Not Present |
| - DL DSCH Transport channel identity - DL DSCH Transport channel identity | Not Present |
| - Logical channel identity | 4 |
| UL Transport channel information for all transport | 7 |
| 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 | al :: OTFO |
| - 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 |
| - CTFC | signalling radio bearer) According to TS34.108 clause 6.10.2.4.1.3 (standalone |
| - 011 0 | 13.6 kbps signalling radio bearer) |
| - Power offset information | 10.0 Kapa digitaling tadio beater) |
| - CHOICE Gain Factors | Computed Gain Factors (The last TFC is set to Signalled |
| | Gain Factors) |
| • | , |

| Information Element | Value/remark |
|---|--|
| - Gain factor ßc | 11 (below 64 kbps) |
| | 9 (higher than 64 kbps) |
| | (Not Present if the above is set to Computed Gain |
| | Factors) |
| - Gain factor ßd | 15 |
| | (Not Present if the above is set to Computed Gain |
| | Factors) |
| - Reference TFC ID | 0 |
| - CHOICE mode | FDD |
| - Power offset Pp-m | Not Present |
| Added or Reconfigured TrCH information list | TS 25.331 specifies that "Although this IE is not required |
| | when the IE "RRC state indicator" is set to |
| | "CELL_FACH", need is MP to align with ASN.1" |
| Added or Reconfigured UL TrCH information | |
| Uplink transport channel type | DCH |
| UL Transport channel identity | 5 |
| - TFS | |
| CHOICE Transport channel type | Dedicated transport channels |
| Dynamic Transport format information | |
| - RLC Size | 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 | N . B |
| - 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 |
| | |
| - Added or Reconfigured DL TrCH information | "CELL_FACH", need is MP to align with ASN.1" |
| - Added of Reconligated DL 11CH 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 |
| DOWNLING INFORMATION OR OTHER HOLE | 110t procont |

Contents of RRC CONNECTION SETUP COMPLETE message: $\ensuremath{\mathsf{AM}}$

| 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 | This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I. |
| - RRC Message sequence number | This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value. |
| Identification of received message | Not Checked |
| Protocol error information | |
| - Protocol error cause | Refer to test requirement. |

Contents of SECURITY MODE COMMAND message: AM

| Information Element | Condition | Value/remark |
|---|-----------|---|
| Message Type | A1, A2 | |
| RRC transaction identifier | | Arbitrarily selects an integer between 0 and 3 |
| Integrity check info | | |
| - Message authentication code | | Set to MAC-I value computed by the SS. The first/ leftmost bit of the bit string contains the |
| - RRC Message Sequence Number | | most significant bit of the MAC-I. Set to an arbitrarily selected integer between 0 and 15 |
| Security capability | | |
| - Ciphering algorithm capability | | |
| - UEA0 | | If the UE has indicated support for ciphering |
| - UEA1 | | 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 - Integrity protection algorithm capability | | Spare 2-15 = FALSE 00000000000000010B (UIA1) |
| - UIA1 - Spare | | TRUE |
| - Spare Ciphering mode info | | Spare 0 and Spare 2-15 = FALSE This presence of this IE is dependent on IXIT |
| Cipiteting mode into | | 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, |
| Ciale asia a suce de la comune de d | | this IE is omitted. |
| - Ciphering mode command | | Start/restart |
| - Ciphering algorithm | | UEA0 or UEA1. The indicated algorithm must be one of the algorithms supported by the UE |
| | | as indicated in the IE "security capability" in the RRC CONNECTION SETUP COMPLETE |
| | | message. |
| Ciphering activation time for DPCH Radio bearer downlink ciphering activation time info | | Not Present |
| - Radio bearer activation time | | |
| - RB identity | | 1 |
| - RLC sequence number | | Current RLC SN+2 |
| - RB identity | | 2 |
| - RLC sequence number - RB identity | | Current RLC SN+2 |
| - RLC sequence number - RB identity | | Current RLC SN + 2 |
| - RLC sequence number Integrity protection mode info | | Current RLC SN + 2 |
| - Integrity protection mode command | | Start |
| - Downlink integrity protection activation info | | Not Present |
| - Integrity protection algorithm | | UIA1 |
| - Integrity protection initialisation number | | SS selects an arbitrary 32 bits number for FRESH. |
| | | The first/ leftmost bit of the bit string contains the most significant bit of the FRESH. |
| CN domain identity | | CS or PS |
| UE system specific security capability | A1 | Not Present |
| UE system specific security capability | A2 | |
| - Inter-RAT UE security capability | | |
| - CHOICE system | | GSM |
| - GSM security capability | | The indicated algorithms must be the same as |
| | | the algorithms supported by the UE as |
| | | indicated in the IE " UE system specific |
| | | capability " in the RRC CONNECTION SETUP COMPLETE message. |

| Condition | Explanation |
|-----------|-----------------------|
| A1 | UE not supporting GSM |
| A2 | UE supporting GSM |

Contents of SECURITY MODE COMPLETE message: AM

| Information Element | Value/remark |
|--|--|
| Message Type | |
| RRC transaction identifier | The value of this IE is checked to see that it matches the value of the same IE transmitted in the downlink SECURITY MODE COMMAND message. |
| Integrity check info | |
| - Message authentication code | This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I. |
| - RRC Message sequence number | This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value. |
| Uplink integrity protection activation info | Not checked. |
| Radio bearer uplink ciphering activation time info | If ciphering is not activated in SECURITY MODE |
| | COMMAND message, this IE must be absent. Else, SS |
| | checks this IE for the presence of activation times for all |
| | ciphered uplink RLC-UM and RLC-AM RBs. |

Contents of SECURITY MODE FAILURE message: AM

| Information Element | Value/remark |
|-------------------------------|--|
| Message Type | |
| RRC transaction identifier | Checked to see if the value is the identical to the same IE in the downlink SECURITY MODE COMMAND message. |
| Integrity check info | |
| - Message authentication code | This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I. |
| - RRC Message sequence number | This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value. |
| Failure cause | Refer to test requirement. |

Contents of TRANSPORT CHANNEL RECONFIGURATION message: AM or UM

| Information Element | Condition | Value/remark |
|---|-------------|--|
| Message Type | A1, A2, A3, | |
| | A4, A5, A6 | |
| RRC transaction identifier | | Arbitrarily selects an integer between 0 and 3 |
| Integrity check info | | |
| - message authentication code | | SS calculates the value of MAC-I for this |
| | | message and writes to this IE. The first/ |
| | | leftmost bit of the bit string contains the most |
| | | significant bit of the MAC-I. |
| RRC message sequence number | | SS provides the value of this IE, from its |
| | | internal counter. |
| Integrity protection mode info | | Not Present |
| Ciphering mode info | | Not Present |
| Activation time | A1, A2, A3 | (256+CFN-(CFN MOD 8 + 8))MOD 256 |
| Activation time | A4, A5, A6 | Not Present |
| New U-RNTI | | Not Present |
| New C-RNTI | A1, A2, A3, | Not Present |
| | A4 | |
| New C-RNTI | A5, A6 | '1010 1010 1010 1010' |
| New DSCH-RNTI | A1, A2, A3, | Not Present |
| | A4, A5, A6 | |
| 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, | Not Present |
| 2 Tru ii v 2 Tox oyolo longin ocomoloni | A4,A5,A6 | THE TREE THE STATE OF THE STATE |
| CN information info | 7 , , , | Not Present |
| URA identity | | Not Present |
| Downlink counter synchronisation info | | Not Present |
| UL Transport channel information for all transport | A1, A2, A5, | Not Present |
| channels | A6 | |
| UL Transport channel information for all transport | A3, A4 | |
| channels | | |
| - PRACH TFCS | | Not Present |
| - CHOICE mode | | FDD |
| - TFC subset | | Not Present |
| - UL DCH TFCS | | |
| - CHOICE TFCI signalling | | Normal |
| - TFCI Field 1 information | | |
| - CHOICE TFCS representation | | Complete reconfiguration |
| - TFCS complete reconfigure information | | |
| - CHOICE CTFC Size | | Number of bits used must be enough to cover |
| | | all combinations of CTFC from TS34.108 |
| 0750 : 4 | | clause 6.10.2.4 Parameter Set. |
| - CTFC information | | This IE is repeated for TFC numbers and |
| | | reference to TS34.108 clause 6.10.2.4 |
| OTEO | | Parameter Set |
| - CTFC | | Reference to TS34.108 clause 6.10.2.4 |
| - Power offset information | | Parameter Set |
| - CHOICE Gain Factors | | Computed Cain Factors/The last TEC is get to |
| - CHOICE Gaill Factors | | Computed Gain Factors(The last TFC is set to Signalled Gain Factors) |
| - Gain factor βc | | 11 (below 64 kbps) |
| - Gairriactor pc | | 9 (higher than 64 kbps) |
| | | (Not Present if the CHOICE Gain Factors is set |
| | | to ComputedGain Factors) |
| - Gain factor βd | | 15 |
| Can racio: pa | | (Not Present if the CHOICE Gain Factors is set |
| | | to ComputedGain Factors) |
| - Reference TFC ID | | 0 |
| - CHOICE mode | | FDD |
| - Power offset P p-m | | Not Present |
| Added or Reconfigured UL TrCH information | A1, A2, A5, | Not Present |
| | A6 | |

| Information Element | Condition | Value/remark |
|--|-----------|--|
| Added or Reconfigured UL TrCH information | A4 | 2 TrCHs(DCH for DCCH and DCH for DTCH) |
| - Uplink transport channel type | | DCH |
| - UL Transport channel identity | | 5 |
| - TFS | | |
| - CHOICE Transport channel type | | Dedicated transport channels |
| - Dynamic Transport format information | | D (|
| - 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 | | D (T004 400 |
| - Transmission time interval | | Reference to TS34.108 clause 6.10 Parameter Set |
| - Type of channel coding | | Reference to TS34.108 clause 6.10 Parameter |
| Type of charmer county | | Set |
| - Coding Rate | | Reference to TS34.108 clause 6.10 Parameter |
| , and the second | | Set |
| - Rate matching attribute | | Reference to TS34.108 clause 6.10 Parameter |
| CDC size | | Set |
| - CRC size | | Reference to TS34.108 clause 6.10 Parameter |
| - Uplink transport channel type | | Set 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 |
| - Number of TBs and TTI List | | Set |
| - Transmission Time Interval | | (This IE is repeated for TFI number.) 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 |
| Type of channel coding | | Set Reference to TS34.108 clause 6.10 Parameter |
| - Type of channel coding | | Set |
| - Coding Rate | | Reference to TS34.108 clause 6.10 Parameter |
| gramig rand | | Set |
| - Rate matching attribute | | Reference to TS34.108 clause 6.10 Parameter |
| 000 : | | Set |
| - CRC size | | Reference to TS34.108 clause 6.10 Parameter |
| Added or Reconfigured UL TrCH information | A3 | Set (DCH for DTCH) |
| - Uplink transport channel type | 73 | DCH |
| - UL Transport channel identity | | 1 |
| - TFS | | |
| - CHOICE Transport channel type | | Dedicated transport channels |
| - Dynamic Transport format information | | Deference to TO24 400 eleves 0.40 Dem |
| - 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 |
| - Hansinission line interval | | 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 |

| Information Element | Condition | Value/remark |
|---|-------------|---|
| - Rate matching attribute | | Reference to TS34.108 clause 6.10 Parameter |
| | | Set |
| - CRC size | | Reference to TS34.108 clause 6.10 Parameter |
| | | Set |
| CHOICE mode | A1,A2,A3, | FDD |
| | A4,A5,A6 | |
| - CPCH set ID | | Not Present |
| - Added or Reconfigured TrCH | | Not Present |
| information for DRAC list | | = |
| DL Transport channel information common for all | A1, A2, | Not Present |
| transport channel | A5,A6 | |
| DL Transport channel information common for all | A3,A4 | |
| transport channel | | Not Decemb |
| - SCCPCH TFCS | | Not Present FDD |
| - CHOICE DI parameters | | |
| - CHOICE DL parameters - DL DCH TFCS | | Explicit |
| - CHOICE TFCI Signalling | | Normal |
| - TFCI Field 1 Information | | Noma |
| - CHOICE TFCS representation | | Complete reconfiguration |
| - TFCS complete reconfigure | | Complete recomingulation |
| - CHOICE CTEC Size | | Number of bits used must be enough to cover |
| | | all combinations of CTFC from clause |
| | | TS34.108 clause 6.10.2.4 Parameter Set. |
| - CTFC information | | This IE is repeated for TFC numbers and |
| | | reference to TS34.108 clause 6.10.2.4 |
| - CTFC | | Reference to TS34.108 clause 6.10.2.4 |
| | | Parameter Set |
| Power offset information | | Not Present |
| Added or Reconfigured DL TrCH information | A1, A2, A5, | Not Present |
| | A6 | |

| Information Element | Condition | Value/remark |
|---|---|---|
| Added or Reconfigured DL TrCH information | A4 | 2 TrCHs(DCH for DCCH and DCH for DTCH) |
| - Downlink transport channel type | * | DCH |
| - DL Transport channel identity | | 10 |
| - CHOICE DL parameters | | Same as UL |
| Uplink transport channel type | | DCH |
| - UL TrCH identity | | 5 |
| - DCH quality target | | N (B) |
| - BLER Quality value | | Not Present |
| Downlink transport channel type DL Transport channel identity | | DCH 6 |
| - CHOICE DL parameters | | Explicit |
| - TFS | | Explicit |
| - CHOICE Transport channel type | | Dedicated transport channel |
| - 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.) |
| - Dynamic transport format information | | Net Descript |
| - Transmission Time Interval | | Not Present Reference to TS34.108 clause 6.10 Parameter |
| - Number of Transport blocks | | Set |
| - Semi-static Transport Format information | | Set |
| - Transmission time interval | | Reference to TS34.108 clause 6.10 Parameter |
| Transmission time interval | | Set |
| - Type of channel coding | | Reference to TS34.108 clause 6.10 Parameter |
| j | | Set |
| - Coding Rate | | Reference to TS34.108 clause 6.10 Parameter |
| | | Set |
| - Rate matching attribute | | Reference to TS34.108 clause 6.10 Parameter |
| 000 : | | Set |
| - CRC size | | Reference to TS34.108 clause 6.10 Parameter |
| - DCH quality target | | Set |
| - BLER Quality value | | -2.0 |
| Added or Reconfigured DL TrCH information | A3 | 2.0 |
| - Downlink transport channel type | | DCH |
| - DL Transport channel identity | | 6 |
| - CHOICE DL parameters | | Explicit |
| - TFS | | |
| - CHOICE Transport channel type | | Dedicated transport channel |
| - Dynamic transport format information | | D (T004 400 L |
| - RLC Size | | Reference to TS34.108 clause 6.10 Parameter |
| - Number of TBs and TTI List | | Set (This IE is repeated for TFI number.) |
| - Dynamic transport format information | | (This is repeated for TFT humber.) |
| - Transmission Time Interval | | Not Present |
| - Number of Transport blocks | | Reference to TS34.108 clause 6.10 Parameter |
| ' | | Set |
| - Semi-static Transport Format information | | |
| - Transmission time interval | | Reference to TS34.108 clause 6.10 Parameter |
| | | Set |
| - Type of channel coding | | Reference to TS34.108 clause 6.10 Parameter |
| Coding Data | | Set |
| - Coding Rate | | Reference to TS34.108 clause 6.10 Parameter Set |
| - Rate matching attribute | | Reference to TS34.108 clause 6.10 Parameter |
| - Itale matering attribute | | Set |
| - CRC size | | Reference to TS34.108 clause 6.10 Parameter |
| | | Set |
| - DCH quality target | | |
| - BLER Quality value | | -2.0 |
| Frequency info | A1,A2,A3, | |
| | A4,A5 | |
| - UARFCN uplink (Nu) | | Reference to clause 5.1 Test frequencies |
| - UARFCN downlink (Nd) | | Reference to clause 5.1 Test frequencies |
| Frequency info Maximum allowed UL TX power | A6 A1,A2,A3, | Not Present |
| | 1 | 33dBm |

| Information Element | Condition | Value/remark |
|---|-------------------|---|
| | A4,A5,A6 | |
| CHOICE channel requirement | A5, A6 | Not Present |
| CHOICE channel requirement | A1, A2, A3, A4 | Uplink DPCH info |
| -Uplink DPCH power control info | A4 | |
| - 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 | | Reference to TS34.108 clause 6.10 Parameter |
| oprodumg radio. | | Set |
| - TFCI existence | | Reference to TS34.108 clause 6.10 Parameter Set |
| - Number of FBI bit | | Reference to TS34.108 clause 6.10 Parameter Set |
| - Puncturing Limit | | Reference to TS34.108 clause 6.10 Parameter Set |
| CHOICE Mode | A1,A2,A3, | FDD |
| B. II I BBOOK! (| A4,A5,A6 | N . 5 |
| - Downlink PDSCH information | 45.40 | Not Present |
| Downlink information common for all radio links | A5, A6 | Not Present |
| Downlink information common for all radio links | A1, A2, A3 | |
| - Downlink DPCH info common for all RL | | |
| - Timing indicator | | Maintain |
| - CFN-targetSFN frame offset | | Not Present |
| - Downlink DPCH power control information | | |
| - DPC mode | | 0 (single) |
| - CHOICE mode | | FDD |
| - Power offset P _{Pilot-DPDCH} | | 0 |
| - DL rate matching restriction information | | Not Present |
| - Spreading factor | | Reference to TS34.108 clause 6.10 Parameter Set |
| - Fixed or Flexible Position | | Reference to TS34.108 clause 6.10 Parameter Set |
| - TFCI existence | | Reference to TS34.108 clause 6.10 Parameter Set |
| - CHOICE SF | | Reference to TS34.108 clause 6.10 Parameter Set |
| - DPCH compressed mode info | | Not Present |
| - TX Diversity mode | | None |
| - SSDT information | | Not Present |
| - Default DPCH Offset Value | | Not Present |
| Downlink information common for all radio links | A4 | |
| - Downlink DPCH info common for all RL | 1 | |
| - Timing indicator | | Initialise |
| - CFN-targetSFN frame offset | | Not Present |
| - Downlink DPCH power control information | | |
| - DPC mode | | 0 (single) |
| - CHOICE mode | | FDD |
| - Power offset P _{Pilot-DPDCH} | | 0 |
| - DL rate matching restriction information | | Not Present |
| - Spreading factor | | Reference to TS34.108 clause 6.10 Parameter |
| | | Set |
| - Fixed or Flexible Position | | Reference to TS34.108 clause 6.10 Parameter Set |
| - TFCI existence | | Reference to TS34.108 clause 6.10 Parameter Set |
| - CHOICE SF | | Reference to TS34.108 clause 6.10 Parameter Set |
| - DPCH compressed mode info | | Not Present |
| - TX Diversity mode | | None |
| - SSDT information | | Not Present |
| - Default DPCH Offset Value | | Arbitrary set to value 0306688 by step of 512 |

| Information Element | Condition | Value/remark |
|--|------------|--|
| Downlink information for each radio link list | A1, A2, A3 | |
| - Downlink information for each radio links | , , , - | |
| - CHOICE mode | | FDD |
| - Primary CPICH info | | |
| - Primary scrambling code | | Ref. to the Default setting in TS34.108 clause |
| Trimary coramoung code | | 6.1 (FDD) |
| - PDSCH with SHO DCH info | | Not Present |
| - PDSCH code mapping | | Not Present |
| - Downlink DPCH info for each RL | | Not i lesent |
| - Primary CPICH usage for channel estimation | | Primary CPICH may be used |
| - DPCH frame offset | | Set to value Default DPCH Offset Value (as |
| - Dr Gri Iraine onset | | currently stored in SS) mod 38400 |
| Dower offeet D | | 0 |
| - Power offset P _{Pilot-DPDCH} | | |
| - Secondary CPICH info | | Not Present |
| - DL channelisation code | | |
| - Secondary scrambling code | | 4 |
| - Spreading factor | | Reference to TS34.108 clause 6.10 Parameter |
| | | Set |
| - 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 |
| Downlink information for each radio link list | A4 | |
| - Downlink information for each radio links | | |
| - CHOICE mode | | FDD |
| - Primary CPICH info | | |
| - Primary scrambling code | | Ref. to the Default setting in TS34.108 clause |
| | | 6.1 (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 |
| - Power offset P _{Pilot-DPDCH} | | 0 |
| - Secondary CPICH info | | Not Present |
| - DL channelisation code | | |
| - Secondary scrambling code | | 4 |
| - Spreading factor | | Reference to TS34.108 clause 6.10 Parameter |
| oproduming radios | | Set |
| - 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 |
| - Downlink information for each radio link | A5 | 110t / 1000lit |
| - Downlink information for each radio link - Choice mode | 73 | FDD |
| | | טט ו |
| - Primary CPICH info | | Pof to the Default cetting in TS24 100 alones |
| - Primary scrambling code | | Ref. to the Default setting in TS34.108 clause |
| DDCCU with CHO DCU info | | 6.1 (FDD) |
| - PDSCH with SHO DCH info | | Not Present |
| - PDSCH code mapping | | Not Present |
| - Downlink DPCH info for each RL | | Not present |
| - SCCPCH information for FACH | . | 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 identitifer | Checked to see if it is set to identical value of the same IE in the downlink TRANSPORT CHANNEL RECONFIGURATION message. |
| Integrity check info | |
| - Message authentication code | This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I. |
| - RRC Message sequence number | This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value. |
| Failure cause | Checked to see if it meets test requirement |

