## ABSTRACT

Communication technology supported by internet technology is the development of the most rapidly evolving technologies today, because communication technology is a global data network using TCP / IP as the protocol. One implementation of a communication technology which is necessary for communication in a conference, for example, communication between managers at the main office with a manager in several branches of the main offices are scattered in different areas using video conference as a tool for distance communication so that the cost of accommodation and time more efficiently.

In this final project is designed implementation of video conference in WLAN coverage areas in IT Telkom, by utilizing existing infrastructure. Design and implementation a wireless video conference network conducted in the inter-building WLAN IT on Telkom as an illustration of the real condition by using an open source application software PBX (Asterisk). Quality of Service (QoS) can be measured using a software that Wireshark, which can capture these QoS parameters.

The result of this Final Project is information about the parameters of Quality of Service (QoS) which is calculated by using the Mean Opinion Score (MOS), subjectively and objectively and find out problems in a network such as delay, jitter, throughput, and packet loss on the performance of wireless video conferencing. Recording quality results, measured by Mean Opinion Score (MOS), subjectively by distributing questionnaires to 30 respondents, the survey found that from the calculation of overall average value of each aspect is 3:58 which means it is located among the criteria quite well and good. While the Mean Opinion Score (MOS) objectively by using the formula E-model estimation shows that the average R factor in non-loss condition that is equal to 72.25775 which means that the average value was within the category quite well with the MOS values between 3.6 until 4.0. While