

## **ABSTRACT**

Together with the improvement of information technology especially in multimedia service such as video, voice and data and also the improvement of telecommunication technology based on fiber optic network then increasingly of information necessities that we feel today. The HFC (Hybrid Fiber Coax) would be able to support that improvement of services.

Basic design of HFC planning is area surveying that describes the space of network so that can be known the number of users, services that provided and also the allocation of bandwidth used. And then tools surveying to scetch the network planned. Design is done by using manual calculation and cabletools software to make this planning easier. This software gives information that is useful in the coaxial network planning.

The result of this HFC Network planning (Hybrid Fiber Coax) in Taman Berdikari Sentosa Residential shows that the planning done has reached the target that has been decided that for 43 dB in CNR, and 51 dB in CSO, CTB, and XMod. The result of HFC Planning can be used to transmute signal to each user..