TSG-RAN Working Group 1(Radio) meeting #5 ***TSGR1#5(99)595***
Cheju, Korea, 01 – 04 June 1999

Agenda Item:

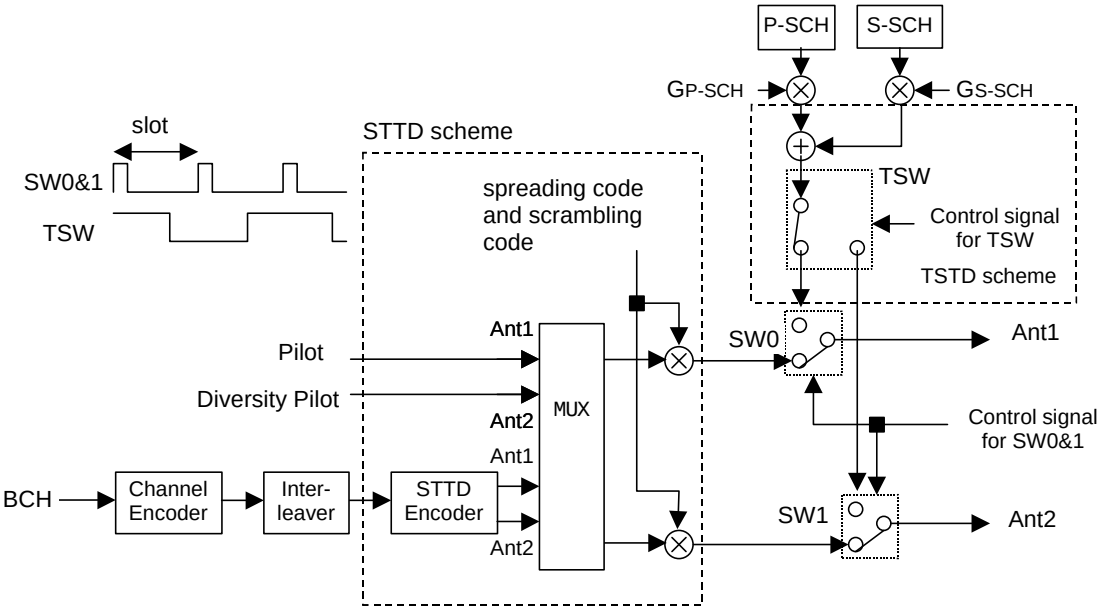
Source: **Editor**

Title: Text proposal for 25.211

Document for:

This text proposal includes updated figures for TX diversity and for shared channels. The text and figure of Appendix A is also updated.

5.3.1.1.2 Time Switched Transmit Diversity for SCH (TSTD)



GP-SCH: Gain factor of Primary SCH
GS-SCH: Gain factor of Secondary SCH

Figure 1: Multiplexing scheme of SCH (TSTD) and PCCPCH (STTD)

