

ABSTRACT

Telecommunication today is increasing rapidly. Telecommunication operator must apply some technology for give the better quality of service and development of users. TELKOM is telecommunication operator have much user. Demand of telecommunication service is growth where new service needed various like leased line, web service/internet, or video service.

In this final task will explain planning Fibre In The Loop like demand forecast, demography of user who needed fiber optic serve, choose of facilities used, network planning design, calculate Fiber In The Loop planning suitable, also fulfilled development of planning.

Fiber in The Loop has been chosen to fulfilled telecommunication POTS and non POTS in 10 building which give high investment for TELKOM because there are office and business center. In the billing data for January 2004 gived 4.980.832.214. For Fibre In The Loop planning suitable analysis, total loss is less (average 8 dB) than power budget (average 32 dB) for every link, so this planning qualify and can accomodated growth demand for five year future.