

## ABSTRACT

PT. TELKOM especially Kandatel Bandung, DPG FO department has been doing migration on HDSL DPG Fastlink transmission system, which is using copper cable to fiber optic cable. The information system that used to describe fiber optic network condition which has implemented as well as will be implemented mentioned above is lack supporting of cost and time efficiency in case decision making. This because of fiber optic network data processing is manually proceeded so that requires complicated procedure and needs along time.

In this final task made designing of Geographical Information System which has ability to increase efficiency especially for DPG FO and Jarlokaf planning department Kandatel Bandung in case of decision making. Research methodology used in this designing is by doing literature study and field study to analyze system requirement. Field study conducted by direct interview with persons in DPG FO and field survey so the data accuracy in this system information match according to requirement and match with field in real.

The conclusion in this designing result is successly made an integrated geographical information system and be able to present information that needed in implementing DPG Fastlink optical network. These informations are; ONU position and it's attributes data, optical cable route, it's position and it's attributes data, core alocation used in one ONU, STO position, clousure position and information about core which is used or not used in that clousure. In this designing also made security system by doing user selection using username and password so not any person can access this system.