RP-000215

TSG-RAN Meeting #8 Düsseldorf, Germany, 21 – 23 June 2000

Title: Agreed CRs to TS 25.302

Source: TSG-RAN WG2

Agenda item: 5.2.3

| Doc-1st- | Status- | Spec | CR | Rev | Subject | Cat | Version | Versio |
|-----------|---------|--------|-----|-----|--|-----|---------|--------|
| R2-000870 | agreed | 25.302 | 049 | 1 | Maximum number of simultaneous compressed mode pattern sequences per measurement purpose | С | 3.4.0 | 3.5.0 |
| R2-000877 | agreed | 25.302 | 050 | 1 | Removal of CPICH SIR measurement quantity | С | 3.4.0 | 3.5.0 |
| R2-000801 | agreed | 25.302 | 051 | | Measurements | F | 3.4.0 | 3.5.0 |
| R2-000890 | agreed | 25.302 | 052 | 1 | End of CPCH transmission | В | 3.4.0 | 3.5.0 |
| R2-001025 | agreed | 25.302 | 053 | 1 | Measurements of RACH and CPCH | F | 3.4.0 | 3.5.0 |
| R2-000849 | agreed | 25.302 | 056 | | Editorial modification on Transport Block Size | F | 3.4.0 | 3.5.0 |
| R2-000941 | agreed | 25.302 | 057 | 3 | CPCH correction | F | 3.4.0 | 3.5.0 |
| R2-001151 | agreed | 25.302 | 058 | 1 | SFN Transmission Rate and the Need to Maintain CFN in TDD Mode | С | 3.4.0 | 3.5.0 |
| R2-001085 | agreed | 25.302 | 059 | | Addition of out-of-sync-configuration control primitives | F | 3.4.0 | 3.5.0 |
| R2-001129 | agreed | 25.302 | 060 | | Addition of propagation delay measurement | С | 3.4.0 | 3.5.0 |
| R2-001221 | agreed | 25.302 | 061 | 2 | Layer 1 LCS measurements | F | 3.4.0 | 3.5.0 |
| R2-001154 | agreed | 25.302 | 062 | 1 | Refinement of the definition of a Transport Block | D | 3.4.0 | 3.5.0 |
| R2-001153 | agreed | 25.302 | 063 | 1 | Corrections of CPCH Emergency stop and start of message Indicator | F | 3.4.0 | 3.5.0 |
| R2-001225 | agreed | 25.302 | 064 | | BLER | F | 3.4.0 | 3.5.0 |

3GPP TSG RAN WG2 Meeting 12 Seoul, Korea, 10-14 Apr. 2000

| | CHANGE REQUEST |
|--------------------------------------|---|
| | 25.302 CR 049r1 Current Version: 3.4.0 |
| For submission | to: TSG-RAN #8 for approval X strategic (for SMG |
| | for information non-strategic use only) |
| Proposed chang | Je affects: (U)SIM ME X UTRAN / Radio X Core Network |
| Source: | TSG-RAN WG2 Date: 11.4.2000 |
| Subject: | Maximum number of simultaneous compressed mode pattern sequences per measurement purpose |
| Work item: | |
| <u>Category:</u> A B C D | Addition of featureRelease 97Functional modification of featureXRelease 98 |
| <u>Reason for</u> change: | The maximum value of simultaneous compressed mode pattern sequences is set to 6 according to the measurement needs. The value of 6 is chosen according to the following scenario: |
| | The following measurements that have different timing alignment requirements and therefore might need separate compressed mode pattern sequences can be required simultaneously: |
| | GSM RSSI measurements |
| | GSM cell search for synchronisation |
| | GSM cell synchronisation refreshing |
| | FDD inter-frequency measurements |
| | TDD measurements |
| | With the addition of one pattern sequence reserved for the measurement purpose "other measurements" of 25.331. According to the measurement needs the number of simultaneous compressed mode patterns per measurement purpose is restricted to 1 except for GSM measurement purpose where 3 different kinds of measurement_needs could be identified. |
| Clauses affected | <u>d:</u> 7.3 |

<u>Other specs</u> Other 3G core specifications \rightarrow List of CRs:

| affected: | Other GSM core specifications | \rightarrow List of CRs: | |
|--------------|----------------------------------|----------------------------|--|
| | MS test specifications | \rightarrow List of CRs: | |
| | BSS test specifications | \rightarrow List of CRs: | |
| | O&M specifications | \rightarrow List of CRs: | |
| | | | |
| <u>Other</u> | | | |

comments:

7.3 Compressed Mode

Compressed Mode is defined as the mechanism whereby certain idle periods are created in radio frames so that the UE can perform measurements during these periods (more details can be found in [3]).

Compressed Mode is obtained by layer 2 using transport channels provided by the layer 1 as follows:

- compressed mode is controlled by the RRC layer, which configures the layer 2 and the physical layer;
- the number of occurrences of compressed frames is controlled by RRC, and can be modified by RRC signalling;
- it is under the responsibility of the layer 2 if necessary and if possible to either buffer some layer 2 PDUs (typically at the RLC layer for NRT services) or to rate adapt the data flow (similarly to GSM) so that there is no loss of data because of compressed mode. This will be service dependent and controlled by the RRC layer.

For measurements in compressed mode, a transmission gap pattern sequence is defined. A transmission gap pattern sequence consists of alternating transmission gap patterns 1 and 2, and each of these patterns in turn consists of one or two transmission gaps. The transmission gap pattern structure, position and repetition are defined with physical channel parameters described in [3]. In addition, the UTRAN configures compressed mode pattern sequences with the the following parameters:

- **____TGMP:** Transmission Gap pattern sequence Measurement Purpose: This parameter defines the purpose this transmission gap pattern sequence is intended for. The following values are used:
 - 'TDD measurement', for which one compressed mode pattern sequence can be configured,
 - 'FDD measurement', for which one compressed mode pattern sequence can be configured,
 - 'GSM measurement', for which three simultaneous compressed mode pattern sequences can be configured,
 - 'Other'; for which one compressed mode pattern sequence can be configured.
- **TGPSI:** Transmission Gap Pattern Sequence Identifier selects the compressed mode pattern sequence for which the parameters are to be set. The range of TGPSI is [1 to <MaxTGPS>].

The UE shall support <u>a total number of <MaxTGPS></u> simultaneous compressed mode pattern sequences which can be used for different measurement, which is determined bys the UE's capability to support each of the measurement types categorised by the TGMP. For example, a UE supporting FDD and GSM shall support four simultaneous compressed mode pattern sequences and a UE supporting FDD and TDD shall support two simultaneous compressed mode pattern sequences.

When using simultaneous pattern sequences, it is the responsibility of the NW to ensure that the compressed mode gaps do not overlap and are not scheduled to overlap the same frame. Gaps exceeding the maximum gap length shall not be processed by the UE and shall interpreted as a faulty message. If the UE detects overlapping gaps, it shall process the gap from the pattern sequence having the lowest TGPSI.

