

## ABSTRACT

Worldwide Interoperability For Microwave (WiMax) is a standard for broadband wireless access (BWA) with the ability to deliver high-speed data. Many more capabilities was offered by WiMax than previous technologies, such as high data rate, wireless access to end users, as well as the ability to apply the conditions of Non Line of Sight (NLOS), both applications for fixed, nomadic, portable, or mobile.

Another characteristic of WiMax is a guaranteed QOs (Quality of Service). Therefore, the mobile WiMax is needed a good scheduling algorithm that is able to support QOS for a variety existing services. A good Scheduling algorithms should be able to guarantee the maximum total data rate, fairness, and the good use of bandwidth for all users.

In this Final Project will be analyzed WiMax network performance when using scheduling algorithm of Modified Weighted Round-Robin (MWRR), Weighted Fair Queuing (WFQ) dan Custom Queuing (CQ), seen from the parameters of *delay*, *packet loss*, *jitter*, *throughput* dan *fairness* and compared with ITU-T standard.

Keywords : WiMAX, QOS, MWRR, WFQ, CQ, OPNET