ABSTRACT

In this globalization era, all expanding to go to efficient and better in fulfilling requirement in fresh user, information hold role which of vital importance in social activity until the business activity, interregional business goodness and also inter-states rendering foreign exchange. Business fluency, especially transaction of inter-states very determined by submitted/sent information speed in real time. In consequence very fair if telecommunications hold important role in determining economic growth an nation.

Telecommunications infrastructure which on the offered have to comply with standard quality or Error Objective and Availability Performance conditions.

These conditions had been standardized by ITU through several recommendations.

This final project will plan border communication network between Indonesia-Timor Leste with digital microwave radio. Planning will be started with forecasting of requirement bandwidth, calculating height antenna is used and link digital microwave radio as according to standard ITU-T G.826.

Result of this final project are channel that is needed for the international call between Indonesia - Timor Leste to 8 year to the fore is 298 channel or 10 E1. Probability Outage for link national is 9.374707.10⁻⁴ and international is 9,7357.10⁻⁴, the value not yet comply standard of ITU-T G.826.