## **ABSTRACT**

Conventional television which can only be enjoyed in a fix condition, now, earn can be enjoyed by mobile. There are some standard used such as DVB-H, T-DMB, Media-Flo, MBMS and etc. Each this standard has been developed some different state. Especial condition which must be fulfilled for TV Mobile transmission is ability of transmission system in overcoming movement of receiver so not degrade quality of service.

This journal will study two standard of transmission that is DVB-H standard and T-DMB standard. DVB-H (Digital *Video Broadcasting-Handheld*) standard representing development from standard DVB-T (*Digital Video Broadcasting-Terrestrial*) while, standard of T-DMB represent development from standard DAB (*Digital Audio Broadcasting*) Eureka-147 standard. Both standards will be compared to see its ability in overcoming various condition of channels, then will be selected to be used in simulation of TV Mobile network design with case study in Town of Bandung.

From simulation result, DVB-H standard more better ability in overcoming AWGN (*Additive White Gaussian Noise*) channel with reinforcement until 2 dB to reach BER (*Bits Error Rates*) with value 10<sup>-4</sup> compared by standard T-DMB, but DVB-H not better in overcoming Rayleigh channel and In design of TV Mobile network used T-DMB standard is required 10 cell for urban area and 2 cell for sub urban area.