Hanover, Germany

30 August-4 September 1999

Agenda Item: Ad Hoc -3

Source: Motorola

Text Proposal for Dynamic Persistence Part of the RACH Procedure

Introduction

In a 3GPP-WCDMA system a dynamic persistence algorithm is included for managing interference and minimizing delay by controlling access to the RACH channel of the system. The text proposal for the Random Access Procedure in Section 6 of 25.214 should be modified to account for the dynamic persistence algorithm. It may be noted that to conserve BCH resources the persistence factor communicates the magnitude of the RV as a power of 2. As such, only 3 to 4 bits are required to communicate the persistence factor smaller than 0.001.

1.0 Text Proposal

Procedure (3) should be revised as follows:

- 3.1) Monitor the broadcast channel (BCH).
- 3.2) Read the current persistence factor, *N*, from the BCH.
- 3.3) If N = 0, the UE proceeds to step 4. Otherwise, the UE generate an integer uniform random variable R in the interval $[0, 1, ..., 2^N 1]$.
- 3.4) If the outcome of the random draw R=0, the UE proceeds to step 4. Otherwise, the UE defers the transmission of the message for one frame and repeats step 3.