

## ABSTRACT

The human need for telecommunications services increases, both the number and types of services such as voice, data and images. This is to motivate the need for changes in communication networks with greater capacity and better quality. Access the local network of fiber can meet the demands of the above, for a fiber optic transmission medium that has a number of advantages.

One of the technologies that use fiber as the access network is Epon (Ethernet Passive Optical Network). Epon is a technology-based transmission protocol Ethernet optical network that allows point-to-multipoint topology wich give contributes both customers and providers.

In this final task, it will analysis of the planning and implementation Epon by Indosat Mega Media in Makassar. It will be calculated also the amount of bandwidth that will be provided by Indosat Mega Media for the next 5-years. So IM2 can give a satisfy for their customers.

**Keyword : EPON, Topology, Demand**