ABSTRAC

HSDPA technology which is used for high speed data access through wireless channels is an WCDMA 3GPP Release 5, where this technology can support a multimedia service packages with speed access data reach 14Mbps in accordance with the development of this technology at the time.

As one of the supporting factors for the occurrence of the service with load balancing (load sharing) in the system that has a different carrier frequency, and this can be achieved with the way move the traffic of a cell have more load to cell have less load in one other carrier frequency to another carrier frequency ,The other way is to monitor the power for the DL series of cell loading and choose of which must be kept in a fixed channel or data transmission must be changed GPRS system.

The analysis to load-sharing of do the power in the downlink using the capacity management algorithm DL Power Monitor, where this algorithm will determine the relationship which will occur in the load sharing of data so that it will be the best relationships will be made in the system, while algorithm above method is applied to the load sharing method is inter-frequency load sharing and the results of its parameters which will be analysis simulation using matlab 7.1.

So for this simulation we get packet loss minimum value of 0% in browsing, wap and mms service, and maximum value of 3% in download service with load sharing system.to system without load sharing have minimum value of 0% in wap service and maximum value of 8% in download service Throughput have minimum value 10 Mbps with delay of service 0.1 ms to system load sharing and to system without load sharing have throughput 11 Mbps with delay of service 0.6 ms. with use user input maximum is 80 User and far distance is 5 Km.

Keywords: *HSDPA, load sharing, Inter-Frequency Handover, Frequency carrier, DL Power Monitor, Capacity Management.*