3GPP TSG RAN WG2 Meeting 12 Seoul, Korea, 10-14 Apr. 2000 Document **R2-000877**

| CHANGE REQUEST | | | | | | | | |
|--|--|---|---------|--|--------------|---|-----|--|
| | | 25.302 | CR | 050r1 | Current Vers | ion: 3.4.0 | | |
| For submission to: TSG-RAN #8 for approval for information X strategic for information non-strategic | | | | | | | | |
| Proposed change affects: (U)SIM ME X UTRAN / Radio X Core Network | | | | | | | | |
| Source: | TSG-RAN | WG2 | | | Date: | 11.4.2000 | | |
| Subject: | Removal of | of CPICH SIR mea | suremen | t quantity | | | | |
| Work item: | | | | | | | | |
| | B Addition cC Functional | nds to a correction | | rlier release | X | Phase 2 Release 96 Release 97 Release 98 Release 99 Release 00 | X | |
| <u>Reason for</u> change: | | e concluded that the 99. A note reflection | | | | all not be includ | ded | |
| Clauses affect | ed: 9.2.4 | | | | | | | |
| Other specs affected: | Other 3G co Other GSM specifica MS test spe BSS test sp O&M specifi | ations cifications ecifications | - | → List of CRs → List of CRs | | | | |
| <u>Other</u> comments: | | | | | | | | |

9.2.4 CPICH SIR

This measure is mandatory for the UE. This measure is not included in release 99.

| Measurement | CPICH SIR |
|-------------------|--|
| Source | L1 (UE) |
| Destination | RRC (UE, RNC) |
| Reporting Trigger | periodic or event triggered |
| Definition | This quantity is a ratio of the CPICH Received Signal Code Power (RSCP) to the |
| | Interference Signal Code Power (ISCP). |

| | Document | R2-000801 |
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|--|-----------------------|---|---|---|--|--|---|---|-----------|
| | | | 25.302 | 2 CR | 051 | | Current Ver | sion: <u>3.4.0</u> | |
| GSM (AA.BB) or | 3G (. | AA.BBB) specifica | ation number \uparrow | | ſ | CR number | as allocated by MC | C support team | |
| For submission to:TSG-RAN #8for approvalXstrategic(for SMGlist expected approval meeting # here ↑for informationImage: Comparison of the strategic(for SMG use only) | | | | | | | | | |
| | Forn | n: CR cover sheet, v | ersion 2 for 3GPP and SM | IG The late | st version of ti | his form is avai | lable from: ftp://ftp.3gp | p.org/Information/CR-Fo | rm-v2.doc |
| Proposed cha (at least one should b | | | (U)SIM | ME | X | UTRAN | / Radio 🛛 🗙 | Core Netwo | rk |
| Source: | | TSG-RAN V | VG2 | | | | Date | <u>2000-04-10</u> |) |
| Subject: | | Measureme | ents | | | | | | |
| Work item: | | | | | | | | | |
| Category: (only one category shall be marked with an X) | F A B C D | Addition of | modification of f | | arlier rele | | X <u>Release</u> | Phase 2 Release 96 Release 97 Release 98 Release 99 Release 00 | X |
| <u>Reason for</u> <u>change:</u> | | In order to r RSCP/ISCF The UE me because of | between the differn ninimize the val of times SF and a asurement "CFI that the name h nk SIR currently | lue range SF/2 in th N-SFN ob nas been | on SIR e uplink oserved t changed | WG1 has and dow ime diffe I to "SFN | s chosen to de nlink respecti rence" has be -CFN observe | efine SIR as vely. een redefined a ed time differen | |
| Clauses affect | ted | 9.2.1, 9 | 9.2.9, added cla | iuse 9.3.x | | | | | |
| Other specs affected: | C N E | Other 3G cor Other GSM c specificat AS test spec BSS test spe D&M specific | ions ifications cifications | | $\begin{array}{l} \rightarrow \ \text{List} \\ \end{array}$ | of CRs: of CRs: of CRs: | | | |
| Other comments: | | | | | | | | | |
| comments: | < | : dout | ole-click here for | r help and | l instruct | ions on t | now to create | a CR. | |

9.2.1 <u>S</u>CFN-<u>C</u>SFN observed time difference

This measure is mandatory for the UE.

| Measurement | SCFN-CSFN observed time difference |
|-------------------|--|
| Source | L1 (UE) |
| Destination | RRC (RNC) for handover |
| Reporting Trigger | On-demand, Event-triggered |
| Definition | The ' <u>SCFN-CSFN</u> observed time difference' indicates the time difference which is measured by the UE between CFN in the UE and the SFN of the target neighbouring cell and the CFN in the UE This measurement is applicable to FDD cells only. |

*** Next modified section ***

9.2.9 SIR

This measure is mandatory for the UE.

| Measurement | SIR |
|-------------------|---|
| Source | L1(UE) |
| Destination | RRC(UE,RNC) |
| Reporting Trigger | Periodic, once every power control cycle, event triggered |
| Definition | Signal to Interference Ratio is defined as <u>(RSCP/-divided by</u> ISCP) x(SF/2) for FDD and |
| | as (RSCP/ ISCP) xSF for TDD. For FDD this is measured on the DPCCH. For TDD this is |
| | measured on the DPCH or PDSCH. |

| *** | Next modified | section | *** |
|-----|---------------|---------|-----|

9.3.x SIR

| Measurement | SIR |
|-------------------|---|
| Source | L1(Node B) |
| Destination | RRC(RNC) |
| Reporting Trigger | Periodic, event triggered |
| Definition | Signal to Interference Ratio is defined as (RSCP/ISCP) xSF. For FDD this is measured on |
| | the DPCCH. For TDD this is measured on the DPCH. |

| Document R2- | U | 0 | U | 8 | 9 | 0 | |
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| | | 25.302 | CR | 052r1 | Curren | nt Versio | n: <mark>3.4.0</mark> |
| GSM (AA.BB) or 3G (| (AA.BBB) specifica | tion number \uparrow | | ↑ CR | number as allocated | l by MCC si | upport team |
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| Form: CR cover sheet, | version 2 for 3GPP ar | nd SMG The latest version | on of this form | is available from | r ftp://ftp.3gpp. | org/Info | rmation/CR-Form- v2.doc |
| Proposed chang (at least one should be m | | (U)SIM | ME [| <mark>X</mark> U | TRAN / Radio | X | Core Network |
| Source: | TSG-RAN V | VG2 | | | | Date: | 13 April, 2000 |
| Subject: | End of CPC | H transmission | | | | | |
| Work item: | | | | | | | |
| Category:FA(only one categoryBShall be markedCWith an X)D | Addition of | nodification of fea | | lier releas | | | Phase 2 Release 96 Release 97 Release 98 Release 99 X Release 00 |
| <u>Reason for</u> <u>change:</u> | was agreen | nent that the pr should be ren | rimitives | s, CPHY- | CPCH-STOP- | REQ a | s meeting. There nd CPHY-CPCH- posed to adopt |
| Clauses affected | l <u>:</u> 10.1.7, | 10.2, new 10.2.1 | <mark>.6, 10.3.</mark> | 2 | | | |
| Affected: | Other 3G core Other GSM co specificati MS test speci BSS test spec O&M specifica | ons fications cifications | - | $\begin{array}{l} \rightarrow \text{ List of C} \\ \rightarrow \text{ List of C} \end{array}$ | CRs: CRs: CRs: | | |
| Other comments: | | | | | | | |

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10.1 Generic names of primitives between layers 1 and 2

The primitives between layer 1 and layer 2 are shown in table 8.

| Generic Name | Parameters |
|---------------------|------------------------------------|
| PHY-ACCESS-REQ | transport format subset |
| PHY-ACCESS-CNF | Access Information |
| PHY-DATA-REQ | TFI, TBS |
| PHY-DATA-IND | TFI, TBS, CRC result, TD (NOTE) |
| PHY-CPCH_STATUS-REQ | transport format subset |
| PHY-CPCH_STATUS-CNF | transport format subset |
| PHY-STATUS-IND | Event value |

Table 8: Primitives between layer 1 and 2

NOTE: TDD only.

