# TSG-RAN Meeting #16 Marco Island, FL, USA, 4 - 7 June 2002

Title: Agreed CRs (Release '99 and Rel-4/Rel-5 category A) to TS 25.331 (5)

Source: TSG-RAN WG2

#### Agenda item: 7.2.3

| Doc-1st-  | Status- | Spec   | CR   | Rev | Phase | Subject   |   | Version | Versio |
|-----------|---------|--------|------|-----|-------|---|---|---------|--------|
| R2-021351 | agreed  | 25.331 | 1445 |     | R99   | Layer 3 retransmission of SIGNALLING<br>CONNECTION RELEASE INDICATION               | F | 3.10.0  | 3.11.0 |
| R2-021352 | agreed  | 25.331 | 1446 |     | Rel-4 | Layer 3 retransmission of SIGNALLING<br>CONNECTION RELEASE INDICATION               |   | 4.4.0   | 4.5.0  |
| R2-021353 | agreed  | 25.331 | 1447 |     | Rel-5 | Layer 3 retransmission of SIGNALLING<br>CONNECTION RELEASE INDICATION               | A | 5.0.0   | 5.1.0  |
| R2-021354 | agreed  | 25.331 | 1448 |     | R99   | Alignment of tabular and ASN.1 for<br>UTRAN GPS timing of cell frames<br>resolution | F | 3.10.0  | 3.11.0 |
| R2-021355 | agreed  | 25.331 | 1449 |     | Rel-4 | Alignment of tabular and ASN.1 for<br>UTRAN GPS timing of cell frames<br>resolution | A | 4.4.0   | 4.5.0  |
| R2-021356 | agreed  | 25.331 | 1450 |     | Rel-5 | Alignment of tabular and ASN.1 for<br>UTRAN GPS timing of cell frames<br>resolution |   | 5.0.0   | 5.1.0  |
| R2-021357 | agreed  | 25.331 | 1451 |     | R99   | Correction to Default Radio Configuration Timers                                    |   | 3.10.0  | 3.11.0 |
| R2-021358 | agreed  | 25.331 | 1452 |     | Rel-4 | Correction to Default Radio Configuration<br>Timers                                 |   | 4.4.0   | 4.5.0  |
| R2-021359 | agreed  | 25.331 | 1453 |     | Rel-5 | Correction to Default Radio Configuration Timers                                    | A | 5.0.0   | 5.1.0  |
| R2-021360 | agreed  | 25.331 | 1454 |     | R99   | Clarification to number of L3 filters   | F | 3.10.0  | 3.11.0 |
| R2-021361 | agreed  | 25.331 | 1455 |     | Rel-4 | Clarification to number of L3 filters   | А | 4.4.0   | 4.5.0  |
| R2-021362 | agreed  | 25.331 | 1456 |     | Rel-5 | Clarification to number of L3 filters   | А | 5.0.0   | 5.1.0  |
| R2-021474 | agreed  | 25.331 | 1457 | 1   | R99   | Correction to 3G to 2G Inter-RAT<br>handover for multi-domain RABs                  |   | 3.10.0  | 3.11.0 |
| R2-021475 | agreed  | 25.331 | 1458 | 1   | Rel-4 | Correction to 3G to 2G Inter-RAT<br>handover for multi-domain RABs                  |   | 4.4.0   | 4.5.0  |
| R2-021476 | agreed  | 25.331 | 1459 | 1   | Rel-5 | Correction to 3G to 2G Inter-RAT handover for multi-domain RABs                     |   | 5.0.0   | 5.1.0  |
| R2-021369 | agreed  | 25.331 | 1460 |     | R99   | DCH quality target F 3.   |   | 3.10.0  | 3.11.0 |
| R2-021370 | agreed  | 25.331 | 1461 |     | Rel-4 | DCH quality target  | А | 4.4.0   | 4.5.0  |
| R2-021371 | agreed  | 25.331 | 1462 |     | Rel-5 | DCH quality target  | А | 5.0.0   | 5.1.0  |

|                               | CHANGE REQUEST   | CR-Form-v5  |
|-------------------------------|--|---|
| ж                             | 25.331 CR 1445 <b># rev</b> - <sup># C</sup>   | urrent version: <b>3.10.0</b> <sup>#</sup>  |
| For <u>HELP</u> on us         | ing this form, see bottom of this page or look at the p  | pop-up text over the X symbols.   |
| Proposed change a             | ffects: ೫ (U)SIM ME/UE X Radio Acce  | ss Network X Core Network   |
| Title: भ                      | Layer 3 retransmission of SIGNALLING CONNECT   | ION RELEASE INDICATION  |
| Source: ೫                     | TSG-RAN WG2  |   |
| Work item code: #             | TEI  | <b>Date:</b>  |
|                               | -  | Release: #R99Use one of the following releases:<br>2(GSM Phase 2)R96(Release 1996)R97(Release 1997)R98(Release 1998)R99(Release 1999)REL-4(Release 4)REL-5(Release 5) |
| Reason for change:            | * # The SIGNALLING CONNECTION RELEASE IN<br>introduced to avoid a deadlock in case the NAS<br>the signalling connection with a particular CN d<br>result of a RLC re-establishment or inter-RAT o<br>avoided.  | S on the UE side decides to abort<br>lomain. If the message is lost as a  |
| Summary of change             | <ul> <li>It is proposed to handle the SIGNALLING CON<br/>INDICATION message similarly to the INITIAL<br/>i.e. it is proposed to have Layer 3 retransmission<br/>establishment or inter-RAT change</li> <li>Isolated Impact Change Analysis.</li> <li>This change clarifies the SIGNALLING CONNE<br/>procedure.</li> <li>It would not affect implementations behaving like<br/>affect implementations supporting the corrected</li> </ul>   | DIRECT TRANSFER message,<br>on in case of RLC re-<br>ECTION RELEASE INDICATION<br>ke indicated in the CR, it would  |
| Consequences if not approved: | <ul> <li>If NAS on the UE side decides to abort the sign be able to release RRC/RR until it is powered of the sign be able to release RRC/RR until it it is powered of the sign be able to release RRC/RR until it it it it it it it is powered be able to release RRC/RR until it it</li></ul> | nalling connection, the UE may not  |
| Clauses affected:             | # 8.1.14.2, 8.1.14.2a (new)  |   |
| Other specs                   |  | .4.0, CR 1446<br>.0.0, CR 1447  |
| affected:                     | Test specifications<br>O&M Specifications  | ,   |
| Other comments:               | ж  |   |

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at: <u>http://www.3gpp.org/3G\_Specs/CRs.htm</u>. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked # contain pop-up help information about the field that they are closest to.
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- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

[...]

### 8.1.14 Signalling connection release indication procedure

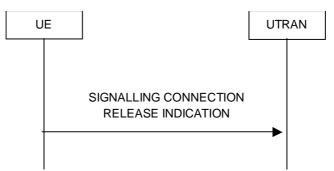


Figure 8.1.14-1: Signalling connection release indication procedure, normal case

#### 8.1.14.1 General

The signalling connection release indication procedure is used by the UE to indicate to the UTRAN that one of its signalling connections has been released. The procedure may in turn initiate the RRC connection release procedure.

#### 8.1.14.2 Initiation

The UE shall, on receiving a request to release (abort) the signalling connection from upper layers for a specific CN domain:

- 1> if a signalling connection in the variable ESTABLISHED\_SIGNALLING\_CONNECTIONS for the specific CN domain identified with the IE "CN domain identity" exists:
  - 2> initiate the signalling connection release indication procedure.
- 1> otherwise:
  - 2> abort any ongoing establishment of signalling connection for that specific CN domain as specified in 8.1.3.5a.

Upon initiation of the signalling connection release indication procedure in CELL\_PCH or URA\_PCH state, the UE shall:

- 1> perform a cell update procedure, according to subclause 8.3.1, using the cause "uplink data transmission";
- 1> when the cell update procedure completed successfully:
  - 2> continue with the signalling connection release indication procedure as below.

The UE shall:

- 1> set the IE "CN Domain Identity" to the value indicated by the upper layers. The value of the IE indicates the CN domain whose associated signalling connection the upper layers are indicating to be released;
- 1> remove the signalling connection with the identity indicated by upper layers from the variable ESTABLISHED\_SIGNALLING\_CONNECTIONS;
- 1> transmit a SIGNALLING CONNECTION RELEASE INDICATION message on DCCH using AM RLC.

When the <u>successful delivery of the SIGNALLING CONNECTION RELEASE INDICATION message</u> has been <u>confirmed by RLC</u> submitted to lower layers for transmission the procedure ends.

#### 8.1.14.2a RLC re-establishment or inter-RAT change

If a re-establishment of RLC on signalling radio bearer RB2 occurs before the successful delivery of the SIGNALLING CONNECTION RELEASE INDICATION message has been confirmed by RLC, the UE shall:

1> retransmit the SIGNALLING CONNECTION RELEASE INDICATION message on the uplink DCCH using <u>AM RLC on signalling radio bearer RB2.</u>

If an Inter-RAT handover from UTRAN procedure occurs before the successful delivery of the SIGNALLING CONNECTION RELEASE INDICATION message has been confirmed by RLC, the UE shall:

1> abort the signalling connection while in the new RAT.

# 8.1.14.3 Reception of SIGNALLING CONNECTION RELEASE INDICATION by the UTRAN

Upon reception of a SIGNALLING CONNECTION RELEASE INDICATION message, the UTRAN requests the release of the signalling connection from upper layers. Upper layers may then initiate the release of the signalling connection.

[...]

### R2-021352

|                               | CHANGE REQUEST   | CR-Form-v5   |  |  |  |  |  |  |  |  |
|-------------------------------|--|--|--|--|--|--|--|--|--|--|
| ж                             | 25.331 CR 1446 <b># rev</b> - <sup># C</sup>   | current version: <b>4.4.0</b> <sup>#</sup>   |  |  |  |  |  |  |  |  |
| For <u>HELP</u> on us         | For <b>HELP</b> on using this form, see bottom of this page or look at the pop-up text over the <b>#</b> symbols.  |  |  |  |  |  |  |  |  |  |
| Proposed change a             | ffects: ೫ (U)SIM ME/UE X Radio Acce  | ess Network X Core Network   |  |  |  |  |  |  |  |  |
| Title: ೫                      | Layer 3 retransmission of SIGNALLING CONNECT   | ION RELEASE INDICATION   |  |  |  |  |  |  |  |  |
| Source: अ                     | TSG-RAN WG2  |  |  |  |  |  |  |  |  |  |
| Work item code: ೫             | TEI  | <b>Date:</b>   |  |  |  |  |  |  |  |  |
|                               | <ul> <li>A F</li> <li>Use <u>one</u> of the following categories:</li> <li>F (correction)</li> <li>A (corresponds to a correction in an earlier release)</li> <li>B (addition of feature),</li> <li>C (functional modification of feature)</li> <li>D (editorial modification)</li> <li>Detailed explanations of the above categories can be found in 3GPP <u>TR 21.900</u>.</li> </ul>  | Release: # REL-4<br>Use <u>one</u> of the following releases:<br>2 (GSM Phase 2)<br>R96 (Release 1996)<br>R97 (Release 1997)<br>R98 (Release 1998)<br>R99 (Release 1999)<br>REL-4 (Release 4)<br>REL-5 (Release 5) |  |  |  |  |  |  |  |  |
| Reason for change:            | * The SIGNALLING CONNECTION RELEASE In<br>introduced to avoid a deadlock in case the NAS<br>the signalling connection with a particular CN of<br>result of a RLC re-establishment or inter-RAT<br>avoided.   | S on the UE side decides to abort domain. If the message is lost as a  |  |  |  |  |  |  |  |  |
| Summary of change             | <ul> <li>It is proposed to handle the SIGNALLING CON<br/>INDICATION message similarly to the INITIAL<br/>i.e. it is proposed to have Layer 3 retransmission<br/>establishment or inter-RAT change</li> <li>Isolated Impact Change Analysis.</li> <li>This change clarifies the SIGNALLING CONNE<br/>procedure.</li> <li>It would not affect implementations behaving line<br/>affect implementations supporting the corrected</li> </ul> | DIRECT TRANSFER message,<br>on in case of RLC re-<br>ECTION RELEASE INDICATION<br>ke indicated in the CR, it would   |  |  |  |  |  |  |  |  |
| Consequences if not approved: | # If NAS on the UE side decides to abort the sign<br>be able to release RRC/RR until it is powered of  |  |  |  |  |  |  |  |  |  |
| Clauses affected:             | # 8.1.14.2, 8.1.14.2a (new)  |  |  |  |  |  |  |  |  |  |
| Other specs                   |  | .10.0, CR 1445<br>.0.0, CR 1447  |  |  |  |  |  |  |  |  |
| affected:                     | Test specifications<br>O&M Specifications  |  |  |  |  |  |  |  |  |  |
| Other comments:               | X  |  |  |  |  |  |  |  |  |  |

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[...]

### 8.1.14 Signalling connection release indication procedure

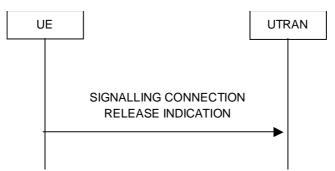


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When the <u>successful delivery of the SIGNALLING CONNECTION RELEASE INDICATION message</u> has been <u>confirmed by RLC</u> submitted to lower layers for transmission the procedure ends.

#### 8.1.14.2a RLC re-establishment or inter-RAT change

If a re-establishment of RLC on signalling radio bearer RB2 occurs before the successful delivery of the SIGNALLING CONNECTION RELEASE INDICATION message has been confirmed by RLC, the UE shall:

1> retransmit the SIGNALLING CONNECTION RELEASE INDICATION message on the uplink DCCH using <u>AM RLC on signalling radio bearer RB2</u>.

If an Inter-RAT handover from UTRAN procedure occurs before the successful delivery of the SIGNALLING CONNECTION RELEASE INDICATION message has been confirmed by RLC, the UE shall:

1> abort the signalling connection while in the new RAT.

# 8.1.14.3 Reception of SIGNALLING CONNECTION RELEASE INDICATION by the UTRAN

Upon reception of a SIGNALLING CONNECTION RELEASE INDICATION message, the UTRAN requests the release of the signalling connection from upper layers. Upper layers may then initiate the release of the signalling connection.

[...]

### R2-021353

|                               |                            |  | СНА  | NGE R   | EQ   | UES  | ST                             |  |  |   | CR-Form-v5            |
|-------------------------------|----------------------------|--|--|---|--|--|--------------------------------|--|--|---|-----------------------|
| ж                             | 25.                        | <mark>331</mark>   | CR 1447  | <mark>ж г</mark>  | ev   | <b>-</b> 9                                 | ж (                            | Current vers   | sion:  | 5.0.0   | ж                     |
| For <u>HELP</u> on us         | sing th                    | nis for  | rm, see bottor   | n of this pag   | ge or l  | look at                                    | t the                          | pop-up text  | over   | the X syr                                     | mbols.                |
| Proposed change a             | affects                    | s: #   | (U)SIM   | ME/UE   | X  | Radio                                      | Acc                            | ess Networ   | k <mark>X</mark>                                   | Core Ne                                       | etwork                |
| Title: ೫                      | Laye                       | e <mark>r 3 re</mark>  | etransmission  | of SIGNAL   | LING   | CONN                                       | NEC                            | TION RELE  | ASE  | INDICATI                                      | ON                    |
| Source: ೫                     | TSG                        | -RAN   | WG2  |   |  |  |                                |  |  |   |                       |
| Work item code: #             | TEI                        |  |  |   |  |  |                                | Date: ೫  | 13   | May 2002                                      | 2                     |
| Category: Ж                   | F<br>A<br>E<br>C<br>Detail | (corr<br>(corr<br>(ada<br>(fund<br>(fund<br>(edit<br>ed exp  | the following ca<br>rection)<br>responds to a d<br>lition of feature<br>ctional modificat<br>torial modificati<br>blanations of th<br>3GPP <u>TR 21.9</u>  | correction in a<br>),<br>ation of featur<br>on)<br>e above cate                       | re)  |  |                                | Release: #<br>Use <u>one</u> of<br>2<br>R96<br>R97<br>R98<br>R99<br>REL-4<br>REL-5 | the fc<br>(GSN<br>(Rele<br>(Rele<br>(Rele<br>(Rele |   |                       |
| Reason for change             | e: #                       | introo<br>the s  | SIGNALLING<br>duced to avoi<br>ignalling conr<br>it of a RLC re-<br>ded.   | d a deadloc<br>nection with   | k in c<br>a par  | ase the<br>ticular                         | e NA<br>CN                     | S on the UI<br>domain. If t  | E side<br>he mo                                    | e decides<br>essage is                        | to abort<br>lost as a |
| Summary of chang              | je: #                      | INDIC<br>i.e. it<br>estat<br>Isola<br>This<br>proce<br>It wo | coroposed to h<br>CATION mes<br>is proposed to<br>blishment or in<br>ated Impact (<br>change clarif<br>edure.<br>uld not affect  | sage simila<br>to have Lay<br>hter-RAT ch<br>Change Ana<br>tes the SIGN<br>implementa | rly to f<br>er 3 ro<br>ange<br>alysis<br>NALLI<br>ations | the INI<br>etransi<br>S.<br>NG CO<br>behav | ITIAL<br>miss<br>ONN<br>/ing l | DIRECT T<br>ion in case<br>IECTION RI  | RAN<br>of RL                                       | SFER me<br>.C re-<br>.SE INDIC<br>he CR, it v | ATION                 |
| Consequences if not approved: | Ħ                          | If NA  | t implementa<br>S on the UE<br>ble to release  | side decide:  | s to al  | bort th                                    | <mark>e sig</mark>             | gnalling con   |  |   | may not               |
| Clauses affected:             | ж                          | 8.1.1  | 4.2, 8.1.14.2  | a (new)   |  |  |                                |  |  |   |                       |
| Other specs<br>affected:      | ж                          | Τe   | ther core specient<br>ther specifications<br>and Specifications with the specification of the speci | ons   | ж  |  |                                | 3.10.0, CR<br>4.4.0, CR 1  |  |   |                       |
| Other comments:               | ж                          |  |  |   |  |  |                                |  |  |   |                       |

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[...]

### 8.1.14 Signalling connection release indication procedure

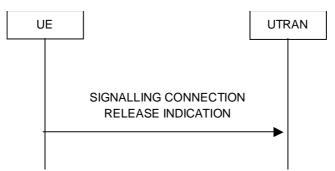


Figure 8.1.14-1: Signalling connection release indication procedure, normal case

#### 8.1.14.1 General

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When the <u>successful delivery of the SIGNALLING CONNECTION RELEASE INDICATION message</u> has been <u>confirmed by RLC</u> submitted to lower layers for transmission the procedure ends.

#### 8.1.14.2a RLC re-establishment or inter-RAT change

If a re-establishment of RLC on signalling radio bearer RB2 occurs before the successful delivery of the SIGNALLING CONNECTION RELEASE INDICATION message has been confirmed by RLC, the UE shall:

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1> abort the signalling connection while in the new RAT.

# 8.1.14.3 Reception of SIGNALLING CONNECTION RELEASE INDICATION by the UTRAN

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[...]

# R2-021354

|                         | CHANGE REQUEST  |  |  |  |  |  |  |  |
|-------------------------|---|--|--|--|--|--|--|--|
|                         |   |  |  |  |  |  |  |  |
| <sup>#</sup> 2          | 5.331 CR 1448 <b># rev</b> - <sup># Current version: 3.10.0 <sup>#</sup></sup>  |  |  |  |  |  |  |  |
| For <u>HELP</u> on usin | g this form, see bottom of this page or look at the pop-up text over the $#$ symbols.   |  |  |  |  |  |  |  |
| Proposed change affe    | Proposed change affects: # (U)SIM ME/UE X Radio Access Network X Core Network   |  |  |  |  |  |  |  |
| Title: # A              | lignment of tabular and ASN.1 for UTRAN GPS timing of cell frames resolution  |  |  |  |  |  |  |  |
| Source: ೫ T             | SG-RAN WG2  |  |  |  |  |  |  |  |
| Work item code: % ा     | El Date: 육 13 May 2002  |  |  |  |  |  |  |  |
| De                      | Release: % R99e one of the following categories:Use one of the following releases:F (correction)2(GSM Phase 2)A (corresponds to a correction in an earlier release)R96(Release 1996)B (addition of feature),R97(Release 1997)C (functional modification of feature)R98(Release 1998)D (editorial modification)R99(Release 1999)tailed explanations of the above categories canREL-4(Release 4)found in 3GPP TR 21.900.REL-5(Release 5)  |  |  |  |  |  |  |  |
| Reason for change:      | 1. In order to unambiguously span an entire week, the "UTRAN GPS timing of cel<br>frames" component of IE "UE positioning GPS reference time" (10.3.7.96) must<br>have an integer range of (02322431999999) and a resolution of 1 chip.   |  |  |  |  |  |  |  |
|                         | Note that:<br>(2322432000000 chips / 3840000 chips per sec) = 604800 sec = 1 week<br>This change enables the meaning of the "UTRAN GPS timing of cell frames"<br>component to be consistently interpreted across the following portions of the<br>specification:<br>- tabular description of 10.3.7.88<br>- tabular description of 10.3.7.96<br>- ASN.1 description of "UTRAN-GPSReferenceTime"<br>2. [From Tdoc 1261]<br>During RAN #15, from Tdoc RP-020074, CR-1342-R3 was approved for R99, and   |  |  |  |  |  |  |  |
|                         | CR-1343 was approved for REL-4.<br>One of the purposes of these CRs was to remove the procedural significance of<br>the IE "UE positioning GPS reference cell info" (10.3.7.95a). These CRs removed<br>statements explaining how this IE would be used to help direct the UE in making<br>"UE GPS timing of cell frames" measurements.<br>Since the significance (or usefulness) of this IE is now removed from the<br>specification, it makes sense to remove the remaining associated references to |  |  |  |  |  |  |  |
|                         | this IE.<br>3. [From Tdoc 1155]<br>During RAN #14, from Tdoc RP-010941, CR-1185-R4 was approved for R99, and<br>CR-1186 was approved for REL-4. These CRs corrected the tabular description<br>of the type and reference column for the "Whole GPS Chips" component of the IE<br>"UE positioning GPS measured results" (10.3.7.93). The specified range was   |  |  |  |  |  |  |  |

|                                    | adjusted from (01023) to the correct range of (01022). Unfortunately, the range of the corresponding ASN.1 element was not adjusted at that time. This CR simply adjusts the "wholeGPS-Chips" component of the "GPS-MeasurementParam" ASN.1 information element to indicate the correct range of (01022). Note that the representation of this component remains to be a 10-bit integer.  |
|------------------------------------|---|
| Summary of change: ೫               | 1. The semantics description for the "UTRAN GPS timing of cell frames" component of IE "UE positioning GPS reference time" (10.3.7.96) is changed to indicate 1 chip resolution instead of 1/16 chip resolution.  |
|                                    | <ol> <li>[From Tdoc 1261]</li> <li>All references to the unused IE "UE positioning GPS reference cell info"<br/>(10.3.7.95a) are removed.</li> </ol>  |
|                                    | 3. [From Tdoc 1155]<br>The "wholeGPS-Chips" component of the "GPS-MeasurementParam" ASN.1<br>information element is adjusted to indicate the correct range of (01022).  |
|                                    | Isolated Impact Change Analysis.  |
|                                    | 1. This change clarifies the resolution of the "UTRAN GPS timing of cell frames" component that may be used in providing UTRAN-GPS timing assistance to the UE.   |
|                                    | 2. [From Tdoc 1261]<br>This change removes portions of the specification associated with the unused<br>(and purposeless) IE "UE positioning GPS reference cell info" (10.3.7.95a).  |
|                                    | 3. [From Tdoc 1155]<br>This change corrects the range of the "wholeGPS-Chips" component of the<br>"GPS-MeasurementParam" ASN.1 element.   |
|                                    | It would not affect implementations behaving like indicated in the CR, it would<br>affect implementations supporting the corrected functionality otherwise.   |
| Consequences if %<br>not approved: | 1. The tabular description of the "UTRAN GPS timing of cell frames" component<br>of IE "UE positioning GPS reference time" (10.3.7.96) will conflict with the<br>description of the same component of IE "UE positioning GPS acquisition<br>assistance" (10.3.7.88) and the definition of the associated ASN.1 element<br>"UTRAN-GPSReferenceTime". Consequently, it will be unclear how the UE is to<br>interpret the intended resolution of this parameter. If a UE incorrectly interprets<br>the resolution of this parameter, the search for GPS satellites may fail and the<br>time-stamping value assigned to GPS measurements may cause gross errors in<br>the resulting position computation. |
|                                    | 2. [From Tdoc 1261]<br>Useless references and ASN.1 code elements associated with this IE "UE<br>positioning GPS reference cell info" will remain in the specification, possibly<br>causing confusion with respect to the meaning of the term "reference cell".   |
|                                    | <ul> <li>3. [From Tdoc 1155]</li> <li>Since GPS codes are each composed of 1023 chips, if this range is not corrected to indicate (01022), then it will be unclear how the UTRAN is to interpret the value "wholeGPS-Chips"=1023. Two interpretations are possible:</li> <li>a) "1023" wraps around to equal "0"; or, b) "1023" extends 1023 chips beyond "0". If the UE and UTRAN do not share the same common interpretation of this value, then it is possible that such a GPS measurement could cause a large error in the final position computation.</li> </ul>   |

Clauses affected: # 8.6.7.19.6, 10.3.7.90, 10.3.7.95a, 10.3.7.96, 11.3, 13.4.28a

| Other comments: | ж |   |   |  |
|-----------------|---|---|---|--|
| affected:       |   | Test specifications<br>O&M Specifications |   |  |
| Other specs     | ж | Other core specifications                 | ж | 25.331 v4.4.0, CR 1449<br>25.331 v5.0.0, CR 1450 |

#### How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at: <u>http://www.3gpp.org/3G\_Specs/CRs.htm</u>. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked # contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <u>ftp://ftp.3gpp.org/specs/</u> For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

# \*\*\* NEXT MODIFIED SECTION \*\*\*

#### 8.6.7.19.6 <u>VoidUE positioning GPS reference cell info</u>

If IE "UE positioning GPS reference cell info" is received in the MEASUREMENT CONTROL message, the UE shall update the variable UE\_POSITIONING\_GPS\_DATA accordingly. The UE shall:

1> store received reference cell information in the IE "UE positioning GPS reference cell info" in the variable UE\_POSITIONING\_GPS\_DATA, overwriting any existing information.

## \*\*\* NEXT REFERENCE SECTION \*\*\*

#### 10.3.7.88 UE positioning GPS acquisition assistance

This IE contains parameters that enable fast acquisition of the GPS signals in UE-assisted GPS positioning.

| Information Element/Group<br>name      | Need | Multi                     | Type and<br>Reference  | Semantics description  |
|--|------|---------------------------|--|--|
| GPS TOW msec                           | MP   |                           | Integer(06.<br>048*10 <sup>8</sup> -1)                         | GPS Time of Week in<br>milliseconds rounded down to<br>the nearest millisecond unit. |
| UTRAN GPS reference time               | OP   |                           |  |  |
| >UTRAN GPS timing of cell<br>frames    | MP   |                           | Integer(0<br>2322431999<br>999)                                | GPS timing of cell frames in steps of 1 chip.  |
| >CHOICE mode                           | OP   |                           |  |  |
| >>FDD                                  |      |                           |  |  |
| >>>Primary CPICH Info                  | MP   |                           | Primary<br>CPICH Info<br>10.3.6.60                             | Identifies the reference cell for<br>the GPS TOW-SFN<br>relationship                 |
| >>TDD                                  |      |                           |  |  |
| >>>cell parameters id                  | MP   |                           | Cell<br>parameters<br>id 10.3.6.9                              | Identifies the reference cell for<br>the GPS TOW-SFN<br>relationship                 |
| >SFN                                   | MP   |                           | Integer(040<br>95)   | The SFN which the UTRAN<br>GPS timing of cell frames time<br>stamps.                 |
| Satellite information                  | MP   | 1 to<br><maxsat></maxsat> |  |  |
| >SatID                                 | MP   |                           | Integer<br>(063)   |  |
| >Doppler (0 <sup>th</sup> order term)  | MP   |                           | Real(-<br>51205117.5<br>by step of<br>2.5)                     | Hz   |
| >Extra Doppler                         | OP   |                           | ,  |  |
| >>Doppler (1 <sup>st</sup> order term) | MP   |                           | Real (-<br>0.9660.483<br>by step of<br>0.023)                  | Scaling factor 1/42  |
| >>Doppler Uncertainty                  | MP   |                           | Enumerated<br>(12.5,25,50,<br>100,200)                         | Hz.<br>Three spare values are<br>needed.   |
| >Code Phase                            | MP   |                           | Integer(010<br>22)   | Chips, specifies the centre of the search window                                     |
| >Integer Code Phase                    | MP   |                           | Integer(019  | 1023 chip segments   |
| >GPS Bit number                        | MP   |                           | Integer(03)  | Specifies GPS bit number (20<br>1023 chip segments)                                  |
| >Code Phase Search Window              | MP   |                           | Integer(1023<br>,1,2,3,4,6,8,1<br>2,16,24,32,4<br>8,64,96,128, | Specifies the width of the search window.  |

| Information Element/Group<br>name | Need | Multi | Type and<br>Reference                 | Semantics description |
|-----------------------------------|------|-------|---------------------------------------|-----------------------|
|                                   |      |       | 192)                                  |                       |
| >Azimuth and Elevation            | OP   |       |                                       |                       |
| >>Azimuth                         | MP   |       | Real(0348.<br>75 by step of<br>11.25) | Degrees               |
| >>Elevation                       | MP   |       | Real(078.7<br>5 by step of<br>11.25)  | Degrees               |

# \*\*\* NEXT MODIFIED SECTION \*\*\*

#### 10.3.7.90 UE positioning GPS assistance data

This IE contains GPS assistance data.

| Information Element/Group<br>name           | Need | Multi | Type and<br>Reference  | Semantics description                  |
|---|------|-------|--|--|
| UE positioning GPS reference<br>time        | OP   |       | UE<br>positioning<br>GPS<br>reference<br>time<br>10.3.7.96                       |  |
| UE positioning GPS reference<br>UE position | OP   |       | Ellipsoid<br>point with<br>altitude and<br>uncertainty<br>ellipsoid<br>10.3.8.4c | A priori knowledge of UE 3-D position. |
| UE positioning GPS DGPS corrections         | OP   |       | UE<br>positioning<br>GPS DGPS<br>corrections<br>10.3.7.91                        |  |
| UE positioning GPS navigation model         | OP   |       | UE<br>positioning<br>GPS<br>navigation<br>model<br>10.3.7.94                     |  |
| UE positioning GPS ionospheric model        | OP   |       | UE<br>positioning<br>GPS<br>ionospheric<br>model<br>10.3.7.92                    |  |
| UE positioning GPS UTC model                | OP   |       | UE<br>positioning<br>GPS UTC<br>model<br>10.3.7.97                               |  |
| UE positioning GPS almanac                  | OP   |       | UE<br>positioning<br>GPS<br>almanac<br>10.3.7.89                                 |  |
| UE positioning GPS acquisition assistance   | OP   |       | UE<br>positioning<br>GPS   |  |

| Information Element/Group<br>name         | Need          | Multi | Type and<br>Reference  | Semantics description   |
|---|---------------|-------|--|---|
|   |               |       | acquisition<br>assistance<br>10.3.7.88                           |   |
| UE positioning GPS real-time integrity    | OP            |       | UE<br>positioning<br>GPS real-<br>time integrity<br>10.3.7.95    |   |
| UE positioning GPS reference<br>coll info | <del>OP</del> |       | UE<br>positioning<br>GPS<br>reference<br>cell info<br>10.3.7.95a | Identifies reference cell<br>associated with request for UE<br>GPS timing of cell frames<br>measurement |

# \*\*\* NEXT MODIFIED SECTION \*\*\*

### 10.3.7.95a VoidUE positioning GPS reference cell info

| Information Element/Group<br>name | Need | <del>Multi</del> | Type and<br>Reference              | Semantics description |
|-----------------------------------|------|------------------|------------------------------------|-----------------------|
| CHOICE mode                       | MP   |                  |                                    |                       |
| >FDD                              |      |                  |                                    |                       |
| >>Primary CPICH info              | MP   |                  | Primary<br>CPICH info<br>10.3.6.60 |                       |
| <del>&gt;TDD</del>                |      |                  |                                    |                       |
| >>cell parameters ID              | MP   |                  | Cell<br>parameters<br>id 10.3.6.9  |                       |

# \*\*\* NEXT MODIFIED SECTION \*\*\*

### 10.3.7.96 UE positioning GPS reference time

| Information Element/Group<br>name   | Need | Multi | Type and<br>Reference                  | Semantics description   |
|-------------------------------------|------|-------|--|---|
| GPS Week                            | MP   |       | Integer(010<br>23)                     |   |
| GPS TOW msec                        | MP   |       | Integer(06.<br>048*10 <sup>8</sup> -1) | GPS Time of Week in milliseconds (rounded down to the nearest millisecond unit).                |
| UTRAN GPS reference time            | OP   |       |  |   |
| >UTRAN GPS timing of cell<br>frames | MP   |       | Integer(0<br>2322431999<br>999)        | UTRAN GPS timing of cell<br>frames in steps of 1 <mark>/16<sup>th</sup> chip<del>s</del></mark> |
| >CHOICE mode                        | OP   |       |  |   |
| >>FDD                               |      |       |  |   |
| >>>Primary CPICH Info               | MP   |       | Primary<br>CPICH Info<br>10.3.6.60     | Identifies the reference cell for<br>the GPS TOW-SFN<br>relationship                            |
| >>TDD                               |      |       |  |   |
| >>>cell parameters id               | MP   |       | Cell<br>parameters<br>id 10.3.6.9      | Identifies the reference cell for<br>the GPS TOW-SFN<br>relationship                            |
| >SFN                                | MP   |       | Integer(040                            | The SFN which the UTRAN   |

| Information Element/Group<br>name | Need | Multi                     | Type and<br>Reference  | Semantics description  |
|-----------------------------------|------|---------------------------|--|--|
|                                   |      |                           | 95)  | GPS timing of cell frames time stamps.   |
| SFN-TOW Uncertainty               | OP   |                           | Enumerated<br>(lessThan10,<br>moreThan10<br>)                                      | This field indicates the<br>uncertainty of the relation GPS<br>TOW/SFN. lessThan10 means<br>the relation is accurate to at<br>least 10 ms. |
| T <sub>UTRAN-GPS</sub> drift rate | OP   |                           | Integer (0, 1,<br>2, 5, 10, 15,<br>25, 50, -1, -<br>2, -5, -10, -<br>15, -25, -50) | in 1/256 chips per sec.  |
| GPS TOW Assist                    | OP   | 1 to<br><maxsat></maxsat> |  |  |
| >SatID                            | MP   |                           | Enumerated(<br>063)  |  |
| >TLM Message                      | MP   |                           | Bit string(14)   |  |
| >TLM Reserved                     | MP   |                           | Bit string(2)  |  |
| >Alert                            | MP   |                           | Boolean  |  |
| >Anti-Spoof                       | MP   |                           | Boolean  |  |

# \*\*\* NEXT REFERENCE SECTION \*\*\*

| <br>***************************************   |
|---|
|   |
| <br>MEASUREMENT INFORMATION ELEMENTS (10.3.7) |
|   |
| <br>******                                    |

# \*\*\* NEXT MODIFIED SECTION \*\*\*

| UE-Positioning-GPS-AcquisitionAssi<br>qps-ReferenceTime | stance ::= SE<br>INTEGER (060 | QUENCE {                              |              |             |
|---|-------------------------------|---------------------------------------|--------------|-------------|
| utran-GPSReferenceTime                                  |                               | ReferenceTime                         | OPTIONAL,    |             |
| satelliteInformationList                                |                               | onSatInfoList                         | 0111011111,  |             |
| }   | 1                             |                                       |              |             |
|   |                               |                                       |              |             |
| UE-Positioning-GPS-AdditionalAssis                      | tanceDataRequest              | : := SEQUENCE                         | {            |             |
| almanacRequest  | BOOLEAN,                      |                                       |              |             |
| utcModelRequest   | BOOLEAN,                      |                                       |              |             |
| ionosphericModelRequest                                 | BOOLEAN,                      |                                       |              |             |
| navigationModelRequest                                  | BOOLEAN,                      |                                       |              |             |
| dgpsCorrectionsRequest                                  | BOOLEAN,                      |                                       |              |             |
| referenceLocationRequest<br>referenceTimeRequest        | BOOLEAN,<br>BOOLEAN,          |                                       |              |             |
| aquisitionAssistanceRequest                             | BOOLEAN,                      |                                       |              |             |
| realTimeIntegrityRequest                                | BOOLEAN,                      |                                       |              |             |
| navModelAddDataRequest                                  |                               | ning-GPS-NavModelAd                   | dDataReq     | OPTIONAL    |
| }   | OH TOBICIC                    | aning GID NavModelAd                  | abacanceg    | OTIIONAL    |
| J   |                               |                                       |              |             |
| UE-Positioning-GPS-Almanac ::=                          | SE                            | QUENCE {                              |              |             |
| wn-a  | BIT STRING                    | (SIZE (8)),                           |              |             |
| almanacSatInfoList                                      | AlmanacSat                    | InfoList,                             |              |             |
| sv-GlobalHealth   | BIT STRING                    | G (SIZE (364))                        | OPTIO        | NAL         |
| }   |                               |                                       |              |             |
|   |                               | · · · · · · · · · · · · · · · · · · · |              |             |
| UE-Positioning-GPS-AssistanceData                       |                               | QUENCE {                              | G. D. (      |             |
| ue-positioning-GPS-ReferenceTi<br>OPTIONAL,             |                               | UE-Positioning-GP                     |              |             |
| ue-positioning-GPS-ReferenceLo                          |                               | ReferenceLocation                     |              | OPTIONAL,   |
| ue-positioning-GPS-DGPS-Correc<br>OPTIONAL,             |                               | UE-Positioning-GP                     |              |             |
| ue-positioning-GPS-NavigationM<br>OPTIONAL,             | odel                          | UE-Positioning-GP                     | S-Navigation | Model       |
| ue-positioning-GPS-Ionospheric<br>OPTIONAL,             | Model                         | UE-Positioning-GP                     | S-Ionospheri | cModel      |
| ue-positioning-GPS-UTC-Model<br>OPTIONAL,               |                               | UE-Positioning-GP                     | S-UTC-Model  |             |
| ue-positioning-GPS-Almanac<br>OPTIONAL,                 |                               | UE-Positioning-GP                     | S-Almanac    |             |
| ue-positioning-GPS-Acquisition<br>OPTIONAL,             | Assistance                    | UE-Positioning-GP                     | S-Acquisitio | nAssistance |
| ue-positioning-GPS-Real-timeIn                          | tegrity                       | BadSatList                            |              | OPTIONAL,   |
| dummy is not used in this v                             | ersion of specif              | ication and it shou                   | <u>ld</u>    |             |
| be ignored.   |                               |                                       |              |             |
| ue-positioning-GPS-referenceCe                          | <del>llInfo</del> dummy       | UE-Positionin                         | g-GPS-Refere | nceCellInfo |
| OPTIONAL  |                               |                                       |              |             |
| }   |                               |                                       |              |             |
| UE-Positioning-GPS-DGPS-Correction                      | g ::= SFOUEN                  | ICF (                                 |              |             |
| qps-TOW   |                               | 0604799),                             |              |             |
| statusHealth  |                               | tionStatus,                           |              |             |
| dqps-CorrectionSatInfoList                              |                               | ectionSatInfoList                     |              |             |
| }   |                               |                                       |              |             |
| -   | XT MODIF                      | TIED SECTIO                           | N ***        |             |
| dDd Maanumant Daviers                                   |                               |                                       |              |             |
| GPS-MeasurementParam ::=                                | SEQUENCE {                    |                                       |              |             |

| GPS-MeasurementParam ···= | SEQUENCE {                     |
|---------------------------|--------------------------------|
| satelliteID               | INTEGER (063),                 |
| c-N0                      | INTEGER (063),                 |
| doppler                   | INTEGER (-3276832768),         |
| wholeGPS-Chips            | INTEGER (01022 <del>3</del> ), |
| fractionalGPS-Chips       | INTEGER $(01023)$ ,            |
|                           |                                |

```
multipathIndicator
    multipathIndicator
pseudorangeRMS-Error
}
```

MultipathIndicator, INTEGER (0..63)

GPS-MeasurementParamList ::= SEQUENCE (SIZE (1..maxSat)) OF GPS-MeasurementParam

## \*\*\* NEXT MODIFIED SECTION \*\*\*

# 13.4.28a UE\_POSITIONING\_GPS\_DATA

| Information Element/Group<br>name      | Need | Multi                     | Type and reference     | Semantics description        |
|--|------|---------------------------|------------------------|------------------------------|
| GPS Data ciphering info                | OP   |                           | UE                     |                              |
|  | 0.   |                           | positioning            |                              |
|  |      |                           | Ciphering              |                              |
|  |      |                           | info                   |                              |
|  |      |                           | 10.3.7.86              |                              |
| GPS Deciphering Keys                   | OP   |                           |                        |                              |
| >Current deciphering key               | MP   |                           | Bit string(56)         |                              |
| >Next deciphering key                  | MP   |                           | Bit string(56)         |                              |
| UE positioning GPS reference           | OP   |                           | UE                     |                              |
| time                                   |      |                           | positioning            |                              |
|  |      |                           | GPS                    |                              |
|  |      |                           | reference              |                              |
|  |      |                           | time                   |                              |
|  |      |                           | 10.3.7.96              |                              |
| UE positioning GPS reference           | OP   |                           | Ellipsoid              | A priori knowledge of UE 3-D |
| UE position                            |      |                           | point with             | position.                    |
|  |      |                           | altitude and           |                              |
|  |      |                           | uncertainty            |                              |
|  |      |                           | ellipsoid              |                              |
|  |      |                           | 10.3.8.4c              |                              |
| UE positioning GPS DGPS                | OP   |                           | UE                     |                              |
| corrections                            |      |                           | positioning            |                              |
|  |      |                           | GPS DGPS               |                              |
|  |      |                           | corrections            |                              |
|  |      |                           | 10.3.7.91              |                              |
| UE positioning GPS navigation<br>model | OP   | 1 to<br><maxsat></maxsat> |                        |                              |
| >SatID                                 | MP   |                           | Enumerated(            | Satellite ID                 |
|  |      |                           | 063)                   |                              |
| >GPS Ephemeris and Clock               | MP   |                           | UE                     |                              |
| Correction parameters                  |      |                           | positioning            |                              |
|  |      |                           | GPS                    |                              |
|  |      |                           | Ephemeris              |                              |
|  |      |                           | and Clock              |                              |
|  |      |                           | Correction             |                              |
|  |      | 1                         | parameters             |                              |
|  |      |                           | 10.3.7.91a             |                              |
| UE positioning GPS ionospheric         | OP   |                           | UE                     |                              |
| model                                  |      |                           | positioning            |                              |
|  |      |                           | GPS                    |                              |
|  |      |                           | ionospheric            |                              |
|  |      |                           | model                  |                              |
|  |      |                           | 10.3.7.92              |                              |
| UE positioning GPS UTC model           | OP   |                           | UE                     |                              |
|  |      | 1                         | positioning<br>GPS UTC |                              |
|  |      |                           |                        |                              |
|  |      |                           | model<br>10.3.7.97     |                              |
| UE positioning GPS almanac             | OP   |                           | 10.3.7.37              |                              |
| >SatID                                 | MP   | 1 to                      |                        |                              |
|  |      | <maxsat></maxsat>         |                        |                              |
| >>WNa                                  | MP   |                           |                        |                              |
|  |      | 1                         | 1                      |                              |
| >>DataID                               | MP   |                           |                        | Same as IE in 10.3.7.89      |

| Information Element/Group<br>name         | Need | Multi | Type and<br>reference                         | Semantics description   |
|---|------|-------|---|-------------------------|
| >>t <sub>oa</sub>                         | MP   |       |   | Same as IE in 10.3.7.89 |
| >>δl                                      | MP   |       |   | Same as IE in 10.3.7.89 |
| >>OMEGADOT                                | MP   |       |   | Same as IE in 10.3.7.89 |
| >>SV Health                               | MP   |       |   | Same as IE in 10.3.7.89 |
| >>A <sup>1/2</sup>                        | MP   |       |   | Same as IE in 10.3.7.89 |
| >>OMEGA0                                  | MP   |       |   | Same as IE in 10.3.7.89 |
| >>M0                                      | MP   |       |   | Same as IE in 10.3.7.89 |
| >>@                                       | MP   |       |   | Same as IE in 10.3.7.89 |
| >>af <sub>0</sub>                         | MP   |       |   | Same as IE in 10.3.7.89 |
| >>af <sub>1</sub>                         | MP   |       |   | Same as IE in 10.3.7.89 |
| >SV Global Health                         | OP   |       |   | Same as IE in 10.3.7.89 |
| UE positioning GPS acquisition assistance | OP   |       | UE<br>positioning                             |                         |
| assistance                                |      |       | GPS   |                         |
|   |      |       | acquisition                                   |                         |
|   |      |       | assistance                                    |                         |
|   |      |       | 10.3.7.88                                     |                         |
| UE positioning GPS real-time              | OP   |       | UE  |                         |
| integrity                                 |      |       | positioning<br>GPS real-                      |                         |
|   |      |       | time integrity<br>10.3.7.95                   |                         |
| UE positioning GPS reference              | OP   |       | <del>UE</del>                                 |                         |
| <del>cell info</del>                      |      |       | <del>positioning</del><br>GPS                 |                         |
|   |      |       | reference                                     |                         |
|   |      |       | <del>cell info</del><br><del>10.3.7.95a</del> |                         |

# R2-021355

| CHANGE REQUEST       |  |   |  |  |  |  |  |  |
|----------------------|--|---|--|--|--|--|--|--|
| æ                    | <b>5.331</b> CR 1449 <b># rev</b> - <sup># Current version:</sup> <b>4.4.0</b> <sup>#</sup>  |   |  |  |  |  |  |  |
| For <u>HELP</u> on u | ng this form, see bottom of this page or look at the pop-up text over the $st$ symbo   | ols.  |  |  |  |  |  |  |
| Proposed change a    | ects: ¥ (U)SIM ME/UE X Radio Access Network X Core Netwo   | ork   |  |  |  |  |  |  |
| Title: #             | Alignment of tabular and ASN.1 for UTRAN GPS timing of cell frames resolution  |   |  |  |  |  |  |  |
| Source: ೫            | rsg-ran wg2  |   |  |  |  |  |  |  |
| Work item code: ℜ    | [El Date: 육3 May 2002  |   |  |  |  |  |  |  |
| Category: ₩          | Release: \$*       REL-4         se one of the following categories:       Use one of the following release         F (correction)       2       (GSM Phase 2)         A (corresponds to a correction in an earlier release)       R96       (Release 1996)         B (addition of feature),       R97       (Release 1997)         C (functional modification of feature)       R98       (Release 1998)         D (editorial modification)       R99       (Release 1999)         etailed explanations of the above categories can       REL-4       (Release 4)         e found in 3GPP TR 21.900.       REL-5       (Release 5)  | s:  |  |  |  |  |  |  |
| Reason for change    | Reason for change: #       1. In order to unambiguously span an entire week, the "UTRAN GPS timing of cell frames" component of IE "UE positioning GPS reference time" (10.3.7.96) must have an integer range of (02322431999999) and a resolution of 1 chip.         Note that:       (2322432000000 chips / 3840000 chips per sec) = 604800 sec = 1 week         This change enables the meaning of the "UTRAN GPS timing of cell frames" component to be consistently interpreted across the following portions of the specification:         -       tabular description of 10.3.7.88         -       tabular description of 10.3.7.96         -       ASN.1 description of "UTRAN-GPSReferenceTime"   |   |  |  |  |  |  |  |
|                      | <ul> <li>2. [From Tdoc 1261]<br/>During RAN #15, from Tdoc RP-020074, CR-1342-R3 was approved for R99, CR-1343 was approved for REL-4.</li> <li>One of the purposes of these CRs was to remove the procedural significance the IE "UE positioning GPS reference cell info" (10.3.7.95a). These CRs rem statements explaining how this IE would be used to help direct the UE in make "UE GPS timing of cell frames" measurements.</li> <li>Since the significance (or usefulness) of this IE is now removed from the specification, it makes sense to remove the remaining associated references this IE.</li> <li>3. [From Tdoc 1155]</li> <li>During RAN #14, from Tdoc RP-010941, CR-1185-R4 was approved for R99, CR-1186 was approved for REL-4. These CRs corrected the tabular descript of the type and reference column for the "Whole GPS Chips" component of the "UE positioning GPS measured results" (10.3.7.93). The specified range was</li> </ul> | e of<br>noved<br>king<br>to<br>, and<br>tion<br>ne IE |  |  |  |  |  |  |

|                                    | adjusted from (01023) to the correct range of (01022). Unfortunately, the range of the corresponding ASN.1 element was not adjusted at that time. This CR simply adjusts the "wholeGPS-Chips" component of the "GPS-MeasurementParam" ASN.1 information element to indicate the correct range of (01022). Note that the representation of this component remains to be a 10-bit integer.  |
|------------------------------------|---|
| Summary of change: ೫               | 1. The semantics description for the "UTRAN GPS timing of cell frames" component of IE "UE positioning GPS reference time" (10.3.7.96) is changed to indicate 1 chip resolution instead of 1/16 chip resolution.  |
|                                    | <ol> <li>[From Tdoc 1261]</li> <li>All references to the unused IE "UE positioning GPS reference cell info"<br/>(10.3.7.95a) are removed.</li> </ol>  |
|                                    | 3. [From Tdoc 1155]<br>The "wholeGPS-Chips" component of the "GPS-MeasurementParam" ASN.1<br>information element is adjusted to indicate the correct range of (01022).  |
|                                    | Isolated Impact Change Analysis.  |
|                                    | 1. This change clarifies the resolution of the "UTRAN GPS timing of cell frames" component that may be used in providing UTRAN-GPS timing assistance to the UE.   |
|                                    | 2. [From Tdoc 1261]<br>This change removes portions of the specification associated with the unused<br>(and purposeless) IE "UE positioning GPS reference cell info" (10.3.7.95a).  |
|                                    | 3. [From Tdoc 1155]<br>This change corrects the range of the "wholeGPS-Chips" component of the<br>"GPS-MeasurementParam" ASN.1 element.   |
|                                    | It would not affect implementations behaving like indicated in the CR, it would<br>affect implementations supporting the corrected functionality otherwise.   |
| Consequences if %<br>not approved: | 1. The tabular description of the "UTRAN GPS timing of cell frames" component<br>of IE "UE positioning GPS reference time" (10.3.7.96) will conflict with the<br>description of the same component of IE "UE positioning GPS acquisition<br>assistance" (10.3.7.88) and the definition of the associated ASN.1 element<br>"UTRAN-GPSReferenceTime". Consequently, it will be unclear how the UE is to<br>interpret the intended resolution of this parameter. If a UE incorrectly interprets<br>the resolution of this parameter, the search for GPS satellites may fail and the<br>time-stamping value assigned to GPS measurements may cause gross errors in<br>the resulting position computation. |
|                                    | 2. [From Tdoc 1261]<br>Useless references and ASN.1 code elements associated with this IE "UE<br>positioning GPS reference cell info" will remain in the specification, possibly<br>causing confusion with respect to the meaning of the term "reference cell".   |
|                                    | <ul> <li>3. [From Tdoc 1155]</li> <li>Since GPS codes are each composed of 1023 chips, if this range is not corrected to indicate (01022), then it will be unclear how the UTRAN is to interpret the value "wholeGPS-Chips"=1023. Two interpretations are possible:</li> <li>a) "1023" wraps around to equal "0"; or, b) "1023" extends 1023 chips beyond "0". If the UE and UTRAN do not share the same common interpretation of this value, then it is possible that such a GPS measurement could cause a large error in the final position computation.</li> </ul>   |

Clauses affected: # 8.6.7.19.6, 10.3.7.90, 10.3.7.95a, 10.3.7.96, 11.3, 13.4.28a

| Other specs     | Ħ | Other core specifications                 | ж | 25.331 v3.10.0, CR 1448<br>25.331 v5.0.0, CR 1450 |
|-----------------|---|---|---|---|
| affected:       |   | Test specifications<br>O&M Specifications |   |   |
| Other comments: | ж |   |   |   |

#### How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at: <u>http://www.3gpp.org/3G\_Specs/CRs.htm</u>. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked # contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <u>ftp://ftp.3gpp.org/specs/</u> For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

# \*\*\* NEXT MODIFIED SECTION \*\*\*

#### 8.6.7.19.6 <u>VoidUE positioning GPS reference cell info</u>

If IE "UE positioning GPS reference cell info" is received in the MEASUREMENT CONTROL message, the UE shall update the variable UE\_POSITIONING\_GPS\_DATA accordingly. The UE shall:

1> store received reference cell information in the IE "UE positioning GPS reference cell info" in the variable UE\_POSITIONING\_GPS\_DATA, overwriting any existing information.

# \*\*\* NEXT REFERENCE SECTION \*\*\*

#### 10.3.7.88 UE positioning GPS acquisition assistance

This IE contains parameters that enable fast acquisition of the GPS signals in UE-assisted GPS positioning.

| Information Element/Group<br>name      | Need | Multi                     | Type and<br>Reference  | Semantics description  |
|--|------|---------------------------|--|--|
| GPS TOW msec                           | MP   |                           | Integer(06.<br>048*10 <sup>8</sup> -1)                         | GPS Time of Week in<br>milliseconds rounded down to<br>the nearest millisecond unit. |
| UTRAN GPS reference time               | OP   |                           |  |  |
| >UTRAN GPS timing of cell<br>frames    | MP   |                           | Integer(0<br>2322431999<br>999)                                | GPS timing of cell frames in steps of 1 chip.  |
| >CHOICE mode                           | OP   |                           |  |  |
| >>FDD                                  |      |                           |  |  |
| >>>Primary CPICH Info                  | MP   |                           | Primary<br>CPICH Info<br>10.3.6.60                             | Identifies the reference cell for<br>the GPS TOW-SFN<br>relationship                 |
| >>TDD                                  |      |                           |  |  |
| >>>cell parameters id                  | MP   |                           | Cell<br>parameters<br>id 10.3.6.9                              | Identifies the reference cell for<br>the GPS TOW-SFN<br>relationship                 |
| >SFN                                   | MP   |                           | Integer(040<br>95)   | The SFN which the UTRAN<br>GPS timing of cell frames time<br>stamps.                 |
| Satellite information                  | MP   | 1 to<br><maxsat></maxsat> |  |  |
| >SatID                                 | MP   |                           | Integer<br>(063)   |  |
| >Doppler (0 <sup>th</sup> order term)  | MP   |                           | Real(-<br>51205117.5<br>by step of<br>2.5)                     | Hz   |
| >Extra Doppler                         | OP   |                           | ,  |  |
| >>Doppler (1 <sup>st</sup> order term) | MP   |                           | Real (-<br>0.9660.483<br>by step of<br>0.023)                  | Scaling factor 1/42  |
| >>Doppler Uncertainty                  | MP   |                           | Enumerated<br>(12.5,25,50,<br>100,200)                         | Hz.<br>Three spare values are<br>needed.   |
| >Code Phase                            | MP   |                           | Integer(010<br>22)   | Chips, specifies the centre of the search window                                     |
| >Integer Code Phase                    | MP   |                           | Integer(019  | 1023 chip segments   |
| >GPS Bit number                        | MP   |                           | Integer(03)  | Specifies GPS bit number (20<br>1023 chip segments)                                  |
| >Code Phase Search Window              | MP   |                           | Integer(1023<br>,1,2,3,4,6,8,1<br>2,16,24,32,4<br>8,64,96,128, | Specifies the width of the search window.  |

| Information Element/Group<br>name | Need | Multi | Type and<br>Reference                 | Semantics description |
|-----------------------------------|------|-------|---------------------------------------|-----------------------|
|                                   |      |       | 192)                                  |                       |
| >Azimuth and Elevation            | OP   |       |                                       |                       |
| >>Azimuth                         | MP   |       | Real(0348.<br>75 by step of<br>11.25) | Degrees               |
| >>Elevation                       | MP   |       | Real(078.7<br>5 by step of<br>11.25)  | Degrees               |

# \*\*\* NEXT MODIFIED SECTION \*\*\*

#### 10.3.7.90 UE positioning GPS assistance data

This IE contains GPS assistance data.

| Information Element/Group<br>name           | Need | Multi | Type and<br>Reference  | Semantics description                  |
|---|------|-------|--|--|
| UE positioning GPS reference<br>time        | OP   |       | UE<br>positioning<br>GPS<br>reference<br>time<br>10.3.7.96                       |  |
| UE positioning GPS reference<br>UE position | OP   |       | Ellipsoid<br>point with<br>altitude and<br>uncertainty<br>ellipsoid<br>10.3.8.4c | A priori knowledge of UE 3-D position. |
| UE positioning GPS DGPS corrections         | OP   |       | UE<br>positioning<br>GPS DGPS<br>corrections<br>10.3.7.91                        |  |
| UE positioning GPS navigation model         | OP   |       | UE<br>positioning<br>GPS<br>navigation<br>model<br>10.3.7.94                     |  |
| UE positioning GPS ionospheric model        | OP   |       | UE<br>positioning<br>GPS<br>ionospheric<br>model<br>10.3.7.92                    |  |
| UE positioning GPS UTC model                | OP   |       | UE<br>positioning<br>GPS UTC<br>model<br>10.3.7.97                               |  |
| UE positioning GPS almanac                  | OP   |       | UE<br>positioning<br>GPS<br>almanac<br>10.3.7.89                                 |  |
| UE positioning GPS acquisition assistance   | OP   |       | UE<br>positioning<br>GPS   |  |

| Information Element/Group<br>name         | Need          | Multi | Type and<br>Reference  | Semantics description   |
|---|---------------|-------|--|---|
|   |               |       | acquisition<br>assistance<br>10.3.7.88                           |   |
| UE positioning GPS real-time integrity    | OP            |       | UE<br>positioning<br>GPS real-<br>time integrity<br>10.3.7.95    |   |
| UE positioning GPS reference<br>coll info | <del>OP</del> |       | UE<br>positioning<br>GPS<br>reference<br>cell info<br>10.3.7.95a | Identifies reference cell<br>associated with request for UE<br>GPS timing of cell frames<br>measurement |

# \*\*\* NEXT MODIFIED SECTION \*\*\*

### 10.3.7.95a VoidUE positioning GPS reference cell info

| Information Element/Group<br>name | Need | <del>Multi</del> | Type and<br>Reference              | Semantics description |
|-----------------------------------|------|------------------|------------------------------------|-----------------------|
| CHOICE mode                       | MP   |                  |                                    |                       |
| >FDD                              |      |                  |                                    |                       |
| >>Primary CPICH info              | MP   |                  | Primary<br>CPICH info<br>10.3.6.60 |                       |
| <del>&gt;TDD</del>                |      |                  |                                    |                       |
| >>cell parameters ID              | MP   |                  | Cell<br>parameters<br>id 10.3.6.9  |                       |

# \*\*\* NEXT MODIFIED SECTION \*\*\*

### 10.3.7.96 UE positioning GPS reference time

| Information Element/Group<br>name   | Need | Multi | Type and<br>Reference                  | Semantics description  |
|-------------------------------------|------|-------|--|--|
| GPS Week                            | MP   |       | Integer(010<br>23)                     |  |
| GPS TOW msec                        | MP   |       | Integer(06.<br>048*10 <sup>8</sup> -1) | GPS Time of Week in milliseconds (rounded down to the nearest millisecond unit).               |
| UTRAN GPS reference time            | OP   |       |  |  |
| >UTRAN GPS timing of cell<br>frames | MP   |       | Integer(0<br>2322431999<br>999)        | UTRAN GPS timing of cell<br>frames in steps of 1 <del>/16<sup>th</sup></del> chip <del>s</del> |
| >CHOICE mode                        | OP   |       |  |  |
| >>FDD                               |      |       |  |  |
| >>>Primary CPICH Info               | MP   |       | Primary<br>CPICH Info<br>10.3.6.60     | Identifies the reference cell for<br>the GPS TOW-SFN<br>relationship                           |
| >>TDD                               |      |       |  |  |
| >>>cell parameters id               | MP   |       | Cell<br>parameters<br>id 10.3.6.9      | Identifies the reference cell for<br>the GPS TOW-SFN<br>relationship                           |
| >SFN                                | MP   |       | Integer(040                            | The SFN which the UTRAN  |

| Information Element/Group<br>name | Need | Multi                     | Type and<br>Reference  | Semantics description  |
|-----------------------------------|------|---------------------------|--|--|
|                                   |      |                           | 95)  | GPS timing of cell frames time stamps.   |
| SFN-TOW Uncertainty               | OP   |                           | Enumerated<br>(lessThan10,<br>moreThan10<br>)                                      | This field indicates the<br>uncertainty of the relation GPS<br>TOW/SFN. lessThan10 means<br>the relation is accurate to at<br>least 10 ms. |
| T <sub>UTRAN-GPS</sub> drift rate | OP   |                           | Integer (0, 1,<br>2, 5, 10, 15,<br>25, 50, -1, -<br>2, -5, -10, -<br>15, -25, -50) | in 1/256 chips per sec.  |
| GPS TOW Assist                    | OP   | 1 to<br><maxsat></maxsat> |  |  |
| >SatID                            | MP   |                           | Enumerated(<br>063)  |  |
| >TLM Message                      | MP   |                           | Bit string(14)   |  |
| >TLM Reserved                     | MP   |                           | Bit string(2)  |  |
| >Alert                            | MP   |                           | Boolean  |  |
| >Anti-Spoof                       | MP   |                           | Boolean  |  |

# \*\*\* NEXT REFERENCE SECTION \*\*\*

| <br>*   |
|---|
|   |
| <br>MEASUREMENT INFORMATION ELEMENTS (10.3.7) |
|   |
| <br>*****************                         |

# \*\*\* NEXT MODIFIED SECTION \*\*\*

| <pre>UE-Positioning-GPS-AcquisitionAssistance<br/>gps-ReferenceTime INT<br/>utran-GPSReferenceTime<br/>satelliteInformationList<br/>}</pre>  | ce ::= SEQUENCE {<br>TEGER (0604799999),<br>UTRAN-GPSReferenceTime<br>AcquisitionSatInfoList            | OPTIONAL,        |
|--|---|------------------|
| UE-Positioning-GPS-AdditionalAssistance<br>almanacRequest<br>utcModelRequest<br>ionosphericModelRequest  | eDataRequest ::= SEQUENCE {<br>BOOLEAN,<br>BOOLEAN,<br>BOOLEAN,   |                  |
| <pre>navigationModelRequest<br/>dgpsCorrectionsRequest<br/>referenceLocationRequest<br/>referenceTimeRequest<br/>aquisitionAssistanceRequest<br/>realTimeIntegrityRequest<br/>navModelAddDataRequest</pre> | BOOLEAN,<br>BOOLEAN,<br>BOOLEAN,<br>BOOLEAN,<br>BOOLEAN,<br>BOOLEAN,<br>UE-Positioning-GPS-NavModelAddD | DataReq OPTIONAL |
| <pre> UE-Positioning-GPS-Almanac ::=     wn-a     almanacSatInfoList     sv-GlobalHealth }</pre>   | SEQUENCE {<br>BIT STRING (SIZE (8)),<br>AlmanacSatInfoList,<br>BIT STRING (SIZE (364))                  | OPTIONAL         |
| UE-Positioning-GPS-AssistanceData ::=<br>ue-positioning-GPS-ReferenceTime<br>OPTIONAL,<br>ue-positioning-GPS-ReferenceLocatio<br>ue-positioning-GPS-DGPS-Corrections<br>OPTIONAL,                          |   | OPTIONAL,        |

Error! No text of specified style in document.

