ABSTRACT

Wireless communications systems enable the end users to be mobile. Majority of the wireless communications networks are cellular networks. Several methods are developed to increase the performance of the cellular networks. The performance of the cellular networks depends on the correct determination of the design parameters as well as the architecture of the system and the traffic requirements. The performance of cellular networks also depends on their implementation cost.

In this final project will analyze the performance of CDMA2000 1x two-tier network cellular. There are seven scenarios in this final project. All cell use same frequency, 800 MHz.

Microcell implementation in macrocell was the distance function, we will search the ideal position. We will see the influence of path loss exponent values and the influence if we adding fading Rayleigh to the system.

The results are in simulations graphics and tables, from the result we'll find ideal position of microcell. The performance will increase if the microcell position farther.