

ABSTRACT

In this time, trend usage of communications flange to wireless and personal with joining three service (voice, video and data) in one carrier media, and then this service known as triple play services. To enable ready of the service needed capable of broadband access network. WiMAX represent one of the technological alternative capable to accommodate requirement of service. However, technology of WiMAX relative newly and still be developed hence in its implementation sometimes yield quality / Quality Of Service (Qos) which not yet matching with the one which expected (standar) especially for the service of voice and video.

In this Final Duty, studied field in Telkom RDC by doing measurement of parameter of Qos to the each service (voice, video and data) in network of WiMAX that is at condition of LOS and Non LOS (NLOS) for a few apart from Subscriber Station (SS) with Base Station (BS). Parameter of Qos perceived at the research is delay, packet loss, jitter and throughput, that happened start from source node up to destination node.

Result of measurement obtained that value of one delay way, jitter, and loss packet for the service of voice and video streaming when used by together or triple play still reside in range that recommended by ITU where biggest value which measured for the service of voice that is one delay way 78.12990 ms, jitter 5.189692 ms, loss packet 0.03%, while for the service of video of streaming that is one delay way 55.45069 ms, jitter 6.588448 ms, loss packet 0.276%. Value of RSSI biggest obtained at Telkom RDC that is equal to - 52,1 dBm in condition of LOS, while value of RSSI smallest at Setiabudi Regency dot of I that is equal to - 90,6 dBm. Assess biggest throughput obtained at Telkom RDC equal to 4,919 Mbps for downlink and 5,017 Mbps for the uplink. Furthermost distance signal which admit of to be accepted better by SS is 32,8 km at Rancaekek with condition LOS.

Keyword : WiMAX, Triple play