

ABSTRACT

Telecommunications fiber optic transmission are currently being utilized by the field of telecommunication service providers such as PT. Telecommunications Indonesia, Tbk or PT. TELKOM. Optical fiber capable of supporting more demanding consumer demand in telecommunications viewed from the transmission quality of the optical fiber itself. However, sometimes there is a disruption in the shipping process or obstacles that make the quality of the transmission is not eligible. Therefore, the authors take an example of a case study locations until now there is still a disturbance that link Bandung - Cianjur.

The research method used in this final project in the form of results of measurements and calculations. The first utilize existing measurement results of devices such as OTDR provided by PT. Telkom Lembong. The second mathematical calculations. Because of the limitations, The writer just get the data which is then processed to be associated with the calculation results. By condition mathematical calculations are in accordance with the procedures and parameters of its eligible. From the results of earlier measurements will be analyzed parameters by comparing two to analyze the cause of the disturbance. From the measurement results, the things that will be analyzed is the link power budget, rise time budget, maintainability, availability, reliability

From the results of the evaluation during the period September 2014 - August 2015, unknown value MTTR (Repair) by an average of 3.95 hours (standard), the value of MTTR (Recovery) an average of 5.30 hours (not standard), and the average system availability of 99.75% (less standard). This indicates that the quality of system performance is not good enough. Please also note during the period, the dominant disorder that occurs is broken wires caused by a 3rd party.

Keywords: transmission, existing, OTDR, splice, dispersion, connectors