10.1.1 PHY-Access-REQ

The PHY-ACCESS-REQ primitive is used to request access to either a RACH or a CPCH transport channel from the physical layer. A PHY-ACCESS primitive is submitted once before the actual data for peer-to-peer communication is passed to the physical layer using the PHY-Data primitive.

Primitive Type: request.

Parameters:

- Transport Format subset.

10.1.2 PHY-Access-CNF

The PHY-ACCESS-CNF primitive is used to confirm that physical layer synchronisation has been established and that the physical layer is ready for data transmission using the PHY-Data primitive.

Primitive Type: confirm.

Parameters:

- access information.

10.1.3 PHY-Data-REQ

The PHY-DATA primitives are used to request SDUs used for communications passed to and from the physical layer. One PHY-DATA primitive is submitted every Transmission Time Interval for each Transport Channel.

Primitive Type: request.

Parameters:

- TFI;
- Transport Block Set;
- <u>FN_{CELL};</u>
- Page indicators (PIs) (PCH only).

10.1.4 PHY- Data-IND

The PHY-DATA primitives are used to indicate SDUs used for Layer 2 passed to and from the physical layer. One PHY-DATA primitive is submitted every Transmission Time Interval for each Transport Channel.

Primitive Type: indicate.

Parameters:

- TFI;
- Transport Block Set;
- CRC check result;
- TD (RX Timing Deviation measurement) (optional, TDD only).

10.1.5 PHY-CPCH_Status-REQ

The PHY-CPCH_STATUS-REQ primitive is used by MAC to request CPCH status information which is broadcast on CSICH. The parameter Transport Format subset allows to restrict the CPCH status information request to a limited number of CPCH channels of the given CPCH set.

Primitive Type: request.

Parameters:

- Transport Format subset.

10.1.6 PHY-CPCH_Status-CNF

The PHY-CPCH_STATUS-CNF primitive is used by L1 to indicate CPCH status information which is broadcast on CSICH. Status information is represented in terms of a Transport format subset which is permitted to be employed by the UE.

Primitive Type: Confirm

Parameters:

- Transport Format subset

10.1.7 PHY-Status-IND

The PHY-Status-IND primitive can be used by the layer 1 to notify higher layers of an event that has occurred.

Primitive Type: indication

Parameters:

- Event value:
 - CPCH Emergency stop was received;
 - CPCH Start of Message Indicator was not received;
 - L1 hardware failure has occurred.
 - CPCH End of Transmission was received

10.2 Generic names of primitives between layers 1 and 3

The status primitives between layer 1 and 3 are shown in table 9.

Table 9: Status primitives between layer 1 and 3

| Generic Name | Parameters |
|----------------------|-------------|
| CPHY-Sync-IND | none |
| CPHY-Out-of-Sync-IND | none |
| CPHY-Measurement-REQ | Measurement |
| | parameters |
| CPHY-Measurement-IND | Measurement |
| | parameters |
| CPHY-ERROR-IND | Error Code |
| CPHY-CPCH-EOT-IND | none |

10.2.1 STATUS PRIMITIVES

10.2.1.1 CPHY-Sync-IND

This primitive is used for L1 to indicate to RRC that synchronisation of a certain physical channel has been done in the receiver. In FDD synchronisation is based on reception of the DPCCH, and in TDD synchronisation is based on midamble reception.

Primitive Type: indication.

Parameters:

- none.

10.2.1.2 CPHY-Out-of-Sync-IND

Primitive sent from L1 to RRC indicating that synchronisation of a previously configured connection has been lost in the receiver. In FDD synchronisation is based on reception of the DPCCH, and in TDD synchronisation is based on midamble reception.

Primitive Type: indication.

Parameters:

- none.

10.2.1.3 CPHY-Measurement-REQ

The Request primitive is used for RRC to configure L1 measurements.

Primitive Type: request.

Parameters:

- transmission power threshold;
- refer to clause 9 for measurement parameters.

10.2.1.4 CPHY-Measurement-IND

The Indication primitive is used to report the measurement results.

Primitive Type: indication.

Parameters:

- refer to clause 9 for measurement parameters.

10.2.1.5 CPHY-ERROR-IND

The CPHY-ERROR primitive is used to indicate to the management entity that an error has occurred as a result of a physical layer fault.

Primitive Type: indication.

Parameters:

- error code.

10.2.1.6 CPHY-CPCH-EOT-IND

The CPHY-CPCH-EOT-IND primitive is used by L1 to indicate RRC of an end of CPCH transmission event has occurred.

Primitive Type: indication.

Parameters:

- none.

10.3 Parameter definition

10.3.1 Error code

- Hardware failure.

10.3.2 Event value

- Maximum transmission power has been reached.
- Allowable transmission power has been reached.
- Average transmission power is below allowable transmission power.
- Loss of DL DPCCH.
- Emergency stop of CPCH transmission.
- Maximum number of frames for CPCH transmission has been reached.
- End of Frame for CPCH transmission has been received.

3GPP RAN WG2 Meeting #13

Document R2-001025

Hawaii, USA, 22-26 May, 2000

e.g. for 3GPP use the format TP-99xxx or for SMG, use the format P-99-xxx

| | CHANGE REQUEST Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly. |
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| | 25.302 CR 053r1 Current Version: 3.4.0 |
| GSM (AA.BB) or 30 | G (AA.BBB) specification number ↑ ↑ CR number as allocated by MCC support team |
| list expected approval n | to: TSG-RAN #8 For approval x strategic (for SMG use only) meeting # here ↑ for information for information for information for this form is available from: tp://tp.3gpp.org/Information/CR-Form-v2.doc |
| Proposed changed (at least one should be r | |
| Source: | TSG-RAN WG2Date:26-MAY-2000 |
| Subject: | Measurements of RACH and CPCH |
| Work item: | |
| Category:FA(only one categoryshall be markedwith an X) | A Corresponds to a correction in an earlier release Release 96 B Addition of feature Release 97 C Functional modification of feature Release 98 |
| <u>Reason for</u> change: | For consistency with other specifications regarding common measurement for RACH and CPCH |
| Clauses affecte | <u>d:</u> 9.3.12, 9.3.13, 9.3.14 |
| <u>Other specs</u> affected: | Other 3G core specifications \rightarrow List of CRs:Other GSM core specifications \rightarrow List of CRs:MS test specifications \rightarrow List of CRs:BSS test specifications \rightarrow List of CRs:O&M specifications \rightarrow List of CRs: |
| <u>Other</u> <u>comments:</u> | |