Contents of TRANSPORT FORMAT COMBINATION CONTROL message: AM or UM (in CELL_DCH)

| Information Element | Value/remark |
|--|--|
| Message Type | |
| RRC transaction identifier | Arbitrarily selects an integer between 0 and 3 |
| Integrity check info | |
| - Message authentication code | SS calculates the value of MAC-I for this message and writes to this IE. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I. |
| - RRC Message sequence number | SS provides the value of this IE, from its internal counter. |
| CHOICE mode | FDD |
| DPCH/PUSCH TFCS in Uplink | |
| - CHOICE Subset representation | Allowed transport format combination list |
| Allowed Transport format combination | 0 (The TFC is constructed from ALL TF0) |
| Activation time for TFC subset | Not Present |
| TFC Control duration | Not Present |

Contents of 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 Capability update requirement | SS provides the value of this IE, from its internal counter. |
| 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 - 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 INFORMATON message. |
| Integrity check info | |
| - Message authentication code | SS calculates the value of MAC-I for this message and writes to this IE. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I. |
| - RRC Message sequence number | SS provides the value of this IE, from its internal counter. |

Contents of URA UPDATE message: TM

| Information Element | Value/remark |
|-------------------------------|---|
| Message Type | |
| U-RNTI | |
| - SRNC identity | 0000 0000 0001B |
| - S-RNTI | 0000 0000 0000 0000 0001B |
| RRC transaction identifier | Checked to see if it is absent |
| Integrity check info | |
| - Message authentication code | This IE is checked to see if it is present. The value is |
| | compared against the XMAC-I value computed by SS. |
| | The first/ leftmost bit of the bit string contains the most |
| | significant bit of the MAC-I. |
| - RRC Message sequence number | This IE is checked to see if it is present. The value is |
| | used by SS to compute the XMAC-I value. |
| URA update cause | See the test content |
| Protocol error indicator | Checked to see if it is absent or set to 'FALSE' |
| Protocol error information | Checked to see if it is absent |

Contents of URA UPDATE CONFIRM message: UM

| Information Element | Value/remark |
|---------------------------------------|--|
| Message Type | |
| U-RNTI | If this message is sent on CCCH, use the following |
| | values. Else, this IE is absent. |
| - SRNC identity | 0000 0000 0001B |
| - S-RNTI | 0000 0000 0000 0000 0001B |
| RRC transaction identifier | Arbitrarily selects and integer between 0 and 3 |
| Integrity check info | |
| - message authentication code | SS calculates the value of MAC-I for this message and |
| | writes to this IE. The first/ leftmost bit of the bit string |
| | contains the most significant bit of the MAC-I. |
| - RRC message sequence number | SS provides the value of this IE, from its internal counter. |
| Integrity protection mode info | Not Present |
| Ciphering mode info | Not Present |
| New U-RNTI | Not Present |
| New C-RNTI | Not Present |
| RRC state indicator | URA_PCH |
| UTRAN DRX cycle length coefficient | 3 |
| CN information info | Not Present |
| URA identity | Not Present |
| Downlink counter 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 CN information info | 1800 seconds |
| | 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 RRC Message Contents (TDD)

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 | CN identity |
| - Paging cause | Terminating Interactive Call |
| - CN domain identity | PS domain |
| - CHOICE UE identity | |
| - IMSI (GSM-MAP) | Set to the same octet string as in the IMSI stored in the |
| | USIM card |
| BCCH modification info | Not Present |

Contents of RADIO BEARER SETUP message: AM or UM (Speech in CS)

| Information Element | Value/remark |
|---|--|
| Message Type | Taidon cinai N |
| 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 |
| - RRC message sequence number | contains the most significant bit of the MAC-I. 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. |
| Circle arise at the address are and | Else, this IE is omitted. |
| - Ciphering mode command - Ciphering algorithm | Start/restart Use one of the supported ciphering algorithms |
| - Ciphering agontim - Ciphering activation time for DPCH | (256+CFN-(CFN MOD 8 + 8))MOD 256 |
| - Radio bearer downlink ciphering activation time | Not Present |
| info | |
| Activation time | (256+CFN-(CFN MOD 8 + 8))MOD 256 |
| New U-RNTI | Not Present |
| New C-RNTI New DSCH-RNTI | Not Present 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 Re-establishment timer | Not Present UseT314 |
| - RB information to setup | 0361314 |
| - RB identity | 10 |
| - PDCP info | Not Present |
| - CHOICE RLC info type | RLC info |
| - CHOICE Uplink RLC mode | TM RLC Not Present |
| - Transmission RLC discard - Segmentation indication | FALSE |
| - CHOICE Downlink RLC mode | TM RLC |
| - Segmentation indication | FALSE |
| - RB mapping info | |
| - Information for each multiplexing option | Not Droppet |
| RLC logical channel mapping indicator Number of uplink RLC logical channels | Not Present |
| - 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 Not Present |
| - PDCP info - CHOICE RLC info type | Not Present RLC info |
| - CHOICE VEC IIIIO type - 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 | TALOE |
| - 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 - CHOICE RLC size list | Not Present |
| - MAC logical channel priority | Configured 6 |
| - Downlink RLC logical channel info | 0 |
| 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 - CHOICE Uplink RLC mode | RLC info 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 Logical channel identity | 3 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 RB information to be affected list | Not Present |
| | Not Present |
| Downlink counter synchronisation info UL Transport channel information for all transport | Not Present |
| 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 |
| DDACH TECS | TS34.108 clause 6 Parameter Set.) |
| - PRACH TFCS - CHOICE TFCI signalling | (This IE is repeated for TFC number.) Normal |
| - TFCI Field 1 information | Notifial |
| - TFCS complete reconfigure information | |
| - CHOICE TFCS Size | Number of used bits must be enough to cover |
| | all combinations of CTFC from clauses 6. Refer to TS34.108 clause 6 Parameter Set |
| - CTFC information | Not Present |
| - CHOICE mode | TDD |
| - Individual UL CCTrCH information | Not Present |
| Deleted TrCH information list | Not Present |
| Added or Reconfigured LIL TrCH information list | 3 DCHs |
| Added or Reconfigured UL TrCH information Uplink transport channel type | DCH |
| - UL Transport channel identity | 1 |
| - TFS | |
| - CHOICE Transport channel type | Dedicated transport channels |

- CHOICE DL parameters

Information Element Value/remark - 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 - 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 - 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 - Transmission Time Interval Reference to TS34.108 clause 6.10 Parameter Set - Number of Transport blocks (This IE is repeated for TFI number.) - CHOICE Logical Channel list - 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 Reference to TS34.108 clause 6.10 Parameter Set - Rate matching attribute - CRC size Reference to TS34.108 clause 6.10 Parameter Set - Uplink transport channel type DCH - UL Transport channel identity 3 - 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 - Transmission Time Interval Reference to TS34.108 clause 6.10 Parameter Set - Number of Transport blocks (This IE is repeated for TFI number.) - CHOICE Logical Channel list - 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 Reference to TS34.108 clause 6.10 Parameter Set - CRC size CHOICE mode TDD (no data) DL Transport channel information common for all transport channel - SCCPCH TFCS Not Present - CHOICE mode TDD - CHOICE DL parameters Same as UL Deleted TrCH information list Not Present Added or Reconfigured TrCH information list 3 DCHs Added or Reconfigured DL TrCH information - Downlink transport channel type DCH - DL Transport channel identity - CHOICE DL parameters Same as UL - Uplink transport channel type DCH - UL TrCH identity - DCH quality target - BLER Quality value -6.3 - Downlink transport channel type DCH - DL Transport channel identity

Same as UL

| Information Element | Value/remark |
|---|--|
| Uplink transport channel type | DCH |
| - UL TrCH identity | 2 |
| - DCH quality target | |
| - BLER Quality value | Not Present |
| - Downlink transport channel type | DCH |
| - DL Transport channel identity | 8 |
| - CHOICE DL parameters | Same as UL |
| - Uplink transport channel type | DCH |
| - UL TrCH identity | 3 |
| - DCH quality target | N / D |
| - BLER Quality value | Not Present |
| Frequency info | Deference to eleves 5.4 Test from vencies |
| - UARFON Nt) | Reference to clause 5.1 Test frequencies |
| Maximum allowed UL TX power | 30dBm |
| CHOICE channel requirement | Uplink DPCH info |
| - Uplink DPCH power control info - CHOICE Mode | TDD (no data) |
| - CHOICE Mode Downlink information common for all radio links | TDD (no data) |
| - Downlink DPCH info common for all RL | |
| | Maintain |
| - Timing indicator | Not Present |
| CFN-targetSFN frame offset Downlink DPCH power control information | INOUT TESETIL |
| - DPC mode | 0 (single) |
| - CHOICE mode | TDD |
| - Default DPCH Offset Value | Not Present |
| Downlink information for each radio link list | Not i lesent |
| - Downlink information for each radio link | |
| - Choice mode | TDD |
| - Primary CCPCH info | |
| - CHOICE SyncCase | Sync Case 1 |
| - Timeslot | PCCPCH timeslot |
| - Cell parameters ID | 0 |
| - SCTD indicator | |
| - Downlink DPCH info for each RL | |
| - CHOICE mode | TDD |
| - DL CCTrCH List | |
| - TFCS ID | 1 |
| - Time info | |
| - Activation time | (256+CFN-(CFN mod 8 + 8))mod 256 |
| - Duration | infinite |
| - Common timeslot info | |
| - 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 | |
| Individual timeslot info | |
| Timeslot number | The number of a downlink timeslot that has |
| | unassigned codes. |
| - TFCI existence | TRUE |
| Midamble shift and burst type | |
| -CHOICE Burst Type | |
| -Type 1 | |
| -Midamble Allocation Mode | Default |
| - Midamble configuration burst | As defined in 3GPP TS 25.221 |
| type 1 and 3 | |
| - First timeslot channelisation codes | (//05) |
| 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 |
| Dita- | that is being assigned in the slot. |
| - Bitmap | Bitmap of the codes that are being assigned in |
| 010105 | 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 |

Contents of RADIO BEARER SETUP message: AM or UM (Packet to CELL_DCH from CELL_DCH in PS)

| 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 MOD 8 + 8))MOD 256 |
| Radio bearer downlink ciphering activation time info | Not Present |
| Activation time | (256+CFN-(CFN MOD 8 + 8))MOD 256 |
| New U-RNTI | Not Present |
| New C-RNTI | Not Present |
| New DSCH-RNTI | Not Present |

| Information Florers | Value les mante |
|--|---|
| Information Element RRC State indicator | Value/remark CELL DCH |
| UTRAN DRX cycle length coefficient | Not Present |
| CN information info | Not Present |
| URA identity | Not Present |
| Signalling RB information to setup | Not Present |
| RAB information for setup | |
| - RAB info | |
| - RAB identity | 0000 0101B |
| | The first/ leftmost bit of the bit string contains the most |
| CNI domain identity | significant bit of the RAB identity. PS domain |
| - CN domain identity | Not Present |
| NAS Synchronization Indicator Re-establishment timer | UseT314 |
| - RB information to setup | 0361314 |
| - 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 - Max_RST | 500 |
| - Max_RST - Polling info | 7 |
| - Folling IIII0 - 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 TRUE |
| In-sequence deliveryReceiving window size | 128 |
| - Downlink RLC status info | 120 |
| - 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 DCH |
| Uplink transport channel type UL Transport channel identity | 1 DCH |
| - 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 Not Present |
| DL DSCH Transport channel identity Logical channel identity | Not Present Not Present |
| - Logical channel identity - 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 Downlink transport channel type | 1 FACH |
| - Downlink transport Grianner type | 1 /1011 |

| | 1 |
|---|--|
| 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 Downlink counter synchronisation info | Not Present Not Present |
| UL Transport channel information for all transport | Not Flesent |
| 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. |
| 0750: (| Refer to TS34.108 clause 6 Parameter Set |
| - CTFC information | Not Present |
| - CHOICE mode - Individual UL CCTrCH information | TDD Not Present |
| Deleted TrCH information list | Not Present |
| Added or Reconfigured TrCH information list | Not Flesent |
| - 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 - CRC size | Reference to TS34.108 clause 6.10 Parameter Set Reference to TS34.108 clause 6.10 Parameter Set |
| CHOICE mode | TDD (no data) |
| DL Transport channel information common for all | (no data) |
| transport channel | |
| - SCCPCH TFCS | Not Present |
| - CHOICE mode | TDD |
| - Downlink DPCH info common for all RL | |
| - Timing indicator | Maintain |
| - CFN-targetSFN frame offset | Not Present |
| - Downlink DPCH power control information | |
| - CHOICE mode | TDD |
| - TPC step size | 1 dB |
| - Default DPCH offset value | 0 Not Drogent |
| Deleted TrCH information list | Not Present |
| Added or Reconfigured DL TrCH information | |
| - Added or Reconfigured DL TrCH information - Downlink transport channel type | DCH |
| - DL Transport channel identity | DCn 6 |
| - CHOICE DL parameters | Explicit |
| - TFS | Explicit |
| - CHOICE Transport channel type | Dedicated transport channels |
| - Dynamic Transport format information | (This IE is repeated for TFI number) |
| - 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 |
| | |

Information Element

- 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

- -CHOICE mode
- UARFCN (Nt)

Maximum allowed UL TX power CHOICE channel requirement

- Uplink DPCH power control info
 - CHOICE mode
 - UL Target SIR
 - CHOICE UL OL PC info
 - Uplink Timing Advance Control
 - UL CCTrCH List
 - TFCS Id
 - Time info
 - Activation time
 - Duration
 - Common timeslot info
 - 2nd interleaving mode
 - TFCI coding
 - Puncturing Limit
 - Repetition Period
 - Repetition Length
 - First individual timeslot info
 - Timeslot number
 - TFCI existence
 - Midamble shift and burst type
 - -CHOICE Burst Type
 - -Type 1
 - -Midamble Allocation Mode
 - Midamble configuration burst

type 1 and 3

- First timeslot channelisation codes
- Channelisation code
- CHOICE more timeslots

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
- Default DPCH Offset Value

Downlink information for each radio link list

- Downlink information for each radio link
 - Choice mode
 - Primary CCPCH info CHOICE SyncCase

 - Timeslot
 - Cell parameters ID
 - SCTD indicator
 - Downlink DPCH info for each RL

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

Value/remark

-6.3

TDD

Reference to clause 5.1 Test frequencies 30 dBm

Uplink DPCH info

TDD

Reference to TS34.108 Parameter set. Individually signalled

Not Present

(256+CFN-(CFN MOD 8 + 8))MOD 256

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

The number of an uplink timeslot that has unassigned codes.

TRUE

Default

As defined in 3GPP TS 25,221

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.

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.

Maintain Not Present

0 (single)

TDD (no data)

Not Present

TDD

Sync Case 1 PCCPCH timeslot

| Information Element | Value/remark |
|---|--|
| - CHOICE mode | TDD |
| - DL CCTrCH List | |
| - TFCS ID | 1 |
| - Time info | <u>'</u> |
| - Activation time | (256+CFN-(CFN mod 8 + 8))mod 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 | |
| - Individual timeslot info | |
| - Timeslot number | The number of a downlink timeslot that has |
| | unassigned codes. |
| - TFCI existence | TRUE |
| Midamble shift and burst type | |
| -CHOICE Burst Type | |
| -Type 1 | |
| -Midamble Allocation Mode | Default |
| Midamble configuration burst | As defined in 3GPP TS 25.221 |
| type 1 and 3 | |
| 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. |
| - Bitmap | Bitmap of the codes that are being assigned in |
| | the slot. |
| OUDIOE C L | |
| - 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 |
| - UL GOTTON TPO LIST | NOT Present |
| -SCCPCH information for FACH | Not Present |
| COOL OIT IIII OIII I AOIT | INOCT TOSETT |
| | |

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 | 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 RELEASE COMPLETE message: AM

| Message Type | |
|--|---|
| RRC transaction identifier | Checked to see the value is identical to the same IE in the downlink RADIO BEARER RELEASE message. |
| Integrity check info | |
| - Message authentication code | This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I. |
| - RRC Message sequence number | This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value. |
| Uplink integrity protection activation info | Not checked. |
| CHOICE mode | TDD |
| COUNT-C activation time | The presence of this IE depends on the following 2 factors: (a) There exists RB(s) mapped to RLC-TM and (b) UE is transiting to CELL_DCH state after the RB release procedure. Else, this IE is absent. |
| Radio bearer uplink ciphering activation time info | If ciphering is not activated in RADIO BEARER RELEASE message, this IE must be absent. Else, SS checks this IE for the presence of activation times of all ciphered uplink RLC-UM and RLC-AM RBs. |
| Uplink counter synchronisation info | Not checked |

Contents of RRC CONNECTION REQUEST message: TM

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

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 | The presence of this IE depends on 2 factors: |
| | This IE is present when this message is transmitted on |
| | downlink DCCH. Else, this IE and the sub-IEs are omitted. |
| Message authentication code | SS calculates the value of MAC-I for this message and |
| | writes to this IE. The first/ leftmost bit of the bit string |
| | contains the most significant bit of the MAC-I. |
| - RRC Message sequence number | SS provides the value of this IE, from its internal counter. |
| N308 | 2 (for CELL_DCH state). Not Present (for UE in other |
| | connected mode states). |
| Release cause | Normal event |
| Rplmn information | Not Present |

Contents of RRC CONNECTION RELEASE COMPLETE message: AM or UM

| Information Element | Semantics description |
|-------------------------------|---|
| Message Type | |
| RRC transaction identifier | The value of this IE is checked to see that it matches the value of the same IE transmitted in the downlink RRC CONNECTION RELEASE message. |
| Integrity check info | |
| - Message authentication code | Checked to see if it's identical to the value of XMAC-I calculated by the SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I. |
| - RRC Message sequence number | Checked to see if it is present. This number is used by the SS to compute the XMAC-I |
| Error indication | Not checked |

