

ABSTRACT

Now the communications technology development is very quick. The service is also must be increase there fore PT Telkom gives service for the customers who use the optic fiber as a transmissions link. The solution for existing network weakness to handle a multimedia service,then used network system using transmission media sharped fiber optic wire. The reason is fibre optic has wide bandwidth, small size,easy for operating, and so practical because the fibre optic have hight capacity.

For service the customer.who amount are many and scattered uses OAN (*Optical Access Network*) especially PON (*Passive Optical Network*).This paper do planning with location in STO Rancaekek. This plan started with demand forecast to forecast next year.

By this planning it expectated it is suitable with the condition in the yard, to reliable broadband access, it can increase the service to the customer, it increase the capacity to customers and reduce the intrusion.