

ABSTRACTION

By the limitation of telecommunication network which owned by PT Telkom, especially for conventional network such as copper wire, so to activate the consumer circuit demand usually needs long time and high work. Because this reason, it makes PT Telkom to build telecommunication service using optical fiber technology in their primary cable which supported by additional transmission device known with DLC.

DLC device is multiplexer and digital cross connection which have several advantages such as easy to operate and can fulfill all kind of costumer needs, from voice or data with kind of interface and speed.

In DLC technology application, it needs an analysis to all aspect include, planning, installation, transmission system, security system, service capability, operation and maintenance to reach the optimum result. In this final project, analysis is done to the DLC device and its network for voice service, by seeing several parameters such as of line loss, link power budget, rise time budget and BER, and also parameters from copper wire network such as loop resistance, isolation resistance, line loss and crosstalk. From the analysis, resulting that the condition of DLC device and its network for voice service in Distel Semarang is good performance, because all of parameters measurement pass the standard.