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9.3 UTRAN Measurements

9.3.12 Acknowledged PRACH preambles

| Measurement | Acknowledged PRACH preambles |
|-------------------|--|
| Source | L1(Node B) |
| Destination | RRC(RNC) |
| Reporting Trigger | Periodic, event triggered, On demand |
| Definition | The acknowledged PRACH preambles measurement is defined as the total number of |
| | acknowledged PRACH preambles per access frame for each PRACH, where an access frame |
| | consists of fifteen access slots from access slot #0 to access slot #14. This is equivalent to the |
| | number of positive acquisition indicators transmitted per access frame on each AICH. |

9.3.13 Detected PCPCH access preambles

| Measurement | Detected PCPCH Access preambles |
|-------------------|--|
| Source | L1(Node B) |
| Destination | RRC(RNC) |
| Reporting Trigger | Periodic, event triggered, On demand |
| Definition | The detected PCPCH access preambles measurement is defined as the total number of |
| | detected access preambles per access frame on the PCPCHs belonging to a CPCH set, where |
| | an access frame consists of fifteen access slots from access slot #0 to access slot #14. |

9.3.14 Acknowledged PCPCH access preambles

| Measurement | Acknowledged PCPCH access preambles |
|--------------------------|--|
| Source | L1(Node B) |
| Destination | RRC(RNC) |
| Reporting Trigger | Periodic, event triggered, On demand |
| Definition | The acknowledged PCPCH access preambles measurement is defined as the total number of acknowledged PCPCH access preambles per access frame on the PCPCHs, where an access frame consists of fifteen access slots from access slot #0 to access slot #14. This is equivalent to the number of positive acquisition indicators transmitted on the AP-AICH per access frame. |

| 3GPP TSG RAN WG2 meeting #12 Seoul, Korea, 10 - 13 April 2000 | | | Docume | e.g. for 3GPP use the format TP-99xxx or for SMG, use the format P-99-xxx | | |
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| | | 25.3 | <mark>02</mark> CR | 056 | Current | /ersion: <mark>3.4.0</mark> |
| GSM (AA.BB) or 3 | G (AA.BBB) speci | ification number \uparrow | | ↑ (| CR number as allocated by | MCC support team |
| For submission | al meeting # here ↑ | for | for approval information | | non-s | trategic (for SMG trategic use only) |
| F | Form: CR cover shee | t, version 2 for 3GPP and | d SMG The late | est version of thi | s form is available from: ftp://ftp | b.3gpp.org/Information/CR-Form-v2.doc |
| Proposed chan (at least one should be | | (U)SIM | ME | X | UTRAN / Radio | X Core Network |
| Source: | TSG-RAN | WG2 | | | D | ate: 2000-4-10 |
| Subject: | Editorial r | nodification on | transport bl | ock size | | |
| | | | | 00110120 | | |
| Work item: | | | | | | |
| | F Correctio | | tion in on o | orlior rolo | X <u>Relea</u> | se: Phase 2 Release 96 |
| | A Correspo B Addition | onds to a correct of feature | ane | | | Release 90 |
| | | al modification | of feature | | | Release 98 |
| wur an X) | D Editorial | modification | | | | Release 99 X Release 00 |
| Reason for | Descript | ion is modified | in order to | alian curre | ant TS25 302 with | TS25.331 regarding |
| change: | | ort block size=0 | | angri curre | ent 1828.802 with | 1020.001 regarding |
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| Clauses affecte | ed: 11 | | | | | |
| Other specs | Other 3G c | ore specificatio | ns | \rightarrow List o | f CRs: | |
| affected: | Other GSN | | | \rightarrow List o | f CRs: | |
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| | BSS test sp | pecifications | | \rightarrow List o | | |
| | O&M speci | fications | | \rightarrow List o | f CRs: | |
| <u>Other</u> | | | | | | |
| <u>comments:</u> | | | | | | |



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11 Transport block transmission

Data exchange between MAC and the physical layer, is defined in terms of Transport Block Sets (TBS). On a Transport Channel, one Transport Block Set can be transmitted for every Transmission Time Interval. A TBS consists of one or several Transport Blocks which shall be numbered 1,..., m, \ldots, M and is delivered in the order of the index m. A Transport Block is identical with a MAC PDU. A Transport Block (MAC PDU) is a bit string ordered from first to last, where the first and last bits are numbered 1 and A, respectively, where A is the number of bits of the Transport Block. In case of Transport Block size=0 bit, only parity bits are sent and A=0.

The bits of the *m*th Transport Block in a TBS, are denoted as $a_{im1}, ..., a_{imA}$ for a Transport Channel identified by an index *i* (cf. TS 25.212 and TS 25.222).

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| Document | R2-00 | 0941 |
|----------|-------------------|--------------|
| e.g. for | 3GPP use the forn | nat TP-99xxx |

| Seoul, Kolea ID - 15 April. 2000 or for SMG, use the format P-99-xxx | | | |
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| | | embedded help file at the bottom of this ructions on how to fill in this form correctly. | |
| | 25.302 CR 057r3 Cu | irrent Version: 3.4.0 | |
| GSM (AA.BB) or 3G | G (AA.BBB) specification number↑ ↑ CR number as allo | ocated by MCC support team | |
| For submission | | Strategic (for SMG Non-strategic use only) | |
| Form: CR cover sheet, | at, version 2 for 3GPP and SMG The latest version of this form is available from: <u>ftp://ftp.3c</u> | gpp.org/Information/CR-Form- v2.doc | |
| Proposed chang (at least one should be n | | adio X Core Network | |
| Source: | TSG-RAN WG2 | Date: 12 th Apr. 2000 | |
| Subject: | CPCH correction | | |
| Work item: | | | |
| Category:FA(only one categoryshall be markedCwith an X) | A Corresponds to a correction in an earlier release A Addition of feature C Functional modification of feature | Release:Phase 2Release 96Release 97Release 97Release 98Release 99XRelease 00 | |
| <u>Reason for</u> change: | In this CR, CD-ICH is changed to CD/CA-ICH to keep consister 25.302. and | ency between TS 25.331 and TS | |
| Clauses affected | <u>d:</u> 10.3.3, 10.3.5.9 | | |
| Affected: | Other 3G core specifications \rightarrow List of CRs:Other GSM core specifications \rightarrow List of CRs:MS test specifications \rightarrow List of CRs:BSS test specifications \rightarrow List of CRs:O&M specifications \rightarrow List of CRs: | | |
| Other comments: | | | |

<----- double-click here for help and instructions on how to create a CR.

10.2.2.15 CPHY-CPCH-Estop-CNF

This primitive is sent from Node B L1 to RRC for confirming the emergency stop of the CPCH.

Primitive Type: confirm.

Parameters:

- none.

10.3 Parameter definition

10.3.1 Error code

- Hardware failure.

10.3.2 Event value

- Maximum transmission power has been reached.
- Allowable transmission power has been reached.
- Average transmission power is below allowable transmission power.
- Loss of DL DPCCH.
- Emergency stop of CPCH transmission.

10.3.3 Access Information

- Ready for RACH data transmission (in case of FDD mode: when Ack on AICH has been received).

The following values of this parameter apply to FDD only:

- NACK on AICH or AP-AICH has been received;
- timeout, no response on AICH or AP-AICH has been received while maximum number of access preamble transmissions has been performed;
- ready for CPCH data transmission (CD or CD/CA information received on CD ICH or CD/CA-ICH, respectively);
- mismatch of CD-ICH or-CD/CA-ICH signatures;
- no response on CD ICH or CD/CA-ICH received;
- timeout, no CD/CA-ICH received.