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

| 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 | FALSE |
| update requirement | |
| - UE radio access TDD capability | TRUE |
| update requirement | |
| - System specific capability update requirement list | GSM |

| Information Floment | Value/remark |
|--|---|
| Information Element | |
| Signalling RB information to setup - RB identity | (UM DCCH for RRC) Not Present |
| - RB identity - CHOICE RLC info type | HOLF TOOTH |
| - 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 Configured |
| CHOICE RLC size list MAC logical channel priority | Configured |
| MAC logical channel priority Downlink RLC logical channel info | ' |
| Number of RLC logical channels | 1 |
| Downlink transport channel type | DCH |
| - 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 FACH |
| Downlink transport channel type DL DCH Transport channel identity | FACH Not Present |
| - DL DCH Transport channel identity - DL DSCH Transport channel identity | Not Present |
| - DE DSCH Transport channel identity - Logical channel identity | Not Present |
| 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 |
| | |
| Trop president and the control of th | 100 |
| - Transmission window size | 128 |
| - Timer_RST - May_RST | 500 |
| - Max_RST - Polling info | 1 |
| - Polling into - Timer_poll_prohibit | 200 |
| - Timer_poli_prohibit - Timer_poll | 200 |
| - Poll PDU | Not present |
| - FUII_FDU | ווטג אופספווג |

| 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 | 2 DDM:y/Ontions |
| - Information for each multiplexing option | 2 RBMuxOptions Not Present |
| - RLC logical channel mapping indicator | |
| Number of RLC logical channels Uplink transport channel type | 1 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 | (ANA DOCUL for NACE DT High priority) |
| Signalling RB information to setup - RB identity | (AM DCCH for NAS_DT High priority) Not Present |
| - RB identity - CHOICE RLC info type | Not Present |
| - RLC info | |
| - CHOICE Uplink RLC mode | AM RLC |
| - Transmission RLC discard | AIVI NEO |
| - 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 | 000 |
| - Timer_status_prohibit | 200 |
| - Timer_EPC | Not Present |
| - Missing PDU indicator | TRUE |
| - Timer_STATUS_periodic | Not Present |
| - RB mapping info | 2 PPMuvOntions |
| - Information for each multiplexing option | 2 RBMuxOptions Not Present |
| - RLC logical channel mapping indicator | 1 |
| Number of RLC logical channels 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 FACH |
| - Downlink transport channel type | Not Present |
| DL DCH Transport channel identity DL DSCH Transport channel identity | |
| - Logical channel identity | Not Present |
| 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 |

| 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 | T |
| - Number of RLC logical channels | 1 |
| Downlink transport channel type | DCH |
| | 10 |
| - DL DCH Transport channel identity | |
| - 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 | |
| - TFCS ID | (This IE is repeated for TFC number.) |
| - Allowed Transport Format combination | 0 to MaxTFCvalue-1 (MaxTFCValue is refer to |
| F | TS34.108 clause 6 Parameter Set.) |
| - PRACH TFCS | (This IE is repeated for TFC number.) |
| - CHOICE TFCI signalling | Normal |
| - TFCI Field 1 information | Normal |
| - TFCS complete reconfigure | |
| information | |
| - CHOICE TFCS Size | Number of used bits must be enough to cover |
| - GHOIGE IT GO SIZE | all combinations of CTFC from clauses 6. |
| | Refer to TS34.108 clause 6 Parameter Set |
| CTCC information | |
| - CTFC information | Not Present TDD |
| - CHOICE mode | |
| - Individual UL CCTrCH information | Not Present |
| Deleted TrCH information list | Not Present |
| Added or Reconfigured UL TrCH information | BOLL |
| - Uplink transport channel type | DCH |
| - UL Transport channel identity | 5 |
| - TFS | |
| | |

Information Element

- CHOICE Transport channel type
- Dynamic Transport format information
- RLC size
- Number of TBs and TTI lists
- 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

DL Transport channel information common for all transport channel

- SCCPCH TFCS
- CHOICE mode
- CHOICE DL parameters

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 Transport channel identity
 - -DCH quality target
 - BLER Quality target

Frequency info

Maximum allowed UL TX power

HOICE channel requirement

- Uplink DPCH power control info
 - CHOICE mode
 - UL Target SIR
 - CHOICE UL OL PC info
 - Uplink Timing Advance Control
 - UL CCTrCH List
 - TFCS Id
 - Time info
 - Activation time
 - Duration
 - Common timeslot info
 - 2nd interleaving mode
 - TFCI coding
 - Puncturing Limit
 - Repetition Period
 - Repetition Length
 - First individual timeslot info
 - Timeslot number
 - TFCI existence
 - Midamble shift and burst type
 - -CHOICE Burst Type
 - -Type 1
 - -Midamble Allocation Mode
 - Midamble configuration burst

type 1 and 3

- First timeslot channelisation codes

Value/remark

Dedicated transport channels

According to TS34.108 clause 6 for standalone 13.6 kbps signalling radio bearer

(This IE is repeated for TFI number)

According to TS34.108 clause 6 for standalone 13.6 kbps signalling radio bearer

According to TS34.108 clause 6 for standalone 13.6 kbps signalling radio bearer

According to TS34.108 clause 6 for standalone 13.6 kbps signalling radio bearer

According to TS34.108 clause 6 for standalone 13.6 kbps signalling radio bearer

According to TS34.108 clause 6 for standalone 13.6 kbps signalling radio bearer

According to TS34.108 clause 6 for standalone 13.6 kbps signalling radio bearer

According to TS34.108 clause 6 for standalone 13.6 kbps signalling radio bearer

Not Present

TDD

Same as UL

DCH

10

Same as UL

DCH

5

-6.3

Not Present

Not Present

Uplink DPCH info

TDD

Reference to TS34.108 Parameter set.

Individually signalled

Not Present

1

(256+CFN-(CFN MOD 8 + 8))MOD 256

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

The number of an uplink timeslot that has unassigned codes.

TRUE

Default

As defined in 3GPP TS 25.221

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 |
|---|---|
| - Channelisation code | (i/SF) where i denotes an unassigned code |
| Chambadali oodo | matching the SF specified in TS34.108 clause |
| | 6 Parameter Set. |
| - CHOICE more timeslots | The presence of this IE depends upon the |
| STICIOL IIIO MINOSIOLO | 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 | 3 |
| - Downlink DPCH info common for all RL | |
| - Timing indicator | Maintain |
| - CFN-targetSFN frame offset | Not Present |
| - Downlink DPCH power control information | |
| - DPC mode | 0 (single) |
| - CHOICE mode | TDD (no data) |
| - Default DPCH Offset Value | Not Present |
| Downlink information for each radio link list | |
| - Downlink information for each radio link | |
| - Choice mode | TDD |
| - Primary CCPCH info | |
| - CHOICE SyncCase | Sync Case 1 |
| - Timeslot | PCCPCH timeslot |
| - Cell parameters ID | 0 |
| - SCTD indicator | |
| - Downlink DPCH info for each RL | |
| - CHOICE mode | TDD |
| - DL CCTrCH List | |
| - TFCS ID | 1 |
| - Time info | (256 + CEN (CEN mod 2 + 2)\ |
| - Activation time | (256+CFN-(CFN mod 8 + 8))mod 256 |
| - Duration | infinite |
| - Common timeslot info | Poforonce to TS24 108 |
| - 2nd interleaving mode | Reference to TS34.108 TRUE |
| - TFCI coding - Puncturing limit | Reference to TS34.108 clause 6 Parameter set |
| - Puncturing limit - Repetition period | 1 |
| - Repetition period - Repetition length | Empty |
| - Downlink DPCH timeslots and codes | Linety |
| - Individual timeslot info | |
| - Timeslot number | The number of a downlink timeslot that has |
| | unassigned codes. |
| - TFCI existence | TRUE |
| - Midamble shift and burst type | |
| -CHOICE Burst Type | |
| -Type 1 | |
| -Midamble Allocation Mode | Default |
| - Midamble configuration burst | As defined in 3GPP TS 25.221 |
| type 1 and 3 | |
| - 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. |
| - Bitmap | Bitmap of the codes that are being assigned in |
| | the slot. |
| | |
| - CHOICE more timeslots | The presence of this IE depends upon whether |
| | the requirements of 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 |
| | 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. |
| 0747711 | 9 |
| 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 | A1, A2 | |
| RRC transaction identifier | | Arbitrarily selects an integer between 0 and 3 |
| Integrity check info | | , , |
| - Message authentication code | | Set to an arbitrarily selected 32-bits integer. The |
| | | first/ leftmost bit of the bit string contains the most |
| | | significant bit of the MAC-I. |
| - RRC Message Sequence Number | | Set to an arbitrarily selected integer between 0 |
| Title meddaga dagaanaa Tambar | | and 15 |
| Security capability | | |
| - Ciphering algorithm capability | | |
| - UEA0 | | If ciphering is not indicated to be active on IXIT |
| - OLAO | | statements in TS 34.123-2, set this IE to TRUE. |
| - UEA1 | | |
| - OLAT | | If ciphering is indicated to be active on IXIT |
| Coore | | statements in TS 34.123-2, set this IE to TRUE. |
| - Spare | | FALSE |
| - Integrity protection algorithm | | 000000000000010B (UIA1) |
| capability | | TDUE |
| - UIA1 | | TRUE |
| - Spare | | FALSE |
| Ciphering mode info | | This presence of this IE is dependent on IXIT |
| | | statements in TS 34.123-2. If ciphering is |
| | | indicated to be active, this IE present with the |
| | | values of the sub IEs as stated below. Else, this |
| | | IE is omitted. |
| - Ciphering mode command | | Start/restart |
| - Ciphering algorithm | | Use the same ciphering algorithm specified in |
| | | "ciphering algorithm capability" IE in this |
| | | message. |
| Ciphering activation time for DPCH | | Not Present |
| Radio bearer downlink ciphering | | |
| activation time info | | |
| Radio bearer activation time | | |
| - RB identity | | 1 |
| - RLC sequence number | | Current RLC SN+2 |
| - RB identity | | 2 |
| - RLC sequence number | | Current RLC SN+2 |
| - RB identity | | 3 |
| - RLC sequence number | | Current RLC SN + 2 |
| - RB identity | | 4 |
| - RLC sequence number | | Current RLC SN + 2 |
| Integrity protection mode info | | |
| - Integrity protection mode command | | Start |
| - Downlink integrity protection | | Not Present |
| activation info | | |
| - Integrity protection algorithm | | UIA1 |
| - Integrity protection initialisation | | SS selects an arbitrary 32 bits number for |
| number | | FRESH. |
| 1 | | The first/ leftmost bit of the bit string contains the |
| | | most significant bit of the FRESH. |
| CN domain identity | | Supported domain |
| UE system specific security capability | A1 | Not Checked |
| UE system specific security capability | A2 | |
| - Inter-RAT UE security capability | , _ | |
| - CHOICE system | | GSM |
| - GSM security capability | | The indicated algorithms must be the same as the |
| - Goivi security capability | | |
| | | algorithms supported by the UE as indicated in |
| | | the IE " UE system specific capability " in the RRC |
| | | CONNECTION SETUP COMPLETE message. |

| Condition | Explanation |
|-----------|-----------------------|
| A1 | UE not supporting GSM |
| A2 | UE supporting GSM |

Contents of SECURITY MODE COMPLETE message: AM

| Information Element | Value/remark |
|--|--|
| Message Type | |
| RRC transaction identifier | The value of this IE is checked to see that it matches the value of the same IE transmitted in the downlink SECURITY MODE COMMAND message. |
| Integrity check info | |
| - Message authentication code | This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I. |
| - RRC Message sequence number | This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value. |
| Uplink integrity protection activation info | Not checked. |
| Radio bearer uplink ciphering activation time info | If ciphering is not activated in SECURITY MODE |
| | COMMAND message, this IE must be absent. Else, SS |
| | checks this IE for the presence of activation times for all |
| | ciphered uplink RLC-UM and RLC-AM RBs. |

Contents of UPLINK DIRECT TRANSFER message: AM

| Information Element | Value/remark |
|-------------------------------|--|
| Message Type | |
| Integrity check info | |
| - Message authentication code | This IE is checked to see if it is present. The value is compared against the XMAC-I value computed by SS. The first/ leftmost bit of the bit string contains the most significant bit of the MAC-I. |
| - RRC Message sequence number | This IE is checked to see if it is present. The value is used by SS to compute the XMAC-I value. |
| CN domain identity | Checked to see if set to supported CN domain as specified in the IXIT statements |
| NAS message | Set according to that indicated in specific message content clause |
| Measured results on RACH | Not checked |

9.2 Default Message Contents for RF

This clause contains the default values of common messages for RF test. The parameters of the UL/DL reference measurement channel 12.2kbps, the DL reference measurement channel for BTFD, UE test loop mode 1 without Dummy DCCH transmission and UE test loop mode 2 with Dummy DCCH transmission are set to default message contents.

9.2.1 Default Message Contents for RF (FDD)

Contents of Activate RB Test Mode message

| Information Element | Value/remark |
|------------------------|----------------|
| Protocol discriminator | F (Length 1/2) |
| Skip indicator | 0 (Length 1/2) |
| Message Type | 44h |

Contents of Close UE Test Loop message (UE test loop mode 1 without Dummy DCCH transmission)

| Information Element | Value/remark |
|------------------------------|-----------------|
| Protocol discriminator | F (Length 1/2) |
| Skip indicator | 0 (Length 1/2) |
| Message Type | 40h |
| UE test loop mode | 00h |
| UE test loop mode 1 LB setup | 03h 00h F4h 0Ah |

Contents of Close UE Test Loop message (UE test loop mode 2 without Dummy DCCH transmission)

| Information Element | Value/remark |
|------------------------|----------------|
| Protocol discriminator | F (Length 1/2) |
| Skip indicator | 0 (Length 1/2) |
| Message Type | 40h |
| UE test loop mode | 01h |

Contents of Open UE Test Loop message

| Information Element | Value/remark |
|------------------------|----------------|
| Protocol discriminator | F (Length 1/2) |
| Skip indicator | 0 (Length 1/2) |
| Message Type | 42h |

Contents of PAGING TYPE 1 message: TM (CS)

| Information Element | Value/remark |
|---|---|
| Message Type | |
| Paging record list | |
| -Paging record | |
| CHOICE Used paging identity | CN identity |
| - Paging cause | Terminating Streaming Call |
| - CN domain identity | CS domain |
| - CHOICE UE identity | |
| - IMSI (GSM-MAP) | Set to the same octet string as in the IMSI stored in the |
| | USIM card |
| BCCH modification info | Not Present |

Contents of PAGING TYPE 1 message: TM (PS)

| Information Element | Value/remark |
|-------------------------------|---|
| Message Type | |
| Paging record list | |
| -Paging record | |
| - CHOICE Used paging identity | CN identity |
| - Paging cause | Terminating Interactive Call |
| - CN domain identity | PS domain |
| - CHOICE UE identity | |
| - IMSI (GSM-MAP) | Set to the same octet string as in the IMSI stored in the |
| | USIM card |
| BCCH modification info | Not Present |

Contents of RADIO BEARER SETUP message: AM or UM

| 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 |
| DDC | significant bit of the MAC-I. |
| - RRC message sequence number | SS provides the value of this IE, from its internal counter. |
| Integrity protection mode info | Not Present |
| Ciphering mode info | Not Present |
| Activation time | (256+CFN-(CFN MOD 8 + 8))MOD 256 |
| New U-RNTI | Not Present |
| New C-RNTI | Not Present |
| New DSCH-RNTI | Not Present |
| RRC State indicator | CELL_DCH |
| UTRAN DRX cycle length coefficient | Not Present |
| CN information info | Not Present |
| URA identity | Not Present |
| Signalling RB information to setup | Not Present |
| RAB information for setup list | |
| - RAB information for setup | |
| - RAB info | |
| - RAB identity | 0000 0001B |
| , | The first/ leftmost bit of the bit string contains |
| | the most significant bit of the RAB identity. |
| - CN domain identity | CS domain |
| NAS Synchronization Indicator | Not Present |
| - Re-establishment timer | UseT314 |
| - RB information to setup list | |
| - RB information to setup | |
| - RB identity | 10 |
| - PDCP info | Not Present |
| - CHOICE RLC info type | RLC info |
| - CHOICE Uplink RLC mode | TM RLC |
| - Transmission RLC discard | Not Present |
| Segmentation indication CHOICE Downlink RLC mode | FALSE |
| | TM RLC FALSE |
| Segmentation indicationRB mapping info | FALSE |
| - RB mapping into - Information for each multiplexing option | |
| - RLC logical channel mapping indicator | Not Present |
| - Number of uplink RLC logical channels | 1 |
| - Uplink transport channel type | DCH |
| - UL Transport channel identity | 1 |
| - Logical channel identity | Not Present |
| - CHOICE RLC size list | Configured |
| - MAC logical channel priority | 7 |
| - Downlink RLC logical channel info | |
| - Number of downlink RLC logical channels | 1 |
| - Downlink transport channel type | DCH |
| - DL DCH Transport channel identity | 6 |
| - DL DSCH Transport channel identity | Not Present |
| - Logical channel identity | Not Present |
| RB information to be affected list | Not Present |
| Downlink counter synchronisation info | Not Present |
| UL Transport channel information for all transport | |
| channels | |
| - PRACH TFCS | Not Present |
| - CHOICE mode | FDD |
| - TFC subset | Not Present |
| - UL DCH TFCS | l |
| - CHOICE TFCI signalling | Normal |
| - TFCI Field 1 information | Complete recent :: |
| - CHOICE TFCS representation | Complete reconfiguration |

| Information Element | Value/remark |
|--|------------------------------|
| - TFCS complete reconfigure information | |
| - CHOICE CTFC Size | 2 bit CTFC |
| - CTFC information | 4 TFCs |
| - 2bit CTFC | 0 |
| - Power offset Information | |
| - CHOICE Gain Factors | Computed Gain Factors |
| - Reference TFC ID - CHOICE mode | 0 FDD |
| - Power offset P _{p-m} | Not Present |
| - 2bit CTFC | 2 |
| - Power offset Information | |
| - CHOICE Gain Factors | Computed Gain Factors |
| - Reference TFC ID | 0 |
| - CHOICE mode | FDD Not Present |
| - Power offset P _{p-m} - 2bit CTFC | 1 |
| - Power offset Information | ' |
| - CHOICE Gain Factors | Computed Gain Factors |
| - Reference TFC ID | 0 |
| - CHOICE mode | FDD |
| - Power offset P _{p-m} | Not Present |
| - 2bit CTFC - Power offset Information | 3 |
| - CHOICE Gain Factors | Signalled Gain Factors |
| - CHOICE mode | FDD |
| - Gain factor ßc | 8 |
| - Gain factor ßd | 15 |
| - Reference TFC ID | 0 |
| - CHOICE mode | FDD Net Brooks |
| - Power offset P _{p-m} Deleted UL TrCH information list | Not Present Not Present |
| Added or Reconfigured UL TrCH information list | 1 |
| - Added or Reconfigured UL TrCH information | |
| - Uplink transport channel type | DCH |
| - UL Transport channel identity | 1 |
| - TFS - CHOICE Transport channel type | Dedicated transport abannals |
| - Dynamic Transport Format Information | Dedicated transport channels |
| - RLC size | 244 bits |
| - Number of TBs and TTI List | 2 |
| - Transmission Time Interval | Not Present |
| - Number of Transport blocks | 0 |
| - Transmission Time Interval | Not Present |
| Number of Transport blocks CHOICE Logical Channel List | 1 ALL |
| - Semi-static Transport Format Information | / ١٠٠ |
| - Transmission time interval | 20 |
| - Type of channel coding | Convolutional |
| - Coding Rate | 1/3 |
| - Rate matching attribute | 256 |
| - CRC size CHOICE mode | 16 FDD |
| - CPCH set ID | Not Present |
| - Added or Reconfigured TrCH information for DRAC | Not Present |
| list | |
| DL Transport channel information common for all | |
| transport channel - SCCPCH TFCS | Not Present |
| - SCCPCH TPCS - CHOICE mode | FDD |
| - CHOICE DL parameters | Same as UL |
| Deleted DL TrCH information list | Not Present |
| Added or Reconfigured DL TrCH information list | 1 |
| - Added or Reconfigured DL TrCH information | 2011 |
| - Downlink transport channel type | DCH |
| - DL Transport channel identity - CHOICE DL parameters | 6 Same as UL |
| - Uplink transport channel type | DCH |
| opinik transport Granner type | 2011 |

