

## **ABSTRACT**

Basically, DPG is a digital pair gain which is implemented by PT Telkom at access network called by Fastlink system. Fastlink consists of modules used for the solving of network problems. This system can handle many services, includes interactive services like telephone, ISDN, 64 Kbit/s data and 2 Mbit/s services, or modern broadband services like CATV.

With progress at economic sector requesites of society about telecommunication service so decrease. Existing telecommunication service more much transmitted the information in voice. But now telecommunication service must can give transmit not only in voice format but telecommunication service can transmit on other format (like data, picture, and video) with high bit rate and better quality with using

The solution for existing network weakness to handle a multimedia service, then used network system using transmission media sharped fibre optic wire. The reason is fibre optic has wide bandwidth, small size, easy for operating, and so practical because the fibre optic have high capacity.

On the final project studied about fibre access local network plan with Fastlink technology at STO Tegal. This plan started with demand forecast to forecasting demand need in next year.

Result of forecasting in used to make planning on fibre access network, and from this forecasting we can account the hardware were needed

*STTTTELKOM*