5.3.2.2 Dedicated channel pilots with feedback mode transmit diversity

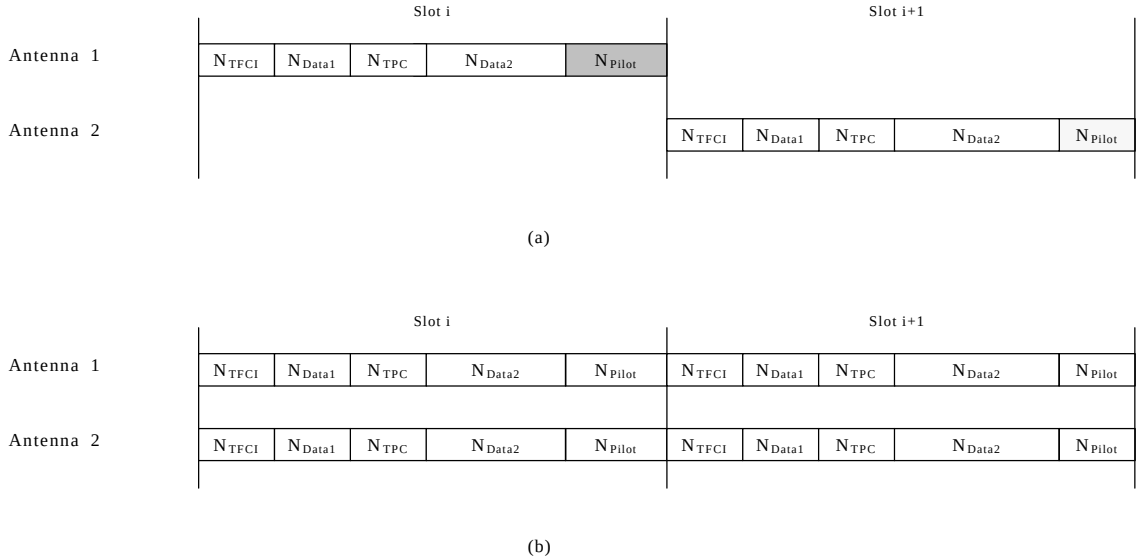


Figure 2: Slot structures for downlink dedicated physical channel diversity transmission. Structure (a) may be used in conjunction with antenna verification. Structure (b) is used otherwise.

5.3.3.1.2 Primary CCPCH structure with FB mode transmit diversity

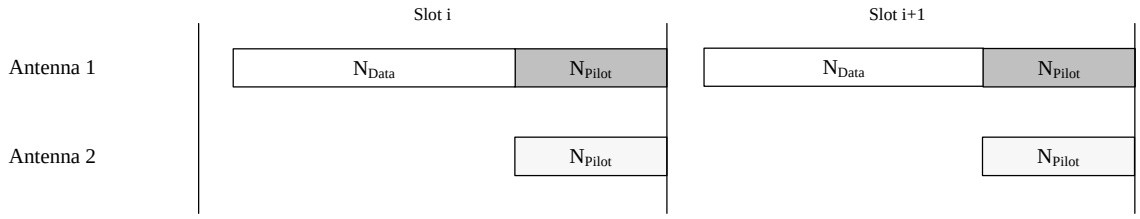
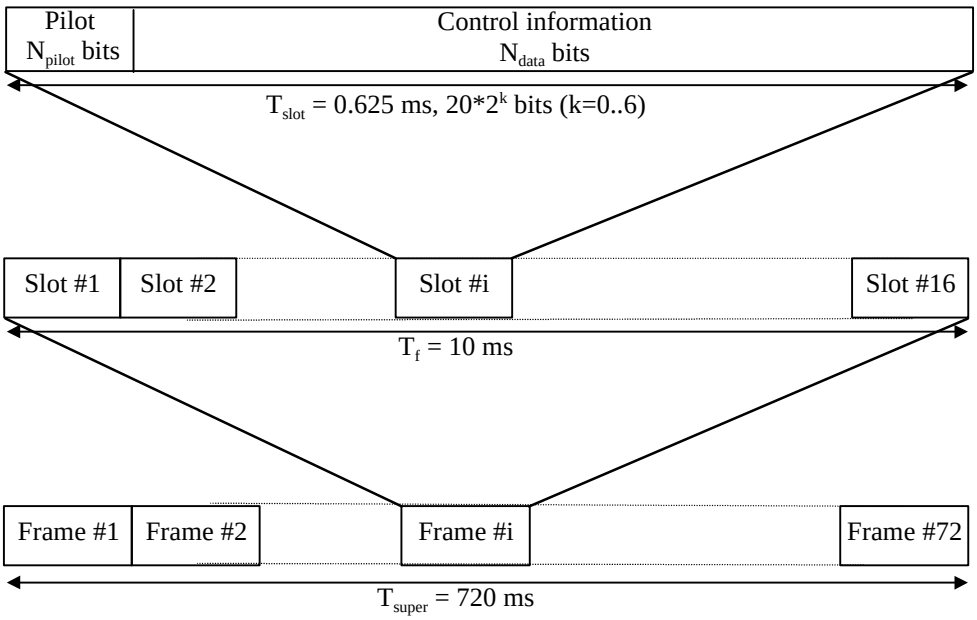


Figure 3: Slot structure of Primary CCPCH when diversity transmission is applied on dedicated channels.