10.3.4 Transport Format Subset

- A subset of the Transport Format set of a Transport Channel.

10.3.5 Physical channel description

10.3.5.1 Primary SCH

- Tx diversity mode.

10.3.5.2 Secondary SCH

- Tx diversity mode.

10.3.5.3 Primary CCPCH

- Frequency info.
- DL scrambling code.
- Tx diversity mode.
- Timeslot (TDD only).
- Burst type (TDD only).
- Offset (TDD only).
- Repetition period (TDD only).
- Repetition length (TDD only).

10.3.5.4 Secondary CCPCH

- DL scrambling code.
- Channelisation code.
- Tx diversity mode.
- Timeslot (TDD only).
- Burst type (TDD only).
- Midamble shift (TDD only).
- Offset (TDD only).
- Repetition period (TDD only).
- Repetition length (TDD only).
- TFCI presence (TDD only).

10.3.5.5 PRACH

NOTE: The PRACH can also be used to map the FAUSCH Transport Channel.

- Access Slot.
- Preamble spreading code (FDD only).
- Preamble signature (FDD only).
- Spreading factor for data part.
- Power control info:
 - UL target SIR;
 - primary CCPCH DL TX Power;
 - UL interference;
 - power offset (Power ramping) (FDD only).

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- Access Service Class Selection:
 - preamble signature classification information.
- AICH transmission timing parameter (FDD only).
- Timeslots (TDD only).
- Spreading codes (TDD only).
- Midamble codes (TDD only).

10.3.5.6 Uplink DPDCH+DPCCH

- UL scrambling code.
- DPCCH Gate rate.
- DPCCH slot structure (N_{pilot}, N_{TPC}, N_{TFCI}, N_{FBI}).
- Transmission Time offset value.

10.3.5.7 Uplink DPCH

- Timing Advance (TDD only).
- DPCH channelisation code (TDD only).
- Burst Type (TDD only).
- DPCH midamble shift (TDD only).
- Timeslot (TDD only).
- Offset (TDD only).
- Repetition Period (TDD only).
- Repetition length (TDD only).
- TFCI presence (TDD only).

10.3.5.8 Downlink DPCH

- Transmission Time offset value.
- DPCCH Gate rate (FDD only).
- DL scrambling code:
 - DL Channelisation code.
- Tx diversity mode:
 - FB mode (FDD only).
- Slot structure (N_{pilo} , N_{TPC} , N_{TFCI} , N_{FBI} , N_{data1} , N_{data2}) (FDD only).
- Burst Type (TDD only).
- DPCH midamble shift (TDD only).
- Timeslot (TDD only).
- Offset (TDD only).
- Repetition period (TDD only).

- Repetition length (TDD only).
- TFCI presence (TDD only).

10.3.5.9 PCPCH (Physical Common Packet Channel)

- CPCH Set ID to which this PCPCH belongs.
- Parameters related to the AP preamble:
 - Access Preamble (AP) scrambling code;
 - available AP signatures/subchannels for access request;
 - DL AP AICH Channelisation code.
- Parameters related to the CD preamble:
 - CD preamble scrambling code;
 - available CD signatures/subchannels;

- Parameters related to PCPCH message part:
 - PCPCH scrambling code;
 - PCPCH Channelisation code;
 - data rate (spreading factor);
 - N_frames_max: Maximum length of CPCH message in radio frames.

10.3.5.10 PICH

- Scrambling code.
- Channelisation code.
- Timeslot (TDD only).
- Burst Type (TDD only).
- Midamble shift (TDD only).
- Offset (TDD only).
- Repetition period (TDD only).
- Repetition length (TDD only).

10.3.5.11 AICH

- Scrambling code.
- Channelisation code.
- Tx diversity mode.

NOTE: The value for the parameters needs to be consistent with the corresponding PRACH.

10.3.5.12 AP-AICH

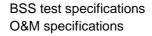
- CPCH Set ID.

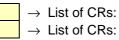
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| Source: | | TSG-RAN WG2 Date: 04/04/00 |
| Subject: | | SFN Transmission Rate and the Need to maintain CFN in TDD Mode |
| Work item: | | |
| Category: (only one category Shall be marked With an X) | F A B C D | CorrectionRelease:Phase 2Corresponds to a correction in an earlier releaseRelease 96Addition of featureRelease 97Functional modification of featureRelease 98Editorial modificationRelease 99XRelease 90Release 90X |
| <u>Reason for</u> <u>change:</u> | | In TDD mode it is necessary to maintain a continuous CFN when transiting cells for MAC layer ciphering and for scheduling radio transmissions. When the SFN is not coordinated between cells it is necessary to measure the OFF (CFN – SFN observed time difference) and increase the frequency of SFN transmission on the BCCH in TDD mode. As defined in 25.301 (sect 8.2.2), ciphering of RLC TM connections is provided by the MAC using the CFN to maintain transmission sequence and uniquely identify data frames. When transiting cells it is necessary to provide a continuous CFN to maintain ciphering. It is also necessary to maintain CFN's for scheduling of frame transmissions over the air and lub/lur interfaces. The CFN is not transmitted over the air interface it is calculated from each cells SFN by applying the OFF (offset). The OFF is determined before entering new cells by reading neighbour cell SFN and calculating the difference to the current cells SFN. When SFN's are not synchronised between cells it is necessary for the UE to measure the SFN of neighbour cells and report the OFF result to the S-RNC when requested. It is also necessary to transmit the SFN on the BCCH frequently so that measurements and frame scheduling procedures can be made rapidly. In 25.331 (sect 8.1.1.1.5) it is stated the master information block, which contains the SFN for TDD mode is scheduled every 8, 16, 32 or 64 frames (equivalent to every 80 to 640ms). |
| Clauses affect | ted | <u>. 9.1.1</u> |
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| Affected: | | Differ SG core specifications \rightarrow List of CRs: Specifications \rightarrow List of CRs: |

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MS test specifications





Other comments:

9.1.1 CFN-SFN observed time difference

This measure is mandatory for the UE.

| Measurement | CFN-SFN observed time difference |
|-------------------|--|
| Source | L1 (UE) |
| Destination | RRC (RNC) for handover |
| Reporting Trigger | On-demand, Event-triggered |
| Definition | The 'CFN-SFN observed time difference' indicates the time difference (in chips for FDD and in frames for TDD) which is measured by the UE between CFN in the UE and the SFN of the target neighbouring cell. This measurement is applicable to FDD cells only. |

3GPP TSG RAN WG2#13 Oahu, HI, USA, 22-26 May 2000

Document R2-001085 e.g. for 3GPP use the format TP-99xxx or for SMG, use the format P-99-xxx

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10.2.2 CONTROL PRIMITIVES

The control primitives between layer 1 and 3 are shown in table 10.

| Generic Name | Parameters |
|---------------------------------|--|
| CPHY-TrCH-Config-REQ | Transport channel description, |
| CPHY-TrCH-Config-CNF | |
| CPHY-TrCH_Release- REQ | |
| CPHY-TrCH_Release- CNF | |
| CPHY-RL-Setup-REQ | Physical channel description |
| CPHY-RL-Setup-CNF | none |
| CPHY-RL-Release-REQ | none |
| CPHY-RL-Release-CNF | none |
| CPHY-RL-Modify-REQ | Physical channel description |
| CPHY-RL-Modify-CNF | none |
| CPHY-Commit-REQ | Activation Time |
| CPHY-CPCH-Estop-IND | none |
| CPHY-CPCH-Estop-Resp | none |
| CPHY-CPCH-Estop-REQ | none |
| CPHY-CPCH-Estop-CNF | none |
| CPHY-Out-of-Sync- Config-REQ | Out of sync detection parameters |
| CPHY-Out-of-Sync- Config-CNF | none |

Table 10: Control primitives between layer 1 and 3

10.2.2.1 CPHY-TrCH-Config-REQ

This primitive is used for setting up and configuring a transport channel, and also to modify an existing transport channel.

