

## ABSTRACT

Along with growth of social, economy and increasing of inhabitant, strived of telecommunication service more be promoted and also commendable service that more and more quick so as a supplier of telecommunication service, PT Telkom that had a service of telecommunication must be making a plant for built Access Network for a future.

Based in the fact that supply of the network is decrease and demand from customers more increase so PT Telkom as suppliers of the network telecommunication have to make a new network draft. The network will develop is HFC (Hybrid Fiber Coax).

The Hybrid Fiber Coax Network (HFC) is the Network that had a function to distributed Signal optic from Head end to Fiber node and distributed signal optic from Coax network to End user. The beginning, Technology of HFC is shape from coax cable or TV (CATV).

This project, A writer will explain above The Planning Of Hybrid Fiber Coax (HFC) at Housing of Singgasana Pradana Cibaduyut Bandung. This Planning will divide into two part, Fiber Optic network Planning from HeadEnd until Fiber node and Coax network Planning from Fiber node until Singgasana Pradana Housing.

The Planning will do are Block A, Block B and Block C with amount 56 housing customer. Service will plan are TV Cable and Fast internet. These Peripheral are *Amplifier, Splitter, Tap, Coax 0,625 comm scope* for cable distribution.

Finally, this planning result coax network performance with:  $CNR_{total}$  rata-rata is 75,8 dB,  $CSO_{total}$  is 52 dB,  $CTB_{total}$  is 50,98 dB,  $Xmod_{total}$  is 50,98 dB,  $Hum_{total}$  is 43,98 dB. All performance value comply with a request of international standard.