

## ABSTRAK

Sistem transmisi jaringan lokal dengan akses fiber optik (jarlokaf) direkomendasikan untuk batas redaman sebesar 30 dB tanpa menggunakan pengulang. Pada STO MI Panakkukang jarak untuk setiap masing-masing Optical Line Termination ke Optical Network Unit yaitu 2530 m hingga yang terjauh 6.414 m dengan redaman berkisar antara 14,612 dB - 16,848 dB hingga belum memungkinkan penggunaan pengulang. Sistem transmisi Jarlokaf (Fastlink) mode operasinya Halfduplex (komunikasi dua arah secara bergantian), dengan teknik multiplex Wave length Dew's/on Multiplexing yaitu multiplex panjang gelombang. Sisi downstream (dari Optical Line Termination ke Optical Network Unit) menggunakan panjang gelombang 1550 nm dan sisi Upstream (dari Optical Network Unit ke Optical Line Termination) menggunakan panjang gelombang 1310 nm.

## ABSTRACT

*Local network transmission system with fiber optic access (jarlokaf) is recommended for attenuation limits of 30 dB without using repeaters. At STO MI Panakkukang the distance for each Optical Line Termination to the Optical Network Unit is 2530 m to the furthest 6,414 m with attenuation ranging from 14,612 dB - 16,848 dB until it is not possible to use repeaters. The Jarlokaf (Fastlink) transmission mode is Halfduplex (alternating two-way communication), with a multiplex Wave length Dew's / on Multiplexing technique that is wavelength multiplex. The downstream side (from Optical Line Termination to Optical Network Unit) uses a wavelength of 1550 nm and the Upstream side (from Optical Network Unit to Optical Line Termination) using a wavelength of 1310 nm.*