8

Error! No text of specified style in document.

```
ue-positioning-GPS-NavigationModel
                                                    UE-Positioning-GPS-NavigationModel
    OPTIONAL,
    ue-positioning-GPS-IonosphericModel
                                                    UE-Positioning-GPS-IonosphericModel
    OPTIONAL,
    ue-positioning-GPS-UTC-Model
                                                    UE-Positioning-GPS-UTC-Model
   OPTIONAL,
    ue-positioning-GPS-Almanac
                                                    UE-Positioning-GPS-Almanac
   OPTIONAL,
    ue-positioning-GPS-AcquisitionAssistance
                                                   UE-Positioning-GPS-AcquisitionAssistance
    OPTIONAL,
   ue-positioning-GPS-Real-timeIntegrity
                                                    BadSatList
                                                                                        OPTIONAL,
    -- dummy is not used in this version of specification and it should
    -- be ignored.
    ue-positioning-GPS-referenceCellInfodummy
                                                       UE-Positioning-GPS-ReferenceCellInfo
    OPTIONAL
}
UE-Positioning-GPS-DGPS-Corrections ::=
                                          SEQUENCE {
   gps-TOW
                                       INTEGER (0..604799),
    statusHealth
                                       DiffCorrectionStatus,
   dgps-CorrectionSatInfoList
                                       DGPS-CorrectionSatInfoList
}
```

### **\*\*\* NEXT MODIFIED SECTION \*\*\***

INTEGER (0..63),
INTEGER (0..63),

INTEGER (0..10223),
INTEGER (0..1023),

SEQUENCE {

| GPS- | MeasurementParam ::= |
|------|----------------------|
|      | satelliteID          |
|      | c-N0                 |
|      | doppler              |
|      | wholeGPS-Chips       |
|      | fractionalGPS-Chips  |
|      | multipathIndicator   |
|      | pseudorangeRMS-Error |
| }    |                      |
|      |                      |

1

MultipathIndicator, INTEGER (0..63)

INTEGER (-32768..32768),

GPS-MeasurementParamList ::=

SEQUENCE (SIZE (1..maxSat)) OF GPS-MeasurementParam

### \*\*\* NEXT MODIFIED SECTION \*\*\*

#### 13.4.28a UE\_POSITIONING\_GPS\_DATA

| Information Element/Group<br>name           | Need | Multi | Type and reference   | Semantics description                  |
|---|------|-------|--|--|
| GPS Data ciphering info                     | OP   |       | UE<br>positioning<br>Ciphering<br>info<br>10.3.7.86                              |  |
| GPS Deciphering Keys                        | OP   |       |  |  |
| >Current deciphering key                    | MP   |       | Bit string(56)   |  |
| >Next deciphering key                       | MP   |       | Bit string(56)   |  |
| UE positioning GPS reference time           | OP   |       | UE<br>positioning<br>GPS<br>reference<br>time<br>10.3.7.96                       |  |
| UE positioning GPS reference<br>UE position | OP   |       | Ellipsoid<br>point with<br>altitude and<br>uncertainty<br>ellipsoid<br>10.3.8.4c | A priori knowledge of UE 3-D position. |
| UE positioning GPS DGPS corrections         | OP   |       | UE<br>positioning<br>GPS DGPS<br>corrections<br>10.3.7.91                        |  |
| UE positioning GPS navigation               | OP   | 1 to  |  |  |

| Information Element/Group<br>name                 | Need          | Multi                     | Type and<br>reference  | Semantics description   |
|---|---------------|---------------------------|--|-------------------------|
| model   |               | <maxsat></maxsat>         |  |                         |
| >SatID  | MP            |                           | Enumerated(<br>063)  | Satellite ID            |
| >GPS Ephemeris and Clock<br>Correction parameters | MP            |                           | UE<br>positioning<br>GPS<br>Ephemeris<br>and Clock<br>Correction<br>parameters<br>10.3.7.91a |                         |
| UE positioning GPS ionospheric model              | OP            |                           | UE<br>positioning<br>GPS<br>ionospheric<br>model<br>10.3.7.92                                |                         |
| UE positioning GPS UTC model                      | OP            |                           | UE<br>positioning<br>GPS UTC<br>model<br>10.3.7.97   |                         |
| UE positioning GPS almanac                        | OP            |                           |  |                         |
| >SatID  | MP            | 1 to<br><maxsat></maxsat> |  |                         |
| >>WNa   | MP            |                           |  |                         |
| >>DataID  | MP            |                           |  | Same as IE in 10.3.7.89 |
| >>e   | MP            |                           |  | Same as IE in 10.3.7.89 |
| >>t <sub>oa</sub>                                 | MP            |                           |  | Same as IE in 10.3.7.89 |
| >>δl  | MP            |                           |  | Same as IE in 10.3.7.89 |
| >>OMEGADOT  | MP            |                           |  | Same as IE in 10.3.7.89 |
| >>SV Health                                       | MP            |                           |  | Same as IE in 10.3.7.89 |
| >>A <sup>1/2</sup>                                | MP            |                           |  | Same as IE in 10.3.7.89 |
| >>OMEGA0  | MP            |                           |  | Same as IE in 10.3.7.89 |
| >>M <sub>0</sub>                                  | MP            |                           |  | Same as IE in 10.3.7.89 |
| >>0   | MP            |                           |  | Same as IE in 10.3.7.89 |
| >>af <sub>0</sub>                                 | MP            |                           |  | Same as IE in 10.3.7.89 |
| >>af <sub>1</sub>                                 | MP            |                           |  | Same as IE in 10.3.7.89 |
| >SV Global Health                                 | OP            |                           |  | Same as IE in 10.3.7.89 |
| UE positioning GPS acquisition assistance         | OP            |                           | UE<br>positioning<br>GPS<br>acquisition<br>assistance<br>10.3.7.88                           |                         |
| UE positioning GPS real-time integrity            | OP            |                           | UE<br>positioning<br>GPS real-<br>time integrity<br>10.3.7.95                                |                         |
| UE positioning GPS reference<br>cell info         | <del>OP</del> |                           | UE<br>positioning<br>GPS<br>reference<br>cell info<br>10.3.7.95a                             |                         |

# R2-021356

|                                    | adjusted from (01023) to the correct range of (01022). Unfortunately, the range of the corresponding ASN.1 element was not adjusted at that time. This CR simply adjusts the "wholeGPS-Chips" component of the "GPS-MeasurementParam" ASN.1 information element to indicate the correct range of (01022). Note that the representation of this component remains to be a 10-bit integer.  |
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|                                    | 1. This change clarifies the resolution of the "UTRAN GPS timing of cell frames" component that may be used in providing UTRAN-GPS timing assistance to the UE.   |
|                                    | 2. [From Tdoc 1261]<br>This change removes portions of the specification associated with the unused<br>(and purposeless) IE "UE positioning GPS reference cell info" (10.3.7.95a).  |
|                                    | 3. [From Tdoc 1155]<br>This change corrects the range of the "wholeGPS-Chips" component of the<br>"GPS-MeasurementParam" ASN.1 element.   |
|                                    | It would not affect implementations behaving like indicated in the CR, it would<br>affect implementations supporting the corrected functionality otherwise.   |
| Consequences if %<br>not approved: | 1. The tabular description of the "UTRAN GPS timing of cell frames" component<br>of IE "UE positioning GPS reference time" (10.3.7.96) will conflict with the<br>description of the same component of IE "UE positioning GPS acquisition<br>assistance" (10.3.7.88) and the definition of the associated ASN.1 element<br>"UTRAN-GPSReferenceTime". Consequently, it will be unclear how the UE is to<br>interpret the intended resolution of this parameter. If a UE incorrectly interprets<br>the resolution of this parameter, the search for GPS satellites may fail and the<br>time-stamping value assigned to GPS measurements may cause gross errors in<br>the resulting position computation. |
|                                    | 2. [From Tdoc 1261]<br>Useless references and ASN.1 code elements associated with this IE "UE<br>positioning GPS reference cell info" will remain in the specification, possibly<br>causing confusion with respect to the meaning of the term "reference cell".   |
|                                    | <ul> <li>3. [From Tdoc 1155]</li> <li>Since GPS codes are each composed of 1023 chips, if this range is not corrected to indicate (01022), then it will be unclear how the UTRAN is to interpret the value "wholeGPS-Chips"=1023. Two interpretations are possible:</li> <li>a) "1023" wraps around to equal "0"; or, b) "1023" extends 1023 chips beyond "0". If the UE and UTRAN do not share the same common interpretation of this value, then it is possible that such a GPS measurement could cause a large error in the final position computation.</li> </ul>   |

Clauses affected: # 8.6.7.19.6, 10.3.7.90, 10.3.7.95a, 10.3.7.96, 11.3, 13.4.28a

| Other specs     | ж | Other core specifications                 | Ħ | 25.331 v3.10.0, CR 1448<br>25.331 v4.4.0, CR 1449 |
|-----------------|---|---|---|---|
| affected:       |   | Test specifications<br>O&M Specifications |   |   |
| Other comments: | ж |   |   |   |

#### How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at: <u>http://www.3gpp.org/3G\_Specs/CRs.htm</u>. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked # contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <u>ftp://ftp.3gpp.org/specs/</u> For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

# \*\*\* NEXT MODIFIED SECTION \*\*\*

#### 8.6.7.19.6 <u>VoidUE positioning GPS reference cell info</u>

If IE "UE positioning GPS reference cell info" is received in the MEASUREMENT CONTROL message, the UE shall update the variable UE\_POSITIONING\_GPS\_DATA accordingly. The UE shall:

1> store received reference cell information in the IE "UE positioning GPS reference cell info" in the variable UE\_POSITIONING\_GPS\_DATA, overwriting any existing information.

# \*\*\* NEXT REFERENCE SECTION \*\*\*

#### 10.3.7.88 UE positioning GPS acquisition assistance

This IE contains parameters that enable fast acquisition of the GPS signals in UE-assisted GPS positioning.

| Information Element/Group<br>name      | Need | Multi                     | Type and<br>Reference  | Semantics description  |
|--|------|---------------------------|--|--|
| GPS TOW msec                           | MP   |                           | Integer(06.<br>048*10 <sup>8</sup> -1)                         | GPS Time of Week in<br>milliseconds rounded down to<br>the nearest millisecond unit. |
| UTRAN GPS reference time               | OP   |                           |  |  |
| >UTRAN GPS timing of cell<br>frames    | MP   |                           | Integer(0<br>2322431999<br>999)                                | GPS timing of cell frames in steps of 1 chip.  |
| >CHOICE mode                           | OP   |                           |  |  |
| >>FDD                                  |      |                           |  |  |
| >>>Primary CPICH Info                  | MP   |                           | Primary<br>CPICH Info<br>10.3.6.60                             | Identifies the reference cell for<br>the GPS TOW-SFN<br>relationship                 |
| >>TDD                                  |      |                           |  |  |
| >>>cell parameters id                  | MP   |                           | Cell<br>parameters<br>id 10.3.6.9                              | Identifies the reference cell for<br>the GPS TOW-SFN<br>relationship                 |
| >SFN                                   | MP   |                           | Integer(040<br>95)   | The SFN which the UTRAN<br>GPS timing of cell frames time<br>stamps.                 |
| Satellite information                  | MP   | 1 to<br><maxsat></maxsat> |  |  |
| >SatID                                 | MP   |                           | Integer<br>(063)   |  |
| >Doppler (0 <sup>th</sup> order term)  | MP   |                           | Real(-<br>51205117.5<br>by step of<br>2.5)                     | Hz   |
| >Extra Doppler                         | OP   |                           | - /  |  |
| >>Doppler (1 <sup>st</sup> order term) | MP   |                           | Real (-<br>0.9660.483<br>by step of<br>0.023)                  | Scaling factor 1/42  |
| >>Doppler Uncertainty                  | MP   |                           | Enumerated<br>(12.5,25,50,<br>100,200)                         | Hz.<br>Three spare values are<br>needed.   |
| >Code Phase                            | MP   |                           | Integer(010<br>22)   | Chips, specifies the centre of the search window                                     |
| >Integer Code Phase                    | MP   |                           | Integer(019  | 1023 chip segments   |
| >GPS Bit number                        | MP   |                           | Integer(03)  | Specifies GPS bit number (20<br>1023 chip segments)                                  |
| >Code Phase Search Window              | MP   |                           | Integer(1023<br>,1,2,3,4,6,8,1<br>2,16,24,32,4<br>8,64,96,128, | Specifies the width of the search window.  |

| Information Element/Group<br>name | Need | Multi | Type and<br>Reference                 | Semantics description |
|-----------------------------------|------|-------|---------------------------------------|-----------------------|
|                                   |      |       | 192)                                  |                       |
| >Azimuth and Elevation            | OP   |       |                                       |                       |
| >>Azimuth                         | MP   |       | Real(0348.<br>75 by step of<br>11.25) | Degrees               |
| >>Elevation                       | MP   |       | Real(078.7<br>5 by step of<br>11.25)  | Degrees               |

### \*\*\* NEXT MODIFIED SECTION \*\*\*

#### 10.3.7.90 UE positioning GPS assistance data

This IE contains GPS assistance data.

| Information Element/Group<br>name           | Need | Multi | Type and<br>Reference  | Semantics description                  |
|---|------|-------|--|--|
| UE positioning GPS reference<br>time        | OP   |       | UE<br>positioning<br>GPS<br>reference<br>time<br>10.3.7.96                       |  |
| UE positioning GPS reference<br>UE position | OP   |       | Ellipsoid<br>point with<br>altitude and<br>uncertainty<br>ellipsoid<br>10.3.8.4c | A priori knowledge of UE 3-D position. |
| UE positioning GPS DGPS corrections         | OP   |       | UE<br>positioning<br>GPS DGPS<br>corrections<br>10.3.7.91                        |  |
| UE positioning GPS navigation model         | OP   |       | UE<br>positioning<br>GPS<br>navigation<br>model<br>10.3.7.94                     |  |
| UE positioning GPS ionospheric model        | OP   |       | UE<br>positioning<br>GPS<br>ionospheric<br>model<br>10.3.7.92                    |  |
| UE positioning GPS UTC model                | OP   |       | UE<br>positioning<br>GPS UTC<br>model<br>10.3.7.97                               |  |
| UE positioning GPS almanac                  | OP   |       | UE<br>positioning<br>GPS<br>almanac<br>10.3.7.89                                 |  |
| UE positioning GPS acquisition assistance   | OP   |       | UE<br>positioning<br>GPS   |  |

6

| Information Element/Group<br>name         | Need          | Multi | Type and<br>Reference  | Semantics description   |
|---|---------------|-------|--|---|
|   |               |       | acquisition<br>assistance<br>10.3.7.88                           |   |
| UE positioning GPS real-time integrity    | OP            |       | UE<br>positioning<br>GPS real-<br>time integrity<br>10.3.7.95    |   |
| UE positioning GPS reference<br>coll info | <del>OP</del> |       | UE<br>positioning<br>GPS<br>reference<br>cell info<br>10.3.7.95a | Identifies reference cell<br>associated with request for UE<br>GPS timing of cell frames<br>measurement |

### \*\*\* NEXT MODIFIED SECTION \*\*\*

#### 10.3.7.95a VoidUE positioning GPS reference cell info

| Information Element/Group<br>name | Need | <del>Multi</del> | Type and<br>Reference              | Semantics description |
|-----------------------------------|------|------------------|------------------------------------|-----------------------|
| CHOICE mode                       | MP   |                  |                                    |                       |
| >FDD                              |      |                  |                                    |                       |
| >>Primary CPICH info              | MP   |                  | Primary<br>CPICH info<br>10.3.6.60 |                       |
| <del>&gt;TDD</del>                |      |                  |                                    |                       |
| >>cell parameters ID              | MP   |                  | Cell<br>parameters<br>id 10.3.6.9  |                       |

# \*\*\* NEXT MODIFIED SECTION \*\*\*

#### 10.3.7.96 UE positioning GPS reference time

1

| Information Element/Group<br>name   | Need | Multi | Type and<br>Reference                  | Semantics description   |
|-------------------------------------|------|-------|--|---|
| GPS Week                            | MP   |       | Integer(010<br>23)                     |   |
| GPS TOW msec                        | MP   |       | Integer(06.<br>048*10 <sup>8</sup> -1) | GPS Time of Week in milliseconds (rounded down to the nearest millisecond unit).                |
| UTRAN GPS reference time            | OP   |       |  |   |
| >UTRAN GPS timing of cell<br>frames | MP   |       | Integer(0<br>2322431999<br>999)        | UTRAN GPS timing of cell<br>frames in steps of 1 <mark>/16<sup>th</sup> chip<del>s</del></mark> |
| >CHOICE mode                        | OP   |       |  |   |
| >>FDD                               |      |       |  |   |
| >>>Primary CPICH Info               | MP   |       | Primary<br>CPICH Info<br>10.3.6.60     | Identifies the reference cell for<br>the GPS TOW-SFN<br>relationship                            |
| >>TDD                               |      |       |  |   |
| >>>cell parameters id               | MP   |       | Cell<br>parameters<br>id 10.3.6.9      | Identifies the reference cell for<br>the GPS TOW-SFN<br>relationship                            |
| >SFN                                | MP   |       | Integer(040                            | The SFN which the UTRAN   |

| Information Element/Group<br>name | Need | Multi                     | Type and<br>Reference  | Semantics description  |
|-----------------------------------|------|---------------------------|--|--|
|                                   |      |                           | 95)  | GPS timing of cell frames time stamps.   |
| SFN-TOW Uncertainty               | OP   |                           | Enumerated<br>(lessThan10,<br>moreThan10<br>)                                      | This field indicates the<br>uncertainty of the relation GPS<br>TOW/SFN. lessThan10 means<br>the relation is accurate to at<br>least 10 ms. |
| T <sub>UTRAN-GPS</sub> drift rate | OP   |                           | Integer (0, 1,<br>2, 5, 10, 15,<br>25, 50, -1, -<br>2, -5, -10, -<br>15, -25, -50) | in 1/256 chips per sec.  |
| GPS TOW Assist                    | OP   | 1 to<br><maxsat></maxsat> |  |  |
| >SatID                            | MP   |                           | Enumerated(<br>063)  |  |
| >TLM Message                      | MP   |                           | Bit string(14)   |  |
| >TLM Reserved                     | MP   |                           | Bit string(2)  |  |
| >Alert                            | MP   |                           | Boolean  |  |
| >Anti-Spoof                       | MP   |                           | Boolean  |  |

## \*\*\* NEXT REFERENCE SECTION \*\*\*

| <br>*   |
|---|
|   |
| <br>MEASUREMENT INFORMATION ELEMENTS (10.3.7) |
|   |
| <br>*****************                         |

### \*\*\* NEXT MODIFIED SECTION \*\*\*

| <pre>UE-Positioning-GPS-AcquisitionAssistance<br/>gps-ReferenceTime INT<br/>utran-GPSReferenceTime<br/>satelliteInformationList<br/>}</pre>  | ce ::= SEQUENCE {<br>TEGER (0604799999),<br>UTRAN-GPSReferenceTime<br>AcquisitionSatInfoList            | OPTIONAL,        |
|--|---|------------------|
| UE-Positioning-GPS-AdditionalAssistance<br>almanacRequest<br>utcModelRequest<br>ionosphericModelRequest  | eDataRequest ::= SEQUENCE {<br>BOOLEAN,<br>BOOLEAN,<br>BOOLEAN,   |                  |
| <pre>navigationModelRequest<br/>dgpsCorrectionsRequest<br/>referenceLocationRequest<br/>referenceTimeRequest<br/>aquisitionAssistanceRequest<br/>realTimeIntegrityRequest<br/>navModelAddDataRequest</pre> | BOOLEAN,<br>BOOLEAN,<br>BOOLEAN,<br>BOOLEAN,<br>BOOLEAN,<br>BOOLEAN,<br>UE-Positioning-GPS-NavModelAddD | DataReq OPTIONAL |
| <pre> UE-Positioning-GPS-Almanac ::=     wn-a     almanacSatInfoList     sv-GlobalHealth }</pre>   | SEQUENCE {<br>BIT STRING (SIZE (8)),<br>AlmanacSatInfoList,<br>BIT STRING (SIZE (364))                  | OPTIONAL         |
| UE-Positioning-GPS-AssistanceData ::=<br>ue-positioning-GPS-ReferenceTime<br>OPTIONAL,<br>ue-positioning-GPS-ReferenceLocatio<br>ue-positioning-GPS-DGPS-Corrections<br>OPTIONAL,                          |   | OPTIONAL,        |

Error! No text of specified style in document.

8

Error! No text of specified style in document.

```
ue-positioning-GPS-NavigationModel
                                                    UE-Positioning-GPS-NavigationModel
    OPTIONAL,
    ue-positioning-GPS-IonosphericModel
                                                    UE-Positioning-GPS-IonosphericModel
    OPTIONAL,
    ue-positioning-GPS-UTC-Model
                                                    UE-Positioning-GPS-UTC-Model
   OPTIONAL,
    ue-positioning-GPS-Almanac
                                                    UE-Positioning-GPS-Almanac
   OPTIONAL,
    ue-positioning-GPS-AcquisitionAssistance
                                                   UE-Positioning-GPS-AcquisitionAssistance
    OPTIONAL,
   ue-positioning-GPS-Real-timeIntegrity
                                                    BadSatList
                                                                                        OPTIONAL,
    -- dummy is not used in this version of specification and it should
    -- be ignored.
    ue-positioning-GPS-referenceCellInfodummy
                                                       UE-Positioning-GPS-ReferenceCellInfo
    OPTIONAL
}
UE-Positioning-GPS-DGPS-Corrections ::=
                                          SEQUENCE {
   gps-TOW
                                       INTEGER (0..604799),
    statusHealth
                                       DiffCorrectionStatus,
   dgps-CorrectionSatInfoList
                                       DGPS-CorrectionSatInfoList
}
```

### **\*\*\* NEXT MODIFIED SECTION \*\*\***

INTEGER (0..63),
INTEGER (0..63),

INTEGER (0..10223),
INTEGER (0..1023),

SEQUENCE {

| GPS- | MeasurementParam ::= |
|------|----------------------|
|      | satelliteID          |
|      | c-N0                 |
|      | doppler              |
|      | wholeGPS-Chips       |
|      | fractionalGPS-Chips  |
|      | multipathIndicator   |
|      | pseudorangeRMS-Error |
| }    |                      |
|      |                      |

1

MultipathIndicator, INTEGER (0..63)

INTEGER (-32768..32768),

GPS-MeasurementParamList ::=

SEQUENCE (SIZE (1..maxSat)) OF GPS-MeasurementParam

### \*\*\* NEXT MODIFIED SECTION \*\*\*

#### 13.4.28a UE\_POSITIONING\_GPS\_DATA

| Information Element/Group<br>name           | Need | Multi | Type and reference   | Semantics description                  |
|---|------|-------|--|--|
| GPS Data ciphering info                     | OP   |       | UE<br>positioning<br>Ciphering<br>info<br>10.3.7.86                              |  |
| GPS Deciphering Keys                        | OP   |       |  |  |
| >Current deciphering key                    | MP   |       | Bit string(56)   |  |
| >Next deciphering key                       | MP   |       | Bit string(56)   |  |
| UE positioning GPS reference time           | OP   |       | UE<br>positioning<br>GPS<br>reference<br>time<br>10.3.7.96                       |  |
| UE positioning GPS reference<br>UE position | OP   |       | Ellipsoid<br>point with<br>altitude and<br>uncertainty<br>ellipsoid<br>10.3.8.4c | A priori knowledge of UE 3-D position. |
| UE positioning GPS DGPS corrections         | OP   |       | UE<br>positioning<br>GPS DGPS<br>corrections<br>10.3.7.91                        |  |
| UE positioning GPS navigation               | OP   | 1 to  |  |  |

| Information Element/Group<br>name                 | Need          | Multi                     | Type and<br>reference  | Semantics description   |
|---|---------------|---------------------------|--|-------------------------|
| model   |               | <maxsat></maxsat>         |  |                         |
| >SatID  | MP            |                           | Enumerated(<br>063)  | Satellite ID            |
| >GPS Ephemeris and Clock<br>Correction parameters | MP            |                           | UE<br>positioning<br>GPS<br>Ephemeris<br>and Clock<br>Correction<br>parameters<br>10.3.7.91a |                         |
| UE positioning GPS ionospheric model              | OP            |                           | UE<br>positioning<br>GPS<br>ionospheric<br>model<br>10.3.7.92                                |                         |
| UE positioning GPS UTC model                      | OP            |                           | UE<br>positioning<br>GPS UTC<br>model<br>10.3.7.97   |                         |
| UE positioning GPS almanac                        | OP            |                           |  |                         |
| >SatID  | MP            | 1 to<br><maxsat></maxsat> |  |                         |
| >>WNa   | MP            |                           |  |                         |
| >>DataID  | MP            |                           |  | Same as IE in 10.3.7.89 |
| >>e   | MP            |                           |  | Same as IE in 10.3.7.89 |
| >>t <sub>oa</sub>                                 | MP            |                           |  | Same as IE in 10.3.7.89 |
| >>δl  | MP            |                           |  | Same as IE in 10.3.7.89 |
| >>OMEGADOT  | MP            |                           |  | Same as IE in 10.3.7.89 |
| >>SV Health                                       | MP            |                           |  | Same as IE in 10.3.7.89 |
| >>A <sup>1/2</sup>                                | MP            |                           |  | Same as IE in 10.3.7.89 |
| >>OMEGA0  | MP            |                           |  | Same as IE in 10.3.7.89 |
| >>M <sub>0</sub>                                  | MP            |                           |  | Same as IE in 10.3.7.89 |
| >>0   | MP            |                           |  | Same as IE in 10.3.7.89 |
| >>af <sub>0</sub>                                 | MP            |                           |  | Same as IE in 10.3.7.89 |
| >>af <sub>1</sub>                                 | MP            |                           |  | Same as IE in 10.3.7.89 |
| >SV Global Health                                 | OP            |                           |  | Same as IE in 10.3.7.89 |
| UE positioning GPS acquisition assistance         | OP            |                           | UE<br>positioning<br>GPS<br>acquisition<br>assistance<br>10.3.7.88                           |                         |
| UE positioning GPS real-time integrity            | OP            |                           | UE<br>positioning<br>GPS real-<br>time integrity<br>10.3.7.95                                |                         |
| UE positioning GPS reference<br>cell info         | <del>OP</del> |                           | UE<br>positioning<br>GPS<br>reference<br>cell info<br>10.3.7.95a                             |                         |

|                    | CR-Form-v5        |   |  |  |   |  |   |   |  |  |   |   |
|--------------------|-------------------|---|--|--|---|--|---|---|--|--|---|---|
| <u>م</u>           |                   |   |  |  |   |  |   |   |  |  |   | _ 90  |
| x                  | 25                | .331  | CR   | 1451   | я   | rev  | -   | ж   | Current ve   | ersion:  | 3.10.0  | <b>)</b> "  |
| For <u>HELP</u> on | using             | this for  | m, see   | bottom   | of this p   | age or   | look  | at th   | e pop-up te  | xt ove   | r the # sy  | mbols.  |
| Proposed change    | affec             | ts: ¥   | (U)  | SIM  | ME/U  | EX   | Rad   | io Ac   | cess Netw  | ork X  | Core N  | letwork   |
| Title:             | l <mark>Co</mark> | rrection  | n to De  | afault Ra  | <mark>dio Con</mark> t  | igurati  | <mark>on Tir</mark>   | ners  |  |  |   |   |
| Source: ೫          | <mark>េ TS</mark> | G-RAN   | <mark>I WG2</mark>   |  |   |  |   |   |  |  |   |   |
| Work item code: ⅌  | te state          | 1   |  |  |   |  |   |   | Date:  | ж <mark>07</mark>  | 7.05.2002   |   |
| Category: ≇        | Deta              | F (con<br>A (con<br>B (add<br>C (fun<br>D (edi<br>ailed exp   | rection)<br>respond<br>lition of<br>ctional<br>torial m<br>planatio  | owing cate<br>ds to a co<br>feature),<br>modification<br>ns of the<br>FR 21.900  | orrection i<br>ion of fea<br>n)<br>above ca   | ture)  |   | elease  | 2  | of the<br>(GS<br>(Re<br>(Re<br>(Re<br>(Re<br>(Re   | 99<br>following re<br>M Phase 2<br>lease 1996<br>lease 1997<br>lease 1999<br>lease 4)<br>lease 5)   | )<br>)<br>)   |
| Reason for chang   | e: #              | signa<br>timer<br>asso<br>Using<br>trans<br>80%<br>This<br>Also,<br>bear<br>capa<br>also<br>trans<br>It is p<br>are in<br>3.4 k | alling ra<br>Status<br>ciated<br>g this c<br>oport ch<br>of the<br>is an in<br>, using<br>er ontc<br>city ov<br>has va<br>port ch<br>propos<br>ncreas<br>bps sig | adio bea<br>Periodic<br>with the<br>configura<br>nannel w<br>available<br>nefficient<br>this sam<br>erhead.<br>lue 100r<br>nannel ca<br>ed that the<br>ed from<br>gnalling | rers. In a<br>has val<br>signallir<br>tion, 2 S<br>which has<br>transp<br>t use of<br>ne config<br>ne transp<br>Furtherr<br>ns, with<br>apacity of<br>he value<br>100ms t<br>radio be | all of the<br>ue 100<br>ng radio<br>STATU<br>s capac<br>ort cha<br>the ava<br>guration<br>port cha<br>nore, the<br>overheat<br>s of bo<br>o 300n<br>arers in | s PD<br>city fo<br>nnel o<br>ailable<br>he inc<br>of the<br>ad ev<br>oth tim<br>ns in a<br>n clau | config<br>or RB<br>rer tr<br>Us w<br>r 25<br>capa<br>ban<br>then<br>coul<br>clusic<br>clusic<br>clusic<br>se p<br>en fu | n mapping a<br>ld result in<br>on of timerF<br>revious exa | e para<br>(RLC<br>annel I<br>nitted<br>, and t<br>sed fo<br>to third<br>20%<br>collPer<br>ic and<br>config | Ameter<br>AM), and<br>has value<br>every 100<br>this could<br>or this over<br>AM signal<br>transport<br>iodic pollin<br>s will incre<br>timerPollf<br>urations w<br>inificantly | the TTI<br>40ms.<br>Oms on a<br>result in<br>rhead.<br>ling radio<br>channel<br>ng, which<br>ase the<br>Periodic<br><i>v</i> hich use<br>reduce |
| Summary of chan    | <b>ge:</b>        | incre<br>kbps<br>Impac<br>This is   | ased f<br>signal<br>ct Ana<br>s an iso<br>PollPer  | rom 100<br>ling radio<br><b>lysis:</b><br>plated im  | ms to 30<br>o bearer<br>npact co  | 00ms ir<br>s in cla<br>rrectior  | n all d<br>ause 1<br>n to th  | efaul<br>13.7<br>Ie va  | timerPollPe<br>It radio con<br>Iue for time<br>ations. No  | figurat<br>rStatu  | ions which<br>sPeriodic   | n use 3.4<br>and  |

|                                  | UE implements/NW doesn't – UE will timeout slightly less frequently than the NW expects.<br>NW implements/UE doesn't – UE will timeout slightly more frequently than the NW expects.<br>In both cases the NW can reconfigure the UE if it wishes to change the timer values. |
|----------------------------------|--|
| Consequences if<br>not approved: | * The default radio bearer configurations which use 3.4 kbps signalling radio bearers may not work.  |
|                                  |  |
| Clauses affected:                | <mark>ቼ 13.7</mark>  |
| Other specs<br>affected:         | Conter core specifications#25.331 v4.4.0, CR 1452<br>25.331 v5.0.0, CR 1453Test specificationsO&M Specifications   |
| Other comments:                  | ¥  |

#### How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at: <u>http://www.3gpp.org/3G\_Specs/CRs.htm</u>. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked **#** contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <u>ftp://ftp.3gpp.org/specs/</u> For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

### 13.7 Parameter values for default radio configurations

The UE shall support the use of the default radio configurations that are specified in the following.

NOTE 1: These configurations are based on [41] and cover a number of RAB and signalling connection configurations.

In the table that is used to specify the parameter values for these default configurations, the following principles are used:

- Optional IEs that are not used are omitted;
- In case no parameter value is specified in a column, this means the value given the previous (left side) column applies.
- NOTE 2: If needed, signalling radio bearer RB4 is established after the completion of handover.
- NOTE 3: For each default configuration, the value of both FDD and TDD parameters are specified. All parameters apply to both FDD and TDD modes, unless explicitly stated otherwise. It should be noted that in this respect default configurations differ from pre-defined configurations, which only include parameter values for one mode.
- NOTE 4: The transport format sizes, indicated in the following table, concern the RLC PDU size, since all configurations concern dedicated channels. The transport block sizes indicated in TS 34.108 are different since these include the size of the MAC header.

| Configuration                     | 3.4 kbps signalling                | 13.6 kbps<br>signalling            | 7.95 kbps speech<br>+<br>3.4 kbps signalling        | 12.2 kbps speech<br>+<br>3.4 kbps signalling         |
|-----------------------------------|------------------------------------|------------------------------------|---|--|
| Ref 34.108                        | 2                                  | 3                                  | 6   | 4  |
| Default configuration identity    | 0                                  | 1                                  | 2   | 3  |
| RB INFORMATION                    |                                    |                                    |   |  |
| rb-Identity                       | RB1: 1, RB2: 2,<br>RB3: 3          | RB1: 1, RB2: 2,<br>RB3: 3          | RB1: 1, RB2: 2,<br>RB3: 3, RB5: 5,<br>RB6: 6        | RB1: 1, RB2: 2,<br>RB3: 3, RB5: 5,<br>RB6: 6, RB7: 7 |
| rlc-InfoChoice                    | RIc-info                           | RIc-info                           | Rlc-info  | RIc-info   |
| >ul-RLC-Mode                      | RB1: UM<br>RB2- RB3: AM            | RB1: UM<br>RB2- RB3: AM            | RB1: UM<br>RB2- RB3: AM<br>RB5-RB6: TM              | RB1: UM<br>RB2- RB3: AM<br>RB5-RB7: TM               |
| >>transmissionRLC-<br>DiscardMode | RB1: N/A<br>RB2- RB3:<br>NoDiscard | RB1: N/A<br>RB2- RB3:<br>NoDiscard | RB1: N/A<br>RB2- RB3:<br>NoDiscard<br>RB5- RB6: N/A | RB1: N/A<br>RB2- RB3:<br>NoDiscard<br>RB5- RB7: N/A  |
| >>>maxDat                         | RB1: N/A<br>RB2- RB3: 15           | RB1: N/A<br>RB2- RB3: 15           | RB1: N/A<br>RB2- RB3: 15<br>RB5- RB6: N/A           | RB1: N/A<br>RB2- RB3: 15<br>RB5- RB7: N/A            |
| >>transmissionWindowSiz<br>e      | RB1: N/A<br>RB2- RB3: 128          | RB1: N/A<br>RB2- RB3: 128          | RB1: N/A<br>RB2- RB3: 128<br>RB5- RB6: N/A          | RB1: N/A<br>RB2- RB3: 128<br>RB5- RB7: N/A           |
| >>timerRST                        | RB1: N/A<br>RB2- RB3: 300          | RB1: N/A<br>RB2- RB3: 300          | RB1: N/A<br>RB2- RB3: 300<br>RB5- RB6: N/A          | RB1: N/A<br>RB2- RB3: 300<br>RB5- RB7: N/A           |
| >>max-RST                         | RB1: N/A<br>RB2- RB3: 1            | RB1: N/A<br>RB2- RB3: 1            | RB1: N/A<br>RB2- RB3: 1<br>RB5- RB6: N/A            | RB1: N/A<br>RB2- RB3: 1<br>RB5- RB7: N/A             |
| >>pollingInfo                     | RB1: N/A<br>RB2- RB3: as below     | RB1: N/A<br>RB2- RB3: as below     | RB1: N/A<br>RB2- RB3: as below<br>RB5- RB6: N/A     | RB1: N/A<br>RB2- RB3: as below<br>RB5- RB7: N/A      |
| >>>lastTransmissionPDU-<br>Poll   | RB2- RB3: FALSE                    | RB2- RB3: FALSE                    | RB2- RB3: FALSE                                     | RB2- RB3: FALSE                                      |
| >>>lastRetransmissionPD<br>U-Poll | RB2- RB3: FALSE                    | RB2- RB3: FALSE                    | RB2- RB3: FALSE                                     | RB2- RB3: FALSE                                      |
| >>>timerPollPeriodic              | RB2- RB3: 100300                   | RB2- RB3: 100                      | RB2- RB3: 100300                                    | RB2- RB3: <del>100</del> 300                         |

| Configuration  | 3.4 kbps signalling       | 13.6 kbps<br>signalling   | 7.95 kbps speech                           | 12.2 kbps speech                           |
|--|---------------------------|---------------------------|--|--|
|  |                           | Signaling                 | 3.4 kbps signalling                        | 3.4 kbps signalling                        |
| >>segmentationIndication                             | RB1- RB3: N/A             | RB1- RB3: N/A             | RB1- RB3: N/A<br>RB5- RB6: FALSE           | RB1- RB3: N/A<br>RB5- RB7: FALSE           |
| >dl-RLC-Mode   | RB1: UM                   | RB1: UM                   | RB1: UM                                    | RB1: UM                                    |
|  | RB2- RB3: AM              | RB2- RB3: AM              | RB2- RB3: AM                               | RB2- RB3: AM                               |
|  | -                         | -                         | RB5- RB6: TM                               | RB5- RB7: TM                               |
| >>inSequenceDelivery                                 | RB1: N/A                  | RB1: N/A                  | RB1: N/A                                   | RB1: N/A                                   |
|  | RB2- RB3: TRUE            | RB2- RB3: TRUE            | RB2- RB3: TRUE<br>RB5- RB6: N/A            | RB2- RB3: TRUE<br>RB5- RB7: N/A            |
| >>receivingWindowSize                                | RB1: N/A                  | RB1: N/A                  | RB1: N/A                                   | RB1: N/A                                   |
|  | RB2- RB3: 128             | RB2- RB3: 128             | RB2- RB3: 128<br>RB5- RB6: N/A             | RB2- RB3: 128<br>RB5- RB7: N/A             |
| >>dl-RLC-StatusInfo                                  | RB1: N/A                  | RB1: N/A                  | RB1: N/A                                   | RB1: N/A                                   |
|  | RB2- RB3: as below        | RB2- RB3: as below        | RB2- RB3: as below                         | RB2- RB3: as below                         |
|  |                           |                           | RB5- RB6: N/A                              | RB5- RB7: N/A                              |
| >>>timerStatusProhibit                               | RB2- RB3: 100             | RB2- RB3: 100             | RB2- RB3: 100                              | RB2- RB3: 100                              |
| >>>missingPDU-Indicator                              | RB2- RB3: FALSE           | RB2- RB3: FALSE           | RB2- RB3: FALSE                            | RB2- RB3: FALSE                            |
| >>>timerStatusPeriodic                               | RB2- RB3: 100300          | RB2- RB3: 100             | RB2- RB3: 100300                           | RB2- RB3: 100300                           |
| >>segmentationIndication                             | RB1- RB3: N/A             | RB1- RB3: N/A             | RB1- RB3: N/A<br>RB5- RB6: FALSE           | RB1- RB3: N/A<br>RB5- RB7: FALSE           |
| rb-MappingInfo                                       |                           |                           |  |  |
| >UL-<br>LogicalChannelMappings                       | OneLogicalChannel         | OneLogicalChannel         | OneLogicalChannel                          | OneLogicalChanne                           |
| >>ul-<br>TransportChannelType                        | Dch                       | Dch                       | Dch  | Dch  |
| >>>transportChannelIdentit<br>y                      | RB1- RB3: 1               | RB1- RB3: 1               | RB1- RB3: 3<br>RB5: 1, RB6: 2              | RB1- RB3: 4<br>RB5: 1, RB6: 2,<br>RB7: 3   |
| >>logicalChannelIdentity                             | RB1: 1, RB2: 2,<br>RB3: 3 | RB1: 1, RB2: 2,<br>RB3: 3 | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5- RB6: N/A | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5- RB7: N/A |
| >>rlc-SizeList                                       | RB1- RB3:<br>configured   | RB1- RB3:<br>configured   | RB1- RB3:<br>configured<br>RB5- RB6: N/A   | RB1- RB3:<br>configured<br>RB5- RB7: N/A   |
| >>mac-<br>LogicalChannelPriority                     | RB1: 1, RB2: 2,<br>RB3: 3 | RB1: 1, RB2: 2,<br>RB3: 3 | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5- RB6: 5   | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5- RB7: 5   |
| >DL-<br>logicalChannelMappingList                    |                           |                           |  |  |
| >>Mapping option 1<br>>>>dl-<br>TransportChannelType | One mapping option<br>Dch | One mapping option<br>Dch | One mapping option<br>Dch                  | One mapping option                         |
| >>>transportChannellden<br>tity                      | RB1- RB3: 1               | RB1- RB3: 1               | RB1- RB3: 3<br>RB5: 1, RB6: 2              | RB1- RB3: 4<br>RB5: 1, RB6: 2,<br>RB7: 3   |
| >>>logicalChannelIdentity                            | RB1: 1, RB2: 2,<br>RB3: 3 | RB1: 1, RB2: 2,<br>RB3: 3 | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5- RB6: N/A | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5- RB7: N/A |
| TrCH INFORMATION PER<br>TrCH                         |                           |                           |  |  |
| UL-<br>AddReconfTransChInfoList                      |                           |                           |  |  |
| >Uplink transport channel type                       | dch                       | dch                       | dch  | dch  |
| >transportChannelIdentity                            | TrCH1: 1                  | TrCH1: 1                  | TrCH1: 1, TrCH2: 2,<br>TrCH3: 3            | TrCH1: 1, TrCH2: 2<br>TrCH3: 3, TrCH4: 4   |
| >transportFormatSet                                  | DedicatedTransChT<br>FS   | DedicatedTransChT<br>FS   | DedicatedTransChT<br>FS                    | DedicatedTransCh<br>FS                     |
| >>dynamicTF-information                              |                           |                           |  |  |

| Configuration   | 3.4 kbps signalling                           | 13.6 kbps<br>signalling                       | 7.95 kbps speech   | 12.2 kbps speech   |
|---|---|---|--|--|
|   |   | Signaling                                     | -<br>3.4 kbps signalling   | -<br>3.4 kbps signalling   |
| >>>tf0/ tf0,1   | TrCH1: (0x144,<br>1x144)                      | TrCH1: (0x144,<br>1x144)                      | TrCH1: (0x75)<br>TrCH2: (0x 84<br>1x84)<br>TrCH3: (0x144,<br>1x144)                        | TrCH1: (0x81)<br>TrCH2: (0x 103,<br>1x103)<br>TrCH3: (0x 60,<br>1x60)<br>TrCH4: (0x144,<br>1x144)                |
| >>>rlcSize  | BitMode                                       | BitMode                                       | BitMode  | BitMode  |
| >>>>sizeType  | TrCH1: type 2,<br>part1= 2, part2= 0<br>(144) | TrCH1: type 2,<br>part1= 2, part2= 0<br>(144) | TrCH1: type 1: 75<br>TrCH2: type 1: 84<br>TrCH3: 2: type 2,<br>part1= 2, part2= 0<br>(144) | TrCH1: type 1: 81<br>TrCH2: type 1: 103<br>TrCH3: type 1: 60<br>TrCH4: 2: type 2,<br>part1= 2, part2= 0<br>(144) |
| >>>numberOfTbSizeList   | TrCH1: Zero, one                              | TrCH1: Zero, one                              | TrCH1: Zero<br>TrCH2-3: Zero, one  | TrCH1: Zero<br>TrCH2-4: Zero, one  |
| >>>logicalChannelList   | All   | All   | All  | All  |
| >>>tf 1   | N/A   | N/A   | TrCH1: (1x39)<br>TrCH2- TrCH4: N/A   | TrCH1: (1x39)<br>TrCH2- TrCH4: N/A   |
| >>>numberOfTransportBl<br>ocks  |   |   | TrCH1: One   | TrCH1: One   |
| >>>rlc-Size   |   |   | TrCH1: BitMode   | TrCH1: BitMode   |
| >>>>sizeType  |   |   | TrCH1: 1: 39   | TrCH1: 1: 39   |
| >>>numberOfTbSizeList   |   |   | TrCH1: One   | TrCH1: One   |
| >>>logicalChannelList   |   |   | TrCH1: all   | TrCH1: all   |
| >>>tf 2   | N/A   | N/A   | TrCH1: (1x75)<br>TrCH2- TrCH3: N/A   | TrCH1: (1x81)<br>TrCH2- TrCH4: N/A   |
| >>>>numberOfTransportBl<br>ocks   |   |   | TrCH1: Zero  | TrCH1: Zero  |
| >>>rlc-Size   |   |   | TrCH1: BitMode   | TrCH1: BitMode   |
| >>>>sizeType  |   |   | TrCH1: type 1: 75  | TrCH1: type 1: 81  |
| >>>numberOfTbSizeList   |   |   | TrCH1: One   | TrCH1: One   |
| >>>logicalChannelList<br>>>semistaticTF-Information                       |   |   | TrCH1: all   | TrCH1: all   |
| >>>tti  | TrCH1: 40                                     | TrCH1: 10                                     | TrCH1- TrCH2: 20<br>TrCH3: 40  | TrCH1- TrCH3: 20<br>TrCH4: 40  |
| >>>channelCodingType  | Convolutional                                 | Convolutional                                 | Convolutional  | Convolutional  |
| >>>>codingRate  | TrCH1: Third                                  | TrCH1: Third                                  | TrCH1- TrCH2:<br>Third<br>TrCH3: Third   | TrCH1- TrCH2:<br>Third<br>TrCH3: Half<br>TrCH4: Third  |
| >>>rateMatchingAttribute  | TrCH1: 160                                    | TrCH1: 160                                    | TrCH1: 200<br>TrCH2: 190<br>TrCH3: 160   | TrCH1: 200<br>TrCH2: 190<br>TrCH3: 235<br>TrCH4: 160   |
| >>>crc-Size   | TrCH1: 16                                     | TrCH1: 16                                     | TrCH1: 12<br>TrCH2: 0<br>TrCH3: 16   | TrCH1: 12<br>TrCH2- TrCH3: 0<br>TrCH4: 16  |
| DL-   |   |   |  |  |
| AddReconfTransChInfoList  |   |   |  |  |
| >Downlink transport   | dch   | dch   | dch  | dch  |
| channel type<br>>dl-<br>TransportChannelIdentity<br>(should be as for UL) | TrCH1: 1                                      | TrCH1: 1                                      | TrCH1: 1, TrCH2: 2,<br>TrCH3: 3  | TrCH1: 1, TrCH2: 2,<br>TrCH3: 3, TrCH4: 4  |
| >tfs-SignallingMode   | SameAsUL                                      | SameAsUL                                      | Explicit<br><only on="" tf0="" trch1<br="">is different and<br/>shown below&gt;</only>     | Explicit<br><only on="" tf0="" trch1<br="">is different and<br/>shown below&gt;</only>                           |
| >>transportFormatSet  |   |   | DedicatedTransChT<br>FS  | DedicatedTransChT<br>FS  |
| >>>dynamicTF-information  |   |   |  |  |

| Configuration                          | 3.4 kbps signalling       | 13.6 kbps<br>signalling   | 7.95 kbps speech                                     | 12.2 kbps speech                                     |
|--|---------------------------|---------------------------|--|--|
|  |                           | Signaling                 | 3.4 kbps signalling                                  | т<br>3.4 kbps signalling                             |
| >>>>tf0/ tf0,1                         |                           |                           | TrCH1: (1x0)   | TrCH1: (1x0)   |
| >>>>rlcSize                            |                           |                           | BitMode  | bitMode  |
| >>>>sizeType                           |                           |                           | TrCH1: type 1: 0                                     | TrCH1: type 1: 0                                     |
| >>>>numberOfTbSizeList                 |                           |                           | TrCH1: One   | TrCH1: One   |
| >>>>logicalChannelList                 |                           |                           | All  | All  |
| >>ULTrCH-Id                            | TrCH1: 1                  | TrCH1: 1                  | TrCH1: 1, TrCH2: 2,<br>TrCH3: 3                      | TrCH1: 1, TrCH2: 2,<br>TrCH3: 3, TrCH4: 4            |
| >dch-QualityTarget                     | 2                         |                           |  |  |
| >>bler-QualityValue                    | TrCH1: 5x10 <sup>-2</sup> | TrCH1: 5x10 <sup>-2</sup> | TrCH1: 7x10 <sup>-3</sup><br>TrCH2- TrCH3:<br>Absent | TrCH1: 7x10 <sup>-3</sup><br>TrCH2- TrCH4:<br>Absent |
| TrCH INFORMATION,<br>COMMON            |                           |                           |  |  |
| ul-CommonTransChInfo                   |                           |                           |  |  |
| >tfcs-ID (TDD only)                    | 1                         | 1                         | 1  | 1  |
| >sharedChannelIndicator<br>(TDD only)  | FALSE                     | FALSE                     | FALSE  | FALSE  |
| >tfc-Subset                            | Absent, not required      | Absent, not required      | Absent, not required                                 | Absent, not required                                 |
| >ul-TFCS                               | Normal TFCI<br>signalling | Normal TFCI<br>signalling | Normal TFCI<br>signalling                            | Normal TFCI<br>signalling                            |
| >>explicitTFCS-<br>ConfigurationMode   | Complete                  | Complete                  | Complete   | Complete   |
| >>>ctfcSize                            | Ctfc2Bit                  | Ctfc2Bit                  | Ctfc4Bit   | Ctfc6Bit   |
| >>>>TFCS representation                | Addition                  | Addition                  | Addition   | Addition   |
| >>>>TFCS list                          |                           |                           |  |  |
| >>>>>TFCS 1                            | (TF0)                     | (TF0)                     | (TF0, TF0, TF0)                                      | (TF0, TF0, TF0,<br>TF0)                              |
| >>>>>ctfc                              | 0                         | 0                         | 0  | 0  |
| >>>>>>gainFactorInform ation           | Computed                  | Computed                  | Computed   | Computed   |
| >>>>>>>referenceTFCId                  | 0                         | 0                         | 0  | 0  |
| >>>>>TFCS 2                            | (TF1)                     | (TF1)                     | (TF1, TF0, TF0)                                      | (TF1, TF0, TF0,<br>TF0)                              |
| >>>>>ctfc                              | 1                         | 1                         | 1  | 1  |
| >>>>>>gainFactorInform ation           | Signalled                 | Signalled                 | Computed   | Computed   |
| >>>>>>βc (FDD only)                    | 11                        | 11                        | N/A  | N/A  |
| >>>>>βd                                | 15                        | 15                        | N/A  | N/A  |
| >>>>>>>>referenceTFCId                 | N/A                       | N/A                       | 0  | 0  |
| >>>>TFCS 3                             |                           |                           | (TF2, TF1, TF0)                                      | (TF2, TF1, TF1,<br>TF0)                              |
| >>>>>>ctfc                             | 1                         |                           | 5  | 11   |
| >>>>>>gainFactorInform ation           |                           |                           | Computed   | Computed   |
| >>>>>>referenceTFCId                   |                           |                           | 0  | 0  |
| >>>>>TFCS 4                            |                           |                           | (TF0, TF0, TF1)                                      | (TF0, TF0, TF0,<br>TF1)                              |
| >>>>>>ctfc                             |                           |                           | 6  | 12   |
| >>>>>>sgainFactorInform ation          |                           |                           | Computed   | Computed   |
| >>>>>βc (FDD only)                     |                           |                           | N/A  | N/A  |
| >>>>>βd                                |                           |                           | N/A  | N/A  |
| >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>> |                           | <br>                      | 0  | 0  |
| >>>>>TFCS 5                            |                           |                           | (TF1, TF0, TF1)                                      | (TF1, TF0, TF0,<br>TF1)                              |
| >>>>>ctfc                              |                           |                           | 7  | 13   |
| >>>>>gainFactorInform                  |                           |                           | Computed   | Computed   |
| >>>>>referenceTFCId                    |                           |                           | 0  | 0  |
| >>>>TFCS 6                             |                           |                           | (TF2, TF1, TF1)                                      | (TF2, TF1, TF1,                                      |
|  |                           |                           |  | TF1)   |

| Configuration                   | 3.4 kbps signalling | 13.6 kbps                 | 7.95 kbps speech         | 12.2 kbps speech         |
|---------------------------------|---------------------|---------------------------|--------------------------|--------------------------|
|                                 |                     | signalling                | +<br>3.4 kbps signalling | +<br>3.4 kbps signalling |
| >>>>>ctfc                       |                     |                           | 11                       | 23                       |
| >>>>>sgainFactorInform ation    |                     |                           | Signalled                | Signalled                |
| >>>>>βc (FDD only)              |                     |                           | 11                       | 11                       |
| >>>>>βd                         |                     |                           | 15                       | 15                       |
| >>>>>>referenceTFCId            |                     |                           | 0                        | 0                        |
| dl-CommonTransChInfo            |                     |                           |                          |                          |
| >tfcs-SignallingMode            | Same as UL          | Same as UL                | Same as UL               | Same as UL               |
| PhyCH INFORMATION<br>FDD        |                     |                           |                          |                          |
| UL-DPCH-InfoPredef              |                     |                           |                          |                          |
| >ul-DPCH-<br>PowerControlInfo   |                     |                           |                          |                          |
| >>powerControlAlgorithm         | Algorithm 1         | Algorithm 1               | Algorithm 1              | Algorithm 1              |
| >>>tpcStepSize                  | 1                   | 1                         | 1                        | 1                        |
| >tfci-Existence                 | TRUE                | TRUE                      | TRUE                     | TRUE                     |
| >puncturingLimit                | 1                   | 1                         | 1                        | 0.88                     |
| DL-<br>CommonInformationPredef  |                     |                           |                          |                          |
| >dl-DPCH-InfoCommon             |                     |                           |                          |                          |
| >>spreadingFactor               | 256                 | 128                       | 128                      | 128                      |
| >>pilotBits                     | 4                   | 4                         | 4                        | 4                        |
| >>positionFixed                 | N/A                 | N/A                       | Fixed                    | Fixed                    |
| PhyCH INFORMATION               |                     |                           |                          |                          |
| TDD                             |                     |                           |                          |                          |
| UL-DPCH-InfoPredef              |                     |                           |                          |                          |
| >ul-DPCH-                       |                     |                           |                          |                          |
| PowerControlInfo                |                     |                           |                          |                          |
| >>dpch-ConstantValue            | -20                 | -20                       | -20                      | -20                      |
| >commonTimeslotInfo             |                     |                           |                          |                          |
| >>secondInterleavingMode        | frameRelated        | frameRelated              | frameRelated             | frameRelated             |
| >>tfci-Coding                   | 4                   | 4                         | 16                       | 16                       |
| >>puncturingLimit               | 1                   | 0.92                      | 0.52                     | 0.88                     |
| >>repetitionPeriodAndLeng<br>th | repetitionPeriod1   | repetitionPeriod1         | repetitionPeriod1        | repetitionPeriod1        |
| DL-                             |                     |                           |                          |                          |
| CommonInformationPredef         |                     |                           |                          |                          |
| >dl-DPCH-InfoCommon             |                     |                           |                          |                          |
| >>commonTimeslotInfo            | fromoDolotad        | fromoDolated              | fromoDolotad             | framaDalatad             |
| >>>secondInterleavingMod        | frameRelated        | frameRelated              | frameRelated             | frameRelated             |
| e<br>>>>tfci-Coding             | 4                   | 4                         | 16                       | 16                       |
| >>>puncturingLimit              | 1                   | 0.92                      | 0.52                     | 0.92                     |
| >>>repetitionPeriodAndLe        | repetitionPeriod1   | 0.92<br>repetitionPeriod1 | repetitionPeriod1        | repetitionPeriod1        |
| ngth                            |                     |                           |                          | repetition enour         |

| Configuration                  | 28.8 kbps conv.<br>CS- data +<br>3.4 kbps signalling | 32 kbps conv. CS-<br>data +<br>3.4 kbps signalling | 64kbps conv. CS-<br>data +<br>3.4 kbps signalling | 14.4 kbps<br>streaming CS-<br>data +<br>3.4 kbps signalling |
|--------------------------------|--|--|---|---|
| Ref 34.108                     | 12   | 14   | 13  | 15  |
| Default configuration identity | 4  | 5  | 6   | 7   |
| RB INFORMATION                 |  |  |   |   |
| rb-Identity                    | RB1: 1, RB2: 2,<br>RB3: 3, RB5: 5                    | RB1: 1, RB2: 2,<br>RB3: 3, RB5: 5                  | RB1: 1, RB2: 2,<br>RB3: 3, RB5: 5                 | RB1: 1, RB2: 2,<br>RB3: 3, RB5: 5                           |
| rlc-InfoChoice                 | RIc-info   | RIc-info   | RIc-info  | RIc-info  |

| Configuration                     | 28.8 kbps conv.<br>CS- data + | 32 kbps conv. CS-<br>data +  | 64kbps conv. CS-<br>data +         | 14.4 kbps<br>streaming CS-    |
|-----------------------------------|-------------------------------|------------------------------|------------------------------------|-------------------------------|
|                                   | 3.4 kbps signalling           | 3.4 kbps signalling          | 3.4 kbps signalling                | data +<br>3.4 kbps signalling |
| >ul-RLC-Mode                      | RB1: UM                       | RB1: UM                      | RB1: UM                            | RB1: UM                       |
|                                   | RB2- RB3: AM                  | RB2- RB3: AM                 | RB2- RB3: AM                       | RB2- RB3: AM                  |
|                                   | RB5: TM                       | RB5: TM                      | RB5: TM                            | RB5: TM                       |
| >>transmissionRLC-                | RB1: N/A                      | RB1: N/A                     | RB1: N/A                           | RB1: N/A                      |
| DiscardMode                       | RB2- RB3:                     | RB2- RB3:                    | RB2- RB3:                          | RB2- RB3:                     |
|                                   | NoDiscard                     | NoDiscard                    | NoDiscard                          | NoDiscard                     |
|                                   | RB5: N/A                      | RB5: N/A                     | RB5: N/A                           | RB5: N/A                      |
| >>>maxDat                         | RB1: N/A                      | RB1: N/A                     | RB1: N/A                           | RB1: N/A                      |
|                                   | RB2- RB3: 15                  | RB2- RB3: 15                 | RB2- RB3: 15                       | RB2- RB3: 15                  |
|                                   | RB5: N/A                      | RB5: N/A                     | RB5: N/A                           | RB5: N/A                      |
| >>transmissionWindowSiz           | RB1: N/A                      | RB1: N/A                     | RB1: N/A                           | RB1: N/A                      |
| е                                 | RB2- RB3: 128                 | RB2- RB3: 128                | RB2- RB3: 128                      | RB2- RB3: 128                 |
|                                   | RB5: N/A                      | RB5: N/A                     | RB5: N/A                           | RB5: N/A                      |
| >>timerRST                        | RB1: N/A                      | RB1: N/A                     | RB1: N/A                           | RB1: N/A                      |
|                                   | RB2- RB3: 300                 | RB2- RB3: 300                | RB2- RB3: 300                      | RB2- RB3: 300                 |
|                                   | RB5: N/A                      | RB5: N/A                     | RB5: N/A                           | RB5: N/A                      |
| >>max-RST                         | RB1: N/A                      | RB1: N/A                     | RB1: N/A                           | RB1: N/A                      |
|                                   | RB2- RB3: 1                   | RB2- RB3: 1                  | RB2- RB3: 1                        | RB2- RB3: 1                   |
|                                   | RB5: N/A                      | RB5: N/A                     | RB5: N/A                           | RB5: N/A                      |
| >>pollingInfo                     | RB1: N/A                      | RB1: N/A                     | RB1: N/A                           | RB1: N/A                      |
|                                   | RB2- RB3: as below            | RB2- RB3: as below           | RB2- RB3: as below                 | RB2- RB3: as below            |
|                                   | RB5: N/A                      | RB5: N/A                     | RB5: N/A                           | RB5: N/A                      |
| >>>lastTransmissionPDU-<br>Poll   | RB2- RB3: FALSE               | RB2- RB3: FALSE              | RB2- RB3: FALSE                    | RB2- RB3: FALSE               |
| >>>lastRetransmissionPD<br>U-Poll | RB2- RB3: FALSE               | RB2- RB3: FALSE              | RB2- RB3: FALSE                    | RB2- RB3: FALSE               |
| >>>timerPollPeriodic              | RB2- RB3: <del>100</del> 300  | RB2- RB3: <del>100</del> 300 | RB2- RB3: <del>100</del> 300       | RB2- RB3: 100300              |
| >>segmentationIndication          | RB1- RB3: N/A                 | RB1- RB3: N/A                | RB1- RB3: N/A                      | RB1- RB3: N/A                 |
| 0                                 | RB5: FALSE                    | RB5: FALSE                   | RB5: FALSE                         | RB5: FALSE                    |
| >dl-RLC-Mode                      | RB1: UM                       | RB1: UM                      | RB1: UM                            | RB1: UM                       |
|                                   | RB2- RB3: AM                  | RB2- RB3: AM                 | RB2- RB3: AM                       | RB2- RB3: AM                  |
|                                   | RB5: TM                       | RB5: TM                      | RB5: TM                            | RB5: TM                       |
| >>inSequenceDelivery              | RB1: N/A                      | RB1: N/A                     | RB1: N/A                           | RB1: N/A                      |
|                                   | RB2- RB3: TRUE                | RB2- RB3: TRUE               | RB2- RB3: TRUE                     | RB2- RB3: TRUE                |
|                                   | RB5: N/A                      | RB5: N/A                     | RB5: N/A                           | RB5: N/A                      |
| >>receivingWindowSize             | RB1: N/A                      | RB1: N/A                     | RB1: N/A                           | RB1: N/A                      |
|                                   | RB2- RB3: 128                 | RB2- RB3: 128                | RB2- RB3: 128                      | RB2- RB3: 128                 |
|                                   | RB5: N/A                      | RB5: N/A                     | RB5: N/A                           | RB5: N/A                      |
| >>dl-RLC-StatusInfo               | RB1: N/A                      | RB1: N/A                     | RB1: N/A                           | RB1: N/A                      |
|                                   | RB2- RB3: as below            | RB2- RB3: as below           | RB2- RB3: as below                 | RB2- RB3: as below            |
|                                   | RB5: N/A                      | RB5: N/A                     | RB5: N/A                           | RB5: N/A                      |
| >>>timerStatusProhibit            | RB2- RB3: 100                 | RB2- RB3: 100                | RB2- RB3: 100                      | RB2- RB3: 100                 |
| >>>missingPDU-Indicator           | RB2- RB3: FALSE               | RB2- RB3: FALSE              | RB2- RB3: FALSE                    | RB2- RB3: FALSE               |
| >>>timerStatusPeriodic            | RB2- RB3: <del>100</del> 300  | RB2- RB3: <del>100</del> 300 | RB2- RB3: <del>100<u>300</u></del> | RB2- RB3: 100300              |
| >>segmentationIndication          | RB1- RB3: N/A                 | RB1- RB3: N/A                | RB1- RB3: N/A                      | RB1- RB3: N/A                 |
|                                   | RB5: FALSE                    | RB5: FALSE                   | RB5: FALSE                         | RB5: FALSE                    |
| rb-MappingInfo                    |                               |                              |                                    |                               |
| >UL-                              | OneLogicalChannel             | OneLogicalChannel            | OneLogicalChannel                  | OneLogicalChannel             |
| LogicalChannelMappings            | 0                             | 0                            | 0                                  | Ũ                             |
| >>ul-<br>TransportChannelType     | Dch                           | Dch                          | Dch                                | Dch                           |
| >>>transportChannelldenti         | RB1- RB3: 2                   | RB1- RB3: 2                  | RB1- RB3: 2                        | RB1- RB3: 2                   |
| ty                                | RB5: 1                        | RB5: 1                       | RB5: 1                             | RB5: 1                        |
| >>logicalChannelIdentity          | RB1: 1, RB2: 2,               | RB1: 1, RB2: 2,              | RB1: 1, RB2: 2,                    | RB1: 1, RB2: 2,               |
|                                   | RB3: 3                        | RB3: 3                       | RB3: 3                             | RB3: 3                        |
|                                   | RB5: N/A                      | RB5: N/A                     | RB5: N/A                           | RB5: N/A                      |
| >>rlc-SizeList                    | RB1- RB3:                     | RB1- RB3:                    | RB1- RB3:                          | RB1- RB3:                     |
|                                   | configured                    | configured                   | configured                         | configured                    |
|                                   | RB5: N/A                      | RB5: N/A                     | RB5: N/A                           | RB5: N/A                      |
| >>mac-                            | RB1: 1, RB2: 2,               | RB1: 1, RB2: 2,              | RB1: 1, RB2: 2,                    | RB1: 1, RB2: 2,               |
| LogicalChannelPriority            | RB3: 3                        | RB3: 3                       | RB3: 3                             | RB3: 3                        |
|                                   | RB5: 5                        | RB5: 5                       | RB5: 5                             | RB5: 5                        |

| Configuration  | 28.8 kbps conv.                          | 32 kbps conv. CS-                     | 64kbps conv. CS-                       | 14.4 kbps                                      |
|--|--|---------------------------------------|--|--|
|  | CS- data +<br>3.4 kbps signalling        | data +<br>3.4 kbps signalling         | data +<br>3.4 kbps signalling          | streaming CS-<br>data +<br>3.4 kbps signalling |
| >DL-   |  |                                       |  |  |
| logicalChannelMappingList                                  | On a sur a la sur a sti a s              | 0                                     | 0                                      | On a manufacture station                       |
| >Mapping option 1 >>dl-                                    | One mapping option                       | One mapping option                    | One mapping option                     | One mapping option                             |
| TransportChannelType                                       | Den                                      | Den                                   | Den                                    | DCII   |
| >>>transportChannellden                                    | RB1- RB3: 2                              | RB1- RB3: 2                           | RB1- RB3: 2                            | RB1- RB3: 2                                    |
| tity   | RB5: 1                                   | RB5: 1                                | RB5: 1                                 | RB5: 1   |
| >>>logicalChannelIdentity                                  | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5: N/A    | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5: N/A | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5: N/A  | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5: N/A          |
| TrCH INFORMATION PER<br>TrCH<br>UL-                        |  |                                       |  |  |
| AddReconfTransChInfoLis                                    |  |                                       |  |  |
| <ul> <li>&gt; Uplink transport channel<br/>type</li> </ul> | dch                                      | dch                                   | dch                                    | dch  |
| >transportChannelldentity                                  | TrCH1: 1, TrCH2: 2                       | TrCH1: 1, TrCH2: 2                    | TrCH1: 1, TrCH2: 2                     | TrCH1: 1, TrCH2: 2                             |
| >transportFormatSet  | DedicatedTransChT<br>FS                  | DedicatedTransChT<br>FS               | DedicatedTransChT<br>FS                | DedicatedTransChT<br>FS                        |
| >>dynamicTF-information                                    | T-014. (0.570                            | T-014. (0-040                         | T-014. (0-040                          |  |
| >>>tf0/ tf0,1  | TrCH1: (0x576,<br>1x576, 2x576)          | TrCH1: (0x640,<br>1x640)              | TrCH1: (0x640,<br>2x640)               | TrCH1: (0x576,<br>1x576)                       |
|  | TrCH2: (0x144,                           | TrCH2: (0x144,                        | TrCH2: (0x144,                         | TrCH2: (0x144,                                 |
|  | 1x144)                                   | 1x144)                                | 1x144)                                 | 1x144)   |
| >>>rlcSize   | TrCH1: OctetMode<br>TrCH2:BitMode        | TrCH1: OctetMode<br>TrCH2:BitMode     | TrCH1: OctetMode<br>TrCH2:BitMode      | TrCH1: OctetMode<br>TrCH2:BitMode              |
| >>>>sizeType   | TrCH1: type 2,                           | TrCH1: type 2,                        | TrCH1: type 2,                         | TrCH1: type 2,                                 |
|  | part1= 11, part2= 2<br>(576)             | part1= 11, part2= 2<br>(640)          | part1= 11, part2= 2<br>(640)           | part1= 9,<br>part2= 2 (576)                    |
|  | TrCH2: type 2,                           | TrCH2: type 2,                        | TrCH2: type 2,                         | TrCH2: type 2,                                 |
|  | part1= 2, part2= 0<br>(144)              | part1= 2, part2= 0<br>(144)           | part1= 2, part2= 0<br>(144)            | part1= 2,<br>part2= 0 (144)                    |
| >>>numberOfTbSizeList                                      | TrCH1: Zero,1, 2 (4)<br>TrCH2: Zero, one | TrCH1: Zero, one<br>TrCH2: Zero, one  | TrCH1: Zero, 2 (4)<br>TrCH2: Zero, one | TrCH1: Zero, one,<br>TrCH2: Zero, one          |
| >>>logicalChannelList                                      | All                                      | All                                   | All                                    | All  |
| >>semiStaticTF-<br>Information                             |  |                                       |  |  |
| >>>tti   | TrCH1: 40<br>TrCH2: 40                   | TrCH1: 20<br>TrCH2: 40                | TrCH1: 20<br>TrCH2: 40                 | TrCH1: 40<br>TrCH2: 40                         |
| >>>channelCodingType                                       | TrCH1: Turbo                             | TrCH1: Turbo                          | TrCH1: Turbo                           | TrCH1: Turbo                                   |
|  | TrCH2:<br>Convolutional                  | TrCH2:<br>Convolutional               | TrCH2:<br>Convolutional                | TrCH2:<br>Convolutional                        |
| >>>>codingRate   | TrCH1: N/A                               | TrCH1: N/A                            | TrCH1: N/A                             | TrCH1: N/A                                     |
|  | TrCH2: Third                             | TrCH2: Third                          | TrCH2: Third                           | TrCH2: Third                                   |
| >>>rateMatchingAttribute                                   | TrCH1: 180                               | TrCH1: 185                            | TrCH1: 170                             | TrCH1: 165                                     |
|  | TrCH2: 160                               | TrCH2: 160                            | TrCH2: 160                             | TrCH2: 160                                     |
| >>>crc-Size  | TrCH1: 16<br>TrCH2: 16                   | TrCH1: 16<br>TrCH2: 16                | TrCH1: 16<br>TrCH2: 16                 | TrCH1: 16<br>TrCH2: 16                         |
| DL-<br>AddReconfTransChInfoLis<br>t                        |  |                                       |  |  |
| >Downlink transport<br>channel type                        | dch                                      | dch                                   | dch                                    | dch  |
| >dl-<br>TransportChannelldentity<br>(should be as for UL)  | TrCH1: 1, TrCH2: 2                       | TrCH1: 1, TrCH2: 2                    | TrCH1: 1, TrCH2: 2                     | TrCH1: 1, TrCH2: 2                             |
| >tfs-SignallingMode  | SameAsUL                                 | SameAsUL                              | SameAsUL                               | SameAsUL                                       |
| >>transportFormatSet                                       |  |                                       |  |  |
| >>>dynamicTF-information                                   |  |                                       |  |  |
| >>>>tf0/ tf0,1<br>>>>>rlcSize                              |  |                                       |  |  |
| ~~>>IIUUI2E  |  |                                       |  |  |

