

TSG-RAN Working Group 1 meeting #12  
Seoul, Korea  
April 10 – 13, 2000

***TSGR1#12(00)0466***

**Agenda item:** AH 1  
**Source:** InterDigital Communications Corporations  
**Title:** Editorial change – correction in setting of TPC bit  
**Document for:** Decision

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This CR proposes an editorial to fix in TS 25.224.

In the section describing power control for dedicated physical channel of this spec the wording for setting TPC bit to increase power was changed from “TPC bit= 1” to “TPC command up”

This CR proposes to use the same change in section “Out of synchronisation handling” for consistency.

## CHANGE REQUEST

Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.

**25.224 CR 016**

Current Version: **3.2.0**

GSM (AA.BB) or 3G (AA.BBB) specification number ↑

↑ CR number as allocated by MCC support team

For submission to: **RAN #8**  
list expected approval meeting # here ↑

for approval   
for information

strategic   
non-strategic  (for SMG use only)

Form: CR cover sheet, version 2 for 3GPP and SMG The latest version of this form is available from: <ftp://ftp.3gpp.org/Information/CR-Form-v2.doc>

**Proposed change affects:** (U)SIM  ME  UTRAN / Radio  Core Network   
(at least one should be marked with an X)

**Source:** InterDigital Comm. Corp. **Date:** 28 March, 2000

**Subject:**

**Work item:** TS 25.224

**Category:** F Correction  **Release:** Phase 2   
A Corresponds to a correction in an earlier release  Release 96   
(only one category shall be marked with an X) B Addition of feature  Release 97   
C Functional modification of feature  Release 98   
D Editorial modification  Release 99   
Release 00

**Reason for change:** Making TPC definition for setting power up consistent with other sections of the specification.

**Clauses affected:** 4.2.3.3.1

**Other specs affected:** Other 3G core specifications  → List of CRs:  
Other GSM core specifications  → List of CRs:  
MS test specifications  → List of CRs:  
BSS test specifications  → List of CRs:  
O&M specifications  → List of CRs:

**Other comments:**



help.doc

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

### 4.2.3.3 Dedicated Physical Channel

The initial transmission power of the downlink Dedicated Physical Channel is set by the network. After the initial transmission, the UTRAN transits into SIR-based inner loop power control.

The measurement of received SIR shall be carried out periodically at the UE. When the measured value is higher than the target SIR value, TPC command = “down”. When this is lower than or equal to the target SIR value, TPC command = “up”.

As a response to the received TPC command, UTRAN may adjust the transmit power of all downlink DPCHs of this radio link. When the TPC command is judged as “down”, the transmission power may be reduced by one step, whereas if judged as “up”, the transmission power may be raised by one step. The transmission power of one DPCH shall not exceed the limits set by higher layer signalling by means of Maximum\_DL\_Power (dB) and Minimum\_DL\_Power (dB). The transmission power is defined as the average power of the complex QPSK symbols of a single DPCH before spreading.

The total downlink transmission power at the nodeB within one timeslot shall not exceed Maximum\_Transmission\_Power set by higher layer signalling. In case the total power of the sum of all transmissions would exceed this limit, then the transmission power of all downlink DPCHs is reduced by the amount that allows fulfilling the requirement. The same amount of power reduction is applied to all DPCHs

A higher layer outer loop adjusts the target SIR.

#### 4.2.3.3.1 Out of synchronisation handling

When the dedicated physical channel out of sync criteria based on the received burst quality is as given in the section 4.4.2 then the UE shall set the uplink TPC command = “up” TPC bit = „1,,. The CRC based criteria shall not be taken into account in TPC bit value setting.