5.3.3.4 Physical Shared Channel Control Channel (PSCCCH)



.

Figure 4: Frame structure of the Physical Shared Channel Control Channel (PSCCCH).

5.3.3.5.1 DSCH associated with a DCH

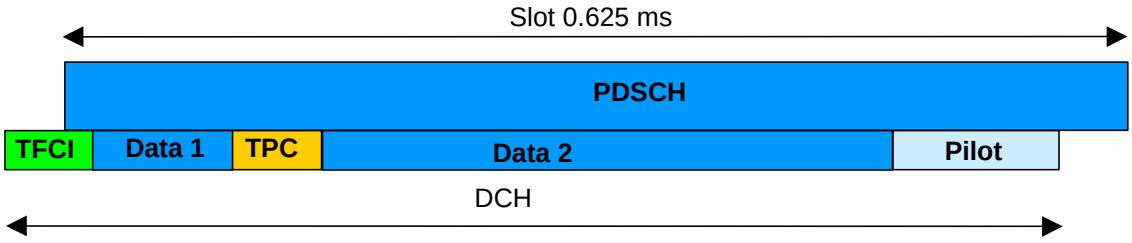


Figure 5: Frame structure for the DSCH when associated to a DCH.

5.3.3.5.2 DSCH associated with a DSCH control channel

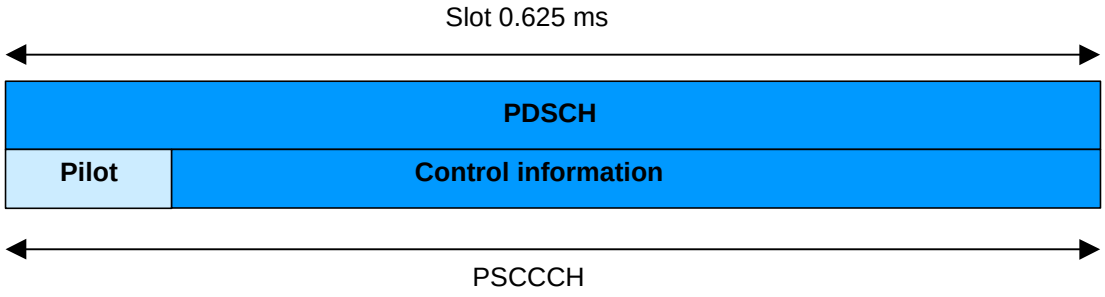


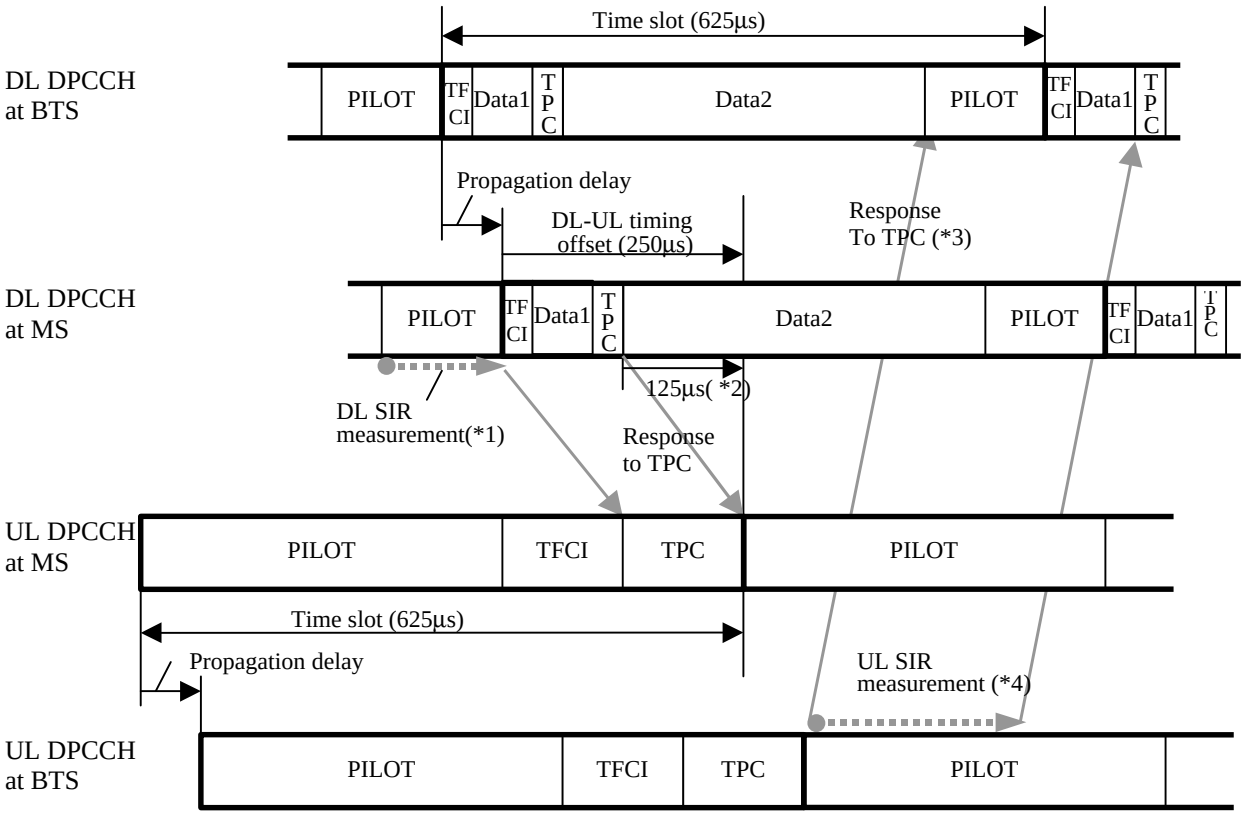
Figure 6: Frame structure for the DSCH when associated to a DSCH control channel.

Appendix A: Power Control Timing

<Editors note: The Power control timing described in this appendix should be seen as an example on how the control bits have to be placed in order to permit a short TPC delay. It seems appropriate to move this part later.>

In order to maximize the BTS-UE~~MS~~ distance within which one-slot control delay is achieved, the frame timing of a ~~reverse~~ uplink DPCH is delayed by 250μs from that of the corresponding ~~forward~~ downlink DPCH measured at the ~~MS~~ UE antenna.