| Configuration                          | 28.8 kbps conv.<br>CS- data +<br>3.4 kbps signalling | 32 kbps conv. CS-<br>data +<br>3.4 kbps signalling | 64kbps conv. CS-<br>data +<br>3.4 kbps signalling | 14.4 kbps<br>streaming CS-<br>data + |
|--|--|--|---|--------------------------------------|
|  |  |  |   | 3.4 kbps signalling                  |
| >>>>sizeType                           |  |  |   |                                      |
| >>>numberOfTbSizeList                  |  |  |   |                                      |
| >>>logicalChannelList                  |  |  |   |                                      |
| >>ULTrCH-Id<br>>dch-QualityTarget      | TrCH1: 1, TrCH2: 2                                   | TrCH1: 1, TrCH2: 2                                 | TrCH1: 1, TrCH2: 2                                | TrCH1: 1, TrCH2: 2                   |
| >>bler-QualityValue                    | TrCH1: 2x10 <sup>-3</sup>                            | TrCH1: 2x10 <sup>-3</sup>                          | TrCH1: 2x10 <sup>-3</sup>                         | TrCH1: 1x10 <sup>-2</sup>            |
|  | TrCH2: Absent  | TrCH2: Absent                                      | TrCH2: Absent                                     | TrCH2: Absent                        |
| TrCH INFORMATION,<br>COMMON            |  |  |   |                                      |
| ul-CommonTransChInfo                   |  |  |   |                                      |
| >tfcs-ID (TDD only)                    | 1  | 1  | 1   | 1                                    |
| >sharedChannelIndicator<br>(TDD only)  | FALSE  | FALSE  | FALSE   | FALSE                                |
| >tfc-Subset                            | Absent, not required                                 | Absent, not required                               | Absent, not required                              | Absent, not required                 |
| >ul-TFCS                               | Normal TFCI<br>signalling                            | Normal TFCI<br>signalling                          | Normal TFCI<br>signalling                         | Normal TFCI<br>signalling            |
| >>explicitTFCS-                        | Complete   | Complete   | Complete  | Complete                             |
| ConfigurationMode                      |  |  |   |                                      |
| >>>ctfcSize                            | Ctfc2Bit   | Ctfc2Bit   | Ctfc2Bit  | Ctfc4Bit                             |
| >>>>TFCS representation                | Addition   | Addition   | Addition  | Addition                             |
| >>>>TFCS list                          |  |  |   |                                      |
| >>>>>TFCS 1<br>>>>>>>ctfc              | (TF0, TF0)<br>0                                      | (TF0, TF0)<br>0                                    | (TF0, TF0)<br>0                                   | (TF0, TF0)<br>0                      |
| >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>> | Computed   | Computed   | Computed  | Computed                             |
| ation                                  | Computed   | Computed   | Computed  | Computed                             |
| >>>>>>referenceTFCId                   | 0  | 0  | 0   | 0                                    |
| >>>>>TFCS 2                            | (TF1, TF0)   | (TF1, TF0)   | (TF1, TF0)  | (TF1, TF0)                           |
| >>>>>>ctfc                             | 1  | 1  | 1   | 1                                    |
| >>>>>>gainFactorInform ation           | Computed   | Computed   | Computed  | Computed                             |
| >>>>>βc (FDD only)                     | N/A  | N/A  | N/A   | N/A                                  |
| >>>>>βd                                | N/A  | N/A  | N/A   | N/A                                  |
| >>>>>>referenceTFCId                   | 0  | 0  | 0   | 0                                    |
| >>>>>TFCS 3                            | (TF2, TF0)   | (TF0, TF1)   | (TF0, TF1)  | (TF0, TF1)                           |
| >>>>>ctfc                              | 2  | 2  | 2   | 2                                    |
| >>>>>>gainFactorInform ation           | Computed   | Computed   | Computed  | Computed                             |
| >>>>>>referenceTFCId                   | 0  | 0  | 0   | 0                                    |
| >>>>>TFCS 4                            | (TF0, TF1)   | (TF1, TF1)   | (TF1, TF1)  | (TF1, TF1)                           |
| >>>>>>ctfc                             | 3  | 3  | 3   | 3                                    |
| >>>>>>gainFactorInform ation           | Computed   | Signalled  | Signalled   | Signalled                            |
| >>>>>βc (FDD only)                     | N/A  | 8  | 8   | 11                                   |
| >>>>>βd                                | N/A  | 15   | 15  | 15                                   |
| >>>>>>referenceTFCId                   | N/A  | N/A  | N/A   | N/A                                  |
| >>>>>TFCS 5                            | (TF1, TF1)   | N/A  | N/A   |                                      |
| >>>>>ctfc                              | 4  |  |   |                                      |
| >>>>>>gainFactorInform ation           | Computed   |  |   |                                      |
| >>>>>referenceTFCId                    | 8  |  |   |                                      |
| >>>>>TFCS 6                            | (TF2, TF1)   | N/A  | N/A   |                                      |
| >>>>>>ctfc                             | 5  |  |   |                                      |
| >>>>>>gainFactorInform ation           | Signalled  |  |   |                                      |
| >>>>>βc (FDD only)                     | 8  |  |   |                                      |
| >>>>>βd                                | 15   |  |   |                                      |
| >>>>>referenceTFCId                    | N/A  |  |   |                                      |
| >>>>TFCS 7                             |  |  |   |                                      |
| >>>>>>ctfc                             |  |  |   |                                      |

| Configuration                              | 28.8 kbps conv.<br>CS- data + | 32 kbps conv. CS-<br>data + | 64kbps conv. CS-<br>data +            | 14.4 kbps<br>streaming CS-    |
|--|-------------------------------|-----------------------------|---------------------------------------|-------------------------------|
|  | 3.4 kbps signalling           | 3.4 kbps signalling         | 3.4 kbps signalling                   | data +<br>3.4 kbps signalling |
| >>>>>gainFactorInform                      |                               |                             |                                       |                               |
| ation                                      |                               |                             |                                       |                               |
| >>>>>>referenceTFCId                       |                               |                             |                                       |                               |
| >>>>>TFCS 8                                |                               |                             |                                       |                               |
| >>>>>>ctfc                                 |                               |                             |                                       |                               |
| >>>>>>gainFactorInform ation               |                               |                             |                                       |                               |
| >>>>>>>referenceTFCId                      |                               |                             |                                       |                               |
| >>>>>TFCS 9                                |                               |                             |                                       |                               |
| >>>>>>ctfc                                 |                               |                             |                                       |                               |
| >>>>>>gainFactorInform                     |                               |                             |                                       |                               |
| ation                                      |                               |                             |                                       |                               |
| >>>>>>referenceTFCId                       |                               |                             |                                       |                               |
| >>>>>TFCS 10                               |                               |                             |                                       |                               |
| >>>>>>ctfc                                 |                               |                             |                                       |                               |
| >>>>>>gainFactorInform                     |                               |                             |                                       |                               |
| ation                                      |                               |                             |                                       |                               |
| >>>>>βc (FDD only)                         |                               |                             |                                       |                               |
| >>>>>βd                                    |                               |                             |                                       |                               |
| >>>>>>referenceTFCId                       |                               |                             |                                       |                               |
| dl-CommonTransChInfo                       |                               |                             |                                       |                               |
| >tfcs-SignallingMode                       | Same as UL                    | Same as UL                  | Same as UL                            | Same as UL                    |
|  |                               |                             |                                       |                               |
| PhyCH INFORMATION                          |                               |                             |                                       |                               |
| FDD<br>UL-DPCH-InfoPredef                  |                               |                             |                                       |                               |
| >ul-DPCH-inioPredei                        |                               |                             |                                       |                               |
| PowerControlInfo                           |                               |                             |                                       |                               |
| >>powerControlAlgorithm                    | Algorithm 1                   | Algorithm 1                 | Algorithm 1                           | Algorithm 1                   |
| >>>tpcStepSize                             | 1                             | 1                           | 1                                     | 1                             |
| >tfci-Existence                            | TRUE                          | TRUE                        | TRUE                                  | TRUE                          |
| >puncturingLimit                           | 0.92                          | 0.8                         | 0.92                                  | 1                             |
| DL-  |                               |                             |                                       |                               |
| CommonInformationPrede<br>f                |                               |                             |                                       |                               |
| >dl-DPCH-InfoCommon                        |                               |                             |                                       |                               |
| >>spreadingFactor                          | 64                            | 64                          | 32                                    | 128                           |
| >>pilotBits                                | 8                             | 8                           | 8                                     | 8                             |
| >>positionFixed                            | Flexible                      | Flexible                    | Flexible                              | Flexible                      |
| PhyCH INFORMATION                          |                               |                             |                                       |                               |
| TDD  |                               |                             |                                       |                               |
| UL-DPCH-InfoPredef                         |                               |                             |                                       |                               |
| >ul-DPCH-<br>PowerControlInfo              |                               |                             |                                       |                               |
|  | 20                            | 20                          | 20                                    | 20                            |
| >dpch-ConstantValue<br>>commonTimeslotInfo | -20                           | -20                         | -20                                   | -20                           |
| >>secondInterleavingMod                    | frameRelated                  | frameRelated                | frameRelated                          | frameRelated                  |
| e  | Tamer elaleu                  | namerteialeu                | namerteidteu                          | Tamer Celaleu                 |
| >>tfci-Coding                              | 16                            | 8                           | 8                                     | 8                             |
| >>puncturingLimit                          | 0.44                          | 0.8                         | 0.56                                  | 0.8                           |
| >>repetitionPeriodAndLen                   | repetitionPeriod1             | repetitionPeriod1           | repetitionPeriod1                     | repetitionPeriod1             |
| gth  |                               |                             | · · · · · · · · · · · · · · · · · · · |                               |
| DL-  |                               |                             |                                       |                               |
| CommonInformationPrede<br>f                |                               |                             |                                       |                               |
| >dl-DPCH-InfoCommon                        |                               |                             |                                       |                               |
| >>commonTimeslotInfo                       |                               |                             |                                       |                               |
| >>>secondInterleavingMo<br>de              | frameRelated                  | frameRelated                | frameRelated                          | frameRelated                  |
| >>>tfci-Coding                             | 16                            | 8                           | 8                                     | 8                             |
| >>>puncturingLimit                         | 0.44                          | 0.64                        | 0.56                                  | 0.8                           |

| Configuration                    | 28.8 kbps conv.<br>CS- data +<br>3.4 kbps signalling | 32 kbps conv. CS-<br>data +<br>3.4 kbps signalling | 64kbps conv. CS-<br>data +<br>3.4 kbps signalling | 14.4 kbps<br>streaming CS-<br>data +<br>3.4 kbps signalling |
|----------------------------------|--|--|---|---|
| >>>repetitionPeriodAndLe<br>ngth | repetitionPeriod1                                    | repetitionPeriod1                                  | repetitionPeriod1                                 | repetitionPeriod1   |

| Configuration                     | 28.8 kbps<br>streaming CS-<br>data +<br>3.4 kbps signalling | 57.6 kbps<br>streaming CS-<br>data +<br>3.4 kbps signalling | 12.2 kbps<br>speech(multimode<br>) +<br>3.4 kbps signalling |
|-----------------------------------|---|---|---|
| Ref 34.108                        | 16  | 17  | 1a  |
| Default configuration<br>identity | 8   | 9   | 10  |
| RB INFORMATION                    |   |   |   |
| rb-Identity                       | RB1: 1, RB2: 2,   | RB1: 1, RB2: 2,   | RB1: 1, RB2: 2,   |
|                                   | RB3: 3, RB5: 5  | RB3: 3, RB5: 5  | RB3: 3, RB5: 5,<br>RB6: 6, RB7: 7                           |
| rlc-InfoChoice                    | RIc-info  | RIc-info  | RIc-info  |
| >ul-RLC-Mode                      | RB1: UM<br>RB2- RB3: AM<br>RB5: TM                          | RB1: UM<br>RB2- RB3: AM<br>RB5: TM                          | RB1: UM<br>RB2- RB3: AM<br>RB5-RB7: TM                      |
| >>transmissionRLC-<br>DiscardMode | RB1: N/A<br>RB2- RB3:<br>NoDiscard<br>RB5: N/A              | RB1: N/A<br>RB2- RB3:<br>NoDiscard<br>RB5: N/A              | RB1: N/A<br>RB2- RB3:<br>NoDiscard<br>RB5- RB7: N/A         |
| >>>maxDat                         | RB3: N/A<br>RB2- RB3: 15<br>RB5: N/A                        | RB3: N/A<br>RB2- RB3: 15<br>RB5: N/A                        | RB1: N/A<br>RB2- RB3: 15<br>RB5- RB7: N/A                   |
| >>transmissionWindowSiz<br>e      | RB1: N/A<br>RB2- RB3: 128<br>RB5: N/A                       | RB1: N/A<br>RB2- RB3: 128<br>RB5: N/A                       | RB1: N/A<br>RB2- RB3: 128<br>RB5- RB7: N/A                  |
| >>timerRST                        | RB1: N/A<br>RB2- RB3: 300<br>RB5: N/A                       | RB1: N/A<br>RB2- RB3: 300<br>RB5: N/A                       | RB1: N/A<br>RB2- RB3: 300<br>RB5- RB7: N/A                  |
| >>max-RST                         | RB1: N/A<br>RB2- RB3: 1<br>RB5: N/A                         | RB1: N/A<br>RB2- RB3: 1<br>RB5: N/A                         | RB1: N/A<br>RB2- RB3: 1<br>RB5- RB7: N/A                    |
| >>pollingInfo                     | RB1: N/A<br>RB2- RB3: as below<br>RB5: N/A                  | RB1: N/A<br>RB2- RB3: as below<br>RB5: N/A                  | RB1: N/A<br>RB2- RB3: as below<br>RB5- RB7: N/A             |
| >>>lastTransmissionPDU-<br>Poll   | RB2- RB3: FALSE   | RB2- RB3: FALSE   | RB2- RB3: FALSE   |
| >>>lastRetransmissionPD<br>U-Poll | RB2- RB3: FALSE   | RB2- RB3: FALSE   | RB2- RB3: FALSE   |
| >>>timerPollPeriodic              | RB2- RB3: <del>100<u>300</u></del>                          | RB2- RB3: <del>100<u>300</u></del>                          | RB2- RB3: <del>100<u>300</u></del>                          |
| >>segmentationIndication          | RB1- RB3: N/A<br>RB5: FALSE                                 | RB1- RB3: N/A<br>RB5: FALSE                                 | RB1- RB3: N/A<br>RB5- RB7: FALSE                            |
| >dl-RLC-Mode                      | RB1: UM<br>RB2- RB3: AM<br>RB5: TM                          | RB1: UM<br>RB2- RB3: AM<br>RB5: TM                          | RB1: UM<br>RB2- RB3: AM<br>RB5- RB7: TM                     |
| >>inSequenceDelivery              | RB1: N/A<br>RB2- RB3: TRUE<br>RB5: N/A                      | RB1: N/A<br>RB2- RB3: TRUE<br>RB5: N/A                      | RB1: N/A<br>RB2- RB3: TRUE<br>RB5- RB7: N/A                 |
| >>receivingWindowSize             | RB1: N/A<br>RB2- RB3: 128<br>RB5: N/A                       | RB1: N/A<br>RB2- RB3: 128<br>RB5: N/A                       | RB1: N/A<br>RB2- RB3: 128<br>RB5- RB7: N/A                  |
| >>dl-RLC-StatusInfo               | RB1: N/A<br>RB2- RB3: as below<br>RB5: N/A                  | RB1: N/A<br>RB2- RB3: as below<br>RB5: N/A                  | RB1: N/A<br>RB2- RB3: as below<br>RB5- RB7: N/A             |
| >>>timerStatusProhibit            | RB2- RB3: 100   | RB2- RB3: 100   | RB2- RB3: 100   |
| >>>missingPDU-Indicator           | RB2- RB3: FALSE   | RB2- RB3: FALSE   | RB2- RB3: FALSE   |
| >>>timerStatusPeriodic            | RB2- RB3: 100300  | RB2- RB3: 100300  | RB2- RB3: 100300  |
| >>segmentationIndication          | RB1- RB3: N/A<br>RB5: FALSE                                 | RB1- RB3: N/A<br>RB5: FALSE                                 | RB1- RB3: N/A<br>RB5- RB7: FALSE                            |

| Configuration                                  | 28.8 kbps<br>streaming CS-                | 57.6 kbps<br>streaming CS-                                 | 12.2 kbps<br>speech(multimode                      |
|--|---|--|--|
|  | data +<br>3.4 kbps signalling             | data +<br>3.4 kbps signalling                              | ) +<br>3.4 kbps signalling                         |
| rb-MappingInfo                                 |   |  | ole Rope eignannig                                 |
| >UL-<br>LogicalChannelMappings                 | OneLogicalChannel                         | OneLogicalChannel  | OneLogicalChannel                                  |
| >>ul-  | Dch                                       | Dch  | Dch  |
| TransportChannelType >>>transportChannelIdenti | RB1- RB3: 2                               | RB1- RB3: 2  | RB1- RB3: 4  |
| ty   | RB5: 1                                    | RB5: 1   | RB5: 1, RB6: 2,<br>RB7: 3                          |
| >>logicalChannelIdentity                       | RB1: 1, RB2: 2,                           | RB1: 1, RB2: 2,  | RB1: 1, RB2: 2,                                    |
|  | RB3: 3<br>RB5: N/A                        | RB3: 3<br>RB5: N/A   | RB3: 3<br>RB5- RB7: N/A                            |
| >>rlc-SizeList                                 | RB1- RB3:                                 | RB1- RB3:  | RB1- RB3:  |
|  | configured<br>RB5: N/A                    | configured<br>RB5: N/A                                     | configured<br>RB5- RB7: N/A                        |
| >>mac-   | RB1: 1, RB2: 2,                           | RB1: 1, RB2: 2,  | RB1: 1, RB2: 2,                                    |
| LogicalChannelPriority                         | RB3: 3<br>RB5: 5                          | RB3: 3<br>RB5: 5   | RB3: 3<br>RB5- RB7: 5                              |
| >DL-<br>logicalChannelMappingList              |   |  |  |
| >>Mapping option 1                             | One mapping option                        | One mapping option   | One mapping option                                 |
| >>>dl-<br>TransportChannelType                 | Dch                                       | Dch  | Dch  |
| >>>transportChannellden                        | RB1- RB3: 2                               | RB1- RB3: 2  | RB1- RB3: 4  |
| tity   | RB5: 1                                    | RB5: 1   | RB5: 1, RB6: 2,<br>RB7: 3                          |
| >>>logicalChannelIdentity                      | RB1: 1, RB2: 2,                           | RB1: 1, RB2: 2,  | RB1: 1, RB2: 2,                                    |
|  | RB3: 3<br>RB5: N/A                        | RB3: 3<br>RB5: N/A   | RB3: 3<br>RB5- RB7: N/A                            |
| TrCH INFORMATION PER<br>TrCH                   |   |  |  |
| UL-<br>AddReconfTransChInfoLis<br>t            |   |  |  |
| >Uplink transport channel type                 | dch                                       | dch  | dch  |
| >transportChannelldentity                      | TrCH1: 1, TrCH2: 2                        | TrCH1: 1, TrCH2: 2   | TrCH1: 1, TrCH2: 2,<br>TrCH3: 3, TrCH4: 4          |
| >transportFormatSet                            | DedicatedTransChT<br>FS                   | DedicatedTransChT<br>FS                                    | DedicatedTransChT<br>FS                            |
| >>dynamicTF-information                        |   |  |  |
| >>>tf0/ tf0,1                                  | TrCH1: (0x576,                            | TrCH1: (0x576,   | TrCH1: (0x81)                                      |
|  | 1x576, 2x576)<br>TrCH2: (0x144,<br>1x144) | 1x576, 2x576,<br>3x576, 4x576)<br>TrCH2: (0x144,<br>1x144) | TrCH2: (0x 103<br>TrCH3: (0x 60)<br>TrCH4: (0x144) |
| >>>rlcSize                                     | TrCH1: OctetMode<br>TrCH2:BitMode         | TrCH1: OctetMode<br>TrCH2:BitMode                          | BitMode  |
| >>>>sizeType                                   | TrCH1: type 2,                            | TrCH1: type 2,   | TrCH1: type 1: 81                                  |
|  | part1= 9,                                 | part1= 9,  | TrCH2: type 1: 103                                 |
|  | part2= 2 (576)<br>TrCH2: type 2,          | part2= 2 (576)<br>TrCH2: type 2,                           | TrCH3: type 1: 60<br>TrCH4: 2: type 2,             |
|  | part1= 2,                                 | part1= 2,  | part1= 2, part2= 0                                 |
|  | part2= 0 (144)                            | part2= 0 (144)   | (144)  |
| >>>>numberOfTbSizeList                         | TrCH1: Zero, one, 2<br>TrCH2: Zero, one   | TrCH1: Zero, one,<br>2, 3, 4<br>TrCH2: Zero, one           | TrCH1-4: Zero                                      |
| >>>logicalChannelList                          | All                                       | All  | All  |
| >>>tf 1  |   |  | TrCH1: (1x39)                                      |
|  |   |  | TrCH2: (1x53)                                      |
|  |   |  | TrCH3: (1x60)<br>TrCH4: (1x144)                    |
| >>>numberOfTransportBl<br>ocks                 |   |  | TrCH1-3: One                                       |
| 0010   | 1   |  | 1  |

| 3.4 kbps signalling         3.4 kbps signalling         3.4 kbps signalling         3.4 kbps signalling           >>>>>sigeType         TCH1:3: BitMode         TCH1:3: BitMode           >>>>>numberOfTbSizeList         TCH1:3: BitMode           >>>>soslogicalChannelList         TCH1:3: CH1:3:  | Configuration            | 28.8 kbps<br>streaming CS-<br>data + | 57.6 kbps<br>streaming CS-<br>data + | 12.2 kbps<br>speech(multimode<br>) + |
|--|--------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| >>>>sizeType         TCH1: 1: 30<br>TCH2: 1: 33<br>TCH3: 1: 60           >>>>ldgicalChannelList         TCH1: 3. all           >>>If 2         TCH1: 3. all           >>>If 2         TCH1: 1: 42           >>>Imple: Complex  |                          | 3.4 kbps signalling                  | 3.4 kbps signalling                  | 3.4 kbps signalling                  |
| TCH2: 1: 53           >>>>numberOTDSizeList         TCH1: 3: 60           >>>>tf 2         TCH1: 3: 60           >>>tf 2         TCH1: 3: 60           >>>>tf 2         TCH1: 1: 7           >>>>numberOTransportBl         TCH1: 1: 7           >>>>sizeTcSize         TCH1: 1: 1: 1: 1: 1: 1: 1: 1: 1: 1: 1: 1: 1  |                          |                                      |                                      |                                      |
|  | >>>>sizeType             |                                      |                                      |                                      |
| >>>>numberOfTbSizeList         TrCH1:3: One           >>>>logicalChannelList         TrCH1:3: all           >>>If 2         TrCH1:(1x42)           TrCH2:(1x63)         TrCH3: all           >>>>numberOfTransportBl         TrCH1:(1x42)           ocks         TrCH1: Itype1: 42           >>>>numberOfTSizeList         TrCH1: Itype1: 42           >>>>numberOfTSizeList         TrCH1: Itype1: 42           >>>>numberOfTSizeList         TrCH1: Itype1: 42           >>>>numberOfTransportBl         TrCH1: Itype1: 42           >>>>numberOfTsizeList         TrCH1: Itype1: 33           >>>>numberOfTransportBl         TrCH1: Itype1: 53           >>>stf3         TrCH1: Itype1: 53           >>>sticeType         TrCH1: Itype1: 53           >>>sticeType         TrCH1: Itype1: 54           >>>>numberOfTransportBl         TrCH1: Itype1: 54           >>>>numberOfTsizeList         TrCH1: Itype1: 84           >>>>numberOfTsizeList         TrCH1: Itype1: 84           >>>>numberOfTsizeList         TrCH1: Itype1: 84           >>>>sticeType         TrCH1: Itype1: 84           >>>>numberOfTransportBl         TrCH1: Itype1: 81           >>>stif         TrCH1: Itype1: 12           >>>>stif         TrCH1: Itype1: 13           >>>>>>   |                          |                                      |                                      |                                      |
| >>>>logicalChannelList         TrCH1-3: all           >>>tf 2         TrCH1: (1x42)           TrCH1: (1x42)         TrCH2: (1x63)           TrCH2: TrCH2: (1x63)         TrCH1: PitMode           >>>>sostro:Size         TrCH1: PitMode           >>>>numberOfTransportBl         TrCH1: PitMode           >>>>sostro:Size         TrCH1: PitMode           >>>>sostro:Size         TrCH1: PitMode           >>>>numberOfTransportBl         TrCH1: PitMode           >>>>sostro:Size         TrCH1: PitMode           >>>>sostro:Size         TrCH1: PitMode           >>>>numberOfTransportBl         TrCH1: PitMode           >>>>sostro:Size         TrCH1: PitMode           >>>>sostro:Size         TrCH1: PitMode           >>>>solgicalChannelList         TrCH1: PitMode           >>>>>>solte-Size         TrCH1: PitH1: PitH1: PitMod  | >>>>numberOfThSizeList   |                                      |                                      |                                      |
| >>>>ff 2         TrCH1: (1x42)<br>TrCH2: (1x63)<br>TrCH3: TrCH4: N/A           >>>>numberOfTransportBl         TrCH1: 2: One           >>>>s>sizeType         TrCH1: Diff.           >>>>sosigeType         TrCH1: Diff.           TrCH2: Type 1: 84         TrCH1: CH1: Diff.           >>>>sosigeType         TrCH1: Diff.           TrCH2: Type 1: 75         TrCH1: Diff.           TrCH2: Type 1: 76         TrCH1: Diff.           >>>>>>sosigeType  |                          |                                      |                                      |                                      |
| >>>>numberOfTransportBl         TCH2 (1x83)<br>TCH3: TrCH4: NA           >>>>soshc5ize         TrCH1: BitMode           >>>>soshc5ize         TrCH1: BitMode           >>>>soshc5ize         TrCH1: Difference           >>>>soshc5ize         TrCH1: Difference           >>>>soshc5ize         TrCH1: Difference           >>>>soshc5ize         TrCH1: Difference           >>>>logicalChannelList         TrCH1: NA           >>>>numberOfTransportBl         TrCH1: CH1: CH2: Ch2           ocks         TrCH1: Difference           >>>>numberOfTransportBl         TrCH1: CH1: CH2: Ch2           ocks         TrCH1: Difference           >>>>numberOfTransportBl         TrCH1: CH1: CH2: Ch2           ocks         TrCH1: CH1: CH2: Ch2           >>>numberOfTbSizeList         TrCH1: CH1: CH2: Ch2           >>>stigeType         TrCH1: CH1: CH2: Ch2           >>>stigeType         TrCH1: CH1: CH2: Ch2           >>>>stigeType         TrCH1: CH2: Ch2           >>>>stif 4  |                          |                                      |                                      |                                      |
| TrCH3-TrCH3: N/A           >>>>numberOfTransportBl         TrCH1: DitMode           >>>>rlc-Size         TrCH1: BitMode           >>>>soslogicalChannelList         TrCH1: CH1: 20 ne           >>>>logicalChannelList         TrCH1: 20 ne           >>>>tf 3         TrCH1: all           >>>sologicalChannelList         TrCH1: 20 ne           >>>>numberOfTransportBl         TrCH1: CH1: CH2: (1x84)           cocks         TrCH1: CH1: CH2: (1x84)           >>>>numberOfTbSizeList         TrCH1: StMode           >>>>soligicalChannelList         TrCH1: StMode           >>>>soligicalChannelList         TrCH1: StMode           >>>>numberOfTbSizeList         TrCH1: StMode           >>>>numberOfTbSizeList         TrCH1: StMode           >>>>numberOfTbSizeList         TrCH1: StMode           >>>>soligicalChannelList         TrCH1: StMode      <  |                          |                                      |                                      |                                      |
| >>>>umberOfTransportBl         TrCH1-2: One           ocks         TrCH1: BitMode           >>>>sizeType         TrCH1: type 1: 42           TrCH1: type 1: 42         TrCH1: type 1: 42           >>>sumberOfTbSizeList         TrCH1: 1(x55)           >>>numberOfTransportBl         TrCH1: (1x55)           >>>numberOfTransportBl         TrCH1: BitMode           >>>sostf 3         TrCH1: (1x55)           >>>numberOfTransportBl         TrCH1: BitMode           >>>>sostf 4         TrCH1: 2: Zero           ocks         TrCH1: 2: Zero           ocks         TrCH1: 2: Zero           >>>>sostf 4         TrCH1: 2: One           >>>>southerOfTbSizeList         TrCH1: 2: One           >>>>southerOfTbSizeList         TrCH1: 1(x75)           >>>southerOfTransportBl         TrCH1: 1(x75)           ocks         TrCH1: 1(x75)           >>>>numberOfTransportBl         TrCH1: 1(x75)           ocks         TrCH1: 2: One           >>>>sosticeSize         TrCH1: 1(x75)           TrCH2: 1(xpe1: 75)         TrCH2: 1(xpe1: 75)           TrCH2: 1(xpe1: 75)         TrCH2: 1(xpe1: 75)           TrCH2: 1(xpe1: 75)         TrCH2: 1(xpe1: 75)           >>>>sochc-Size         TrCH1: 1(xa1) <t< td=""><td></td><td></td><td></td><td></td></t<>   |                          |                                      |                                      |                                      |
| >>>>sizeType         TrCH1: type 1: 42<br>TrCH2: type 1: 63           >>>>logicalChannelList         TrCH1: 2: One           >>>stf 3         TrCH1: (1x55)<br>TrCH2: (1x84)           >>>stf 3         TrCH1: (1x55)<br>TrCH2: (1x84)           >>>somberOfTransportBl<br>ocks         TrCH1: (1x55)<br>TrCH2: (1x84)           >>>>numberOfTbSizeList         TrCH1: (1x75)<br>TrCH2: (1x84)           >>>>numberOfTbSizeList         TrCH1: (1x75)<br>TrCH2: (1x81)           >>>>solgicalChannelList         TrCH1: (1x75)<br>TrCH2: (1x103)<br>TrCH3: TrCH4: N/A           >>>>numberOfTbSizeList         TrCH1: (1x75)<br>TrCH2: (1x103)<br>TrCH3: TrCH4: N/A           >>>>numberOfTbSizeList         TrCH1: 2: One           >>>>numberOfTbSizeList         TrCH1: 1ype 1: 75<br>TrCH2: (1x103)<br>TrCH3: TrCH4: N/A           >>>>numberOfTbSizeList         TrCH1: 2: One           >>>>solgicalChannelList         TrCH1: 1ype 1: 75<br>TrCH3: 1ype 1: 70<br>TrCH1: 1ype 1: 81           >>>>thf 5         TrCH1: 1ype 1: 81<br>TrCH1: 1ype 1: 81           >>>>numberOfTbSizeList         TrCH1: 1ype 1: 81<br>TrCH1: 1ype 1: 81           >>>>numberOfTbSizeList         TrCH1: 1ype 1: 81  | •                        |                                      |                                      |                                      |
| TCH2: type 1: 63           >>>>logicalChannelList         TrCH1: all           >>>stf 3         TrCH1: all           >>>stf 3         TrCH1: txts)           >>>stf 3         TrCH1: txts)           >>>stric-Size         TrCH1: type 1: 56           >>>>stigeIqChannelList         TrCH1: type 1: 57           >>>stigeIqChannelList         TrCH1: type 1: 58           >>>>stic-Size         TrCH1: type 1: 56           >>>>stigeIqChannelList         TrCH1: type 1: 56           >>>>stigeIqChannelList         TrCH1: 2: type 1: 84           >>>>numberOfTbSizeList         TrCH1: 1: type 1: 57           >>>stf 4         TrCH1: 1: type 1: 75           TrCH1: type 1: 57         TrCH1: 1: type 1: 75           TrCH1: type 1: 103         TrCH1: 1: type 1: 75           >>>>numberOfTbSizeList         TrCH1: 1: type 1: 75           >>>>stf 5         TrCH1: type 1: 103           >>>>>>>>>>>>>>>>>stf 5         TrCH1: 1: type 1: 103           >>>>>>>>>>>>>>>>>>>>>>>>>>>>   | >>>>rlc-Size             |                                      |                                      | TrCH1: BitMode                       |
| >>>>numberOfTbSizeList         TrCH1-2: One           >>>stf 3         TrCH1: (1x55)           >>>tf 3         TrCH1: (1x55)           TrCH1: (1x55)         TrCH2: (1x84)           TrCH1: (1x55)         TrCH2: (1x84)           >>>>numberOfTransportBl         TrCH1: BitMode           >>>>socks         TrCH1: Iype 1: 55           >>>>sigeType         TrCH1: (1x75)           >>>>logicalChannelList         TrCH1: (1x75)           >>>>tf 4         TrCH1: (1x75)           >>>socks         TrCH1: (1x75)           >>>>togicalChannelList         TrCH1: (1x75)           >>>>togicalChannelList         TrCH1: (1x75)           >>>>sologicalChannelList         TrCH1: (1x75)           >>>>sologicalChannelList         TrCH1: (1x75)           >>>>sologicalChannelList         TrCH1: (1x75)           >>>>sologicalChannelList         TrCH1: (1x81)           >>>>numberOfTbSizeList         TrCH1: (1x81)           >>>>sologicalChannelList         TrCH1: (1x81)           >>>>sologicalChannelList <td>&gt;&gt;&gt;&gt;sizeType</td> <td></td> <td></td> <td></td>   | >>>>sizeType             |                                      |                                      |                                      |
| >>>>logicalChannelList         TrCH1: all           >>>tf 3         TrCH1: (1x55)<br>TrCH2: (1x84)<br>TrCH3: TrCH3: TrCH4: N/A           >>>>numberOfTransportBl<br>ocks         TrCH1-2: Zero           >>>>rlc-Size         TrCH1: BitMode           >>>>syszlrc-Size         TrCH1: 1: ype 1: 55<br>TrCH2: (1ype 1: 84           >>>>numberOfTbSizeList         TrCH1: Que 1: 55<br>TrCH2: (1ype 1: 84           >>>>numberOfTbSizeList         TrCH1: (1x75)<br>TrCH2: (1x103)<br>TrCH3: TrCH4: N/A           >>>solf 4         TrCH1: (1x75)<br>TrCH2: (1x103)<br>TrCH3: TrCH4: N/A           >>>>numberOfTbSizeList         TrCH1: (1x75)<br>TrCH2: (1x103)<br>TrCH3: TrCH4: N/A           >>>>numberOfTbSizeList         TrCH1: (1x75)<br>TrCH2: (1x103)           >>>>numberOfTbSizeList         TrCH1: Que 1: 75<br>TrCH3: TrCH4: N/A           >>>>numberOfTbSizeList         TrCH1: Que 1: 103           >>>>numberOfTbSizeList         TrCH1: Que 1: 103           >>>>numberOfTransportBl<br>ocks         TrCH1: Que 1: 103           >>>>numberOfTransportBl<br>ocks         TrCH1: Que 1: 103           >>>>numberOfTbSizeList         TrCH1: Que 1: RM2           >>>>numberOfTbSizeList         TrCH1: Que 1: CH4: N/A           >>>>numberOfTransportBl         TrCH1: Que 1: CH4: QU           >>>>numberOfTransportBl         Convolutional           >>>>>>>>>>>>>>>>>>>>>>>>>>>>   | >>>>numberOfTbSizeList   |                                      |                                      |                                      |
| >>>tf 3         TrCH1: (1x55)<br>TrCH2: (1x84)           >>>>numberOfTransportBl<br>ocks         TrCH1: RitMode           >>>>sizeType         TrCH1: BitMode           >>>>numberOfTbSizeList         TrCH1: spe 1: 55<br>TrCH2: type 1: 84           >>>>numberOfTbSizeList         TrCH1: all           >>>>logicalChannelList         TrCH1: spe 1: 55<br>TrCH2: type 1: 84           >>>>tf 4         TrCH1: all           >>>strc-Size         TrCH1: spe 1: 75<br>TrCH2: type 1: 84           >>>>tf 4         TrCH1: spe 1: 75<br>TrCH2: type 1: 84           >>>stf 4         TrCH1: spe 1: 75<br>TrCH2: type 1: 103<br>TrCH3: TrCH3: TrCH4: N/A           >>>sorlc-Size         TrCH1: SitMode           >>>solgicalChannelList         TrCH1: SitMode           >>>solgicalChannelList         TrCH1: N/A           >>>solgicalChannelList         TrCH1: SitMode           >>>solgicalChannelList         TrCH1: N/A           >>>solgicalChannelList         TrCH1: N/A           >>>solgicalChannelList         TrCH1: N/A           >>>solgicalChannelList         TrCH1: 10 ne   |                          |                                      |                                      |                                      |
| TrCH2: (1x84)           TrCH3: TrCH4: N/A           >>>>numberOfTransportBl           ocks           >>>>sizeType           TrCH1: BitMode           >>>>sizeType           TrCH1: BitMode           >>>>trCH1: BitMode           >>>>stit           >>>stit           TrCH1: type 1: 55           TrCH1: QP 1: 84           >>>>numberOfTbSizeList           >>>stit           TrCH1: QP 1: 84           >>>stit           TrCH1: QP 1: 84           >>>stit           TrCH1: QP 1: 84           TrCH1: QP 1: 84           >>>stit           TrCH1: QP 1: 84           >>>stit           TrCH1: QP 1: 84           >>>stit           TrCH1: QP 1: 103           TrCH1: QP 1: 103           TrCH2: QP 1: 103           TrCH2: QP 1: 103           TrCH1: BitMode           >>>systerSte           TrCH1: QP 1: 10           TrCH1  |                          |                                      |                                      |                                      |
| >>>>numberOfTransportBl         TrCH1-2: Zero           >>>>sizeType         TrCH1: BitMode           >>>>sizeType         TrCH1: type 1: 55           >>>>logicalChannelList         TrCH1: type 1: 84           >>>>tf 4         TrCH1: all           >>>>tf 4         TrCH1: type 1: 103           >>>tf 4         TrCH1: type 1: 103           >>>>trCH3: TrCH1: type 1: 75           TrCH1: type 1: 75           TrCH1: type 1: 75           TrCH1: type 1: 103           >>>>numberOfTbSizeList           >>>>sizeType           TrCH1: type 1: 103           >>>>numberOfTbSizeList           TrCH1: type 1: 81           TrCH1: type 1: 81           >>>sizeType           TrCH1: type 1: 81           >>>numberOfTbSizeList           TrCH1: 40           TrCH1: 40           TrCH1: 40           TrCH1: 40           TrCH1: 40           TrCH2: 40   |                          |                                      |                                      | TrCH2: (1x84)                        |
| ocks         TrCH1: BitMode           >>>>rlc-Size         TrCH1: BitMode           >>>>sizeType         TrCH1: SitMode           >>>>logicalChannelList         TrCH1: Rep 1: 55           >>>>logicalChannelList         TrCH1: all           >>>>tf 4         TrCH1: I(1775)           >>>>logicalChannelList         TrCH1: all           >>>>tf 4         TrCH1: Rep 1: 55           >>>>numberOfTransportBl         TrCH1: I(1775)           ocks         TrCH1: Rep 1: 75           >>>>numberOfTbSizeList         TrCH1: Rep 1: 75           >>>>numberOfTransportBl         TrCH1: Rep 1: 75           ocks         TrCH1: Rep 1: 75           >>>>numberOfTransportBl         TrCH1: Rep 1: 75           >>>>sizeType         TrCH1: Rep 1: 76           >>>>numberOfTsizeList         TrCH1: Rep 1: 76           >>>>numberOfTsizeList         TrCH1: Rep 1: 81           >>>>numberOfTsizeList         TrCH1: Rep 1: 76           >>>>numberOfTsizeList         TrCH1: Rep 1: 76           >>>>numberOfTsi   |                          |                                      |                                      |                                      |
| >>>>sizeType         TrCH1: type 1: 55<br>TrCH2: type 1: 84           >>>>logicalChannelList         TrCH1: all           >>>stf 4         TrCH1: (1x75)<br>TrCH2: (1x103)<br>TrCH3: TrCH4: N/A           >>>numberOfTransportBl<br>ocks         TrCH1: BitMode           >>>>numberOfTbSizeList         TrCH1: bitMode           >>>sizeType         TrCH1: slitMode           >>>>numberOfTbSizeList         TrCH1: lall           >>>>numberOfTbSizeList         TrCH1: slitMode           >>>>numberOfTbSizeList         TrCH1: lall           >>>>numberOfTbSizeList         TrCH1: lall           >>>>numberOfTransportBl<br>ocks         TrCH1: lall           >>>>numberOfTbSizeList         TrCH1: lall           >>>sligicalChannelList         TrCH1: lall           >>>slogicalChannelList         TrCH1: lall           >>>slogicalChannelList         TrCH1: lall           >>>slogicalChannelList         TrCH1: lall           >>>sizeType         TrCH1: lall           >>>sologicalChannelList         TrCH  | •                        |                                      |                                      | TrCH1-2: Zero                        |
| Image: Second         |                          |                                      |                                      |                                      |
| >>>>numberOfTbSizeList         TrCH1-2: One           >>>slogicalChannelList         TrCH1: all           >>>tf 4         TrCH1: (1x75)           TrCH1: (1x75)         TrCH2: (1x103)           TrCH3: TrCH4: N/A         TrCH1: N/A           >>>>numberOfTransportBl         TrCH1: BitMode           >>>>sizeType         TrCH1: type 1: 75           TrCH2: (1x103)         TrCH1: type 1: 103           >>>soumberOfTbSizeList         TrCH1: type 1: 75           >>>numberOfTansportBl         TrCH1: 2: One           >>>slogicalChannelList         TrCH1: all           >>>stf 5         TrCH1: CH1: 2: One           >>>slogicalChannelList         TrCH1: N/A           >>>numberOfTransportBl         TrCH1: CH1: Ch1: N/A           ocks         TrCH1: SitMode           >>>steTc-Size         TrCH1: CH1: Ch1: Ch1: Ch1: Ch1: Ch1: Ch1: Ch1: Ch   | >>>>sizeType             |                                      |                                      |                                      |
| >>>logicalChannelList         TrCH1: all           >>>tf 4         TrCH1: (1x75)<br>TrCH2: (1x103)<br>TrCH3: TrCH4: N/A           >>>numberOfTransportBl<br>ocks         TrCH1: BitMode           >>>sizeType         TrCH1: SitMode           >>>sumberOfTbSizeList         TrCH1: N/A           >>>numberOfTransportBl<br>ocks         TrCH1: SitMode           >>>numberOfTbSizeList         TrCH1: SitMode           >>>numberOfTbSizeList         TrCH1: CH1: CH1: CONE           >>>numberOfTransportBl<br>ocks         TrCH1: SitMode           >>>numberOfTbSizeList         TrCH1: CH1: CNE           >>>numberOfTransportBl<br>ocks         TrCH1: CNE           >>>numberOfTbSizeList         TrCH1: SitMode           >>>numberOfTbSizeList         TrCH1: CNE           >>>numberOfTbSizeList         TrCH1: CNE           >>>numberOfTbSizeList         TrCH1: SitMode           >>>seniftstrictF-<br>Information         TrCH1: 40           >>>tti         TrCH1: 40         TrCH1: CNE           TrCH2: Convolutional         TrCH2: 40         TrCH4: 40           >>>channelCodingType         TrCH1: N/A         TrCH1: CH2: Third         TrCH1: CH2: Third           TrCH2: Convolutional         TrCH1: N/A         TrCH1: TrCH2: Third         TrCH1: TrCH2: Third           TrCH2: 160         TrCH1: 14  |                          |                                      |                                      |                                      |
| >>>If 4         TrCH1: (1x75)<br>TrCH2: (1x103)<br>TrCH3: TrCH4: N/A           >>>>numberOfTransportBl<br>ocks         TrCH1: ElitMode           >>>>rlc-Size         TrCH1: [1ype 1: 75<br>TrCH2: type 1: 103           >>>sizeType         TrCH1: [1ype 1: 75<br>TrCH2: type 1: 103           >>>numberOfTbSizeList         TrCH1: [1ype 1: 75<br>TrCH2: type 1: 103           >>>numberOfTbSizeList         TrCH1: [1ype 1: 75<br>TrCH2: type 1: 103           >>>numberOfTbSizeList         TrCH1: [1ype 1: 75<br>TrCH2: type 1: 103           >>>numberOfTssizeList         TrCH1: [1ype 1: 103           >>>numberOfTransportBl<br>ocks         TrCH1: [1ype 1: 81           >>>numberOfTransportBl<br>ocks         TrCH1: [1ype 1: 81           >>>numberOfTbSizeList         TrCH1: [1ype 1: 81           >>>numberOfTbSizeList         TrCH1: [1ype 1: 81           >>>sizeType         TrCH1: [1ype 1: 81           >>>seniStaticTF-<br>Information         TrCH1: 40<br>TrCH2: 40         TrCH1: 11           >>>tti         TrCH1: 10<br>TrCH2: 40         TrCH1: 11           >>>tti         TrCH1: Turbo<br>TrCH2: 10         TrCH1: 11           >>>codingRate         TrCH1: 155<br>TrCH2: 160         TrCH1: 145<br>TrCH2: 160         TrCH3: 205<br>TrCH3: 160   |                          |                                      |                                      |                                      |
| TrCH2: (1x103)<br>TrCH3: TrCH4: N/A>>>>numberOfTransportBl<br>ocksTrCH1:2: One>>>sizeTypeTrCH1: BitMode>>>>sizeTypeTrCH1: TrCH1: PitMode>>>>numberOfTbSizeListTrCH1: 2: One>>>slogicalChannelListTrCH1: 2: One>>>sologicalChannelListTrCH1: 103>>>numberOfTbSizeListTrCH1: 110>>>sologicalChannelListTrCH1: 110>>>sologicalChannelListTrCH1: 110>>>sologicalChannelListTrCH1: 110>>>sologicalChannelListTrCH1: 110>>>numberOfTbSizeListTrCH1: 110>>>numberOfTbSizeListTrCH1: 110>>>numberOfTbSizeListTrCH1: 110>>>sologicalChannelListTrCH1: 110>>>sologicalChannelListTrCH1: 110>>>sologicalChannelListTrCH1: 110>>>semiStaticTF-<br>InformationTrCH1: 40TrCH2: 40TrCH1: 40TrCH2: 40TrCH1: 12>>>codingRateTrCH1: 112TrCH2: ThirdTrCH2: ThirdTrCH2: 160TrCH2: 160<   |                          |                                      |                                      |                                      |
| Image: system of the system  | >>>tf 4                  |                                      |                                      | TrCH1: (1x75)                        |
| >>>>numberOfTransportBl<br>ocksTrCH1-2: One>>>sizeTypeTrCH1: BitMode>>>sizeTypeTrCH1: type 1: 75>>>logicalChannelListTrCH1: 2: One>>>logicalChannelListTrCH1: 1481)>>>tf 5TrCH1: 1481)>>>numberOfTransportBlTrCH1: 1481)ocksTrCH1: BitMode>>>numberOfTbSizeListTrCH1: 1481)>>>numberOfTransportBlTrCH1: 1481)ocksTrCH1: Internet Interne   |                          |                                      |                                      |                                      |
| >>>rlc-Size         TrCH1: BitMode           >>>>sizeType         TrCH1: type 1: 75<br>TrCH2: type 1: 103           >>>numberOfTbSizeList         TrCH1-2: One           >>>>logicalChannelList         TrCH1: all           >>>stf 5         TrCH1: (1x81)           TrCH1: (1x81)         TrCH1: (1x81)           >>>numberOfTransportBl         TrCH1: BitMode           ocks         TrCH1: N/A           >>>sizeType         TrCH1: BitMode           >>>>sizeType         TrCH1: BitMode           >>>sizeType         TrCH1: N/A           >>>sizeType         TrCH1: BitMode           >>>sizeType         TrCH1: N/A           >>>sizeType         TrCH1: BitMode           >>>seriseType         TrCH1: N/A           >>>sologicalChannelList         TrCH1: BitMode           >>>semiStaticTF-         TrCH1: A0           Information         TrCH1: 40         TrCH1: Ch1: Ch1: Ch1: Ch1: Ch1: Ch1: Ch1: Ch   |                          |                                      |                                      |                                      |
| >>>>sizeTypeTrCH1: type 1: 75<br>TrCH2: type 1: 103>>>>logicalChannelListTrCH1-2: One>>>logicalChannelListTrCH1: all>>>tf 5TrCH1: (1x81)<br>TrCH2: TrCH4: N/A>>>>numberOfTransportBl<br>ocksTrCH1: BitMode>>>>logicalChannelListTrCH1: type 1: 81>>>>logicalChannelListTrCH1: type 1: 81>>>>logicalChannelListTrCH1: type 1: 81>>>>logicalChannelListTrCH1: 10 ne>>>somberOfTbSizeListTrCH1: 10 ne>>>semiStaticTF-<br>InformationTrCH1: 40TrCH2: 40TrCH2: 40>>>channelCodingTypeTrCH1: Turbo<br>TrCH2: Convolutional>>>codingRateTrCH1: N/A<br>TrCH2: ThirdTrCH1: N/A<br>TrCH2: 160TrCH1: 145<br>TrCH1: N/A<br>TrCH2: 160>>>rateMatchingAttributeTrCH1: 155<br>TrCH2: 160>>>rateMatchingAttributeTrCH1: 16<br>TrCH2: 160>>>cosizeTrCH1: 16<br>TrCH2: 160   |                          |                                      |                                      | TrCH1: BitMode                       |
| Image: constraint of the system of the sys |                          |                                      |                                      |                                      |
| >>>>numberOfTbSizeListTrCH1-2: One>>>logicalChannelListTrCH1: all>>>tf 5TrCH1: (1x81)>>>numberOfTransportBlTrCH1: (1x81)ocksTrCH1: One>>>>rlc-SizeTrCH1: BitMode>>>>snumberOfTbSizeListTrCH1: N/A>>>>numberOfTbSizeListTrCH1: Uppe 1: 81>>>somiBtaticTF-TrCH1: 40InformationTrCH1: 40>>>channelCodingTypeTrCH1: TurboTrCH2: 40TrCH1: TurboTrCH2: ConvolutionalTrCH1: N/ATrCH2: TrCH2: ConvolutionalTrCH1: N/ATrCH2: TrCH2: TrCH3: Half<br>TrCH3: Half<br>TrCH2: 160>>>rateMatchingAttributeTrCH1: 155TrCH1: 145TrCH2: 160TrCH2: 160TrCH3: 235TrCH3: 235TrCH4: 160TrCH3: 12  |                          |                                      |                                      |                                      |
| >>>tf 5TrCH1: (1x81)<br>TrCH2- TrCH4: N/A>>>>numberOfTransportBl<br>ocksTrCH1: One>>>>rlc-SizeTrCH1: BitMode>>>>sizeTypeTrCH1: BitMode>>>>numberOfTbSizeListTrCH1: type 1: 81>>>numberOfTbSizeListTrCH1: One>>>logicalChannelListTrCH1: all>>semiStaticTF-<br>InformationTrCH1: 40<br>TrCH2: 40>>>ttiTrCH1: 1urbo<br>TrCH2: 40>>>channelCodingTypeTrCH1: Turbo<br>TrCH2: Convolutional>>>codingRateTrCH1: N/A<br>TrCH2: Third>>>rateMatchingAttributeTrCH1: 155<br>TrCH2: 160>>>codingAttributeTrCH1: 155<br>TrCH2: 160>>>corc-SizeTrCH1: 16TrCH1: 16TrCH1: 12   | >>>>numberOfTbSizeList   |                                      |                                      | TrCH1-2: One                         |
| Image: system of the system  | >>>>logicalChannelList   |                                      |                                      | TrCH1: all                           |
| >>>>numberOfTransportBl<br>ocksTrCH1: One>>>>rlc-SizeTrCH1: BitMode>>>sizeTypeTrCH1: type 1: 81>>>numberOfTbSizeListTrCH1: One>>>logicalChannelListTrCH1: One>>>semiStaticTF-<br>InformationTrCH1: 40<br>TrCH2: 40TrCH1: 40<br>TrCH2: 40>>>ttiTrCH1: TrCH1: 40<br>TrCH2: 40TrCH1: TrCH3: 20<br>TrCH2: 40>>>channelCodingTypeTrCH1: Turbo<br>TrCH2: Convolutional<br>ConvolutionalTrCH1: Turbo<br>Convolutional>>>codingRateTrCH1: N/A<br>TrCH2: ThirdTrCH1: N/A<br>TrCH2: ThirdTrCH1: TrCH2: Third<br>TrCH2: Third>>>rateMatchingAttributeTrCH1: 155<br>TrCH2: 160TrCH1: 145<br>TrCH2: 160TrCH1: 200<br>TrCH2: 160>>>crc-SizeTrCH1: 16TrCH1: 16  | >>>tf 5                  |                                      |                                      |                                      |
| ocksImage: constraint of the system of the syst          |                          |                                      |                                      |                                      |
| >>>>sizeTypeTrCH1: type 1: 81>>>numberOfTbSizeListTrCH1: One>>>logicalChannelListTrCH1: all>>semiStaticTF-<br>InformationTrCH1: 40>>>tiTrCH2: 40>>>tiTrCH1: TurboTrCH2: 40TrCH1: TurboTrCH2: 40TrCH2: 40>>>channelCodingTypeTrCH1: TurboTrCH2:<br>ConvolutionalTrCH1: Turbo>>>codingRateTrCH1: N/ATrCH2: ThirdTrCH2: Third>>>rateMatchingAttributeTrCH1: 155TrCH2: 160TrCH2: 160TrCH2: 160TrCH2: 160TrCH2: 160TrCH2: 160TrCH2: 160TrCH1: 12  | ocks                     |                                      |                                      |                                      |
| >>>numberOfTbSizeListTrCH1: One>>>logicalChannelListTrCH1: all>>semiStaticTF-<br>InformationTrCH1: 40>>>tiiTrCH1: 40TrCH2: 40TrCH2: 40TrCH2: 40TrCH1: TurboTrCH2: ConvolutionalTrCH1: TurboTrCH2: ConvolutionalConvolutional>>>codingRateTrCH1: N/ATrCH2: ThirdTrCH1: 155TrCH2: 160TrCH1: 145TrCH2: 160TrCH2: 160TrCH3: 235TrCH4: 160>>>crc-SizeTrCH1: 16TrCH1: 16TrCH1: 12  |                          |                                      |                                      |                                      |
| >>>logicalChannelListTrCH1: all>>semiStaticTF-<br>InformationTrCH1: 40TrCH1: 40>>>ttiTrCH1: 40TrCH1: 40TrCH2: 40TrCH2: 40TrCH4: 40>>>channelCodingTypeTrCH1: TurboTrCH1: TurboTrCH2:<br>ConvolutionalTrCH1: TurboTrCH1: Turbo>>>codingRateTrCH1: N/ATrCH1: N/ATrCH1- TrCH2:<br>Convolutional>>>codingRateTrCH1: N/ATrCH1: N/ATrCH1- TrCH2:<br>TrCH2: Third>>>rateMatchingAttributeTrCH1: 155TrCH1: 145TrCH1: 200TrCH2: 160TrCH2: 160TrCH2: 160TrCH2: 190>>>crc-SizeTrCH1: 16TrCH1: 16TrCH1: 12   |                          |                                      |                                      |                                      |
| >>semiStaticTF-<br>InformationTrCH1: 40<br>TrCH2: 40TrCH1: 40<br>TrCH2: 40TrCH1- TrCH3: 20<br>TrCH4: 40>>>channelCodingTypeTrCH1: Turbo<br>TrCH2: 40TrCH1: Turbo<br>TrCH2: 40TrCH1: Turbo<br>TrCH2: 40Convolutional>>>codingRateTrCH1: N/A<br>TrCH2: ThirdTrCH1: N/A<br>TrCH2: ThirdTrCH1- TrCH2: Third>>>codingAttributeTrCH1: 155<br>TrCH2: 160TrCH1: 145<br>TrCH2: 160TrCH1: 200<br>TrCH2: 160>>>crc-SizeTrCH1: 16TrCH1: 16   |                          |                                      |                                      |                                      |
| InformationTrCH1: 40TrCH1: 40TrCH1: 10>>>ttiTrCH2: 40TrCH2: 40TrCH1: TurboTrCH4: 40>>>channelCodingTypeTrCH1: TurboTrCH1: TurboTrCH1: TurboTrCH2:TrCH2:ConvolutionalConvolutional>>>codingRateTrCH1: N/ATrCH1: N/ATrCH1: TrCH2:TrCH2:TrCH2: ThirdTrCH2: ThirdTrCH1: N/A>>>codingRateTrCH1: 155TrCH1: 145TrCH1: 200TrCH2: 160TrCH2: 160TrCH2: 160TrCH2: 190>>>crc-SizeTrCH1: 16TrCH1: 16TrCH1: 12   |                          |                                      |                                      |                                      |
| >>>ttiTrCH1: 40<br>TrCH2: 40TrCH1: 40<br>TrCH2: 40TrCH1- TrCH3: 20<br>TrCH4: 40>>>channelCodingTypeTrCH1: Turbo<br>TrCH2:<br>ConvolutionalTrCH1: Turbo<br>TrCH2:<br>ConvolutionalConvolutional>>>codingRateTrCH1: N/A<br>TrCH2: ThirdTrCH1: N/A<br>TrCH2: ThirdTrCH1- TrCH2:<br>TrCH2: Third>>>codingAttributeTrCH1: 155<br>TrCH2: 160TrCH1: 145<br>TrCH2: 160TrCH1: 200<br>TrCH2: 190<br>TrCH2: 190<br>TrCH3: 235<br>TrCH4: 160   |                          |                                      |                                      |                                      |
| TrCH2: 40TrCH2: 40TrCH4: 40>>>channelCodingTypeTrCH1: Turbo<br>TrCH2:<br>ConvolutionalTrCH1: Turbo<br>TrCH2:<br>ConvolutionalConvolutional>>>codingRateTrCH1: N/A<br>TrCH2: ThirdTrCH1: N/A<br>TrCH2: ThirdTrCH1- TrCH2:<br>TrCH2: Third>>>codingRateTrCH1: N/A<br>TrCH2: ThirdTrCH1: N/A<br>TrCH2: ThirdTrCH1- TrCH2:<br>Third>>>rateMatchingAttributeTrCH1: 155<br>TrCH2: 160TrCH1: 145<br>TrCH2: 160TrCH1: 200<br>TrCH2: 160>>>crc-SizeTrCH1: 16TrCH1: 16TrCH1: 12  |                          | TrCH1: 40                            | TrCH1: 40                            | TrCH1- TrCH3: 20                     |
| >>>channelCodingTypeTrCH1: Turbo<br>TrCH2:<br>ConvolutionalTrCH1: Turbo<br>TrCH2:<br>ConvolutionalConvolutional>>>codingRateTrCH1: N/A<br>TrCH2: ThirdTrCH1: N/A<br>TrCH2: ThirdTrCH1- TrCH2:<br>TrCH2: Third>>>codingRateTrCH1: N/A<br>TrCH2: ThirdTrCH1: N/A<br>TrCH2: ThirdTrCH1- TrCH2:<br>Third>>>rateMatchingAttributeTrCH1: 155<br>TrCH2: 160TrCH1: 145<br>TrCH2: 160TrCH1: 200<br>TrCH2: 160>>>crc-SizeTrCH1: 16TrCH1: 16TrCH1: 12   |                          |                                      |                                      |                                      |
| ConvolutionalConvolutional>>>codingRateTrCH1: N/A<br>TrCH2: ThirdTrCH1: N/A<br>TrCH2: ThirdTrCH1- TrCH2:<br>Third>>>rateMatchingAttributeTrCH1: 155<br>TrCH2: 160TrCH1: 145<br>TrCH2: 160TrCH1: 200<br>TrCH2: 160>>>ccc-SizeTrCH1: 16TrCH1: 16   | >>>channelCodingType     | TrCH1: Turbo                         | TrCH1: Turbo                         |                                      |
| >>>codingRateTrCH1: N/A<br>TrCH2: ThirdTrCH1: N/A<br>TrCH2: ThirdTrCH1- TrCH2:<br>Third>>>rateMatchingAttributeTrCH1: 155<br>TrCH2: 160TrCH1: 145<br>TrCH2: 160TrCH1: 200<br>TrCH2: 160>>>crc-SizeTrCH1: 16TrCH1: 16   |                          |                                      | -                                    |                                      |
| >>>rateMatchingAttribute         TrCH1: 155<br>TrCH2: 160         TrCH1: 145<br>TrCH2: 160         TrCH1: 145<br>TrCH2: 160         TrCH1: 200<br>TrCH2: 190<br>TrCH3: 235<br>TrCH4: 160           >>>crc-Size         TrCH1: 16         TrCH1: 16         TrCH1: 12   | >>>>codingRate           |                                      |                                      |                                      |
| Image: system with the system withe system with the system with the system with the sys        |                          | TrCH2: Third                         | TrCH2: Third                         |                                      |
| >>>rateMatchingAttribute TrCH1: 155 TrCH1: 145 TrCH1: 200<br>TrCH2: 160 TrCH2: 160 TrCH2: 190<br>TrCH3: 235<br>TrCH4: 160 TrCH4: 160   |                          |                                      |                                      |                                      |
| TrCH3: 235           TrCH4: 160           >>>crc-Size         TrCH1: 16           TrCH1: 12  | >>>rateMatchingAttribute |                                      |                                      | TrCH1: 200                           |
| TrCH4: 160           >>>crc-Size         TrCH1: 16         TrCH1: 12   |                          | TrCH2: 160                           | TrCH2: 160                           |                                      |
| >>>crc-Size TrCH1: 16 TrCH1: 16 TrCH1: 12  |                          |                                      |                                      |                                      |
|  | Oi                       |                                      | T-014.40                             |                                      |
|  | >>>crc-Size              |                                      |                                      |                                      |
| TrCH4: 16  |                          |                                      |                                      |                                      |

| Configuration   | 12.2 kbps                                  |  |   |  |
|---|--|--|---|--|
|   | streaming CS-<br>data +                    | streaming CS-<br>data +                    | speech(multimode<br>) +   |  |
|   | 3.4 kbps signalling                        | 3.4 kbps signalling                        | 3.4 kbps signalling   |  |
| DL-<br>AddReconfTransChInfoLis<br>t                       |  |  |   |  |
| >Downlink transport<br>channel type                       | dch  | dch  | dch   |  |
| >dl-<br>TransportChannelldentity<br>(should be as for UL) | TrCH1: 1, TrCH2: 2                         | TrCH1: 1, TrCH2: 2                         | TrCH1: 1, TrCH2: 2,<br>TrCH3: 3, TrCH4: 4   |  |
| >tfs-SignallingMode                                       | SameAsUL                                   | SameAsUL                                   | Independent<br><only on="" tf0="" trch1<br="">is different and<br/>shown below&gt;</only> |  |
| >>transportFormatSet                                      |  |  | DedicatedTransChT<br>FS   |  |
| >>>dynamicTF-information                                  |  |  |   |  |
| >>>>tf0/ tf0,1<br>>>>>rlcSize                             |  |  | TrCH1: (1x0)<br>bitMode   |  |
| >>>>icSize<br>>>>>sizeType                                |  |  | TrCH1: type 1: 0  |  |
| >>>>numberOfTbSizeList                                    |  |  | TrCH1: One  |  |
| >>>logicalChannelList                                     |  |  | All   |  |
| >>ULTrCH-Id   | TrCH1: 1, TrCH2: 2                         | TrCH1: 1, TrCH2: 2                         | TrCH1: 1, TrCH2: 2,<br>TrCH3: 3, TrCH4: 4   |  |
| >dch-QualityTarget  |  |  |   |  |
| >>bler-QualityValue                                       | TrCH1: 1x10 <sup>-2</sup><br>TrCH2: Absent | TrCH1: 1x10 <sup>-2</sup><br>TrCH2: Absent | TrCH1: 7x10 <sup>-3</sup><br>TrCH2- TrCH4:<br>Absent                                      |  |
| TrCH INFORMATION,<br>COMMON                               |  |  |   |  |
| ul-CommonTransChInfo                                      |  |  |   |  |
| >tfcs-ID (TDD only)                                       | 1  | 1  | 1   |  |
| >sharedChannelIndicator<br>(TDD only)                     | FALSE                                      | FALSE                                      | FALSE   |  |
| >tfc-Subset   | Absent, not required                       | Absent, not required                       | Absent, not required  |  |
| >ul-TFCS  | Normal TFCI                                | Normal TFCI                                | Normal TFCI   |  |
|   | signalling                                 | signalling                                 | signalling  |  |
| >>explicitTFCS-<br>ConfigurationMode                      | Complete                                   | Complete                                   | Complete  |  |
| >>>ctfcSize   | Ctfc4Bit                                   | Ctfc4Bit                                   | Ctfc8Bit  |  |
| >>>>TFCS representation                                   | Addition                                   | Addition                                   | Addition  |  |
| >>>>TFCS list   | ( <b></b>                                  | (  |   |  |
| >>>>>TFCS 1   | (TF0, TF0)                                 | (TF0, TF0)                                 | (TF0, TF0, TF0,<br>TF0)   |  |
| >>>>>>ctfc  | 0  | 0  | 0   |  |
| >>>>>>gainFactorInform ation                              | Computed                                   | Computed                                   | Computed  |  |
| >>>>>>referenceTFCId                                      | 0  | 0  | 0   |  |
| >>>>>TFCS 2   | (TF1, TF0)                                 | (TF1, TF0)                                 | (TF1, TF0, TF0,<br>TF0)   |  |
| >>>>>ctfc   | 1  | 1  | 1   |  |
| >>>>>>gainFactorInform ation                              | Computed                                   | Computed                                   | Computed  |  |
| >>>>>>βc (FDD only)                                       | N/A  | N/A  | N/A   |  |
| >>>>>βd   | N/A  | N/A  | N/A   |  |
| >>>>>>>referenceTFCId                                     | 0  | 0  | 0   |  |
| >>>>TFCS 3  | (TF2, TF0)                                 | (TF2, TF0)                                 | (TF2, TF1, TF0,<br>TF0)   |  |
| >>>>>ctfc   | 2  | 2  | 8   |  |
| >>>>>>gainFactorInform ation                              | Computed                                   | Computed                                   | Computed  |  |
| >>>>>>referenceTFCId                                      | 0  | 0  | 0   |  |
|   |  |  |   |  |