Primitive Type: request.

Parameters:

- transport channel description.

10.2.2.2 CPHY-TrCH-Config-CNF

This primitive is used for confirming the setting up and configuring a transport channel, and also modifying an existing transport channel.

Primitive Type: confirm.

Parameters:

10.2.2.3 CPHY-TrCH-Release-REQ

This primitive is used for releasing a transport channel.

Primitive Type: request.

Parameters:

- none.

10.2.2.4 CPHY-TrCH-Release-CNF

This primitive is used for confirming the releasing a transport channel.

Primitive Type: confirm.

Parameters:

- none.

10.2.2.5 CPHY-RL-Setup-REQ

The Request primitive is sent from RRC to L1 for establishment of a Radio link to a certain UE.

Primitive Type: request.

Parameters:

- physical channel description.

10.2.2.6 CPHY-RL-Setup-CNF

The Confirm primitive is returned from L1 to RRC when the Radio link is established. In case L1 is unable to execute the request, this is indicated in the confirm primitive.

Primitive Type: confirm.

Parameters:

- none.

10.2.2.7 CPHY-RL-Release-REQ

The Request primitive is sent from RRC to L1 for release of a Radio link to a certain UE.

Primitive Type: request.

Parameters:

- none.

10.2.2.8 CPHY-RL-Release-CNF

The Confirm primitive is returned from L1 to RRC when the radio link is released.

Primitive Type: confirm.

Parameters:

10.2.2.9 CPHY-Modify-REQ

The Request primitive is sent from RRC to L1 for modification of a Radio link to a certain UE.

Primitive Type: request.

Parameters:

- physical channel description.

10.2.2.10 CPHY-RL-Modify-CNF

The Confirm primitive is returned from L1 to RRC when the radio link is modified. In case L1 is unable to execute the request, this is indicated in the confirm primitive.

Primitive Type: confirm.

Parameters:

- none.

10.2.2.11 CPHY-Commit-REQ

This primitive is sent from RRC to L1 to synchronise UE and NW for the physical channel modification.

Primitive Type: request.

Parameters:

- activation time.

10.2.2.12 CPHY-CPCH-Estop-IND

The CPHY-CPCH-Estop-IND primitive is used by L1 to notify RRC of a CPCH emergency stop event has occurred.

Primitive Type: indication.

Parameters:

- none.

10.2.2.13 CPHY-CPCH-Estop-Resp

This primitive is sent from UE RRC to L1 for emergency stop of the CPCH transmission. After receiving this primitive, UE L1 stopping its transmission on the related CPCH.

Primitive Type: response.

Parameters:

- none.

10.2.2.14 CPHY-CPCH-Estop-REQ

This primitive is sent from RRC to L1 for CPCH Emergency Stop. This primitive is sent for triggering of a CPCH emergency stop. After receiving this primitive, Node B L1 sends CPCH Estop Command to UE. This CPCH Estop Command is a specific bit pattern on the currently unused DL DPCH field.

Primitive Type: request.

Parameters:

10.2.2.15 CPHY-CPCH-Estop-CNF

This primitive is sent from Node B L1 to RRC for confirming the emergency stop of the CPCH.

Primitive Type: confirm.

Parameters:

- none.

10.2.2.16 CPHY-Out-of-Sync-Config-REQ

This primitive is sent from RRC to Node B L1 to reconfigure the parameters to detect "in sync" and "out of sync" conditions of uplink physical channel transmission.

Primitive Type: request.

Parameters:

- Out of Sync detection parameters

10.2.2.17 CPHY-Out-of-Sync-Config-CNF

This primitive is sent from Node B L1 to RRC for confirming the Reconfiguration of the Out-of-Sync parameters on Node B L1.

Primitive Type: confirm.

Parameters:

1

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| Subject: | | Addition of | propagat | <mark>ion delay</mark> | <mark>measu</mark> | rement | | | | | |
| Work item: | | | | | | | | | | | |
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2

9.3 UTRAN Measurements

9.3.1 RSSI

| Measurement | RSSI |
|-------------------|--|
| Source | L1 (Node B) |
| Destination | RRC(RNC) |
| Reporting Trigger | On-demand, Event-triggered, Periodic |
| Definition | Received Signal Strength Indicator, the wide-band received power within the UTRAN UL channel bandwidth at a UTRAN access point. For TDD this is measured in specified timeslots. |

9.3.2 Transmitted carrier power

| Measurement | Transmitted carrier power |
|-------------------|---|
| Source | L1(Node-B) |
| Destination | RRC(RNC) |
| Reporting Trigger | On-demand, periodic, Event-triggered |
| Definition | Transmitted carrier power is the ratio between the total transmitted power on one DL carrier from one UTRAN access point, compared to the maximum power possible to use on that DL carrier at this moment of time. For TDD this is measured in specified timeslots. |

9.3.3 Transmitted code power

| Measurement | Transmitted code power |
|-------------------|--|
| Source | L1(Node-B) |
| Destination | RRC (RNC) |
| Reporting Trigger | On-demand, periodic, Event-triggered |
| Definition | Transmitted Code Power is the transmitted power on one carrier, one scrambling and one |
| | channelisation code. For TDD this is measured in specified timeslots. |

9.3.4 Transport channel BLER

| Measurement | Transport channel BLER (BLock Error Rate) |
|-------------------|--|
| Source | L1(Node-B) |
| Destination | RRC(RNC) |
| Reporting Trigger | periodic, event triggered, on demand |
| Definition | Estimation of the transport channel block error rate (BLER). |

9.3.5 Physical channel BER

| Measurement | Physical channel BER |
|-------------------|--|
| Source | L1(Node-B) |
| Destination | RRC(RNC) |
| Reporting Trigger | On-demand, Event-triggered, periodic |
| Definition | The physical channel BER is measured on the control part after RL combining. |

3

9.3.6 Transport channel BER

| Measurement | Transport channel BER |
|-------------------|--|
| Source | L1(Node-B) |
| Destination | RRC(RNC) |
| Reporting Trigger | On-demand, Event-triggered, periodic |
| Definition | The transport channel BER is measured on the data part after RL combining. |

9.3.7 RX timing deviation

| Measurement | RX timing deviation |
|-------------------|--|
| Source | L1 (Node B) |
| Destination | RRC (RNC) |
| Reporting Trigger | Periodic, event triggered |
| Definition | The difference of the time of arrival of the UL transmissions in relation to the arrival time of a signal with zero propagation delay. This measurement is applicable for TDD cells only. |

