

## **ABSTRACT**

Fo-nisasi is activity to widening the fiber optic access network while to change transport system of DLC (Digital Loop Carrier) from HDSL system using coaxial as transport E1 to be a fiber optic. By this substitution reliable transport system of DLC increasing, because optical system is insensitive to electric interference, less attenuation, bandwidth have bigger capacity and small size, have isolation between transmitter and receiver, and also it have good ability for data channel with high stability.

This final project will study several things: first, the reason why in STO Kopo Bandung had done the widening of fiber optic network by changing transport system from HDSL to OMUX. Second, the different of HDSL system and OMUX look from how big the powered transmitted and received, bandwidth, and bit rate by each system. The research have done at ONU RF, RG1, RG2, RAA, RR1, RS, RV, RAD1, RAD2, RE, RC1, RX, RAB, dan RD1 (96 cores) in STO Kopo Bandung.

From this analysis and evaluation have done in this final project wondered is can knowing which the widening of optical access network by changing transport system of HDSL to OMUX in STO Kopo Bandung have reaching the target which wanted by PT Telkom to increasing customer service.