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 |
| - message authentication code | 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 | Set by operator |
| - Radio bearer downlink ciphering activation time | Not Present |
| info Activation time | Set by operator |
| New U-RNTI | Set by operator 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 Not Present |
| Signalling RB information to setup RAB information for setup | Not Present |
| - 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 - Re-establishment timer | Not Present UseT314 |
| - RB information to setup | 0561314 |
| - RB identity | 10 |
| - PDCP info | Not Present |
| - CHOICE RLC info type | RLC info |
| - CHOICE Uplink RLC mode | TM RLC |
| - Transmission RLC discard | Not Present FALSE |
| - Segmentation indication - CHOICE Downlink RLC mode | TM RLC |
| - Segmentation indication | FALSE |
| - RB mapping info | |
| - Information for each multiplexing option | l |
| - RLC logical channel mapping indicator | Not Present |
| Number of uplink RLC logical channels Uplink transport channel type | 1 DCH |
| - UL Transport channel identity | 1 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 DCH |
| Downlink transport channel type 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 |
| 10.7 | RMC for BTFD |
| UL Transport channel information for all transport | |
| channels - PRACH TFCS | Not Present |
| - CHOICE mode | FDD |
| 0110102 mose | 1 · |

| Information Flowant | Valuatramant |
|--|---------------------------|
| Information Element | Value/remark Not Present |
| - TFC subset - UL DCH TFCS | Not Present |
| - CHOICE TFCI signalling | Normal |
| - TFCI Field 1 information | Normal |
| - CHOICE TFCS representation | Complete reconfiguration |
| - TFCS complete reconfigure information | Complete recorniguration |
| - 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 | ComputedCoinFootore |
| -gain-actorinformation - Reference TFC ID | ComputedGainFactors 0 |
| - Reference TPC ID | 12 |
| - crico -powerOffsetInformation(OP) | 1- |
| -gainFactorInformation | SignalledGainFactors |
| -modeSpecificInfo | Fdd |
| -fdd | 1.55 |
| - Gain factor ßc | 8 |
| - Gain factor ßd | 15 |
| - Reference TFC ID | 0 |
| - ctfc6 | 2 |
| -powerOffsetInformation(OP) | |
| -gainFactorInformation | ComputedGainFactors |
| - Reference TFC ID | 0 |
| - ctfc6 | 13 |
| -powerOffsetInformation(OP) | Operated Opin Footons |
| -gainFactorInformation - Reference TFC ID | ComputedGainFactors |
| - Reference TPC ID | 3 |
| - ctico -powerOffsetInformation(OP) | 3 |
| -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) | Computed Coin Factors |
| -gainFactorInformation - Reference TFC ID | ComputedGainFactors |
| - Reference IFC ID - ctfc6 | 5 |
| - ctrco -powerOffsetInformation(OP) | J |
| -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 | |
|--|--|
| -powerOffsetInformation(OP) -gainFactorInformation ComputedGainFactors - Reference TFC ID 0 -cttc6 7 -powerOffsetInformation(OP) -gainFactorInformation ComputedGainFactors - Reference TFC ID 0 -cttc6 18 -powerOffsetInformation(OP) -gainFactorInformation ComputedGainFactors - Reference TFC ID 0 -cttc6 18 -powerOffsetInformation ComputedGainFactors - Reference TFC ID 0 -cttc6 8 -powerOffsetInformation ComputedGainFactors - Reference TFC ID 0 -cttc6 19 -powerOffsetInformation ComputedGainFactors - Reference TFC ID 0 -cttc6 19 -powerOffsetInformation ComputedGainFactors - Reference TFC ID 0 -cttc6 19 -powerOffsetInformation ComputedGainFactors - Reference TFC ID 0 -cttc6 9 -powerOffsetInformation ComputedGainFactors - Reference TFC ID 0 -cttc6 20 -powerOffsetInformation ComputedGainFactors - Reference TFC ID 0 -cttc6 20 -powerOffsetInformation ComputedGainFactors - Reference TFC ID 0 -cttc6 20 -powerOffsetInformation ComputedGainFactors - Reference TFC ID 0 -cttc6 10 -cttc6 10 -cttc6 10 -cttc6 10 -powerOffsetInformation ComputedGainFactors - Reference TFC ID 0 -cttc6 10 -powerOffsetInformation ComputedGainFactors - Reference TFC ID 0 -cttc6 10 -powerOffsetInformation ComputedGainFactors - Reference TFC ID 0 -cttc6 10 -powerOffsetInformation ComputedGainFactors - Reference TFC ID 0 -cttc6 21 -powerOffsetInformation ComputedGainFactors | |
| -gainFactorInformation | |
| - Reference TFC ID - ctfc6 - ctfc6 - powerOffsetInformation(OP) - gainFactorInformation - Reference TFC ID - ctfc6 - c | |
| - ctfc6 -powerOffsetInformation(OP) -gainFactorInformation - Reference TFC ID -ctfc6 -powerOffsetInformation(OP) -gainFactorInformation(OP) -gainFactorInformation(OP) -gainFactorInformation - Reference TFC ID -ctfc6 -powerOffsetInformation(OP) -gainFactorInformation(OP) -gainFactorInformation - Reference TFC ID -ctfc6 -powerOffsetInformation(OP) -gainFactorInformation(OP) -gainFactorInformation - Reference TFC ID -ctfc6 -powerOffsetInformation(OP) -gainFactorInformation - Reference TFC ID -ctfc6 -powerOffsetInformation(OP) -gainFactorInformation - Reference TFC ID -ctfc6 -powerOffsetInformation - ComputedGainFactors - Reference TFC ID -ctfc6 -powerOffsetInformation(OP) -gainFactorInformation - ComputedGainFactors - Reference TFC ID -ctfc6 -powerOffsetInformation(OP) -gainFactorInformation(OP) | |
| -gainFactorInformation | |
| -gainFactorInformation | |
| - ctfc6 -powerOffsetInformation(OP) -gainFactorInformation - Reference TFC ID - ctfc6 -powerOffsetInformation - Reference TFC ID - ctfc6 -powerOffsetInformation - Reference TFC ID - ctfc6 - powerOffsetInformation OP) - gainFactorInformation - Reference TFC ID - ctfc6 - powerOffsetInformation - Reference TFC ID - ctfc6 - powerOffsetInformation(OP) - gainFactorInformation - Reference TFC ID - ctfc6 - powerOffsetInformation - ComputedGainFactors - Reference TFC ID - ctfc6 - powerOffsetInformation - ComputedGainFactors - Reference TFC ID - ctfc6 - powerOffsetInformation - ComputedGainFactors - Reference TFC ID - ctfc6 - powerOffsetInformation(OP) - ctfc6 - c | |
| -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 19 -powerOffsetInformation 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 20 -powerOffsetInformation ComputedGainFactors - Reference TFC ID 0 -ctfc6 10 -powerOffsetInformation ComputedGainFactors - Reference TFC ID 0 - ctfc6 10 -powerOffsetInformation ComputedGainFactors - Reference TFC ID 0 - ctfc6 10 -powerOffsetInformation ComputedGainFactors - Reference TFC ID 0 - ctfc6 21 -powerOffsetInformation ComputedGainFactors - Reference TFC ID 0 - ctfc6 21 -powerOffsetInformation(OP) -gainFactorInformation ComputedGainFactors - Reference TFC ID 0 - ctfc6 21 -powerOffsetInformation(OP) -gainFactorInformation(OP) -gainFactorInformation(OP) -gainFactorInformation(OP) | |
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| - Reference TFC ID | |
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| -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 20 -powerOffsetInformation ComputedGainFactors - Reference TFC ID 0 - ctfc6 10 - ctfc6 10 - ctfc6 10 - powerOffsetInformation(OP) -gainFactorInformation ComputedGainFactors - Reference TFC ID 0 - ctfc6 21 -powerOffsetInformation ComputedGainFactors - Reference TFC ID 0 - ctfc6 21 -powerOffsetInformation(OP) -gainFactorInformation(OP) -gainFactorInformation(OP) -gainFactorInformation(OP) -gainFactorInformation(OP) -gainFactorInformation(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 20 -powerOffsetInformation ComputedGainFactors - Reference TFC ID 0 - ctfc6 10 -powerOffsetInformation(OP) -gainFactorInformation ComputedGainFactors - Reference TFC ID 0 - ctfc6 10 -powerOffsetInformation(OP) -gainFactorInformation ComputedGainFactors - Reference TFC ID 0 - ctfc6 21 -powerOffsetInformation(OP) -gainFactorInformation(OP) -gainFactorInformation(OP) -gainFactorInformation(OP) -gainFactorInformation(OP) -gainFactorInformation(OP) -gainFactorInformation(OP) | |
| - 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 20 -powerOffsetInformation ComputedGainFactors - Reference TFC ID 0 - ctfc6 10 -powerOffsetInformation(OP) -gainFactorInformation ComputedGainFactors - Reference TFC ID 0 - ctfc6 10 -powerOffsetInformation ComputedGainFactors - Reference TFC ID 0 - ctfc6 21 -powerOffsetInformation(OP) -gainFactorInformation ComputedGainFactors - Reference TFC ID 0 - ctfc6 21 -powerOffsetInformation(OP) -gainFactorInformation ComputedGainFactors | |
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| - Reference TFC ID | |
| - ctfc6 9 -powerOffsetInformation(OP) -gainFactorInformation ComputedGainFactors - Reference TFC ID 0 - ctfc6 20 -powerOffsetInformation(OP) -gainFactorInformation ComputedGainFactors - Reference TFC ID 0 - ctfc6 10 - ctfc6 10 -powerOffsetInformation(OP) -gainFactorInformation ComputedGainFactors - Reference TFC ID 0 - ctfc6 10 - ctfc6 21 -powerOffsetInformation(OP) - ctfc6 21 -powerOffsetInformation(OP) - gainFactorInformation ComputedGainFactors - ComputedGainFactors - ComputedGainFactors - ComputedGainFactors | |
| -powerOffsetInformation(OP) -gainFactorInformation | |
| -gainFactorInformation ComputedGainFactors - Reference TFC ID 0 - ctfc6 20 -powerOffsetInformation(OP) ComputedGainFactors - Reference TFC ID 0 - ctfc6 10 -powerOffsetInformation(OP) ComputedGainFactors - Reference TFC ID 0 - ctfc6 21 -powerOffsetInformation(OP) ComputedGainFactors -gainFactorInformation(OP) 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(OP) -gainFactorInformation(OP) -gainFactorInformation(OP) -gainFactorInformation(OP) -gainFactorInformation ComputedGainFactors | |
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| -gainFactorInformation ComputedGainFactors - Reference TFC ID 0 - ctfc6 10 -powerOffsetInformation(OP) ComputedGainFactors - Reference TFC ID 0 - ctfc6 21 -powerOffsetInformation(OP) ComputedGainFactors - gainFactorInformation ComputedGainFactors | |
| - Reference TFC ID 0 - ctfc6 10 -powerOffsetInformation(OP) -gainFactorInformation ComputedGainFactors - Reference TFC ID 0 - ctfc6 21 -powerOffsetInformation(OP) -gainFactorInformation ComputedGainFactors | |
| - ctfc6 10 -powerOffsetInformation(OP) -gainFactorInformation ComputedGainFactors - Reference TFC ID 0 - ctfc6 21 -powerOffsetInformation(OP) -gainFactorInformation ComputedGainFactors | |
| -powerOffsetInformation(OP) -gainFactorInformation ComputedGainFactors - Reference TFC ID 0 - ctfc6 21 -powerOffsetInformation(OP) -gainFactorInformation ComputedGainFactors | |
| -gainFactorInformation ComputedGainFactors - Reference TFC ID 0 - ctfc6 21 -powerOffsetInformation(OP) -gainFactorInformation ComputedGainFactors | |
| - Reference TFC ID 0 - ctfc6 21 -powerOffsetInformation(OP) -gainFactorInformation ComputedGainFactors | |
| - ctfc6 21 -powerOffsetInformation(OP) -gainFactorInformation ComputedGainFactors | |
| -powerOffsetInformation(OP) -gainFactorInformation ComputedGainFactors | |
| -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 | 130 |
| -NumberOfTransportBlocks | long |
| · | one |
| - Choice Logical Channel List | ALL |
| RLC size -numberOfTbSizeList | 115 |
| | lone |
| -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 TFCI signalling | Normal |
| - TFCI Field 1 information | |
| - CHOICE TFCS representation | Complete reconfiguration |
| - TFCS complete reconfigure information | C44-CDi4 |
| - CHOICE CTFC Size | Ctfc6Bit |
| 0002.1 | = - |
| - ctfc6 - ctfc6 | 9 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 DCH |
| - Downlink transport channel type - DL Transport channel identity | DCH 6 |
| - DE Transport Channel Identity | U |

| Information Florant | Valualramanla | |
|--|------------------------------|--|
| 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 | 140 | |
| -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 | 39 | |
| -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 _{Pilot-DPDCH} | 0 | |
| - DL rate matching restriction information | Not Present | |
| - Spreading factor | 128 | |
| - Number of bits for Pilot bits(SF=128,256) | 4 | |
| - Fixed or Flexible Position | Fixed | |
| - TFCI existence | FALSE | |
| - DPCH compressed mode info | Not Present | |
| - TX Diversity mode | None | |
| - SSDT information | Not Present | |
| - 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-RNTĬ | 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. |
| - 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 | TRUE | |
| requirement | | |
| - UE radio access TDD capability update | FALSE | |
| requirement | | |
| - 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 | j' | |
| Number of RLC logical channels | 1 | |
| Downlink transport channel type | FACH | |
| | Not Present | |
| - DL DCH Transport channel identity | | |
| - DL DSCH Transport channel identity | Not Present | |
| - Logical channel identity | I (AM DOOLL (*** DDO) | |
| - Signalling RB information to setup | (AM DCCH for RRC) | |
| - 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 | Configured | |
| - CHOICE RLC size list | Configured | |
| MAC logical channel priority Downlink RLC logical channel info | 2 | |
| - 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 | | |
| - 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 | 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 Net Brooms | |
| - Timer_EPC | Not Present | |
| - Missing PDU indicator | TRUE | |
| - Timer_STATUS_periodic | Not Present | |
| - RB mapping info | 2 PPMuvOntions | |
| - Information for each multiplexing option | 2 RBMuxOptions | |
| - RLC logical channel mapping indicator | Not Present | |
| Number of RLC logical channelsUplink transport channel type | 1 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 | AM DLC | |
| - CHOICE Uplink RLC mode | AM RLC | |
| - Transmission RLC discard | | |

| Information Element | Value/remark | |
|---|--|--|
| - 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 | 120 | |
| - Timer_status_prohibit | 200 | |
| - Timer_EPC | Not Present | |
| - Missing PDU indicator | TRUE | |
| - Timer_STATUS_periodic | Not Present | |
| - RB mapping info | Not i room | |
| - 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 | FDD | |
| - TFC subset | Not Present | |
| - UL DCH TFCS | No | |
| - CHOICE TFCI signalling | Normal | |

| Information Element | Value/remark |
|---|------------------------------|
| - TFCI Field 1 information | * Graditalia |
| - CHOICE TFCS representation | Complete reconfiguration |
| - TFCS complete reconfiguration information | gananan |
| - CHOICE CTFC Size | 2 bit CTFC |
| - CTFC information | 2 TFCs |
| - 2bit CTFC | 0 |
| - Power offset Information | |
| - CHOICE Gain Factors | computedGainFactors |
| - Reference TFC ID | 0 |
| - CHOICE mode | FDD |
| - Power offset Pp-m | Not Present |
| - 2bit CTFC | 1 |
| - Power offset Information | |
| - CHOICE Gain Factors | signalledGainFactors |
| - CHOICE mode | FDD |
| - Gain factor ßc | 15 |
| - Gain factor ßd | 15 |
| - Reference TFC ID | 0 |
| - CHOICE mode | FDD |
| - Power offset Pp-m | Not Present |
| Added or Reconfigured UL TrCH information list | 1 |
| - Added or Reconfigured UL TrCH information | |
| - Uplink transport channel type | DCH |
| - UL Transport channel identity | 5 |
| - TFS | |
| - CHOICE Transport channel type | Dedicated transport channels |
| - Dynamic Transport Format Information | |
| - RLC size | 96 bits |
| - Number of TBs and TTI List | 2 |
| - Transmission Time Interval | Not Present |
| - Number of Transport blocks | 0 |
| - Transmission Time Interval | Not Present |
| - Number of Transport blocks | 1 |
| - CHOICE Logical Channel List | ALL |
| - Semi-static Transport Format Information | |
| - Transmission time interval | 40 |
| - Type of channel coding | Convolutional |
| - Coding Rate | 1/3 |
| - Rate matching attribute | 256 |
| - CRC size | 12 |
| DL Transport channel information common for all | |
| transport channel | |
| - SCCPCH TFCS | Not Present |
| - CHOICE mode | FDD |
| - CHOICE DL parameters | Same as UL |
| Added or Reconfigured DL TrCH information list | 1 |
| - Added or Reconfigured DL TrCH information | |
| - Downlink transport channel type | DCH |
| - DL Transport channel identity | 10 |
| - 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 |
| - Uplink DPCH power control info | |
| | • |

| Information Element | Value/remark | |
|--|---|--|
| - DPCCH power offset | -6dB | |
| - PC Preamble | 1 frame | |
| | 7 frames | |
| - SRB delay | | |
| - 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 Pilot-DPDCH | 0 | |
| DL rate matching restriction information | Not Present | |
| - Spreading factor | 256 | |
| - Fixed or Flexible Position | Fixed | |
| - TFCI existence | FALSE | |
| - CHOICE SF | | |
| - Number of bits for Pilot bits | 8 | |
| - DPCH compressed mode info | Not Present | |
| - TX Diversity mode | None | |
| - SSDT information | Not Present | |
| - Default DPCH Offset Value | Arbitrary set to value 0306688 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 | |
| - GOOT OTTINIONNALION TO FACIT | INOUT TESTIL | |

Contents of SECURITY MODE COMMAND message: AM

| Information Element | Condition | Value/remark |
|---|--------------|---|
| Message Type | A1, A2 | |
| RRC transaction identifier | , | Arbitrarily selects an integer between 0 and 3 |
| Integrity check info | | |
| - Message authentication code | | Set to an arbitrarily selected 32-bits integer. The |
| | | first/ leftmost bit of the bit string contains the |
| | | most significant bit of the MAC-I. |
| - RRC Message Sequence Number | | Set to an arbitrarily selected integer between 0 |
| | | and 15 |
| Security capability | | |
| - Ciphering algorithm capability | | |
| - UEAO | | If the UE has indicated support for ciphering |
| | | algorithm UEA0 in the IE "security capability" in |
| | | the RRC CONNECTION SETUP COMPLETE |
| | | message, this IE is set to TRUE. |
| - UEA1 | | If the UE has indicated support for ciphering |
| | | algorithm UEA1 in the IE "security capability" in |
| | | the RRC CONNECTION SETUP COMPLETE |
| | | message, this IE is set to TRUE. |
| - Spare | | Spare 2-15 = FALSE |
| Integrity protection algorithm capability | | 000000000000010B (UIA1) |
| - UIA1 | | TRUE |
| - Spare | | Spare 0 and Spare 2-15 = FALSE |
| Ciphering mode info | | This presence of this IE is dependent on IXIT |
| | | statements in TS 34.123-2. If ciphering is |
| | | indicated to be active, this IE present with the |
| | | values of the sub IEs as stated below. Else, this |
| Cinhavina mada sammand | | IE is omitted. |
| - Ciphering mode command | | Start/restart |
| - Ciphering algorithm | | UEA0 or UEA1. The indicated algorithm must be one of the algorithms supported by the UE |
| | | as indicated in the IE "security capability" in the |
| | | RRC CONNECTION SETUP COMPLETE |
| | | message. |
| - Ciphering activation time for DPCH | | Not Present |
| - Radio bearer downlink ciphering activation | | THE THEODING |
| time info | | |
| - Radio bearer activation time | | |
| - RB identity | | 1 |
| - RLC sequence number | | Current RLC SN+2 |
| - RB identity | | 2 |
| - RLC sequence number | | Current RLC SN+2 |
| - RB identity | | 3 |
| - RLC sequence number | | Current RLC SN + 2 |
| - RB identity | | 4 |
| - RLC sequence number | | Current RLC SN + 2 |
| Integrity protection mode info | | |
| - Integrity protection mode command | | Start |
| - Downlink integrity protection activation | | Not Present |
| info | | 11104 |
| - Integrity protection algorithm | | UIA1 |
| - Integrity protection initialisation number | | SS selects an arbitrary 32 bits number for FRESH. |
| | | The first/ leftmost bit of the bit string contains |
| | | the most significant bit of the FRESH. |
| CN domain identity | | CS or PS |
| UE system specific security capability | A1 | Not Present |
| UE system specific security capability | A2 | THE TOOLS |
| - Inter-RAT UE security capability | / \ <u>_</u> | |
| - CHOICE system | | GSM |
| - GSM security capability | | The indicated algorithms must be the same as |
| - Goivi Security Capability | | the algorithms supported by the UE as indicated |
| | | in the IE " UE system specific capability " in the |
| | | RRC CONNECTION SETUP COMPLETE |
| | | message. |
| | 1 | iniosougo. |

| Condition | Explanation |
|-----------|-----------------------|
| A1 | UE not supporting GSM |
| A2 | UE supporting GSM |

