ABSTRACT

Today the technology development of telecommunication grows rapidly. It can be seen in the technology development of access network, such as copper local access network, radio local access network, fiber local access network. The purpose of the application of this technology is giving a better grade of service.

STO Sukabumi has 4054 customers (4054 sst). They are shared with copper local access network and radio local access network. For now on there are 637 waiting list. So STO Sukabumi need to expand it's network to solve that problem. The disadvantage of the technology of copper and radio access local network is that they have limited service, because of that the technology of fiber access local is used to expand the network in STO Sukabumi.

This final task research the planning of fiber local access network in STO Sukabumi including demand forecasting, technology selection, tool requirement and kind of service. This planning uses SDH technology. This technology consist of ONU and fiber cable as it's transmition. According to the next five years estimate, STO Majalaya will have 6298 customers (6298 sst). So this planning needs 6 ONU240 and 3 ONU 450.