

## ABSTRACT

In the growth and development of multimedia communication necessary, prosecute to develop a method which can bring multimedia application in *IP network* previously only text base. Nowadays *multimedia services* growth to be *video* and *voice* communication. *Video* is one of *multimedia services* sample that need more *resource* allocation with delay and packet loss requirement. And with this, the user demands are also vary. Where *user* tries to access the internet wherever and whenever they are in *mobile*. This is the reason which emerging the mobile IP technology to solve the internet user demanding problem in reliable mobility.

With this reason, so need a *video compressor* which can overcome limited resource problem in IP network ( *Mobile IPv4* ). In this final project use *video codec H.264* where can keep video quality at low bit rates. So desirable video quality still allow ITU-T perform after transport on *Mobile IPv4 network*.

In final project, implemented and analyze quality of *video codec H.264* and QoS wireless network in *Mobile IPv4* case. MOS parameter used to observe quality of video, while *delay, jitter, packet loss and jitter* parameter used to observe QoS *Mobile IPv4* network.

This final project shows that quality of video still good when *Mobile Node* at *Home Network* and *Foreign Network*. While worst condition shown when *Mobile Node* make *Hand Over*. Where the value of *packet loss, delay,* and *jitter* disposed increase than *Mobile Node* at *Home Network* although at *Foreign Network*. Observed parameter in this final project base on ITU-T.