3GPP TSG RAN Meeting #28 Quebec, Canada, 1 - 3 June 2005

RP-050214

Title CRs (Rel-5 & Rel-6) to 25.101 for the removal of Tx diversity closed loop

mode2

Source 3GPP TSG RAN WG4 (Radio)

Agenda Item 7.7.5

| WG Tdoc | Spec | CR | R | Cat | Rel | Curr Ver | Title | Work Item |
|-----------|--------|-----|---|-----|-------|-------------|---|-----------|
| R4-050405 | 25.101 | 416 | | С | Rel-5 | 5.14.0 | Feature Clean Up: Removal of Tx diversity closed loop mode2 | TEI5 |
| R4-050406 | 25.101 | 417 | | С | Rel-6 | 6.7.0 | Feature Clean Up: Removal of Tx diversity closed loop mode2 | TEI6 |

3GPP TSG RAN WG4 (Radio) Meeting #35

Athens, Greece 9 - 13 May 2005

| | | | CHA | ANGE | REQ | UE | ST | | | CIX-I OIIII-V |
|-----------------------|-----------------------|--|---|--|-----------------------|----------|---------|--------------|--|--|
| * | 25 | .101 | CR 416 | | жrev | | ж (| Current vei | sion: | <mark>5.14.0</mark> [≇] |
| For <u>HELP</u> on us | sing i | his for | rm, see botto | om of this | page or | look a | at the | pop-up tex | t over | the % symbols. |
| Proposed change a | | | JICC apps₩ | | | | | | | Core Network |
| Title: ∺ | Fea | ature C | Clean Up: Re | emoval of | Tx dive | rsity cl | osed | loop mode | 2 | |
| Source: # | 3G | PP TS | G RAN WG | 4 (Radio) | | | | | | |
| Work item code: ₩ | TE | 15 | | | | | | Date: 3 | € 16/ | /05/2005 |
| Category: Ж | С | | | | | | | Release: 8 | € Re | I-5 |
| | Deta | F (cord A (cord B (add C (fund D (edit iled exp | the following of rection) responds to a dition of feature ctional modificatorial | correction re), cation of fa tion) the above | n in an ea eature) | | lease) | 2 | (GSN (Rele (Rele (Rele (Rele (Rele (Rele | ollowing releases: M Phase 2) Pease 1996) Pease 1997) Pease 1998) Pease 1999) Pease 4) Pease 5) |
| | Tion of (Filonouse d) | | | | | | | | | |
| Reason for change | <i>:</i> | RAN | #27 decision | n on Feat | ture Clea | an-up | | | | |
| Summary of change | e: ૠ | | section 8.6.2 rsity Mode 2 | | | lulatior | n of D | CH in Clos | ed Lo | op Transmit |
| | | Isolat | ed Impact A | Analysis | | | | | | |
| | | Funct | ionality remo | oved: Clo | sed Loo | p Tran | smit [| Diversity M | ode 2 | |
| | | are r | | | | | | | | implementations rting the removed |
| Consequences if | ¥ | | | | es and e | volutio | on of t | the existing | g featu | re remain slow |
| not approved: | | also | in the future | | | | | | | |
| Clauses affected: | Ж | 8.6.2 | 2.1 | | | | | | | |
| Other specs | ¥ | Y N X | Other core | specifica | ations | ¥ | 25.21 | 1, 25.214, | 25.33 | 1, 25.423, 25.433 |

How to create CRs using this form:

 \mathbb{H}

affected:

Other comments:

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

Test specifications

X O&M Specifications

34.121

- 1) Fill out the above form. The symbols above marked \(\mathcal{H} \) 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 ftp://ftp.3gpp.org/specs/ 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.

8.6.2 Demodulation of DCH in closed loop transmit diversity mode

The receive characteristic of the dedicated channel (DCH) in closed loop transmit diversity mode is determined by the Block Error Ratio (BLER). DCH is mapped into in Dedicated Physical Channel (DPCH).

8.6.2.1 Minimum requirement

For the parameters specified in Table 8.21 the average downlink $\frac{DPCH_{-}E_{c}}{I_{or}}$ power ratio shall be below the specified value for the BLER shown in Table 8.22.

Table 8.21: Test Parameters for DCH Reception in closed loop transmit diversity mode (Propagation condition: Case 1)

| Parameter | Unit | Test 1 (Mode 1) | Test 2 (Mode 2) |
|------------------------------------|--------------|--------------------|---|
| \hat{I}_{or}/I_{oc} | dB | 9 | 9 |
| I_{oc} | dBm/3.84 MHz | -60 | -60 |
| Information data rate | kbps | 12.2 | 12.2 |
| Feedback error rate | % | 4 | 4 |
| Closed loop timing adjustment mode | - | 1 | 4 |

Table 8.22: Test requirements for DCH reception in closed loop transmit diversity mode

| Test Number | | $\frac{DPCH_{-}E_{c}}{I_{or}}$ (see note) | BLER | | | |
|-------------|--------|--|----------------------------|--|--|--|
| 1 | | -18.0 dB | 10 ⁻² | | | |
| 2 | | -18.3 dB | 10⁻² | | | |
| NOTE: | sharin | This is the total power from both antennas. Power sharing between antennas are feedback mode dependent as specified in TS25.214. | | | | |

8.6.3 Demodulation of DCH in Site Selection Diversity Transmission Power Control mode

3GPP TSG RAN WG4 (Radio) Meeting #35

Athens, Greece 9 - 13 May 2005

| CHANGE REQUEST | | | | | | | | CR-I OIIII-VI |
|---|--|--|------------------|------------|---|----------|---|---------------|
| ж <mark>2</mark> | 5.101 C | CR 417 | жrev | * | Current vers | sion: 6 | .7.0 | ¥ |
| For <u>HELP</u> on using | this form, | , see bottom of | f this page or | look at t | he pop-up text | over the | e ∺ syr | nbols. |
| Proposed change affe | Proposed change affects: UICC apps# ME X Radio Access Network Core Network | | | | | | | |
| Title: | eature Cle | an Up: Remov | al of Tx divers | sity close | ed loop mode2 | | | |
| Source: # 30 | GPP TSG | RAN WG4 (Ra | adio) | | | | | |
| Work item code: | EI6 | | | | Date: ૠ | 16/05 | /2005 | |
| Det | F (correct A (correct B (addition C (function D (editorit tailed explai | e following categ etion) sponds to a corre on of feature), onal modification ial modification) nations of the ak SPP TR 21.900. | ection in an ear | | Release: 光 Use <u>one</u> of 2 se) R96 R97 R98 R99 Rel-4 Rel-5 Rel-6 | | hase 2) e 1996) e 1997) e 1998) e 1999) e 4) e 5) | eases: |
| Reason for change: \$ | € RAN#2 | 27 decision on | Feature Clear | n-up | | | | |
| Summary of change: Sub section 8.6.2.1 test 2 Demodulation of DCH in Closed Loop Transmit Diversity Mode 2 removed | | | | | | | nit | |
| | Isolated | I Impact Analy | ysis . | | | | | |
| | Functionality removed: Closed Loop Transmit Diversity Mode 2 | | | | | | | |

| Clauses affected: | 8.6.2.1 |
|-------------------|---|
| Other specs | Y N X Other core specifications |
| affected: | X Test specifications 34.121 O&M Specifications |
| | |
| Other comments: | * |

Isolated impact statement: Since functionality is removed, UE implementations are not affected. Would affect UTRAN implementations supporting the removed

Introduction of new features and evolution of the existing feature remain slow

How to create CRs using this form:

Consequences if

not approved:

functionality.

also in the future.

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