| Configuration                        | 28.8 kbps               | 57.6 kbps               | 12.2 kbps               |
|--------------------------------------|-------------------------|-------------------------|-------------------------|
| eenigalation                         | streaming CS-<br>data + | streaming CS-<br>data + | speech(multimode<br>) + |
|                                      | 3.4 kbps signalling     | 3.4 kbps signalling     | 3.4 kbps signalling     |
| >>>>>TFCS 4                          | (TF0, TF1)              | (TF3, TF0)              | (TF3, TF2, TF0,<br>TF0) |
| >>>>>ctfc                            | 3                       | 3                       | 15                      |
| >>>>>>gainFactorInform ation         | Computed                | Computed                | Computed                |
| >>>>>βc (FDD only)                   | N/A                     | N/A                     | N/A                     |
| >>>>>βd                              | N/A                     | N/A                     | N/A                     |
| >>>>>referenceTFCId                  | 0                       | 0                       | 0                       |
| >>>>>TFCS 5                          | (TF1, TF1)              | (TF4, TF0)              | (TF4, TF3, TF0,<br>TF0) |
| >>>>>>ctfc                           | 4                       | 4                       | 22                      |
| >>>>>>gainFactorInform ation         | Computed                | Computed                | Computed                |
| >>>>>>referenceTFCId                 | 0                       | 0                       | 0                       |
| >>>>>TFCS 6                          | (TF2, TF1)              | (TF0, TF1)              | (TF5, TF4, TF1,<br>TF0) |
| >>>>>ctfc                            | 5                       | 5                       | 59                      |
| >>>>>gainFactorInform ation          | Signalled               | Computed                | Computed                |
| >>>>>βc (FDD only)                   | 8                       | N/A                     | N/A                     |
| >>>>>βd                              | 15                      | N/A                     | N/A                     |
| >>>>>>referenceTFCId                 | N/A                     | 0                       | 0                       |
| >>>>>TFCS 7                          |                         | (TF1, TF1)              | (TF0,TF0,TF0,TF1)       |
| >>>>>>ctfc                           |                         | 6                       | 60                      |
| >>>>>>gainFactorInform ation         |                         | Computed                | Computed                |
| >>>>>>referenceTFCId                 |                         | 0                       | 0                       |
| >>>>>TFCS 8                          |                         | (TF2, TF1)              | (TF1,TF0,TF0,TF1)       |
| >>>>>>ctfc                           |                         | 7                       | 61                      |
| >>>>>>gainFactorInform ation         |                         | Computed                | Computed                |
| >>>>>>referenceTFCId                 |                         | 0                       | 0                       |
| >>>>>TFCS 9                          |                         | (TF3, TF1)              | (TF2,TF1,TF0,TF1)       |
| >>>>>ctfc<br>>>>>>>gainFactorInform  |                         | 8<br>Computed           | 68<br>Computed          |
|                                      |                         | 0                       | 0                       |
| >>>>>>referenceTFCld                 |                         |                         |                         |
| >>>>>TFCS 10<br>>>>>>ctfc            |                         | (TF4, TF1)<br>9         | (TF3,TF2,TF0,TF1)<br>75 |
| >>>>>>sgainFactorInform              |                         | Signalled               | Computed                |
| ation                                |                         | 8                       | N/A                     |
| >>>>>βc (FDD only)                   |                         | 15                      | N/A<br>N/A              |
| >>>>>βd                              |                         |                         | 0                       |
| >>>>>>referenceTFCld<br>>>>>>TFCS 11 |                         | 0                       | -                       |
| >>>>>>>>>ctfc                        |                         |                         | (TF4,TF3,TF0,TF1)<br>82 |
| >>>>>>sgainFactorInform<br>ation     |                         |                         | Computed                |
| >>>>>>>referenceTFCId                |                         |                         | 0                       |
| >>>>>TFCS 12                         |                         |                         | (TF5,TF4,TF1,TF1)       |
| >>>>>>ctfc                           |                         |                         | 119                     |
| >>>>>>gainFactorInform ation         |                         |                         | Signalled               |
| >>>>>βc (FDD only)                   |                         |                         | 11                      |
| >>>>>βd                              |                         |                         | 15                      |
| >>>>>>>referenceTFCId                |                         |                         | 0                       |
| dl-CommonTransChInfo                 |                         |                         |                         |
| >tfcs-SignallingMode                 | Same as UL              | Same as UL              | Same as UL              |
| PhyCH INFORMATION<br>FDD             |                         |                         |                         |
|                                      |                         |                         |                         |

| Configuration                      | 28.8 kbps<br>streaming CS-<br>data +<br>3.4 kbps signalling | 57.6 kbps<br>streaming CS-<br>data +<br>3.4 kbps signalling | 12.2 kbps<br>speech(multimode<br>) +<br>3.4 kbps signalling |
|------------------------------------|---|---|---|
| UL-DPCH-InfoPredef                 |   |   |   |
| >ul-DPCH-                          |   |   |   |
| PowerControlInfo                   |   |   |   |
| >>powerControlAlgorithm            | Algorithm 1   | Algorithm 1   | Algorithm 1   |
| >>>tpcStepSize                     | 1   | 1   | 1   |
| >tfci-Existence                    | TRUE  | TRUE  | TRUE  |
| >puncturingLimit                   | 1   | 1   | 0.88  |
| DL-                                |   |   |   |
| CommonInformationPrede<br>f        |   |   |   |
| >dl-DPCH-InfoCommon                |   |   |   |
| >>spreadingFactor                  | 64  | 32  | 128   |
| >>pilotBits                        | 8   | 8   | 4   |
| >>positionFixed                    | Flexible  | Flexible  | Fixed   |
| PhyCH INFORMATION<br>TDD           |   |   |   |
| UL-DPCH-InfoPredef                 |   |   |   |
| >ul-DPCH-<br>PowerControlInfo      |   |   |   |
| >>dpch-ConstantValue               | -20   | -20   | -20   |
| >commonTimeslotInfo                |   |   |   |
| >>secondInterleavingMod<br>e       | frameRelated  | frameRelated  | frameRelated  |
| >>tfci-Coding                      | 16  | 16  | 16  |
| >>puncturingLimit                  | 0.44  | 0.48  | 0.88  |
| >>repetitionPeriodAndLen<br>gth    | repetitionPeriod1   | repetitionPeriod1   | repetitionPeriod1   |
| DL-<br>CommonInformationPrede<br>f |   |   |   |
| >dl-DPCH-InfoCommon                |   |   |   |
| >>commonTimeslotInfo               |   |   |   |
| >>secondInterleavingMo<br>de       | frameRelated  | frameRelated  | frameRelated  |
| >>>tfci-Coding                     | 16  | 16  | 16  |
| >>>puncturingLimit                 | 0.44  | 0.48  | 0.92  |
| >>>repetitionPeriodAndLe           | repetitionPeriod1   | repetitionPeriod1   | repetitionPeriod1   |

|                               |              |   | CHAN  |  | EQUI   | EST  |  |  |   | CR-Form-v5  |
|-------------------------------|--------------|---|---|--|--|--|--|--|---|---|
| ¥                             | 25           | .331  | CR 1452   | ж <b>г</b>   | ev -   | ж  | Current vers   | sion:  | 4.4.0   | ж   |
| For <u>HELP</u> on u          | ising        | this for  | m, see bottom   | of this pag  | ie or looi   | k at the   | e pop-up text  | over   | the ¥ syr   | nbols.  |
| Proposed change               | affec        | ts: Ж   | (U)SIM  | ME/UE  | X Ra   | dio Ac   | cess Networ  | k <mark>X</mark>   | Core Ne   | twork   |
| Title: ೫                      | Co           | rrectior  | <mark>n to Default Ra</mark>  | dio Configi  | uration T  | imers.   |  |  |   |   |
| Source: #                     | TS           | G-RAN   | WG2   |  |  |  |  |  |   |   |
| Work item code: ೫             | TE           | l   |   |  |  |  | <i>Date:</i> ೫   | 07.  | 05.2002   |   |
| Category: अ                   | Use<br>Deta  | F (corr<br>A (corr<br>B (add<br>C (fund<br>D (edit<br>iled exp  | the following cate<br>rection)<br>responds to a co<br>lition of feature),<br>ctional modificatio<br>corial modificatio<br>blanations of the<br>3GPP <u>TR 21.900</u>  | orrection in a<br>ion of featur<br>n)<br>above cates   | e)   |  | Release: %<br>Use <u>one</u> of<br>2<br>9) R96<br>R97<br>R98<br>R99<br>REL-4<br>REL-5  | the fo.<br>(GSN<br>(Rele<br>(Rele<br>(Rele<br>(Rele<br>(Rele   |   |   |
| Reason for change             | . ¥          | Claur   | se 13.7 defines   | s soveral d  | ofoult ro  | dio co   | ofigurations   | which  |   | hnc   |
|                               | 5. m         | signa<br>timer<br>asso<br>Using<br>trans<br>80%<br>This<br>Also,<br>bear<br>capa<br>also<br>trans<br>It is p<br>are ir<br>3.4 k | alling radio bea<br>StatusPeriodic<br>ciated with the<br>g this configura<br>port channel w<br>of the available<br>is an inefficient<br>using this sam<br>er onto the san<br>city overhead.<br>has value 100r<br>port channel c<br>proposed that t<br>hcreased from<br>bps signalling<br>ransport channel | rers. In all<br>has value<br>signalling<br>ation, 2 ST/<br>which has c<br>e transport<br>t use of the<br>ne configur<br>he transpor<br>Furthermo<br>ms, with eit<br>apacity over<br>he values of<br>100ms to 3<br>radio bear | of these<br>100ms<br>radio be<br>ATUS Pl<br>apacity f<br>channe<br>availab<br>ration an<br>rt channe<br>re, the ir<br>ther of th<br>erhead e<br>of both ti<br>300ms ir<br>ers in cla | config<br>for RB<br>arer tra<br>DUs w<br>for 25 I<br>I capace<br>I capace<br>le ban<br>d then<br>el coul<br>nelse pro-<br>even fu<br>merSta<br>ause 13 | urations the<br>2 and RB3 (F<br>ansport chan<br>ill be transmi<br>RLC PDUs, a<br>city being use<br>dwidth.<br>mapping a th<br>d result in 12<br>on of timerPol<br>revious exam<br>inther.<br>atusPeriodic<br>fault radio co<br>3.7 in order to | paran<br>RLC A<br>nel ha<br>tted e<br>and th<br>ed for<br>hird A<br>0% tr<br>IPeric<br>ples v<br>and ti<br>onfigue | neter<br>M), and t<br>as value 4<br>very 100r<br>is could re<br>this overf<br>M signalli<br>ansport cl<br>odic polling<br>will increa<br>merPollP<br>rations wh<br>ificantly re | he TTI<br>loms.<br>ns on a<br>esult in<br>nead.<br>ng radio<br>hannel<br>g, which<br>se the<br>eriodic<br>nich use<br>educe |
| Summary of chang              | <b>де:</b> Ж | incre   | values of both<br>ased from 100<br>signalling radi  | ms to 300r   | ns in all  | defaul   |  |  |   |   |
| Consequences if not approved: | ж            |   | default radio be<br>ers may not wo  |  | gurations  | s whic   | h use 3.4 kbp  | os sigr  | nalling rac   | lio   |
| Clauses affected:             | ж            | 13.7  |   |  |  |  |  |  |   |   |

ses anecteu. <sup>66</sup> 10.7

| Other specs<br>affected: | ж | Other core specifications <b>#</b><br>Test specifications<br>O&M Specifications | 25.331 v3.10.0, CR 1451<br>25.331 v5.0.0, CR 1453 |
|--------------------------|---|---|---|
| Other comments:          | ж |   |   |

#### How to create CRs using this form:

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Comprehensive information and tips about how to create CRs can be found at: <u>http://www.3gpp.org/3G\_Specs/CRs.htm</u>. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked # contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <u>ftp://ftp.3gpp.org/specs/</u> For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

## 13.7 Parameter values for default radio configurations

The UE shall support the use of the default radio configurations that are specified in the following.

NOTE 1: These configurations are based on [41] and cover a number of RAB and signalling connection configurations.

In the table that is used to specify the parameter values for these default configurations, the following principles are used:

- Optional IEs that are not used are omitted;
- In case no parameter value is specified in a column, this means the value given the previous (left side) column applies.
- NOTE 2: If needed, signalling radio bearer RB4 is established after the completion of handover.
- NOTE 3: For each default configuration, the value of FDD, 3.84 Mcps TDD and 1.28 Mcps TDD parameters are specified. All parameters apply to FDD, 3.84 Mcps TDD and 1.28 Mcps TDD modes, unless explicitly stated otherwise. It should be noted that in this respect default configurations differ from pre-defined configurations, which only include parameter values for one mode.
- NOTE 4: The transport format sizes, indicated in the following table, concern the RLC PDU size, since all configurations concern dedicated channels. The transport block sizes indicated in TS 34.108 are different since these include the size of the MAC header.

| Configuration                     | 3.4 kbps signalling                | 13.6 kbps<br>signalling            | 7.95 kbps speech<br>+<br>3.4 kbps signalling        | 12.2 kbps speech<br>+<br>3.4 kbps signalling         |
|-----------------------------------|------------------------------------|------------------------------------|---|--|
| Ref 34.108                        | 2                                  | 3                                  | 6   | 4  |
| Default configuration<br>identity | 0                                  | 1                                  | 2   | 3  |
| RB INFORMATION                    |                                    |                                    |   |  |
| rb-Identity                       | RB1: 1, RB2: 2,<br>RB3: 3          | RB1: 1, RB2: 2,<br>RB3: 3          | RB1: 1, RB2: 2,<br>RB3: 3, RB5: 5,<br>RB6: 6        | RB1: 1, RB2: 2,<br>RB3: 3, RB5: 5,<br>RB6: 6, RB7: 7 |
| rlc-InfoChoice                    | RIc-info                           | RIc-info                           | RIc-info  | RIc-info   |
| >ul-RLC-Mode                      | RB1: UM<br>RB2- RB3: AM            | RB1: UM<br>RB2- RB3: AM            | RB1: UM<br>RB2- RB3: AM<br>RB5-RB6: TM              | RB1: UM<br>RB2- RB3: AM<br>RB5-RB7: TM               |
| >>transmissionRLC-<br>DiscardMode | RB1: N/A<br>RB2- RB3:<br>NoDiscard | RB1: N/A<br>RB2- RB3:<br>NoDiscard | RB1: N/A<br>RB2- RB3:<br>NoDiscard<br>RB5- RB6: N/A | RB1: N/A<br>RB2- RB3:<br>NoDiscard<br>RB5- RB7: N/A  |
| >>>maxDat                         | RB1: N/A<br>RB2- RB3: 15           | RB1: N/A<br>RB2- RB3: 15           | RB1: N/A<br>RB2- RB3: 15<br>RB5- RB6: N/A           | RB1: N/A<br>RB2- RB3: 15<br>RB5- RB7: N/A            |
| >>transmissionWindowSiz<br>e      | RB1: N/A<br>RB2- RB3: 128          | RB1: N/A<br>RB2- RB3: 128          | RB1: N/A<br>RB2- RB3: 128<br>RB5- RB6: N/A          | RB1: N/A<br>RB2- RB3: 128<br>RB5- RB7: N/A           |
| >>timerRST                        | RB1: N/A<br>RB2- RB3: 300          | RB1: N/A<br>RB2- RB3: 300          | RB1: N/A<br>RB2- RB3: 300<br>RB5- RB6: N/A          | RB1: N/A<br>RB2- RB3: 300<br>RB5- RB7: N/A           |
| >>max-RST                         | RB1: N/A<br>RB2- RB3: 1            | RB1: N/A<br>RB2- RB3: 1            | RB1: N/A<br>RB2- RB3: 1<br>RB5- RB6: N/A            | RB1: N/A<br>RB2- RB3: 1<br>RB5- RB7: N/A             |
| >>pollingInfo                     | RB1: N/A<br>RB2- RB3: as below     | RB1: N/A<br>RB2- RB3: as below     | RB1: N/A<br>RB2- RB3: as below<br>RB5- RB6: N/A     | RB1: N/A<br>RB2- RB3: as below<br>RB5- RB7: N/A      |
| >>>lastTransmissionPDU-<br>Poll   | RB2- RB3: FALSE                    | RB2- RB3: FALSE                    | RB2- RB3: FALSE                                     | RB2- RB3: FALSE                                      |

| Configuration                       | 3.4 kbps signalling            | 13.6 kbps<br>signalling        | 7.95 kbps speech                                | 12.2 kbps speech                                |
|-------------------------------------|--------------------------------|--------------------------------|---|---|
|                                     |                                | signaling                      | +<br>3.4 kbps signalling                        | +<br>3.4 kbps signalling                        |
| >>>lastRetransmissionPD<br>U-Poll   | RB2- RB3: FALSE                | RB2- RB3: FALSE                | RB2- RB3: FALSE                                 | RB2- RB3: FALSE                                 |
| >>>timerPollPeriodic                | RB2- RB3: <del>100</del> 300   | RB2- RB3: 100                  | RB2- RB3: <del>100</del> 300                    | RB2- RB3: <del>100</del> 300                    |
| >>segmentationIndication            | RB1- RB3: N/A                  | RB1- RB3: N/A                  | RB1- RB3: N/A<br>RB5- RB6: FALSE                | RB1- RB3: N/A<br>RB5- RB7: FALSE                |
| >dl-RLC-Mode                        | RB1: UM<br>RB2- RB3: AM        | RB1: UM<br>RB2- RB3: AM        | RB1: UM<br>RB2- RB3: AM<br>RB5- RB6: TM         | RB1: UM<br>RB2- RB3: AM<br>RB5- RB7: TM         |
| >>inSequenceDelivery                | RB1: N/A<br>RB2- RB3: TRUE     | RB1: N/A<br>RB2- RB3: TRUE     | RB1: N/A<br>RB2- RB3: TRUE<br>RB5- RB6: N/A     | RB1: N/A<br>RB2- RB3: TRUE<br>RB5- RB7: N/A     |
| >>receivingWindowSize               | RB1: N/A<br>RB2- RB3: 128      | RB1: N/A<br>RB2- RB3: 128      | RB1: N/A<br>RB2- RB3: 128<br>RB5- RB6: N/A      | RB1: N/A<br>RB2- RB3: 128<br>RB5- RB7: N/A      |
| >>dl-RLC-StatusInfo                 | RB1: N/A<br>RB2- RB3: as below | RB1: N/A<br>RB2- RB3: as below | RB1: N/A<br>RB2- RB3: as below<br>RB5- RB6: N/A | RB1: N/A<br>RB2- RB3: as below<br>RB5- RB7: N/A |
| >>>timerStatusProhibit              | RB2- RB3: 100                  | RB2- RB3: 100                  | RB2- RB3: 100                                   | RB2- RB3: 100                                   |
| >>>missingPDU-Indicator             | RB2- RB3: FALSE                | RB2- RB3: FALSE                | RB2- RB3: FALSE                                 | RB2- RB3: FALSE                                 |
| >>>timerStatusPeriodic              | RB2- RB3: <del>100</del> 300   | RB2- RB3: 100                  | RB2- RB3: <del>100</del> 300                    | RB2- RB3: <del>100</del> 300                    |
| >>segmentationIndication            | RB1- RB3: N/A                  | RB1- RB3: N/A                  | RB1- RB3: N/A<br>RB5- RB6: FALSE                | RB1- RB3: N/A<br>RB5- RB7: FALSE                |
| rb-MappingInfo                      |                                |                                |   |   |
| >UL-<br>LogicalChannelMappings      | OneLogicalChannel              | OneLogicalChannel              | OneLogicalChannel                               | OneLogicalChannel                               |
| >>ul-<br>TransportChannelType       | Dch                            | Dch                            | Dch   | Dch   |
| >>>transportChannelldentit<br>y     | RB1- RB3: 1                    | RB1- RB3: 1                    | RB1- RB3: 3<br>RB5: 1, RB6: 2                   | RB1- RB3: 4<br>RB5: 1, RB6: 2,<br>RB7: 3        |
| >>logicalChannelIdentity            | RB1: 1, RB2: 2,<br>RB3: 3      | RB1: 1, RB2: 2,<br>RB3: 3      | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5- RB6: N/A      | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5- RB7: N/A      |
| >>rlc-SizeList                      | RB1- RB3:<br>configured        | RB1- RB3:<br>configured        | RB1- RB3:<br>configured<br>RB5- RB6: N/A        | RB1- RB3:<br>configured<br>RB5- RB7: N/A        |
| >>mac-<br>LogicalChannelPriority    | RB1: 1, RB2: 2,<br>RB3: 3      | RB1: 1, RB2: 2,<br>RB3: 3      | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5- RB6: 5        | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5- RB7: 5        |
| >DL-<br>logicalChannelMappingList   |                                |                                |   |   |
| >>Mapping option 1                  | One mapping option             | One mapping option             | One mapping option                              | One mapping option                              |
| >>>dl-<br>TransportChannelType      | Dch                            | Dch                            | Dch   | Dch   |
| >>>>transportChannellden<br>tity    | RB1- RB3: 1                    | RB1- RB3: 1                    | RB1- RB3: 3<br>RB5: 1, RB6: 2                   | RB1- RB3: 4<br>RB5: 1, RB6: 2,<br>RB7: 3        |
| >>>logicalChannelIdentity           | RB1: 1, RB2: 2,<br>RB3: 3      | RB1: 1, RB2: 2,<br>RB3: 3      | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5- RB6: N/A      | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5- RB7: N/A      |
| TrCH INFORMATION PER<br>TrCH<br>UL- |                                |                                |   |   |
| AddReconfTransChInfoList            | dah                            | dah                            | deb   | deb   |
| >Uplink transport channel<br>type   |                                |                                |   | dch   |
| >transportChannelIdentity           | TrCH1: 1                       | TrCH1: 1                       | TrCH1: 1, TrCH2: 2,<br>TrCH3: 3                 | TrCH1: 1, TrCH2: 2,<br>TrCH3: 3, TrCH4: 4       |
| >transportFormatSet                 | DedicatedTransChT<br>FS        | DedicatedTransChT<br>FS        | DedicatedTransChT<br>FS                         | DedicatedTransChT<br>FS                         |
| >>dynamicTF-information             |                                |                                |   |   |

| Configuration   | 3.4 kbps signalling                           | 13.6 kbps<br>signalling                       | 7.95 kbps speech   | 12.2 kbps speech   |
|---|---|---|--|--|
|   |   | Signaling                                     | -<br>3.4 kbps signalling   | -<br>3.4 kbps signalling   |
| >>>tf0/ tf0,1   | TrCH1: (0x144,<br>1x144)                      | TrCH1: (0x144,<br>1x144)                      | TrCH1: (0x75)<br>TrCH2: (0x 84<br>1x84)<br>TrCH3: (0x144,<br>1x144)                        | TrCH1: (0x81)<br>TrCH2: (0x 103,<br>1x103)<br>TrCH3: (0x 60,<br>1x60)<br>TrCH4: (0x144,<br>1x144)                |
| >>>rlcSize  | BitMode                                       | BitMode                                       | BitMode  | BitMode  |
| >>>>sizeType  | TrCH1: type 2,<br>part1= 2, part2= 0<br>(144) | TrCH1: type 2,<br>part1= 2, part2= 0<br>(144) | TrCH1: type 1: 75<br>TrCH2: type 1: 84<br>TrCH3: 2: type 2,<br>part1= 2, part2= 0<br>(144) | TrCH1: type 1: 81<br>TrCH2: type 1: 103<br>TrCH3: type 1: 60<br>TrCH4: 2: type 2,<br>part1= 2, part2= 0<br>(144) |
| >>>numberOfTbSizeList   | TrCH1: Zero, one                              | TrCH1: Zero, one                              | TrCH1: Zero<br>TrCH2-3: Zero, one  | TrCH1: Zero<br>TrCH2-4: Zero, one  |
| >>>logicalChannelList   | All   | All   | All  | All  |
| >>>tf 1   | N/A   | N/A   | TrCH1: (1x39)<br>TrCH2- TrCH4: N/A   | TrCH1: (1x39)<br>TrCH2- TrCH4: N/A   |
| >>>numberOfTransportBl<br>ocks  |   |   | TrCH1: One   | TrCH1: One   |
| >>>rlc-Size   |   |   | TrCH1: BitMode   | TrCH1: BitMode   |
| >>>>sizeType  |   |   | TrCH1: 1: 39   | TrCH1: 1: 39   |
| >>>numberOfTbSizeList   |   |   | TrCH1: One   | TrCH1: One   |
| >>>logicalChannelList   |   |   | TrCH1: all   | TrCH1: all   |
| >>>tf 2   | N/A   | N/A   | TrCH1: (1x75)<br>TrCH2- TrCH3: N/A   | TrCH1: (1x81)<br>TrCH2- TrCH4: N/A   |
| >>>>numberOfTransportBl<br>ocks   |   |   | TrCH1: Zero  | TrCH1: Zero  |
| >>>rlc-Size   |   |   | TrCH1: BitMode   | TrCH1: BitMode   |
| >>>>sizeType  |   |   | TrCH1: type 1: 75  | TrCH1: type 1: 81  |
| >>>numberOfTbSizeList   |   |   | TrCH1: One   | TrCH1: One   |
| >>>logicalChannelList<br>>>semistaticTF-Information                       |   |   | TrCH1: all   | TrCH1: all   |
| >>>tti  | TrCH1: 40                                     | TrCH1: 10                                     | TrCH1- TrCH2: 20<br>TrCH3: 40  | TrCH1- TrCH3: 20<br>TrCH4: 40  |
| >>>channelCodingType  | Convolutional                                 | Convolutional                                 | Convolutional  | Convolutional  |
| >>>>codingRate  | TrCH1: Third                                  | TrCH1: Third                                  | TrCH1- TrCH2:<br>Third<br>TrCH3: Third   | TrCH1- TrCH2:<br>Third<br>TrCH3: Half<br>TrCH4: Third  |
| >>>rateMatchingAttribute  | TrCH1: 160                                    | TrCH1: 160                                    | TrCH1: 200<br>TrCH2: 190<br>TrCH3: 160   | TrCH1: 200<br>TrCH2: 190<br>TrCH3: 235<br>TrCH4: 160   |
| >>>crc-Size   | TrCH1: 16                                     | TrCH1: 16                                     | TrCH1: 12<br>TrCH2: 0<br>TrCH3: 16   | TrCH1: 12<br>TrCH2- TrCH3: 0<br>TrCH4: 16  |
| DL-   |   |   |  |  |
| AddReconfTransChInfoList  |   |   |  |  |
| >Downlink transport   | dch   | dch   | dch  | dch  |
| channel type<br>>dl-<br>TransportChannelIdentity<br>(should be as for UL) | TrCH1: 1                                      | TrCH1: 1                                      | TrCH1: 1, TrCH2: 2,<br>TrCH3: 3  | TrCH1: 1, TrCH2: 2,<br>TrCH3: 3, TrCH4: 4  |
| >tfs-SignallingMode   | SameAsUL                                      | SameAsUL                                      | Explicit<br><only on="" tf0="" trch1<br="">is different and<br/>shown below&gt;</only>     | Explicit<br><only on="" tf0="" trch1<br="">is different and<br/>shown below&gt;</only>                           |
| >>transportFormatSet  |   |   | DedicatedTransChT<br>FS  | DedicatedTransChT<br>FS  |
| >>>dynamicTF-information  |   |   |  |  |

| Configuration                          | 3.4 kbps signalling       | 13.6 kbps<br>signalling   | 7.95 kbps speech                                     | 12.2 kbps speech                                     |
|--|---------------------------|---------------------------|--|--|
|  |                           | Signaling                 | 3.4 kbps signalling                                  | т<br>3.4 kbps signalling                             |
| >>>>tf0/ tf0,1                         |                           |                           | TrCH1: (1x0)   | TrCH1: (1x0)   |
| >>>>rlcSize                            |                           |                           | BitMode  | bitMode  |
| >>>>sizeType                           |                           |                           | TrCH1: type 1: 0                                     | TrCH1: type 1: 0                                     |
| >>>>numberOfTbSizeList                 |                           |                           | TrCH1: One   | TrCH1: One   |
| >>>>logicalChannelList                 |                           |                           | All  | All  |
| >>ULTrCH-Id                            | TrCH1: 1                  | TrCH1: 1                  | TrCH1: 1, TrCH2: 2,<br>TrCH3: 3                      | TrCH1: 1, TrCH2: 2,<br>TrCH3: 3, TrCH4: 4            |
| >dch-QualityTarget                     | 2                         |                           |  |  |
| >>bler-QualityValue                    | TrCH1: 5x10 <sup>-2</sup> | TrCH1: 5x10 <sup>-2</sup> | TrCH1: 7x10 <sup>-3</sup><br>TrCH2- TrCH3:<br>Absent | TrCH1: 7x10 <sup>-3</sup><br>TrCH2- TrCH4:<br>Absent |
| TrCH INFORMATION,<br>COMMON            |                           |                           |  |  |
| ul-CommonTransChInfo                   |                           |                           |  |  |
| >tfcs-ID (TDD only)                    | 1                         | 1                         | 1  | 1  |
| >sharedChannelIndicator<br>(TDD only)  | FALSE                     | FALSE                     | FALSE  | FALSE  |
| >tfc-Subset                            | Absent, not required      | Absent, not required      | Absent, not required                                 | Absent, not required                                 |
| >ul-TFCS                               | Normal TFCI<br>signalling | Normal TFCI<br>signalling | Normal TFCI<br>signalling                            | Normal TFCI<br>signalling                            |
| >>explicitTFCS-<br>ConfigurationMode   | Complete                  | Complete                  | Complete   | Complete   |
| >>>ctfcSize                            | Ctfc2Bit                  | Ctfc2Bit                  | Ctfc4Bit   | Ctfc6Bit   |
| >>>>TFCS representation                | Addition                  | Addition                  | Addition   | Addition   |
| >>>>TFCS list                          |                           |                           |  |  |
| >>>>>TFCS 1                            | (TF0)                     | (TF0)                     | (TF0, TF0, TF0)                                      | (TF0, TF0, TF0,<br>TF0)                              |
| >>>>>ctfc                              | 0                         | 0                         | 0  | 0  |
| >>>>>>gainFactorInform ation           | Computed                  | Computed                  | Computed   | Computed   |
| >>>>>>>referenceTFCId                  | 0                         | 0                         | 0  | 0  |
| >>>>>TFCS 2                            | (TF1)                     | (TF1)                     | (TF1, TF0, TF0)                                      | (TF1, TF0, TF0,<br>TF0)                              |
| >>>>>ctfc                              | 1                         | 1                         | 1  | 1  |
| >>>>>>gainFactorInform ation           | Signalled                 | Signalled                 | Computed   | Computed   |
| >>>>>>βc (FDD only)                    | 11                        | 11                        | N/A  | N/A  |
| >>>>>βd                                | 15                        | 15                        | N/A  | N/A  |
| >>>>>>>>referenceTFCId                 | N/A                       | N/A                       | 0  | 0  |
| >>>>TFCS 3                             |                           |                           | (TF2, TF1, TF0)                                      | (TF2, TF1, TF1,<br>TF0)                              |
| >>>>>>ctfc                             | 1                         |                           | 5  | 11   |
| >>>>>>gainFactorInform ation           |                           |                           | Computed   | Computed   |
| >>>>>>referenceTFCId                   |                           |                           | 0  | 0  |
| >>>>>TFCS 4                            |                           |                           | (TF0, TF0, TF1)                                      | (TF0, TF0, TF0,<br>TF1)                              |
| >>>>>>ctfc                             |                           |                           | 6  | 12   |
| >>>>>>sgainFactorInform ation          |                           |                           | Computed   | Computed   |
| >>>>>βc (FDD only)                     |                           |                           | N/A  | N/A  |
| >>>>>βd                                |                           |                           | N/A  | N/A  |
| >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>> |                           | <br>                      | 0  | 0  |
| >>>>>TFCS 5                            |                           |                           | (TF1, TF0, TF1)                                      | (TF1, TF0, TF0,<br>TF1)                              |
| >>>>>ctfc                              |                           |                           | 7  | 13   |
| >>>>>gainFactorInform                  |                           |                           | Computed   | Computed   |
| >>>>>referenceTFCId                    |                           |                           | 0  | 0  |
| >>>>TFCS 6                             |                           |                           | (TF2, TF1, TF1)                                      | (TF2, TF1, TF1,                                      |
|  |                           |                           |  | TF1)   |

| Configuration                               | 3.4 kbps signalling | 13.6 kbps         | 7.95 kbps speech 12.2    | 12.2 kbps speech         |
|---|---------------------|-------------------|--------------------------|--------------------------|
|   |                     | signalling        | +<br>3.4 kbps signalling | +<br>3.4 kbps signalling |
| >>>>>ctfc                                   |                     |                   | 11                       | 23                       |
| >>>>>>gainFactorInform                      |                     |                   | Signalled                | Signalled                |
| ation                                       |                     |                   |                          |                          |
| >>>>>βc (FDD only)                          |                     |                   | 11                       | 11                       |
| >>>>>βd                                     |                     |                   | 15                       | 15                       |
| >>>>>>referenceTFCId                        |                     |                   | 0                        | 0                        |
| dl-CommonTransChInfo                        |                     |                   |                          |                          |
| >tfcs-SignallingMode                        | Same as UL          | Same as UL        | Same as UL               | Same as UL               |
| PhyCH INFORMATION                           |                     |                   |                          |                          |
| FDD<br>UL-DPCH-InfoPredef                   |                     |                   |                          |                          |
| >ul-DPCH-                                   |                     |                   |                          |                          |
| PowerControlInfo                            |                     |                   |                          |                          |
| >>powerControlAlgorithm                     | Algorithm 1         | Algorithm 1       | Algorithm 1              | Algorithm 1              |
| >>>tpcStepSize                              | 1                   | 1                 | 1                        | 1                        |
| >tfci-Existence                             | TRUE                | TRUE              | TRUE                     | TRUE                     |
| >puncturingLimit                            | 1                   | 1                 | 1                        | 0.88                     |
| DL-   |                     |                   |                          |                          |
| CommonInformationPredef                     |                     |                   |                          |                          |
| >dl-DPCH-InfoCommon                         |                     |                   |                          |                          |
| >>spreadingFactor                           | 256                 | 128               | 128                      | 128                      |
| >>pilotBits                                 | 4                   | 4                 | 4                        | 4                        |
| >>positionFixed                             | N/A                 | N/A               | Fixed                    | Fixed                    |
|   |                     |                   |                          |                          |
| PhyCH INFORMATION<br>3.84 Mcps TDD          |                     |                   |                          |                          |
| UL-DPCH-InfoPredef                          |                     |                   |                          |                          |
| >ul-DPCH-                                   |                     |                   |                          |                          |
| PowerControlInfo                            |                     |                   |                          |                          |
| >>dpch-ConstantValue                        | -20                 | -20               | -20                      | -20                      |
| >commonTimeslotInfo                         |                     |                   |                          |                          |
| >>secondInterleavingMode                    | frameRelated        | frameRelated      | frameRelated             | frameRelated             |
| >>tfci-Coding                               | 4                   | 4                 | 16                       | 16                       |
| >>puncturingLimit                           | 1                   | 0.92              | 0.52                     | 0.88                     |
| >>repetitionPeriodAndLeng                   | repetitionPeriod1   | repetitionPeriod1 | repetitionPeriod1        | repetitionPeriod1        |
| th  |                     |                   |                          |                          |
| DL-   |                     |                   |                          |                          |
| CommonInformationPredef                     |                     |                   |                          |                          |
| >dl-DPCH-InfoCommon<br>>>commonTimeslotInfo |                     |                   |                          |                          |
| >>secondInterleavingMod                     | frameRelated        | frameRelated      | frameRelated             | frameRelated             |
| e   | Indiffer Celated    | Inditiervelated   | Tamertelated             | Indimentended            |
| >>>tfci-Coding                              | 4                   | 4                 | 16                       | 16                       |
| >>>puncturingLimit                          | 1                   | 0.92              | 0.52                     | 0.92                     |
| >>>repetitionPeriodAndLe                    | repetitionPeriod1   | repetitionPeriod1 | repetitionPeriod1        | repetitionPeriod1        |
| ngth  |                     |                   |                          |                          |
| PhyCH INFORMATION                           |                     |                   |                          |                          |
| 1.28 Mcps TDD                               |                     |                   |                          |                          |
| UL-DPCH-InfoPredef                          |                     |                   |                          |                          |
| >commonTimeslotInfo                         |                     |                   |                          |                          |
| >>secondInterleavingMode                    | frameRelated        | frameRelated      | frameRelated             | frameRelated             |
| >>tfci-Coding                               | 4                   | 4                 | 16                       | 16                       |
| >>puncturingLimit                           | TopotitionDeriod4   | 0.64              | 0.80                     | 0.60                     |
| >>repetitionPeriodAndLeng                   | repetitionPeriod1   | repetitionPeriod1 | repetitionPeriod1        | repetitionPeriod1        |
| th<br>DL-                                   |                     |                   |                          |                          |
| CommonInformationPredef                     |                     |                   |                          |                          |
| >dl-DPCH-InfoCommon                         |                     |                   |                          |                          |
| >>commonTimeslotInfo                        |                     |                   |                          |                          |
| ///////////////////////////////////////     |                     |                   |                          |                          |
| >>>secondInterleavingMod                    | frameRelated        | frameRelated      | frameRelated             | frameRelated             |

| Configuration                    | 3.4 kbps signalling | 13.6 kbps<br>signalling | 7.95 kbps speech<br>+<br>3.4 kbps signalling | 12.2 kbps speech<br>+<br>3.4 kbps signalling |
|----------------------------------|---------------------|-------------------------|--|--|
| >>>tfci-Coding                   | 4                   | 4                       | 16   | 16   |
| >>>puncturingLimit               | 1                   | 0.64                    | 0.80   | 0.60   |
| >>>repetitionPeriodAndLe<br>ngth | repetitionPeriod1   | repetitionPeriod1       | repetitionPeriod1                            | repetitionPeriod1                            |

| Configuration                     | 28.8 kbps conv.<br>CS- data +                   | 32 kbps conv. CS-<br>data +                     | 64kbps conv. CS-<br>data +                      | 14.4 kbps<br>streaming CS-                      |
|-----------------------------------|---|---|---|---|
|                                   | 3.4 kbps signalling                             | 3.4 kbps signalling                             | 3.4 kbps signalling                             | data +<br>3.4 kbps signalling                   |
| Ref 34.108                        | 12  | 14  | 13  | 15  |
| Default configuration identity    | 4   | 5   | 6   | 7   |
| RB INFORMATION                    |   |   |   |   |
| rb-Identity                       | RB1: 1, RB2: 2,<br>RB3: 3, RB5: 5               |
| rlc-InfoChoice                    | Rlc-info  | RIc-info  | RIc-info  | RIc-info  |
| >ul-RLC-Mode                      | RB1: UM<br>RB2- RB3: AM<br>RB5: TM              |
| >>transmissionRLC-<br>DiscardMode | RB1: N/A<br>RB2- RB3:<br>NoDiscard              | RB1: N/A<br>RB2- RB3:<br>NoDiscard              | RB1: N/A<br>RB2- RB3:<br>NoDiscard              | RB1: N/A<br>RB2- RB3:<br>NoDiscard              |
|                                   | RB5: N/A  | RB5: N/A  | RB5: N/A  | RB5: N/A  |
| >>>maxDat                         | RB1: N/A<br>RB2- RB3: 15<br>RB5: N/A            |
| >>transmissionWindowSiz<br>e      | RB1: N/A<br>RB2- RB3: 128<br>RB5: N/A           |
| >>timerRST                        | RB1: N/A<br>RB2- RB3: 300                       |
| >>max-RST                         | RB5: N/A<br>RB1: N/A<br>RB2- RB3: 1<br>RB5: N/A |
| >>pollingInfo                     | RB1: N/A<br>RB2- RB3: as below<br>RB5: N/A      |
| >>>lastTransmissionPDU-<br>Poll   | RB2- RB3: FALSE                                 | RB2- RB3: FALSE                                 | RB2- RB3: FALSE                                 | RB2- RB3: FALSE                                 |
| >>>lastRetransmissionPD<br>U-Poll | RB2- RB3: FALSE                                 | RB2- RB3: FALSE                                 | RB2- RB3: FALSE                                 | RB2- RB3: FALSE                                 |
| >>>timerPollPeriodic              | RB2- RB3: <del>100</del> 300                    | RB2- RB3: <del>100</del> 300                    | RB2- RB3: <del>100</del> 300                    | RB2- RB3: 100300                                |
| >>segmentationIndication          | RB1- RB3: N/A<br>RB5: FALSE                     |
| >dl-RLC-Mode                      | RB1: UM<br>RB2- RB3: AM<br>RB5: TM              |
| >>inSequenceDelivery              | RB1: N/A<br>RB2- RB3: TRUE<br>RB5: N/A          |
| >>receivingWindowSize             | RB1: N/A<br>RB2- RB3: 128<br>RB5: N/A           |
| >>dl-RLC-StatusInfo               | RB1: N/A<br>RB2- RB3: as below<br>RB5: N/A      |
| >>>timerStatusProhibit            | RB2- RB3: 100                                   | RB2- RB3: 100                                   | RB2- RB3: 100                                   | RB2- RB3: 100                                   |
| >>>missingPDU-Indicator           | RB2- RB3: FALSE                                 | RB2- RB3: FALSE                                 | RB2- RB3: FALSE                                 | RB2- RB3: FALSE                                 |
| >>>timerStatusPeriodic            | RB2- RB3: 100300                                | RB2- RB3: <del>100</del> 300                    | RB2- RB3: <del>100</del> 300                    | RB2- RB3: 100300                                |

| Configuration                       | 28.8 kbps conv.   | 32 kbps conv. CS-   | 64kbps conv. CS-  | 14.4 kbps  |
|-------------------------------------|---|---|---|--|
|                                     | CS- data +<br>3.4 kbps signalling   | data +<br>3.4 kbps signalling   | data +<br>3.4 kbps signalling   | streaming CS-<br>data +<br>3.4 kbps signalling   |
| >>segmentationIndication            | RB1- RB3: N/A<br>RB5: FALSE   | RB1- RB3: N/A<br>RB5: FALSE   | RB1- RB3: N/A<br>RB5: FALSE   | RB1- RB3: N/A<br>RB5: FALSE  |
| rb-MappingInfo                      |   |   |   |  |
| >UL-<br>LogicalChannelMappings      | OneLogicalChannel   | OneLogicalChannel   | OneLogicalChannel   | OneLogicalChannel  |
| >>ul-<br>TransportChannelType       | Dch   | Dch   | Dch   | Dch  |
| >>>transportChannelIdenti<br>ty     | RB1- RB3: 2<br>RB5: 1   | RB1- RB3: 2<br>RB5: 1   | RB1- RB3: 2<br>RB5: 1   | RB1- RB3: 2<br>RB5: 1  |
| >>logicalChannelIdentity            | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5: N/A   | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5: N/A   | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5: N/A   | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5: N/A  |
| >>rlc-SizeList                      | RB1- RB3:<br>configured<br>RB5: N/A   | RB1- RB3:<br>configured<br>RB5: N/A   | RB1- RB3:<br>configured<br>RB5: N/A   | RB1- RB3:<br>configured<br>RB5: N/A  |
| >>mac-<br>LogicalChannelPriority    | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5: 5   | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5: 5   | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5: 5   | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5: 5  |
| >DL-<br>logicalChannelMappingList   |   |   |   |  |
| >>Mapping option 1                  | One mapping option  | One mapping option  | One mapping option  | One mapping option   |
| >>>dl-<br>TransportChannelType      | Dch   | Dch   | Dch   | Dch  |
| >>>>transportChannellden<br>tity    | RB1- RB3: 2<br>RB5: 1   | RB1- RB3: 2<br>RB5: 1   | RB1- RB3: 2<br>RB5: 1   | RB1- RB3: 2<br>RB5: 1  |
| >>>logicalChannelIdentity           | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5: N/A   | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5: N/A   | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5: N/A   | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5: N/A  |
| TrCH INFORMATION PER<br>TrCH        |   |   |   |  |
| UL-<br>AddReconfTransChInfoLis<br>t |   |   |   |  |
| >Uplink transport channel type      | dch   | dch   | dch   | dch  |
| >transportChannelIdentity           | TrCH1: 1, TrCH2: 2  | TrCH1: 1, TrCH2: 2  | TrCH1: 1, TrCH2: 2  | TrCH1: 1, TrCH2: 2   |
| >transportFormatSet                 | DedicatedTransChT<br>FS   | DedicatedTransChT<br>FS   | DedicatedTransChT<br>FS   | DedicatedTransChT<br>FS  |
| >>dynamicTF-information             |   |   |   |  |
| >>>tf0/ tf0,1                       | TrCH1: (0x576,<br>1x576, 2x576)<br>TrCH2: (0x144,<br>1x144)                                     | TrCH1: (0x640,<br>1x640)<br>TrCH2: (0x144,<br>1x144)  | TrCH1: (0x640,<br>2x640)<br>TrCH2: (0x144,<br>1x144)  | TrCH1: (0x576,<br>1x576)<br>TrCH2: (0x144,<br>1x144)   |
| >>>>rlcSize                         | TrCH1: OctetMode<br>TrCH2:BitMode   | TrCH1: OctetMode<br>TrCH2:BitMode   | TrCH1: OctetMode<br>TrCH2:BitMode   | TrCH1: OctetMode<br>TrCH2:BitMode  |
| >>>>sizeType                        | TrCH1: type 2,<br>part1= 11, part2= 2<br>(576)<br>TrCH2: type 2,<br>part1= 2, part2= 0<br>(144) | TrCH1: type 2,<br>part1= 11, part2= 2<br>(640)<br>TrCH2: type 2,<br>part1= 2, part2= 0<br>(144) | TrCH1: type 2,<br>part1= 11, part2= 2<br>(640)<br>TrCH2: type 2,<br>part1= 2, part2= 0<br>(144) | TrCH1: type 2,<br>part1= 9,<br>part2= 2 (576)<br>TrCH2: type 2,<br>part1= 2,<br>part2= 0 (144) |
| >>>>numberOfTbSizeList              | TrCH1: Zero,1, 2 (4)<br>TrCH2: Zero, one  | TrCH1: Zero, one<br>TrCH2: Zero, one  | TrCH1: Zero, 2 (4)<br>TrCH2: Zero, one  | TrCH1: Zero, one,<br>TrCH2: Zero, one  |
| >>>logicalChannelList               | All   | All   | All   | All  |
| >>semiStaticTF-<br>Information      |   |   |   |  |
| >>>tti                              | TrCH1: 40<br>TrCH2: 40  | TrCH1: 20<br>TrCH2: 40  | TrCH1: 20<br>TrCH2: 40  | TrCH1: 40<br>TrCH2: 40   |
| >>>channelCodingType                | TrCH1: Turbo<br>TrCH2:<br>Convolutional   | TrCH1: Turbo<br>TrCH2:<br>Convolutional   | TrCH1: Turbo<br>TrCH2:<br>Convolutional   | TrCH1: Turbo<br>TrCH2:<br>Convolutional  |

| Configuration                                  | 28.8 kbps conv.<br>CS- data + | 32 kbps conv. CS-<br>data + | 64kbps conv. CS-<br>data + | 14.4 kbps<br>streaming CS-    |
|--|-------------------------------|-----------------------------|----------------------------|-------------------------------|
|  | 3.4 kbps signalling           | 3.4 kbps signalling         | 3.4 kbps signalling        | data +<br>3.4 kbps signalling |
| >>>codingRate                                  | TrCH1: N/A                    | TrCH1: N/A                  | TrCH1: N/A                 | TrCH1: N/A                    |
|  | TrCH2: Third                  | TrCH2: Third                | TrCH2: Third               | TrCH2: Third                  |
| >>>rateMatchingAttribute                       | TrCH1: 180                    | TrCH1: 185                  | TrCH1: 170                 | TrCH1: 165                    |
|  | TrCH2: 160                    | TrCH2: 160                  | TrCH2: 160                 | TrCH2: 160                    |
| >>>crc-Size                                    | TrCH1: 16                     | TrCH1: 16                   | TrCH1: 16                  | TrCH1: 16                     |
| D  | TrCH2: 16                     | TrCH2: 16                   | TrCH2: 16                  | TrCH2: 16                     |
| DL-<br>AddReconfTransChInfoLis<br>t            |                               |                             |                            |                               |
| >Downlink transport<br>channel type            | dch                           | dch                         | dch                        | dch                           |
| >dl-   | TrCH1: 1, TrCH2: 2            | TrCH1: 1, TrCH2: 2          | TrCH1: 1, TrCH2: 2         | TrCH1: 1, TrCH2: 2            |
| TransportChannelldentity (should be as for UL) |                               |                             |                            |                               |
| >tfs-SignallingMode                            | SameAsUL                      | SameAsUL                    | SameAsUL                   | SameAsUL                      |
| >>transportFormatSet                           |                               |                             |                            |                               |
| >>>dynamicTF-information                       |                               |                             |                            |                               |
| >>>>tf0/ tf0,1                                 |                               |                             |                            |                               |
| >>>>rlcSize                                    |                               |                             |                            |                               |
| >>>>sizeType                                   |                               |                             |                            |                               |
| >>>>numberOfTbSizeList                         |                               |                             |                            |                               |
| >>>>logicalChannelList                         |                               |                             |                            |                               |
| >>ULTrCH-Id                                    | TrCH1: 1, TrCH2: 2            | TrCH1: 1, TrCH2: 2          | TrCH1: 1, TrCH2: 2         | TrCH1: 1, TrCH2: 2            |
| >dch-QualityTarget                             | TrCH1: 2x10 <sup>-3</sup>     | TrCH1: 2x10 <sup>-3</sup>   | TrCH1: 2x10 <sup>-3</sup>  | TrCH1: 1x10 <sup>-2</sup>     |
| >>bler-QualityValue                            | TrCH1: 2x10 TrCH2: Absent     | TrCH1: 2x10 TrCH2: Absent   | TrCH1: 2x10 TrCH2: Absent  | TrCH1: 1x10 TrCH2: Absent     |
| TrCH INFORMATION,<br>COMMON                    | TCHZ. ADSent                  | TICHZ. ADSent               | TCHZ. ADSent               | TCH2. Absent                  |
| ul-CommonTransChInfo                           |                               |                             |                            |                               |
| >tfcs-ID (TDD only)                            | 1                             | 1                           | 1                          | 1                             |
| >sharedChannelIndicator<br>(TDD only)          | FALSE                         | FALSE                       | FALSE                      | FALSE                         |
| >tfc-Subset                                    | Absent, not required          | Absent, not required        | Absent, not required       | Absent, not required          |
| >ul-TFCS                                       | Normal TFCI                   | Normal TFCI                 | Normal TFCI                | Normal TFCI                   |
|  | signalling                    | signalling                  | signalling                 | signalling                    |
| >>explicitTFCS-<br>ConfigurationMode           | Complete                      | Complete                    | Complete                   | Complete                      |
| >>>ctfcSize                                    | Ctfc2Bit                      | Ctfc2Bit                    | Ctfc2Bit                   | Ctfc4Bit                      |
| >>>>TFCS representation                        | Addition                      | Addition                    | Addition                   | Addition                      |
| >>>>TFCS list                                  |                               |                             |                            |                               |
| >>>>>TFCS 1                                    | (TF0, TF0)                    | (TF0, TF0)                  | (TF0, TF0)                 | (TF0, TF0)                    |
| >>>>>ctfc<br>>>>>>>gainFactorInform            | 0<br>Computed                 | 0<br>Computed               | 0<br>Computed              | 0<br>Computed                 |
| ation  | Computed                      | Computed                    | Computed                   | Computed                      |
| >>>>>>>>referenceTFCId                         | 0                             | 0                           | 0                          | 0                             |
| >>>>>TFCS 2                                    | (TF1, TF0)                    | (TF1, TF0)                  | (TF1, TF0)                 | (TF1, TF0)                    |
| >>>>>>ctfc                                     | 1                             | 1                           | 1                          | 1                             |
| >>>>>>sgainFactorInform ation                  | Computed                      | Computed                    | Computed                   | Computed                      |
| >>>>>βc (FDD only)                             | N/A                           | N/A                         | N/A                        | N/A                           |
| >>>>>βd  | N/A                           | N/A                         | N/A                        | N/A                           |
| >>>>>>>>>>>referenceTFCId                      | 0                             | 0                           | 0                          | 0                             |
| >>>>>TFCS 3                                    | (TF2, TF0)                    | (TF0, TF1)                  | (TF0, TF1)                 | (TF0, TF1)                    |
| >>>>>>>ctfc                                    | 2                             | 2                           | 2                          | 2                             |
| >>>>>sgainFactorInform ation                   | Computed                      | Computed                    | Computed                   | Computed                      |
| >>>>>>referenceTFCId                           | 0                             | 0                           | 0                          | 0                             |
| >>>>>TFCS 4                                    | (TF0, TF1)                    | (TF1, TF1)                  | (TF1, TF1)                 | (TF1, TF1)                    |
| >>>>>ctfc                                      | 3                             | 3                           | 3                          | 3                             |
| >>>>>>gainFactorInform                         | Computed                      | Signalled                   | Signalled                  | Signalled                     |
| ation  |                               |                             |                            |                               |

| Configuration                        | 28.8 kbps conv.<br>CS- data +<br>3.4 kbps signalling | 32 kbps conv. CS-<br>data +<br>3.4 kbps signalling | 64kbps conv. CS-<br>data +<br>3.4 kbps signalling | 14.4 kbps<br>streaming CS-<br>data + |
|--------------------------------------|--|--|---|--------------------------------------|
|                                      | N/A  | 8  | 8   | 3.4 kbps signalling                  |
| >>>>>βc (FDD only)                   | N/A<br>N/A   | 15   | 15  | 15                                   |
| >>>>>βd                              |  |  |   |                                      |
| >>>>>>referenceTFCId<br>>>>>>TFCS 5  |  | N/A  | N/A   | N/A                                  |
|                                      | (TF1, TF1)   | N/A  | N/A   |                                      |
| >>>>>>ctfc<br>>>>>>>gainFactorInform | 4<br>Computed  |  |   |                                      |
| ation                                |  |  |   |                                      |
| >>>>>>referenceTFCId                 | 8  |  |   |                                      |
| >>>>>TFCS 6                          | (TF2, TF1)   | N/A  | N/A   |                                      |
| >>>>>>ctfc                           | 5<br>Oiser alla al                                   |  |   |                                      |
| >>>>>sgainFactorInform ation         | Signalled  |  |   |                                      |
| >>>>>>βc (FDD only)                  | 8  |  |   |                                      |
| >>>>>βd                              | 15   |  |   |                                      |
| >>>>>>referenceTFCId                 | N/A  |  |   |                                      |
| >>>>>TFCS 7                          | ľ  |  |   |                                      |
| >>>>>ctfc                            |  |  |   |                                      |
| >>>>>>gainFactorInform               |  |  |   |                                      |
| ation                                |  |  |   |                                      |
| >>>>>>referenceTFCId                 |  |  |   |                                      |
| >>>>>TFCS 8                          |  |  |   |                                      |
| >>>>>>ctfc                           |  |  |   |                                      |
| >>>>>>gainFactorInform ation         |  |  |   |                                      |
| >>>>>>referenceTFCId                 |  |  |   |                                      |
| >>>>>TFCS 9                          |  |  |   |                                      |
| >>>>>>ctfc                           |  |  |   |                                      |
| >>>>>>gainFactorInform ation         |  |  |   |                                      |
| >>>>>referenceTFCId<br>>>>>>TFCS 10  |  |  |   |                                      |
| >>>>>>ctfc                           |  |  |   |                                      |
| >>>>>gainFactorInform                |  |  |   |                                      |
| ation                                |  |  |   |                                      |
| >>>>>βc (FDD only)                   |  |  |   |                                      |
| >>>>>βd                              |  |  |   |                                      |
| >>>>>>referenceTFCId                 |  |  |   |                                      |
| dl-CommonTransChInfo                 |  |  |   |                                      |
| >tfcs-SignallingMode                 | Same as UL   | Same as UL   | Same as UL  | Same as UL                           |
| PhyCH INFORMATION<br>FDD             |  |  |   |                                      |
| UL-DPCH-InfoPredef                   |  |  |   |                                      |
| >ul-DPCH-                            |  |  |   |                                      |
| PowerControlInfo                     |  |  |   |                                      |
| >>powerControlAlgorithm              | Algorithm 1  | Algorithm 1  | Algorithm 1                                       | Algorithm 1                          |
| >>>tpcStepSize                       | 1  | 1  | 1   | 1                                    |
| >tfci-Existence                      | TRUE   | TRUE   | TRUE  | TRUE                                 |
| >puncturingLimit                     | 0.92   | 0.8  | 0.92  | 1                                    |
| DL-                                  |  |  |   |                                      |
| CommonInformationPrede<br>f          |  |  |   |                                      |
| >dl-DPCH-InfoCommon                  |  |  |   |                                      |
| >>spreadingFactor                    | 64   | 64   | 32  | 128                                  |
| >>pilotBits                          | 8  | 8  | 8   | 8                                    |
| >>positionFixed                      | Flexible   | Flexible   | Flexible  | Flexible                             |
| PhyCH INFORMATION<br>3.84 Mcps TDD   |  |  |   |                                      |
| UL-DPCH-InfoPredef                   |  |  |   |                                      |

| Configuration                      | 28.8 kbps conv.<br>CS- data +<br>3.4 kbps signalling | 32 kbps conv. CS-<br>data +<br>3.4 kbps signalling | 64kbps conv. CS-<br>data +<br>3.4 kbps signalling | 14.4 kbps<br>streaming CS-<br>data +<br>3.4 kbps signalling |
|------------------------------------|--|--|---|---|
| >ul-DPCH-                          |  |  |   |   |
| PowerControlInfo                   |  |  |   |   |
| >>dpch-ConstantValue               | -20  | -20  | -20   | -20   |
| >commonTimeslotInfo                |  |  |   |   |
| >>secondInterleavingMod            | frameRelated   | frameRelated                                       | frameRelated                                      | frameRelated  |
| е                                  |  |  |   |   |
| >>tfci-Coding                      | 16   | 8  | 8   | 8   |
| >>puncturingLimit                  | 0.44   | 0.8  | 0.56  | 0.8   |
| >>repetitionPeriodAndLen<br>gth    | repetitionPeriod1                                    | repetitionPeriod1                                  | repetitionPeriod1                                 | repetitionPeriod1   |
| DL-<br>CommonInformationPrede<br>f |  |  |   |   |
| >dl-DPCH-InfoCommon                |  |  |   |   |
| >>commonTimeslotInfo               |  |  |   |   |
| >>>secondInterleavingMo<br>de      | frameRelated   | frameRelated                                       | frameRelated                                      | frameRelated  |
| >>>tfci-Coding                     | 16   | 8  | 8   | 8   |
| >>>puncturingLimit                 | 0.44   | 0.64   | 0.56  | 0.8   |
| >>>repetitionPeriodAndLe           | repetitionPeriod1                                    | repetitionPeriod1                                  | repetitionPeriod1                                 | repetitionPeriod1   |
| PhyCH INFORMATION<br>1.28 Mcps TDD |  |  |   |   |
| UL-DPCH-InfoPredef                 |  |  |   |   |
| >commonTimeslotInfo                |  |  |   |   |
| >>secondInterleavingMod<br>e       | frameRelated   | frameRelated                                       | frameRelated                                      | frameRelated  |
| >>tfci-Coding                      | 16   | 8  | 8   | 8   |
| >>puncturingLimit                  | 0.64   | 0.60   | 0.64  | 1   |
| >>repetitionPeriodAndLen<br>gth    | repetitionPeriod1                                    | repetitionPeriod1                                  | repetitionPeriod1                                 | repetitionPeriod1   |
| DL-<br>CommonInformationPrede<br>f |  |  |   |   |
| >dl-DPCH-InfoCommon                |  |  |   |   |
| >>commonTimeslotInfo               |  |  |   |   |
| >>>secondInterleavingMo<br>de      | frameRelated   | frameRelated                                       | frameRelated                                      | frameRelated  |
| >>>tfci-Coding                     | 16   | 8  | 8   | 8   |
| >>>puncturingLimit                 | 0.64   | 0.60   | 0.64  | 0.88  |
| >>>repetitionPeriodAndLe           | repetitionPeriod1                                    | repetitionPeriod1                                  | repetitionPeriod1                                 | repetitionPeriod1   |

| Configuration                  | 28.8 kbps<br>streaming CS-<br>data +<br>3.4 kbps signalling | 57.6 kbps<br>streaming CS-<br>data +<br>3.4 kbps signalling | 12.2 kbps<br>speech(multimode<br>) +<br>3.4 kbps signalling |
|--------------------------------|---|---|---|
| Ref 34.108                     | 16  | 17  | 1a  |
| Default configuration identity | 8   | 9   | 10  |
| RB INFORMATION                 |   |   |   |
| rb-Identity                    | RB1: 1, RB2: 2,<br>RB3: 3, RB5: 5                           | RB1: 1, RB2: 2,<br>RB3: 3, RB5: 5                           | RB1: 1, RB2: 2,<br>RB3: 3, RB5: 5,<br>RB6: 6, RB7: 7        |
| rlc-InfoChoice                 | RIc-info  | RIc-info  | RIc-info  |
| >ul-RLC-Mode                   | RB1: UM<br>RB2- RB3: AM<br>RB5: TM                          | RB1: UM<br>RB2- RB3: AM<br>RB5: TM                          | RB1: UM<br>RB2- RB3: AM<br>RB5-RB7: TM                      |

| Configuration                     | 28.8 kbps<br>streaming CS-<br>data + | 57.6 kbps<br>streaming CS-<br>data + | 12.2 kbps<br>speech(multimode<br>) + |
|-----------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
|                                   | 3.4 kbps signalling                  | 3.4 kbps signalling                  | 3.4 kbps signalling                  |
| >>transmissionRLC-                | RB1: N/A                             | RB1: N/A                             | RB1: N/A                             |
| DiscardMode                       | RB2- RB3:                            | RB2- RB3:                            | RB2- RB3:                            |
|                                   | NoDiscard                            | NoDiscard                            | NoDiscard                            |
|                                   | RB5: N/A                             | RB5: N/A                             | RB5- RB7: N/A                        |
| >>>maxDat                         | RB1: N/A                             | RB1: N/A                             | RB1: N/A                             |
|                                   | RB2- RB3: 15                         | RB2- RB3: 15                         | RB2- RB3: 15                         |
|                                   | RB5: N/A                             | RB5: N/A                             | RB5- RB7: N/A                        |
| >>transmissionWindowSiz           | RB1: N/A                             | RB1: N/A                             | RB1: N/A                             |
| e                                 | RB2- RB3: 128                        | RB2- RB3: 128                        | RB2- RB3: 128                        |
|                                   | RB5: N/A                             | RB5: N/A                             | RB5- RB7: N/A                        |
| >>timerRST                        | RB1: N/A                             | RB1: N/A                             | RB1: N/A                             |
|                                   | RB2- RB3: 300                        | RB2- RB3: 300                        | RB2- RB3: 300                        |
| 507                               | RB5: N/A                             | RB5: N/A                             | RB5- RB7: N/A                        |
| >>max-RST                         | RB1: N/A                             | RB1: N/A<br>RB2- RB3: 1              | RB1: N/A                             |
|                                   | RB2- RB3: 1<br>RB5: N/A              |                                      | RB2- RB3: 1                          |
|                                   | RB5: N/A<br>RB1: N/A                 | RB5: N/A                             | RB5- RB7: N/A                        |
| >>pollingInfo                     | RB2- RB3: as below                   | RB1: N/A                             | RB1: N/A<br>RB2- RB3: as below       |
|                                   |                                      | RB2- RB3: as below                   |                                      |
| >>>lastTransmissionPDU-           | RB5: N/A<br>RB2- RB3: FALSE          | RB5: N/A<br>RB2- RB3: FALSE          | RB5- RB7: N/A<br>RB2- RB3: FALSE     |
| Poll                              |                                      |                                      |                                      |
| >>>lastRetransmissionPD<br>U-Poll | RB2- RB3: FALSE                      | RB2- RB3: FALSE                      | RB2- RB3: FALSE                      |
| >>>timerPollPeriodic              | RB2- RB3: <del>100</del> 300         | RB2- RB3: <del>100</del> 300         | RB2- RB3: 100300                     |
| >>segmentationIndication          | RB1- RB3: N/A                        | RB1- RB3: N/A                        | RB1- RB3: N/A                        |
|                                   | RB5: FALSE                           | RB5: FALSE                           | RB5- RB7: FALSE                      |
| >dl-RLC-Mode                      | RB1: UM                              | RB1: UM                              | RB1: UM                              |
|                                   | RB2- RB3: AM                         | RB2- RB3: AM                         | RB2- RB3: AM                         |
|                                   | RB5: TM                              | RB5: TM                              | RB5- RB7: TM                         |
| >>inSequenceDelivery              | RB1: N/A                             | RB1: N/A                             | RB1: N/A                             |
|                                   | RB2- RB3: TRUE                       | RB2- RB3: TRUE                       | RB2- RB3: TRUE                       |
|                                   | RB5: N/A                             | RB5: N/A                             | RB5- RB7: N/A                        |
| >>receivingWindowSize             | RB1: N/A                             | RB1: N/A                             | RB1: N/A                             |
|                                   | RB2- RB3: 128                        | RB2- RB3: 128                        | RB2- RB3: 128                        |
|                                   | RB5: N/A                             | RB5: N/A                             | RB5- RB7: N/A                        |
| >>dl-RLC-StatusInfo               | RB1: N/A                             | RB1: N/A                             | RB1: N/A                             |
|                                   | RB2- RB3: as below                   | RB2- RB3: as below                   | RB2- RB3: as below                   |
|                                   | RB5: N/A                             | RB5: N/A                             | RB5- RB7: N/A                        |
| >>>timerStatusProhibit            | RB2- RB3: 100                        | RB2- RB3: 100                        | RB2- RB3: 100                        |
| >>>missingPDU-Indicator           | RB2- RB3: FALSE                      | RB2- RB3: FALSE                      | RB2- RB3: FALSE                      |
| >>>timerStatusPeriodic            | RB2- RB3: <del>100</del> 300         | RB2- RB3: <del>100</del> 300         | RB2- RB3: <del>100</del> 300         |
| >>segmentationIndication          | RB1- RB3: N/A                        | RB1- RB3: N/A                        | RB1- RB3: N/A                        |
|                                   | RB5: FALSE                           | RB5: FALSE                           | RB5- RB7: FALSE                      |
| rb-MappingInfo                    |                                      |                                      |                                      |
| >UL-                              | OneLogicalChannel                    | OneLogicalChannel                    | OneLogicalChannel                    |
| LogicalChannelMappings            |                                      |                                      | -                                    |
| >>ul-                             | Dch                                  | Dch                                  | Dch                                  |
| TransportChannelType              |                                      |                                      |                                      |
| >>>transportChannelIdenti         | RB1- RB3: 2                          | RB1- RB3: 2                          | RB1- RB3: 4                          |
| ty                                | RB5: 1                               | RB5: 1                               | RB5: 1, RB6: 2,                      |
|                                   |                                      |                                      | RB7: 3                               |
| >>logicalChannelIdentity          | RB1: 1, RB2: 2,                      | RB1: 1, RB2: 2,                      | RB1: 1, RB2: 2,                      |
|                                   | RB3: 3                               | RB3: 3                               | RB3: 3                               |
|                                   | RB5: N/A                             | RB5: N/A                             | RB5- RB7: N/A                        |
| >>rlc-SizeList                    | RB1- RB3:                            | RB1- RB3:                            | RB1- RB3:                            |
|                                   | configured                           | configured                           | configured                           |
|                                   | RB5: N/A                             | RB5: N/A                             | RB5- RB7: N/A                        |
| >>mac-                            | RB1: 1, RB2: 2,                      | RB1: 1, RB2: 2,                      | RB1: 1, RB2: 2,                      |
| LogicalChannelPriority            | RB3: 3                               | RB3: 3                               | RB3: 3                               |
|                                   |                                      |                                      |                                      |
|                                   | RB5: 5                               | RB5: 5                               | RB5- RB7: 5                          |
| >DL-                              | RB5: 5                               | RB5: 5                               | RB2- RB7: 5                          |