9.2.2 Default Message Contents for RF (TDD)

Contents of Activate RB Test Mode message

| Information Element | Value/remark |
|------------------------|----------------|
| Protocol discriminator | F (Length 1/2) |
| Skip indicator | 0 (Length 1/2) |
| Message Type | 44h |

Contents of Close UE Test Loop message

| Information Element | Value/remark |
|------------------------------|-----------------|
| Protocol discriminator | F (Length 1/2) |
| Skip indicator | 0 (Length 1/2) |
| Message Type | 40h |
| UE test loop mode | 00h |
| UE test loop mode 1 LB setup | 03h 00h F4h 0Ah |

Contents of Open UE Test Loop message

| Information Element | Value/remark | |
|------------------------|----------------|--|
| Protocol discriminator | F (Length 1/2) | |
| Skip indicator | 0 (Length 1/2) | |
| Message Type | 42h | |

Contents of PAGING TYPE 1 message: TM (CS)

| Information Element | Value/remark |
|---|---|
| Message Type | |
| Paging record list | |
| -Paging record | |
| CHOICE Used paging identity | CN identity |
| - Paging cause | Terminating Streaming Call |
| - CN domain identity | CS domain |
| - CHOICE UE identity | |
| - IMSI (GSM-MAP) | Set to the same octet string as in the IMSI stored in the |
| | USIM card |
| BCCH modification info | Not Present |

Contents of PAGING TYPE 1 message: TM (PS)

| Information Element | Value/remark | |
|---|---|--|
| Message Type | | |
| Paging record list | | |
| -Paging record | | |
| CHOICE Used paging identity | CN identity | |
| - Paging cause | Terminating Interactive Call | |
| - CN domain identity | PS domain | |
| - CHOICE UE identity | | |
| - IMSI (GSM-MAP) | Set to the same octet string as in the IMSI stored in the | |
| | USIM card | |
| BCCH modification info | Not Present | |

Contents of RADIO BEARER SETUP message: AM or UM

| Information Element | Condition | Value/remark |
|--|-----------|--|
| Message Type | A1,A3 | |
| RRC transaction identifier | | Arbitrarily selects an integer between 0 and 3 |
| Integrity check info | | |
| - message authentication code | | SS calculates the value of MAC-I for this |
| - | | message and writes to this IE. The first/ |
| | | leftmost bit of the bit string contains the most |
| | | significant bit of the MAC-I. |
| - RRC message sequence number | | SS provides the value of this IE, from its |
| | | internal counter. |
| Integrity protection mode info | | Not Present |
| Ciphering mode info | | Not Present |
| Activation time | | (256+CFN-(CFN MOD 8 + 8))MOD 256 |
| New U-RNTI | | Not Present |
| New C-RNTI | | Not Present |
| New DSCH-RNTI | | Not Present |
| 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 | 1 | Not Present |
| RAB information for setup list | A1 | |
| - RAB information for setup | | |
| - RAB info | 1 | |
| - RAB identity | | 0000 0001B |
| | | The first/ leftmost bit of the bit string contains |
| | | the most significant bit of the RAB identity. |
| - CN domain identity | | CS domain |
| - NAS Synchronization Indicator | | Not Present |
| - Re-establishment timer | | UseT314 |
| - RB information to setup list | | |
| - RB information to setup | | 40 |
| - 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 CHOICE Downlink RLC mode | | FALSE TM RLC |
| - Segmentation indication | | FALSE |
| - RB mapping info | | FALSE |
| - Information for each multiplexing option | | |
| - RLC logical channel mapping indicator | | Not Present |
| - Number of uplink RLC logical channels | | 1 |
| - Uplink transport channel type | 1 | DCH |
| - UL Transport channel identity | 1 | 1 |
| - Logical channel identity | | Not Present |
| - CHOICE RLC size list | 1 | Configured |
| - MAC logical channel priority | 1 | 7 |
| - Downlink RLC logical channel info | | |
| - Number of downlink RLC logical channels | 1 | 1 |
| - Downlink transport channel type | 1 | DCH |
| - DL DCH Transport channel identity | | 6 |
| - DL DSCH Transport channel identity | 1 | Not Present |
| - Logical channel identity | 1 | Not Present |
| RAB information for setup list | A3 | |
| - RAB information for setup | | |
| - RAB info | 1 | |
| - RAB identity | | 0000 0101B |
| , | 1 | The first/ leftmost bit of the bit string contains |
| | 1 | the most significant bit of the RAB identity. |
| - CN domain identity | | PS domain , |
| - NAS Synchronization Indicator | 1 | Not Present |
| - Re-establishment timer | 1 | UseT314 |
| - RB information to setup list | 1 | |
| - RB information to setup | | |
| · | | ' |

| Information Element | Condition | Value/remark |
|---|-----------|---|
| - RB identity | | 20 |
| - PDCP info | | Not Present |
| - CHOICE RLC info type | | RLC info |
| - CHOICE Uplink RLC mode | | AM RLC |
| | | AWI KLC |
| - Transmission RLC discard | | No diseased |
| - CHOICE SDU discard mode | | No discard |
| - MAX_DAT | | 15 |
| - Transmission window size | | 128 |
| - Timer_RST | | 500 |
| - Max_RST | | 4 |
| - Polling info | | |
| - Timer_poll_prohibit | | 200 |
| - Timer_poll | | 200 |
| - Poll_SDU | | 1 |
| - Last transmission PDU poll | | TRUE |
| - Last retransmission PDU poll | | TRUE |
| · | | 99 |
| - Poll_Windows | | |
| - Timer_poll_periodic | | Not Present |
| - CHOICE Downlink RLC mode | | AM RLC |
| - In-sequence delivery | | TRUE |
| - Receiving window size | | 128 |
| - Downlink RLC status info | | |
| Timer_status_prohibit | | 200 |
| - Timer_EPC | | 200 |
| - Missing PDU indicator | | TRUE |
| - Timer_STATUS_periodic | | Not Present |
| - RB mapping info | | |
| - Information for each multiplexing option | | 2RBMuxOptions |
| - RLC logical channel mapping indicator | | Not Present |
| - Number of uplink RLC logical channels | | 1 |
| - Uplink transport channel type | | DCH |
| | | |
| - UL Transport channel identity | | 1 |
| - Logical channel identity | | Not Present |
| - CHOICE RLC size list | | Configured |
| MAC logical channel priority | | 8 |
| Downlink RLC logical channel info | | |
| Number of downlink RLC logical channels | | 1 |
| Downlink transport channel type | | DCH |
| DL DCH Transport channel identity | | 6 |
| - DL DSCH Transport channel identity | | Not Present |
| - Logical channel identity | | Not Present |
| - RLC logical channel mapping indicator | | Not Present |
| - Number of uplink RLC logical 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 |
| - DL DCH Transport channel identity | | Not Present |
| - DL DSCH Transport channel identity | | Not Present |
| - Logical channel identity | | Not Present |
| RB information to be affected list | A1,A3 | Not Present |
| Downlink counter synchronisation info | , | Not Present |
| UL Transport channel information for all transport | A1,A3 | 11007 100011 |
| channels | 71,73 | |
| | | Not Descent |
| - PRACH TFCS | | Not Present |
| - CHOICE mode | | TDD |
| -Individual UL CCTrCH information | | <u></u> |
| - 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.) |

| Information Element | Condition | Value/remark |
|--|-----------|---|
| - 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. |
| 0750: (| | Refer to TS34.108 clause 6 Parameter Set |
| - CTFC information | | Not Present |
| - CHOICE mode | | TDD |
| - Individual UL CCTrCH information | | Not Present |
| Deleted UL TrCH information list | | Not Present |
| Added or Reconfigured UL TrCH information list | A1 | 1 |
| - Added or Reconfigured UL TrCH information | | DOLL |
| - Uplink transport channel type | | DCH |
| - UL Transport channel identity - TFS | | |
| - CHOICE Transport channel type | | Dedicated transport channels |
| - Dynamic Transport Format Information | | Dedicated transport charmers |
| - RLC size | | Reference to TS34.108 clause 6.10 Parameter |
| TALO GIZO | | 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 |
| - Transmission Time Interval | | Not Present |
| - Number of Transport blocks | | 1 |
| - CHOICE Logical Channel List | | ALL |
| - Semi-static Transport Format Information | | |
| - Transmission time interval | | Reference to TS34.108 clause 6.10 Parameter |
| Tune of changed anding | | Set |
| - Type of channel coding | | Reference to TS34.108 clause 6.10 Parameter Set |
| - Coding Rate | | Reference to TS34.108 clause 6.10 Parameter |
| - Coding Nate | | Set |
| - Rate matching attribute | | Reference to TS34.108 clause 6.10 Parameter |
| Trail matering annuals | | Set |
| - CRC size | | Reference to TS34.108 clause 6.10 Parameter |
| | | Set |
| CHOICE mode | A1, A3 | TDD (no data) |
| DL Transport channel information common for all | A1,A3 | |
| transport channel | | |
| - SCCPCH TFCS | | Not Present |
| - CHOICE mode | | TDD |
| - CHOICE DL parameters | A4 A0 | Independent (Refer to TS34.108 clause 6) |
| Deleted DL TrCH information list | A1,A3 | Not Present |
| Added or Reconfigured DL TrCH information list - Added or Reconfigured DL TrCH information | | 1 |
| - Added of Reconfigured DL Tron information - Downlink transport channel type | | DCH |
| - DL Transport channel identity | | 6 |
| - CHOICE DL parameters | | Same as UL |
| - Uplink transport channel type | | DCH |
| - UL TrCH identity | | 1 |
| - DCH quality target | | |
| - BLER Quality value | <u> </u> | Reference to TS34.108 clause 6 |
| Frequency info | A1,A3 | Not Present |
| Maximum allowed UL TX power | | 30dBm |
| CHOICE channel requirement | | Uplink DPCH info |
| - Uplink DPCH power control info | | |
| - CHOICE mode | | TDD |
| - UL Target SIR | | Reference to TS34.108 Parameter set. |
| - CHOICE UL OL PC info | | Individually signalled |
| Individual timeslot interference info Individual timeslot interference | | |
| - DPCH Constant Value | | Values are used for open loop power control, |
| - Di Oli Golistant value | | section 8 in TS 25.331 |
| - Uplink Timing Advance Control | | Not Present |
| - UL CCTrCH List | | |
| - TFCS Id | | 1 |
| • | • | • |

| Information Element | Condition | Value/remark |
|--|-----------|---|
| - Time info | | |
| - Activation time | | (256+CFN-(CFN MOD 8 + 8))MOD 256 |
| - Duration | | Infinite |
| - Common timeslot info | | |
| - 2nd interleaving mode | | Reference to TS34.108 clause 6.10 Parameter |
| | | Set Reference to TS34.108 clause 6.10 Parameter |
| - TFCI coding | | 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 |
| - First individual timeslot info | | |
| - Timeslot number | | The number of an uplink timeslot that has |
| | | unassigned codes. |
| - TFCI existence | | TRUE |
| - Midamble shift and burst type | | |
| -CHOICE Burst Type | | |
| -Type 1 | | |
| -Midamble Allocation Mode | | Default |
| - Midamble Configuration burst | | As defined in 3GPP TS 25.221 |
| | | AS defined in SGPP 13 25.221 |
| type 1 and 3 | | Denoted (4.0) for each about live time and |
| - First timeslot channelisation codes | | Repeated (1,2) for each channelisation code |
| | | assigned in the slot to meet the needs of |
| | | TS34.108 clause 6 Parameter Set. |
| - Channelisation code | | (i/SF) where i denotes an unassigned code |
| | | matching the SF specified in TS34.108 clause |
| | | 6 Parameter Set. |
| - 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. |
| CHOICE Mode | | TDD (no data) |
| Downlink information common for all radio links | A1,A3 | |
| Downlink DPCH info common for all RL | | |
| - Timing indicator | | Maintain |
| - CFN-targetSFN frame offset | | Not Present |
| - Downlink DPCH power control information | | |
| - CHOICE mode | | TDD |
| - DPC mode | | 0 (single) |
| - Default DPCH Offset Value | | Not Present |
| Downlink information for per radio link list | A1,A3 | 11511 155511 |
| - Downlink information for each radio link | 71,73 | |
| - CHOICE mode | | TDD |
| | | |
| - Primary CCPCH info | 1 | Syna Casa 1 |
| - CHOICE SyncCase | 1 | Sync Case 1 |
| - Timeslot | 1 | PCCPCH timeslot |
| - Cell parameters ID | 1 | 0 |
| - SCTD indicator | 1 | |
| - Downlink DPCH info for each RL | 1 | |
| - CHOICE mode | 1 | TDD |
| - DL CCTrCH List | 1 | _ |
| - TFCS ID | 1 | 1 |
| - Time info | 1 | |
| - Activation time | 1 | (256+CFN-(CFN mod 8 + 8))mod 256 |
| - Duration | 1 | infinite |
| - Common timeslot info | 1 | |
| - 2nd interleaving mode | 1 | Reference to TS34.108 |
| - TFCI coding | 1 | TRUE |
| - Puncturing limit | 1 | Reference to TS34.108 clause 6 Parameter |
| | 1 | set |
| - Repetition period | 1 | 1 |
| - Repetition length | 1 | Empty |
| - Downlink DPCH timeslots and codes | 1 | -···r·7 |
| - Individual timeslot info | 1 | |
| - marviduai timesiot IIIIO | 1 | |

| Information Element | Condition | Value/remark |
|---|-----------|--|
| - Timeslot number | | The number of a downlink timeslot that has |
| | | unassigned codes. |
| - TFCI existence | | TRUE |
| Midamble shift and burst type | | |
| -CHOICE Burst Type | | |
| -Type 1 | | |
| -Midamble Allocation Mode | | Default |
| - Midamble configuration burst | | As defined in 3GPP TS 25.221 |
| type 1 and 3 | | |
| 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 |
| D'' | | that is being assigned in the slot. |
| - Bitmap | | Bitmap of the codes that are being assigned in |
| 0110105 | | 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 |
| LIL COT*CH TDC Liet | | have been assigned in the first timeslot |
| - UL CCTrCH TPC List | | Not Present |
| -SCCPCH information for FACH | | Not Present |

| Co | ndition | Explanation |
|--|---|---|
| A1 | | This IE is needed for transparent mode. In the case of TX and RX test cases, this IE is selected. |
| A3 | 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

| 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 | 0000 0000 00045 |
| - 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 | - W 0- |
| - UE radio access FDD capability update | FALSE |
| requirement | TOUR |
| - UE radio access TDD capability update | TRUE |
| requirement | |
| - 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 | 6 BBM |
| - 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 | |
| - 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 | Not Propert |
| - RLC logical channel mapping indicator | Not Present |
| - Number of RLC logical channels | 1 RACH |
| Uplink transport channel typeUL Transport channel identity | Not Present |
| - OL Transport channel identity - Logical channel identity | Not Present |
| - 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 - DL DSCH Transport channel identity | Not Present |
| - Logical channel identity | 1 |
| - Logical charmer identity - Signalling RB information to setup | (AM DCCH for RRC) |
| - RB identity | Not Present |
| • | I NOT I 1696111 |
| - CHOICE RLC info type | l l |

| 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 | O DDM On the re- |
| - Information for each multiplexing option | 2 RBMuxOptions |
| - RLC logical channel mapping indicator | Not Present |
| - Number of RLC logical channels | 1 DCH |
| - Uplink transport channel type | 5 |
| - UL Transport channel identity - 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 Uplink transport channel type | RACH |
| - UL Transport channel identity | Not Present |
| - OE Transport channel identity - 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 | 0.0004 0.00 |
| - 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 Configured |
| - CHOICE RLC size list | Configured 4 |
| - MAC logical channel priority - Downlink RLC logical channel info | 4 |
| - 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.) |

- Activation time

- Duration

- Common timeslot info

Value/remark Information Element - UL TFCS - TFC subset Default value is the complete existing set of transport format combinations 0 to MaxTFCvalue-1 (MaxTFCValue is refer to - Allowed Transport Format combination 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. Refer to TS34.108 clause 6 Parameter Set - CTFC information Not Present - CHOICE mode **TDD** - Individual UL CCTrCH information Not Present Deleted TrCH information list Not Present Added or Reconfigured UL TrCH information list - Added or Reconfigured UL TrCH information - Uplink transport channel type DCH - UL Transport channel identity 5 - CHOICE Transport channel type Dedicated transport channels - Dynamic Transport Format Information According to TS34.108 clause 6 - RLC size - Number of TBs and TTI List (This IE is repeated for TFI number) - CHOICE mode - Transmission Time Interval According to TS34.108 clause 6 - CHOICE Logical channel list ΑII - Semi-static Transport Format information DL Transport channel information common for all transport channel - SCCPCH TFCS Not Present - CHOICE mode TDD Same as UL - CHOICE DL parameters Added or Reconfigured DL TrCH information list - Added or Reconfigured DL TrCH information DCH - Downlink transport channel type 10 - DL Transport channel identity Same as UL - CHOICE DL parameters - Uplink transport channel type DCH - UL TrCH Identity - DCH quality target - BLER Quality value Reference to TS 34.108 Frequency info Not Present Maximum allowed UL TX power Not Present CHOICE channel requirement Uplink DPCH info - Uplink DPCH power control info - CHOICE mode - UL target SIR Reference to TS34.108 Parameter set TDD - CHOICE mode Individually signalled - CHOICE UL OL PC info - Individual timeslot interference info Not Present - Individual timeslot interference - DPCH Constant Value - Primary CCPCH Tx Power Not Present - Time info

