

ABSTRACT

Ciumbuleuit apartment located in Bandung is a fairly luxurious apartments and is equipped with high technology. One of the services offered by the apartment to increase sales is triple play services owned by Fiber To The Home (FTTH). However, no specific analysis of the FTTH network that has been built in the apartment. FTTH network analysis is needed to see if the network is implemented already fit for use or not. To that end, the author would like to assist in analyzing the optical link networks in order to market the apartments according to standards that have been determined.

In this final project will be the analysis of network performance on Apartment Ciumbuleit with several parameters, namely Link Power Budget, Rise Time Budget, Signal to Noise Ratio (SNR), Bit Error Rate (BER), and Quality of Service (QoS). Analysis is conducted with literatur study and further data collection on actual field conditions.

Based on the test results conducted link, it is evident that the FTTH network that have been implemented have been feasible and meets the standards set by PT. Telkom with test parameters were used that Link Power Budget, Rise Time Budget, SNR, and BER. From the results of testing the quality of service based on the QoS parameters for triple play services are implemented in Apartment Ciumbuleuit that the bandwidth that has been given to each of these services still meet the standards of the ITU-T and provide the results of quality of service with a category value of 1 to 5 obtained are 4 or included in good categories. With 1010 customers who will occupy the number 34 fiber optic cores are implemented so each customer can increase their total service up to 77 Mbps.

Keywords: *Link Power Budget, Rise Time Budget, SNR, BER, QoS*