| Configuration  | 28.8 kbps<br>streaming CS-              | 57.6 kbps<br>streaming CS-                | 12.2 kbps<br>speech(multimode                       |
|--|---|---|---|
|  | data +                                  | data +                                    | ) +   |
|  | 3.4 kbps signalling                     | 3.4 kbps signalling                       | 3.4 kbps signalling                                 |
| >>Mapping option 1   | One mapping option                      | One mapping option                        | One mapping option                                  |
| >>>dl-<br>TransportChannelType                             | Dch                                     | Dch                                       | Dch   |
| >>>transportChannellden<br>tity                            | RB1- RB3: 2<br>RB5: 1                   | RB1- RB3: 2<br>RB5: 1                     | RB1- RB3: 4<br>RB5: 1, RB6: 2,<br>RB7: 3            |
| >>>logicalChannelIdentity                                  | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5: N/A   | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5: N/A     | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5- RB7: N/A          |
| TrCH INFORMATION PER<br>TrCH                               |   |   |   |
| UL-<br>AddReconfTransChInfoLis<br>t                        |   |   |   |
| >Uplink transport channel<br>type                          | dch                                     | dch                                       | dch   |
| >transportChannelIdentity                                  | TrCH1: 1, TrCH2: 2                      | TrCH1: 1, TrCH2: 2                        | TrCH1: 1, TrCH2: 2,<br>TrCH3: 3, TrCH4: 4           |
| >transportFormatSet  | DedicatedTransChT<br>FS                 | DedicatedTransChT<br>FS                   | DedicatedTransChT<br>FS                             |
| >>dynamicTF-information                                    |   |   |   |
| >>>tf0/ tf0,1  | TrCH1: (0x576,<br>1x576, 2x576)         | TrCH1: (0x576,<br>1x576, 2x576,           | TrCH1: (0x81)<br>TrCH2: (0x 103                     |
|  | TrCH2: (0x144,<br>1x144)                | 3x576, 4x576)<br>TrCH2: (0x144,<br>1x144) | TrCH3: (0x 60)<br>TrCH4: (0x144)                    |
| >>>rlcSize   | TrCH1: OctetMode<br>TrCH2:BitMode       | TrCH1: OctetMode<br>TrCH2:BitMode         | BitMode   |
| >>>>sizeType   | TrCH1: type 2,<br>part1= 9,             | TrCH1: type 2,<br>part1= 9,               | TrCH1: type 1: 81<br>TrCH2: type 1: 103             |
|  | part2= 2 (576)<br>TrCH2: type 2,        | part2= 2 (576)<br>TrCH2: type 2,          | TrCH3: type 1: 60<br>TrCH4: 2: type 2,              |
|  | part1= 2,<br>part2= 0 (144)             | part1= 2,<br>part2= 0 (144)               | part1= 2, part2= 0<br>(144)                         |
| >>>numberOfTbSizeList                                      | TrCH1: Zero, one, 2<br>TrCH2: Zero, one | TrCH1: Zero, one,<br>2, 3, 4              | TrCH1-4: Zero                                       |
|  | All                                     | TrCH2: Zero, one                          | All   |
| <pre>&gt;&gt;&gt;logicalChannelList &gt;&gt;&gt;tf 1</pre> | All                                     | All                                       | TrCH1: (1x39)                                       |
|  |   |   | TrCH2: (1x53)<br>TrCH3: (1x60)                      |
| >>>numberOfTransportBl                                     |   |   | TrCH4: (1x144)<br>TrCH1-3: One                      |
| ocks<br>>>>>rlc-Size                                       |   |   | TrCH1-3: BitMode                                    |
| >>>>sizeType   |   |   | TrCH1: 1: 39  |
|  |   |   | TrCH2: 1: 53<br>TrCH3: 1: 60                        |
| >>>>numberOfTbSizeList                                     |   |   | TrCH1-3: One  |
| >>>>logicalChannelList                                     |   |   | TrCH1-3: all  |
| >>>tf 2  |   |   | TrCH1: (1x42)<br>TrCH2: (1x63)<br>TrCH3- TrCH4: N/A |
| >>>>numberOfTransportBl<br>ocks                            |   |   | TrCH1-2: One  |
| >>>rlc-Size  |   |   | TrCH1: BitMode                                      |
| >>>>sizeType   |   |   | TrCH1: type 1: 42<br>TrCH2: type 1: 63              |
| >>>>numberOfTbSizeList                                     |   |   | TrCH1-2: One  |
| >>>logicalChannelList                                      | 1                                       |   | TrCH1: all  |

| Configuration                                     | 28.8 kbps               | 57.6 kbps               | 12.2 kbps                                  |
|---|-------------------------|-------------------------|--|
|   | streaming CS-<br>data + | streaming CS-<br>data + | speech(multimode<br>) +                    |
|   | 3.4 kbps signalling     | 3.4 kbps signalling     | 3.4 kbps signalling                        |
| >>>tf 3   |                         |                         | TrCH1: (1x55)                              |
|   |                         |                         | TrCH2: (1x84)                              |
|   |                         |                         | TrCH3- TrCH4: N/A                          |
| >>>>numberOfTransportBl<br>ocks                   |                         |                         | TrCH1-2: Zero                              |
| >>>rlc-Size                                       |                         |                         | TrCH1: BitMode                             |
| >>>>sizeType                                      |                         |                         | TrCH1: type 1: 55                          |
| Contraction of the Simol int                      |                         |                         | TrCH2: type 1: 84<br>TrCH1-2: One          |
| >>>>numberOfTbSizeList<br>>>>>logicalChannelList  |                         |                         | TrCH1: all                                 |
| >>>tf 4   |                         |                         | TrCH1: (1x75)                              |
|   |                         |                         | TrCH2: (1x103)                             |
|   |                         |                         | TrCH3- TrCH4: N/A                          |
| >>>numberOfTransportBl                            |                         |                         | TrCH1-2: One                               |
| ocks  |                         |                         | T OLIVE DYNA I                             |
| >>>rlc-Size<br>>>>>sizeType                       |                         |                         | TrCH1: BitMode<br>TrCH1: type 1: 75        |
| >>>>size i ype                                    |                         |                         | TrCH1: type 1: 75<br>TrCH2: type 1: 103    |
| >>>numberOfTbSizeList                             |                         |                         | TrCH1-2: One                               |
| >>>logicalChannelList                             |                         |                         | TrCH1: all                                 |
| >>>tf 5   |                         |                         | TrCH1: (1x81)                              |
|   |                         |                         | TrCH2- TrCH4: N/A                          |
| >>>>numberOfTransportBl<br>ocks                   |                         |                         | TrCH1: One                                 |
| >>>rlc-Size                                       |                         |                         | TrCH1: BitMode                             |
| >>>>sizeType                                      |                         |                         | TrCH1: type 1: 81                          |
| >>>>numberOfTbSizeList                            |                         |                         | TrCH1: One                                 |
| >>>logicalChannelList                             |                         |                         | TrCH1: all                                 |
| >>semiStaticTF-<br>Information                    |                         |                         |  |
| >>>tti  | TrCH1: 40               | TrCH1: 40               | TrCH1- TrCH3: 20                           |
|   | TrCH2: 40               | TrCH2: 40               | TrCH4: 40                                  |
| >>>channelCodingType                              | TrCH1: Turbo            | TrCH1: Turbo            | Convolutional                              |
|   | TrCH2:<br>Convolutional | TrCH2:<br>Convolutional |  |
| >>>codingRate                                     | TrCH1: N/A              | TrCH1: N/A              | TrCH1- TrCH2:                              |
|   | TrCH2: Third            | TrCH2: Third            | Third                                      |
|   |                         |                         | TrCH3: Half                                |
|   |                         |                         | TrCH4: Third                               |
| >>>rateMatchingAttribute                          | TrCH1: 155              | TrCH1: 145              | TrCH1: 200                                 |
|   | TrCH2: 160              | TrCH2: 160              | TrCH2: 190<br>TrCH3: 235                   |
|   |                         |                         | TrCH4: 160                                 |
| >>>crc-Size                                       | TrCH1: 16               | TrCH1: 16               | TrCH1: 12                                  |
|   | TrCH2: 16               | TrCH2: 16               | TrCH2- TrCH3: 0                            |
|   |                         |                         | TrCH4: 16                                  |
| DL-<br>AddReconfTransChInfoLis                    |                         |                         |  |
| t<br>Downlink transport                           | dab                     | dab                     | dah  |
| >Downlink transport<br>channel type               | dch                     | dch                     | dch  |
| >dl-  | TrCH1: 1, TrCH2: 2      | TrCH1: 1, TrCH2: 2      | TrCH1: 1, TrCH2: 2,                        |
| TransportChannelldentity<br>(should be as for UL) |                         |                         | TrCH3: 3, TrCH4: 4                         |
| >tfs-SignallingMode                               | SameAsUL                | SameAsUL                | Independent                                |
|   |                         |                         | <only on="" td="" tf0="" trch1<=""></only> |
|   |                         |                         | is different and                           |
| · · · tropoportEorm - +0 - +                      |                         |                         | shown below>                               |
| >>transportFormatSet                              |                         |                         | DedicatedTransChT<br>FS                    |
| >>>dynamicTF-information                          |                         |                         |  |

| Configuration                         | 28.8 kbps<br>streaming CS-<br>data +       | 57.6 kbps<br>streaming CS-<br>data +       | 12.2 kbps<br>speech(multimode<br>) +                 |
|---------------------------------------|--|--|--|
|                                       | 3.4 kbps signalling                        | 3.4 kbps signalling                        | 3.4 kbps signalling                                  |
| >>>>tf0/ tf0,1                        |  |  | TrCH1: (1x0)   |
| >>>rlcSize                            |  |  | bitMode  |
| >>>>sizeType                          |  |  | TrCH1: type 1: 0                                     |
| >>>>numberOfTbSizeList                |  |  | TrCH1: One   |
| >>>>logicalChannelList                |  |  | All  |
| >>ULTrCH-Id                           | TrCH1: 1, TrCH2: 2                         | TrCH1: 1, TrCH2: 2                         | TrCH1: 1, TrCH2: 2,<br>TrCH3: 3, TrCH4: 4            |
| >dch-QualityTarget                    |  |  | <b>–</b> <u>–</u> <u>–</u> <del>–</del> <del>3</del> |
| >>bler-QualityValue                   | TrCH1: 1x10 <sup>-2</sup><br>TrCH2: Absent | TrCH1: 1x10 <sup>-2</sup><br>TrCH2: Absent | TrCH1: 7x10 <sup>-3</sup><br>TrCH2- TrCH4:<br>Absent |
| TrCH INFORMATION,<br>COMMON           |  |  |  |
| ul-CommonTransChInfo                  |  |  |  |
| >tfcs-ID (TDD only)                   | 1  | 1  | 1  |
| >sharedChannelIndicator<br>(TDD only) | FALSE                                      | FALSE                                      | FALSE  |
| >tfc-Subset                           | Absent, not required                       | Absent, not required                       | Absent, not required                                 |
| >ul-TFCS                              | Normal TFCI                                | Normal TFCI                                | Normal TFCI  |
|                                       | signalling                                 | signalling                                 | signalling   |
| >>explicitTFCS-<br>ConfigurationMode  | Complete                                   | Complete                                   | Complete   |
| >>>ctfcSize                           | Ctfc4Bit                                   | Ctfc4Bit                                   | Ctfc8Bit   |
| >>>>TFCS representation               | Addition                                   | Addition                                   | Addition   |
| >>>>TFCS list                         |  |  |  |
| >>>>>TFCS 1                           | (TF0, TF0)                                 | (TF0, TF0)                                 | (TF0, TF0, TF0,<br>TF0)                              |
| >>>>>>ctfc                            | 0  | 0  | 0  |
| >>>>>>gainFactorInform ation          | Computed                                   | Computed                                   | Computed   |
| >>>>>>referenceTFCId                  | 0  | 0  | 0  |
| >>>>>TFCS 2                           | (TF1, TF0)                                 | (TF1, TF0)                                 | (TF1, TF0, TF0,<br>TF0)                              |
| >>>>>>ctfc                            | 1  | 1  | 1  |
| >>>>>>gainFactorInform ation          | Computed                                   | Computed                                   | Computed   |
| >>>>>>βc (FDD only)                   | N/A  | N/A  | N/A  |
| >>>>>βd                               | N/A  | N/A  | N/A  |
| >>>>>>referenceTFCId                  | 0  | 0  | 0  |
| >>>>>TFCS 3                           | (TF2, TF0)                                 | (TF2, TF0)                                 | (TF2, TF1, TF0,<br>TF0)                              |
| >>>>>>ctfc                            | 2  | 2  | 8  |
| >>>>>>gainFactorInform ation          | Computed                                   | Computed                                   | Computed   |
| >>>>>>referenceTFCId                  | 0  | 0  | 0  |
| >>>>>TFCS 4                           | (TF0, TF1)                                 | (TF3, TF0)                                 | (TF3, TF2, TF0,<br>TF0)                              |
| >>>>>>ctfc                            | 3  | 3  | 15   |
| >>>>>>gainFactorInform ation          | Computed                                   | Computed                                   | Computed   |
| >>>>>βc (FDD only)                    | N/A  | N/A  | N/A  |
| >>>>>βd                               | N/A  | N/A  | N/A  |
| >>>>>>>referenceTFCId                 | 0  | 0  | 0  |
| >>>>TFCS 5                            | (TF1, TF1)                                 | (TF4, TF0)                                 | (TF4, TF3, TF0,<br>TF0)                              |
| >>>>>ctfc                             | 4  | 4  | 22   |
| >>>>>gainFactorInform<br>ation        | Computed                                   | Computed                                   | Computed   |
| >>>>>referenceTFCId                   | 0  | 0  | 0  |

| Configuration                          | 28.8 kbps<br>streaming CS-<br>data +<br>3.4 kbps signalling | 57.6 kbps<br>streaming CS-<br>data +<br>3.4 kbps signalling | 12.2 kbps<br>speech(multimode<br>) +<br>3.4 kbps signalling |
|--|---|---|---|
| >>>>>TFCS 6                            | (TF2, TF1)  | (TF0, TF1)  | (TF5, TF4, TF1,   |
|  | 5   | 5   | TF0)<br>59  |
| >>>>>>ctfc<br>>>>>>>gainFactorInform   | 5<br>Signalled  | 5<br>Computed   | Computed  |
| ation                                  | Signalieu   | Computed  | Computed  |
| >>>>>βc (FDD only)                     | 8   | N/A   | N/A   |
| >>>>>βd                                | 15  | N/A   | N/A   |
| >>>>>>referenceTFCId                   | N/A   | 0   | 0   |
| >>>>>TFCS 7                            |   | (TF1, TF1)  | (TF0,TF0,TF0,TF1)   |
| >>>>>>ctfc                             |   | 6   | 60  |
| >>>>>>gainFactorInform                 |   | Computed  | Computed  |
| ation                                  |   |   |   |
| >>>>>>referenceTFCld                   |   | 0<br>(TF2, TF1)   |   |
| >>>>>TFCS 8<br>>>>>>ctfc               |   | (TF2, TF1)<br>7   | (TF1,TF0,TF0,TF1)<br>61                                     |
| >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>> |   | Computed  | Computed  |
| ation                                  |   | Joinpaloa   | Jonipaloa   |
| >>>>>>referenceTFCId                   |   | 0   | 0   |
| >>>>>TFCS 9                            |   | (TF3, TF1)  | (TF2,TF1,TF0,TF1)   |
| >>>>>ctfc                              |   | 8   | 68  |
| >>>>>>gainFactorInform ation           |   | Computed  | Computed  |
| >>>>>>referenceTFCId                   |   | 0   | 0   |
| >>>>>TFCS 10                           |   | (TF4, TF1)  | (TF3,TF2,TF0,TF1)   |
| >>>>>ctfc                              |   | 9   | 75  |
| >>>>>>gainFactorInform ation           |   | Signalled   | Computed  |
| >>>>>βc (FDD only)                     |   | 8   | N/A   |
| >>>>>βd                                |   | 15  | N/A   |
| >>>>>>referenceTFCId                   |   | 0   | 0   |
| >>>>>TFCS 11                           |   |   | (TF4,TF3,TF0,TF1)   |
| >>>>>>ctfc                             |   |   | 82  |
| >>>>>>sgainFactorInform                |   |   | Computed  |
| ation                                  |   |   | 0   |
| >>>>>>referenceTFCId                   |   |   |   |
| >>>>>TFCS 12                           |   |   | (TF5,TF4,TF1,TF1)<br>119                                    |
| >>>>>>>>>>sgainFactorInform            |   |   | Signalled   |
| ation                                  |   |   | olghalled   |
| >>>>>βc (FDD only)                     |   |   | 11  |
| >>>>>βd                                |   |   | 15  |
| >>>>>>referenceTFCId                   |   |   | 0   |
| dl-CommonTransChInfo                   |   |   |   |
| >tfcs-SignallingMode                   | Same as UL  | Same as UL  | Same as UL  |
| PhyCH INFORMATION<br>FDD               |   |   |   |
| UL-DPCH-InfoPredef                     |   |   |   |
| >ul-DPCH-                              |   |   |   |
| PowerControlInfo                       |   |   |   |
| >>powerControlAlgorithm                | Algorithm 1   | Algorithm 1   | Algorithm 1   |
| >>>tpcStepSize                         | 1   | 1   | 1   |
| >tfci-Existence                        | TRUE  | TRUE  | TRUE  |
|  |   | 1   | 0.88  |
| >puncturingLimit                       | 1   | -   | 0.00  |
| DL-<br>CommonInformationPrede          | 1   |   |   |
| DL-<br>CommonInformationPrede<br>f     | 1   |   |   |
| DL-<br>CommonInformationPrede          | 64  | 32  | 128   |

| Configuration                              | 28.8 kbps<br>streaming CS-<br>data +<br>3.4 kbps signalling | 57.6 kbps<br>streaming CS-<br>data +<br>3.4 kbps signalling | 12.2 kbps<br>speech(multimode<br>) +<br>3.4 kbps signalling |
|--|---|---|---|
| >>positionFixed                            | Flexible  | Flexible  | Fixed   |
| PhyCH INFORMATION                          |   |   | T IXOU  |
| 3.84 Mcps TDD                              |   |   |   |
| UL-DPCH-InfoPredef                         |   |   |   |
| >ul-DPCH-                                  |   |   |   |
| PowerControlInfo                           |   |   |   |
| >>dpch-ConstantValue                       | -20   | -20   | -20   |
| >commonTimeslotInfo                        |   |   |   |
| >>secondInterleavingMod<br>e               | frameRelated  | frameRelated  | frameRelated  |
| >>tfci-Coding                              | 16  | 16  | 16  |
| >>puncturingLimit                          | 0.44  | 0.48  | 0.88  |
| >>repetitionPeriodAndLen<br>gth            | repetitionPeriod1   | repetitionPeriod1   | repetitionPeriod1   |
| DL-<br>CommonInformationPrede<br>f         |   |   |   |
| >dl-DPCH-InfoCommon                        |   |   |   |
| >>commonTimeslotInfo                       |   |   |   |
| >>>secondInterleavingMo<br>de              | frameRelated  | frameRelated  | frameRelated  |
| >>>tfci-Coding                             | 16  | 16  | 16  |
| >>>puncturingLimit                         | 0.44  | 0.48  | 0.92  |
| >>>repetitionPeriodAndLe<br>ngth           | repetitionPeriod1   | repetitionPeriod1   | repetitionPeriod1   |
| PhyCH INFORMATION<br>1.28 Mcps TDD         |   |   |   |
| UL-DPCH-InfoPredef                         |   |   |   |
| >commonTimeslotInfo                        |   |   |   |
| <pre>&gt;&gt;secondInterleavingMod e</pre> | frameRelated  | frameRelated  |   |
| >>tfci-Coding                              | 16  | 16  |   |
| >>puncturingLimit                          | 0.64  | 0.72  |   |
| >>repetitionPeriodAndLen<br>gth            | repetitionPeriod1   | repetitionPeriod1   |   |
| DL-<br>CommonInformationPrede<br>f         |   |   |   |
| >dI-DPCH-InfoCommon                        |   |   |   |
| >>commonTimeslotInfo                       |   |   |   |
| >>>secondInterleavingMo                    | frameRelated  | frameRelated  | frameRelated  |
| de   |   |   |   |
| >>>tfci-Coding                             | 16  | 16  | 16  |
| >>>puncturingLimit                         | 0.64  | 0.72  | 0.92  |
| >>>repetitionPeriodAndLe<br>ngth           | repetitionPeriod1   | repetitionPeriod1   | repetitionPeriod1   |

| Configuration                     | 10.2/6.7/5.9/4.75<br>kbps speech +<br>3.4 kbps signalling | 7.4/6.7/5.9/4.75<br>kbps speech +<br>3.4 kbps signalling |
|-----------------------------------|---|--|
| Ref 34.108                        | N/A   | N/A  |
| Default configuration             | 11  | 12   |
|                                   |   |  |
| RB INFORMATION<br>rb-Identity     | RB1: 1, RB2: 2,   |  |
| rb-ideniity                       | RB3: 3, RB5: 5,   | RB1: 1, RB2: 2,<br>RB3: 3, RB5: 5,                       |
|                                   | RB6: 6, RB7: 7  | RB6: 6   |
| rlc-InfoChoice                    | RIc-info  | RIc-info   |
| >ul-RLC-Mode                      | RB1: UM   | RB1: UM  |
|                                   | RB2- RB3: AM  | RB2- RB3: AM   |
|                                   | RB5-RB7: TM   | RB5-RB6: TM  |
| >>transmissionRLC-                | RB1: N/A  | RB1: N/A   |
| DiscardMode                       | RB2- RB3:   | RB2- RB3:  |
|                                   | NoDiscard   | NoDiscard  |
|                                   | RB5- RB7: N/A   | RB5- RB6: N/A  |
| >>>maxDat                         | RB1: N/A  | RB1: N/A   |
|                                   | RB2- RB3: 15  | RB2- RB3: 15   |
|                                   | RB5- RB7: N/A   | RB5- RB6: N/A  |
| >>transmissionWindowSiz           | RB1: N/A  | RB1: N/A   |
| e                                 | RB2- RB3: 128   | RB2- RB3: 128  |
|                                   | RB5- RB7: N/A   | RB5- RB6: N/A  |
| >>timerRST                        | RB1: N/A  | RB1: N/A   |
|                                   | RB2- RB3: 300   | RB2- RB3: 300  |
| >>max-RST                         | RB5- RB7: N/A<br>RB1: N/A                                 | RB5- RB6: N/A<br>RB1: N/A                                |
| >>111ax-R31                       | RB1. N/A<br>RB2- RB3: 1                                   | RB2- RB3: 1  |
|                                   | RB5- RB7: N/A   | RB5- RB6: N/A  |
| >>pollingInfo                     | RB1: N/A  | RB1: N/A   |
| 2 politigitio                     | RB2- RB3: as below<br>RB5- RB7: N/A                       | RB2- RB3: as below<br>RB5- RB6: N/A                      |
| >>>lastTransmissionPDU-<br>Poll   | RB2- RB3: FALSE   | RB2- RB3: FALSE  |
| >>>lastRetransmissionPD<br>U-Poll | RB2- RB3: FALSE   | RB2- RB3: FALSE  |
| >>>timerPollPeriodic              | RB2- RB3: <del>100</del> 300                              | RB2- RB3: <del>100</del> 300                             |
| >>segmentationIndication          | RB1- RB3: N/A   | RB1- RB3: N/A  |
|                                   | RB5- RB7: FALSE   | RB5- RB6: FALSE  |
| >dl-RLC-Mode                      | RB1: UM   | RB1: UM  |
|                                   | RB2- RB3: AM<br>RB5- RB7: TM                              | RB2- RB3: AM<br>RB5- RB6: TM                             |
|                                   | RB8: TM   | RB7: TM  |
| >>inSequenceDelivery              | RB1: N/A  | RB1: N/A   |
|                                   | RB2- RB3: TRUE  | RB2- RB3: TRUE   |
|                                   | RB5- RB8: N/A   | RB5- RB7: N/A  |
| >>receivingWindowSize             | RB1: N/A  | RB1: N/A   |
| -                                 | RB2- RB3: 128   | RB2- RB3: 128  |
|                                   | RB5- RB8: N/A   | RB5- RB7: N/A  |
| >>dl-RLC-StatusInfo               | RB1: N/A  | RB1: N/A   |
|                                   | RB2- RB3: as below  | RB2- RB3: as below                                       |
|                                   | RB5- RB7: N/A   | RB5- RB6: N/A  |
| >>>timerStatusProhibit            | RB2- RB3: 100   | RB2- RB3: 100  |
| >>>missingPDU-Indicator           | RB2- RB3: FALSE   | RB2- RB3: FALSE  |
| >>>timerStatusPeriodic            | RB2- RB3: <u>100300</u>                                   | RB2- RB3: <u>100300</u>                                  |
| >>segmentationIndication          | RB1- RB3: N/A<br>RB5- RB7: FALSE                          | RB1- RB3: N/A<br>RB5- RB6: FALSE                         |
| rb-MappingInfo                    |   |  |
| >UL-<br>LogicalChannelMappings    | OneLogicalChannel   | OneLogicalChannel  |
| >>ul-<br>TransportChannelType     | Dch   | Dch  |

>>>tf 2

ocks

>>>rlc-Size

>>>>sizeType

>>>numberOfTbSizeList

>>>>numberOfTransportBl

>>>>logicalChannelList

| >>>transportChannelldentit              | RB1- RB3: 4               | RB1- RB3: 3               |
|---|---------------------------|---------------------------|
| y                                       | RB5: 1, RB6: 2,           | RB5: 1, RB6: 2            |
| 3                                       | RB7: 3,                   | 11201 1, 11201 2          |
| >>logicalChannelIdentity                | RB1: 1, RB2: 2,           | RB1: 1, RB2: 2,           |
| 5                                       | RB3: 3                    | RB3: 3                    |
|   | RB5- RB7: N/A             | RB5- RB6: N/A             |
| >>rlc-SizeList                          | RB1- RB3:                 | RB1- RB3:                 |
|   | configured                | configured                |
|   | RB5- RB7: N/A             | RB5- RB6: N/A             |
| >>mac-                                  | RB1: 1, RB2: 2,           | RB1: 1, RB2: 2,           |
| LogicalChannelPriority                  | RB3: 3                    | RB3: 3                    |
|   | RB5- RB7: 5               | RB5- RB6: 5               |
| >DL-                                    |                           |                           |
| logicalChannelMappingList               |                           |                           |
| >>Mapping option 1                      | One mapping option        | One mapping option        |
| >>>dl-                                  | Dch                       | Dch                       |
| TransportChannelType                    |                           |                           |
| >>>>transportChannellden                | RB1- RB3: 4               | RB1- RB3: 3               |
| tity                                    | RB5: 1, RB6: 2,           | RB5: 1, RB6: 2,           |
|   | RB7: 3, RB8: 5            | RB7:4                     |
| >>>logicalChannelIdentity               | RB1: 1, RB2: 2,<br>RB3: 3 | RB1: 1, RB2: 2,<br>RB3: 3 |
|   | RB3: 3<br>RB5- RB8: N/A   | RB5- RB7: N/A             |
| TrCH INFORMATION PER                    | RDJ- RDO. N/A             | RDJ- RDT. N/A             |
| TrCH                                    |                           |                           |
| UL-                                     |                           |                           |
| AddReconfTransChInfoList                |                           |                           |
| >Uplink transport channel               | dch                       | dch                       |
| type                                    |                           |                           |
| >transportChannelIdentity               | TrCH1: 1, TrCH2: 2,       | TrCH1: 1, TrCH2: 2,       |
|   | TrCH3: 3, TrCH4: 4        | TrCH3: 3                  |
| >transportFormatSet                     | DedicatedTransChT         | DedicatedTransChT         |
| al an anni a <b>TE</b> in fa ann a tian | FS                        | FS                        |
| >>dynamicTF-information                 |                           |                           |
| >>>tf0/ tf0,1                           | TrCH1: (0x65)             | TrCH1: (0x61)             |
|   | TrCH2: (0x 99)            | TrCH2: (0x 87)            |
|   | TrCH3: (0x 40,            | TrCH3: (0x 144,           |
|   | 1x40)                     | 1x144)                    |
|   | TrCH4: (0x144,<br>1x144)  |                           |
| >>>>rlcSize                             | BitMode                   | BitMode                   |
| >>>>sizeType                            | TrCH1: type 1: 65         | TrCH1: type 1: 61         |
| served to the                           | TrCH2: type 1: 99         | TrCH2: type 1: 87         |
|   | TrCH3: type 1: 40         | TrCH3: 2: type 2,         |
|   | TrCH4: 2: type 2,         | part1 = 2, part2 = 0      |
|   | part1 = 2, part2 = 0      | (144)                     |
|   | (144)                     | ····/                     |
| >>>>numberOfTbSizeList                  | TrCH1-2: Zero             | TrCH1-2: Zero             |
|   | TrCH3-4: Zero, one        | TrCH3: Zero, one          |
| >>>>logicalChannelList                  | All                       | All                       |
| >>>tf 1                                 | TrCH1: (1x39)             | TrCH1: (1x39)             |
|   | TrCH2: (1x 53)            | TrCH2: (1x53)             |
|   | TrCH3- TrCH4: N/A         | TrCH3: N/A                |
| >>>>numberOfTransportBl                 | TrCH1: One                | TrCH1: One                |
| ocks                                    | TrCH2: One                | TrCH2: One                |
| >>>>rlc-Size                            | TrCH1-2: BitMode          | TrCH1-2: BitMode          |
| >>>>sizoTypo                            |                           |                           |

TrCH1: 1: 39

TrCH2: 1: 53

TrCH1: all

TrCH1-2: One

TrCH1: (1x42)

TrCH2: (1x63)

TrCH1: One

TrCh2: One

TrCH1: BitMode

TrCH3- TrCH4: N/A

TrCH1: BitMode

TrCH1: 1: 39

TrCH1: 1: 53

TrCH1: all

TrCH1-2: One

TrCH1: (1x42)

TrCH2: (1x63)

TrCH3: N/A

TrCH1: One

TrCh2: One

|   | 1   |  |
|---|---|--|
| >>>>sizeType  | TrCH1: type 1: 42   | TrCH1: type 1: 42  |
|   | TrCH2: type 1: 63   | TrCH2: type 1: 63  |
| >>>>numberOfTbSizeList  | TrCH1: One  | TrCH1: One   |
|   | TrCH2: One<br>TrCH1: all  | TrCH2: One   |
| >>>>logicalChannelList  | TrCH1: all  | TrCH1: all<br>TrCH2: all   |
| >>>tf 3   | TrCH1: (1x55)   | TrCH1: (1x55)  |
| >>>(1 3   |   |  |
|   | TrCH2: (1x76)<br>TrCH3- TrCH4: N/A  | TrCH2: (1x76)<br>TrCH3: N/A  |
| >>>>numberOfTransportBl   | TrCH1: One  | TrCH1: One   |
| ocks  | TrCh2: One  | TrCh2: One   |
| >>>rlc-Size   | TrCH1: BitMode  | TrCH1: BitMode   |
| >>>>sizeType  | TrCH1: type 1: 55   | TrCH1: type 1: 55  |
|   | TrCH2: type 1: 76   | TrCH2: type 1: 76  |
| >>>>numberOfTbSizeList  | TrCH1: One  | TrCH1: One   |
|   | TrCH2: One  | TrCH2: One   |
| >>>logicalChannelList   | TrCH1: all  | TrCH1: all   |
|   | TrCH2: all  | TrCH2: all   |
| >>>tf 4   | TrCH1: (1x58)   | TrCH1: (1x58)  |
|   | TrCH2: (1x99)   | TrCH2: (1x87)  |
|   | TrCH3- TrCH4: N/A   | TrCH3: N/A   |
| >>>>numberOfTransportBl   | TrCH1: One  | TrCH1: One   |
| ocks  | TrCh2: One  | TrCh2: One   |
| >>>rlc-Size   | TrCH1: BitMode  | TrCH1: BitMode   |
| >>>>sizeType  | TrCH1: type 1: 58   | TrCH1: type 1: 58  |
| <i>.</i>  | TrCH2: type 1: 99   | TrCH2: type 1: 87  |
| >>>>numberOfTbSizeList  | TrCH1: One  | TrCH1: One   |
|   | TrCH2: One  | TrCH2: One   |
| >>>logicalChannelList   | TrCH1: all  | TrCH1: all   |
| C C   | TrCH2: all  | TrCH2: all   |
| >>>tf 5   | TrCH1: (1x65)   | TrCH1: (1x61)  |
|   | TrCH2- TrCH4: N/A   | TrCH2- TrCH4: N/A  |
| >>>>numberOfTransportBl   | TrCH1: One  | TrCH1: One   |
| ocks  |   |  |
| >>>rlc-Size   | TrCH1: BitMode  | TrCH1: BitMode   |
| >>>>sizeType  | TrCH1: type 1: 42   | TrCH1: type 1: 42  |
| >>>>numberOfTbSizeList  | TrCH1: One  | TrCH1: One   |
| >>>>logicalChannelList  | TrCH1: all  | TrCH1: all   |
| >>semistaticTF-Information  |   |  |
| >>>tti  | TrCH1- TrCH3: 20  | TrCH1- TrCH2: 20   |
|   | TrCH4: 40   | TrCH3: 40  |
| >>>channelCodingType  |   |  |
| >>>>codingPoto  | Convolutional   | Convolutional  |
| >>>>codingRate  | Convolutional<br>TrCH1- TrCH2:  | TrCH1- TrCH2:  |
|   | Convolutional<br>TrCH1- TrCH2:<br>Third   | TrCH1- TrCH2:<br>Third   |
|   | Convolutional<br>TrCH1- TrCH2:<br>Third<br>TrCH3: Half  | TrCH1- TrCH2:  |
|   | Convolutional<br>TrCH1- TrCH2:<br>Third<br>TrCH3: Half<br>TrCH4: Third  | TrCH1- TrCH2:<br>Third<br>TrCH3: Third   |
| >>>rateMatchingAttribute  | Convolutional<br>TrCH1- TrCH2:<br>Third<br>TrCH3: Half<br>TrCH4: Third<br>TrCH1: 200  | TrCH1- TrCH2:<br>Third<br>TrCH3: Third<br>TrCH1: 200   |
|   | Convolutional<br>TrCH1- TrCH2:<br>Third<br>TrCH3: Half<br>TrCH4: Third<br>TrCH1: 200<br>TrCH2: 190  | TrCH1- TrCH2:<br>Third<br>TrCH3: Third<br>TrCH1: 200<br>TrCH2: 190   |
|   | Convolutional<br>TrCH1- TrCH2:<br>Third<br>TrCH3: Half<br>TrCH4: Third<br>TrCH1: 200<br>TrCH1: 200<br>TrCH2: 190<br>TrCH3: 235  | TrCH1- TrCH2:<br>Third<br>TrCH3: Third<br>TrCH1: 200   |
| >>>rateMatchingAttribute  | Convolutional<br>TrCH1- TrCH2:<br>Third<br>TrCH3: Half<br>TrCH4: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH2: 190<br>TrCH3: 235<br>TrCH4: 160  | TrCH1- TrCH2:<br>Third<br>TrCH3: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH3: 160   |
|   | Convolutional<br>TrCH1- TrCH2:<br>Third<br>TrCH3: Half<br>TrCH4: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH2: 190<br>TrCH3: 235<br>TrCH4: 160<br>TrCH1: 12   | TrCH1- TrCH2:<br>Third<br>TrCH3: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH3: 160<br>TrCH1: 12  |
| >>>rateMatchingAttribute  | Convolutional<br>TrCH1- TrCH2:<br>Third<br>TrCH3: Half<br>TrCH4: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH2: 190<br>TrCH3: 235<br>TrCH4: 160<br>TrCH1: 12<br>TrCH1: 12<br>TrCH2- TrCH3: 0   | TrCH1- TrCH2:<br>Third<br>TrCH3: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH3: 160<br>TrCH1: 12<br>TrCH1: 12<br>TrCH2: 0   |
| >>>rateMatchingAttribute  | Convolutional<br>TrCH1- TrCH2:<br>Third<br>TrCH3: Half<br>TrCH4: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH2: 190<br>TrCH3: 235<br>TrCH4: 160<br>TrCH1: 12   | TrCH1- TrCH2:<br>Third<br>TrCH3: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH3: 160<br>TrCH1: 12  |
| >>>rateMatchingAttribute >>>crc-Size DL-  | Convolutional<br>TrCH1- TrCH2:<br>Third<br>TrCH3: Half<br>TrCH4: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH2: 190<br>TrCH3: 235<br>TrCH4: 160<br>TrCH1: 12<br>TrCH1: 12<br>TrCH2- TrCH3: 0   | TrCH1- TrCH2:<br>Third<br>TrCH3: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH3: 160<br>TrCH1: 12<br>TrCH1: 12<br>TrCH2: 0   |
| >>>rateMatchingAttribute<br>>>>crc-Size<br>DL-<br>AddReconfTransChInfoList  | Convolutional<br>TrCH1- TrCH2:<br>Third<br>TrCH3: Half<br>TrCH4: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH3: 235<br>TrCH4: 160<br>TrCH1: 12<br>TrCH1: 12<br>TrCH2- TrCH3: 0<br>TrCH4: 16  | TrCH1- TrCH2:<br>Third<br>TrCH3: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH3: 160<br>TrCH1: 12<br>TrCH1: 12<br>TrCH2: 0   |
| >>>rateMatchingAttribute<br>>>>crc-Size<br>DL-<br>AddReconfTransChInfoList<br>>Downlink transport   | Convolutional<br>TrCH1- TrCH2:<br>Third<br>TrCH3: Half<br>TrCH4: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH2: 190<br>TrCH3: 235<br>TrCH4: 160<br>TrCH1: 12<br>TrCH1: 12<br>TrCH2- TrCH3: 0   | TrCH1- TrCH2:<br>Third<br>TrCH3: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH3: 160<br>TrCH1: 12<br>TrCH2: 0<br>TrCH3: 16   |
| >>>rateMatchingAttribute<br>>>>crc-Size<br>DL-<br>AddReconfTransChInfoList  | Convolutional<br>TrCH1- TrCH2:<br>Third<br>TrCH3: Half<br>TrCH4: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH3: 235<br>TrCH4: 160<br>TrCH1: 12<br>TrCH2- TrCH3: 0<br>TrCH4: 16   | TrCH1- TrCH2:<br>Third<br>TrCH3: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH3: 160<br>TrCH1: 12<br>TrCH2: 0<br>TrCH3: 16   |
| <pre>&gt;&gt;rateMatchingAttribute &gt;&gt;&gt;crc-Size DL- AddReconfTransChInfoList &gt;Downlink transport channel type &gt;dI-</pre>                          | Convolutional<br>TrCH1- TrCH2:<br>Third<br>TrCH3: Half<br>TrCH4: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH3: 235<br>TrCH4: 160<br>TrCH1: 12<br>TrCH2- TrCH3: 0<br>TrCH4: 16   | TrCH1- TrCH2:<br>Third<br>TrCH3: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH3: 160<br>TrCH1: 12<br>TrCH2: 0<br>TrCH3: 16   |
| <pre>&gt;&gt;rateMatchingAttribute &gt;&gt;&gt;crc-Size DL- AddReconfTransChInfoList &gt;Downlink transport channel type &gt;dl- TransportChannelIdentity</pre> | Convolutional<br>TrCH1- TrCH2:<br>Third<br>TrCH3: Half<br>TrCH4: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH3: 235<br>TrCH4: 160<br>TrCH1: 12<br>TrCH2- TrCH3: 0<br>TrCH4: 16<br>dch  | TrCH1- TrCH2:           Third           TrCH3: Third           TrCH1: 200           TrCH2: 190           TrCH3: 160           TrCH1: 12           TrCH2: 0           TrCH3: 16           dch                                 |
| <pre>&gt;&gt;rateMatchingAttribute &gt;&gt;&gt;crc-Size DL- AddReconfTransChInfoList &gt;Downlink transport channel type &gt;dI-</pre>                          | Convolutional<br>TrCH1- TrCH2:<br>Third<br>TrCH3: Half<br>TrCH4: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH3: 235<br>TrCH4: 160<br>TrCH1: 12<br>TrCH2- TrCH3: 0<br>TrCH4: 16<br>dch  | TrCH1- TrCH2:<br>Third<br>TrCH3: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH3: 160<br>TrCH1: 12<br>TrCH2: 0<br>TrCH3: 16<br>dch  |
| <pre>&gt;&gt;rateMatchingAttribute &gt;&gt;&gt;crc-Size DL- AddReconfTransChInfoList &gt;Downlink transport channel type &gt;dl- TransportChannelIdentity</pre> | Convolutional<br>TrCH1- TrCH2:<br>Third<br>TrCH3: Half<br>TrCH4: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH3: 235<br>TrCH4: 160<br>TrCH1: 12<br>TrCH2- TrCH3: 0<br>TrCH4: 16<br>dch  | TrCH1- TrCH2:           Third           TrCH3: Third           TrCH1: 200           TrCH2: 190           TrCH3: 160           TrCH1: 12           TrCH2: 0           TrCH3: 16           dch                                 |
| <pre>&gt;&gt;rateMatchingAttribute &gt;&gt;&gt;crc-Size DL- AddReconfTransChInfoList &gt;Downlink transport channel type &gt;dl- TransportChannelIdentity</pre> | Convolutional<br>TrCH1- TrCH2:<br>Third<br>TrCH3: Half<br>TrCH4: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH3: 235<br>TrCH4: 160<br>TrCH1: 12<br>TrCH2- TrCH3: 0<br>TrCH4: 16<br>dch<br>Independent<br><only on="" td="" tf0="" trch1<=""><td>TrCH1- TrCH2:<br/>Third<br/>TrCH3: Third<br/>TrCH1: 200<br/>TrCH2: 190<br/>TrCH3: 160<br/>TrCH1: 12<br/>TrCH2: 0<br/>TrCH3: 16<br/>dch<br/>Independent<br/><only on="" td="" tf0="" trch1<=""></only></td></only> | TrCH1- TrCH2:<br>Third<br>TrCH3: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH3: 160<br>TrCH1: 12<br>TrCH2: 0<br>TrCH3: 16<br>dch<br>Independent<br><only on="" td="" tf0="" trch1<=""></only>                                   |
| <pre>&gt;&gt;rateMatchingAttribute &gt;&gt;&gt;crc-Size DL- AddReconfTransChInfoList &gt;Downlink transport channel type &gt;dl- TransportChannelIdentity</pre> | Convolutional           TrCH1- TrCH2:           Third           TrCH3: Half           TrCH4: Third           TrCH1: 200           TrCH2: 190           TrCH3: 235           TrCH4: 160           TrCH2- TrCH3: 0           TrCH4: 16           dch           Independent           <0nly tf0 on TrCH1   | TrCH1- TrCH2:<br>Third<br>TrCH3: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH3: 160<br>TrCH1: 12<br>TrCH2: 0<br>TrCH3: 16<br>dch<br>Independent<br><only on="" tf0="" trch1<br="">and tf0/tf1 on</only>                         |
| <pre>&gt;&gt;rateMatchingAttribute &gt;&gt;&gt;crc-Size DL- AddReconfTransChInfoList &gt;Downlink transport channel type &gt;dl- TransportChannelIdentity</pre> | Convolutional<br>TrCH1- TrCH2:<br>Third<br>TrCH3: Half<br>TrCH4: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH3: 235<br>TrCH4: 160<br>TrCH1: 12<br>TrCH2- TrCH3: 0<br>TrCH4: 16<br>dch<br>Independent<br><only on="" tf0="" trch1<br="">and tf0/tf1 on<br/>TrCH5 are different</only>   | TrCH1- TrCH2:<br>Third<br>TrCH3: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH3: 160<br>TrCH1: 12<br>TrCH2: 0<br>TrCH3: 16<br>dch<br>Independent<br><only on="" tf0="" trch1<br="">and tf0/tf1 on<br/>TrCH4 are different</only> |

| >>>>tf0/ tf0,1  | TrCH1: (1x0)  | TrCH1: (1x0)  |
|---|---|---|
|   | TrCH5: (0x7, 1x7)   | TrCH4: (0x7, 1x7)   |
| >>>rlcSize  | BitMode   | bitMode   |
| >>>>sizeType  | TrCH1: type 1: 0  | TrCH1: type 1: 0  |
|   | TrCH5: type 1: 7  | TrCH4: type 1: 7  |
| >>>>numberOfTbSizeList  | TrCH1: One  | TrCH1: One  |
|   | TrCH5: Zero, one  | TrCH4: Zero, one  |
| >>>>logicalChannelList  | All   | All   |
| >>>semistaticTF-  | same as UL except   | same as DL except   |
| Information   | for TrCH5   | for TrCH4   |
| >>>>tti   | TrCH5: 20   | TrCH4: 20   |
| >>>>channelCodingType   | Convolutional   | Convolutional   |
| >>>>codingRate  | TrCH5: Third  | TrCH4: Third  |
| >>>rateMatchingAttribute  | TrCH5: 200  | TrCH4: 200  |
| >>>>crc-Size  | TrCH5: 12   | TrCH4: 12   |
| >>ULTrCH-Id   | TrCH1: 1, TrCH2: 2,   | TrCH1: 1, TrCH2: 2,   |
|   | TrCH3: 3, TrCH4: 4,   | TrCH3: 3  |
| >dch-QualityTarget  | -3  |   |
| >>bler-QualityValue   | TrCH1: 7x10 <sup>-3</sup>   | TrCH1: 7x10 <sup>-3</sup>   |
|   | TrCH2- TrCH5:   | TrCH2- TrCH4:   |
|   | Absent  | Absent  |
| TrCH INFORMATION,   |   |   |
| COMMON  |   |   |
| ul-CommonTransChInfo  |   |   |
| >tfcs-ID (TDD only)   | 1   | 1   |
| >sharedChannelIndicator   | FALSE   | FALSE   |
| (TDD only)  |   |   |
| > tfc-Subset  | Absent, not required  | Absent, not required  |
| >ul-TFCS  | Normal TFCI   | Normal TFCI   |
|   | signalling  | signalling  |
| >>explicitTFCS-   | Complete  | Complete  |
| ConfigurationMode   |   |   |
| >>>ctfcSize   | Ctfc6Bit  | Ctfc6Bit  |
| >>>>TFCS representation   | Addition  | Addition  |
| >>>>TFC list  |   |   |
| >>>>>TFC 1  | (TF0, TF0, TF0,   | (TF0, TF0, TF0)   |
|   |   |   |
|   | TF0)  |   |
| >>>>>ctfc   | TF0)<br>0   | 0   |
|   |   | 0<br>Computed   |
| >>>>>ctfc<br>>>>>>gainFactorInform<br>ation   | 0   | •   |
| >>>>>gainFactorInform   | 0   | •   |
| >>>>>>gainFactorInform<br>ation   | 0<br>Computed   | Computed  |
| >>>>>gainFactorInform<br>ation<br>>>>>>referenceTFCId   | 0<br>Computed<br>0  | Computed<br>0   |
| >>>>>gainFactorInform<br>ation<br>>>>>>referenceTFCId   | 0<br>Computed<br>0<br>(TF1, TF0, TF0,   | Computed<br>0   |
| >>>>>sgainFactorInform<br>ation<br>>>>>>referenceTFCId<br>>>>>>TFC 2  | 0<br>Computed<br>0<br>(TF1, TF0, TF0,<br>TF0)   | Computed<br>0<br>(TF1, TF0, TF0)  |
| >>>>>sgainFactorInform<br>ation<br>>>>>>referenceTFCId<br>>>>>>TFC 2<br>>>>>>ctfc   | 0<br>Computed<br>0<br>(TF1, TF0, TF0,<br>TF0)<br>1  | Computed<br>0<br>(TF1, TF0, TF0)<br>1   |
| >>>>>sgainFactorInform<br>ation<br>>>>>>referenceTFCId<br>>>>>>TFC 2<br>>>>>>ctfc<br>>>>>>sgainFactorInform<br>ation  | 0<br>Computed<br>0<br>(TF1, TF0, TF0,<br>TF0)<br>1  | Computed<br>0<br>(TF1, TF0, TF0)<br>1   |
| >>>>>sgainFactorInform<br>ation<br>>>>>>referenceTFCId<br>>>>>>TFC 2<br>>>>>>>ctfc<br>>>>>>sgainFactorInform<br>ation<br>>>>>>βc (FDD only)   | 0<br>Computed<br>0<br>(TF1, TF0, TF0,<br>TF0)<br>1<br>Computed<br>N/A   | Computed<br>0<br>(TF1, TF0, TF0)<br>1<br>Computed<br>N/A  |
| >>>>>sgainFactorInform<br>ation<br>>>>>>referenceTFCId<br>>>>>>TFC 2<br>>>>>>>ctfc<br>>>>>>sgainFactorInform<br>ation<br>>>>>>βc (FDD only)<br>>>>>>>βd   | 0<br>Computed<br>0<br>(TF1, TF0, TF0,<br>TF0)<br>1<br>Computed<br>N/A<br>N/A  | Computed<br>0<br>(TF1, TF0, TF0)<br>1<br>Computed<br>N/A<br>N/A   |
| >>>>>sgainFactorInform<br>ation<br>>>>>>referenceTFCId<br>>>>>>TFC 2<br>>>>>>sctfc<br>>>>>>sgainFactorInform<br>ation<br>>>>>>βc (FDD only)<br>>>>>>βd<br>>>>>>referenceTFCId   | 0<br>Computed<br>0<br>(TF1, TF0, TF0,<br>TF0)<br>1<br>Computed<br>N/A<br>N/A<br>0   | Computed<br>0<br>(TF1, TF0, TF0)<br>1<br>Computed<br>N/A<br>N/A<br>0  |
| >>>>>sgainFactorInform<br>ation<br>>>>>>referenceTFCId<br>>>>>>TFC 2<br>>>>>>>ctfc<br>>>>>>sgainFactorInform<br>ation<br>>>>>>βc (FDD only)<br>>>>>>>βd   | 0<br>Computed<br>0<br>(TF1, TF0, TF0,<br>TF0)<br>1<br>Computed<br>N/A<br>N/A<br>0<br>(TF2, TF1, TF0,  | Computed<br>0<br>(TF1, TF0, TF0)<br>1<br>Computed<br>N/A<br>N/A   |
| >>>>>sgainFactorInform<br>ation<br>>>>>>referenceTFCId<br>>>>>>TFC 2<br>>>>>>sgainFactorInform<br>ation<br>>>>>>>βc (FDD only)<br>>>>>>βd<br>>>>>>FeferenceTFCId<br>>>>>>TFC 3  | 0<br>Computed<br>0<br>(TF1, TF0, TF0,<br>TF0)<br>1<br>Computed<br>N/A<br>N/A<br>0<br>(TF2, TF1, TF0,<br>TF0)  | Computed<br>0<br>(TF1, TF0, TF0)<br>1<br>Computed<br>N/A<br>N/A<br>0<br>(TF2, TF1, TF0)   |
| >>>>>sgainFactorInform<br>ation<br>>>>>>referenceTFCId<br>>>>>>TFC 2<br>>>>>>sgainFactorInform<br>ation<br>>>>>>>βd<br>>>>>>>βd<br>>>>>>>FeferenceTFCId<br>>>>>>TFC 3<br>>>>>>ctfc  | 0<br>Computed<br>0<br>(TF1, TF0, TF0,<br>TF0)<br>1<br>Computed<br>N/A<br>N/A<br>0<br>(TF2, TF1, TF0,<br>TF0)<br>8   | Computed         0           0         (TF1, TF0, TF0)           1         Computed           N/A         N/A           0         (TF2, TF1, TF0)           8         8   |
| $\begin{tabular}{lllllllllllllllllllllllllllllllllll$   | 0<br>Computed<br>0<br>(TF1, TF0, TF0,<br>TF0)<br>1<br>Computed<br>N/A<br>N/A<br>0<br>(TF2, TF1, TF0,<br>TF0)  | Computed<br>0<br>(TF1, TF0, TF0)<br>1<br>Computed<br>N/A<br>N/A<br>0<br>(TF2, TF1, TF0)   |
| >>>>>>gainFactorInform         ation         >>>>>referenceTFCId         >>>>>TFC 2         >>>>>sgainFactorInform         ation         >>>>>sgainFactorInform         ation         >>>>>sp6c (FDD only)         >>>>>>βd         >>>>>>FfC 3         >>>>>>tfc         >>>>>stfc         >>>>>ctfc         >>>>>>sctfc         >>>>>>sctfc         >>>>>>sqainFactorInform         ation | 0<br>Computed<br>0<br>(TF1, TF0, TF0,<br>TF0)<br>1<br>Computed<br>N/A<br>N/A<br>0<br>(TF2, TF1, TF0,<br>TF0)<br>8<br>Computed   | Computed<br>0<br>(TF1, TF0, TF0)<br>1<br>Computed<br>N/A<br>N/A<br>0<br>(TF2, TF1, TF0)<br>8<br>Computed  |
| $\begin{tabular}{lllllllllllllllllllllllllllllllllll$   | 0<br>Computed<br>0<br>(TF1, TF0, TF0,<br>TF0)<br>1<br>Computed<br>N/A<br>N/A<br>0<br>(TF2, TF1, TF0,<br>TF0)<br>8<br>Computed<br>0                                    | Computed<br>0<br>(TF1, TF0, TF0)<br>1<br>Computed<br>N/A<br>N/A<br>0<br>(TF2, TF1, TF0)<br>8<br>Computed<br>0   |
| >>>>>>gainFactorInform         ation         >>>>>referenceTFCId         >>>>>TFC 2         >>>>>sgainFactorInform         ation         >>>>>sgainFactorInform         ation         >>>>>sp6c (FDD only)         >>>>>>βd         >>>>>>FfC 3         >>>>>>tfc         >>>>>stfc         >>>>>ctfc         >>>>>>sctfc         >>>>>>sctfc         >>>>>>sqainFactorInform         ation | 0<br>Computed<br>0<br>(TF1, TF0, TF0,<br>TF0)<br>1<br>Computed<br>N/A<br>N/A<br>0<br>(TF2, TF1, TF0,<br>TF0)<br>8<br>Computed<br>0<br>(TF3, TF2, TF0,                 | Computed<br>0<br>(TF1, TF0, TF0)<br>1<br>Computed<br>N/A<br>N/A<br>0<br>(TF2, TF1, TF0)<br>8<br>Computed  |
| $\begin{tabular}{lllllllllllllllllllllllllllllllllll$   | 0<br>Computed<br>0<br>(TF1, TF0, TF0,<br>TF0)<br>1<br>Computed<br>N/A<br>N/A<br>0<br>(TF2, TF1, TF0,<br>TF0)<br>8<br>Computed<br>0<br>(TF3, TF2, TF0,<br>TF0,<br>TF0) | Computed           0           (TF1, TF0, TF0)           1           Computed           N/A           0           (TF2, TF1, TF0)           8           Computed           0           (TF3, TF2, TF0)              |
| $\begin{tabular}{lllllllllllllllllllllllllllllllllll$   | 0<br>Computed<br>0<br>(TF1, TF0, TF0,<br>TF0)<br>1<br>Computed<br>N/A<br>N/A<br>0<br>(TF2, TF1, TF0,<br>TF0)<br>8<br>Computed<br>0<br>(TF3, TF2, TF0,<br>TF0)<br>15   | Computed           0           (TF1, TF0, TF0)           1           Computed           N/A           0           (TF2, TF1, TF0)           8           Computed           0           (TF3, TF2, TF0)           15 |
| $\begin{tabular}{lllllllllllllllllllllllllllllllllll$   | 0<br>Computed<br>0<br>(TF1, TF0, TF0,<br>TF0)<br>1<br>Computed<br>N/A<br>N/A<br>0<br>(TF2, TF1, TF0,<br>TF0)<br>8<br>Computed<br>0<br>(TF3, TF2, TF0,<br>TF0,<br>TF0) | Computed           0           (TF1, TF0, TF0)           1           Computed           N/A           0           (TF2, TF1, TF0)           8           Computed           0           (TF3, TF2, TF0)              |
| $\begin{tabular}{lllllllllllllllllllllllllllllllllll$   | 0<br>Computed<br>0<br>(TF1, TF0, TF0,<br>TF0)<br>1<br>Computed<br>N/A<br>N/A<br>0<br>(TF2, TF1, TF0,<br>TF0)<br>8<br>Computed<br>0<br>(TF3, TF2, TF0,<br>TF0)<br>15   | Computed           0           (TF1, TF0, TF0)           1           Computed           N/A           0           (TF2, TF1, TF0)           8           Computed           0           (TF3, TF2, TF0)           15 |
| $\begin{tabular}{lllllllllllllllllllllllllllllllllll$   | 0<br>Computed<br>0<br>(TF1, TF0, TF0,<br>TF0)<br>1<br>Computed<br>N/A<br>N/A<br>0<br>(TF2, TF1, TF0,<br>TF0)<br>8<br>Computed<br>0<br>(TF3, TF2, TF0,<br>TF0)<br>15   | Computed           0           (TF1, TF0, TF0)           1           Computed           N/A           0           (TF2, TF1, TF0)           8           Computed           0           (TF3, TF2, TF0)           15 |
| $\begin{array}{l} >>>>>> gainFactorInform \\ ation \\ >>>>>TFC 2 \\ \\ >>>>>TFC 2 \\ \\ >>>>>>gainFactorInform \\ ation \\ \\ >>>>>>\betac (FDD only) \\ \\ >>>>>>\betad \\ \\ >>>>>>\betad \\ \\ >>>>>TFC 3 \\ \\ \\ >>>>>>tfc 3 \\ \\ \\ >>>>>tfc 4 \\ \\ \\ >>>>>>tfc 4 \\ \\ \\ >>>>>>TFC 4 \\ \\ \\ \\ >>>>>TFC 4 \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ $              | 0<br>Computed<br>0<br>(TF1, TF0, TF0,<br>TF0)<br>1<br>Computed<br>N/A<br>N/A<br>0<br>(TF2, TF1, TF0,<br>TF0)<br>8<br>Computed<br>0<br>(TF3, TF2, TF0,<br>TF0)<br>15   | Computed           0           (TF1, TF0, TF0)           1           Computed           N/A           0           (TF2, TF1, TF0)           8           Computed           0           (TF3, TF2, TF0)           15 |
| $\begin{tabular}{lllllllllllllllllllllllllllllllllll$   | 0<br>Computed<br>0<br>(TF1, TF0, TF0,<br>TF0)<br>1<br>Computed<br>N/A<br>N/A<br>0<br>(TF2, TF1, TF0,<br>TF0)<br>8<br>Computed<br>0<br>(TF3, TF2, TF0,<br>TF0)<br>15   | Computed           0           (TF1, TF0, TF0)           1           Computed           N/A           0           (TF2, TF1, TF0)           8           Computed           0           (TF3, TF2, TF0)           15 |

| >>>>>TFC 5   | (TF4, TF3, TF0,<br>TF0)            | (TF4, TF3, TF0)                   |
|--|------------------------------------|-----------------------------------|
| >>>>>ctfc  | 22                                 | 22                                |
| >>>>>>sgainFactorInform  | Computed                           | Computed                          |
| ation  | F                                  |                                   |
| >>>>>>referenceTFCId   | 0                                  | 0                                 |
| >>>>>TFC 6   | (TF5, TF4, TF1,                    | (TF5, TF4, TF0)                   |
|  | TF0)                               |                                   |
| >>>>>ctfc  | 59                                 | 29                                |
| >>>>>>gainFactorInform   | Computed                           | Computed                          |
| ation  |                                    |                                   |
| >>>>>>βc (FDD only)  |                                    |                                   |
| >>>>>βd  |                                    |                                   |
| >>>>>>referenceTFCId   | 0                                  | 0                                 |
| >>>>>TFC 7   | (TF0, TF0, TF0,                    | (TF0, TF0, TF1)                   |
|  | TF1)                               |                                   |
| >>>>>>ctfc   | 60<br>October 1                    | 30<br>Oceano de la                |
| >>>>>>sgainFactorInform  | Computed                           | Computed                          |
| ation >>>>>>referenceTFCId   | 0                                  |                                   |
| >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>                             | •                                  | 0<br>(TE1 TE0 TE1)                |
| >>>>>>   | (TF1, TF0, TF0,<br>TF1)            | (TF1, TF0, TF1)                   |
| >>>>>ctfc  | 61                                 | 31                                |
| >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>                             | computed                           | computed                          |
| ation  | computed                           | compared                          |
| >>>>>βc (FDD only)   |                                    |                                   |
| >>>>>βd  |                                    |                                   |
| >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>                             | 0                                  | 0                                 |
| >>>>>TFC 9   | (TF2, TF1, TF0,                    | 0<br>(TF2, TF1, TF1)              |
|  | TF1)                               | (11 2, 11 1, 11 1)                |
| >>>>>ctfc  | 68                                 | 38                                |
| >>>>>>gainFactorInform   | computed                           | computed                          |
| ation  |                                    |                                   |
| >>>>>>referenceTFCId   |                                    |                                   |
| >>>>>TFC 10  | (TF3, TF2, TF0,                    | (TF3, TF2, TF1)                   |
|  | TF1)                               |                                   |
| >>>>>>ctfc   | 75                                 | 45                                |
| >>>>>>sgainFactorInform  | computed                           | computed                          |
| ation  |                                    |                                   |
| >>>>>βc (FDD only)   |                                    |                                   |
| >>>>>βd  |                                    |                                   |
| >>>>>>referenceTFCId   | 0                                  | 0                                 |
| >>>>>TFC 11  | (TF4, TF3, TF0,                    | (TF4, TF3, TF1)                   |
| · · · · · · · · otto   | TF1)                               | 50                                |
| >>>>>>ctfc<br>>>>>>>gainFactorInform                               | 82<br>computed                     | 52<br>computed                    |
| ation  | computed                           | computed                          |
| >>>>>>>referenceTFCId  |                                    |                                   |
| >>>>>TFC 12  | (TF5, TF4, TF1,                    | (TF5, TF4, TF1)                   |
|  | TF1)                               | (                                 |
| >>>>>ctfc  | 97                                 | 59                                |
| >>>>>>gainFactorInform   | signalled                          | signalled                         |
| ation  | ~                                  | -                                 |
| >>>>>>βc (FDD only)  | 11                                 | 11                                |
| >>>>>βd  | 15                                 | 15                                |
| >>>>>>referenceTFCId   |                                    |                                   |
| > TFC subset list  |                                    | <u> </u>                          |
|  |                                    |                                   |
| >>TFC subset 1   | (speech rate 10.2)                 | (speech rate 7.4)                 |
| >>TFC subset 1 >>> Allowed transport                               | (speech rate 10.2)<br>(TFC1, TFC2, | (speech rate 7.4)<br>(TFC1, TFC2, |
| >>TFC subset 1<br>>>> Allowed transport<br>format combination list | (TFC1, TFC2,                       | (TFC1, TFC2,                      |
| >>> Allowed transport  |                                    |                                   |

| Allowed transport                                |                      |                         |
|--|----------------------|-------------------------|
| >>> Allowed transport<br>format combination list | (TFC1, TFC2,         | (TFC1, TFC2,            |
| format combination list                          | TFC7, TFC8, TFC5,    | TFC7, TFC8, TFC5,       |
| TEO autoratio                                    | TFC11)               | TFC11)                  |
| >>TFC subset 3                                   | (speech rate 5.9)    | (speech rate 5.9)       |
| >>> Allowed transport                            | (TFC1, TFC2,         | (TFC1, TFC2,            |
| format combination list                          | TFC7, TFC8, TFC4,    | TFC7, TFC8, TFC4,       |
|  | TFC10)               | TFC10)                  |
| >>TFC subset 4                                   | (speech rate 4.75)   | (speech rate 4.75)      |
| >>> Allowed transport                            | (TFC1, TFC2,         | (TFC1, TFC2,            |
| format combination list                          | TFC7, TFC8, TFC3,    | TFC7, TFC8, TFC3,       |
|  | TFC9)                | TFC9)                   |
| dl-CommonTransChInfo                             |                      |                         |
| >tfcs-SignallingMode                             | Independent          | Independent             |
| ul-CommonTransChInfo                             |                      |                         |
| >tfcs-ID (TDD only)                              | 1                    | 1                       |
| >sharedChannelIndicator                          | FALSE                | FALSE                   |
| (TDD only)                                       |                      |                         |
| > tfc-Subset                                     | Absent, not required | Absent, not required    |
| >dl-TFCS   | Normal TFCI          | Normal TFCI             |
|  | signalling           | signalling              |
| >>explicitTFCS-                                  | Complete             | Complete                |
| ConfigurationMode                                |                      |                         |
| >>>ctfcSize                                      | Ctfc6Bit             | Ctfc6Bit                |
| >>>>TFCS representation                          | Addition             | Addition                |
| >>>>TFCS list                                    |                      |                         |
| >>>>>TFC 1                                       | (TF0, TF0, TF0,      | (TF0, TF0, TF0,         |
|  | TF0, TF0)            | TF0)                    |
| >>>>>>ctfc                                       | 0                    | 0                       |
| >>>>>TFC 2                                       | (TF1, TF0, TF0,      | (TF1, TF0, TF0,         |
|  | TF0, TF0)            | TF0)                    |
| >>>>>ctfc  | 1                    | 1                       |
| >>>>>TFC 3                                       | (TF2, TF1, TF0,      | (TF2, TF1, TF0,         |
|  | TF0, TF0)            | TF0)                    |
| >>>>>ctfc  | 8                    | 8                       |
| >>>>>TFC 4                                       | (TF3, TF2, TF0,      | (TF3, TF2, TF0,         |
| _  | TF0, TF0)            | TF0)                    |
| >>>>>>ctfc                                       | 15                   | 15                      |
| >>>>>TFC 5                                       | (TF4, TF3, TF0,      | (TF4, TF3, TF0,         |
|  | TF0, TF0)            | TF0)                    |
| >>>>>>ctfc                                       | 22                   | 22                      |
| >>>>TFC 6  | (TF5, TF4, TF1,      | (TF5, TF4, TF0,         |
|  | TF0, TF0)            | (110, 111, 110,<br>TF0) |
| >>>>>ctfc  | 59                   | 29                      |
| >>>>>TFC 7                                       | (TF0, TF0, TF0,      | (TF0, TF0, TF1,         |
|  | TF1, TF0)            | (110, 110, 111,<br>TF0) |
| >>>>>ctfc  | 60                   | 30                      |
| >>>>>TFC 8                                       | (TF1, TF0, TF0,      | (TF1, TF0, TF1,         |
|  | TF1, TF0)            | (TF1, TF0, TF1,<br>TF0) |
| >>>>>ctfc  | 61                   | 31                      |
| >>>>>TFC 9                                       | (TF2, TF1, TF0,      | (TF2, TF1, TF1,         |
|  | TF1, TF0)            | (1F2, 1F1, 1F1,<br>TF0) |
| ~~~~~  | , ,                  | 37                      |
| >>>>>>Ctfc                                       | 68<br>(TE3 TE2 TE0   |                         |
| >>>>>TFC 10                                      | (TF3, TF2, TF0,      | (TF3, TF2, TF1,         |
|  | TF1, TF0)            | TF0)                    |
| >>>>>>ctfc                                       | 75                   | 55                      |
| >>>>>TFC 11                                      | (TF4, TF3, TF0,      | (TF4, TF3, TF1,         |
|  | TF1, TF0)            | TF0)                    |
| >>>>>>ctfc                                       | 82                   | 52                      |
| >>>>>TFC 12                                      | (TF5, TF4, TF1,      | (TF5, TF4, TF1,         |
| _  | TF1, TF0)            | TF0)                    |
| >>>>>>ctfc                                       | 119                  | 59                      |
| >>>>>TFC 13                                      | (TF0, TF0, TF0,      | (TF0, TF0, TF0,         |
|  | TF0, TF1)            | TF1)                    |
| >>>>>>ctfc                                       | 120                  | 60                      |
|  |                      |                         |

