ABSTRACT

Nowadays, the services of Internet Protocol Television (IPTV) growing rapidly where there is an increasing need for user requests and need for higher video resolution. These needs cause to bandwidth resources provided by the network provider will be dwindling. Compression method as a way to reduce the load of video traffic on the network. H.264/AVC and H.265/HEVC are compression method developed by ITU-T Video Coding Experts Group (VCEG) and ISO/IEC Moving Picture Experts Group (MPEG).

In this final project, IPTV video streaming service will be test using compression method H.264/AVC and H.265/HEVC. This testing process will be determine the effect of use of compression methods in different IPTV video resolution. The quality of the tested video resolution includes standard definition (720x480) and high definition (1280x720 and 1920x1080).

From the results of measurements made in this final project, found that use of compression methods are useful to decrease the traffic load on the IPTV network. Where throughput obtained for video compression H.265/HEVC approximately 50% compared with compression H.264 / AVC. In the video storage capacity H.265/HEVC result of approximately 50% compared to H.264/AVC. However, in compression process H.265/HEVC require a relatively longer time compared to H.264/AVC.

Keyword : Internet Protocol Television (IPTV), throughput, Standard Definiton, High Definition, H.264/AVC, H.265/ HEVC