ABSTRACT

Generally, studio of Local TV do not take possession of same place with its transmitter station, hence from is station of Local TV need reliable transmission system to deliver broadcast matter from studio to transmitter station. In others side, station of local TV transmitter in its broadcasting of afforded to earn to give broadcast service with good quality. However since topography condition which scraggly, where have a lot of hill and gasket, hence be required system planning which good to earning to overcome it.

This things being discussed in this Final Project, by taking study case of transmitter system planning at station TV of MQTV who possession of channel 60 for region of broadcast Bandung. Where at transmission system usher studio with transmitter station using digital communications system of radio microwave link line-of-sight (LOS), and at system transmission of transmitter station TV which in the form of system of communications of Analogous broadcasting TV.

In this Final Project to give illustration of transmitter system configuration at station TV of MQTV. Then explained how done planning process till be got acceptance result (RSL and field Strength). Then the result of this planning will be evaluated by participating measurement result of some regional location of broadcast Bandung. Finally evaluate performance the result of planning covering RSL and BER at communications system of microwave link, and also the field strength accepted and S/N of system transmission broadcast TV.

From planning result known that at system of communications of microwave link with availability of equal to 99,999% and BER < 10-10, hence be required by power of equal to 11,57 dBm. Whereas at system of transmission of broadcast TV known that with power equal to 2,5 kW and gain antenna equal to 18,2 dB, hence pursuant to calculation result have earned to fulfill strong standard field accepted minimum (70 dBμV/m) for region of broadcast Bandung. But pursuant to measurement result still there are some location get receive field strength below standard. Therefore, from result reconfiguration known that to be required a power minimize 5 kW and gain antenna; more or less 20 dB.