ABSTRACT

By the limitation of telecommunication network which owned by PT Telkom, especially for conventional network such as copper wire, so to activate the high demand of consumer circuit usually needs lot of time and work. Because this reason, it makes PT Telkom to build telecommunication service using optical fiber technology in ther 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 implementing DLC technology, it a must to do an analysis which cover all aspects, such as installation and planning, transmission system, security system, services ablity, operation and maintenance in order to get optimum result. In this final project, analysis will be done to DLC device and its network for voice services, by inspecting its parameter such as line loss, link power budget, rise time budget, transmission bit rate, and bit error rate (BER).