## **3GPP-RAN Working Group 1 meeting #2**

TSGR1#2(99)027

Yokohama, Japan 22 - 25 February 1999

Agenda Item: 5

**Source**: Golden Bridge Technology, Inc.

Title: Downlink Common Control Channel Structure

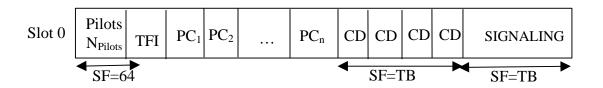
**Document for:** Proposed draft text for Downlink Common Control Channel

## 1. DL Common Control Channel Structure

Assume that there are N simultaneous Common Packet Channel users in the UL direction.

- 1. There are N power control channels associated with N user. These power control channels are time multiplexed.
- 2. The pilot symbols required for coherent detection are time multiplexed with the other control information in the Common Control Channel in the DL direction.
- 3. Messages such as L1 ACK (Busy), Free, CD, ARQ ACK/NAK will be sent through the Common control Channel as well. Some of the messages such as L1 ACK, TPC and CD bits are not interleaved since fast response time is required.
- 4. L1 ACK requires a predetermined time allocation in the .625 ms slot. This is required every other slot at the end of the DSMA/CDMA-CD mini-slot which corresponds to the .25 ms guard time.
- 5. Other less delay sensitive messages and commands go through the signaling channel which is time multiplexed with other information in the Common Control Channel.

**Figure 1** illustrates the structure of the Downlink Common Control Channel:



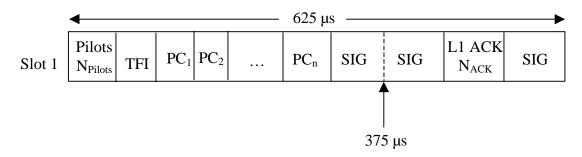


Figure 1 Structure of the DL Common Packet Control Channel