

ABSTRACT

Limited frequency allocation in wireless network need efficient and affective allocation technique. One of channel allocation technique for micro cell GSM is Dynamics channel Assignment (DCA). By using DCA for Channel allocation, every channel within cell can temporarily used when communication establish. The primary variation of DCA scheme is distributed and centralized.

The final assignment will discussing about maximum capacity for channel modeling by using Distributed DCA on a micro cell GSM. Channel model design by performance standard within GSM which is 2% maximal blocking with Okumura Hata link budgeting propagation models. Observed cell have measurement of 7,2 km within 7 cell uniform cluster.

From simulation data using Matlab 7.4 software, parameter value measured which are efficiency, user distant dispersion, CNIR, receiving delay, channel request delay, capacity needed for user, and dropping probability happen in the system, is got. Simulation result of this particular final assignment shows that channel allocation using Distributed DCA scheme has 97,63 % and dropping probability 0,25%. This final result simulation is to watch DDCA scheme ability to increase users capacity.

Keywords : Distributed Dynamics Channel Assignment, Okumura Hata, GSM