>>>>>TFC 14

| (TF1, TF0, TF0, |
|-----------------|
| TF1)            |
| 61              |
| (TF2, TF1, TF0, |
| TF1)            |
| 68              |
| (TF3, TF2, TF0, |
| TF1)            |
| 75              |
| (TF4, TF3, TF0, |
| TF1)            |
| 82              |
| (TF5, TF4, TF0, |
| TF1)            |
| 89              |

|   | IF0, IF1)         | 1F1)                      |
|---|-------------------|---------------------------|
| >>>>>>ctfc  | 121               | 61                        |
| >>>>>TFC 15   | (TF2, TF1, TF0,   | (TF2, TF1, TF0,           |
|   | TF0, TF1)         | TF1)                      |
| - 16 -  |                   | /                         |
| >>>>>ctfc   | 128               | 68                        |
| >>>>>TFC 16   | (TF3, TF2, TF0,   | (TF3, TF2, TF0,           |
|   | TF0, TF1)         | TF1)                      |
| >>>>>ctfc   | 135               | 75                        |
| >>>>>TFC 17   | (TF4, TF3, TF0,   | (TF4, TF3, TF0,           |
| <i>&gt;&gt;&gt;&gt;&gt;</i>   |                   |                           |
|   | TF0, TF1)         | TF1)                      |
| >>>>>>ctfc  | 152               | 82                        |
| >>>>>TFC 18   | (TF5, TF4, TF1,   | (TF5, TF4, TF0,           |
|   | TF0, TF1)         | TF1)                      |
| >>>>>ctfc   | 189               | 89                        |
| >>>>>TFC 19   | (TF0, TF0, TF0,   | (TF0, TF0, TF1,           |
| ///////////////////////////////////////   |                   |                           |
|   | TF1, TF1)         | TF1)                      |
| >>>>>ctfc   | 180               | 90                        |
| >>>>>TFC 20   | (TF1, TF0, TF0,   | (TF1, TF0, TF1,           |
|   | TF1, TF1)         | TF1)                      |
| >>>>>ctfc   | 181               | 91                        |
| >>>>>TFC 21   | (TF2, TF1, TF0,   |                           |
| 22222211621   |                   | (TF2, TF1, TF1,           |
| -   | TF1, TF1)         | TF1)                      |
| >>>>>ctfc   | 188               | 98                        |
| >>>>>TFC 22   | (TF3, TF2, TF0,   | (TF3, TF2, TF1,           |
|   | TF1, TF1)         | TF1)                      |
| >>>>>ctfc   | 195               | 105                       |
|   |                   |                           |
| >>>>>TFC 23   | (TF4, TF3, TF0,   | (TF4, TF3, TF1,           |
|   | TF1, TF1)         | TF1)                      |
| >>>>>>ctfc  | 239               | 112                       |
| >>>>>TFC 24   | (TF5, TF4, TF1,   | (TF5, TF4, TF1,           |
|   | TF1, TF1)         | (110, 11, 11, 11, 1, TF1) |
| · · · · · · · · · · · · · · · · · · ·   |                   | /                         |
| >>>>>ctfc   | 218               | 119                       |
| PhyCH INFORMATION   |                   |                           |
| FDD   |                   |                           |
| UL-DPCH-InfoPredef  |                   |                           |
| >ul-DPCH-   |                   |                           |
| PowerControlInfo  |                   |                           |
|   | Algorithm 4       | Algorithm 4               |
| >>powerControlAlgorithm   | Algorithm 1       | Algorithm 1               |
| >>>tpcStepSize  | 1                 | 1                         |
| >tfci-Existence   | TRUE              | TRUE                      |
| >puncturingLimit  | 0.88              | 0.88                      |
| DI -  |                   |                           |
|   |                   |                           |
| CommonInformationPredef   |                   |                           |
| >dl-DPCH-InfoCommon   |                   |                           |
| >>spreadingFactor   | 128               | 128                       |
| >>pilotBits   | 4                 | 4                         |
| >>positionFixed   | Fixed             | Fixed                     |
|   |                   |                           |
|   |                   |                           |
| PhyCH INFORMATION   |                   |                           |
| 3.84 Mcps TDD   |                   |                           |
| UL-DPCH-InfoPredef  |                   | 1                         |
| >ul-DPCH-   |                   |                           |
|   |                   |                           |
| PowerControlInfo  |                   |                           |
| >>dpch-ConstantValue  | -20               | -20                       |
| >commonTimeslotInfo   |                   |                           |
| >>secondInterleavingMode  | frameRelated      | frameRelated              |
|   | 16                | 16                        |
| >>tfci-Coding   |                   |                           |
| in a constant in the second | 0.60              | 0.60                      |
| >>puncturingLimit   |                   |                           |
| >>puncturingLimit<br>>>repetitionPeriodAndLeng  | repetitionPeriod1 | repetitionPeriod1         |
| >>repetitionPeriodAndLeng   |                   | repetitionPeriod1         |
| >>repetitionPeriodAndLeng<br>th   |                   | repetitionPeriod1         |
| >>repetitionPeriodAndLeng<br>th<br>DL-  |                   | repetitionPeriod1         |
| >>repetitionPeriodAndLeng<br>th<br>DL-<br>CommonInformationPredef   |                   | repetitionPeriod1         |
| >>repetitionPeriodAndLeng<br>th<br>DL-  |                   | repetitionPeriod1         |

(TF1, TF0, TF0, TF0, TF1)

| >>>secondInterleavingMod         | frameRelated      | frameRelated      |
|----------------------------------|-------------------|-------------------|
| е                                |                   |                   |
| >>>tfci-Coding                   | 16                | 16                |
| >>>puncturingLimit               | 0.60              | 0.60              |
| >>>repetitionPeriodAndLe         | repetitionPeriod1 | repetitionPeriod1 |
| ngth                             |                   |                   |
| PhyCH INFORMATION                |                   |                   |
| 1.28 Mcps TDD                    |                   |                   |
| UL-DPCH-InfoPredef               |                   |                   |
| >commonTimeslotInfo              |                   |                   |
| >>secondInterleavingMode         | frame Related     | frame Related     |
| >>tfci-Coding                    | 16                | 16                |
| >>puncturingLimit                | 0.64              | 0.64              |
| >>repetitionPeriodAndLeng        | repetitionPeriod1 | repetitionPeriod1 |
| th                               |                   |                   |
| DL-                              |                   |                   |
| CommonInformationPredef          |                   |                   |
| >dl-DPCH-InfoCommon              |                   |                   |
| >>commonTimeslotInfo             |                   |                   |
| >>>secondInterleavingMod         | frame Related     | frame Related     |
| e                                |                   |                   |
| >>>tfci-Coding                   | 16                | 16                |
| >>>puncturingLimit               | 0.64              | 0.64              |
| >>>repetitionPeriodAndLe<br>ngth | repetitionPeriod1 | repetitionPeriod1 |

| CHANGE REQUEST                |              |   |  |   |   |  | CR-Form-v5  |  |   |   |
|-------------------------------|--------------|---|--|---|---|--|---|--|---|---|
| ¥                             | 25           | .331  | CR 1453  | жr  | ev -  | ¥  | Current vers  | ion:   | <b>5.0.0</b>  | ж   |
| For <u>HELP</u> on u          | sing         | this for  | m, see bottom  | of this pag   | je or loo   | k at th  | e pop-up text   | over   | the ¥ syr   | mbols.  |
| Proposed change               | affec        | ts: ¥   | (U)SIM   | ME/UE   | X Ra  | adio Ac  | ccess Network   | k <mark>X</mark>   | Core Ne   | etwork  |
| Title: ೫                      | Co           | rrectior  | n to Default Ra  | dio Config  | uration 7   | <mark>Timers</mark>  |   |  |   |   |
| Source: ೫                     | TS           | G-RAN   | WG2  |   |   |  |   |  |   |   |
| Work item code: ℜ             | TE           | l   |  |   |   |  | Date: ೫   | 07.  | 05.2002   |   |
| Category: ₩                   | Use<br>Deta  | F (corr<br>A (corr<br>B (add<br>C (fund<br>D (edia<br>iled exp  | the following cat<br>rection)<br>responds to a co<br>dition of feature),<br>ctional modificati<br>torial modificatio<br>blanations of the<br>3GPP <u>TR 21.90</u>  | orrection in a<br>ion of featur<br>n)<br>above cate   | e)  |  | Release: #<br>Use <u>one</u> of<br>2<br>e) R96<br>R97<br>R98<br>R99<br>REL-4<br>REL-4<br>REL-5  | the fo<br>(GSN<br>(Rele<br>(Rele<br>(Rele<br>(Rele<br>(Rele  | -   |   |
|                               |              | Olau  |  |   |   | -l'  | - (:  |  |   | h   |
| Reason for change             | у; њ         | signa<br>timer<br>asso<br>Using<br>trans<br>80%<br>This<br>Also,<br>bear<br>capa<br>also<br>trans<br>It is p<br>are ir<br>3.4 k | se 13.7 defines<br>alling radio bea<br>rStatusPeriodic<br>ciated with the<br>g this configura<br>port channel w<br>of the availabl<br>is an inefficien<br>, using this san<br>er onto the san<br>acity overhead.<br>has value 1000<br>port channel c<br>proposed that t<br>increased from<br>approved that t | ation, 2 STA<br>which has c<br>e transport<br>t use of the<br>me configur<br>ne transpor<br>Furthermo<br>ms, with eit<br>apacity over<br>he values of<br>100ms to 3<br>radio bear | of these<br>100ms<br>radio be<br>ATUS P<br>apacity<br>channe<br>availat<br>ration ar<br>rt channe<br>ore, the i<br>ther of the<br>erhead e<br>of both t<br>300ms in<br>ers in cla | e config<br>for RB<br>earer tr<br>DUs w<br>for 25<br>el capa<br>ble ban<br>nel coul<br>nel | gurations the<br>2 and RB3 (F<br>ansport chan<br>vill be transmi<br>RLC PDUs, a<br>city being use<br>dwidth.<br>In mapping a the<br>dresult in 12<br>on of timerPol<br>revious examurther.<br>satusPeriodic<br>afault radio co<br>3.7 in order to | parar<br>RLC A<br>nel ha<br>tted e<br>and th<br>ed for<br>nird A<br>0% tr<br>IPeric<br>ples n<br>and t<br>onfigu | neter<br>M), and t<br>as value 4<br>very 100r<br>is could r<br>this overh<br>M signalli<br>ansport c<br>odic pollin<br>will increa<br>imerPollP<br>rations wh<br>ificantly re | he TTI<br>40ms.<br>ms on a<br>esult in<br>head.<br>ing radio<br>hannel<br>g, which<br>use the<br>eriodic<br>hich use<br>educe |
| Summary of chang              | <b>уе:</b> Ж | incre   | values of both<br>ased from 100<br>signalling radi   | ms to 300r  | ms in all   | defau  |   |  |   |   |
| Consequences if not approved: | ж            |   | default radio be<br>ers may not wo   |   | guration  | s whic   | h use 3.4 kbp   | s sig  | nalling rac   | dio   |
| Clauses affected:             | ж            | 13.7  |  |   |   |  |   |  |   |   |

| Other specs<br>affected: | ж | Other core specifications<br>Test specifications<br>O&M Specifications | ж | 25.331 v3.10.0, CR 1451<br>25.331 v4.4.0, CR 1452 |
|--------------------------|---|--|---|---|
| Other comments:          | ¥ |  |   |   |

## How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at: <u>http://www.3gpp.org/3G\_Specs/CRs.htm</u>. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked # contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <u>ftp://ftp.3gpp.org/specs/</u> For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

## 13.7 Parameter values for default radio configurations

The UE shall support the use of the default radio configurations that are specified in the following.

NOTE 1: These configurations are based on [41] and cover a number of RAB and signalling connection configurations.

In the table that is used to specify the parameter values for these default configurations, the following principles are used:

- Optional IEs that are not used are omitted;
- In case no parameter value is specified in a column, this means the value given the previous (left side) column applies.
- NOTE 2: If needed, signalling radio bearer RB4 is established after the completion of handover.
- NOTE 3: For each default configuration, the value of FDD, 3.84 Mcps TDD and 1.28 Mcps TDD parameters are specified. All parameters apply to FDD, 3.84 Mcps TDD and 1.28 Mcps TDD modes, unless explicitly stated otherwise. It should be noted that in this respect default configurations differ from pre-defined configurations, which only include parameter values for one mode.
- NOTE 4: The transport format sizes, indicated in the following table, concern the RLC PDU size, since all configurations concern dedicated channels. The transport block sizes indicated in TS 34.108 are different since these include the size of the MAC header.

| Configuration                     | 3.4 kbps signalling                | 13.6 kbps<br>signalling            | 7.95 kbps speech<br>+<br>3.4 kbps signalling        | 12.2 kbps speech<br>+<br>3.4 kbps signalling         |
|-----------------------------------|------------------------------------|------------------------------------|---|--|
| Ref 34.108                        | 2                                  | 3                                  | 6   | 4  |
| Default configuration<br>identity | 0                                  | 1                                  | 2   | 3  |
| RB INFORMATION                    |                                    |                                    |   |  |
| rb-Identity                       | RB1: 1, RB2: 2,<br>RB3: 3          | RB1: 1, RB2: 2,<br>RB3: 3          | RB1: 1, RB2: 2,<br>RB3: 3, RB5: 5,<br>RB6: 6        | RB1: 1, RB2: 2,<br>RB3: 3, RB5: 5,<br>RB6: 6, RB7: 7 |
| rlc-InfoChoice                    | RIc-info                           | RIc-info                           | RIc-info  | RIc-info   |
| >ul-RLC-Mode                      | RB1: UM<br>RB2- RB3: AM            | RB1: UM<br>RB2- RB3: AM            | RB1: UM<br>RB2- RB3: AM<br>RB5-RB6: TM              | RB1: UM<br>RB2- RB3: AM<br>RB5-RB7: TM               |
| >>transmissionRLC-<br>DiscardMode | RB1: N/A<br>RB2- RB3:<br>NoDiscard | RB1: N/A<br>RB2- RB3:<br>NoDiscard | RB1: N/A<br>RB2- RB3:<br>NoDiscard<br>RB5- RB6: N/A | RB1: N/A<br>RB2- RB3:<br>NoDiscard<br>RB5- RB7: N/A  |
| >>>maxDat                         | RB1: N/A<br>RB2- RB3: 15           | RB1: N/A<br>RB2- RB3: 15           | RB1: N/A<br>RB2- RB3: 15<br>RB5- RB6: N/A           | RB1: N/A<br>RB2- RB3: 15<br>RB5- RB7: N/A            |
| >>transmissionWindowSiz<br>e      | RB1: N/A<br>RB2- RB3: 128          | RB1: N/A<br>RB2- RB3: 128          | RB1: N/A<br>RB2- RB3: 128<br>RB5- RB6: N/A          | RB1: N/A<br>RB2- RB3: 128<br>RB5- RB7: N/A           |
| >>timerRST                        | RB1: N/A<br>RB2- RB3: 300          | RB1: N/A<br>RB2- RB3: 300          | RB1: N/A<br>RB2- RB3: 300<br>RB5- RB6: N/A          | RB1: N/A<br>RB2- RB3: 300<br>RB5- RB7: N/A           |
| >>max-RST                         | RB1: N/A<br>RB2- RB3: 1            | RB1: N/A<br>RB2- RB3: 1            | RB1: N/A<br>RB2- RB3: 1<br>RB5- RB6: N/A            | RB1: N/A<br>RB2- RB3: 1<br>RB5- RB7: N/A             |
| >>pollingInfo                     | RB1: N/A<br>RB2- RB3: as below     | RB1: N/A<br>RB2- RB3: as below     | RB1: N/A<br>RB2- RB3: as below<br>RB5- RB6: N/A     | RB1: N/A<br>RB2- RB3: as below<br>RB5- RB7: N/A      |
| >>>lastTransmissionPDU-<br>Poll   | RB2- RB3: FALSE                    | RB2- RB3: FALSE                    | RB2- RB3: FALSE                                     | RB2- RB3: FALSE                                      |

| Configuration                       | 3.4 kbps signalling            | 13.6 kbps<br>signalling        | 7.95 kbps speech                                | 12.2 kbps speech                                |
|-------------------------------------|--------------------------------|--------------------------------|---|---|
|                                     |                                | signaling                      | +<br>3.4 kbps signalling                        | +<br>3.4 kbps signalling                        |
| >>>lastRetransmissionPD<br>U-Poll   | RB2- RB3: FALSE                | RB2- RB3: FALSE                | RB2- RB3: FALSE                                 | RB2- RB3: FALSE                                 |
| >>>timerPollPeriodic                | RB2- RB3: <del>100</del> 300   | RB2- RB3: 100                  | RB2- RB3: <del>100</del> 300                    | RB2- RB3: <del>100</del> 300                    |
| >>segmentationIndication            | RB1- RB3: N/A                  | RB1- RB3: N/A                  | RB1- RB3: N/A<br>RB5- RB6: FALSE                | RB1- RB3: N/A<br>RB5- RB7: FALSE                |
| >dl-RLC-Mode                        | RB1: UM<br>RB2- RB3: AM        | RB1: UM<br>RB2- RB3: AM        | RB1: UM<br>RB2- RB3: AM<br>RB5- RB6: TM         | RB1: UM<br>RB2- RB3: AM<br>RB5- RB7: TM         |
| >>inSequenceDelivery                | RB1: N/A<br>RB2- RB3: TRUE     | RB1: N/A<br>RB2- RB3: TRUE     | RB1: N/A<br>RB2- RB3: TRUE<br>RB5- RB6: N/A     | RB1: N/A<br>RB2- RB3: TRUE<br>RB5- RB7: N/A     |
| >>receivingWindowSize               | RB1: N/A<br>RB2- RB3: 128      | RB1: N/A<br>RB2- RB3: 128      | RB1: N/A<br>RB2- RB3: 128<br>RB5- RB6: N/A      | RB1: N/A<br>RB2- RB3: 128<br>RB5- RB7: N/A      |
| >>dl-RLC-StatusInfo                 | RB1: N/A<br>RB2- RB3: as below | RB1: N/A<br>RB2- RB3: as below | RB1: N/A<br>RB2- RB3: as below<br>RB5- RB6: N/A | RB1: N/A<br>RB2- RB3: as below<br>RB5- RB7: N/A |
| >>>timerStatusProhibit              | RB2- RB3: 100                  | RB2- RB3: 100                  | RB2- RB3: 100                                   | RB2- RB3: 100                                   |
| >>>missingPDU-Indicator             | RB2- RB3: FALSE                | RB2- RB3: FALSE                | RB2- RB3: FALSE                                 | RB2- RB3: FALSE                                 |
| >>>timerStatusPeriodic              | RB2- RB3: <del>100</del> 300   | RB2- RB3: 100                  | RB2- RB3: <del>100</del> 300                    | RB2- RB3: <del>100</del> 300                    |
| >>segmentationIndication            | RB1- RB3: N/A                  | RB1- RB3: N/A                  | RB1- RB3: N/A<br>RB5- RB6: FALSE                | RB1- RB3: N/A<br>RB5- RB7: FALSE                |
| rb-MappingInfo                      |                                |                                |   |   |
| >UL-<br>LogicalChannelMappings      | OneLogicalChannel              | OneLogicalChannel              | OneLogicalChannel                               | OneLogicalChannel                               |
| >>ul-<br>TransportChannelType       | Dch                            | Dch                            | Dch   | Dch   |
| >>>transportChannelldentit<br>y     | RB1- RB3: 1                    | RB1- RB3: 1                    | RB1- RB3: 3<br>RB5: 1, RB6: 2                   | RB1- RB3: 4<br>RB5: 1, RB6: 2,<br>RB7: 3        |
| >>logicalChannelIdentity            | RB1: 1, RB2: 2,<br>RB3: 3      | RB1: 1, RB2: 2,<br>RB3: 3      | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5- RB6: N/A      | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5- RB7: N/A      |
| >>rlc-SizeList                      | RB1- RB3:<br>configured        | RB1- RB3:<br>configured        | RB1- RB3:<br>configured<br>RB5- RB6: N/A        | RB1- RB3:<br>configured<br>RB5- RB7: N/A        |
| >>mac-<br>LogicalChannelPriority    | RB1: 1, RB2: 2,<br>RB3: 3      | RB1: 1, RB2: 2,<br>RB3: 3      | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5- RB6: 5        | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5- RB7: 5        |
| >DL-<br>logicalChannelMappingList   |                                |                                |   |   |
| >>Mapping option 1                  | One mapping option             | One mapping option             | One mapping option                              | One mapping option                              |
| >>>dl-<br>TransportChannelType      | Dch                            | Dch                            | Dch   | Dch   |
| >>>>transportChannellden<br>tity    | RB1- RB3: 1                    | RB1- RB3: 1                    | RB1- RB3: 3<br>RB5: 1, RB6: 2                   | RB1- RB3: 4<br>RB5: 1, RB6: 2,<br>RB7: 3        |
| >>>logicalChannelIdentity           | RB1: 1, RB2: 2,<br>RB3: 3      | RB1: 1, RB2: 2,<br>RB3: 3      | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5- RB6: N/A      | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5- RB7: N/A      |
| TrCH INFORMATION PER<br>TrCH<br>UL- |                                |                                |   |   |
| AddReconfTransChInfoList            | dah                            | dah                            | deb   | deb   |
| >Uplink transport channel<br>type   |                                |                                |   | dch   |
| >transportChannelIdentity           | TrCH1: 1                       | TrCH1: 1                       | TrCH1: 1, TrCH2: 2,<br>TrCH3: 3                 | TrCH1: 1, TrCH2: 2,<br>TrCH3: 3, TrCH4: 4       |
| >transportFormatSet                 | DedicatedTransChT<br>FS        | DedicatedTransChT<br>FS        | DedicatedTransChT<br>FS                         | DedicatedTransChT<br>FS                         |
| >>dynamicTF-information             |                                |                                |   |   |

| Configuration   | 3.4 kbps signalling                           | 13.6 kbps<br>signalling                       | 7.95 kbps speech   | 12.2 kbps speech   |
|---|---|---|--|--|
|   |   | Signaling                                     | -<br>3.4 kbps signalling   | -<br>3.4 kbps signalling   |
| >>>tf0/ tf0,1   | TrCH1: (0x144,<br>1x144)                      | TrCH1: (0x144,<br>1x144)                      | TrCH1: (0x75)<br>TrCH2: (0x 84<br>1x84)<br>TrCH3: (0x144,<br>1x144)                        | TrCH1: (0x81)<br>TrCH2: (0x 103,<br>1x103)<br>TrCH3: (0x 60,<br>1x60)<br>TrCH4: (0x144,<br>1x144)                |
| >>>rlcSize  | BitMode                                       | BitMode                                       | BitMode  | BitMode  |
| >>>>sizeType  | TrCH1: type 2,<br>part1= 2, part2= 0<br>(144) | TrCH1: type 2,<br>part1= 2, part2= 0<br>(144) | TrCH1: type 1: 75<br>TrCH2: type 1: 84<br>TrCH3: 2: type 2,<br>part1= 2, part2= 0<br>(144) | TrCH1: type 1: 81<br>TrCH2: type 1: 103<br>TrCH3: type 1: 60<br>TrCH4: 2: type 2,<br>part1= 2, part2= 0<br>(144) |
| >>>numberOfTbSizeList   | TrCH1: Zero, one                              | TrCH1: Zero, one                              | TrCH1: Zero<br>TrCH2-3: Zero, one  | TrCH1: Zero<br>TrCH2-4: Zero, one  |
| >>>logicalChannelList   | All   | All   | All  | All  |
| >>>tf 1   | N/A   | N/A   | TrCH1: (1x39)<br>TrCH2- TrCH4: N/A   | TrCH1: (1x39)<br>TrCH2- TrCH4: N/A   |
| >>>numberOfTransportBl<br>ocks  |   |   | TrCH1: One   | TrCH1: One   |
| >>>rlc-Size   |   |   | TrCH1: BitMode   | TrCH1: BitMode   |
| >>>>sizeType  |   |   | TrCH1: 1: 39   | TrCH1: 1: 39   |
| >>>numberOfTbSizeList   |   |   | TrCH1: One   | TrCH1: One   |
| >>>logicalChannelList   |   |   | TrCH1: all   | TrCH1: all   |
| >>>tf 2   | N/A   | N/A   | TrCH1: (1x75)<br>TrCH2- TrCH3: N/A   | TrCH1: (1x81)<br>TrCH2- TrCH4: N/A   |
| >>>>numberOfTransportBl<br>ocks   |   |   | TrCH1: Zero  | TrCH1: Zero  |
| >>>rlc-Size   |   |   | TrCH1: BitMode   | TrCH1: BitMode   |
| >>>>sizeType  |   |   | TrCH1: type 1: 75  | TrCH1: type 1: 81  |
| >>>numberOfTbSizeList   |   |   | TrCH1: One   | TrCH1: One   |
| >>>logicalChannelList<br>>>semistaticTF-Information                       |   |   | TrCH1: all   | TrCH1: all   |
| >>>tti  | TrCH1: 40                                     | TrCH1: 10                                     | TrCH1- TrCH2: 20<br>TrCH3: 40  | TrCH1- TrCH3: 20<br>TrCH4: 40  |
| >>>channelCodingType  | Convolutional                                 | Convolutional                                 | Convolutional  | Convolutional  |
| >>>>codingRate  | TrCH1: Third                                  | TrCH1: Third                                  | TrCH1- TrCH2:<br>Third<br>TrCH3: Third   | TrCH1- TrCH2:<br>Third<br>TrCH3: Half<br>TrCH4: Third  |
| >>>rateMatchingAttribute  | TrCH1: 160                                    | TrCH1: 160                                    | TrCH1: 200<br>TrCH2: 190<br>TrCH3: 160   | TrCH1: 200<br>TrCH2: 190<br>TrCH3: 235<br>TrCH4: 160   |
| >>>crc-Size   | TrCH1: 16                                     | TrCH1: 16                                     | TrCH1: 12<br>TrCH2: 0<br>TrCH3: 16   | TrCH1: 12<br>TrCH2- TrCH3: 0<br>TrCH4: 16  |
| DL-   |   |   |  |  |
| AddReconfTransChInfoList  |   |   |  |  |
| >Downlink transport   | dch   | dch   | dch  | dch  |
| channel type<br>>dl-<br>TransportChannelIdentity<br>(should be as for UL) | TrCH1: 1                                      | TrCH1: 1                                      | TrCH1: 1, TrCH2: 2,<br>TrCH3: 3  | TrCH1: 1, TrCH2: 2,<br>TrCH3: 3, TrCH4: 4  |
| >tfs-SignallingMode   | SameAsUL                                      | SameAsUL                                      | Explicit<br><only on="" tf0="" trch1<br="">is different and<br/>shown below&gt;</only>     | Explicit<br><only on="" tf0="" trch1<br="">is different and<br/>shown below&gt;</only>                           |
| >>transportFormatSet  |   |   | DedicatedTransChT<br>FS  | DedicatedTransChT<br>FS  |
| >>>dynamicTF-information  |   |   |  |  |

| Configuration                          | 3.4 kbps signalling       | 13.6 kbps<br>signalling   | 7.95 kbps speech                                     | 12.2 kbps speech                                     |
|--|---------------------------|---------------------------|--|--|
|  |                           | Signaling                 | 3.4 kbps signalling                                  | т<br>3.4 kbps signalling                             |
| >>>>tf0/ tf0,1                         |                           |                           | TrCH1: (1x0)   | TrCH1: (1x0)   |
| >>>>rlcSize                            |                           |                           | BitMode  | bitMode  |
| >>>>sizeType                           |                           |                           | TrCH1: type 1: 0                                     | TrCH1: type 1: 0                                     |
| >>>>numberOfTbSizeList                 |                           |                           | TrCH1: One   | TrCH1: One   |
| >>>>logicalChannelList                 |                           |                           | All  | All  |
| >>ULTrCH-Id                            | TrCH1: 1                  | TrCH1: 1                  | TrCH1: 1, TrCH2: 2,<br>TrCH3: 3                      | TrCH1: 1, TrCH2: 2,<br>TrCH3: 3, TrCH4: 4            |
| >dch-QualityTarget                     | 2                         |                           |  |  |
| >>bler-QualityValue                    | TrCH1: 5x10 <sup>-2</sup> | TrCH1: 5x10 <sup>-2</sup> | TrCH1: 7x10 <sup>-3</sup><br>TrCH2- TrCH3:<br>Absent | TrCH1: 7x10 <sup>-3</sup><br>TrCH2- TrCH4:<br>Absent |
| TrCH INFORMATION,<br>COMMON            |                           |                           |  |  |
| ul-CommonTransChInfo                   |                           |                           |  |  |
| >tfcs-ID (TDD only)                    | 1                         | 1                         | 1  | 1  |
| >sharedChannelIndicator<br>(TDD only)  | FALSE                     | FALSE                     | FALSE  | FALSE  |
| >tfc-Subset                            | Absent, not required      | Absent, not required      | Absent, not required                                 | Absent, not required                                 |
| >ul-TFCS                               | Normal TFCI<br>signalling | Normal TFCI<br>signalling | Normal TFCI<br>signalling                            | Normal TFCI<br>signalling                            |
| >>explicitTFCS-<br>ConfigurationMode   | Complete                  | Complete                  | Complete   | Complete   |
| >>>ctfcSize                            | Ctfc2Bit                  | Ctfc2Bit                  | Ctfc4Bit   | Ctfc6Bit   |
| >>>>TFCS representation                | Addition                  | Addition                  | Addition   | Addition   |
| >>>>TFCS list                          |                           |                           |  |  |
| >>>>>TFCS 1                            | (TF0)                     | (TF0)                     | (TF0, TF0, TF0)                                      | (TF0, TF0, TF0,<br>TF0)                              |
| >>>>>ctfc                              | 0                         | 0                         | 0  | 0  |
| >>>>>>gainFactorInform ation           | Computed                  | Computed                  | Computed   | Computed   |
| >>>>>>>referenceTFCId                  | 0                         | 0                         | 0  | 0  |
| >>>>>TFCS 2                            | (TF1)                     | (TF1)                     | (TF1, TF0, TF0)                                      | (TF1, TF0, TF0,<br>TF0)                              |
| >>>>>ctfc                              | 1                         | 1                         | 1  | 1  |
| >>>>>>gainFactorInform ation           | Signalled                 | Signalled                 | Computed   | Computed   |
| >>>>>>βc (FDD only)                    | 11                        | 11                        | N/A  | N/A  |
| >>>>>βd                                | 15                        | 15                        | N/A  | N/A  |
| >>>>>>>>referenceTFCId                 | N/A                       | N/A                       | 0  | 0  |
| >>>>TFCS 3                             |                           |                           | (TF2, TF1, TF0)                                      | (TF2, TF1, TF1,<br>TF0)                              |
| >>>>>>ctfc                             | 1                         |                           | 5  | 11   |
| >>>>>>gainFactorInform ation           |                           |                           | Computed   | Computed   |
| >>>>>>referenceTFCId                   |                           |                           | 0  | 0  |
| >>>>>TFCS 4                            |                           |                           | (TF0, TF0, TF1)                                      | (TF0, TF0, TF0,<br>TF1)                              |
| >>>>>>ctfc                             |                           |                           | 6  | 12   |
| >>>>>>sgainFactorInform ation          |                           |                           | Computed   | Computed   |
| >>>>>βc (FDD only)                     |                           |                           | N/A  | N/A  |
| >>>>>βd                                |                           |                           | N/A  | N/A  |
| >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>> |                           |                           | 0  | 0  |
| >>>>>TFCS 5                            |                           |                           | (TF1, TF0, TF1)                                      | (TF1, TF0, TF0,<br>TF1)                              |
| >>>>>ctfc                              |                           |                           | 7  | 13   |
| >>>>>gainFactorInform                  |                           |                           | Computed   | Computed   |
| >>>>>referenceTFCId                    |                           |                           | 0  | 0  |
| >>>>TFCS 6                             |                           |                           | (TF2, TF1, TF1)                                      | (TF2, TF1, TF1,                                      |
|  |                           |                           |  | TF1)   |

| Configuration   | 3.4 kbps signalling     | 13.6 kbps         | 7.95 kbps speech         | 12.2 kbps speech         |  |
|---|-------------------------|-------------------|--------------------------|--------------------------|--|
|   |                         | signalling        | +<br>3.4 kbps signalling | +<br>3.4 kbps signalling |  |
| >>>>>ctfc   |                         |                   | 11                       | 23                       |  |
| >>>>>>gainFactorInform  |                         |                   | Signalled                | Signalled                |  |
| ation   |                         |                   |                          |                          |  |
| >>>>>>βc (FDD only)   |                         |                   | 11                       | 11                       |  |
| >>>>>βd   |                         |                   | 15                       | 15                       |  |
| >>>>>>referenceTFCId  |                         |                   | 0                        | 0                        |  |
| dl-CommonTransChInfo  |                         |                   |                          |                          |  |
| >tfcs-SignallingMode  | Same as UL              | Same as UL        | Same as UL               | Same as UL               |  |
| PhyCH INFORMATION   |                         |                   |                          |                          |  |
| FDD<br>UL-DPCH-InfoPredef   |                         |                   |                          |                          |  |
| >ul-DPCH-   |                         |                   |                          |                          |  |
| PowerControlInfo  |                         |                   |                          |                          |  |
| >>powerControlAlgorithm   | Algorithm 1             | Algorithm 1       | Algorithm 1              | Algorithm 1              |  |
| >>>tpcStepSize  | 1                       | 1                 | 1                        | 1                        |  |
| >tfci-Existence   | TRUE                    | TRUE              | TRUE                     | TRUE                     |  |
| >puncturingLimit  | 1                       | 1                 | 1                        | 0.88                     |  |
| DL-   |                         |                   |                          |                          |  |
| CommonInformationPredef   |                         |                   |                          |                          |  |
| >dl-DPCH-InfoCommon   |                         |                   |                          |                          |  |
| >>spreadingFactor   | 256                     | 128               | 128                      | 128                      |  |
| >>pilotBits   | 4                       | 4                 | 4                        | 4                        |  |
| >>positionFixed   | N/A                     | N/A               | Fixed                    | Fixed                    |  |
|   |                         |                   |                          |                          |  |
| PhyCH INFORMATION<br>3.84 Mcps TDD                                      |                         |                   |                          |                          |  |
| UL-DPCH-InfoPredef  |                         |                   |                          |                          |  |
| >ul-DPCH-initoPreder  |                         |                   |                          |                          |  |
| PowerControlInfo  |                         |                   |                          |                          |  |
| >>dpch-ConstantValue  | -20                     | -20               | -20                      | -20                      |  |
| >commonTimeslotInfo   |                         |                   |                          |                          |  |
| >>secondInterleavingMode  | frameRelated            | frameRelated      | frameRelated             | frameRelated             |  |
| >>tfci-Coding   | 4                       | 4                 | 16                       | 16                       |  |
| >>puncturingLimit   | 1                       | 0.92              | 0.52                     | 0.88                     |  |
| >>repetitionPeriodAndLeng   | repetitionPeriod1       | repetitionPeriod1 | repetitionPeriod1        | repetitionPeriod1        |  |
| th  |                         |                   |                          |                          |  |
| DL-   |                         |                   |                          |                          |  |
| CommonInformationPredef   |                         |                   |                          |                          |  |
| >dl-DPCH-InfoCommon   |                         |                   |                          |                          |  |
| <pre>&gt;&gt;commonTimeslotInfo &gt;&gt;&gt;secondInterleavingMod</pre> | frameRelated            | frameRelated      | frameRelated             | frameRelated             |  |
| e   | Indimercelated          | ITameRelateu      | ITamercelateu            | ITAINEREIALEU            |  |
| >>>tfci-Coding  | 4                       | 4                 | 16                       | 16                       |  |
| >>>puncturingLimit  | 1                       | 0.92              | 0.52                     | 0.92                     |  |
| >>>repetitionPeriodAndLe  | repetitionPeriod1       | repetitionPeriod1 | repetitionPeriod1        | repetitionPeriod1        |  |
| ngth  |                         |                   |                          |                          |  |
| PhyCH INFORMATION   |                         |                   |                          |                          |  |
| 1.28 Mcps TDD   |                         |                   |                          |                          |  |
| UL-DPCH-InfoPredef  |                         |                   |                          |                          |  |
| >commonTimeslotInfo   |                         |                   |                          |                          |  |
| >>secondInterleavingMode  | frameRelated            | frameRelated      | frameRelated             | frameRelated             |  |
| >>tfci-Coding   | 4                       | 4                 | 16                       | 16                       |  |
| >>puncturingLimit   | 1<br>repetition Devi 14 | 0.64              | 0.80                     | 0.60                     |  |
| >>repetitionPeriodAndLeng   | repetitionPeriod1       | repetitionPeriod1 | repetitionPeriod1        | repetitionPeriod1        |  |
| th<br>DL-   |                         |                   |                          |                          |  |
| CommonInformationPredef   |                         |                   |                          |                          |  |
| >dl-DPCH-InfoCommon   |                         |                   |                          |                          |  |
|   | 1                       | 1                 |                          |                          |  |
| >>commonTimeslotInfo  |                         |                   |                          |                          |  |
| <pre>&gt;&gt;commonTimeslotInfo &gt;&gt;&gt;secondInterleavingMod</pre> | frameRelated            | frameRelated      | frameRelated             | frameRelated             |  |

| Configuration                    | 3.4 kbps signalling | 13.6 kbps<br>signalling | 7.95 kbps speech<br>+<br>3.4 kbps signalling | 12.2 kbps speech<br>+<br>3.4 kbps signalling |
|----------------------------------|---------------------|-------------------------|--|--|
| >>>tfci-Coding                   | 4                   | 4                       | 16   | 16   |
| >>>puncturingLimit               | 1                   | 0.64                    | 0.80   | 0.60   |
| >>>repetitionPeriodAndLe<br>ngth | repetitionPeriod1   | repetitionPeriod1       | repetitionPeriod1                            | repetitionPeriod1                            |

| Configuration                     | 28.8 kbps conv.<br>CS- data + | 32 kbps conv. CS-<br>data + | 64kbps conv. CS-<br>data +   | 14.4 kbps<br>streaming CS-    |
|-----------------------------------|-------------------------------|-----------------------------|------------------------------|-------------------------------|
|                                   | 3.4 kbps signalling           | 3.4 kbps signalling         | 3.4 kbps signalling          | data +<br>3.4 kbps signalling |
| Ref 34.108                        | 12                            | 14                          | 13                           | 15                            |
| Default configuration identity    | 4                             | 5                           | 6                            | 7                             |
| RB INFORMATION                    |                               |                             |                              |                               |
| rb-Identity                       | RB1: 1, RB2: 2,               | RB1: 1, RB2: 2,             | RB1: 1, RB2: 2,              | RB1: 1, RB2: 2,               |
| ib laoning                        | RB3: 3, RB5: 5                | RB3: 3, RB5: 5              | RB3: 3, RB5: 5               | RB3: 3, RB5: 5                |
| rlc-InfoChoice                    | RIc-info                      | RIc-info                    | RIc-info                     | RIc-info                      |
| >ul-RLC-Mode                      | RB1: UM                       | RB1: UM                     | RB1: UM                      | RB1: UM                       |
|                                   | RB2- RB3: AM                  | RB2- RB3: AM                | RB2- RB3: AM                 | RB2- RB3: AM                  |
|                                   | RB5: TM                       | RB5: TM                     | RB5: TM                      | RB5: TM                       |
| >>transmissionRLC-                | RB1: N/A                      | RB1: N/A                    | RB1: N/A                     | RB1: N/A                      |
| DiscardMode                       | RB2- RB3:                     | RB2- RB3:                   | RB2- RB3:                    | RB2- RB3:                     |
|                                   | NoDiscard                     | NoDiscard                   | NoDiscard                    | NoDiscard                     |
|                                   | RB5: N/A                      | RB5: N/A                    | RB5: N/A                     | RB5: N/A                      |
| >>>maxDat                         | RB1: N/A                      | RB1: N/A                    | RB1: N/A                     | RB1: N/A                      |
|                                   | RB2- RB3: 15                  | RB2- RB3: 15                | RB2- RB3: 15                 | RB2- RB3: 15                  |
|                                   | RB5: N/A                      | RB5: N/A                    | RB5: N/A                     | RB5: N/A                      |
| >>transmissionWindowSiz           | RB1: N/A                      | RB1: N/A                    | RB1: N/A                     | RB1: N/A                      |
| е                                 | RB2- RB3: 128                 | RB2- RB3: 128               | RB2- RB3: 128                | RB2- RB3: 128                 |
|                                   | RB5: N/A                      | RB5: N/A                    | RB5: N/A                     | RB5: N/A                      |
| >>timerRST                        | RB1: N/A                      | RB1: N/A                    | RB1: N/A                     | RB1: N/A                      |
|                                   | RB2- RB3: 300                 | RB2- RB3: 300               | RB2- RB3: 300                | RB2- RB3: 300                 |
|                                   | RB5: N/A                      | RB5: N/A                    | RB5: N/A                     | RB5: N/A                      |
| >>max-RST                         | RB1: N/A                      | RB1: N/A                    | RB1: N/A                     | RB1: N/A                      |
|                                   | RB2- RB3: 1                   | RB2- RB3: 1                 | RB2- RB3: 1                  | RB2- RB3: 1                   |
|                                   | RB5: N/A                      | RB5: N/A                    | RB5: N/A                     | RB5: N/A                      |
| >>pollingInfo                     | RB1: N/A                      | RB1: N/A                    | RB1: N/A                     | RB1: N/A                      |
|                                   | RB2- RB3: as below            | RB2- RB3: as below          | RB2- RB3: as below           | RB2- RB3: as below            |
|                                   | RB5: N/A                      | RB5: N/A                    | RB5: N/A                     | RB5: N/A                      |
| >>>lastTransmissionPDU-<br>Poll   | RB2- RB3: FALSE               | RB2- RB3: FALSE             | RB2- RB3: FALSE              | RB2- RB3: FALSE               |
| >>>lastRetransmissionPD<br>U-Poll | RB2- RB3: FALSE               | RB2- RB3: FALSE             | RB2- RB3: FALSE              | RB2- RB3: FALSE               |
| >>>timerPollPeriodic              | RB2- RB3: <del>100</del> 300  | RB2- RB3: <u>100300</u>     | RB2- RB3: <del>100</del> 300 | RB2- RB3: <del>100</del> 300  |
| >>segmentationIndication          | RB1- RB3: N/A                 | RB1- RB3: N/A               | RB1- RB3: N/A                | RB1- RB3: N/A                 |
| 5                                 | RB5: FALSE                    | RB5: FALSE                  | RB5: FALSE                   | RB5: FALSE                    |
| >dl-RLC-Mode                      | RB1: UM                       | RB1: UM                     | RB1: UM                      | RB1: UM                       |
|                                   | RB2- RB3: AM                  | RB2- RB3: AM                | RB2- RB3: AM                 | RB2- RB3: AM                  |
|                                   | RB5: TM                       | RB5: TM                     | RB5: TM                      | RB5: TM                       |
| >>inSequenceDelivery              | RB1: N/A                      | RB1: N/A                    | RB1: N/A                     | RB1: N/A                      |
| . ,                               | RB2- RB3: TRUE                | RB2- RB3: TRUE              | RB2- RB3: TRUE               | RB2- RB3: TRUE                |
|                                   | RB5: N/A                      | RB5: N/A                    | RB5: N/A                     | RB5: N/A                      |
| >>receivingWindowSize             | RB1: N/A                      | RB1: N/A                    | RB1: N/A                     | RB1: N/A                      |
| -                                 | RB2- RB3: 128                 | RB2- RB3: 128               | RB2- RB3: 128                | RB2- RB3: 128                 |
|                                   | RB5: N/A                      | RB5: N/A                    | RB5: N/A                     | RB5: N/A                      |
| >>dl-RLC-StatusInfo               | RB1: N/A                      | RB1: N/A                    | RB1: N/A                     | RB1: N/A                      |
|                                   | RB2- RB3: as below            | RB2- RB3: as below          | RB2- RB3: as below           | RB2- RB3: as below            |
|                                   | RB5: N/A                      | RB5: N/A                    | RB5: N/A                     | RB5: N/A                      |
| >>>timerStatusProhibit            | RB2- RB3: 100                 | RB2- RB3: 100               | RB2- RB3: 100                | RB2- RB3: 100                 |
| >>>missingPDU-Indicator           | RB2- RB3: FALSE               | RB2- RB3: FALSE             | RB2- RB3: FALSE              | RB2- RB3: FALSE               |
| >>>timerStatusPeriodic            | RB2- RB3: 100300              | RB2- RB3: 100300            | RB2- RB3: 100300             | RB2- RB3: 100300              |

| Configuration                       | 28.8 kbps conv.   | 32 kbps conv. CS-   | 64kbps conv. CS-  | 14.4 kbps  |
|-------------------------------------|---|---|---|--|
|                                     | CS- data +<br>3.4 kbps signalling   | data +<br>3.4 kbps signalling   | data +<br>3.4 kbps signalling   | streaming CS-<br>data +<br>3.4 kbps signalling   |
| >>segmentationIndication            | RB1- RB3: N/A<br>RB5: FALSE   | RB1- RB3: N/A<br>RB5: FALSE   | RB1- RB3: N/A<br>RB5: FALSE   | RB1- RB3: N/A<br>RB5: FALSE  |
| rb-MappingInfo                      |   |   |   |  |
| >UL-<br>LogicalChannelMappings      | OneLogicalChannel   | OneLogicalChannel   | OneLogicalChannel   | OneLogicalChannel  |
| >>ul-<br>TransportChannelType       | Dch   | Dch   | Dch   | Dch  |
| >>>transportChannelIdenti<br>ty     | RB1- RB3: 2<br>RB5: 1   | RB1- RB3: 2<br>RB5: 1   | RB1- RB3: 2<br>RB5: 1   | RB1- RB3: 2<br>RB5: 1  |
| >>logicalChannelIdentity            | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5: N/A   | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5: N/A   | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5: N/A   | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5: N/A  |
| >>rlc-SizeList                      | RB1- RB3:<br>configured<br>RB5: N/A   | RB1- RB3:<br>configured<br>RB5: N/A   | RB1- RB3:<br>configured<br>RB5: N/A   | RB1- RB3:<br>configured<br>RB5: N/A  |
| >>mac-<br>LogicalChannelPriority    | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5: 5   | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5: 5   | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5: 5   | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5: 5  |
| >DL-<br>logicalChannelMappingList   |   |   |   |  |
| >>Mapping option 1                  | One mapping option  | One mapping option  | One mapping option  | One mapping option   |
| >>>dl-<br>TransportChannelType      | Dch   | Dch   | Dch   | Dch  |
| >>>>transportChannellden<br>tity    | RB1- RB3: 2<br>RB5: 1   | RB1- RB3: 2<br>RB5: 1   | RB1- RB3: 2<br>RB5: 1   | RB1- RB3: 2<br>RB5: 1  |
| >>>logicalChannelIdentity           | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5: N/A   | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5: N/A   | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5: N/A   | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5: N/A  |
| TrCH INFORMATION PER<br>TrCH        |   |   |   |  |
| UL-<br>AddReconfTransChInfoLis<br>t |   |   |   |  |
| >Uplink transport channel<br>type   | dch   | dch   | dch   | dch  |
| >transportChannelIdentity           | TrCH1: 1, TrCH2: 2  | TrCH1: 1, TrCH2: 2  | TrCH1: 1, TrCH2: 2  | TrCH1: 1, TrCH2: 2   |
| >transportFormatSet                 | DedicatedTransChT<br>FS   | DedicatedTransChT<br>FS   | DedicatedTransChT<br>FS   | DedicatedTransChT<br>FS  |
| >>dynamicTF-information             |   |   |   |  |
| >>>tf0/ tf0,1                       | TrCH1: (0x576,<br>1x576, 2x576)<br>TrCH2: (0x144,<br>1x144)                                     | TrCH1: (0x640,<br>1x640)<br>TrCH2: (0x144,<br>1x144)  | TrCH1: (0x640,<br>2x640)<br>TrCH2: (0x144,<br>1x144)  | TrCH1: (0x576,<br>1x576)<br>TrCH2: (0x144,<br>1x144)   |
| >>>>rlcSize                         | TrCH1: OctetMode<br>TrCH2:BitMode   | TrCH1: OctetMode<br>TrCH2:BitMode   | TrCH1: OctetMode<br>TrCH2:BitMode   | TrCH1: OctetMode<br>TrCH2:BitMode  |
| >>>>sizeType                        | TrCH1: type 2,<br>part1= 11, part2= 2<br>(576)<br>TrCH2: type 2,<br>part1= 2, part2= 0<br>(144) | TrCH1: type 2,<br>part1= 11, part2= 2<br>(640)<br>TrCH2: type 2,<br>part1= 2, part2= 0<br>(144) | TrCH1: type 2,<br>part1= 11, part2= 2<br>(640)<br>TrCH2: type 2,<br>part1= 2, part2= 0<br>(144) | TrCH1: type 2,<br>part1= 9,<br>part2= 2 (576)<br>TrCH2: type 2,<br>part1= 2,<br>part2= 0 (144) |
| >>>>numberOfTbSizeList              | TrCH1: Zero,1, 2 (4)<br>TrCH2: Zero, one  | TrCH1: Zero, one<br>TrCH2: Zero, one  | TrCH1: Zero, 2 (4)<br>TrCH2: Zero, one  | TrCH1: Zero, one,<br>TrCH2: Zero, one  |
| >>>logicalChannelList               | All   | All   | All   | All  |
| >>semiStaticTF-<br>Information      |   |   |   |  |
| >>>tti                              | TrCH1: 40<br>TrCH2: 40  | TrCH1: 20<br>TrCH2: 40  | TrCH1: 20<br>TrCH2: 40  | TrCH1: 40<br>TrCH2: 40   |
| >>>channelCodingType                | TrCH1: Turbo<br>TrCH2:<br>Convolutional   | TrCH1: Turbo<br>TrCH2:<br>Convolutional   | TrCH1: Turbo<br>TrCH2:<br>Convolutional   | TrCH1: Turbo<br>TrCH2:<br>Convolutional  |

| Configuration                                  | 28.8 kbps conv.<br>CS- data +           | 32 kbps conv. CS-<br>data + | 64kbps conv. CS-<br>data + | 14.4 kbps<br>streaming CS-    |
|--|---|-----------------------------|----------------------------|-------------------------------|
|  | 3.4 kbps signalling                     | 3.4 kbps signalling         | 3.4 kbps signalling        | data +<br>3.4 kbps signalling |
| >>>codingRate                                  | TrCH1: N/A                              | TrCH1: N/A                  | TrCH1: N/A                 | TrCH1: N/A                    |
|  | TrCH2: Third                            | TrCH2: Third                | TrCH2: Third               | TrCH2: Third                  |
| >>>rateMatchingAttribute                       | TrCH1: 180                              | TrCH1: 185                  | TrCH1: 170                 | TrCH1: 165                    |
|  | TrCH2: 160                              | TrCH2: 160                  | TrCH2: 160                 | TrCH2: 160                    |
| >>>crc-Size                                    | TrCH1: 16                               | TrCH1: 16                   | TrCH1: 16                  | TrCH1: 16                     |
| D  | TrCH2: 16                               | TrCH2: 16                   | TrCH2: 16                  | TrCH2: 16                     |
| DL-<br>AddReconfTransChInfoLis<br>t            |   |                             |                            |                               |
| >Downlink transport<br>channel type            | dch                                     | dch                         | dch                        | dch                           |
| >dl-   | TrCH1: 1, TrCH2: 2                      | TrCH1: 1, TrCH2: 2          | TrCH1: 1, TrCH2: 2         | TrCH1: 1, TrCH2: 2            |
| TransportChannelldentity (should be as for UL) |   |                             |                            |                               |
| >tfs-SignallingMode                            | SameAsUL                                | SameAsUL                    | SameAsUL                   | SameAsUL                      |
| >>transportFormatSet                           |   |                             |                            |                               |
| >>>dynamicTF-information                       |   |                             |                            |                               |
| >>>>tf0/ tf0,1                                 |   |                             |                            |                               |
| >>>>rlcSize                                    |   |                             |                            |                               |
| >>>>sizeType                                   |   |                             |                            |                               |
| >>>>numberOfTbSizeList                         |   |                             |                            |                               |
| >>>logicalChannelList                          |   |                             |                            |                               |
| >>ULTrCH-Id                                    | TrCH1: 1, TrCH2: 2                      | TrCH1: 1, TrCH2: 2          | TrCH1: 1, TrCH2: 2         | TrCH1: 1, TrCH2: 2            |
| >dch-QualityTarget                             |   |                             |                            |                               |
| >>bler-QualityValue                            | TrCH1: 2x10 <sup>-3</sup>               | TrCH1: 2x10 <sup>-3</sup>   | TrCH1: 2x10 <sup>-3</sup>  | TrCH1: 1x10 <sup>-2</sup>     |
| TrCH INFORMATION,<br>COMMON                    | TrCH2: Absent                           | TrCH2: Absent               | TrCH2: Absent              | TrCH2: Absent                 |
| ul-CommonTransChInfo                           |   |                             |                            |                               |
| >tfcs-ID (TDD only)                            | 1                                       | 1                           | 1                          | 1                             |
| >sharedChannelIndicator<br>(TDD only)          | FALSE                                   | FALSE                       | FALSE                      | FALSE                         |
| >tfc-Subset                                    | Absent, not required                    | Absent, not required        | Absent, not required       | Absent, not required          |
| >ul-TFCS                                       | Normal TFCI                             | Normal TFCI                 | Normal TFCI                | Normal TFCI                   |
|  | signalling                              | signalling                  | signalling                 | signalling                    |
| >>explicitTFCS-<br>ConfigurationMode           | Complete                                | Complete                    | Complete                   | Complete                      |
| >>>ctfcSize                                    | Ctfc2Bit                                | Ctfc2Bit                    | Ctfc2Bit                   | Ctfc4Bit                      |
| >>>>TFCS representation                        | Addition                                | Addition                    | Addition                   | Addition                      |
| >>>>TFCS list                                  |   |                             |                            |                               |
| >>>>>TFCS 1                                    | (TF0, TF0)                              | (TF0, TF0)                  | (TF0, TF0)                 | (TF0, TF0)                    |
| >>>>>>ctfc                                     | 0<br>Computed                           | 0<br>Computed               | 0<br>Computed              | 0<br>Computed                 |
| >>>>>>gainFactorInform ation                   | Computed                                | Computed                    | Computed                   | Computed                      |
| >>>>>>>>referenceTFCId                         | 0                                       | 0                           | 0                          | 0                             |
| >>>>>TFCS 2                                    | (TF1, TF0)                              | (TF1, TF0)                  | (TF1, TF0)                 | (TF1, TF0)                    |
| >>>>>>>>ctfc                                   | 1                                       | 1                           | 1                          | 1                             |
| >>>>>sgainFactorInform<br>ation                | Computed                                | Computed                    | Computed                   | Computed                      |
| >>>>>βc (FDD only)                             | N/A                                     | N/A                         | N/A                        | N/A                           |
|  | N/A                                     | N/A                         | N/A                        | N/A                           |
| >>>>>βd<br>>>>>>>referenceTFCId                | 0                                       | 0                           | 0                          | 0                             |
| >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>         | (TF2, TF0)                              | (TF0, TF1)                  | (TF0, TF1)                 | (TF0, TF1)                    |
| >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>         | 2                                       | 2                           | 2                          | 2                             |
| >>>>>>sainFactorInform<br>ation                | Computed                                | Computed                    | Computed                   | Computed                      |
| >>>>>>referenceTFCId                           | 0                                       | 0                           | 0                          | 0                             |
| >>>>>TFCS 4                                    | (TF0, TF1)                              | (TF1, TF1)                  | (TF1, TF1)                 | (TF1, TF1)                    |
| >>>>>>ctfc                                     | 3                                       | 3                           | 3                          | 3                             |
| >>>>>>sgainFactorInform                        | Computed                                | Signalled                   | Signalled                  | Signalled                     |
|  | 1 · · · · · · · · · · · · · · · · · · · |                             |                            |                               |

| Configuration                         | 28.8 kbps conv.<br>CS- data +<br>3.4 kbps signalling | 32 kbps conv. CS-<br>data +<br>3.4 kbps signalling | 64kbps conv. CS-<br>data +<br>3.4 kbps signalling | 14.4 kbps<br>streaming CS-<br>data + |
|---------------------------------------|--|--|---|--------------------------------------|
|                                       | N/A  | 8  | 8   | 3.4 kbps signalling                  |
| >>>>>βc (FDD only)                    | N/A<br>N/A   | 15   | 15  | 15                                   |
| >>>>>βd                               |  |  |   |                                      |
| >>>>>>referenceTFCId<br>>>>>>TFCS 5   | N/A<br>(TE1_TE1)                                     | N/A  | N/A   | N/A                                  |
|                                       | (TF1, TF1)   | N/A  | N/A   |                                      |
| >>>>>ctfc<br>>>>>>>gainFactorInform   | 4<br>Computed  |  |   |                                      |
| ation                                 |  |  |   |                                      |
| >>>>>referenceTFCId                   | 8  | N1/A   | <b>N</b> 1/A                                      |                                      |
| >>>>>TFCS 6                           | (TF2, TF1)   | N/A  | N/A   |                                      |
| >>>>>>Ctfc                            | 5<br>Signalled                                       |  |   |                                      |
| >>>>>>gainFactorInform ation          | Signalied  |  |   |                                      |
|                                       | 8  |  |   |                                      |
| >>>>>βc (FDD only)                    | 15   |  |   |                                      |
| >>>>>βd                               | -  |  |   |                                      |
| >>>>>referenceTFCId<br>>>>>>TFCS 7    | N/A  |  |   |                                      |
| >>>>>TFCS /                           |  |  |   |                                      |
| >>>>>>cttc<br>>>>>>>>gainFactorInform |  |  |   |                                      |
| ation                                 |  |  |   |                                      |
| >>>>>>referenceTFCId                  |  |  |   |                                      |
| >>>>>TFCS 8                           |  |  |   |                                      |
| >>>>>>ctfc                            |  |  |   |                                      |
| >>>>>>gainFactorInform ation          |  |  |   |                                      |
| >>>>>>referenceTFCId                  |  |  |   |                                      |
| >>>>>TFCS 9                           |  |  |   |                                      |
| >>>>>>ctfc                            |  |  |   |                                      |
| >>>>>>gainFactorInform ation          |  |  |   |                                      |
| >>>>>referenceTFCld<br>>>>>>TFCS 10   |  |  |   |                                      |
| >>>>>>ctfc                            |  |  |   |                                      |
| >>>>>>sgainFactorInform               |  |  |   |                                      |
| ation                                 |  |  |   |                                      |
| >>>>>βc (FDD only)                    |  |  |   |                                      |
| >>>>>βd                               |  |  |   |                                      |
| >>>>>>referenceTFCId                  |  |  |   |                                      |
| dl-CommonTransChInfo                  |  |  |   |                                      |
| >tfcs-SignallingMode                  | Same as UL   | Same as UL   | Same as UL  | Same as UL                           |
| PhyCH INFORMATION<br>FDD              |  |  |   |                                      |
| UL-DPCH-InfoPredef                    |  |  |   |                                      |
| >ul-DPCH-                             |  |  |   |                                      |
| PowerControlInfo                      |  |  |   |                                      |
| >>powerControlAlgorithm               | Algorithm 1  | Algorithm 1  | Algorithm 1                                       | Algorithm 1                          |
| >>>tpcStepSize                        | 1  | 1  | 1   | 1                                    |
| >tfci-Existence                       | TRUE   | TRUE   | TRUE  | TRUE                                 |
| >puncturingLimit                      | 0.92   | 0.8  | 0.92  | 1                                    |
| DL-<br>CommonInformationPrede<br>f    |  |  |   |                                      |
| >dl-DPCH-InfoCommon                   |  |  |   | <br> <br>                            |
| >>spreadingFactor                     | 64   | 64   | 32  | 128                                  |
| >>pilotBits                           | 8  | 8  | 8   | 8                                    |
| >>positionFixed                       | Flexible   | Flexible   | Flexible  | Flexible                             |
| PhyCH INFORMATION<br>3.84 Mcps TDD    |  |  |   |                                      |
| UL-DPCH-InfoPredef                    |  |  |   |                                      |

| Configuration                      | 28.8 kbps conv.<br>CS- data +<br>3.4 kbps signalling | 32 kbps conv. CS-<br>data +<br>3.4 kbps signalling | 64kbps conv. CS-<br>data +<br>3.4 kbps signalling | 14.4 kbps<br>streaming CS-<br>data +<br>3.4 kbps signalling |
|------------------------------------|--|--|---|---|
| >ul-DPCH-                          |  |  |   |   |
| PowerControlInfo                   |  |  |   |   |
| >>dpch-ConstantValue               | -20  | -20  | -20   | -20   |
| >commonTimeslotInfo                |  |  |   |   |
| >>secondInterleavingMod            | frameRelated   | frameRelated                                       | frameRelated                                      | frameRelated  |
| е                                  |  |  |   |   |
| >>tfci-Coding                      | 16   | 8  | 8   | 8   |
| >>puncturingLimit                  | 0.44   | 0.8  | 0.56  | 0.8   |
| >>repetitionPeriodAndLen<br>gth    | repetitionPeriod1                                    | repetitionPeriod1                                  | repetitionPeriod1                                 | repetitionPeriod1   |
| DL-<br>CommonInformationPrede<br>f |  |  |   |   |
| >dl-DPCH-InfoCommon                |  |  |   |   |
| >>commonTimeslotInfo               |  |  |   |   |
| >>>secondInterleavingMo<br>de      | frameRelated   | frameRelated                                       | frameRelated                                      | frameRelated  |
| >>>tfci-Coding                     | 16   | 8  | 8   | 8   |
| >>>puncturingLimit                 | 0.44   | 0.64   | 0.56  | 0.8   |
| >>>repetitionPeriodAndLe           | repetitionPeriod1                                    | repetitionPeriod1                                  | repetitionPeriod1                                 | repetitionPeriod1   |
| PhyCH INFORMATION<br>1.28 Mcps TDD |  |  |   |   |
| UL-DPCH-InfoPredef                 |  |  |   |   |
| >commonTimeslotInfo                |  |  |   |   |
| >>secondInterleavingMod<br>e       | frameRelated   | frameRelated                                       | frameRelated                                      | frameRelated  |
| >>tfci-Coding                      | 16   | 8  | 8   | 8   |
| >>puncturingLimit                  | 0.64   | 0.60   | 0.64  | 1   |
| >>repetitionPeriodAndLen<br>gth    | repetitionPeriod1                                    | repetitionPeriod1                                  | repetitionPeriod1                                 | repetitionPeriod1   |
| DL-<br>CommonInformationPrede<br>f |  |  |   |   |
| >dl-DPCH-InfoCommon                |  |  |   |   |
| >>commonTimeslotInfo               |  |  |   |   |
| >>>secondInterleavingMo<br>de      | frameRelated   | frameRelated                                       | frameRelated                                      | frameRelated  |
| >>>tfci-Coding                     | 16   | 8  | 8   | 8   |
| >>>puncturingLimit                 | 0.64   | 0.60   | 0.64  | 0.88  |
| >>>repetitionPeriodAndLe           | repetitionPeriod1                                    | repetitionPeriod1                                  | repetitionPeriod1                                 | repetitionPeriod1   |

| Configuration                  | 28.8 kbps<br>streaming CS-<br>data +<br>3.4 kbps signalling | 57.6 kbps<br>streaming CS-<br>data +<br>3.4 kbps signalling | 12.2 kbps<br>speech(multimode<br>) +<br>3.4 kbps signalling |
|--------------------------------|---|---|---|
| Ref 34.108                     | 16  | 17  | 1a  |
| Default configuration identity | 8   | 9   | 10  |
| RB INFORMATION                 |   |   |   |
| rb-Identity                    | RB1: 1, RB2: 2,<br>RB3: 3, RB5: 5                           | RB1: 1, RB2: 2,<br>RB3: 3, RB5: 5                           | RB1: 1, RB2: 2,<br>RB3: 3, RB5: 5,<br>RB6: 6, RB7: 7        |
| rlc-InfoChoice                 | RIc-info  | RIc-info  | RIc-info  |
| >ul-RLC-Mode                   | RB1: UM<br>RB2- RB3: AM<br>RB5: TM                          | RB1: UM<br>RB2- RB3: AM<br>RB5: TM                          | RB1: UM<br>RB2- RB3: AM<br>RB5-RB7: TM                      |