Infinite

(256+CFN-(CFN MOD 8 + 8))MOD 256

| - 2-sc interleaving mode - TFCl coding - Puncturing Limit - Repetition Period - Repetition Length - Uplink DPCH timeslots and codes - CPCH SET Info Downlink Information common for all radio links - Downlink DPCH bird common for all RL - Timing Indication - CFN-targetSPN frame offset - Downlink DPCH power control information - DPC mode - OHOICE mode - OHOICE mode - Parfault DPCH Offset Value Downlink information for per radio links list - Downlink information for per radio links list - Downlink information for each radio links - CHOICE mode - Primary CCPCH info - CHOICE | Information Element | Value/remark |
|--|----------------------------------|---|
| - TFCI coding - Puncturing Limit - Repetition Period - Repetition Period - Repetition Period - Repetition Length - Uplink DPCH imasolts and codes - CPCH SET Info Downlink Information common for all radio links - Downlink DPCH info common for all RL - Timing Indication - CFN-targetSFN frame offset - Downlink DPCH power control information - DPC mode - CHOICE mode - CHOICE mode - Default DPCH Offset Value Downlink information for each radio links - CHOICE mode - Primary CCPCH info - CHOICE SyncCase - Timeslot - Cell parameters ID - SCTD Indicator - Downlink DPCH info for each RL - CHOICE mode - PL CTTCH List - TFCS ID - Time info - Activation time - Duration - Common timeslot info - Repetition period - TFCI coding - Puncturing limit - Repetition period - Repetition period - Repetition period - TFCI coding - TFCI coding - TFCI coding - Puncturing limit - Repetition period - Repetition period - Repetition period - TFCI coding - TFCI coding - TFCI coding - TFCI coding - Puncturing limit - Repetition period - Repetition period - Repetition period - TFCI coding - | | |
| - Puncturing Limit - Repetition Period - Repetition Length - Uplink DPCH timeslots and codes - CPCH SET Info Downlink DPCH info common for all radio links - Downlink DPCH info common for all RL - Timing Indication - CFN-targetSFN frame offset - Downlink DPCH ower control information - DPC mode - Default DPCH Offset Value - Downlink information for per radio links let - Downlink DPCH info reach radio links - CHOICE mode - Primary CCPCH info - CHOICE mode - Primary CCPCH info - CHOICE mode - Downlink DPCH info for each RL - CHOICE mode - Downlink DPCH info for each RL - CHOICE mode - Downlink DPCH info for each RL - CHOICE mode - Downlink DPCH info for each RL - CHOICE mode - Trecs ID - Time info - Activation time - Duration - Common timeslot info - Repetition length - Downlink DPCH timeslots and codes - CHOICE mode - Trecs ID - Time info - Repetition length - Downlink DPCH inforesions - Trecs ID - T | - | |
| Repetition Period Repetition Length - Uplink DPCH timeslots and codes - CPCH SET Info Downlink information common for all radio links - Downlink DPCH info common for all RL - Timing Indication - CPCH stragetSFN frame offset - Downlink DPCH power control information - DPC mode - CHOICE mode - CHOICE mode - Default DPCH Offset Value Downlink information for each radio links - CHOICE mode - CHOICE mode - Primary CPCH info - CHOICE syncCase - Timeslot - Cell parameters ID - SCTD Indicator - Downlink DPCH Info for each RL - CHOICE mode - DL CCTrCH List - TFCS ID - Time info - Activation time - Duration - Common timeslot info - 2-actinterleaving mode - TFCI coding - Repetition length - Downlink DPCH timeslots and codes - CHOICE more timeslots - Timeslot number - Individual timeslot info - TFCI existence - Midamble shift and burst type - CHOICE Burst Type - Type 1 - Midamble Allocation Mode - First thannelisation code - First thannelisation code - First timeslot channelisation code - First thannelisation codes - First thannelisation code - First thannelisation codes - First thannelisat | <u>v</u> | |
| - Repetition Length - Uplink DPCH timeslots and codes - CPCH SET Info Downlink information common for all RL - Timing Indication - CFN-targetSFN frame offset - Downlink DPCH into common for all RL - Timing Indication - CFN-targetSFN frame offset - Downlink DPCH into common for all RL - Timing Indication - DPC mode - CHOICE mode - Default DPCH Offset Value Downlink information for per radio links list - Downlink information for each radio links - CHOICE mode - Primary CCPCH info - CHOICE SyncCase - Timeslot - Cell parameters ID - SCTD Indicator - Downlink DPCH info for each RL - CHOICE mode - DL CCTICH List - TFCS ID - Time info - Activation time - Duration - Common timeslot info - 2-acinterleaving mode - TFCI coding - Puncturing limit - Repetition length - Downlink DPCH timeslots and codes - CHOICE more timeslots - Timeslot number - Individual timeslot info - TFCI existence - Midamble shift and burst type - CHOICE Burst Type - Type 1 - Midamble Allocation Mode - First timeslot channelisation codes - First themeslot channe | S . | |
| - Uplink DPCH timeslots and codes - CPCH SET Info Downlink information common for all radio links - Downlink Information common for all RL - Timing Indication - DPCH promode - CHOICE mode - Default DPCH Offset Value Downlink information for per radio links - Downlink information for per radio links - Downlink information for per radio links - CHOICE mode - Primary CCPCH info - CHOICE SyncCase - Timeslot - SCTI indicator - Downlink DPCH info for each RL - CHOICE mode - DL CCTTCH List - TFCS ID - Time info - Activation time - Duration - Common timeslot info - 2re interleaving mode - TFCI coding - Puncturing limit - Repetition period - Repetition length - Downlink DPCH timeslots and codes - CHOICE more timeslots - Timeslot umber - Timeslot length - Downlink DPCH timeslots and codes - CHOICE wistence - Midamble shift and burst type - CHOICE burst Type - Type 1 and 3 - First timeslot channelisation code - First channelisation code - CHOICE Burst Type - Type 1 and 3 - First timeslot channelisation code - First channelisation cod | · | |
| - CPCH SET Info Downlink information common for all radio links - Downlink DPCH info common for all RL - Timing Indication - CFN-targetSFN frame offset - Downlink DPCH power control information - DPC mode - Default DPCH Offset Value - Default formation for per radio links list - Downlink information for per radio links list - Downlink information for per radio links - CHOICE mode - Primary CCPCH info - CHOICE SyncCase - Timeslot - Cell parameters ID - SCTD indicator - Downlink DPCH info for each RL - CHOICE mode - DL CCTrCH List - TFCS ID - Time info - Activation time - Duration - Common timeslot info - Zavi interleaving mode - TFCI coding - Puncturing limit - Repetition length - Downlink DPCH timeslots and codes - CHOICE more timeslots - Individual timeslot info - TFCI existence - Midamble shift and burst type - CHOICE Burst Type - CHOICE Burst Type - Type 1 - Midamble allocation Mode - First channelisation code | , | |
| Downlink information common for all radio links | | |
| - Downlink DPCH info common for all RL - Timing Indication - CPN-targetSFN frame offset - Downlink DPCH power control information - DPC mode - CHOICE mode - Default DPCH Offset Value Downlink information for per radio links list - Downlink information for per radio links - CHOICE mode - Primary CCPCH info - CHOICE SyncCase - Timeslot - Cell parameters ID - SCTD indicator - Downlink DPCH info for each RL - CHOICE mode - DL CCTCH List - TFCS ID - Time info - Activation time - Duration - Common timeslot info - Zmi interleaving mode - TFCI coding - Puncturing limit - Repetition length - Downlink DPCH timeslots and codes - CHOICE more timeslots - Timeslot number - Individual timeslot info - TFCI existence - Midamble shift and burst type - CHOICE burst Type - Type 1 - Midamble allocation Mode - First channelisation code - First channelisation code - First channelisation code - TS34.108 Sepacition in Sepacition - Individance configuration burst type 1- Sype 1 and 3 - First timeslot channelisation code - First channelisation code - First channelisation code - First channelisation code - TS34.108 Sepacition in SGPP TS 25.221 - Type 1 - Sys (ISF) where i is the lowest numbered code that is being assigned and SF is specified in TS34.108 clause 6 Parameter code that is being assigned and SF is specified in TS34.108 clause 6 Parameter Set First channelisation code - First channelisation code - First channelisation code | | (110 data) |
| - Timing Indication - CFN-targetSFN frame offset - Downlink DPCH power control information - DPC mode - CHOICE mode - Default DPCH Offset Value Downlink information for per radio links list - Downlink information for each radio links - CHOICE mode - Primary CCPCH info - CHOICE syncCase - Timeslot - Cell parameters ID - SCTD indicator - Downlink DPCH info for each RL - CHOICE mode - DL CCTICH List - TFCS ID - Time info - Activation time - Duration - Common timeslot info - 2- interleaving mode - TFCI coding - Puncturing limit - Repetition period - Repetition period - Repetition period - Repetition period - Individual timeslot and codes - CHOICE more timeslots - TFCI existence - Midamble shift and burst type - CHOICE burst Type - Type 1 - Midamble configuration burst type 1 and 3 - First timeslot channelisation code - First channelisation code - TS34. clause 6 Parameter Sct Modernal Sation Codes - CHOICE burst Type - Type 1 - Midamble configuration burst type 1 and 3 - First timeslot channelisation code - First channelisation code - First channelisation code - TS34. clause 6 Parameter Sct TRUE - Midamble configuration burst type - Type 1 - Midamble configuration burst type 1 and 3 - First timeslot channelisation code - First channelisation code - First channelisation code - First channelisation code - First channelisation code - TS34. clause 6 Parameter Sct TRUE - Midamble configuration burst type - Type 1 - Midamble configuration burst type - Type 1 - Midamble configuration burst type 1 and 3 - First timeslot channelisation code - First channelisation code - TS34. clause 6 Parameter Sct TRUE - Midamble configuration burst type 1 and 3 - First timeslot channelisation code - First channelisation code - TS34. clause 6 Parameter Sct TRUE - Midamble configuration burst type 1 and 3 - First timeslot channelisation code | | |
| - CFN-targetSFN frame offset - Downlink DPCH power control information - DPC mode - CHOICE mode - Default DPCH Offset Value Downlink information for per radio links list - Downlink information for per radio links - CHOICE mode - Primary CCPCH Info - CHOICE SyncCase - Timeslot - Cell parameters ID - SCTD indicator - Downlink DPCH info for each RL - CHOICE mode - DL CCTrCH List - TFCS ID - Time info - Activation time - Duration - Common timeslot info - 2nd interleaving mode - TFCI coding - Puncturing limit - Repetition period - Repetition period - Repetition length - Downlink DPCH timeslots and codes - CHOICE more timeslots - TFCI existence - Individual timeslot info - TFCI existence - Midamble configuration burst type - CHOICE Burst Type - Type 1 - Midamble Allocation Mode - Midamble configuration burst type 1 and 3 - First timeslot channelisation code - First channelisation code - CHOICE aure to the first channelisation code - Midamble configuration burst type 1 and 3 - First timeslot channelisation code - First channelisa | | Initialise |
| - Downlink DPCH power control information - DPC mode - CHOICE mode - Default DPCH Offset Value Downlink information for per radio links list - Downlink information for per radio links - CHOICE mode - Primary CCPCH info - CHOICE SyncCase - Timeslot - Cell parameters ID - SCTD indicator - Downlink DPCH info for each RL - CHOICE mode - DL CCTICH List - TFCS ID - Time info - Activation time - Duration - Common timeslot info - 2a interleaving mode - TFCI coding - Puncturing limit - Repetition period - Individual timeslot info - 1TFCI existence - Midamble shift and burst type - CHOICE Burst Type - Type 1 - Midamble configuration burst type 1 and 3 - First timeslot channelisation code - First channelisation code - First channelisation code - TSCI clause 6 Parameter Set - TRUE - Midamble configuration burst type 1 and 3 - First timeslot channelisation code - First channelisation code - First channelisation code - First channelisation code - First channelisation code - TSCI Alouse 6 Parameter Set - TRUE - Midamble configuration burst type - CHOICE Burst Type - Type 1 - Midamble configuration burst type - Tipe 1 - Midamble configuration burst type - First timeslot channelisation code - First channelisation code - First channelisation code - First channelisation code - TSCI Odd (SS) - Timeslot under the value 0306688 by step of 512 | • | |
| - DPC mode - CHOICE mode - Default DPCH Offset Value Downlink information for per radio links list - Downlink information for each radio links - CHOICE mode - Primary CCPCH info - CHOICE SyncCase - Timeslot - Cell parameters ID - SCTD indicator - Downlink DPCH info for each RL - CHOICE mode - DI CCTrCH List - TFCS ID - Time info - Activation time - Duration - Common timeslot info - 2nd interleaving mode - TFCI coding - Puncturing limit - Repetition period - Repetition length - Downlink DPCH timeslots and codes - CHOICE more timeslots - Timeslot number - Trecl existence - Midamble shift and burst type - CHOICE Burst Type - Type 1 - Midamble Allocation Mode - First thannelisation code - TS34.108 clause 6 Parameter set - Default - Midamble Allocation Mode - Midamble Allocation Mode - Midamble Shift and burst type - Type 1 - Midamble configuration burst type 1 and 3 - First timeslot channelisation codes - First channelisation code - First shannelisation code - First channelisation code - First shannelisation code - First shannelisation code - CHOICE Burst Type - Type 1 - Midamble Shift and burst type - Type 1 - Midamble Shift and burst type - Timeslot channelisation codes - First thannelisation code - First channelisation code - First shannelisation code - First shannelisation code - First shannelisation code - Trope 1 - Trope | - | Not i rosont |
| - CHOICE mode - Default DPCH Offset Value Downlink information for per radio links list -Downlink information for each radio links - CHOICE mode - Primary CCPCH info - CHOICE SyncCase - Timeslot - Cell parameters ID - SCTD indicator - Downlink DPCH info for each RL - CHOICE mode - DI CCTCH List - TFCS ID - Time info - Activation time - Duration - Common timeslot info - 2nd interleaving mode - TFCI coding - Puncturing limit - Repetition length - Downlink DPCH timeslots and codes - Timeslot number - Individual timeslot info - TFCI existence - Midamble shift and burst type - CHOICE Burst Type - Midamble Allocation Mode - First channelisation code - First channelisation code - First channelisation code - TSS4. 108 clause 1 (I/SF) where i is the lowest numbered code that is being assigned and SF is specified in TSS4. 108 clause 3 (I/SF) where i is the lowest numbered code that is being assigned and SF is specified in TSS4. 108 clause 3 (I/SF) where i is the lowest numbered code that is being assigned and SF is specified in TSS4. 108 clause 6 Parameter code | • | ((single) |
| Default DPCH Offset Value Downlink information for per radio links list -Downlink information for each radio links - CHOICE mode - Primary CCPCH info - CHOICE SyncCase - Timeslot - 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 - TFCI coding - Puncturing limit - Repetition period - Repetition length - Downlink DPCH timeslots and codes - CHOICE more timeslots - TTCE existence - Midamble shift and burst type - CHOICE Burst Type - Type 1 - Midamble Allocation Mode - First channelisation codes - First channelisation code - First channelisation code - First channelisation code - Primary Set to value 0306688 by step of 512 Arbitrary set to value 0306688 by step of 512 Arbitrary set to value 0306688 by step of 512 Arbitrary set to value 0306688 by step of 512 TDD TDD TDD TDD 1 (256+CFN-(CFN mod 8 + 8))mod 256 infinite (256+CFN-(CFN mod 8 + 8))mod 256 infinite 1 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 in a frame. - Individual timeslot info - TFCI existence - Midamble configuration burst type - CHOICE Burst Type - Type 1 - Midamble configuration burst type 1 and 3 - First timeslot channelisation codes - First channelisation codes - First stimeslot channelisation codes | | |
| Downlink information for per radio links list -Downlink information for each radio links - CHOICE mode - Primary CCPCH info - CHOICE SyncCase - Timeslot - Cell parameters ID - SCTD indicator - Downlink DPCH info for each RL - CHOICE mode - DL CCTrCH List - TFCS ID - Time info - Activation time - Duration - Common timeslot info - 2nd interleaving mode - TFCI coding - Puncturing limit - Repetition period - Repetition period - Repetition length - Downlink DPCH timeslots and codes - CHOICE more timeslots - Timeslot number - Individual timeslot info - TFCI existence - Midamble shift and burst type - CHOICE Burst Type - Type 1 - Midamble Configuration burst type 1 and 3 - First timeslot channelisation code - First channelisation code - First channelisation code - First channelisation code - Primary CCPCH info - TDD - VCPCPCH timeslot - TDD | | , |
| -Downlink information for each radio links - CHOICE mode - Primary CCPCH info - CHOICE SyncCase - Timeslot - Cell parameters ID - SCTD indicator - Downlink DPCH info for each RL - CHOICE mode - DL CCTCH List - TFCS ID - Time info - Activation time - Duration - Common timeslot info - 2nd interleaving mode - TFCI coding - Puncturing limit - Repetition period - Repetition length - Downlink DPCH timeslots and codes - CHOICE more timeslots - TFCI existence - Midamble shift and burst type - CHOICE Burst Type - Midamble configuration burst type 1 and 3 - First channelisation code - First channelisation code - First channelisation code - First channelisation code - Primary CCPCH info - Sync Case 1 - PCCPCH timeslots | | Arbitrary set to value 0306688 by step of 512 |
| - CHOICE mode - Primary CCPCH info - CHOICE SyncCase - Timeslot - Cell parameters ID - SCTD indicator - Downlink DPCH info for each RL - CHOICE mode - DL CCTrCH List - TFCS ID - Time info - Activation time - Duration - Common timeslot info - 2nd interleaving mode - TFCI coding - Puncturing limit - Repetition length - Downlink DPCH timeslots and codes - CHOICE more timeslots - Timeslot number - Individual timeslot info - TFCI existence - Midamble shift and burst type - CHOICE Burst Type - Type 1 - Midamble configuration burst type 1 and 3 - First timeslot tannelisation code - First channelisation code - First channelisation code - First channelisation code - TDD - CPCPCH timeslot - CPCH timeslot - CPCH timeslot - 1 - CPCPCH timeslot - CPCH timeslot - 1 - CPCH timeslot - CPCH timeslot - 1 - CPCH timeslot - 1 - CPCH timeslot - CPCH time | • | |
| - Primary CCPCH info - CHOICE SyncCase - Timeslot - Cell parameters ID - SCTD indicator - Downlink DPCH info for each RL - CHOICE mode - DL CCTrCH List - TFCS ID - Time info - Activation time - Duration - Common timeslot info - 2-a interleaving mode - TFCI coding - Puncturing limit - Repetition period - Repetition length - Downlink DPCH timeslots and codes - CHOICE more timeslots - Timeslot number - Individual timeslot info - Midamble shift and burst type - CHOICE Burst Type - Midamble Allocation Mode - First timeslot annelisation code - First channelisation code - First channelisation code - First channelisation code - First channelisation code - CHOICE burst Tyme - First timeslot tannelisation code - First channelisation code - First shannelisation code - First shannelisation code - TS34.108 clause 6 Parameter set - Empty - Empty - The number of a downlink timeslot that has unassigned codes in a frame Individual timeslot info - TRUE - Midamble Allocation Mode - Midamble Allocation Mode - First timeslot channelisation codes - First channelisation code - First shannelisation code - First shannelisation code - TS34.108 clause 6 Parameter set - Empty - Type 1 - Midamble Shift and burst type - CHOICE Burst Type - Midamble Allocation Mode - Midamble Allocation Mode - Midamble Shift and burst type - First timeslot channelisation codes - First channelisation code | | |
| - CHOICE SyncCase - Timeslot - Cell parameters ID - SCTD indicator - Downlink DPCH info for each RL - CHOICE mode - DL CCTrCH List - TFCS ID - Time info - Activation time - Duration - Common timeslot info - 2nd interleaving mode - TFCI coding - Puncturing limit - Repetition length - Downlink DPCH timeslots and codes - CHOICE more timeslots - Timeslot number - Individual timeslot info - Midamble shift and burst type - CHOICE Burst Type - Midamble Allocation Mode - First timeslot channelisation code - First channelisation code - First channelisation code - TSS4.108 clause 6 Parameter set 1 Empty - Default - As defined in 3GPP TS 25.221 - Wilds clause 6 Parameter set 1 Empty - Default - As defined in 3GPP TS 25.221 - Sync Case 1 - PCCPCH timeslot - TDD - TDD - (ST) | | TDD |
| - Timeslot - Cell parameters ID - SCTD indicator - Downlink DPCH info for each RL - CHOICE mode - DL CCTrCH List - TFCS ID - Activation time - Activation time - Duration - Common timeslot info - 2nd interleaving mode - TFCI coding - Puncturing limit - Repetition period - Repetition length - Downlink DPCH timeslots and codes - CHOICE more timeslots - Timeslot number - Midamble shift and burst type - CHOICE Burst Type - Type 1 - Midamble Allocation Mode - First timeslot channelisation code - First channelisation code - First channelisation code - TSCI wisch can be precised in TS34.108 - Timeslot number - TRUE - Midamble Allocation Mode - Midamble salion codes - First channelisation code - First timeslot channelisation code - First channelisation code - TSCI wisch can be precised to TS34.108 - TIME - Midamble Allocation Mode - Midamble salion codes - First channelisation code - First timeslot channelisation code - TS34.108 clause 6 Parameter set - TRUE - Midamble configuration burst - TRUE - Midamble salion codes - First timeslot channelisation code - First timeslot channelisation code - First timeslot channelisation code | | |
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| - Downlink DPCH info for each RL - CHOICE mode - DL CCTrCH List - TFCS ID - Time info - Activation time - Duration - Common timeslot info - 2nd interleaving mode - TFCI coding - Puncturing limit - Repetition period - Repetition length - Downlink DPCH timeslots and codes - CHOICE more timeslots - Timeslot number - Individual timeslot info - TFCI existence - Midamble shift and burst type - CHOICE Burst Type - Type 1 - Midamble Allocation Mode - First timeslot channelisation code - First channelisation code - TSS4.108 clause 6 Parameter set - TDD - 1 - TDD - 1 - TRUE - Reference to TS34.108 - TRUE - Reference to TS34.108 clause 6 Parameter set - Empty - The number of a downlink timeslot that has unassigned codes in a frame TRUE - Midamble shift and burst type - CHOICE Burst Type - Type 1 - Midamble configuration burst type 1 - First timeslot channelisation code - First channelisation code - First channelisation code - TS34.108 clause 6 Parameter Set. | - Cell parameters ID | 0 |
| - CHOICE mode - DL CCTrCH List - TFCS ID - Time info - Activation time - Duration - Duration - Common timeslot info - 2nd interleaving mode - TFCI coding - Puncturing limit - Repetition period - Repetition length - Downlink DPCH timeslots and codes - CHOICE more timeslots - Timeslot number - Individual timeslot info - TFCI existence - Midamble shift and burst type - CHOICE Burst Type - Type 1 - Midamble Allocation Mode - First timeslot channelisation code - First channelisation code - First channelisation code TDD 1 1 1 1 1 1 1 1 1 1 1 1 | - SCTD indicator | |
| - DL CCTrCH List - TFCS ID - Time info - Activation time - Duration - Common timeslot info - 2nd interleaving mode - TFCI coding - Puncturing limit - Repetition period - Repetition length - Downlink DPCH timeslots and codes - CHOICE more timeslots - Individual timeslot info - TFCI existence - Midamble shift and burst type - CHOICE Burst Type - Type 1 - Midamble configuration burst type 1 and 3 - First timeslot channelisation code - First channelisation code - Trect existence - First channelisation code - First channelisation code - TSCH CFN mod 8 + 8))mod 256 (256+CFN-(CFN mod 8 + 8))mod 256 infinite (256+CFN-(CFN mod 8 + 8))mod 256 infinite (256+CFN-(CFN mod 8 + 8))mod 256 infinite 1 Empty Empty The number of a downlink timeslot that has unassigned codes in a frame. TRUE - TRUE - Midamble shift and burst type - CHOICE Burst Type - Type 1 - Midamble Allocation Mode - Midamble configuration burst type 1 and 3 - First timeslot channelisation codes - First channelisation code - First being assigned and SF is specified in TS34.108 clause 6 Parameter Set. | - Downlink DPCH info for each RL | |
| - DL CCTrCH List - TFCS ID - Time info - Activation time - Duration - Common timeslot info - 2nd interleaving mode - TFCI coding - Puncturing limit - Repetition period - Repetition length - Downlink DPCH timeslots and codes - CHOICE more timeslots - Individual timeslot info - TFCI existence - Midamble shift and burst type - CHOICE Burst Type - Type 1 - Midamble configuration burst type 1 and 3 - First timeslot channelisation code - First channelisation code - Trect existence - First channelisation code - First channelisation code - TSCH CFN mod 8 + 8))mod 256 (256+CFN-(CFN mod 8 + 8))mod 256 infinite (256+CFN-(CFN mod 8 + 8))mod 256 infinite (256+CFN-(CFN mod 8 + 8))mod 256 infinite 1 Empty Empty The number of a downlink timeslot that has unassigned codes in a frame. TRUE - TRUE - Midamble shift and burst type - CHOICE Burst Type - Type 1 - Midamble Allocation Mode - Midamble configuration burst type 1 and 3 - First timeslot channelisation codes - First channelisation code - First being assigned and SF is specified in TS34.108 clause 6 Parameter Set. | - CHOICE mode | TDD |
| - TFCS ID - Time info - Activation time - Duration - Common timeslot info - 2nd interleaving mode - TFCI coding - Puncturing limit - Repetition period - Repetition length - Downlink DPCH timeslots and codes - CHOICE more timeslots - Timeslot number - Individual timeslot info - TFCI existence - Midamble shift and burst type - CHOICE Burst Type - Type 1 - Midamble Configuration burst type 1 and 3 - First timeslot channelisation code - First channelisation code - Activation time - (256+CFN-(CFN mod 8 + 8))mod 256 infinite (256+CFN-(CFN mod 8 + 8))mod 256 (256+CFN-(CFN mod 8 | - DL CCTrCH List | |
| - Time info - Activation time - Duration - Common timeslot info - 2nd interleaving mode - TFCI coding - Puncturing limit - Repetition period - Repetition length - Downlink DPCH timeslots and codes - CHOICE more timeslots - Timeslot number - Individual timeslot info - TFCI existence - Midamble Shift and burst type - CHOICE Burst Type - Type 1 - Midamble Allocation Mode - First timeslot channelisation codes - First timeslot channelisation code - First channelisation code - First channelisation code - Trout (in Sepecification in Info) - Trout (in Sepecification Info) - Trout (in Sepecificat | | 1 |
| - Activation time - Duration - Common timeslot info - 2nd interleaving mode - TFCI coding - Puncturing limit - Repetition period - Repetition length - Downlink DPCH timeslots and codes - CHOICE more timeslots - Timeslot number - Individual timeslot info - TFCI existence - Midamble shift and burst type - CHOICE Burst Type - Type 1 - Midamble Allocation Mode - First timeslot channelisation code - First channelisation code - Choice infinite - Reference to TS34.108 clause 6 Parameter set - Reference to TS34.108 clause 6 Parameter set - TRUE - Empty - The number of a downlink timeslot that has unassigned codes in a frame TRUE - Midamble shift and burst type - CHOICE Burst Type - Midamble Allocation Mode - Midamble Configuration burst type 1 and 3 - First timeslot channelisation code - First channelisation code - First being assigned and SF is specified in TS34.108 clause 6 Parameter Set | | |
| - Duration - Common timeslot info - 2nd interleaving mode - TFCI coding - Puncturing limit - Repetition period - Repetition length - Downlink DPCH timeslots and codes - CHOICE more timeslots - Timeslot number - Individual timeslot info - TFCI existence - Midamble shift and burst type - CHOICE Burst Type - Type 1 - Midamble Allocation Mode - First timeslot channelisation code - First channelisation code - Common timeslot info - TRUE - Midamble Allocation Mode - Midamble Allocation Mode - First channelisation code - Parameter Set | | (256+CEN-(CEN mod 8 + 8))mod 256 |
| - Common timeslot info - 2nd interleaving mode - TFCI coding - Puncturing limit - Repetition period - Repetition length - Downlink DPCH timeslots and codes - CHOICE more timeslots - Timeslot number - Individual timeslot info - TFCI existence - Midamble shift and burst type - CHOICE Burst Type - Type 1 - Midamble Allocation Mode - Midamble configuration burst type 1 and 3 - First timeslot channelisation code - First channelisation code - Reference to TS34.108 - Reference to TS34.108 clause 6 Parameter set - TRUE - Empty - Typy - The number of a downlink timeslot that has unassigned codes in a frame. TRUE - TRUE - TRUE - Midamble shift and burst type - Type 1 - Midamble Allocation Mode - Midamble configuration burst type 1 and 3 - First timeslot channelisation codes - First channelisation code - TS34.108 clause 6 Parameter Set | | |
| - 2nd interleaving mode - TFCI coding - Puncturing limit - Repetition period - Repetition length - Downlink DPCH timeslots and codes - CHOICE more timeslots - Individual timeslot info - TFCI existence - Midamble shift and burst type - CHOICE Burst Type - Type 1 - Midamble Allocation Mode - First timeslot channelisation code - First channelisation code - TSQL Allos clause 6 Parameter set - Reference to TS34.108 clause 6 Parameter set - Reference to TS34.108 clause 6 Parameter set - TRUE - Individual timeslot and codes - The number of a downlink timeslot that has unassigned codes in a frame TRUE - TRUE - TRUE - TRUE - Puncturing limit - Reference to TS34.108 clause 6 Parameter set - TRUE - The number of a downlink timeslot that has unassigned codes in a frame TRUE - Puncturing limit - Reference to TS34.108 clause 6 Parameter set - TRUE - The number of a downlink timeslot that has unassigned codes in a frame TRUE - Puncturing limit - Empty - Type 1 - First clause of Parameter set - TRUE - Puncturing limit - Parameter set - Reference to TS34.108 clause 6 Parameter set - TRUE - Puncturing limit - Empty - Empty - Type 1 - Puncturing limit - Empty - Empty - Type 1 - Puncturing limit - Empty - Type 1 - Puncturing limit - Empty - Empty - Type 1 - Puncturing limit - Empty - Empty - Empty - Empty - Puncturing limit - Empty - Empt | | minite |
| - TFCI coding - Puncturing limit - Repetition period - Repetition length - Downlink DPCH timeslots and codes - CHOICE more timeslots - Timeslot number - Individual timeslot info - TFCI existence - Midamble shift and burst type - CHOICE Burst Type - Type 1 - Midamble Allocation Mode - First timeslot channelisation codes - First channelisation code - TRUE - Reference to TS34.108 clause 6 Parameter set 1 Empty - Empty - The number of a downlink timeslot that has unassigned codes in a frame. TRUE - TRUE - TRUE - TRUE - Alidamble shift and burst type - Type 1 - Midamble Allocation Mode - Midamble Configuration burst type 1 and 3 - First timeslot channelisation codes - First channelisation code - TRUE - Adomnic Manuel Struck of Parameter Set | | Defenses to T004 400 |
| - Puncturing limit - Repetition period - Repetition length - Downlink DPCH timeslots and codes - CHOICE more timeslots - Timeslot number - Individual timeslot info - TFCI existence - Midamble shift and burst type - CHOICE Burst Type - Type 1 - Midamble Allocation Mode - Midamble configuration burst type 1 and 3 - First timeslot channelisation codes - First channelisation code - First channelisation code - First channelisation code - Reference to TS34.108 clause 6 Parameter set 1 Reference to TS34.108 clause 6 Parameter set 1 Lempty The number of a downlink timeslot that has unassigned codes in a frame. TRUE TRUE - TRUE - Default - As defined in 3GPP TS 25.221 - First timeslot channelisation codes - First timeslot channelisation codes - First being assigned and SF is specified in TS34.108 clause 6 Parameter Set | <u> </u> | |
| - Repetition period - Repetition length - Downlink DPCH timeslots and codes - CHOICE more timeslots - Timeslot number - Individual timeslot info - TFCI existence - Midamble shift and burst type - CHOICE Burst Type - Type 1 - Midamble Allocation Mode - Midamble configuration burst type 1 and 3 - First timeslot channelisation codes - First channelisation code - First channelisation code - Repetition period - Empty The number of a downlink timeslot that has unassigned codes in a frame. - TRUE - TRUE - TRUE - Midamble Shift and burst type - CHOICE Burst Type - Type 1 - Midamble Allocation Mode - Midamble Allocation burst type 1 and 3 - First timeslot channelisation codes - First channelisation codes - First channelisation code | · · | 1111 |
| - Repetition length - Downlink DPCH timeslots and codes - CHOICE more timeslots - Timeslot number The number of a downlink timeslot that has unassigned codes in a frame. - Individual timeslot info - TFCI existence - Midamble shift and burst type - CHOICE Burst Type - Type 1 - Midamble Allocation Mode - Midamble configuration burst type 1 and 3 - 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 | | |
| - Downlink DPCH timeslots and codes - CHOICE more timeslots - Timeslot number The number of a downlink timeslot that has unassigned codes in a frame. - Individual timeslot info - TFCI existence - Midamble shift and burst type - CHOICE Burst Type - Type 1 - Midamble Allocation Mode - Midamble configuration burst type 1 and 3 - 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 | | |
| - CHOICE more timeslots - 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 Burst Type - Type 1 - Midamble Allocation Mode - Midamble configuration burst type 1 and 3 - 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 | | Empty |
| - Timeslot number - Individual timeslot info - Individual timeslot info - TFCI existence - Midamble shift and burst type - CHOICE Burst Type - Type 1 - Midamble Allocation Mode - Midamble configuration burst type 1 and 3 - 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 | | |
| unassigned codes in a frame. - Individual timeslot info - TFCI existence - Midamble shift and burst type -CHOICE Burst Type -Type 1 -Midamble Allocation Mode - Midamble configuration burst type 1 and 3 - 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 | | The number of a dougstist time salet that the |
| - Individual timeslot info - TFCI existence - Midamble shift and burst type - CHOICE Burst Type - Type 1 - Midamble Allocation Mode - Midamble configuration burst type 1 and 3 - 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 | - Timesiot number | |
| - TFCI existence - Midamble shift and burst type - CHOICE Burst Type - Type 1 - Midamble Allocation Mode - Midamble configuration burst type 1 and 3 - 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 | - Individual timeslot info | 3 |
| -CHOICE Burst Type -Type 1 -Midamble Allocation Mode - Midamble configuration burst type 1 and 3 - 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 | | TRUE |
| -CHOICE Burst Type -Type 1 -Midamble Allocation Mode - Midamble configuration burst type 1 and 3 - 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 | - Midamble shift and burst type | |
| -Midamble Allocation Mode - Midamble configuration burst type 1 and 3 - 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 | | |
| - Midamble configuration burst type 1 and 3 - 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 | | |
| type 1 and 3 - 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 | | |
| - 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 | | As defined in 3GPP TS 25.221 |
| - 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 | | |
| that is being assigned and SF is specified in TS34.108 clause 6 Parameter Set | | (:/OF)t ::- th ! |
| | - First channelisation code | that is being assigned and SF is specified in |
| - Last channelisation code (j/SF) where j is the highest numbered code that is being assigned in the slot. | - Last channelisation code | (j/SF) where j is the highest numbered code |
| - 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 | - 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 |
| - UL CCTrCH TPC List Not Present | - UL CCTrCH TPC List | |
| -SCCPCH information for FACH Not Present | | |

