## CHANGE REQUEST

 page for instructions on how to fill in this form correctly.
### 25.211 CR 029r1 <br> Current Version: V 3.1.1

GSM (AA.BB) or 3G (AA.BBB) specification number $\uparrow$
$\uparrow$ CR number as allocated by MCC support team
For submission to: WG1 \# 11
list expected approval meeting \# here $\uparrow$


Form: CR cover sheet, version 2 for 3GPP and SMG
$\square$ UTRAN / Radio X Core Network $\square$
Proposed change affects:
(U)SIM $\square$ ME
(at least one should be marked with an X)
Source: Texas Instruments
Date: 24 Feb 2000
Subject: Modifications to STTD text
Work item: TS 25.211

| Category: | F | Correction |
| :--- | :--- | :--- |
|  | A | Corresponds to a correction in an earlier release |
| (only one category | B | Addition of feature |
| shall be marked | C | Functional modification of feature |
| with an $x$ ) | D | Editorial modification |



Reason for change: Better readability and notation for STTD description

## Clauses affected: $\quad$ 5.3.2.1



## Other <br> comments:

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

### 5.3.2.1 STTD for DPCH

The pilot bit pattern for the DPCH channel transmitted on the diversity antenna is given in table 14. The shadowed part indicates pilot bits that are STTD encoded from the corresponding (shadowed) bits in Table 12. For the SF=256 DPCH , if there are only two dedicated pilot bits $\left(\mathrm{N}_{\text {piltot }}=2\right.$ in Tables 12 and 14), they are STTD encoded together with the last two bits (data or DTX) of the secend data field (data2) of the slot.

- For $\mathrm{N}_{\text {pilot }}=8,16$ the shadowed part indicates pilot bits that are obtained by STTD encoding the corresponding (shadowed) bits in Table 12. The non-shadowed pilot bit pattern is orthogonal to the corresponding (nonshadowed) pilot bit pattern in table 12 .
- For $\mathrm{N}_{\text {pilot }}=4$, the diversity antenna pilot bit pattern is obtained by STTD encoding both the shadowed and non-shadowed pilot bits in table 12.
- For $\mathrm{N}_{\text {pilot }}=2$, the diversity antenna pilot pattern is obtained by STTD encoding the two pilot bits in table 12 with the last two bits (data or DTX) of the second data field (data2) of the slot. Thus for $\mathrm{N}_{\text {pilot }}=2$ case, the last two bits of the second data field (data 2) after STTD encoding, follow the diversity antenna pilot bits in Table 14.

STTD encoding for the DPDCH, TPC, and TFCI fields is done as described in section 5.3.1.1.1. For the $\mathrm{SF}=512$ DPCH, the first two bits in each slot, i.e. TPC bits, are not STTD encoded and the same bits are transmitted with equal power from the two antennas. The following remaining four bits are STTD encoded.

Table 14: Pilot pattern of the DPCH channel for the diversity antenna using STTD

|  | Npilot <br> $=\mathbf{2}$ | Npilot = 4 |  | Npilot = 8 |  |  |  |  |  | Npilot = 16 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Symbol <br> $\#$ | 0 | 0 | 1 | 0 | 1 | 2 | 3 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |  |
| Slot \#0 | 01 | 01 | 10 | 11 | 00 | 00 | 10 | 11 | 00 | 00 | 10 | 11 | 00 | 00 | 10 |  |  |
| 1 | 10 | 10 | 10 | 11 | 00 | 00 | 01 | 11 | 00 | 00 | 01 | 11 | 10 | 00 | 10 |  |  |
| 2 | 11 | 11 | 10 | 11 | 11 | 00 | 00 | 11 | 11 | 00 | 00 | 11 | 10 | 00 | 11 |  |  |
| 3 | 10 | 10 | 10 | 11 | 10 | 00 | 01 | 11 | 10 | 00 | 01 | 11 | 00 | 00 | 00 |  |  |
| 4 | 00 | 00 | 10 | 11 | 11 | 00 | 11 | 11 | 11 | 00 | 11 | 11 | 01 | 00 | 10 |  |  |
| 5 | 01 | 01 | 10 | 11 | 00 | 00 | 10 | 11 | 00 | 00 | 10 | 11 | 11 | 00 | 00 |  |  |
| 6 | 01 | 01 | 10 | 11 | 10 | 00 | 10 | 11 | 10 | 00 | 10 | 11 | 01 | 00 | 11 |  |  |
| 7 | 00 | 00 | 10 | 11 | 10 | 00 | 11 | 11 | 10 | 00 | 11 | 11 | 10 | 00 | 11 |  |  |
| 8 | 11 | 11 | 10 | 11 | 00 | 00 | 00 | 11 | 00 | 00 | 00 | 11 | 01 | 00 | 01 |  |  |
| 9 | 01 | 01 | 10 | 11 | 01 | 00 | 10 | 11 | 01 | 00 | 10 | 11 | 01 | 00 | 01 |  |  |
| 10 | 11 | 11 | 10 | 11 | 11 | 00 | 00 | 11 | 11 | 00 | 00 | 11 | 00 | 00 | 10 |  |  |
| 11 | 00 | 00 | 10 | 11 | 01 | 00 | 11 | 11 | 01 | 00 | 11 | 11 | 00 | 00 | 01 |  |  |
| 12 | 00 | 00 | 10 | 11 | 10 | 00 | 11 | 11 | 10 | 00 | 11 | 11 | 11 | 00 | 00 |  |  |
| 13 | 10 | 10 | 10 | 11 | 01 | 00 | 01 | 11 | 01 | 00 | 01 | 11 | 10 | 00 | 01 |  |  |
| 14 | 10 | 10 | 10 | 11 | 01 | 00 | 01 | 11 | 01 | 00 | 01 | 11 | 11 | 00 | 11 |  |  |

