

## ABSTRACT

PT. Telkom in the Bandung area using the fiber optic transport as alternative band of HDSL substitution is called Fo-nisasi. Fo-nisasi is activity to change transport system of DLC (Digital Loop Carrier) from HDSL system with coaxial as transport E1 to be an optimux system. Reliable transport system of DLC measurement increasing with this substitution, while optical system insensitive of electric interference and it have good ability for data channel with high stability.

This final project studied by several thing : first, why PT Telkom done changing the transport system of HDSL to Optimux. Second, how big the power transmitted and received (*Power Link Budget*) by each system. Third, how big *bandwidth* and *bitrate* by each system.

Evaluation focused for transport band between *exchange unit* to *remote unit* or refered as ONU (Optical Network Unit). This experiment to be majoried to STO Lembong that direct 30 ONU in the Bandung area. But, this final project experiment just for OAN in the STO Bandung Centrum. Problem solving in this final project compilation using bibliography study and doing direct needed measurements to the field and also interview with relevant officer.

Output of final project wondered is knowing which transport changing of HDSL to Optimux in the field have reaching target which is wanted by PT Telkom to increase costumer service. Better quality system will support PT. Telkom to emulation facing between each telecommunication companies.