Contents of SECURITY MODE COMMAND message: AM

| Information Element | Condition | Value/remark |
|--|-----------|--|
| Message Type | A1, A2 | |
| RRC transaction identifier | | Arbitrarily selects an integer between 0 and 3 |
| Integrity check info | | Cat to an arbitrarily appared 22 bits into you. The first/ |
| - Message authentication code | | Set to an arbitrarily selected 32-bits integer. The first/leftmost bit of the bit string contains the most |
| | | significant bit of the MAC-I. |
| - RRC Message Sequence Number | | Set to an arbitrarily selected integer between 0 and |
| Titte Meddage Goquenee Hamber | | 15 |
| Security capability | | |
| - Ciphering algorithm capability | | |
| - UEA0 | | If the UE has indicated support for ciphering |
| | | algorithm UEA0 in the IE "security capability" in the |
| | | RRC CONNECTION SETUP COMPLETE message, |
| | | this IE is set to TRUE. |
| - UEA1 | | If the UE has indicated support for ciphering |
| | | algorithm UEA1 in the IE "security capability" in the |
| | | RRC CONNECTION SETUP COMPLETE message, this IE is set to TRUE. |
| - Spare | | Spare 2-15 = FALSE |
| - Integrity protection algorithm capability | | 000000000000010B (UIA1) |
| - UIA1 | | TRUE |
| - Spare | | Spare 0 and Spare 2-15 = FALSE |
| Ciphering mode info | | This presence of this IE is dependent on IXIT |
| | | statements in TS 34.123-2. If ciphering is indicated to |
| | | be active, this IE present with the values of the sub |
| | | IEs as stated below. Else, this IE is omitted. |
| - Ciphering mode command | | Start/restart |
| - Ciphering algorithm | | UEA0 or UEA1. The indicated algorithm must be one |
| | | of the algorithms supported by the UE as indicated in the IE "security capability" in the RRC CONNECTION |
| | | SETUP COMPLETE message. Use the same |
| | | ciphering algorithm specified in "ciphering |
| - Ciphering activation time for DPCH | | Not Present |
| - Radio bearer downlink ciphering | | |
| activation time info | | |
| - Radio bearer activation time | | |
| - RB identity | | 1 |
| - RLC sequence number | | Current RLC SN+2 |
| - RB identity | | Current RLC SN+2 |
| - RLC sequence number - RB identity | | 3 |
| - RLC sequence number | | Current RLC SN + 2 |
| - RB identity | | 4 |
| - RLC sequence number | | Current RLC SN + 2 |
| Integrity protection mode info | | |
| - Integrity protection mode command | | Start |
| - Downlink integrity protection activation | | Not Present |
| info | | 11104 |
| - Integrity protection algorithm | | UIA1 |
| - Integrity protection initialisation number | | SS selects an arbitrary 32 bits number for FRESH. The first/ leftmost bit of the bit string contains the |
| | | most significant bit of the FRESH. |
| CN domain identity | | CS or PS |
| UE system specific security capability | A1 | Not Checked |
| UE system specific security capability | A2 | |
| - Inter-RAT UE security capability | | |
| - CHOICE system | | GSM |
| - GSM security capability | | The indicated algorithms must be the same as the |
| | | algorithms supported by the UE as indicated in the IE |
| | | " UE system specific capability " in the RRC |
| | | CONNECTION SETUP COMPLETE message. |

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| Condition | Explanation |
|-----------|-----------------------|
| A1 | UE not supporting GSM |
| A2 | UE supporting GSM |

Annex A (informative): Void

Annex B (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 | С | 3.0.1 | 3.1.0 | T1-000190 |
| TP-09 | TP-000131 | 002 | | RRC Message Contents: RLCParam | С | 3.0.1 | 3.1.0 | T1-000191 |
| TP-09 | TP-000131 | 003 | | RRC Message Contents: PCPreamble | С | 3.0.1 | 3.1.0 | T1-000192 |
| TP-09 | TP-000131 | 004 | | RRC Message Contents: RBIdentity | С | 3.0.1 | 3.1.0 | T1-000193 |
| TP-09 | TP-000131 | 005 | | RRC Message Contents: TrCHParam | С | 3.0.1 | 3.1.0 | T1-000194 |
| TP-09 | TP-000131 | 006 | | RRC Message Contents: UECapability | С | 3.0.1 | 3.1.0 | T1-000195 |
| TP-09 | TP-000131 | 007 | | RRC Message Contents: RBMapping | С | 3.0.1 | 3.1.0 | T1-000196 |
| TP-09 | TP-000131 | 008 | | RRC Message Contents: PagingCause | С | 3.0.1 | 3.1.0 | T1-000197 |
| TP-09 | TP-000131 | 009 | | RRC Message Contents: CipheringAndIntegrity | С | 3.0.1 | 3.1.0 | T1-000198 |
| TP-09 | TP-000131 | 010 | | RRC Message Contents: RLCInfo | С | 3.0.1 | 3.1.0 | T1-000199 |
| TP-09 | TP-000131 | 011 | | RRC Message Contents: CompressedMode | С | 3.0.1 | 3.1.0 | T1-000200 |
| TP-09 | TP-000131 | 012 | | RRC Message Contents: SIB | С | 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 | С | 3.0.1 | 3.1.0 | T1-000203 |
| TP-09 | TP-000131 | 015 | | RRC Message Contents: TFCS | С | 3.0.1 | 3.1.0 | T1-000204 |
| TP-09 | TP-000131 | 016 | | RRC Message Contents: DPCHFrameOffset | С | 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 | F | 3.0.1 | 3.1.0 | T1-000164 |
| 11 00 | 11 000101 | 0.0 | | authentication (clause 8.1.2) | | 0.0.1 | 0.1.0 | 11 000104 |
| 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 | T1-000212 |
| TP-10 | TP-000215 | 020 | | Common generic procedure for AS testing | В | 3.1.0 | 3.2.0 | T1-000294 |
| TP-10 | TP-000215 | 021 | | | F | 3.1.0 | 3.2.0 | T1-000294 |
| | | 022 | | Tcell parameter | | 3.1.0 | 3.2.0 | |
| 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 | С | 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 | С | 3.1.0 | 3.2.0 | T1-000283 |
| TP-10 | TP-000215 | 029 | | Application of ciphering during conformance testing | С | 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 | F | 3.2.0 | 3.3.0 | T1-010079 |
| TP-11 | TP-010018 | 034 | | clause 7.2) Corrections for Test USIM Parameters(34.108 clause | | 3.2.0 | 3.3.0 | T1-010080 |
| | | | | 8) | | | | |
| 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 | С | 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) | | 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-010215 | 050 | _ | Some corrections in clause 5 | F | 3.4.0 | 3.5.0 | T1-010277 |

