ABSTRACT

CDMA 2000 1x EV-DO was the result of evolution from the latest CDMA, that was CDMA 2000 1x. It was designed to accomodate the need of asymmetric data communication, for instance likes download from the internet whis was theoritically up to 2,4 Mbps at downstream and 153 Kbps at upstream.

The problem is happened if user (MS) mobiles from one BTS to another BTS. Of course it is related with distance between MS and BTS, speed of MS, and variation data rate of services. Three of them can make value of some parameters of network performance changed.

The result of calculation pilot power level(E_c/N_t) shown that degradation power level happened because the distance between MS and BTS became so far, and became no power anymore at the distance 4,8 km. From the analize of throughput and BER to SNR, it can be got several values for three kinds of mapping. First, for HTTP service(38,4 kbps), maximum throughput value with sequence mapping QPSK, 8-PSK, and BPSK are ±97%, 100%, dan ±99%. While, maximum BER value with sequence mapping above are ±0,28, ±0,33, dan ±0,28. Second , for video stremming service(614,4 kbps), maximum throughput value of there kinds of mapping is 100%. While, maximum BER value with sequence mapping above are ±0,28, ±0,33, dan ±0,28. Third, for FTP service(2,4 Mbps), maximum throughput value with sequence mapping QPSK, 8-PSK, and BPSK are ±99%, 100%, dan ±89%. While, maximum BER value with sequence mapping above are ±0,43, ±0,33, dan ±0,34. And then, From the analize of throughput and BER to speed, it can be got several values for three kinds of mapping. First, for HTTP service(38,4 kbps), maximum throughput value of there kinds of mapping is 100%. While, maximum BER value with sequence mapping above are ±0,38, ±0,4, dan ±0,99. Second , for video stremming service(614,4 kbps), maximum throughput value of there kinds of mapping is 100%. While, maximum BER value with sequence mapping above are ±0,38, ±0,4, dan ±0,9. Third, for FTP service(2,4 Mbps), maximum throughput value of there kinds of mapping is 100%. While, maximum BER value with sequence mapping above are ±0,43, ±0,4, dan ±0,9.