ABSTRACT

In direct-sequence code division multiple-access (DS-CDMA), some user send information simultaneously in the same channel at the same carrier frequency. Each user modulate data with unique signature sequence. Multiple-access interference (MAI) is an obstruction on developing a robust code division multiple access (CDMA) communication.

The aim from this final project is to avoid MAI with using a combination between Multiuser Detection (MUD) and Channel decoding or Turbo Processing. This method use SISO multiuser detection and channel decoding which is implemented from modification of log-MAP algorithm.

Counted Parameter is BER as performance index from proposed turbo processing.