| Configuration                     | 28.8 kbps<br>streaming CS-<br>data + | 57.6 kbps<br>streaming CS-<br>data + | 12.2 kbps<br>speech(multimode<br>) + |
|-----------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
|                                   | 3.4 kbps signalling                  | 3.4 kbps signalling                  | 3.4 kbps signalling                  |
| >>transmissionRLC-                | RB1: N/A                             | RB1: N/A                             | RB1: N/A                             |
| DiscardMode                       | RB2- RB3:                            | RB2- RB3:                            | RB2- RB3:                            |
|                                   | NoDiscard                            | NoDiscard                            | NoDiscard                            |
|                                   | RB5: N/A                             | RB5: N/A                             | RB5- RB7: N/A                        |
| >>>maxDat                         | RB1: N/A                             | RB1: N/A                             | RB1: N/A                             |
|                                   | RB2- RB3: 15                         | RB2- RB3: 15                         | RB2- RB3: 15                         |
|                                   | RB5: N/A                             | RB5: N/A                             | RB5- RB7: N/A                        |
| >>transmissionWindowSiz           | RB1: N/A                             | RB1: N/A                             | RB1: N/A                             |
| e                                 | RB2- RB3: 128                        | RB2- RB3: 128                        | RB2- RB3: 128                        |
|                                   | RB5: N/A                             | RB5: N/A                             | RB5- RB7: N/A                        |
| >>timerRST                        | RB1: N/A                             | RB1: N/A                             | RB1: N/A                             |
|                                   | RB2- RB3: 300                        | RB2- RB3: 300                        | RB2- RB3: 300                        |
| DOT                               | RB5: N/A                             | RB5: N/A                             | RB5- RB7: N/A                        |
| >>max-RST                         | RB1: N/A                             | RB1: N/A<br>RB2- RB3: 1              | RB1: N/A                             |
|                                   | RB2- RB3: 1<br>RB5: N/A              |                                      | RB2- RB3: 1                          |
|                                   | RB5: N/A<br>RB1: N/A                 | RB5: N/A                             | RB5- RB7: N/A                        |
| >>pollingInfo                     | RB1. N/A<br>RB2- RB3: as below       | RB1: N/A                             | RB1: N/A<br>RB2- RB3: as below       |
|                                   |                                      | RB2- RB3: as below                   |                                      |
| >>>lastTransmissionPDU-           | RB5: N/A<br>RB2- RB3: FALSE          | RB5: N/A<br>RB2- RB3: FALSE          | RB5- RB7: N/A<br>RB2- RB3: FALSE     |
| Poll                              |                                      |                                      |                                      |
| >>>lastRetransmissionPD<br>U-Poll | RB2- RB3: FALSE                      | RB2- RB3: FALSE                      | RB2- RB3: FALSE                      |
| >>>timerPollPeriodic              | RB2- RB3: <del>100<u>300</u></del>   | RB2- RB3: <del>100</del> 300         | RB2- RB3: 100300                     |
| >>segmentationIndication          | RB1- RB3: N/A                        | RB1- RB3: N/A                        | RB1- RB3: N/A                        |
|                                   | RB5: FALSE                           | RB5: FALSE                           | RB5- RB7: FALSE                      |
| >dl-RLC-Mode                      | RB1: UM                              | RB1: UM                              | RB1: UM                              |
|                                   | RB2- RB3: AM                         | RB2- RB3: AM                         | RB2- RB3: AM                         |
|                                   | RB5: TM                              | RB5: TM                              | RB5- RB7: TM                         |
| >>inSequenceDelivery              | RB1: N/A                             | RB1: N/A                             | RB1: N/A                             |
|                                   | RB2- RB3: TRUE                       | RB2- RB3: TRUE                       | RB2- RB3: TRUE                       |
|                                   | RB5: N/A                             | RB5: N/A                             | RB5- RB7: N/A                        |
| >>receivingWindowSize             | RB1: N/A                             | RB1: N/A                             | RB1: N/A                             |
|                                   | RB2- RB3: 128                        | RB2- RB3: 128                        | RB2- RB3: 128                        |
|                                   | RB5: N/A                             | RB5: N/A                             | RB5- RB7: N/A                        |
| >>dl-RLC-StatusInfo               | RB1: N/A                             | RB1: N/A                             | RB1: N/A                             |
|                                   | RB2- RB3: as below                   | RB2- RB3: as below                   | RB2- RB3: as below                   |
|                                   | RB5: N/A                             | RB5: N/A                             | RB5- RB7: N/A                        |
| >>>timerStatusProhibit            | RB2- RB3: 100                        | RB2- RB3: 100                        | RB2- RB3: 100                        |
| >>>missingPDU-Indicator           | RB2- RB3: FALSE                      | RB2- RB3: FALSE                      | RB2- RB3: FALSE                      |
| >>>timerStatusPeriodic            | RB2- RB3: <del>100</del> 300         | RB2- RB3: <del>100</del> 300         | RB2- RB3: <del>100</del> 300         |
| >>segmentationIndication          | RB1- RB3: N/A                        | RB1- RB3: N/A                        | RB1- RB3: N/A                        |
|                                   | RB5: FALSE                           | RB5: FALSE                           | RB5- RB7: FALSE                      |
| rb-MappingInfo                    |                                      |                                      |                                      |
| >UL-                              | OneLogicalChannel                    | OneLogicalChannel                    | OneLogicalChannel                    |
| LogicalChannelMappings            |                                      |                                      | -                                    |
| >>ul-                             | Dch                                  | Dch                                  | Dch                                  |
| TransportChannelType              |                                      |                                      |                                      |
| >>>transportChannelldenti         | RB1- RB3: 2                          | RB1- RB3: 2                          | RB1- RB3: 4                          |
| ty                                | RB5: 1                               | RB5: 1                               | RB5: 1, RB6: 2,                      |
|                                   |                                      |                                      | RB7: 3                               |
| >>logicalChannelIdentity          | RB1: 1, RB2: 2,                      | RB1: 1, RB2: 2,                      | RB1: 1, RB2: 2,                      |
|                                   | RB3: 3                               | RB3: 3                               | RB3: 3                               |
|                                   | RB5: N/A                             | RB5: N/A                             | RB5- RB7: N/A                        |
| >>rlc-SizeList                    | RB1- RB3:                            | RB1- RB3:                            | RB1- RB3:                            |
|                                   | configured                           | configured                           | configured                           |
|                                   | RB5: N/A                             | RB5: N/A                             | RB5- RB7: N/A                        |
| >>mac-                            | RB1: 1, RB2: 2,                      | RB1: 1, RB2: 2,                      | RB1: 1, RB2: 2,                      |
| LogicalChannelPriority            | RB3: 3                               | RB3: 3                               | RB3: 3                               |
|                                   | RB5: 5                               | RB5: 5                               | RB5- RB7: 5                          |
|                                   |                                      |                                      |                                      |
| >DL-                              |                                      |                                      |                                      |

| Configuration                       | 28.8 kbps<br>streaming CS-            | 57.6 kbps<br>streaming CS-                | 12.2 kbps<br>speech(multimode                       |
|-------------------------------------|---------------------------------------|---|---|
|                                     | data +                                | data +                                    | ) +   |
|                                     | 3.4 kbps signalling                   | 3.4 kbps signalling                       | 3.4 kbps signalling                                 |
| >>Mapping option 1                  | One mapping option                    | One mapping option                        | One mapping option                                  |
| >>>dl-<br>TransportChannelType      | Dch                                   | Dch                                       | Dch   |
| >>>transportChannellden<br>tity     | RB1- RB3: 2<br>RB5: 1                 | RB1- RB3: 2<br>RB5: 1                     | RB1- RB3: 4<br>RB5: 1, RB6: 2,<br>RB7: 3            |
| >>>logicalChannelIdentity           | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5: N/A | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5: N/A     | RB1: 1, RB2: 2,<br>RB3: 3<br>RB5- RB7: N/A          |
| TrCH INFORMATION PER<br>TrCH        |                                       |   |   |
| UL-<br>AddReconfTransChInfoLis<br>t |                                       |   |   |
| >Uplink transport channel<br>type   | dch                                   | dch                                       | dch   |
| >transportChannelIdentity           | TrCH1: 1, TrCH2: 2                    | TrCH1: 1, TrCH2: 2                        | TrCH1: 1, TrCH2: 2,<br>TrCH3: 3, TrCH4: 4           |
| >transportFormatSet                 | DedicatedTransChT<br>FS               | DedicatedTransChT<br>FS                   | DedicatedTransChT<br>FS                             |
| >>dynamicTF-information             |                                       |   |   |
| >>>tf0/ tf0,1                       | TrCH1: (0x576,<br>1x576, 2x576)       | TrCH1: (0x576,<br>1x576, 2x576,           | TrCH1: (0x81)<br>TrCH2: (0x 103                     |
|                                     | TrCH2: (0x144,<br>1x144)              | 3x576, 4x576)<br>TrCH2: (0x144,<br>1x144) | TrCH3: (0x 60)<br>TrCH4: (0x144)                    |
| >>>rlcSize                          | TrCH1: OctetMode<br>TrCH2:BitMode     | TrCH1: OctetMode<br>TrCH2:BitMode         | BitMode   |
| >>>>sizeType                        | TrCH1: type 2,<br>part1= 9,           | TrCH1: type 2,<br>part1= 9,               | TrCH1: type 1: 81<br>TrCH2: type 1: 103             |
|                                     | part2= 2 (576)<br>TrCH2: type 2,      | part2= 2 (576)<br>TrCH2: type 2,          | TrCH3: type 1: 60<br>TrCH4: 2: type 2,              |
|                                     | part1= 2,<br>part2= 0 (144)           | part1= 2,<br>part2= 0 (144)               | part1= 2, part2= 0<br>(144)                         |
| >>>>numberOfTbSizeList              | TrCH1: Zero, one, 2                   | TrCH1: Zero, one,                         | TrCH1-4: Zero                                       |
|                                     | TrCH2: Zero, one                      | 2, 3, 4<br>TrCH2: Zero, one               |   |
| >>>>logicalChannelList              | All                                   | All                                       | All   |
| >>>tf 1                             |                                       |   | TrCH1: (1x39)                                       |
|                                     |                                       |   | TrCH2: (1x53)<br>TrCH3: (1x60)<br>TrCH4: (1x144)    |
| >>>numberOfTransportBl<br>ocks      |                                       |   | TrCH4: (1x144)<br>TrCH1-3: One                      |
| >>>rlc-Size                         |                                       |   | TrCH1-3: BitMode                                    |
| >>>>sizeType                        |                                       |   | TrCH1: 1: 39  |
|                                     |                                       |   | TrCH2: 1: 53<br>TrCH3: 1: 60                        |
| >>>>numberOfTbSizeList              |                                       |   | TrCH1-3: One  |
| >>>>logicalChannelList              |                                       |   | TrCH1-3: all  |
| >>>tf 2                             |                                       |   | TrCH1: (1x42)<br>TrCH2: (1x63)<br>TrCH3- TrCH4: N/A |
| >>>>numberOfTransportBl<br>ocks     |                                       |   | TrCH1-2: One  |
| >>>>rlc-Size                        |                                       |   | TrCH1: BitMode                                      |
| >>>>sizeType                        |                                       |   | TrCH1: type 1: 42<br>TrCH2: type 1: 63              |
| >>>>numberOfTbSizeList              |                                       |   | TrCH1-2: One  |
| >>>logicalChannelList               |                                       |   | TrCH1: all  |

| Configuration                                     | 28.8 kbps               | 57.6 kbps               | 12.2 kbps                                  |
|---|-------------------------|-------------------------|--|
|   | streaming CS-<br>data + | streaming CS-<br>data + | speech(multimode<br>) +                    |
|   | 3.4 kbps signalling     | 3.4 kbps signalling     | 3.4 kbps signalling                        |
| >>>tf 3   |                         |                         | TrCH1: (1x55)                              |
|   |                         |                         | TrCH2: (1x84)                              |
|   |                         |                         | TrCH3- TrCH4: N/A                          |
| >>>>numberOfTransportBl<br>ocks                   |                         |                         | TrCH1-2: Zero                              |
| >>>rlc-Size                                       |                         |                         | TrCH1: BitMode                             |
| >>>>sizeType                                      |                         |                         | TrCH1: type 1: 55                          |
| Contraction of the Simol int                      |                         |                         | TrCH2: type 1: 84<br>TrCH1-2: One          |
| >>>>numberOfTbSizeList<br>>>>>logicalChannelList  |                         |                         | TrCH1: all                                 |
| >>>tf 4   |                         |                         | TrCH1: (1x75)                              |
|   |                         |                         | TrCH2: (1x103)                             |
|   |                         |                         | TrCH3- TrCH4: N/A                          |
| >>>numberOfTransportBl                            |                         |                         | TrCH1-2: One                               |
| ocks  |                         |                         | T OLIVE DYNA I                             |
| >>>>rlc-Size<br>>>>>sizeType                      |                         |                         | TrCH1: BitMode<br>TrCH1: type 1: 75        |
| >>>>size i ype                                    |                         |                         | TrCH1: type 1: 75<br>TrCH2: type 1: 103    |
| >>>numberOfTbSizeList                             |                         |                         | TrCH1-2: One                               |
| >>>logicalChannelList                             |                         |                         | TrCH1: all                                 |
| >>>tf 5   |                         |                         | TrCH1: (1x81)                              |
|   |                         |                         | TrCH2- TrCH4: N/A                          |
| >>>>numberOfTransportBl<br>ocks                   |                         |                         | TrCH1: One                                 |
| >>>rlc-Size                                       |                         |                         | TrCH1: BitMode                             |
| >>>>sizeType                                      |                         |                         | TrCH1: type 1: 81                          |
| >>>>numberOfTbSizeList                            |                         |                         | TrCH1: One                                 |
| >>>logicalChannelList                             |                         |                         | TrCH1: all                                 |
| >>semiStaticTF-<br>Information                    |                         |                         |  |
| >>>tti  | TrCH1: 40               | TrCH1: 40               | TrCH1- TrCH3: 20                           |
|   | TrCH2: 40               | TrCH2: 40               | TrCH4: 40                                  |
| >>>channelCodingType                              | TrCH1: Turbo            | TrCH1: Turbo            | Convolutional                              |
|   | TrCH2:<br>Convolutional | TrCH2:<br>Convolutional |  |
| >>>codingRate                                     | TrCH1: N/A              | TrCH1: N/A              | TrCH1- TrCH2:                              |
|   | TrCH2: Third            | TrCH2: Third            | Third                                      |
|   |                         |                         | TrCH3: Half                                |
|   |                         |                         | TrCH4: Third                               |
| >>>rateMatchingAttribute                          | TrCH1: 155              | TrCH1: 145              | TrCH1: 200                                 |
|   | TrCH2: 160              | TrCH2: 160              | TrCH2: 190<br>TrCH3: 235                   |
|   |                         |                         | TrCH4: 160                                 |
| >>>crc-Size                                       | TrCH1: 16               | TrCH1: 16               | TrCH1: 12                                  |
|   | TrCH2: 16               | TrCH2: 16               | TrCH2- TrCH3: 0                            |
|   |                         |                         | TrCH4: 16                                  |
| DL-<br>AddReconfTransChInfoLis                    |                         |                         |  |
| t<br>Downlink transport                           | dab                     | dab                     | dah  |
| >Downlink transport<br>channel type               | dch                     | dch                     | dch  |
| >dl-  | TrCH1: 1, TrCH2: 2      | TrCH1: 1, TrCH2: 2      | TrCH1: 1, TrCH2: 2,                        |
| TransportChannelldentity<br>(should be as for UL) |                         |                         | TrCH3: 3, TrCH4: 4                         |
| >tfs-SignallingMode                               | SameAsUL                | SameAsUL                | Independent                                |
|   |                         |                         | <only on="" td="" tf0="" trch1<=""></only> |
|   |                         |                         | is different and                           |
| · · · tropoportEorm - +0 - +                      |                         |                         | shown below>                               |
| >>transportFormatSet                              |                         |                         | DedicatedTransChT<br>FS                    |
| >>>dynamicTF-information                          |                         |                         |  |

| Configuration                         | 28.8 kbps<br>streaming CS-<br>data +       | 57.6 kbps<br>streaming CS-<br>data +       | 12.2 kbps<br>speech(multimode<br>) +                 |
|---------------------------------------|--|--|--|
|                                       | 3.4 kbps signalling                        | 3.4 kbps signalling                        | 3.4 kbps signalling                                  |
| >>>>tf0/ tf0,1                        |  |  | TrCH1: (1x0)   |
| >>>rlcSize                            |  |  | bitMode  |
| >>>>sizeType                          |  |  | TrCH1: type 1: 0                                     |
| >>>>numberOfTbSizeList                |  |  | TrCH1: One   |
| >>>>logicalChannelList                |  |  | All  |
| >>ULTrCH-Id                           | TrCH1: 1, TrCH2: 2                         | TrCH1: 1, TrCH2: 2                         | TrCH1: 1, TrCH2: 2,<br>TrCH3: 3, TrCH4: 4            |
| >dch-QualityTarget                    |  |  | <b>–</b> <u>–</u> <u>–</u> <del>–</del> <del>3</del> |
| >>bler-QualityValue                   | TrCH1: 1x10 <sup>-2</sup><br>TrCH2: Absent | TrCH1: 1x10 <sup>-2</sup><br>TrCH2: Absent | TrCH1: 7x10 <sup>-3</sup><br>TrCH2- TrCH4:<br>Absent |
| TrCH INFORMATION,<br>COMMON           |  |  |  |
| ul-CommonTransChInfo                  |  |  |  |
| >tfcs-ID (TDD only)                   | 1  | 1  | 1  |
| >sharedChannelIndicator<br>(TDD only) | FALSE                                      | FALSE                                      | FALSE  |
| >tfc-Subset                           | Absent, not required                       | Absent, not required                       | Absent, not required                                 |
| >ul-TFCS                              | Normal TFCI                                | Normal TFCI                                | Normal TFCI  |
|                                       | signalling                                 | signalling                                 | signalling   |
| >>explicitTFCS-<br>ConfigurationMode  | Complete                                   | Complete                                   | Complete   |
| >>>ctfcSize                           | Ctfc4Bit                                   | Ctfc4Bit                                   | Ctfc8Bit   |
| >>>>TFCS representation               | Addition                                   | Addition                                   | Addition   |
| >>>>TFCS list                         |  |  |  |
| >>>>>TFCS 1                           | (TF0, TF0)                                 | (TF0, TF0)                                 | (TF0, TF0, TF0,<br>TF0)                              |
| >>>>>>ctfc                            | 0  | 0  | 0  |
| >>>>>>gainFactorInform ation          | Computed                                   | Computed                                   | Computed   |
| >>>>>>referenceTFCId                  | 0  | 0  | 0  |
| >>>>>TFCS 2                           | (TF1, TF0)                                 | (TF1, TF0)                                 | (TF1, TF0, TF0,<br>TF0)                              |
| >>>>>>ctfc                            | 1  | 1  | 1  |
| >>>>>>sgainFactorInform ation         | Computed                                   | Computed                                   | Computed   |
| >>>>>βc (FDD only)                    | N/A  | N/A  | N/A  |
| >>>>>βd                               | N/A  | N/A  | N/A  |
| >>>>>>referenceTFCId                  | 0  | 0  | 0  |
| >>>>>TFCS 3                           | (TF2, TF0)                                 | (TF2, TF0)                                 | (TF2, TF1, TF0,<br>TF0)                              |
| >>>>>>ctfc                            | 2  | 2  | 8  |
| >>>>>>gainFactorInform ation          | Computed                                   | Computed                                   | Computed   |
| >>>>>>referenceTFCId                  | 0  | 0  | 0  |
| >>>>>TFCS 4                           | (TF0, TF1)                                 | (TF3, TF0)                                 | (TF3, TF2, TF0,<br>TF0)                              |
| >>>>>>ctfc                            | 3  | 3  | 15   |
| >>>>>>gainFactorInform ation          | Computed                                   | Computed                                   | Computed   |
| >>>>>βc (FDD only)                    | N/A  | N/A  | N/A  |
| >>>>>βd                               | N/A  | N/A  | N/A  |
| >>>>>>>referenceTFCId                 | 0  | 0  | 0  |
| >>>>TFCS 5                            | (TF1, TF1)                                 | (TF4, TF0)                                 | (TF4, TF3, TF0,<br>TF0)                              |
| >>>>>ctfc                             | 4  | 4  | 22   |
| >>>>>gainFactorInform<br>ation        | Computed                                   | Computed                                   | Computed   |
| >>>>>referenceTFCId                   | 0  | 0  | 0  |

| Configuration                          | 28.8 kbps<br>streaming CS-<br>data +<br>3.4 kbps signalling | 57.6 kbps<br>streaming CS-<br>data +<br>3.4 kbps signalling | 12.2 kbps<br>speech(multimode<br>) +<br>3.4 kbps signalling |
|--|---|---|---|
| >>>>>TFCS 6                            | (TF2, TF1)  | (TF0, TF1)  | (TF5, TF4, TF1,   |
|  | 5   | 5   | TF0)<br>59  |
| >>>>>>ctfc<br>>>>>>>gainFactorInform   | 5<br>Signalled  | 5<br>Computed   | Computed  |
| ation                                  | Signalieu   | Computed  | Computed  |
| >>>>>βc (FDD only)                     | 8   | N/A   | N/A   |
| >>>>>βd                                | 15  | N/A   | N/A   |
| >>>>>>referenceTFCId                   | N/A   | 0   | 0   |
| >>>>>TFCS 7                            |   | (TF1, TF1)  | (TF0,TF0,TF0,TF1)   |
| >>>>>>ctfc                             |   | 6   | 60  |
| >>>>>>gainFactorInform                 |   | Computed  | Computed  |
| ation                                  |   |   |   |
| >>>>>>referenceTFCld                   |   | 0<br>(TF2, TF1)   |   |
| >>>>>TFCS 8<br>>>>>>ctfc               |   | (TF2, TF1)<br>7   | (TF1,TF0,TF0,TF1)<br>61                                     |
| >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>> |   | Computed  | Computed  |
| ation                                  |   | Joinpaloa   | Jonipaloa   |
| >>>>>>referenceTFCId                   |   | 0   | 0   |
| >>>>>TFCS 9                            |   | (TF3, TF1)  | (TF2,TF1,TF0,TF1)   |
| >>>>>ctfc                              |   | 8   | 68  |
| >>>>>>gainFactorInform ation           |   | Computed  | Computed  |
| >>>>>>referenceTFCId                   |   | 0   | 0   |
| >>>>>TFCS 10                           |   | (TF4, TF1)  | (TF3,TF2,TF0,TF1)   |
| >>>>>ctfc                              |   | 9   | 75  |
| >>>>>>gainFactorInform ation           |   | Signalled   | Computed  |
| >>>>>βc (FDD only)                     |   | 8   | N/A   |
| >>>>>βd                                |   | 15  | N/A   |
| >>>>>>referenceTFCId                   |   | 0   | 0   |
| >>>>>TFCS 11                           |   |   | (TF4,TF3,TF0,TF1)   |
| >>>>>>ctfc                             |   |   | 82  |
| >>>>>>sgainFactorInform                |   |   | Computed  |
| ation                                  |   |   | 0   |
| >>>>>>referenceTFCId                   |   |   |   |
| >>>>>TFCS 12                           |   |   | (TF5,TF4,TF1,TF1)<br>119                                    |
| >>>>>>>>>>sgainFactorInform            |   |   | Signalled   |
| ation                                  |   |   | olghalled   |
| >>>>>βc (FDD only)                     |   |   | 11  |
| >>>>>βd                                |   |   | 15  |
| >>>>>>referenceTFCId                   |   |   | 0   |
| dl-CommonTransChInfo                   |   |   |   |
| >tfcs-SignallingMode                   | Same as UL  | Same as UL  | Same as UL  |
| PhyCH INFORMATION<br>FDD               |   |   |   |
| UL-DPCH-InfoPredef                     |   |   |   |
| >ul-DPCH-                              |   |   |   |
| PowerControlInfo                       |   |   |   |
| >>powerControlAlgorithm                | Algorithm 1   | Algorithm 1   | Algorithm 1   |
| >>>tpcStepSize                         | 1   | 1   | 1   |
| >tfci-Existence                        | TRUE  | TRUE  | TRUE  |
|  |   | 1   | 0.88  |
| >puncturingLimit                       | 1   | -   | 0.00  |
| DL-<br>CommonInformationPrede          | 1   |   |   |
| DL-<br>CommonInformationPrede<br>f     | 1   |   |   |
| DL-<br>CommonInformationPrede          | 64  | 32  | 128   |

| Configuration                              | 28.8 kbps<br>streaming CS-<br>data +<br>3.4 kbps signalling | 57.6 kbps<br>streaming CS-<br>data +<br>3.4 kbps signalling | 12.2 kbps<br>speech(multimode<br>) +<br>3.4 kbps signalling |
|--|---|---|---|
| >>positionFixed                            | Flexible  | Flexible  | Fixed   |
| PhyCH INFORMATION                          |   |   | T IXOU  |
| 3.84 Mcps TDD                              |   |   |   |
| UL-DPCH-InfoPredef                         |   |   |   |
| >ul-DPCH-                                  |   |   |   |
| PowerControlInfo                           |   |   |   |
| >>dpch-ConstantValue                       | -20   | -20   | -20   |
| >commonTimeslotInfo                        |   |   |   |
| >>secondInterleavingMod<br>e               | frameRelated  | frameRelated  | frameRelated  |
| >>tfci-Coding                              | 16  | 16  | 16  |
| >>puncturingLimit                          | 0.44  | 0.48  | 0.88  |
| >>repetitionPeriodAndLen<br>gth            | repetitionPeriod1   | repetitionPeriod1   | repetitionPeriod1   |
| DL-<br>CommonInformationPrede<br>f         |   |   |   |
| >dl-DPCH-InfoCommon                        |   |   |   |
| >>commonTimeslotInfo                       |   |   |   |
| >>>secondInterleavingMo<br>de              | frameRelated  | frameRelated  | frameRelated  |
| >>>tfci-Coding                             | 16  | 16  | 16  |
| >>>puncturingLimit                         | 0.44  | 0.48  | 0.92  |
| >>>repetitionPeriodAndLe<br>ngth           | repetitionPeriod1   | repetitionPeriod1   | repetitionPeriod1   |
| PhyCH INFORMATION<br>1.28 Mcps TDD         |   |   |   |
| UL-DPCH-InfoPredef                         |   |   |   |
| >commonTimeslotInfo                        |   |   |   |
| <pre>&gt;&gt;secondInterleavingMod e</pre> | frameRelated  | frameRelated  |   |
| >>tfci-Coding                              | 16  | 16  |   |
| >>puncturingLimit                          | 0.64  | 0.72  |   |
| >>repetitionPeriodAndLen<br>gth            | repetitionPeriod1   | repetitionPeriod1   |   |
| DL-<br>CommonInformationPrede<br>f         |   |   |   |
| >dI-DPCH-InfoCommon                        |   |   |   |
| >>commonTimeslotInfo                       |   |   |   |
| >>>secondInterleavingMo                    | frameRelated  | frameRelated  | frameRelated  |
| de   |   |   |   |
| >>>tfci-Coding                             | 16  | 16  | 16  |
| >>>puncturingLimit                         | 0.64  | 0.72  | 0.92  |
| >>>repetitionPeriodAndLe<br>ngth           | repetitionPeriod1   | repetitionPeriod1   | repetitionPeriod1   |

| Configuration                     | 10.2/6.7/5.9/4.75<br>kbps speech +<br>3.4 kbps signalling | 7.4/6.7/5.9/4.75<br>kbps speech +<br>3.4 kbps signalling |
|-----------------------------------|---|--|
| Ref 34.108                        | N/A   | N/A  |
| Default configuration             | 11  | 12   |
|                                   |   |  |
| RB INFORMATION<br>rb-Identity     | RB1: 1, RB2: 2,   |  |
| rb-ideniity                       | RB3: 3, RB5: 5,   | RB1: 1, RB2: 2,<br>RB3: 3, RB5: 5,                       |
|                                   | RB6: 6, RB7: 7  | RB6: 6   |
| rlc-InfoChoice                    | RIc-info  | RIc-info   |
| >ul-RLC-Mode                      | RB1: UM   | RB1: UM  |
|                                   | RB2- RB3: AM  | RB2- RB3: AM   |
|                                   | RB5-RB7: TM   | RB5-RB6: TM  |
| >>transmissionRLC-                | RB1: N/A  | RB1: N/A   |
| DiscardMode                       | RB2- RB3:   | RB2- RB3:  |
|                                   | NoDiscard   | NoDiscard  |
|                                   | RB5- RB7: N/A   | RB5- RB6: N/A  |
| >>>maxDat                         | RB1: N/A  | RB1: N/A   |
|                                   | RB2- RB3: 15  | RB2- RB3: 15   |
|                                   | RB5- RB7: N/A   | RB5- RB6: N/A  |
| >>transmissionWindowSiz           | RB1: N/A  | RB1: N/A   |
| e                                 | RB2- RB3: 128   | RB2- RB3: 128  |
|                                   | RB5- RB7: N/A   | RB5- RB6: N/A  |
| >>timerRST                        | RB1: N/A  | RB1: N/A   |
|                                   | RB2- RB3: 300   | RB2- RB3: 300  |
| >>max-RST                         | RB5- RB7: N/A<br>RB1: N/A                                 | RB5- RB6: N/A<br>RB1: N/A                                |
| >>IIIax-R31                       | RB1. N/A<br>RB2- RB3: 1                                   | RB2- RB3: 1  |
|                                   | RB5- RB7: N/A   | RB5- RB6: N/A  |
| >>pollingInfo                     | RB1: N/A  | RB1: N/A   |
| 22 politigitito                   | RB2- RB3: as below<br>RB5- RB7: N/A                       | RB2- RB3: as below<br>RB5- RB6: N/A                      |
| >>>lastTransmissionPDU-<br>Poll   | RB2- RB3: FALSE   | RB2- RB3: FALSE  |
| >>>lastRetransmissionPD<br>U-Poll | RB2- RB3: FALSE   | RB2- RB3: FALSE  |
| >>>timerPollPeriodic              | RB2- RB3: <del>100</del> 300                              | RB2- RB3: <del>100</del> 300                             |
| >>segmentationIndication          | RB1- RB3: N/A   | RB1- RB3: N/A  |
|                                   | RB5- RB7: FALSE   | RB5- RB6: FALSE  |
| >dl-RLC-Mode                      | RB1: UM   | RB1: UM  |
|                                   | RB2- RB3: AM<br>RB5- RB7: TM                              | RB2- RB3: AM<br>RB5- RB6: TM                             |
|                                   | RB8: TM   | RB7: TM  |
| >>inSequenceDelivery              | RB1: N/A  | RB1: N/A   |
|                                   | RB2- RB3: TRUE  | RB2- RB3: TRUE   |
|                                   | RB5- RB8: N/A   | RB5- RB7: N/A  |
| >>receivingWindowSize             | RB1: N/A  | RB1: N/A   |
| -                                 | RB2- RB3: 128   | RB2- RB3: 128  |
|                                   | RB5- RB8: N/A   | RB5- RB7: N/A  |
| >>dl-RLC-StatusInfo               | RB1: N/A  | RB1: N/A   |
|                                   | RB2- RB3: as below  | RB2- RB3: as below                                       |
|                                   | RB5- RB7: N/A   | RB5- RB6: N/A  |
| >>>timerStatusProhibit            | RB2- RB3: 100   | RB2- RB3: 100  |
| >>>missingPDU-Indicator           | RB2- RB3: FALSE   | RB2- RB3: FALSE  |
| >>>timerStatusPeriodic            | RB2- RB3: <u>100300</u>                                   | RB2- RB3: <u>100300</u>                                  |
| >>segmentationIndication          | RB1- RB3: N/A<br>RB5- RB7: FALSE                          | RB1- RB3: N/A<br>RB5- RB6: FALSE                         |
| rb-MappingInfo                    |   |  |
| >UL-<br>LogicalChannelMappings    | OneLogicalChannel   | OneLogicalChannel  |
| >>ul-<br>TransportChannelType     | Dch   | Dch  |

>>>tf 2

ocks

>>>rlc-Size

>>>>sizeType

>>>numberOfTbSizeList

>>>>numberOfTransportBl

>>>>logicalChannelList

| >>>transportChannelldentit              | RB1- RB3: 4               | RB1- RB3: 3               |
|---|---------------------------|---------------------------|
| y                                       | RB5: 1, RB6: 2,           | RB5: 1, RB6: 2            |
| 3                                       | RB7: 3,                   | 11201 1, 11201 2          |
| >>logicalChannelIdentity                | RB1: 1, RB2: 2,           | RB1: 1, RB2: 2,           |
| 5                                       | RB3: 3                    | RB3: 3                    |
|   | RB5- RB7: N/A             | RB5- RB6: N/A             |
| >>rlc-SizeList                          | RB1- RB3:                 | RB1- RB3:                 |
|   | configured                | configured                |
|   | RB5- RB7: N/A             | RB5- RB6: N/A             |
| >>mac-                                  | RB1: 1, RB2: 2,           | RB1: 1, RB2: 2,           |
| LogicalChannelPriority                  | RB3: 3                    | RB3: 3                    |
|   | RB5- RB7: 5               | RB5- RB6: 5               |
| >DL-                                    |                           |                           |
| logicalChannelMappingList               |                           |                           |
| >>Mapping option 1                      | One mapping option        | One mapping option        |
| >>>dl-                                  | Dch                       | Dch                       |
| TransportChannelType                    |                           |                           |
| >>>>transportChannellden                | RB1- RB3: 4               | RB1- RB3: 3               |
| tity                                    | RB5: 1, RB6: 2,           | RB5: 1, RB6: 2,           |
|   | RB7: 3, RB8: 5            | RB7:4                     |
| >>>logicalChannelIdentity               | RB1: 1, RB2: 2,<br>RB3: 3 | RB1: 1, RB2: 2,<br>RB3: 3 |
|   | RB3: 3<br>RB5- RB8: N/A   | RB5- RB7: N/A             |
| TrCH INFORMATION PER                    | RDJ- RDO. N/A             | RDJ- RDT. N/A             |
| TrCH                                    |                           |                           |
| UL-                                     |                           |                           |
| AddReconfTransChInfoList                |                           |                           |
| >Uplink transport channel               | dch                       | dch                       |
| type                                    |                           |                           |
| >transportChannelIdentity               | TrCH1: 1, TrCH2: 2,       | TrCH1: 1, TrCH2: 2,       |
|   | TrCH3: 3, TrCH4: 4        | TrCH3: 3                  |
| >transportFormatSet                     | DedicatedTransChT         | DedicatedTransChT         |
| al an anni a <b>TE</b> in fa ann a tian | FS                        | FS                        |
| >>dynamicTF-information                 |                           |                           |
| >>>tf0/ tf0,1                           | TrCH1: (0x65)             | TrCH1: (0x61)             |
|   | TrCH2: (0x 99)            | TrCH2: (0x 87)            |
|   | TrCH3: (0x 40,            | TrCH3: (0x 144,           |
|   | 1x40)                     | 1x144)                    |
|   | TrCH4: (0x144,<br>1x144)  |                           |
| >>>>rlcSize                             | BitMode                   | BitMode                   |
| >>>>sizeType                            | TrCH1: type 1: 65         | TrCH1: type 1: 61         |
| served to the                           | TrCH2: type 1: 99         | TrCH2: type 1: 87         |
|   | TrCH3: type 1: 40         | TrCH3: 2: type 2,         |
|   | TrCH4: 2: type 2,         | part1 = 2, part2 = 0      |
|   | part1 = 2, part2 = 0      | (144)                     |
|   | (144)                     | ····/                     |
| >>>>numberOfTbSizeList                  | TrCH1-2: Zero             | TrCH1-2: Zero             |
|   | TrCH3-4: Zero, one        | TrCH3: Zero, one          |
| >>>>logicalChannelList                  | All                       | All                       |
| >>>tf 1                                 | TrCH1: (1x39)             | TrCH1: (1x39)             |
|   | TrCH2: (1x 53)            | TrCH2: (1x53)             |
|   | TrCH3- TrCH4: N/A         | TrCH3: N/A                |
| >>>>numberOfTransportBl                 | TrCH1: One                | TrCH1: One                |
| ocks                                    | TrCH2: One                | TrCH2: One                |
| >>>>rlc-Size                            | TrCH1-2: BitMode          | TrCH1-2: BitMode          |
| >>>>sizoTypo                            |                           |                           |

TrCH1: 1: 39

TrCH2: 1: 53

TrCH1: all

TrCH1-2: One

TrCH1: (1x42)

TrCH2: (1x63)

TrCH1: One

TrCh2: One

TrCH1: BitMode

TrCH3- TrCH4: N/A

TrCH1: BitMode

TrCH1: 1: 39

TrCH1: 1: 53

TrCH1: all

TrCH1-2: One

TrCH1: (1x42)

TrCH2: (1x63)

TrCH3: N/A

TrCH1: One

TrCh2: One

|   | 1   |  |
|---|---|--|
| >>>>sizeType  | TrCH1: type 1: 42   | TrCH1: type 1: 42  |
|   | TrCH2: type 1: 63   | TrCH2: type 1: 63  |
| >>>>numberOfTbSizeList  | TrCH1: One  | TrCH1: One   |
|   | TrCH2: One<br>TrCH1: all  | TrCH2: One   |
| >>>>logicalChannelList  | TrCH1: all  | TrCH1: all<br>TrCH2: all   |
| >>>tf 3   | TrCH1: (1x55)   | TrCH1: (1x55)  |
| >>>(1 3   |   |  |
|   | TrCH2: (1x76)<br>TrCH3- TrCH4: N/A  | TrCH2: (1x76)<br>TrCH3: N/A  |
| >>>>numberOfTransportBl   | TrCH1: One  | TrCH1: One   |
| ocks  | TrCh2: One  | TrCh2: One   |
| >>>rlc-Size   | TrCH1: BitMode  | TrCH1: BitMode   |
| >>>>sizeType  | TrCH1: type 1: 55   | TrCH1: type 1: 55  |
|   | TrCH2: type 1: 76   | TrCH2: type 1: 76  |
| >>>>numberOfTbSizeList  | TrCH1: One  | TrCH1: One   |
|   | TrCH2: One  | TrCH2: One   |
| >>>logicalChannelList   | TrCH1: all  | TrCH1: all   |
|   | TrCH2: all  | TrCH2: all   |
| >>>tf 4   | TrCH1: (1x58)   | TrCH1: (1x58)  |
|   | TrCH2: (1x99)   | TrCH2: (1x87)  |
|   | TrCH3- TrCH4: N/A   | TrCH3: N/A   |
| >>>numberOfTransportBl  | TrCH1: One  | TrCH1: One   |
| ocks  | TrCh2: One  | TrCh2: One   |
| >>>rlc-Size   | TrCH1: BitMode  | TrCH1: BitMode   |
| >>>>sizeType  | TrCH1: type 1: 58   | TrCH1: type 1: 58  |
| <i>.</i>  | TrCH2: type 1: 99   | TrCH2: type 1: 87  |
| >>>>numberOfTbSizeList  | TrCH1: One  | TrCH1: One   |
|   | TrCH2: One  | TrCH2: One   |
| >>>logicalChannelList   | TrCH1: all  | TrCH1: all   |
| C C   | TrCH2: all  | TrCH2: all   |
| >>>tf 5   | TrCH1: (1x65)   | TrCH1: (1x61)  |
|   | TrCH2- TrCH4: N/A   | TrCH2- TrCH4: N/A  |
| >>>>numberOfTransportBl   | TrCH1: One  | TrCH1: One   |
| ocks  |   |  |
| >>>rlc-Size   | TrCH1: BitMode  | TrCH1: BitMode   |
| >>>>sizeType  | TrCH1: type 1: 42   | TrCH1: type 1: 42  |
| >>>>numberOfTbSizeList  | TrCH1: One  | TrCH1: One   |
| >>>>logicalChannelList  | TrCH1: all  | TrCH1: all   |
| >>semistaticTF-Information  |   |  |
| >>>tti  | TrCH1- TrCH3: 20  | TrCH1- TrCH2: 20   |
|   | TrCH4: 40   | TrCH3: 40  |
| >>>channelCodingType  |   |  |
| >>>>codingPoto  | Convolutional   | Convolutional  |
| >>>>codingRate  | Convolutional<br>TrCH1- TrCH2:  | TrCH1- TrCH2:  |
|   | Convolutional<br>TrCH1- TrCH2:<br>Third   | TrCH1- TrCH2:<br>Third   |
|   | Convolutional<br>TrCH1- TrCH2:<br>Third<br>TrCH3: Half  | TrCH1- TrCH2:  |
|   | Convolutional<br>TrCH1- TrCH2:<br>Third<br>TrCH3: Half<br>TrCH4: Third  | TrCH1- TrCH2:<br>Third<br>TrCH3: Third   |
| >>>rateMatchingAttribute  | Convolutional<br>TrCH1- TrCH2:<br>Third<br>TrCH3: Half<br>TrCH4: Third<br>TrCH1: 200  | TrCH1- TrCH2:<br>Third<br>TrCH3: Third<br>TrCH1: 200   |
|   | Convolutional<br>TrCH1- TrCH2:<br>Third<br>TrCH3: Half<br>TrCH4: Third<br>TrCH1: 200<br>TrCH2: 190  | TrCH1- TrCH2:<br>Third<br>TrCH3: Third<br>TrCH1: 200<br>TrCH2: 190   |
|   | Convolutional<br>TrCH1- TrCH2:<br>Third<br>TrCH3: Half<br>TrCH4: Third<br>TrCH1: 200<br>TrCH1: 200<br>TrCH2: 190<br>TrCH3: 235  | TrCH1- TrCH2:<br>Third<br>TrCH3: Third<br>TrCH1: 200   |
| >>>rateMatchingAttribute  | Convolutional<br>TrCH1- TrCH2:<br>Third<br>TrCH3: Half<br>TrCH4: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH2: 190<br>TrCH3: 235<br>TrCH4: 160  | TrCH1- TrCH2:<br>Third<br>TrCH3: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH3: 160   |
|   | Convolutional<br>TrCH1- TrCH2:<br>Third<br>TrCH3: Half<br>TrCH4: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH2: 190<br>TrCH3: 235<br>TrCH4: 160<br>TrCH1: 12   | TrCH1- TrCH2:<br>Third<br>TrCH3: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH3: 160<br>TrCH1: 12  |
| >>>rateMatchingAttribute  | Convolutional<br>TrCH1- TrCH2:<br>Third<br>TrCH3: Half<br>TrCH4: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH2: 190<br>TrCH3: 235<br>TrCH4: 160<br>TrCH1: 12<br>TrCH1: 12<br>TrCH2- TrCH3: 0   | TrCH1- TrCH2:<br>Third<br>TrCH3: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH3: 160<br>TrCH1: 12<br>TrCH1: 12<br>TrCH2: 0   |
| >>>rateMatchingAttribute  | Convolutional<br>TrCH1- TrCH2:<br>Third<br>TrCH3: Half<br>TrCH4: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH2: 190<br>TrCH3: 235<br>TrCH4: 160<br>TrCH1: 12   | TrCH1- TrCH2:<br>Third<br>TrCH3: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH3: 160<br>TrCH1: 12  |
| >>>rateMatchingAttribute >>>crc-Size DL-  | Convolutional<br>TrCH1- TrCH2:<br>Third<br>TrCH3: Half<br>TrCH4: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH2: 190<br>TrCH3: 235<br>TrCH4: 160<br>TrCH1: 12<br>TrCH1: 12<br>TrCH2- TrCH3: 0   | TrCH1- TrCH2:<br>Third<br>TrCH3: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH3: 160<br>TrCH1: 12<br>TrCH1: 12<br>TrCH2: 0   |
| >>>rateMatchingAttribute<br>>>>crc-Size<br>DL-<br>AddReconfTransChInfoList  | Convolutional<br>TrCH1- TrCH2:<br>Third<br>TrCH3: Half<br>TrCH4: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH3: 235<br>TrCH4: 160<br>TrCH1: 12<br>TrCH2- TrCH3: 0<br>TrCH4: 16   | TrCH1- TrCH2:<br>Third<br>TrCH3: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH3: 160<br>TrCH1: 12<br>TrCH1: 12<br>TrCH2: 0   |
| >>>rateMatchingAttribute<br>>>>crc-Size<br>DL-<br>AddReconfTransChInfoList<br>>Downlink transport   | Convolutional<br>TrCH1- TrCH2:<br>Third<br>TrCH3: Half<br>TrCH4: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH2: 190<br>TrCH3: 235<br>TrCH4: 160<br>TrCH1: 12<br>TrCH1: 12<br>TrCH2- TrCH3: 0   | TrCH1- TrCH2:<br>Third<br>TrCH3: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH3: 160<br>TrCH1: 12<br>TrCH2: 0<br>TrCH3: 16   |
| >>>rateMatchingAttribute<br>>>>crc-Size<br>DL-<br>AddReconfTransChInfoList  | Convolutional<br>TrCH1- TrCH2:<br>Third<br>TrCH3: Half<br>TrCH4: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH3: 235<br>TrCH4: 160<br>TrCH1: 12<br>TrCH2- TrCH3: 0<br>TrCH4: 16   | TrCH1- TrCH2:<br>Third<br>TrCH3: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH3: 160<br>TrCH1: 12<br>TrCH2: 0<br>TrCH3: 16   |
| <pre>&gt;&gt;rateMatchingAttribute &gt;&gt;&gt;crc-Size DL- AddReconfTransChInfoList &gt;Downlink transport channel type &gt;dI-</pre>                          | Convolutional<br>TrCH1- TrCH2:<br>Third<br>TrCH3: Half<br>TrCH4: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH3: 235<br>TrCH4: 160<br>TrCH1: 12<br>TrCH2- TrCH3: 0<br>TrCH4: 16   | TrCH1- TrCH2:<br>Third<br>TrCH3: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH3: 160<br>TrCH1: 12<br>TrCH2: 0<br>TrCH3: 16   |
| <pre>&gt;&gt;rateMatchingAttribute &gt;&gt;&gt;crc-Size DL- AddReconfTransChInfoList &gt;Downlink transport channel type &gt;dl- TransportChannelIdentity</pre> | Convolutional<br>TrCH1- TrCH2:<br>Third<br>TrCH3: Half<br>TrCH4: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH3: 235<br>TrCH4: 160<br>TrCH1: 12<br>TrCH2- TrCH3: 0<br>TrCH4: 16<br>dch  | TrCH1- TrCH2:           Third           TrCH3: Third           TrCH1: 200           TrCH2: 190           TrCH3: 160           TrCH1: 12           TrCH2: 0           TrCH3: 16           dch                                 |
| <pre>&gt;&gt;rateMatchingAttribute &gt;&gt;&gt;crc-Size DL- AddReconfTransChInfoList &gt;Downlink transport channel type &gt;dI-</pre>                          | Convolutional<br>TrCH1- TrCH2:<br>Third<br>TrCH3: Half<br>TrCH4: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH3: 235<br>TrCH4: 160<br>TrCH1: 12<br>TrCH2- TrCH3: 0<br>TrCH4: 16<br>dch  | TrCH1- TrCH2:<br>Third<br>TrCH3: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH3: 160<br>TrCH1: 12<br>TrCH2: 0<br>TrCH3: 16<br>dch  |
| <pre>&gt;&gt;rateMatchingAttribute &gt;&gt;&gt;crc-Size DL- AddReconfTransChInfoList &gt;Downlink transport channel type &gt;dl- TransportChannelIdentity</pre> | Convolutional<br>TrCH1- TrCH2:<br>Third<br>TrCH3: Half<br>TrCH4: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH3: 235<br>TrCH4: 160<br>TrCH1: 12<br>TrCH2- TrCH3: 0<br>TrCH4: 16<br>dch  | TrCH1- TrCH2:           Third           TrCH3: Third           TrCH1: 200           TrCH2: 190           TrCH3: 160           TrCH1: 12           TrCH2: 0           TrCH3: 16           dch                                 |
| <pre>&gt;&gt;rateMatchingAttribute &gt;&gt;&gt;crc-Size DL- AddReconfTransChInfoList &gt;Downlink transport channel type &gt;dl- TransportChannelIdentity</pre> | Convolutional<br>TrCH1- TrCH2:<br>Third<br>TrCH3: Half<br>TrCH4: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH3: 235<br>TrCH4: 160<br>TrCH1: 12<br>TrCH2- TrCH3: 0<br>TrCH4: 16<br>dch<br>Independent<br><only on="" td="" tf0="" trch1<=""><td>TrCH1- TrCH2:<br/>Third<br/>TrCH3: Third<br/>TrCH1: 200<br/>TrCH2: 190<br/>TrCH3: 160<br/>TrCH1: 12<br/>TrCH2: 0<br/>TrCH3: 16<br/>dch<br/>Independent<br/><only on="" td="" tf0="" trch1<=""></only></td></only> | TrCH1- TrCH2:<br>Third<br>TrCH3: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH3: 160<br>TrCH1: 12<br>TrCH2: 0<br>TrCH3: 16<br>dch<br>Independent<br><only on="" td="" tf0="" trch1<=""></only>                                   |
| <pre>&gt;&gt;rateMatchingAttribute &gt;&gt;&gt;crc-Size DL- AddReconfTransChInfoList &gt;Downlink transport channel type &gt;dl- TransportChannelIdentity</pre> | Convolutional           TrCH1- TrCH2:           Third           TrCH3: Half           TrCH4: Third           TrCH1: 200           TrCH2: 190           TrCH3: 235           TrCH4: 160           TrCH2- TrCH3: 0           TrCH4: 16           dch           Independent           <0nly tf0 on TrCH1   | TrCH1- TrCH2:<br>Third<br>TrCH3: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH3: 160<br>TrCH1: 12<br>TrCH2: 0<br>TrCH3: 16<br>dch<br>Independent<br><only on="" tf0="" trch1<br="">and tf0/tf1 on</only>                         |
| <pre>&gt;&gt;rateMatchingAttribute &gt;&gt;&gt;crc-Size DL- AddReconfTransChInfoList &gt;Downlink transport channel type &gt;dl- TransportChannelIdentity</pre> | Convolutional<br>TrCH1- TrCH2:<br>Third<br>TrCH3: Half<br>TrCH4: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH3: 235<br>TrCH4: 160<br>TrCH1: 12<br>TrCH2- TrCH3: 0<br>TrCH4: 16<br>dch<br>Independent<br><only on="" tf0="" trch1<br="">and tf0/tf1 on<br/>TrCH5 are different</only>   | TrCH1- TrCH2:<br>Third<br>TrCH3: Third<br>TrCH1: 200<br>TrCH2: 190<br>TrCH3: 160<br>TrCH1: 12<br>TrCH2: 0<br>TrCH3: 16<br>dch<br>Independent<br><only on="" tf0="" trch1<br="">and tf0/tf1 on<br/>TrCH4 are different</only> |

| >>>>tf0/ tf0,1  | TrCH1: (1x0)  | TrCH1: (1x0)  |
|---|---|---|
|   | TrCH5: (0x7, 1x7)   | TrCH4: (0x7, 1x7)   |
| >>>rlcSize  | BitMode   | bitMode   |
| >>>>sizeType  | TrCH1: type 1: 0  | TrCH1: type 1: 0  |
|   | TrCH5: type 1: 7  | TrCH4: type 1: 7  |
| >>>>numberOfTbSizeList  | TrCH1: One  | TrCH1: One  |
|   | TrCH5: Zero, one  | TrCH4: Zero, one  |
| >>>>logicalChannelList  | All   | All   |
| >>>semistaticTF-  | same as UL except   | same as DL except   |
| Information   | for TrCH5   | for TrCH4   |
| >>>>tti   | TrCH5: 20   | TrCH4: 20   |
| >>>>channelCodingType   | Convolutional   | Convolutional   |
| >>>>codingRate  | TrCH5: Third  | TrCH4: Third  |
| >>>rateMatchingAttribute  | TrCH5: 200  | TrCH4: 200  |
| >>>crc-Size   | TrCH5: 12   | TrCH4: 12   |
| >>ULTrCH-Id   | TrCH1: 1, TrCH2: 2,   | TrCH1: 1, TrCH2: 2,   |
|   | TrCH3: 3, TrCH4: 4,   | TrCH3: 3  |
| >dch-QualityTarget  | -3  |   |
| >>bler-QualityValue   | TrCH1: 7x10 <sup>-3</sup>   | TrCH1: 7x10 <sup>-3</sup>   |
|   | TrCH2- TrCH5:   | TrCH2- TrCH4:   |
|   | Absent  | Absent  |
| TrCH INFORMATION,   |   |   |
| COMMON  |   |   |
| ul-CommonTransChInfo  |   |   |
| >tfcs-ID (TDD only)   | 1   | 1   |
| >sharedChannelIndicator   | FALSE   | FALSE   |
| (TDD only)  |   |   |
| > tfc-Subset  | Absent, not required  | Absent, not required  |
| >ul-TFCS  | Normal TFCI   | Normal TFCI   |
|   | signalling  | signalling  |
| >>explicitTFCS-   | Complete  | Complete  |
| ConfigurationMode   |   |   |
| >>>ctfcSize   | Ctfc6Bit  | Ctfc6Bit  |
| >>>>TFCS representation   | Addition  | Addition  |
| >>>>TFC list  |   |   |
| >>>>>TFC 1  | (TF0, TF0, TF0,   | (TF0, TF0, TF0)   |
|   | TF0)  |   |
|   |   | -   |
| >>>>>ctfc   | 0   | 0   |
|   | 0<br>Computed   | 0<br>Computed   |
| >>>>>>ctfc<br>>>>>>>gainFactorInform<br>ation   | -   | -   |
| >>>>>gainFactorInform   | -   | -   |
| >>>>>>gainFactorInform<br>ation   | Computed  | Computed  |
| >>>>>gainFactorInform<br>ation<br>>>>>>referenceTFCId   | Computed<br>0   | Computed<br>0   |
| >>>>>sgainFactorInform<br>ation<br>>>>>>referenceTFCId<br>>>>>>TFC 2<br>>>>>>ctfc   | Computed<br>0<br>(TF1, TF0, TF0,  | Computed<br>0   |
| >>>>>sgainFactorInform<br>ation<br>>>>>>referenceTFCId<br>>>>>>TFC 2  | Computed<br>0<br>(TF1, TF0, TF0,<br>TF0)  | Computed<br>0<br>(TF1, TF0, TF0)  |
| >>>>>sgainFactorInform<br>ation<br>>>>>>referenceTFCId<br>>>>>>TFC 2<br>>>>>>ctfc   | Computed<br>0<br>(TF1, TF0, TF0,<br>TF0)<br>1   | Computed<br>0<br>(TF1, TF0, TF0)<br>1   |
| >>>>>sgainFactorInform<br>ation<br>>>>>>referenceTFCId<br>>>>>>TFC 2<br>>>>>>ctfc<br>>>>>>sgainFactorInform<br>ation  | Computed<br>0<br>(TF1, TF0, TF0,<br>TF0)<br>1   | Computed<br>0<br>(TF1, TF0, TF0)<br>1   |
| >>>>>sgainFactorInform<br>ation<br>>>>>>referenceTFCId<br>>>>>>TFC 2<br>>>>>>>ctfc<br>>>>>>sgainFactorInform<br>ation<br>>>>>>βc (FDD only)   | Computed<br>0<br>(TF1, TF0, TF0,<br>TF0)<br>1<br>Computed<br>N/A  | Computed<br>0<br>(TF1, TF0, TF0)<br>1<br>Computed<br>N/A  |
| >>>>>sgainFactorInform<br>ation<br>>>>>>referenceTFCId<br>>>>>>TFC 2<br>>>>>>>ctfc<br>>>>>>sgainFactorInform<br>ation<br>>>>>>βc (FDD only)<br>>>>>>>βd   | Computed<br>0<br>(TF1, TF0, TF0,<br>TF0)<br>1<br>Computed<br>N/A<br>N/A   | Computed<br>0<br>(TF1, TF0, TF0)<br>1<br>Computed<br>N/A<br>N/A   |
| >>>>>sgainFactorInform<br>ation<br>>>>>>referenceTFCId<br>>>>>>TFC 2<br>>>>>>sctfc<br>>>>>>sgainFactorInform<br>ation<br>>>>>>βc (FDD only)<br>>>>>>βd<br>>>>>>referenceTFCId   | Computed<br>0<br>(TF1, TF0, TF0,<br>TF0)<br>1<br>Computed<br>N/A<br>N/A<br>0  | Computed<br>0<br>(TF1, TF0, TF0)<br>1<br>Computed<br>N/A<br>N/A<br>0  |
| >>>>>sgainFactorInform<br>ation<br>>>>>>referenceTFCId<br>>>>>>TFC 2<br>>>>>>>ctfc<br>>>>>>sgainFactorInform<br>ation<br>>>>>>βc (FDD only)<br>>>>>>>βd   | Computed<br>0<br>(TF1, TF0, TF0,<br>TF0)<br>1<br>Computed<br>N/A<br>N/A<br>0<br>(TF2, TF1, TF0,   | Computed<br>0<br>(TF1, TF0, TF0)<br>1<br>Computed<br>N/A<br>N/A   |
| >>>>>sgainFactorInform<br>ation<br>>>>>>referenceTFCId<br>>>>>>TFC 2<br>>>>>>sgainFactorInform<br>ation<br>>>>>>>βc (FDD only)<br>>>>>>βd<br>>>>>>FeferenceTFCId<br>>>>>>TFC 3  | Computed<br>0<br>(TF1, TF0, TF0,<br>TF0)<br>1<br>Computed<br>N/A<br>N/A<br>0<br>(TF2, TF1, TF0,<br>TF0)   | Computed<br>0<br>(TF1, TF0, TF0)<br>1<br>Computed<br>N/A<br>N/A<br>0<br>(TF2, TF1, TF0)   |
| >>>>>sgainFactorInform<br>ation<br>>>>>>referenceTFCId<br>>>>>>TFC 2<br>>>>>>sgainFactorInform<br>ation<br>>>>>>>βd<br>>>>>>>βd<br>>>>>>>FeferenceTFCId<br>>>>>>TFC 3<br>>>>>>ctfc  | Computed           0           (TF1, TF0, TF0, TF0)           1           Computed           N/A           N/A           0           (TF2, TF1, TF0, TF0, TF0)           8  | Computed<br>0<br>(TF1, TF0, TF0)<br>1<br>Computed<br>N/A<br>N/A<br>0<br>(TF2, TF1, TF0)<br>8  |
| $\begin{tabular}{lllllllllllllllllllllllllllllllllll$   | Computed<br>0<br>(TF1, TF0, TF0,<br>TF0)<br>1<br>Computed<br>N/A<br>N/A<br>0<br>(TF2, TF1, TF0,<br>TF0)   | Computed<br>0<br>(TF1, TF0, TF0)<br>1<br>Computed<br>N/A<br>N/A<br>0<br>(TF2, TF1, TF0)   |
| >>>>>>gainFactorInform         ation         >>>>>referenceTFCId         >>>>>TFC 2         >>>>>sgainFactorInform         ation         >>>>>sgainFactorInform         ation         >>>>>sp6c (FDD only)         >>>>>>βd         >>>>>>FfC 3         >>>>>>tfc         >>>>>stfc         >>>>>ctfc         >>>>>>sctfc         >>>>>>sctfc         >>>>>>sqainFactorInform         ation | Computed<br>0<br>(TF1, TF0, TF0,<br>TF0)<br>1<br>Computed<br>N/A<br>N/A<br>0<br>(TF2, TF1, TF0,<br>TF0)<br>8<br>Computed  | Computed<br>0<br>(TF1, TF0, TF0)<br>1<br>Computed<br>N/A<br>0<br>(TF2, TF1, TF0)<br>8<br>Computed   |
| $\begin{tabular}{lllllllllllllllllllllllllllllllllll$   | Computed           0           (TF1, TF0, TF0, TF0)           1           Computed           N/A           N/A           0           (TF2, TF1, TF0, TF0, TF0)           8           Computed           0   | Computed<br>0<br>(TF1, TF0, TF0)<br>1<br>Computed<br>N/A<br>0<br>(TF2, TF1, TF0)<br>8<br>Computed<br>0  |
| >>>>>>gainFactorInform         ation         >>>>>referenceTFCId         >>>>>TFC 2         >>>>>sgainFactorInform         ation         >>>>>sgainFactorInform         ation         >>>>>sp6c (FDD only)         >>>>>>βd         >>>>>>FfC 3         >>>>>>tfc         >>>>>stfc         >>>>>ctfc         >>>>>>sctfc         >>>>>>sctfc         >>>>>>sqainFactorInform         ation | Computed           0           (TF1, TF0, TF0, TF0)           1           Computed           N/A           N/A           0           (TF2, TF1, TF0, TF0)           8           Computed           0           (TF3, TF2, TF0, TF0, TF0, TF0, TF0, TF0, TF0, TF0  | Computed<br>0<br>(TF1, TF0, TF0)<br>1<br>Computed<br>N/A<br>0<br>(TF2, TF1, TF0)<br>8<br>Computed   |
| $\begin{tabular}{lllllllllllllllllllllllllllllllllll$   | Computed           0           (TF1, TF0, TF0, TF0)           1           Computed           N/A           N/A           0           (TF2, TF1, TF0, TF0)           8           Computed           0           (TF3, TF2, TF0, TF0, TF0)           TF0)           | Computed           0           (TF1, TF0, TF0)           1           Computed           N/A           0           (TF2, TF1, TF0)           8           Computed           0           (TF3, TF2, TF0)              |
| $\begin{tabular}{lllllllllllllllllllllllllllllllllll$   | Computed           0           (TF1, TF0, TF0, TF0, TF0)           1           Computed           N/A           N/A           0           (TF2, TF1, TF0, TF0, TF0)           8           Computed           0           (TF3, TF2, TF0, TF0, TF0)           15   | Computed           0           (TF1, TF0, TF0)           1           Computed           N/A           0           (TF2, TF1, TF0)           8           Computed           0           (TF3, TF2, TF0)           15 |
| $\begin{tabular}{lllllllllllllllllllllllllllllllllll$   | Computed           0           (TF1, TF0, TF0, TF0, TF0)           1           Computed           N/A           N/A           0           (TF2, TF1, TF0, TF0, TF0)           8           Computed           0           (TF3, TF2, TF0, TF0, TF0)           TF0) | Computed           0           (TF1, TF0, TF0)           1           Computed           N/A           0           (TF2, TF1, TF0)           8           Computed           0           (TF3, TF2, TF0)              |
| $\begin{tabular}{lllllllllllllllllllllllllllllllllll$   | Computed           0           (TF1, TF0, TF0, TF0, TF0)           1           Computed           N/A           N/A           0           (TF2, TF1, TF0, TF0, TF0)           8           Computed           0           (TF3, TF2, TF0, TF0, TF0)           15   | Computed           0           (TF1, TF0, TF0)           1           Computed           N/A           0           (TF2, TF1, TF0)           8           Computed           0           (TF3, TF2, TF0)           15 |
| $\begin{tabular}{lllllllllllllllllllllllllllllllllll$   | Computed           0           (TF1, TF0, TF0, TF0, TF0)           1           Computed           N/A           N/A           0           (TF2, TF1, TF0, TF0, TF0)           8           Computed           0           (TF3, TF2, TF0, TF0, TF0)           15   | Computed           0           (TF1, TF0, TF0)           1           Computed           N/A           0           (TF2, TF1, TF0)           8           Computed           0           (TF3, TF2, TF0)           15 |
| $\begin{tabular}{lllllllllllllllllllllllllllllllllll$   | Computed           0           (TF1, TF0, TF0, TF0, TF0)           1           Computed           N/A           N/A           0           (TF2, TF1, TF0, TF0, TF0)           8           Computed           0           (TF3, TF2, TF0, TF0, TF0)           15   | Computed           0           (TF1, TF0, TF0)           1           Computed           N/A           0           (TF2, TF1, TF0)           8           Computed           0           (TF3, TF2, TF0)           15 |
| $\begin{tabular}{lllllllllllllllllllllllllllllllllll$   | Computed           0           (TF1, TF0, TF0, TF0, TF0)           1           Computed           N/A           N/A           0           (TF2, TF1, TF0, TF0, TF0)           8           Computed           0           (TF3, TF2, TF0, TF0, TF0)           15   | Computed           0           (TF1, TF0, TF0)           1           Computed           N/A           0           (TF2, TF1, TF0)           8           Computed           0           (TF3, TF2, TF0)           15 |

| TEO E                                  |                         |                                       |
|--|-------------------------|---------------------------------------|
| >>>>>TFC 5                             | (TF4, TF3, TF0,<br>TF0) | (TF4, TF3, TF0)                       |
| >>>>>ctfc                              | 22                      | 22                                    |
| >>>>>>sgainFactorInform                | Computed                | Computed                              |
| ation                                  |                         |                                       |
| >>>>>>referenceTFCId                   | 0                       | 0                                     |
| >>>>>TFC 6                             | (TF5, TF4, TF1,         | (TF5, TF4, TF0)                       |
|  | TF0)                    |                                       |
| >>>>>ctfc                              | 59                      | 29                                    |
| >>>>>>>sgainFactorInform               | Computed                | Computed                              |
| ation                                  |                         |                                       |
| >>>>>βc (FDD only)                     |                         |                                       |
| >>>>>βd                                |                         |                                       |
| >>>>>>referenceTFCId                   | 0                       | 0                                     |
| >>>>>TFC 7                             | (TF0, TF0, TF0,         | (TF0, TF0, TF1)                       |
| >>>>>ctfc                              | TF1)<br>60              | 30                                    |
| >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>> | Computed                | Computed                              |
| ation                                  |                         | Computed                              |
| >>>>>>referenceTFCId                   | 0                       | 0                                     |
| >>>>>TFC 8                             | (TF1, TF0, TF0,         | (TF1, TF0, TF1)                       |
| . = -                                  | TF1)                    | , , , , , , , , , , , , , , , , , , , |
| >>>>>>ctfc                             | 61                      | 31                                    |
| >>>>>>gainFactorInform                 | computed                | computed                              |
| ation                                  |                         |                                       |
| >>>>> $\beta c$ (FDD only)             |                         |                                       |
| >>>>>βd                                |                         |                                       |
| >>>>>>referenceTFCId                   | 0                       | 0                                     |
| >>>>>TFC 9                             | (TF2, TF1, TF0,<br>TF1) | (TF2, TF1, TF1)                       |
| >>>>>ctfc                              | 68                      | 38                                    |
| >>>>>>gainFactorInform                 | computed                | computed                              |
| ation                                  |                         |                                       |
| >>>>>>referenceTFCId                   |                         |                                       |
| >>>>>TFC 10                            | (TF3, TF2, TF0,<br>TF1) | (TF3, TF2, TF1)                       |
| >>>>>ctfc                              | 75                      | 45                                    |
| >>>>>>sgainFactorInform                | computed                | computed                              |
| ation                                  |                         |                                       |
| >>>>>βc (FDD only)                     |                         |                                       |
| >>>>>βd                                |                         |                                       |
| >>>>>>referenceTFCId                   |                         |                                       |
| >>>>>TFC 11                            | (TF4, TF3, TF0,<br>TF1) | (TF4, TF3, TF1)                       |
| >>>>>ctfc                              | 82                      | 52                                    |
| >>>>>gainFactorInform                  | computed                | computed                              |
| ation                                  |                         | ·                                     |
| >>>>>>referenceTFCId                   |                         |                                       |
| >>>>>TFC 12                            | (TF5, TF4, TF1,<br>TF1) | (TF5, TF4, TF1)                       |
| >>>>>ctfc                              | 97                      | 59                                    |
| >>>>>>gainFactorInform                 | signalled               | signalled                             |
| ation                                  |                         |                                       |
| >>>>>βc (FDD only)                     | 11                      | 11                                    |
| >>>>>βd                                | 15                      | 15                                    |
| >>>>>>referenceTFCId                   |                         |                                       |
| > TFC subset list                      |                         |                                       |
| >>TFC subset 1                         | (speech rate 10.2)      | (speech rate 7.4)                     |
| >>> Allowed transport                  | (TFC1, TFC2,            | (TFC1, TFC2,                          |
| format combination list                | TFC7, TFC8, TFC6,       | TFC7, TFC8, TFC6,                     |
|  | TFC12)                  | TFC12)                                |
| >>TFC subset 2                         | (speech rate 6.7)       | (speech rate 6.7)                     |

| Allowed transport                                |                              |                         |
|--|------------------------------|-------------------------|
| >>> Allowed transport<br>format combination list | (TFC1, TFC2,                 | (TFC1, TFC2,            |
| format combination list                          | TFC7, TFC8, TFC5,            | TFC7, TFC8, TFC5,       |
| TEO autoratio                                    | TFC11)                       | TFC11)                  |
| >>TFC subset 3                                   | (speech rate 5.9)            | (speech rate 5.9)       |
| >>> Allowed transport                            | (TFC1, TFC2,                 | (TFC1, TFC2,            |
| format combination list                          | TFC7, TFC8, TFC4,            | TFC7, TFC8, TFC4,       |
|  | TFC10)                       | TFC10)                  |
| >>TFC subset 4                                   | (speech rate 4.75)           | (speech rate 4.75)      |
| >>> Allowed transport                            | (TFC1, TFC2,                 | (TFC1, TFC2,            |
| format combination list                          | TFC7, TFC8, TFC3,            | TFC7, TFC8, TFC3,       |
|  | TFC9)                        | TFC9)                   |
| dl-CommonTransChInfo                             |                              |                         |
| >tfcs-SignallingMode                             | Independent                  | Independent             |
| ul-CommonTransChInfo                             |                              |                         |
| >tfcs-ID (TDD only)                              | 1                            | 1                       |
| >sharedChannelIndicator                          | FALSE                        | FALSE                   |
| (TDD only)                                       |                              |                         |
| > tfc-Subset                                     | Absent, not required         | Absent, not required    |
| >dl-TFCS   | Normal TFCI                  | Normal TFCI             |
|  | signalling                   | signalling              |
| >>explicitTFCS-                                  | Complete                     | Complete                |
| ConfigurationMode                                |                              |                         |
| >>>ctfcSize                                      | Ctfc6Bit                     | Ctfc6Bit                |
| >>>>TFCS representation                          | Addition                     | Addition                |
| >>>>TFCS list                                    |                              |                         |
| >>>>>TFC 1                                       | (TF0, TF0, TF0,              | (TF0, TF0, TF0,         |
|  | TF0, TF0)                    | (110, 110, 110,<br>TF0) |
| >>>>>ctfc  | 0                            | 0                       |
| >>>>>TFC 2                                       | (TF1, TF0, TF0,              | (TF1, TF0, TF0,         |
|  | TF0, TF0)                    | (111, 110, 110,<br>TF0) |
| >>>>>ctfc  | 1                            | 1                       |
| >>>>>TFC 3                                       | (TF2, TF1, TF0,              | (TF2, TF1, TF0,         |
| ///////////////////////////////////////          | TF0, TF0)                    | TF0)                    |
| >>>>>ctfc  | 8                            | 8                       |
| >>>>>TFC 4                                       | (TF3, TF2, TF0,              | (TF3, TF2, TF0,         |
|  | TF0, TF0)                    | (TF3, TF2, TF0,<br>TF0) |
| >>>>>ctfc  | 15                           | 15                      |
| >>>>>TFC 5                                       | (TF4, TF3, TF0,              | (TF4, TF3, TF0,         |
| >>>>>TFC 5                                       | TF0, TF0)                    | (TF4, TF3, TF0,<br>TF0) |
| >>>>> ctfc                                       | 22                           | 22                      |
| >>>>>>>tfc                                       |                              |                         |
| >>>>>TFC 6                                       | (TF5, TF4, TF1,              | (TF5, TF4, TF0,         |
| ~~~~~  | TF0, TF0)<br>59              | TF0)<br>29              |
| >>>>>>>tfc                                       |                              | -                       |
| >>>>>TFC 7                                       | (TF0, TF0, TF0,<br>TF1, TF0) | (TF0, TF0, TF1,<br>TF0) |
|  |                              | /                       |
| >>>>>>ctfc                                       | 60<br>(TE1 TE0 TE0           | 30<br>(TE1_TE0_TE1      |
| >>>>>TFC 8                                       | (TF1, TF0, TF0,              | (TF1, TF0, TF1,         |
| ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~           | TF1, TF0)                    | TF0)                    |
| >>>>>ctfc  |                              | 31                      |
| >>>>>TFC 9                                       | (TF2, TF1, TF0,              | (TF2, TF1, TF1,         |
|  | TF1, TF0)                    | TF0)                    |
| >>>>>ctfc  | 68                           | 37                      |
| >>>>>TFC 10                                      | (TF3, TF2, TF0,              | (TF3, TF2, TF1,         |
|  | TF1, TF0)                    | TF0)                    |
| >>>>>ctfc  | 75                           | 55                      |
| >>>>>TFC 11                                      | (TF4, TF3, TF0,              | (TF4, TF3, TF1,         |
|  | TF1, TF0)                    | TF0)                    |
| >>>>>>ctfc                                       | 82                           | 52                      |
| >>>>>TFC 12                                      | (TF5, TF4, TF1,              | (TF5, TF4, TF1,         |
|  | TF1, TF0)                    | TF0)                    |
| >>>>>ctfc  | 119                          | 59                      |
| >>>>>TFC 13                                      | (TF0, TF0, TF0,              | (TF0, TF0, TF0,         |
|  | TF0, TF1)                    | TF1)                    |
| >>>>>ctfc  | 120                          | 60                      |
|  |                              |                         |