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| TP-13 | TP-010215 | 051 | | Update to Scope Statement | F | 3.4.0 | 3.5.0 | T1-010278 |
| TP-13 | TP-010215 | 052 | | | F | 3.4.0 | 3.5.0 | T1-010279 |
| TP-13 | TP-010215 | 053 | | Updates to clause 6.1, clause 7.4 and clause 9 | F | 3.4.0 | 3.5.0 | T1-010280 |
| TP-13 | TP-010215 | 054 | | | F | 3.4.0 | 3.5.0 | T1-010281 |
| | | | | tests | | | | |
| 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 | 063 | | Clause 6.11 RBs for RLC and PDCP testing | F | 3.4.0 | 3.5.0 | T1-010290 |
| TP-14 | TP-010285 | 064 | 1 | Correction to 6.1 Contents of System Information | F | 3.5.0 | 3.6.0 | T1-010474 |
| TP-14 | TP-010285 | 066 | 1 | Blocks Corrections to clause 6.1, 7.4 and 9 | F | 3.5.0 | 3.6.0 | T1-010472 |
| TP-14 | TP-010258 | 068 | - | Reference Radio Conditions | F | 3.5.0 | 3.6.0 | T1-010460 |
| TP-14 | TP-010258 | 070 | | Modification of Test procedures for RF tests | F | 3.5.0 | 3.6.0 | T1-010462 |
| TP-14 | TP-010258 | 072 | | Default message contents for RF tests | F | 3.5.0 | 3.6.0 | T1-010464 |
| TP-14 | TP-010258 | 074 | | Correction to 6.10 Reference Radio Bearer configurations | F | 3.5.0 | 3.6.0 | T1-010466 |
| TP-14 | TP-010258 | 076 | | Definition of default value of rate matching attribute | F | 3.5.0 | 3.6.0 | T1-010468 |
| TP-14 | TP-010258 | 078 | | Update of clause 7.4 and 6.10 | F | 3.5.0 | 3.6.0 | T1-010400 |
| | TP-010236 | | | | | | | |
| TP-14 | | 080 | | Correction on introduction of section 6.10 | F | 3.5.0 | 3.6.0 | |
| TP-15 | TP-020038 | 082 | | Diversity (SCTD) | | 3.6.0 | 3.7.0 | T1-020091 |
| TP-15 | TP-020038 | 084 | | Update of reference radio conditions | F | 3.6.0 | 3.7.0 | T1-020097 |
| TP-15 | TP-020038 | 086 | | Update of system reference configurations and default messages | F | 3.6.0 | 3.7.0 | T1-020099 |
| TP-15 | TP-020038 | 088 | | Corrections to 34108-360 | F | 3.6.0 | 3.7.0 | T1-020101 |
| TP-15 | TP-020038 | 090 | | Introduction of new Reference RABs (LS from RAN T1-020025) | F | 3.6.0 | 3.7.0 | T1-020194 |
| TP-15 | TP-020038 | 092 | | Clarification of bit rate of Interactive/Background PS RAB function | F | 3.6.0 | 3.7.0 | T1-020105 |
| TP-15 | TP-020038 | 093 | | Update of SIBs for TDD mode in TS34.108 (Rel99) | F | 3.6.0 | 3.7.0 | T1-020106 |
| | | | | Correction of CR implementation errors in clauses: 6.10.2.2, 6.10.2.4.1.23 and 6.10.2.4.1.58.2.1.1 | | 3.7.0 | 3.7.1 | |
| TP-16 | TP-020141 | 096 | | Correction to clause 7.3.3.4 RADIO BEARER SETUP message | F | 3.7.1 | 3.8.0 | T1-020271 |
| TP-16 | TP-020141 | 097 | | Change of RM attribute of DL:3.4 kbps SRBs for DCCH in TS34.108 for R99 | F | 3.7.1 | 3.8.0 | T1-020272 |
| TP-16 | TP-020141 | 098 | | New additional RAB configuration (R1-020669) for R99 | F | 3.7.1 | 3.8.0 | T1-020273 |
| TP-16 | TP-020141 | 099 | | Correction of Puncturing Limit for RABs in TS34.108 for R99 | F | 3.7.1 | 3.8.0 | T1-020274 |
| TP-16 | TP-020141 | 100 | | Test USIM | F | 3.7.1 | 3.8.0 | T1-020275 |
| TP-16 | TP-020141 | 101 | | Section 6.1 (SIBs)Rel 99 TDD | F | 3.7.1 | 3.8.0 | T1-020276 |
| TP-16 | TP-020141 | 102 | | Section 6.10 References for TDD about Clarification of bit rate of Interactive/Background PS RAB | F | 3.7.1 | 3.8.0 | T1-020277 |
| TP-16 | TP-020141 | 103 | | Correction to default message on clause 9 for Rel'99 | F | 3.7.1 | 3.8.0 | T1-020278 |
| TP-16 | TP-020141 | 103 | | Correction to clause 6.1for Rel'99 | F | 3.7.1 | 3.8.0 | T1-020270 |
| TP-16 | TP-020141 | 105 | | WCDMA1800 additions for Rel'99 | F | 3.7.1 | 3.8.0 | T1-020279 |
| TP-16 | TP-020141 | 106 | | Section 7(reference) Update of generic setup | F | 3.7.1 | 3.8.0 | T1-020280 |
| 11 -10 | 020141 | 100 | | procedures to use 13.6 kbps SRB in RRC connection establishment TDD | | 0.7.1 | 3.0.0 | 11 020201 |
| TP-16 | TP-020141 | 107 | | Section 9.1, Inclusion of Default message contents for TDD Rel 99(TS34.108) | F | 3.7.1 | 3.8.0 | T1-020282 |
| TP-16 | TP-020141 | 120 | | Update of generic setup procedures to use 13.6 kbps SRB in RRC connection establishment | F | 3.7.1 | 3.8.0 | T1-020433 |
| TP-17 | TP-020184 | 122 | - | Alignment of reference configurations on S-CCPCH | F | 3.8.0 | 3.9.0 | T1-020502 |
| TD 47 | TD 000404 | 104 | | with default system information messages | _ | 200 | 200 | T1 000504 |
| TP-17 | TP-020184 | 124 | - | Addition of reference compressed mode pattern | F | 3.8.0 | 3.9.0 | T1-020504 |
| TP-17 | TP-020184 | 126 | | Corrections to default message contents as T1S-020346rev1 | F | 3.8.0 | 3.9.0 | T1-020506 |
| TP-17 | TP-020184 | 128 | - | Additional default message contents for RF Testing | F | 3.8.0 | 3.9.0 | T1-020508 |
| TP-17 | TP-020184 | 130 | - | Corrections related to SIB11, SIB12 and to the MEASUREMENT CONTROL message | F | 3.8.0 | 3.9.0 | T1-020526 |
| TP-17 | TP-020184 | 132 | - | Corrections to clause 6.1 (T1S-020348rev1) | F | 3.8.0 | 3.9.0 | T1-020529 |

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| TP-17 | TP-020184 | 134 | - | Introduction of reference configurations on S-CCPCH and PRACH with two interactive PS domain RABs | F | 3.8.0 | 3.9.0 | T1-020538 |
| TP-17 | TP-020184 | 136 | - | Removal of reference radio bearer configurations for unidirectional streaming CS RABa above 64 kbps | F | 3.8.0 | 3.9.0 | T1-020540 |
| TP-17 | TP-020184 | 139 | - | Some corrections and updates in clause 6.1 TS 34.108 for TDD mode | F | 3.8.0 | 3.9.0 | T1-020575 |
| TP-17 | TP-020184 | 141 | - | | F | 3.8.0 | 3.9.0 | T1-020577 |
| TP-18 | TP-020293 | 143 | - | Correction to default messages in 9.1 and 9.2 | F | 3.9.0 | 3.10.0 | T1-020657 |
| TP-18 | TP-020293 | 145 | - | Corrections in the TDD test frequencies according to | F | 3.9.0 | 3.10.0 | T1-020673 |
| TP-18 | TP-020293 | 147 | - | core specs Addition of alternative configuration using Turbo | F | 3.9.0 | 3.10.0 | T1-020693 |
| | 020200 | | | Coding for Interactive or background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH | | 0.0.0 | 0.10.0 | 11 02000 |
| TP-18 | TP-020293 | 149 | - | Correction to content of sub-clause 6.10.2 | F | 3.9.0 | 3.10.0 | T1-020708 |
| TP-18 | TP-020293 | 151 | - | Correction to SIB 11/12 definition | F | 3.9.0 | 3.10.0 | T1-020711 |
| TP-18 | TP-020293 | 153 | - | Reference Measurement Channels | F | 3.9.0 | 3.10.0 | T1-020767 |
| TP-18 | TP-020293 | 155 | - | Transferring system information definition using ASN.1 description to PRD | F | 3.9.0 | 3.10.0 | T1-020777 |
| TP-18 | TP-020293 | 157 | - | Correction to RLC RAB TFCS | F | 3.9.0 | 3.10.0 | T1-020779 |
| TP-18 | TP-020293 | 159 | | Default Message contents : Correction from CRs approved in RP17meeting | F | 3.9.0 | 3.10.0 | T1-020782 |
| TP-18 | TP-020293 | 161 | - | Corrections to SIB1 to SIB6 | F | 3.9.0 | 3.10.0 | T1-020798 |
| TP-18 | TP-020293 | 163 | - | Correction to RAB configurations as revision of T1S020755 | F | 3.9.0 | 3.10.0 | T1-020800 |
| TP-18 | TP-020293 | 165 | - | Parameter addition for Reference RABs based on LS from RAN2 | F | 3.9.0 | 3.10.0 | T1-020802 |
| TP-18 | TP-020293 | 167 | - | Addition to clause 7.4 for multi call as T1S-020576rev2 (revision to T1S020819) | F | 3.9.0 | 3.10.0 | T1-020817 |
| TP-18 | TP-020293 | 170 | | Correction to Contents of the Scheduling Block System Information in clause 6.1.3. | F | 3.9.0 | 3.10.0 | T1-020843 |
| TP-19 | TP-030043 | 172 | - | RAB Removal from R99 TS 34.108 as T1S030001rev1 | F | 3.10.0 | 3.11.0 | T1-030036 |
| TP-19 | TP-030043 | 174 | - | Combine all Radio Bearer Setup messages into one table | F | 3.10.0 | 3.11.0 | T1-030039 |
| TP-19 | TP-030043 | 176 | - | Corrections to SB and SIB configurations in clause 6.1 as T1S030045rev1 | F | 3.10.0 | 3.11.0 | T1-030041 |
| TP-19 | TP-030043 | 178 | - | Correction to TS34.108 R99 ; PAGING TYPE1 message (Packet in PS) | F | 3.10.0 | 3.11.0 | T1-030043 |
| TP-19 | TP-030043 | 180 | - | Clarification of autentication test algorithm and GSM cipher key | F | 3.10.0 | 3.11.0 | T1-030045 |
| TP-19 | TP-030043 | 182 | - | Addition of simulated network environment for inter- RAT test cases | F | 3.10.0 | 3.11.0 | T1-030047 |
| TP-19 | TP-030043 | 184 | - | Corrections to SIB1 to align with default values for LAC and RAC in 51.010-1 | F | 3.10.0 | 3.11.0 | T1-030049 |
| TP-19 | TP-030043 | 186 | - | Addition of default inter-RAT handover messages | F | 3.10.0 | 3.11.0 | T1-030051 |
| TP-19 | TP-030043 | 188 | - | Correction of activation time IEs in default messages | F | 3.10.0 | 3.11.0 | T1-030053 |
| TP-19 | TP-030043 | 190 | - | Correction to default SECURITY MODE COMMAND message | F | 3.10.0 | 3.11.0 | T1-030055 |
| TP-19 | TP-030043 | 192 | - | Addition of option for UL CM only in default reference CM patterns | F | 3.10.0 | 3.11.0 | T1-030057 |
| TP-19 | TP-030043 | 194 | - | Introduction of a reference RB configuration for RMC for BTFD tests (R99) | F | 3.10.0 | 3.11.0 | T1-030059 |
| TP-19 | TP-030043 | 196 | - | Update of the RRC connection request messages in 34.108 R99 | F | 3.10.0 | 3.11.0 | T1-030062 |
| TP-19 | TP-030044 | 199 | | Update of default parameters for 1 to 8 cell environments (TDD), clause 6.1.4, Rel 99 | F | 3.10.0 | 3.11.0 | T1-030131 |
| TP-19 | TP-030044 | 201 | - | Update of Multi-cell environment for default radio conditions (TDD), clause 6.1.6 (Inclusion of cell 4), Rel 99 | F | 3.10.0 | 3.11.0 | T1-030209 |
| TP-19 | TP-030044 | 203 | | Modification to Generic Registration Procedures | F | 3.10.0 | 3.11.0 | T1-030221 |
| TP-19 | TP-030044 | 205 | - | Update of default configurations to enable testing of low end UE | F | 3.10.0 | 3.11.0 | T1-030227 |
| TP-20 | TP-030098 | 207 | - | Reinstate parameters for Interactive or background /UL:64 kbps / PS RAB | F | 3.11.0 | 3.12.0 | T1-030436 |
| TP-20 | TP-030098 | 209 | - | Correction to Figure 7.4.1.1 (Rel-99) | F | 3.11.0 | 3.12.0 | T1-030482 |
| TP-20 | TP-030098 | 211 | - | Update of SIB 11 and 12 in clause 6.1.0b in TS34.108 (TDD) | | 3.11.0 | 3.12.0 | T1-030506 |
| TP-20 | TP-030098 | 213 | - | Update of Default parameters for 1 to 8 cell environments in TS34.108 (TDD) | F | 3.11.0 | 3.12.0 | T1-030508 |
| TP-20 | TP-030098 | 215 | - | Correction of default messages according to 25331 | F | 3.11.0 | 3.12.0 | T1-030631 |

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| TP-20 | TP-030098 | 217 | - | Section 8.2: Definition of default values for authentication key K on test USIM | F | 3.11.0 | 3.12.0 | T1-030643 |
| TP-20 | TP-030098 | 220 | - | Correction to RADIO BEARER RELEASE and RRC CONNECTION SETUP messages (Revision of T1-030568) | F | 3.11.0 | 3.12.0 | T1-030698 |
| TP-20 | TP-030098 | 222 | - | Update of Reconfiguration messages [revision to T1-030691] | F | 3.11.0 | 3.12.0 | T1-030711 |
| TP-20 | TP-030140 | 225 | - | Correction to default SIB5 (FDD) | F | 3.11.0 | 3.12.0 | T1-030744 |
| TP-21 | TP-030191 | 227 | - | CR to 34.108, R99, Clarification of seg_count in 6.1.0a.3 | F | 3.12.0 | 3.13.0 | T1-030826 |
| TP-21 | TP-030191 | 229 | - | General correction in clause 7.4 for Common generic procedures for AS testing | F | 3.12.0 | 3.13.0 | T1-030975 |
| TP-21 | TP-030191 | 232 | - | Incorrect activation time in CELL_FACH state | F | 3.12.0 | 3.13.0 | T1-031063 |
| TP-21 | TP-030191 | 234 | - | Incorrect Transport Channel Parameters | F | 3.12.0 | 3.13.0 | T1-031065 |
| TP-21 | TP-030191 | 236 | - | Corrections to TS 34.108 common procedures in clause 7.4 of R"99 of TS 34.108 | F | 3.12.0 | 3.13.0 | T1-031094 |
| TP-21 | TP-030191 | 238 | - | Removal of RLC AM in the Default Message Content | F | 3.12.0 | 3.13.0 | T1-031150 |
| TP-21 | TP-030191 | 241 | - | CR 34.108 R99: Manual attach in State 7 Registrated Idle Mode on CS/PS | F | 3.12.0 | 3.13.0 | T1-031174 |
| TP-21 | TP-030191 | 243 | - | URA Identity in Cell Update Confirm and URA Update Confirm | F | 3.12.0 | 3.13.0 | T1-031178 |
| TP-21 | TP-030191 | 245 | - | CR to 34.108 R99; Correction to specification to reflect a change already approved in TTCN CR T1-030396 | F | 3.12.0 | 3.13.0 | T1-031240 |
| TP-21 | TP-030191 | 247 | - | CR to 34.108 REL-99; Correction to section 7.3 Test procedures for RF test | F | 3.12.0 | 3.13.0 | T1-031250 |
| TP-22 | TP-030279 | 259 | 2 | CR on PAGING TYPE 1, RRC CONNECTION REQUEST and RRC CONNECTION SETUP messages for MT RR Connection | F | 3.13.0 | 3.14.0 | T1-031595 |
| TP-22 | TP-030279 | 261 | | CR 34.108 R99: EFRPLMNACT (RPLMN Last used Access Technology) removed | F | 3.13.0 | 3.14.0 | T1-031380 |
| TP-22 | TP-030279 | 263 | 1 | Update of default messages for RRC CONNECTION SETUP and SECURITY MODE COMMAND | F | 3.13.0 | 3.14.0 | T1-031546 |
| TP-22 | TP-030279 | 265 | 1 | Description and corrections of channels for minimum performance levels, TDD mode. | F | 3.13.0 | 3.14.0 | T1-031644 |
| TP-22 | TP-030279 | 267 | 1 | Test frequencies of UMTS800MHz band VI | В | 3.13.0 | 3.14.0 | T1-031554 |
| TP-22 | TP-030279 | 270 | 1 | Update of generic test procedure for TX, RX and Performance Requirement | F | 3.13.0 | 3.14.0 | T1-031609 |
| TP-22 | TP-030279 | 272 | 1 | Introduction of generic test procedure for RRM handover test cases | F | 3.13.0 | 3.14.0 | T1-031607 |
| TP-22 | TP-030279 | 274 | | Correction of CM TGD parameter | F | 3.13.0 | 3.14.0 | T1-031451 |
| TP-22 | TP-030279 | 276 | | Corrections to default message contents of Radio Bearer Release | F | 3.13.0 | 3.14.0 | T1-031470 |
| TP-22 | TP-030279 | 278 | 1 | Modification to default DPCCH_Power_offset value | F | 3.13.0 | 3.14.0 | T1-031597 |

| Meeting -1st- Level | Doc-1st- Level | CR | Rev | Subject | Cat | Version- Current | Version- New | Doc-2nd- Level |
|---------------------------|-------------------|-----|-----|--|-----|---------------------|-----------------|-------------------|
| TP-22 | TP-030279 | 282 | | Correction of TFCS for radio bearer combination 6.10.2.4.1.51b | F | 3.13.0 | 3.14.0 | T1-031526 |

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