9.3.8 Timeslot ISCP

| Measurement | Timeslot ISCP |
|-------------------|---|
| Source | L1(Node B) |
| Destination | RRC (RNC) |
| Reporting Trigger | periodic or event triggered |
| Definition | Interference on Signal Code Power, is the interference after despreading in specified timeslots. Only the non-orthogonal part of the interference is included. This measurement is applicable for TDD cells only. |

9.3.9 RSCP

| Measurement | RSCP |
|-------------------|---|
| Source | L1(Node B) |
| Destination | RRC (RNC) |
| Reporting Trigger | periodic or event triggered |
| Definition | Received Signal Code Power is the received power on DPCH or PRACH or PUSCH after despreading. This measurement is applicable for TDD cells only. |

9.3.10 Round Trip Time

The Round Trip Time (RTT) measurement at a single Node-B may provide an estimate of the round trip time of signals between the Node-B and the UE and this may be used to calculate a radial distance to the UE within the sector. A group of simultaneous RTT measurements made from a number of Node-B or LMU may be used to estimate the location of the UE. The support for this measurement is LCS positioning method dependent.

| Measurement | Round Trip Time |
|-------------------|---|
| Source | L1(Node-B or LMU) |
| Destination | RRC (RNC-LCS) |
| Reporting Trigger | On demand, event triggered |
| | The round trip time is measured from the time of transmission of the beginning of a downlink frame to a UE to the time of reception of the beginning of the corresponding uplink frame from the UE. |

9.3.11 Frequency Offset

The Frequency Offset measures the rate of change (drift) of the Relative Time Difference and may be used to estimate the RTD at the time the UE location measurements are made. The support for this measurement is LCS positioning method dependent.

| Measurement | Frequency Offset |
|-------------------|--|
| Source | L1(LMU) |
| Destination | RRC (RNC-LCS) |
| Reporting Trigger | On demand, event triggered, periodic |
| Definition | The Frequency Offset (FO) measures the rate of change (drift) of the Relative Time |
| | Difference of the transmissions of two Node-Bs. |

9.3.11 Propagation Delay

The Propagation delay measures the one-way propagation delay as measured during either PRACH or PCPCH access. The propagation delay measurement can be used for DPCH setup, as it allows to minimise the search window, when setting up the uplink DPCH.

| Measurement | Propagation delay |
|-------------------|--|
| Source | L1(Node B) |
| Destination | RRC (RNC) |
| Reporting Trigger | Event triggered, periodic |
| Definition | The Propagation deay measures the one-way propagation delay as measured during |
| | either PRACH or PCPCH access. |

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9.2.x UE GPS Timing of Cell Frames for LCS

| The UE GPS Timing of Cell Frames for LCS is an absolute reference time measurement for the arrival of a specific frame for an identified cell within the active set. This measure is applicable for UEs which support reception of GPS signals for LCS. | | | | |
|---|--|--|--|--|
| Measurement | UE GPS Timing of Cell Frames for LCS | | | |
| <u>Source</u> | L1 (UE) | | | |
| Destination | RRC (RNC-LCS) | | | |
| Reporting Trigger | On-demand, Event-triggered, Periodic | | | |
| <u>Definition</u> | Time of arrival for the beginning of a frame, (identified by its SFN), measured when the first significant multipath of the cell CPICH reaches the UE. This is the absolute time reference measurement in respect to GPS Time Of Week for the arrival of this frame. | | | |

XXXXX Next Section XXXXXXXX

9.3.y UTRAN GPS Timing of Cell Frames for LCS

The UTRAN GPS Timing of Cell Frames for LCS is an absolute reference time measurement for the arrival of a specific frame for an identified cell within the active set. This measure is applicable for LMUs which support reception of GPS signals for LCS.

| Measurement | UTRAN GPS Timing of Cell Frames for LCS |
|-------------------|---|
| Source | L1 (LMU) |
| Destination | RRC (RNC-LCS) |
| Reporting Trigger | On-demand, Event-triggered, Periodic |
| <u>Definition</u> | Time of arrival for the beginning of a frame, (identified by its SFN), measured when the first significant multipath of the cell CPICH reaches the UELMU. This is the absolute time reference measurement in respect to GPS Time Of Week for the arrival of this frame. |

| 3GPP TSG R Oahu, HI, US | AN WG2#13 A, 22-26 May, 2000 | Document R2-001154 e.g. for 3GPP use the format TP-99xxx or for SMG, use the format P-99-xxx |
|---|---|---|
| | CHANGE REQ | UEST Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly. |
| | 25.302 CR | Current Version: 3.4.0 |
| GSM (AA.BB) or 30 | G (AA.BBB) specification number \uparrow | [↑] CR number as allocated by MCC support team |
| For submission | | |
| Form: CR cover shee | et, version 2 for 3GPP and SMG The latest version of this for | m is available from: <u>ftp://ftp.3gpp.org/Information/CR-Form-</u> v2.doc |
| Proposed chan | | |
| Source: | TSG-RAN WG2 | Date: 2000-05-16 |
| Subject: | Refinement of the definition of a Trai | nsport Block |
| Work item: | | |
| (only one category E shall be marked | A Corresponds to a correction in an ea | arlier release Release: Phase 2 Release 96 Release 97 Release 97 Release 98 X Release 99 X Release 00 Release 00 X |
| Reason for change: | Clarification of the text | |
| | | |
| Clauses affecte | <u>d:</u> 7.1.1. | |
| Other specs affected: | Other GSM core specifications MS test specifications BSS test specifications | → List of CRs: → List of CRs: → List of CRs: → List of CRs: → List of CRs: |
| <u>Other</u> comments: | | |

7.1.1. Transport Block

This is the basic unit exchanged between L1 and MAC, for L1 processing.

A Transport Block typically corresponds to an RLC PDU or corresponding unit. Layer 1 adds a CRC for each Transport Block.

3GPP TSG-RAN WG2 Meeting #13 Oahu, HI, USA, May 22 – 26, 2000

help.doc

| Document | R2- | ·001 | 153 |
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| e.g. foi | r 3GPP use | the format | TP-99xxx |

| Cana, III, C | 0/1 | , may 22 | 20, 2000 | | | | or for | SMG, use the format | P-99-xxx |
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| | | | 25.302 | CR | 063r1 | | Current Version | on: <mark>3.4.0</mark> | |
| GSM (AA.BB) or 3G (AA.BBB) specification number ↑ ↑ CR number as allocated by MCC support team | | | | | | | | | |
| For submission to: TSG-RAN #8 for approval X strategic (for SMG use only) list expected approval meeting # here for information Image: Comparison of the strategic (for SMG use only) | | | | | | | | | |
| Form: CR cover si | heet, v | rersion 2 for 3GPP a | and SMG The latest version | on of this form | n is available from: | : <u>ftp://ft</u> | o.3gpp.org/Info | | Form- 2.doc |
| Proposed cha (at least one should l | _ | | (U)SIM | ME | X UT | TRAN / | Radio X | Core Netwo | |
| Source: | | TSG-RAN | WG2 | | | | Date: | May 23, 20 | 00 |
| Subject: | | Corrections | of CPCH Emerge | ency Sto | p and Star | <mark>t of Me</mark> | ssage Indicato | or | |
| <u>Work item:</u> | | | | | | | | | |
| Category: (only one category Shall be marked with an X) | F A B C D | Addition of | modification of fea | | rlier releas | e | Release: | Phase 2 Release 96 Release 97 Release 98 Release 99 Release 00 | x |
| <u>Reason for</u> change: | | cha | 25.302 dose not cur annel only for CPCF me CPCH related pa | ł. | | | | a special down | nlink |
| Clauses affec | ted: | 3.2 10 |) <mark>.1.7 10.2.2.12 1</mark> | <mark>0.2.2.1</mark> 4 | 10.3.2 1 | <mark>0.3.5.8</mark> | | | |
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| <u>Other</u> comments: | | | | | | | | | |
| 1 marine | | | | | | | | | |

<----- double-click here for help and instructions on how to create a CR.