>>>>>TFC 14

| (TF1, TF0, TF0, |
|-----------------|
| TF1)            |
| 61              |
| (TF2, TF1, TF0, |
| TF1)            |
| 68              |
| (TF3, TF2, TF0, |
| TF1)            |
| 75              |
| (TF4, TF3, TF0, |
| TF1)            |
| 82              |
| (TF5, TF4, TF0, |
| TF1)            |
| 89              |

|   | IF0, IF1)         | 1F1)                      |
|---|-------------------|---------------------------|
| >>>>>>ctfc  | 121               | 61                        |
| >>>>>TFC 15   | (TF2, TF1, TF0,   | (TF2, TF1, TF0,           |
|   | TF0, TF1)         | TF1)                      |
| - 16 -  |                   | /                         |
| >>>>>ctfc   | 128               | 68                        |
| >>>>>TFC 16   | (TF3, TF2, TF0,   | (TF3, TF2, TF0,           |
|   | TF0, TF1)         | TF1)                      |
| >>>>>ctfc   | 135               | 75                        |
| >>>>>TFC 17   | (TF4, TF3, TF0,   | (TF4, TF3, TF0,           |
| <i>&gt;&gt;&gt;&gt;&gt;</i>   |                   |                           |
|   | TF0, TF1)         | TF1)                      |
| >>>>>>ctfc  | 152               | 82                        |
| >>>>>TFC 18   | (TF5, TF4, TF1,   | (TF5, TF4, TF0,           |
|   | TF0, TF1)         | TF1)                      |
| >>>>>ctfc   | 189               | 89                        |
| >>>>>TFC 19   | (TF0, TF0, TF0,   | (TF0, TF0, TF1,           |
| ///////////////////////////////////////   |                   |                           |
|   | TF1, TF1)         | TF1)                      |
| >>>>>ctfc   | 180               | 90                        |
| >>>>>TFC 20   | (TF1, TF0, TF0,   | (TF1, TF0, TF1,           |
|   | TF1, TF1)         | TF1)                      |
| >>>>>ctfc   | 181               | 91                        |
| >>>>>TFC 21   | (TF2, TF1, TF0,   |                           |
| 22222211621   |                   | (TF2, TF1, TF1,           |
| -   | TF1, TF1)         | TF1)                      |
| >>>>>ctfc   | 188               | 98                        |
| >>>>>TFC 22   | (TF3, TF2, TF0,   | (TF3, TF2, TF1,           |
|   | TF1, TF1)         | TF1)                      |
| >>>>>ctfc   | 195               | 105                       |
|   |                   |                           |
| >>>>>TFC 23   | (TF4, TF3, TF0,   | (TF4, TF3, TF1,           |
|   | TF1, TF1)         | TF1)                      |
| >>>>>>ctfc  | 239               | 112                       |
| >>>>>TFC 24   | (TF5, TF4, TF1,   | (TF5, TF4, TF1,           |
|   | TF1, TF1)         | (110, 11, 11, 11, 1, TF1) |
| · · · · · · · · · · · · · · · · · · ·   |                   | /                         |
| >>>>>ctfc   | 218               | 119                       |
| PhyCH INFORMATION   |                   |                           |
| FDD   |                   |                           |
| UL-DPCH-InfoPredef  |                   |                           |
| >ul-DPCH-   |                   |                           |
| PowerControlInfo  |                   |                           |
|   | Algorithm 4       | Algorithm 4               |
| >>powerControlAlgorithm   | Algorithm 1       | Algorithm 1               |
| >>>tpcStepSize  | 1                 | 1                         |
| >tfci-Existence   | TRUE              | TRUE                      |
| >puncturingLimit  | 0.88              | 0.88                      |
| DI -  |                   |                           |
|   |                   |                           |
| CommonInformationPredef   |                   |                           |
| >dl-DPCH-InfoCommon   |                   |                           |
| >>spreadingFactor   | 128               | 128                       |
| >>pilotBits   | 4                 | 4                         |
| >>positionFixed   | Fixed             | Fixed                     |
|   |                   |                           |
|   |                   |                           |
| PhyCH INFORMATION   |                   |                           |
| 3.84 Mcps TDD   |                   |                           |
| UL-DPCH-InfoPredef  |                   | 1                         |
| >ul-DPCH-   |                   |                           |
|   |                   |                           |
| PowerControlInfo  |                   |                           |
| >>dpch-ConstantValue  | -20               | -20                       |
| >commonTimeslotInfo   |                   |                           |
| >>secondInterleavingMode  | frameRelated      | frameRelated              |
|   | 16                | 16                        |
| >>tfci-Coding   |                   |                           |
| in a constant in the second | 0.60              | 0.60                      |
| >>puncturingLimit   |                   |                           |
| >>puncturingLimit<br>>>repetitionPeriodAndLeng  | repetitionPeriod1 | repetitionPeriod1         |
| >>repetitionPeriodAndLeng   |                   | repetitionPeriod1         |
| >>repetitionPeriodAndLeng<br>th   |                   | repetitionPeriod1         |
| >>repetitionPeriodAndLeng<br>th<br>DL-  |                   | repetitionPeriod1         |
| >>repetitionPeriodAndLeng<br>th<br>DL-<br>CommonInformationPredef   |                   | repetitionPeriod1         |
| >>repetitionPeriodAndLeng<br>th<br>DL-  |                   | repetitionPeriod1         |

(TF1, TF0, TF0, TF0, TF1)

| >>>secondInterleavingMod         | frameRelated      | frameRelated      |
|----------------------------------|-------------------|-------------------|
| е                                |                   |                   |
| >>>tfci-Coding                   | 16                | 16                |
| >>>puncturingLimit               | 0.60              | 0.60              |
| >>>repetitionPeriodAndLe         | repetitionPeriod1 | repetitionPeriod1 |
| ngth                             |                   |                   |
| PhyCH INFORMATION                |                   |                   |
| 1.28 Mcps TDD                    |                   |                   |
| UL-DPCH-InfoPredef               |                   |                   |
| >commonTimeslotInfo              |                   |                   |
| >>secondInterleavingMode         | frame Related     | frame Related     |
| >>tfci-Coding                    | 16                | 16                |
| >>puncturingLimit                | 0.64              | 0.64              |
| >>repetitionPeriodAndLeng        | repetitionPeriod1 | repetitionPeriod1 |
| th                               |                   |                   |
| DL-                              |                   |                   |
| CommonInformationPredef          |                   |                   |
| >dl-DPCH-InfoCommon              |                   |                   |
| >>commonTimeslotInfo             |                   |                   |
| >>>secondInterleavingMod         | frame Related     | frame Related     |
| e                                |                   |                   |
| >>>tfci-Coding                   | 16                | 16                |
| >>>puncturingLimit               | 0.64              | 0.64              |
| >>>repetitionPeriodAndLe<br>ngth | repetitionPeriod1 | repetitionPeriod1 |

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Reason for change: # A CR was approved during RAN2#29 (CR1361) that allows the UE to reject a MEASUREMENT CONTROL message that would require more than 2 L3 filters per measurement type. Objective was to define an upper limit for the UE memory requirements. Currently the specification states the following: "The UE shall support 2 different layer 3 filters per measurement type as indicated in the RRC signalling" This definition is ambiguous because the term "measurement type" can be interpreted differently. One possible interpretation would be that it refers to the IE "measurement type" in the MEASUREMENT CONTROL message. However, a message with IE "measurement type" set to "inter-frequency measurement" could still be used to configure a measurement on intra-frequencies (event 2F), or it could configure a measurement on inter-frequency neighbours which use intra-frequency evaluation criteria (events 1x) to maintain the virtual active set. Other combinations are possible as well. This a interpretation would not limit the memory consumption for storing L3 filtered measurement results, there could still be any number of filters attached to intra- and inter-frequency cells. The other interpretation is that it refers to the type of measurement results that are filtered and to the definitions in section 8.4.0 which distinguishes more precisely between intra-frequency measurement, inter-frequency measurements and inter-RAT measurements. This interpretation makes more sense since it's the measurement result that is filtered. It is assumed that the second interpretation reflects the original intention of the agreed CR1361 and the text is clarified accordingly. **Backward compatibility analysis:** If the UE does not implement the change would have to support a large number of L3 filters per measurement result. The UE might also reject valid

|   | MEASUREMENT CONTROL messages from the network, depending on the interpretation of the specification.<br>If the network does not implement the change then it might configure too many filters, the MEASUREMENT CONTROL message might be rejected by a UE. |  |  |  |  |  |  |  |
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## 8.6.7.2 Filter coefficient

If the IE "Filter coefficient" is received the UE shall apply filtering of the measurements for that measurement quantity according to the formula below. This filtering shall be performed by the UE before UE event evaluation. The UE shall also filter the measurements reported in the IE "Measured results". The filtering shall not be performed for the measurements reported in the IE "Measured results" and for cell-reselection in connected or idle mode.

The filtering shall be performed according to the following formula.

$$F_n = (1-a) \cdot F_{n-1} + a \cdot M_n$$

The variables in the formula are defined as follows:

 $F_n$  is the updated filtered measurement result

 $F_{n-1}$  is the old filtered measurement result

 $M_n$  is the latest received measurement result from physical layer measurements, the unit used for  $M_n$  is the same unit as the reported unit in the MEASUREMENT REPORT message or the unit used in the event evaluation.

 $a = 1/2^{(k/2)}$ , where k is the parameter received in the IE "Filter coefficient".

NOTE: if k is set to 0 that will mean no layer 3 filtering.

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

The physical layer measurement results are sampled once every measurement period. The measurement period and the accuracy for a certain measurement is defined in [19] and [20].

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1> set the variable CONFIGURATION\_INCOMPLETE to TRUE.

## 8.4.0 Measurement related definitions

#### [...]

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Reason for change: # A CR was approved during RAN2#29 (CR1361) that allows the UE to reject a MEASUREMENT CONTROL message that would require more than 2 L3 filters per measurement type. Objective was to define an upper limit for the UE memory requirements. Currently the specification states the following: "The UE shall support 2 different layer 3 filters per measurement type as indicated in the RRC signalling" This definition is ambiguous because the term "measurement type" can be interpreted differently. One possible interpretation would be that it refers to the IE "measurement type" in the MEASUREMENT CONTROL message. However, a message with IE "measurement type" set to "inter-frequency measurement" could still be used to configure a measurement on intra-frequencies (event 2F), or it could configure a measurement on inter-frequency neighbours which use intra-frequency evaluation criteria (events 1x) to maintain the virtual active set. Other combinations are possible as well. This a interpretation would not limit the memory consumption for storing L3 filtered measurement results, there could still be any number of filters attached to intra- and inter-frequency cells. The other interpretation is that it refers to the type of measurement results that are filtered and to the definitions in section 8.4.0 which distinguishes more precisely between intra-frequency measurement, inter-frequency measurements and inter-RAT measurements. This interpretation makes more sense since it's the measurement result that is filtered. It is assumed that the second interpretation reflects the original intention of the agreed CR1361 and the text is clarified accordingly. **Backward compatibility analysis:** If the UE does not implement the change would have to support a large number of L3 filters per measurement result. The UE might also reject valid

|                               | MEASUREMENT CONTROL messages from the network, depending on the interpretation of the specification.<br>If the network does not implement the change then it might configure too many filters, the MEASUREMENT CONTROL message might be rejected by a UE. |  |  |  |  |  |  |  |
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| Summary of change:            | Rewording in section 8.6.7.2 according to the second interpretation above   |  |  |  |  |  |  |  |
| Consequences if not approved: | It remains unclear when a UE is allowed to reject a MEASUREMENT CONTROL message   |  |  |  |  |  |  |  |
| Clauses affected:             | ¥ 8.6.7.2   |  |  |  |  |  |  |  |
| Other specs                   | Conter core specifications         # 25.331 v3.10.0, CR 1454<br>25.331 v5.0.0, CR 1456           Test specifications         # 25.331 v5.0.0, CR 1456   |  |  |  |  |  |  |  |
| Other comments:               | O&M Specifications  |  |  |  |  |  |  |  |

## 8.6.7.2 Filter coefficient

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| Consequences if and approved: | It remains unclear when a UE is allowed to reject a MEASUREMENT CONTROL message   |
| Clauses affected:             | § 8.6.7.2   |
| Other specs                   | Conter core specifications <b>#</b> 25.331 v3.10.0, CR 1454<br>25.331 v4.4.0, CR 1455   |
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|     | # 8<br>#                                 | <ul> <li><b>8.3.7.1</b>, <b>8.3.7.3</b>, <b>8.3.7.8</b>, <b>8.3.11</b></li> <li><b>Cher core specifications</b></li> <li><b>Test specifications</b></li> <li><b>O&amp;M Specifications</b></li> </ul> | #         8.3.7.1, 8.3.7.3, 8.3.7.8, 8.3.11.1, 8.           #         Other core specifications           #         Test specifications           O&M Specifications |  |  |  |

#### How to create CRs using this form:

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

- 1) Fill out the above form. The symbols above marked **#** contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <u>ftp://ftp.3gpp.org/specs/</u> For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

## 8.3.7 Inter-RAT handover from UTRAN

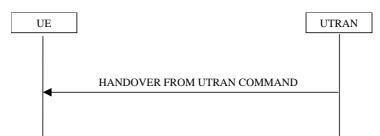


Figure 8.3.7-1: Inter-RAT handover from UTRAN, successful case

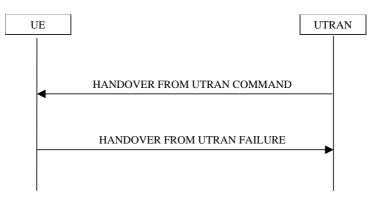


Figure 8.3.7-2: Inter-RAT handover from UTRAN, failure case

## 8.3.7.1 General

The purpose of the inter-RAT handover procedure is to, under the control of the network, transfer a connection between the UE and UTRAN to another radio access technology (e.g. GSM). This procedure may be used in CELL\_DCH state. This procedure may be used when no RABs are established or when the established RABs are only from CS domain or when the established RABs are from both CS and PS domains.

NOTE: This procedure is applicable to CS domain service.

## 8.3.7.2 Initiation

The procedure is initiated when UTRAN orders a UE in CELL\_DCH state, to make a handover to a radio access technology other than UTRAN, e.g. GSM.

To initiate the procedure, UTRAN sends a HANDOVER FROM UTRAN COMMAND message.

## 8.3.7.3 Reception of a HANDOVER FROM UTRAN COMMAND message by the UE

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

The UE shall:

1> establish the connection to the target radio access technology, by using the contents of the IE "Inter-RAT message". This IE contains a message specified in another standard, as indicated by the IE "System type", and carries information about the candidate/ target cell identifier(s) and radio parameters relevant for the target radio access technology. The correspondence between the value of the IE "System type", the standard to apply and the message contained within IE "Inter RAT message" is shown in the following:

| Value of the<br>IE "System<br>type" | Standard to apply  | Inter RAT Message |
|-------------------------------------|--|-------------------|
| GSM                                 | GSM TS 04.18, version 8.5.0 or later                                       | HANDOVER COMMAND  |
| cdma2000                            | TIA/EIA/IS-2000 or later, TIA/EIA/IS-833 or later, TIA/EIQ/IS-834 or later |                   |

- 1> if the IE "System type" has the value "GSM":
  - 2> if the IE "Frequency band" has the value "GSM /DCS 1800 band used":

3> set the BAND\_INDICATOR [45] to "ARFCN indicates 1800 band".

2> if the IE "Frequency band" has the value " GSM /PCS 1900 band used":

3> set the BAND\_INDICATOR [45] to "ARFCN indicates 1900 band".

- 1> apply the "Inter RAT Message" according to the "standard to apply" in the table above.
- 1> if the IE "RAB information List" is included in the HANDOVER FROM UTRAN COMMAND message

2> if the IE "RAB information List" includes one IE "RAB Info" with the IE "CN domain Identity" set to "CS domain":

- 1> in case one or more IEs "RAB info" is included in the HANDOVER FROM UTRAN COMMAND message:
  - <u>32</u>> connect upper layer entities corresponding to indicated <u>CS domain RABs</u> to the radio resources indicated in the inter-RAT message.
- NOTE: In this version of the specification the maximum number of CS RABs which may be included in the IE "RAB information List" is limited to 1.-
- NOTE: Requirements concerning the establishment of the radio connection towards the other radio access technology and the signalling procedure are outside the scope of this specification.

# 8.3.7.8 Unsupported configuration in HANDOVER FROM UTRAN COMMAND message

If

- -\_\_\_\_-the UTRAN instructs the UE to perform a non-supported handover scenario, or
- the UTRAN instructs the UE, e.g. multiple RAB or to use a non-supported configuration, or
- the IE "RAB information List" is included in the HANDOVER FROM UTRAN COMMAND message and this IE does not include any IE "RAB Info" with the IE "CN domain Identity" set to "CS domain",

-the UE shall:

- 1> transmit a HANDOVER FROM UTRAN FAILURE message, setting the information elements as specified below:
  - 2> include the IE "RRC transaction identifier"; and
  - 2> set it to the value of "RRC transaction identifier" in the entry for the HANDOVER FROM UTRAN COMMAND message in the table "Accepted transactions" in the variable TRANSACTIONS; and
  - 2> clear that entry;
  - 2> set the IE "Inter-RAT handover failure" to "configuration unacceptable";
  - 2> when the HANDOVER FROM UTRAN FAILURE message has been submitted to lower layers for transmission:
    - 3> resume normal operation as if the invalid HANDOVER FROM UTRAN COMMAND message has not been received;
    - 3> and the procedure ends.

## 8.3.11 Inter-RAT cell change order from UTRAN

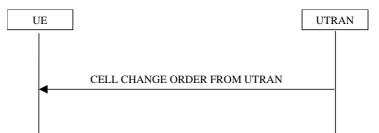


Figure 8.3.11-1: Inter-RAT cell change order from UTRAN

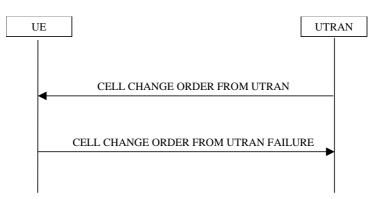


Figure 8.3.11-2: Inter-RAT cell change order from UTRAN, failure case

#### 8.3.11.1 General

The purpose of the inter-RAT cell change order procedure is to transfer, under the control of the network, a connection between the UE and UTRAN to another radio access technology (e.g. GSM). This procedure may be used in CELL\_DCH and CELL\_FACH state. This procedure may be used when no RABs are established or when the established RABs are only from PS domain.

NOTE: This procedure is applicable for services in the PS domain.

#### 8.3.11.2 Initiation

The procedure is initiated when UTRAN orders a UE in CELL\_DCH or CELL\_FACH state, to make a cell change to a radio access technology other than UTRAN, e.g. GSM.

To initiate the procedure, UTRAN sends a CELL CHANGE ORDER FROM UTRAN message.

## 8.3.11.3 Reception of an CELL CHANGE ORDER FROM UTRAN message by the UE

The UE shall be able to receive a CELL CHANGE ORDER FROM UTRAN message and perform a cell change order to another RAT, even if no prior UE measurements have been performed on the target cell.

The UE shall:

- 1> start timer T309; and
- 1> establish the connection to the other radio access technology, as specified within IE "Target cell description". This IE specifies the target cell identity, in accordance with the specifications for that other RAT. In case the target cell is a GSM/ GPRS cell, IE "Target cell description" may also include IE "NC mode", which specifies the cell selection mode to be applied in the target cell; and

1> if IE "NC mode" is not included in the CELL CHANGE ORDER FROM UTRAN:

2> retrieve it from the target cell as specified in [43];

2> act upon IE "NC mode" as specified in [43].

1> if <u>the one or more IEs "RAB info" "RAB Information List" is are</u> included in the CELL CHANGE ORDER FROM UTRAN message:

2> connect the upper layer entities corresponding to indicated RABs to the radio resources offered by the target RATignore the contents of the IE "RAB Information List".

NOTE: Requirements concerning the establishment of the radio connection towards the other radio access technology and the signalling procedure are outside the scope of this specification. In case of GSM/GPRS proceed according to the procedure Network control cell reselection procedure as specified in [44].

#### 8.3.11.4 Successful completion of the cell change order

The UE regards the procedure as completed when it has received a successful response from the target RAT, e.g. in case of GSM when it received the response to a (PACKET) CHANNEL REQUEST in the new cell.

Upon successful completion of the cell change order, the UE shall:

1> stop timer T309;

1> clear or set variables upon leaving UTRA RRC connected mode as specified in subclause 13.4.

Upon indication of the UE having successfully completed the cell change order, UTRAN should:

- 1> release the radio connection; and
- 1> remove all context information for the concerned UE.

NOTE: The release of the UMTS radio resources is initiated from another RAT.

#### 8.3.11.5 Expiry of timer T309 or UE fails to complete requested cell change order

- If:
- timer T309 expires prior to the successful establishment of a connection to the target RAT; or
- if the establishment of the connection to the other RAT failed due to other reasons e.g. (random) access failure, rejection due to lack of resources:

the UE shall:

- 1> if it received the CELL CHANGE ORDER FROM UTRAN message in state CELL\_DCH:
  - 2> revert back to the UTRA configuration;
  - 2> establish the UTRA physical channel(s) used at the time for reception of CELL CHANGE ORDER FROM UTRAN;
  - 2> if the UE does not succeed in establishing the UTRA physical channel(s):
    - 3> perform a cell update procedure according to subclause 8.3.1 with cause "Radio link failure";
    - 3> when the cell update procedure has completed successfully:

4> proceed as below.

- 2> transmit the CELL CHANGE ORDER FROM UTRAN FAILURE message setting the information elements as specified below:
  - 3> include the IE "RRC transaction identifier"; and
  - 3> set it to the value of "RRC transaction identifier" in the entry for the received message in the table "Accepted transactions" in the variable TRANSACTIONS; and
  - 3> clear that entry;

- 3> set the IE "Inter-RAT change failure" to "physical channel failure".
- 2> When the CELL CHANGE ORDER FROM UTRAN FAILURE message has been submitted to lower layer for transmission, the procedure ends.
- 1> if the UE receives the CELL CHANGE ORDER FROM UTRAN message in CELL\_FACH state:
  - 2> revert to the cell it was camped on at the reception of the CELL CHANGE ORDER FROM UTRAN message;
  - 2> if the UE is unable to return to this cell:
    - 3> select a suitable UTRA cell according to [4];
    - 3> initiate the cell update procedure according to subclause 8.3.1 using the cause "cell re-selection";
    - 3> when the cell update procedure completed successfully:

4> proceed as below.

- 2> transmit the CELL CHANGE ORDER FROM UTRAN FAILURE message setting the information elements as specified below:
  - 3> include the IE "RRC transaction identifier"; and
  - 3> set it to the value of "RRC transaction identifier" in the entry for the CELL CHANGE ORDER FROM UTRAN message in the table "Accepted transactions" in the variable TRANSACTIONS; and
  - 3> clear that entry;
  - 3> set the IE "Inter-RAT change failure" to "physical channel failure".
- 2> When the CELL CHANGE ORDER FROM UTRAN FAILURE message has been submitted to lower layer for transmission:

3> the procedure ends.

# 8.3.11.6 Unsupported configuration in CELL CHANGE ORDER FROM UTRAN message

If the UTRAN instructs the UE to perform a non-supported cell change order scenario e.g. multiple RAB or to use a non-supported configuration, the UE shall:

- 1> transmit a CELL CHANGE ORDER FROM UTRAN FAILURE message, setting the information elements as specified below:
  - 2> include the IE "RRC transaction identifier"; and
  - 2> set it to the value of "RRC transaction identifier" in the entry for the received message in the table "Accepted transactions" in the variable TRANSACTIONS; and
  - 2> clear that entry;
  - 2> set the IE "Inter-RAT change failure" to "configuration unacceptable";
  - 2> when the CELL CHANGE ORDER FROM UTRAN FAILURE message has been submitted to lower layers for transmission:
    - 3> resume normal operation as if the CELL CHANGE ORDER FROM UTRAN message has not been received;
    - 3> and the procedure ends.

## 10.2.5 CELL CHANGE ORDER FROM UTRAN

This message is used to order a cell change from UTRA to another radio access technology, e.g., GSM.

#### RLC-SAP: AM

Logical channel: DCCH

Direction: UTRAN→UE

| Information Element/Group<br>name  | Need | Multi                                     | Type and reference  | Semantics description   |
|------------------------------------|------|---|---|---|
| Message Type                       | MP   |   | Message   |   |
|                                    |      |   | Туре  |   |
| UE information elements            |      |   |   |   |
| RRC transaction identifier         | MP   |   | RRC<br>transaction<br>identifier                                |   |
|                                    |      |   | 10.3.3.36   |   |
| Integrity check info               | СН   |   | Integrity<br>check info<br>10.3.3.16                            |   |
| Activation time                    | MD   |   | Activation<br>time 10.3.3.1                                     | Default value is "now"  |
| <b>RB</b> Information elements     |      |   |   |   |
| RAB information list               | OP   | 1 to<br><maxrabs<br>etup&gt;</maxrabs<br> |   | For each RAB to be handed<br>over This IE should not be<br>included in this version of the<br>protocol. |
| >RAB info                          | MP   |   | RAB info<br>10.3.4.8  |   |
| Other information elements         |      |   |   |   |
| Target cell description            | MP   |   |   |   |
| >CHOICE Radio Access<br>Technology | MP   |   |   | Two spare values are needed.  |
| >>GSM                              |      |   |   |   |
| >>>BSIC                            | MP   |   | BSIC<br>10.3.8.2  |   |
| >>>Band Indicator                  | MP   |   | Enumerated<br>(DCS 1800<br>band used,<br>PCS 1900<br>band used) | Indicates how to interpret the<br>BCCH ARFCN  |
| >>>BCCH ARFCN                      | MP   |   | Integer<br>(01023)  | [45]  |
| >>>NC mode                         | OP   |   | Bit string(3)   | [43]  |
| >>IS-2000                          |      |   |   |   |

# 11.2 PDU definitions

```
...
```

```
-- CELL CHANGE ORDER FROM UTRAN
_ _
CellChangeOrderFromUTRAN ::= CHOICE {
                                        SEQUENCE {
    r3
        cellChangeOrderFromUTRAN-IEs
                                              CellChangeOrderFromUTRAN-r3-IEs,
        nonCriticalExtensions
                                           SEQUENCE {} OPTIONAL
    },
    later-than-r3
                                       SEQUENCE {
        rrc-TransactionIdentifier
                                           RRC-TransactionIdentifier,
                                            SEQUENCE { }
        criticalExtensions
    }
}
CellChangeOrderFromUTRAN-r3-IEs ::= SEQUENCE {
    -- User equipment IEs
        rrc-TransactionIdentifier
                                          RRC-TransactionIdentifier,
         -- dummy is not used in this version of the specification, it should
         -- not be sent and if received it should be ignored.
                                                                                  OPTIONAL,
        dummy
                                            IntegrityProtectionModeInfo
        activationTime
                                           ActivationTime
                                                                                   OPTIONAL,
        -- the IE rab-InformationList is not used in this version of the specification, it should

-- not be sent and if received it should be ignored. The IE may be used in a later

-- version of the protocol and hence it is not changed into a dummy

who informationList
        rab-InformationList RAB-InformationList
interRAT-TargetCellDescription InterRAT-TargetCellDescription
                                                                                    OPTIONAL,
}
```

| CHANGE REQUEST  |          |  |  |  |  |  |   |   |   |
|---|----------|--|--|--|--|--|---|---|---|
| ¥   | 25       | .331   | CR 1458  | жr   | ev   | <b>r1</b> <sup>#</sup>   | Current vers  | ion: <mark>4</mark>   | .4.0 <sup>ℋ</sup>   |
| For <b>HELP</b> on using this form, see bottom of this page or look at the pop-up text over the <b>#</b> symbols.   |          |  |  |  |  |  |   |   |   |
| Proposed change affects: # (U)SIM ME/UE X Radio Access Network X Core Network   |          |  |  |  |  |  |   |   |   |
| Title: ೫  | Co       | rrection   | n to 3G to 2G I  | nter-RAT h   | ando   | ver for m  | <mark>ulti-domain R</mark>  | ABs   |   |
| Source: ೫   | TS       | G-RAN  | WG2  |  |  |  |   |   |   |
| Work item code: %   | TE       |  |  |  |  |  | Date: ೫   | 13 <sup>th</sup> - I  | May 2002  |
| Category: ₩   | Deta     | F (corr<br>A (corr<br>B (add<br>C (fund<br>D (edia<br>iled exp | the following cate<br>rection)<br>responds to a co<br>lition of feature),<br>ctional modificatio<br>corial modificatio<br>planations of the<br>3GPP <u>TR 21.900</u> | orrection in a<br>ion of featur<br>n)<br>above categ   | e)   |  | 2   |   | wing releases:<br>'hase 2)<br>e 1996)<br>e 1997)<br>e 1998)<br>e 1999)<br>e 4)              |
| Reason for change: # Unclear specification of how the multi-domains RABs are handled in the Inter-  |          |  |  |  |  |  |   |   |   |
| Reason for change   | <b>.</b> |  | Handover from  |  |  |  |   | nanaico   |   |
| Summary of chang  | ge:      | case<br>wher<br>COM<br>It is c<br>only<br>also<br>FRO          | that no RABs<br>both CS and<br>IMAND messa<br>clarified also the<br>when no RABs<br>clarified that th<br>M UTRAN mes<br>RABs and the S                               | are establis<br>PS RABs a<br>ge only the<br>at the Cell<br>are establ<br>e PS RABs<br>ssage assu | shed<br>are es<br>CS F<br>Chan<br>lished<br>s are<br>iming | or when<br>tablished<br>RABs to l<br>ge Orden<br>l or wher<br>not listed<br>that the | only CS RAB<br>d. In the HANI<br>be handed ov<br>from UTRAN<br>only PS RAB<br>I in the CELL<br>UE will do the | s are es<br>DOVER<br>er are in<br>N proceo<br>3s are e<br>CHANC<br>e mappin | FROM UTRAN<br>Included.<br>dure is used<br>stablished. It is<br>GE ORDER<br>ing between the |
| Revision 1 of the CR adds a comment to ASN.1 to ensure that there is no<br>misalignement between the tabular and the ASN.1. Since the IE "rab-<br>InformationList" may be used in a later protocol version, it is proposed that it<br>should not be changed into a dummy The addition is highlighted in yellow. |          |  |  |  |  |  | 'rab-<br>osed that it   |   |   |
| Consequences if not approved:   | ж        | The  | UE behavior is   | not clearly  | spec   | ified  |   |   |   |
| Clauses affected:   | ж        | 8.3.7  | . <mark>1, 8.3.7.3, 8.3</mark>   | . <mark>7.8, 8.3.1</mark> 1  | <mark>1.1, 8</mark>  | <mark>.3.11.3, 8</mark>  | 3 <mark>.3.11.4, 8.3.1</mark>   | <mark>1.6, 10</mark>  | .2.5, 11.2  |
| Other specs   | ж        | Ot   | ther core speci  | fications  | ж  |  | v3.10.0, CR   |   |   |
| affected:   |          |  | est specification<br>&M Specification  |  |  | 25.331   | v5.0.0, CR 14   | 459r1   |   |
| Other comments:   | ж        |  |  |  |  |  |   |   |   |

#### How to create CRs using this form:

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

- 1) Fill out the above form. The symbols above marked # contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <u>ftp://ftp.3gpp.org/specs/</u> For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

## 8.3.7 Inter-RAT handover from UTRAN

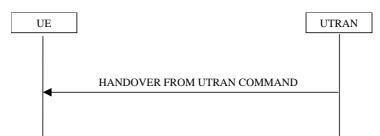


Figure 8.3.7-1: Inter-RAT handover from UTRAN, successful case

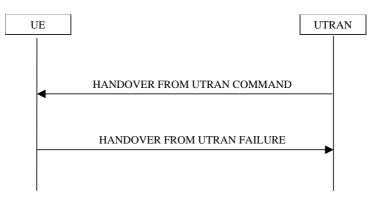


Figure 8.3.7-2: Inter-RAT handover from UTRAN, failure case

## 8.3.7.1 General

The purpose of the inter-RAT handover procedure is to, under the control of the network, transfer a connection between the UE and UTRAN to another radio access technology (e.g. GSM). This procedure may be used in CELL\_DCH state. This procedure may be used when no RABs are established or when the established RABs are only from CS domain or when the established RABs are from both CS and PS domains.

NOTE: This procedure is applicable to CS domain service.

## 8.3.7.2 Initiation

The procedure is initiated when UTRAN orders a UE in CELL\_DCH state, to make a handover to a radio access technology other than UTRAN, e.g. GSM.

To initiate the procedure, UTRAN sends a HANDOVER FROM UTRAN COMMAND message.

## 8.3.7.3 Reception of a HANDOVER FROM UTRAN COMMAND message by the UE

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

The UE shall:

1> establish the connection to the target radio access technology, by using the contents of the IE "Inter-RAT message". This IE contains a message specified in another standard, as indicated by the IE "System type", and carries information about the candidate/ target cell identifier(s) and radio parameters relevant for the target radio access technology. The correspondence between the value of the IE "System type", the standard to apply and the message contained within IE "Inter RAT message" is shown in the following:

| Value of the<br>IE "System<br>type" | Standard to apply  | Inter RAT Message |
|-------------------------------------|--|-------------------|
| GSM                                 | GSM TS 04.18, version 8.5.0 or later                                       | HANDOVER COMMAND  |
| cdma2000                            | TIA/EIA/IS-2000 or later, TIA/EIA/IS-833 or later, TIA/EIQ/IS-834 or later |                   |

- 1> if the IE "System type" has the value "GSM":
  - 2> if the IE "Frequency band" has the value "GSM /DCS 1800 band used":

3> set the BAND\_INDICATOR [45] to "ARFCN indicates 1800 band".

2> if the IE "Frequency band" has the value " GSM /PCS 1900 band used":

3> set the BAND\_INDICATOR [45] to "ARFCN indicates 1900 band".

1> apply the "Inter RAT Message" according to the "standard to apply" in the table above.

1> if the IE "RAB information List" is included in the HANDOVER FROM UTRAN COMMAND message

2> if the IE "RAB information List" includes one IE "RAB Info" with the IE "CN domain Identity" set to "CS domain":

1> in case one or more IEs "RAB info" is included in the HANDOVER FROM UTRAN COMMAND message:

<u>32</u>> connect upper layer entities corresponding to indicated <u>CS domain RABs</u> to the radio resources indicated in the inter-RAT message.

NOTE: In this version of the specification the maximum number of CS RABs which may be included in the IE "RAB information List" is limited to 1.

NOTE: Requirements concerning the establishment of the radio connection towards the other radio access technology and the signalling procedure are outside the scope of this specification.

# 8.3.7.8 Unsupported configuration in HANDOVER FROM UTRAN COMMAND message

If

- the UTRAN instructs the UE to perform a non-supported handover scenario, ore.g. multiple RAB or
- the UTRAN instructs the UE to use a non-supported configuration, or
- the IE "RAB information List" is included in the HANDOVER FROM UTRAN COMMAND message and this IE does not include any IE "RAB Info" with the IE "CN domain Identity" set to "CS domain",

the UE shall:

- 1> transmit a HANDOVER FROM UTRAN FAILURE message, setting the information elements as specified below:
  - 2> include the IE "RRC transaction identifier"; and
  - 2> set it to the value of "RRC transaction identifier" in the entry for the HANDOVER FROM UTRAN COMMAND message in the table "Accepted transactions" in the variable TRANSACTIONS; and
  - 2> clear that entry;
  - 2> set the IE "Inter-RAT handover failure" to "configuration unacceptable";
  - 2> when the HANDOVER FROM UTRAN FAILURE message has been submitted to lower layers for transmission:
    - 3> resume normal operation as if the invalid HANDOVER FROM UTRAN COMMAND message has not been received;
    - 3> and the procedure ends.

## 8.3.11 Inter-RAT cell change order from UTRAN



Figure 8.3.11-1: Inter-RAT cell change order from UTRAN

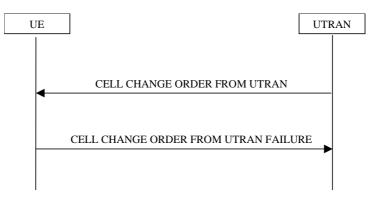


Figure 8.3.11-2: Inter-RAT cell change order from UTRAN, failure case

#### 8.3.11.1 General

The purpose of the inter-RAT cell change order procedure is to transfer, under the control of the network, a connection between the UE and UTRAN to another radio access technology (e.g. GSM). This procedure may be used in CELL\_DCH and CELL\_FACH state. This procedure may be used when no RABs are established or when the established RABs are only from PS domain.

NOTE: This procedure is applicable for services in the PS domain.

#### 8.3.11.2 Initiation

The procedure is initiated when UTRAN orders a UE in CELL\_DCH or CELL\_FACH state, to make a cell change to a radio access technology other than UTRAN, e.g. GSM.

To initiate the procedure, UTRAN sends a CELL CHANGE ORDER FROM UTRAN message.

#### 8.3.11.3 Reception of an CELL CHANGE ORDER FROM UTRAN message by the UE

The UE shall be able to receive a CELL CHANGE ORDER FROM UTRAN message and perform a cell change order to another RAT, even if no prior UE measurements have been performed on the target cell.

The UE shall:

1> start timer T309; and

1> establish the connection to the other radio access technology, as specified within IE "Target cell description". This IE specifies the target cell identity, in accordance with the specifications for that other RAT. In case the target cell is a GSM/ GPRS cell, IE "Target cell description" may also include IE "NC mode", which specifies the cell selection mode to be applied in the target cell; and

1> if IE "NC mode" is not included in the CELL CHANGE ORDER FROM UTRAN:

- 2> retrieve it from the target cell as specified in [43];
- 2> act upon IE "NC mode" as specified in [43].
- 1> if the IE "RAB Information List" is one or more IEs "RAB info" are included in the CELL CHANGE ORDER FROM UTRAN message:
  - 2> ignore the contents of the IE "RAB Information List".connect the upper layer entities corresponding to indicated RABs to the radio resources offered by the target RAT.
- NOTE: Requirements concerning the establishment of the radio connection towards the other radio access technology and the signalling procedure are outside the scope of this specification. In case of GSM/GPRS proceed according to the procedure Network control cell reselection procedure as specified in [44].

#### 8.3.11.4 Successful completion of the cell change order

The UE regards the procedure as completed when it has received a successful response from the target RAT, e.g. in case of GSM when it received the response to a (PACKET) CHANNEL REQUEST in the new cell.

Upon successful completion of the cell change order, the UE shall:

1> stop timer T309;

1> clear or set variables upon leaving UTRA RRC connected mode as specified in subclause 13.4.

Upon indication of the UE having successfully completed the cell change order, UTRAN should:

1> release the radio connection; and

1> remove all context information for the concerned UE.

NOTE: The release of the UMTS radio resources is initiated from another RAT.

#### 8.3.11.5 Expiry of timer T309 or UE fails to complete requested cell change order

If:

- timer T309 expires prior to the successful establishment of a connection to the target RAT; or
- if the establishment of the connection to the other RAT failed due to other reasons e.g. (random) access failure, rejection due to lack of resources:

the UE shall:

- 1> if it received the CELL CHANGE ORDER FROM UTRAN message in state CELL\_DCH:
  - 2> revert back to the UTRA configuration;
  - 2> establish the UTRA physical channel(s) used at the time for reception of CELL CHANGE ORDER FROM UTRAN;
  - 2> if the UE does not succeed in establishing the UTRA physical channel(s):
    - 3> perform a cell update procedure according to subclause 8.3.1 with cause "Radio link failure";
    - 3> when the cell update procedure has completed successfully:
      - 4> proceed as below.
  - 2> transmit the CELL CHANGE ORDER FROM UTRAN FAILURE message setting the information elements as specified below:
    - 3> include the IE "RRC transaction identifier"; and
    - 3> set it to the value of "RRC transaction identifier" in the entry for the received message in the table "Accepted transactions" in the variable TRANSACTIONS; and

3> clear that entry;

- 3> set the IE "Inter-RAT change failure" to "physical channel failure".
- 2> When the CELL CHANGE ORDER FROM UTRAN FAILURE message has been submitted to lower layer for transmission, the procedure ends.
- 1> if the UE receives the CELL CHANGE ORDER FROM UTRAN message in CELL\_FACH state:
  - 2> revert to the cell it was camped on at the reception of the CELL CHANGE ORDER FROM UTRAN message;
  - 2> if the UE is unable to return to this cell:
    - 3> select a suitable UTRA cell according to [4];
    - 3> initiate the cell update procedure according to subclause 8.3.1 using the cause "cell re-selection";
    - 3> when the cell update procedure completed successfully:
      - 4> proceed as below.
  - 2> transmit the CELL CHANGE ORDER FROM UTRAN FAILURE message setting the information elements as specified below:
    - 3> include the IE "RRC transaction identifier"; and
    - 3> set it to the value of "RRC transaction identifier" in the entry for the CELL CHANGE ORDER FROM UTRAN message in the table "Accepted transactions" in the variable TRANSACTIONS; and
    - 3> clear that entry;
    - 3> set the IE "Inter-RAT change failure" to "physical channel failure".
  - 2> When the CELL CHANGE ORDER FROM UTRAN FAILURE message has been submitted to lower layer for transmission:
    - 3> the procedure ends.

# 8.3.11.6 Unsupported configuration in CELL CHANGE ORDER FROM UTRAN message

- If the UTRAN instructs the UE to perform a non-supported cell change order scenario e.g. multiple RAB-or to use a non-supported configuration, the UE shall:
  - 1> transmit a CELL CHANGE ORDER FROM UTRAN FAILURE message, setting the information elements as specified below:
    - 2> include the IE "RRC transaction identifier"; and
    - 2> set it to the value of "RRC transaction identifier" in the entry for the received message in the table "Accepted transactions" in the variable TRANSACTIONS; and
    - 2> clear that entry;
    - 2> set the IE "Inter-RAT change failure" to "configuration unacceptable";
    - 2> when the CELL CHANGE ORDER FROM UTRAN FAILURE message has been submitted to lower layers for transmission:
      - 3> resume normal operation as if the CELL CHANGE ORDER FROM UTRAN message has not been received;
      - 3> and the procedure ends.

## 10.2.5 CELL CHANGE ORDER FROM UTRAN

This message is used to order a cell change from UTRA to another radio access technology, e.g., GSM.

#### RLC-SAP: AM

Logical channel: DCCH

Direction: UTRAN→UE

| Information Element/Group<br>name  | Need | Multi                                     | Type and reference  | Semantics description  |
|------------------------------------|------|---|---|--|
| Message Type                       | MP   |   | Message   |  |
|                                    |      |   | Туре  |  |
| UE information elements            |      |   |   |  |
| RRC transaction identifier         | MP   |   | RRC<br>transaction<br>identifier<br>10.3.3.36                   |  |
| Integrity check info               | СН   |   | Integrity<br>check info<br>10.3.3.16                            |  |
| Activation time                    | MD   |   | Activation<br>time 10.3.3.1                                     | Default value is "now"   |
| <b>RB Information elements</b>     |      |   |   |  |
| RAB information list               | OP   | 1 to<br><maxrabs<br>etup&gt;</maxrabs<br> |   | For each RAB to be handed<br>overThis IE should not be<br>included in this version of the<br>protocol. |
| >RAB info                          | MP   |   | RAB info<br>10.3.4.8  |  |
| Other information elements         |      |   |   |  |
| Target cell description            | MP   |   |   |  |
| >CHOICE Radio Access<br>Technology | MP   |   |   | Two spare values are needed.   |
| >>GSM                              |      |   |   |  |
| >>>BSIC                            | MP   |   | BSIC<br>10.3.8.2  |  |
| >>>Band Indicator                  | MP   |   | Enumerated<br>(DCS 1800<br>band used,<br>PCS 1900<br>band used) | Indicates how to interpret the<br>BCCH ARFCN   |
| >>>BCCH ARFCN                      | MP   |   | Integer<br>(01023)  | [45]   |
| >>>NC mode                         | OP   |   | Bit string(3)   | [43]   |
| >>IS-2000                          |      |   |   |  |

# 11.2 PDU definitions

```
•••
```

```
-- CELL CHANGE ORDER FROM UTRAN
_ _
CellChangeOrderFromUTRAN ::= CHOICE {
                                        SEQUENCE {
    r3
        cellChangeOrderFromUTRAN-IEs
                                              CellChangeOrderFromUTRAN-r3-IEs,
        nonCriticalExtensions
                                           SEQUENCE {} OPTIONAL
    },
    later-than-r3
                                       SEQUENCE {
        rrc-TransactionIdentifier
                                           RRC-TransactionIdentifier,
                                            SEQUENCE { }
        criticalExtensions
    }
}
CellChangeOrderFromUTRAN-r3-IEs ::= SEQUENCE {
    -- User equipment IEs
        rrc-TransactionIdentifier
                                          RRC-TransactionIdentifier,
         -- dummy is not used in this version of the specification, it should
         -- not be sent and if received it should be ignored.
                                                                                  OPTIONAL,
        dummy
                                            IntegrityProtectionModeInfo
        activationTime
                                           ActivationTime
                                                                                   OPTIONAL,
        -- the IE rab-InformationList is not used in this version of the specification, it should

-- not be sent and if received it should be ignored. The IE may be used in a later

-- version of the protocol and hence it is not changed into a dummy

who informationList
        rab-InformationList RAB-InformationList
interRAT-TargetCellDescription InterRAT-TargetCellDescription
                                                                                    OPTIONAL,
}
```

| CR-Form-v5.1  |      |  |                                       |             |  |   |                                |                    |           |        |
|---|------|--|---------------------------------------|-------------|--|---|--------------------------------|--------------------|-----------|--------|
| æ   | 25   | .331   | CR 1459                               | ж <b>г</b>  | ev   | <b>r1</b> <sup>#</sup>  | Current vers                   | ion: 5             | 5.0.0     | ж      |
| For <b>HELP</b> on using this form, see bottom of this page or look at the pop-up text over the <b>#</b> symbols.   |      |  |                                       |             |  |   |                                |                    |           |        |
| Proposed change affects: # (U)SIM ME/UE X Radio Access Network X Core Network   |      |  |                                       |             |  |   |                                |                    |           |        |
| Title: ೫  | Co   | rrection   | n to 3G to 2G Ir                      | nter-RAT h  | ando   | ver for m   | ulti-domain R                  | ABs                |           |        |
| Source: भ   | TS   | G-RAN  | WG2                                   |             |  |   |                                |                    |           |        |
| Work item code: भ   | TE   | I  |                                       |             |  |   | Date: ೫                        | 13 <sup>th</sup> - | May 200   | )2     |
| Category: ₩   | Deta | A       Release: %       REL-5         Ise one of the following categories:       Use one of the following releases:       2         Image: F (correction)       2       (GSM Phase 2)         A (corresponds to a correction in an earlier release)       R96       (Release 1996)         B (addition of feature),       R97       (Release 1997)         C (functional modification of feature)       R98       (Release 1998)         D (editorial modification)       R99       (Release 1999)         Detailed explanations of the above categories can       REL-4       (Release 4)         e found in 3GPP TR 21.900.       REL-5       (Release 5) |                                       |             |  |   |                                |                    |           | ases:  |
| Reason for change: # Unclear specification of how the multi-domains RABs are handled in the Inter-  |      |  |                                       |             |  |   |                                |                    |           |        |
| Reason for change   | е: ж |  | Handover from                         |             |  |   | ins RABs are                   | handle             | d in the  | Inter- |
| Summary of change: #<br>It is clarified the Inter-RAT Handover from UTRAN procedure may be u<br>case that no RABs are established or when only CS RABs are establish<br>when both CS and PS RABs are established. In the HANDOVER FROM<br>COMMAND message only the CS RABs to be handed over are included<br>It is clarified also that the Cell Change Order from UTRAN procedure is<br>only when no RABs are established or when only PS RABs are establis<br>also clarified that the PS RABs are not listed in the CELL CHANGE OR<br>FROM UTRAN message assuming that the UE will do the mapping bet<br>PS RABs and the SAPI in the GSM/GPRS and therefore re-establish th<br>contexts.<br>Revision 1 of the CR adds a comment to ASN.1 to ensure that there is<br>misalignement between the tabular and the ASN.1. Since the IE "rab-<br>InformationList" may be used in a later protocol version, it is proposed t<br>should not be changed into a dummy The addition is highlighted in yells |      |  |                                       |             | stablishe<br>R FROM<br>ncluded<br>dure is u<br>establish<br>GE ORD<br>ing betw<br>blish the<br>rere is no<br>"rab-<br>posed th | ed or<br>UTRAN<br>used<br>led. It is<br>DER<br>een the<br>PDP<br>o<br>at it |                                |                    |           |        |
| Consequences if not approved:   | ж    | The  | UE behavior is                        | not clearly | spec   | ified   |                                |                    |           |        |
|   |      | 0.05   |                                       | 70.00       |  | 0.44.0  |                                | 4.0.15             | 0 5 4 4   |        |
| Clauses affected:   | ж    | 8.3.7  | <mark>.1, 8.3.7.3, 8.3</mark> .       | 7.8, 8.3.1  | 1.1, 8   | .3.11.3, 8  | 3.3.11.4, 8.3.1                | 1.6, 10            | 0.2.5, 11 | .2     |
| Other specs   | Ħ    |  | ther core specif                      |             | Ħ  |   | v3.10.0, CR 2<br>v4.4.0, CR 14 |                    |           |        |
| affected:   |      |  | est specification<br>&M Specification |             |  |   |                                |                    |           |        |

#### Other comments: #

#### How to create CRs using this form:

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

- 1) Fill out the above form. The symbols above marked **#** contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <u>ftp://ftp.3gpp.org/specs/</u> For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

## 8.3.7 Inter-RAT handover from UTRAN

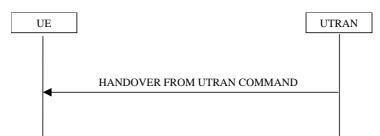


Figure 8.3.7-1: Inter-RAT handover from UTRAN, successful case

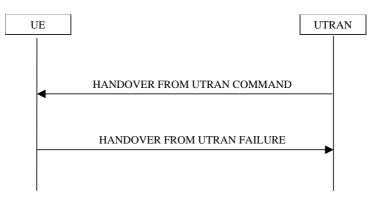


Figure 8.3.7-2: Inter-RAT handover from UTRAN, failure case

## 8.3.7.1 General

The purpose of the inter-RAT handover procedure is to, under the control of the network, transfer a connection between the UE and UTRAN to another radio access technology (e.g. GSM). This procedure may be used in CELL\_DCH state. This procedure may be used when no RABs are established or when the established RABs are only from CS domain or when the established RABs are from both CS and PS domains.

NOTE: This procedure is applicable to CS domain service.

## 8.3.7.2 Initiation

The procedure is initiated when UTRAN orders a UE in CELL\_DCH state, to make a handover to a radio access technology other than UTRAN, e.g. GSM.

To initiate the procedure, UTRAN sends a HANDOVER FROM UTRAN COMMAND message.

## 8.3.7.3 Reception of a HANDOVER FROM UTRAN COMMAND message by the UE

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

The UE shall:

1> establish the connection to the target radio access technology, by using the contents of the IE "Inter-RAT message". This IE contains a message specified in another standard, as indicated by the IE "System type", and carries information about the candidate/ target cell identifier(s) and radio parameters relevant for the target radio access technology. The correspondence between the value of the IE "System type", the standard to apply and the message contained within IE "Inter RAT message" is shown in the following:

| Value of the<br>IE "System<br>type" | Standard to apply  | Inter RAT Message |
|-------------------------------------|--|-------------------|
| GSM                                 | GSM TS 04.18, version 8.5.0 or later                                       | HANDOVER COMMAND  |
| cdma2000                            | TIA/EIA/IS-2000 or later, TIA/EIA/IS-833 or later, TIA/EIQ/IS-834 or later |                   |

- 1> if the IE "System type" has the value "GSM":
  - 2> if the IE "Frequency band" has the value "GSM /DCS 1800 band used":

3> set the BAND\_INDICATOR [45] to "ARFCN indicates 1800 band".

2> if the IE "Frequency band" has the value " GSM /PCS 1900 band used":

3> set the BAND\_INDICATOR [45] to "ARFCN indicates 1900 band".

1> apply the "Inter RAT Message" according to the "standard to apply" in the table above.

1> if the IE "RAB information List" is included in the HANDOVER FROM UTRAN COMMAND message

2> if the IE "RAB information List" includes one IE "RAB Info" with the IE "CN domain Identity" set to "CS domain":

1> in case one or more IEs "RAB info" is included in the HANDOVER FROM UTRAN COMMAND message:

<u>32</u>> connect upper layer entities corresponding to indicated <u>CS domain RABs</u> to the radio resources indicated in the inter-RAT message.

NOTE: In this version of the specification the maximum number of CS RABs which may be included in the IE "RAB information List" is limited to 1.

NOTE: Requirements concerning the establishment of the radio connection towards the other radio access technology and the signalling procedure are outside the scope of this specification.

# 8.3.7.8 Unsupported configuration in HANDOVER FROM UTRAN COMMAND message

If

- \_\_\_\_\_the UTRAN instructs the UE to perform a non-supported handover scenario, or
- the UTRAN instructs the UE -e.g. multiple RAB or to use a non-supported configuration, or
- the IE "RAB information List" is included in the HANDOVER FROM UTRAN COMMAND message and this IE does not include any IE "RAB Info" with the IE "CN domain Identity" set to "CS domain",

the UE shall:

- 1> transmit a HANDOVER FROM UTRAN FAILURE message, setting the information elements as specified below:
  - 2> include the IE "RRC transaction identifier"; and
  - 2> set it to the value of "RRC transaction identifier" in the entry for the HANDOVER FROM UTRAN COMMAND message in the table "Accepted transactions" in the variable TRANSACTIONS; and
  - 2> clear that entry;
  - 2> set the IE "Inter-RAT handover failure" to "configuration unacceptable";
  - 2> when the HANDOVER FROM UTRAN FAILURE message has been submitted to lower layers for transmission:
    - 3> resume normal operation as if the invalid HANDOVER FROM UTRAN COMMAND message has not been received;
    - 3> and the procedure ends.

## 8.3.11 Inter-RAT cell change order from UTRAN

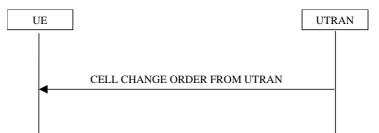


Figure 8.3.11-1: Inter-RAT cell change order from UTRAN

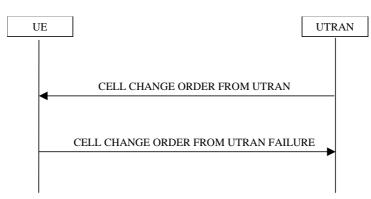


Figure 8.3.11-2: Inter-RAT cell change order from UTRAN, failure case

## 8.3.11.1 General

The purpose of the inter-RAT cell change order procedure is to transfer, under the control of the network, a connection between the UE and UTRAN to another radio access technology (e.g. GSM). This procedure may be used in CELL\_DCH and CELL\_FACH state. This procedure may be used when no RABs are established or when the established RABs are only from PS domain.

#### NOTE: This procedure is applicable for services in the PS domain.

## 8.3.11.2 Initiation

The procedure is initiated when UTRAN orders a UE in CELL\_DCH or CELL\_FACH state, to make a cell change to a radio access technology other than UTRAN, e.g. GSM.

To initiate the procedure, UTRAN sends a CELL CHANGE ORDER FROM UTRAN message.

## 8.3.11.3 Reception of an CELL CHANGE ORDER FROM UTRAN message by the UE

The UE shall be able to receive a CELL CHANGE ORDER FROM UTRAN message and perform a cell change order to another RAT, even if no prior UE measurements have been performed on the target cell.

The UE shall:

- 1> start timer T309; and
- 1> establish the connection to the other radio access technology, as specified within IE "Target cell description". This IE specifies the target cell identity, in accordance with the specifications for that other RAT. In case the target cell is a GSM/ GPRS cell, IE "Target cell description" may also include IE "NC mode", which specifies the cell selection mode to be applied in the target cell; and

1> if IE "NC mode" is not included in the CELL CHANGE ORDER FROM UTRAN:

2> retrieve it from the target cell as specified in [43];

2> act upon IE "NC mode" as specified in [43].

- 1> if the "RAB Information List" is one or more IEs "RAB info" are included in the CELL CHANGE ORDER FROM UTRAN message:
  - 2> ignore the contents of the IE "RAB Information List" connect the upper layer entities corresponding to indicated RABs to the radio resources offered by the target RAT.

NOTE: Requirements concerning the establishment of the radio connection towards the other radio access technology and the signalling procedure are outside the scope of this specification. In case of GSM/GPRS proceed according to the procedure Network control cell reselection procedure as specified in [44].

## 8.3.11.4 Successful completion of the cell change order

The UE regards the procedure as completed when it has received a successful response <u>from the target RAT, e.g. in case</u> of GSM when it received the response to a (PACKET) CHANNEL REQUEST in the new cell.

Upon successful completion of the cell change order, the UE shall:

1> stop timer T309;

1> clear or set variables upon leaving UTRA RRC connected mode as specified in subclause 13.4.

Upon indication of the UE having successfully completed the cell change order, UTRAN should:

1> release the radio connection; and

1> remove all context information for the concerned UE.

NOTE: The release of the UMTS radio resources is initiated from another RAT.

# 8.3.11.6 Unsupported configuration in CELL CHANGE ORDER FROM UTRAN message

- If the UTRAN instructs the UE to perform a non-supported cell change order scenario-e.g. multiple RAB or to use a non-supported configuration, the UE shall:
  - 1> transmit a CELL CHANGE ORDER FROM UTRAN FAILURE message, setting the information elements as specified below:
    - 2> include the IE "RRC transaction identifier"; and
    - 2> set it to the value of "RRC transaction identifier" in the entry for the received message in the table "Accepted transactions" in the variable TRANSACTIONS; and
    - 2> clear that entry;
    - 2> set the IE "Inter-RAT change failure" to "configuration unacceptable";
    - 2> when the CELL CHANGE ORDER FROM UTRAN FAILURE message has been submitted to lower layers for transmission:
      - 3> resume normal operation as if the CELL CHANGE ORDER FROM UTRAN message has not been received;
      - 3> and the procedure ends.

## 10.2.5 CELL CHANGE ORDER FROM UTRAN

This message is used to order a cell change from UTRA to another radio access technology, e.g., GSM.

#### RLC-SAP: AM

Logical channel: DCCH

Direction: UTRAN→UE

| Information Element/Group<br>name | Need | Multi   | Type and<br>reference | Semantics description                        |  |  |  |
|-----------------------------------|------|---|-----------------------|--|--|--|--|
| Message Type                      | MP   |   | Message               |  |  |  |  |
| 0 71                              |      |   | Туре                  |  |  |  |  |
| UE information elements           |      |   |                       |  |  |  |  |
| RRC transaction identifier        | MP   |   | RRC                   |  |  |  |  |
|                                   |      |   | transaction           |  |  |  |  |
|                                   |      |   | identifier            |  |  |  |  |
|                                   |      |   | 10.3.3.36             |  |  |  |  |
| Integrity check info              | СН   |   | Integrity             |  |  |  |  |
|                                   |      |   | check info            |  |  |  |  |
|                                   |      |   | 10.3.3.16             |  |  |  |  |
| Activation time                   | MD   |   | Activation            | Default value is "now"                       |  |  |  |
|                                   |      |   | time 10.3.3.1         |  |  |  |  |
| RB Information elements           |      |   |                       |  |  |  |  |
| RAB information list              | OP   | 1 to  |                       | For each RAB to be handed                    |  |  |  |
|                                   |      | <maxrabs< td=""><td></td><td>over This IE should not be</td></maxrabs<> |                       | over This IE should not be                   |  |  |  |
|                                   |      | etup>   |                       | included in this version of the              |  |  |  |
|                                   |      |   |                       | protocol.                                    |  |  |  |
| >RAB info                         | MP   |   | RAB info              |  |  |  |  |
| Other information elements        |      |   | 10.3.4.8              |  |  |  |  |
|                                   | MP   |   |                       |  |  |  |  |
| Target cell description           |      |   |                       | Two energy where energy and d                |  |  |  |
| >CHOICE Radio Access              | MP   |   |                       | Two spare values are needed.                 |  |  |  |
| Technology                        |      |   |                       |  |  |  |  |
| >>GSM<br>>>>BSIC                  | MP   |   | BSIC                  |  |  |  |  |
| >>>8210                           | MP   |   | 10.3.8.2              |  |  |  |  |
| >>>Band Indicator                 | MP   |   | Enumerated            | Indiantes how to interpret the               |  |  |  |
|                                   | MP   |   | (DCS 1800             | Indicates how to interpret the<br>BCCH ARFCN |  |  |  |
|                                   |      |   | band used,            | BUUH ARFUN                                   |  |  |  |
|                                   |      |   | PCS 1900              |  |  |  |  |
|                                   |      |   | band used)            |  |  |  |  |
| >>>BCCH ARFCN                     | MP   |   | Integer               | [45]   |  |  |  |
|                                   |      |   | (01023)               |  |  |  |  |
| >>>NC mode                        | OP   |   | Bit string(3)         | [43]   |  |  |  |
| >>IS-2000                         |      |   | g(0)                  |  |  |  |  |

## 11.2 PDU definitions

```
...
```

```
-- CELL CHANGE ORDER FROM UTRAN
_ _
CellChangeOrderFromUTRAN ::= CHOICE {
                                        SEQUENCE {
    r3
        cellChangeOrderFromUTRAN-IEs
                                              CellChangeOrderFromUTRAN-r3-IEs,
        nonCriticalExtensions
                                           SEQUENCE {} OPTIONAL
    },
    later-than-r3
                                       SEQUENCE {
        rrc-TransactionIdentifier
                                           RRC-TransactionIdentifier,
                                            SEQUENCE { }
        criticalExtensions
    }
}
CellChangeOrderFromUTRAN-r3-IEs ::= SEQUENCE {
    -- User equipment IEs
        rrc-TransactionIdentifier
                                          RRC-TransactionIdentifier,
         -- dummy is not used in this version of the specification, it should
         -- not be sent and if received it should be ignored.
                                                                                  OPTIONAL,
        dummy
                                            IntegrityProtectionModeInfo
        activationTime
                                           ActivationTime
                                                                                   OPTIONAL,
        -- the IE rab-InformationList is not used in this version of the specification, it should

-- not be sent and if received it should be ignored. The IE may be used in a later

-- version of the protocol and hence it is not changed into a dummy

who informationList
        rab-InformationList RAB-InformationList
interRAT-TargetCellDescription InterRAT-TargetCellDescription
                                                                                    OPTIONAL,
}
```

| Error! No text of specified style in document. 1                               |  |  |  |   |                                       | 1   | Error! No text of specified style in document. |                           |   |   |  |  |          |
|--|--|--|--|---|---------------------------------------|---|--|---------------------------|---|---|--|--|----------|
| 3GPP TSG-RAN WG2 Meeting #29 Tdoc R2-021369<br>Gyeongju, Korea, 13-17 May 2002 |  |  |  |   |                                       |   |  |                           |   | 21369   |  |  |          |
| CHANGE REQUEST   |  |  |  |   |                                       |   |  |                           |   |   |  | R-Form-v5                                  |          |
| æ  | 25.  | .331   | CR   | 1460  |                                       | ж rev                                       | -  | ж                         | Current ve  | ersion  | 3.10 <sup>3</sup>  | <sup>؛</sup> 0.0                           | Ħ        |
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| Proposed change a  | affect   | ts: ¥  | (U)  | SIM   | ME/                                   | UE <mark>X</mark>                           | Rac  | lio Ac                    | ccess Netw  | ork   | Cor  | e Netv                                     | vork     |
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