

ABSTRACT

Technological development nowadays is getting rapidly, especially the technology in the field of communication and information, the development of such carry great influence in the life of society in general and companies in particular. Information technology is currently widely used for everyday purposes, ranging from Administrative Affairs Office to public service with the Government against the people.

The Governments of Bandung Regency is one of the Government agencies that use information and communication technology in order to optimize the service to the public. In this case handled by the Agency's library, archive and Information System Development (BAPAPSI) Bandung Regency. BAPAPSI is the responsible agency directly in terms of operations and maintenance. Insufficient existing infrastructure in Bandung Regency Government may lead to suboptimal performance. National organizations must have a decent network infrastructure to support the development of applications that run on the national systems. The use of Fiber optic network technology is one of the appropriate technologies as a solution for data communication network infrastructure in a regional area especially for an external network that is a network that connects between the County Government with the Sub.

Fiber Optic network is a data communication network that uses light waves as transmission media. On the research of optical fiber network design takes its object in the Bandung Regency Government thoroughly by using methods of Network Development Life Cycle (NDLC). This method is one of the methods used in creating or developing the data communication network infrastructure with fiber optic media and can be done gradually.

This research will predicting a long time work, can be fully achieved and Chart how the costs should be incurred to build communications networks and optical fiber-based information thoroughly. This analysis produces the 3 scenarios that would later be used by the Government in Bandung Regency as reference materials to build a network of communication and information by using a Fiber Optic. The scenario contains about predictions estimate cost, time of manufacture as well as the stages of infrastructure development action network-based data communication optical fibers. The scenario consists of a preliminary or full scenario, partial scenario, and adjusted scenario.

Key Words: Fiber Optic, NDLC, Bandung Regency