## ABSTRACT

Nowadays, freshment and feel safe housing of resident a little annoyed by within many act badness, theft and robbery that happened, especially of theft to empty house or which being omitted by his owner. Therefore to add safety, freshment of pawnbroker and water down security guard in observing and take care of house, hence planned by final project a security system, that is CCTV (Closed-Circuit Television). This system use by watcher camera placed in strategic locations, or by attached by in each house with monitoring of system each; every his point, good by pawnbroker of it self or by his security guard.

This network planning will be builded in housing of Grahadika Sejahtera one of housing in Yogyakarta. Besides system Security of CCTV, to increase service to subscriber, side provider also will be plan development of network CATV (Cable Television) supporting by multimedia service. Thereby, expected by network CATV in the housing will fulfill subscriber requirement to service multimedia. Such as Service of TV Broadcast, Video On Demand (VOD), telephony and internet.

In this last project, the transmission media that is used as a connector of all the network wares is coaxial cable. The field of the service that is not too large can be expected to be served by coaxial network. While, the helper software that is used to make this planning easier is Cable Tools. This software gives information that is useful in the coaxial network planning.

The result of CCTV network planning in the Grahadika sejahtera shows that the planning done has reached the target that has been decided  $\geq 43$  dB in CNR and  $\geq 51$  dB in CTB, CSO and XMOD. With that a result, the network is expected to provide a distributive and interactive service to all costumers in Grahadika sejahtera.