

ABSTRACTION

The world of telecommunication technologies nowadays is growing fast. Even a telecommunication service provider operator can apply some technologies. These technologies applied in order to give better quality of service and to increase more subscribers.

Communication through optical fiber is communication that have superiority and flexibility services. The reason why Local Optical Access Network is implemented are wide bandwidth, low loss and high bit rates. In this paper planned Local Optical Access Network in Banjarsari and Teguhan that are include in STO Medium area using Digital Loop Carrier system. In the planning process begin from forecasting demand, and type of services. From the planning above then analyzed the performance of the systems that contain of: link power budget, which for Banjarsari area is 15,81125 dB, for Teguhan area is 15,215 dB. Loss for both areas are under the standard, which maximum standard is under 30 dB. Then analyse the rise time budget. In Teguhan area, for NRZ format, total of rise time is 0,6201 ns, for RZ format, total of rise time is 0,6201 ns. In Banjarsari area, for NRZ format, total of rise time is 0,7393 ns ns, for RZ format, total of rise time is 0,7393 ns. After analyses, the result are under the standard, it shows that Local Access Fiber Network Planning suitable to be implemented.

rise time budget to give illustration over the optical fiber network apply for both areas.

Access network opticalization program in Kandatel Medium place Digital Loop Carrier (DLC) with Fiber To The Zone (FTTZ) as application mode is to be prime program.