3.2 Abbreviations

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

| ARQ | Automatic Repeat Request |
|------------|---|
| BCCH | Broadcast Control Channel |
| BCH | Broadcast Channel |
| C- CC | Control- Call Control |
| CCC | CPCH Control Command |
| СССН | Common Control Channel |
| ССН | Control Channel |
| CCTrCH | Coded Composite Transport Channel |
| CN | Core Network |
| CRC | Cyclic Redundancy Check |
| DC | Dedicated Control (SAP) |
| DCA | Dynamic Channel Allocation |
| DCCH | Dedicated Control Channel |
| DCH | Dedicated Channel |
| DL | Downlink |
| DRNC | Drift Radio Network Controller |
| DSCH | Downlink Shared Channel |
| DTCH | Dedicated Traffic Channel |
| FACH | Forward Link Access Channel |
| FAUSCH | Fast Uplink Signaling Channel |
| FCS | Fame Check Sequence |
| FDD | Frequency Division Duplex |
| GC | General Control (SAP) |
| HO | Handover |
| ITU | International Telecommunication Union |
| kbps | kilo-bits per second |
| L1 | Layer 1 (physical layer) |
| L2 | Layer 2 (data link layer) |
| L3 LAC | Layer 3 (network layer) |
| LAC LAI | Link Access Control |
| MAC | Location Area Identity Medium Access Control |
| MAC | Mobility Management |
| Nt | Notification (SAP) |
| OCCCH | ODMA Common Control Channel |
| ODCCH | ODMA Dedicated Control Channel |
| ODCH | ODMA Dedicated Channel |
| ODMA | Opportunity Driven Multiple Access |
| ODTCH | ODMA Dedicated Traffic Channel |
| ORACH | ODMA Random Access Channel |
| PCCH | Paging Control Channel |
| PCH | Paging Channel |
| PDU | Protocol Data Unit |
| PHY | Physical layer |
| PhyCH | Physical Channels |
| RACH | Random Access Channel |
| RLC | Radio Link Control |
| RNC | Radio Network Controller |
| RNS | Radio Network Subsystem |
| RNTI | Radio Network Temporary Identity |
| RRC | Radio Resource Control |
| SAP | Service Access Point |
| SDU | Service Data Unit |
| SRNC | Serving Radio Network Controller |
| SRNS | Serving Radio Network Subsystem |
| TCH | Traffic Channel |

| TDD | Time Division Duplex |
|-----------------|--|
| TFCI | Transport Format Combination Indicator |
| TFI | Transport Format Indicator |
| TMSI | Temporary Mobile Subscriber Identity |
| TPC | Transmit Power Control |
| U- | User- |
| UE | User Equipment |
| UE _R | User Equipment with ODMA relay operation enabled |
| UL | Uplink |
| UMTS | Universal Mobile Telecommunications System |
| URA | UTRAN Registration Area |
| UTRA | UMTS Terrestrial Radio Access |
| UTRAN | UMTS Terrestrial Radio Access Network |

10.1.7 PHY-Status-IND

The PHY-Status-IND primitive can be used by the layer 1 to notify higher layers of an event that has occurred.

Primitive Type: indication

Parameters:

- Event value:
 - CPCH Emergency stop was-received completed;
 - CPCH Start of Message Indicator was received;
 - CPCH Start of Message Indicator was not received;
 - L1 hardware failure has occurred.

10.2.2.12 CPHY-CPCH-Estop-IND

The CPHY-CPCH-Estop-IND primitive is used by L1 to notify RRC of a CPCH emergency stop event has occurred.message has been received.

Primitive Type: indication.

Parameters:

- none.

10.2.2.14 CPHY-CPCH-Estop-REQ

This primitive is sent from RRC to L1 for CPCH Emergency Stop. This primitive is sent for triggering of a CPCH emergency stop. After receiving this primitive, Node B L1 sends CPCH Estop Command to UE. This CPCH Estop Command is a specific-all 1 bits pattern in the CCC field of DL DPCCH for CPCH.on the currently unused DL DPCH field.

Primitive Type: request.

Parameters:

10.3.2 Event value

- Maximum transmission power has been reached.
- Allowable transmission power has been reached.
- Average transmission power is below allowable transmission power.
- Loss of DL DPCCH.
- <u>Completion of CPCH</u> Emergency stop. of CPCH transmission.
- CPCH Start of Message Indicator was received.
- CPCH Start of Message Indicator was not received.

10.3.5.8 Downlink DPCH

- Transmission Time offset value.
- DPCCH Gate rate (FDD only).
- DL scrambling code:
 - DL Channelisation code.
- Tx diversity mode:
 - FB mode (FDD only).
- Slot structure (N_{pilot}, N_{TPC}, N_{TFCI}, N_{FBI}, N_{data1}, N_{data2}) (FDD only).
- Special slot structure only for CPCH (N_{pilot}, N_{TPC}, N_{TFCI}, N_{CCC}) (FDD only)
- Burst Type (TDD only).
- DPCH midamble shift (TDD only).
- Timeslot (TDD only).
- Offset (TDD only).
- Repetition period (TDD only).
- Repetition length (TDD only).
- TFCI presence (TDD only).

e.g. for 3GPP use the format TP-99xxx or for SMG, use the format P-99-xxx

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| Form: CR cover sheet, | version 2 for 3GPP a | nd SMG The latest version | on of this form | is available from: | ftp://ftp.3gp | p.org/Infc | ormation/CR-F | |
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| Source: | TSG-RAN V | VG2 | | | | Date: | 2000-05-25 | |
| Subject: | BLER | | | | | | | |
| Work item: | | | | | | | | |
| Category:FA(only one categoryshall be markedCwith an X)D | Addition of | modification of fea | | rlier release | | elease: | Phase 2 Release 96 Release 97 Release 98 Release 99 Release 00 | X |
| <u>Reason for</u> change: | UTRAN BLI | ER is not part of Re | elease 99. | | | | | |
| Clauses affected | <u>: 9.3.4</u> | | | | | | | |
| affected: 0 | Other 3G core Other GSM c specificati MS test speci 3SS test speci 0&M specific | ions ifications cifications | - | $\begin{array}{l} \rightarrow \text{ List of C} \\ \rightarrow \text{ List of C} \end{array}$ | Rs: Rs: Rs: | | | |
| Other comments: | | | | | | | | |



<----- double-click here for help and instructions on how to create a CR.

9.3.4 Transport channel BLER

This measurement is not included in release 99.

| Measurement | Transport channel BLER (BLock Error Rate) |
|-------------------|--|
| Source | L1(Node-B) |
| Destination | RRC(RNC) |
| Reporting Trigger | periodic, event triggered, on demand |
| Definition | Estimation of the transport channel block error rate (BLER). |