Responding to a ~~forward~~ downlink TPC command, ~~MS~~ UE shall change its ~~reverse~~ uplink DPCH output power at the beginning of the first ~~reverse~~ uplink pilot field after the TPC command reception. Responding to a ~~reverse~~ uplink TPC command, BTS shall change its DPCH output power at the beginning of the first of later ~~forward~~ downlink pilot field after the TPC command reception. Note that the delay from the ~~reverse~~ uplink TPC command reception to the power change timing is not specified for BTS. ~~MS~~ UE shall decide and send TPC commands on the ~~reverse~~ uplink based on the ~~forward~~ downlink SIR measurement. The TPC command field on the ~~reverse~~ uplink starts, when measured at the ~~MS~~ UE antenna, 125μs after the end of ~~forward~~ downlink pilot field. BTS shall decide and send TPC commands based on the ~~reverse~~ uplink SIR measurement. However, the SIR measurement periods are not specified either for ~~MS~~ UE or BTS.

Fig. A-1 illustrates an example of transmitter power control timings.



*1,4 The SIR measurement periods illustrated here are examples. Other ways of measurement are allowed to achieve accurate SIR estimation.
*2 Except the case of DL symbol rate=8ksps.
*3 If there is not enough time for BTS to respond to the TPC, the action can be delayed until the next slot.

Fig. A-1 Transmitter power control Timing