

ABSTRACT

High speed internet connection and TV cable service are now become everyone need, especially in big cities. Lots of entertainments and information that has given by television or internet has made increase the number of user, so it needed to concern about the quality, speed, and line data capacity. There for it has to build a technological device that would give all the services with one media, so it would eliminate the complexity of used devices in user side.

Hybrid Fiber Coax (HFC) network structure is one of network technology that capable to handle the need. HFC is telecommunication network devices which combine fiber optic technology, optoelectronic and coaxial cable network to become a “hybrid” technology. The used of HFC can support many services, such as telephone, internet, and Video on Demand (VOD) with higher transmitted data rate and better quality.

The result from this planning is make an architecture HFC network design with concerning the infrastructure network, shape of architecture network, system performance, and bandwidth capability that given for the services. So it would accomplish the target of this planning like $CNR \geq 43$ and $CSO, CTB, XMOD \geq 51$. Hopefully this planning project would be realized and accessible by all internet and TV cable user at Bumi Asri Medan Housing.