ABSTRACT

Discussions in network planning construction of cellular communication system have been listed in literature references and learned in college anywhere. It indicates how rapid the telecommunication has increased, and social eagerness in knowing about telecommunication is clearly growing. Thus, the application is needed to make it easier to understand the implementation in telecommunication. An example for understanding that telecommunication is learning instrument application which is used as cellular communication system radio access dimensioning.

This final project makes a design of dimensioning simulation of cellular communication system radio access by using Matlab 7.1. Any parameters affect this calculation are : Spreading Power (Ptx), Receving Power (Prx), Propagation Loss (Lp), Cell Sum (N), Cell Radius (R), Frequency (F), and any others technical parameters.

Simulation result is capable of performing learning instrument which can produce digital cells having characteristic based on calculation and same size with certain digital map.

Keywords : Powerlink Budget, Cell Radius, Cell Sum, Frequency, Cell Dimensioning