

## ABSTRACT

Wimax (World wide Interoperability for Microwave Access) is a standard Broadband Wireless Access with the ability to provide high-speed data services are designed to achieve a wide coverage area. In this final test, the wimax network in East Bandung area to support data transfer with the condition of large areas, located in the office, a large number of users and high-speed data access. The services analysis performed by test video services, voice and packet data.

Measurement process is done by accessing the video services, voice and packet data with eight scenarios that have been determined based on a survey of internet users. In these measurements, the used bandwidth is 2Mbps with a maximum duration of each service access amounted to 650 sec and use best effort parameter on Wimax services. For video service applications use streaming video, video chat, in voice and packet data services use VoIP and web services. The Measurements results are analyzed by UDP and HTTP protocols that captured through Wireshark software. The result will be used for the analysis of throughput, delay, jitter and packet loss as the QoS parameters on Wimax network.

Analysis QoS of measurement results was done on video services, voice and packet data on a Wimax network in East Bandung area showed that the services of PT.TELKOM equal with and fill IEEE802.16d Quality of Services standards. Maximum limit services that can be tested and fill the QoS of Wimax standard are 2-5 pairs of VoIP, <20 video streams, <20 Video chat and <30 web.

**Keywords: Wimax, IP, Video, Packet Data and Voice**