

## **ABSTRACT**

*Currently, protocol standard which is used in VoIP communication are SIP and H323. At this research, it is used IETF standard-SIP Protocol, because next communication will be go to the NGN (Next Generation Network). VOIP network not only provides voice but also messaging and video service. Video service more interested and start to develop.*

*Data communication also directed to the wireless network. Wireless Local Area Network (WLAN) is designed for data communication early. Then, the video communication is tried to be implemented in the data network. Characteristic of Video information that has to be real time and reliable become a specific question for the wireless network. Whether video communication on WLAN can be accepted?*

*Asterisk is a open source PBX, IP PBX and server in software based on Linux, BSD, MacOSX which is can provide video call service, voice mail, conferencing, IVR, Queuing, as well calling function standard. It is used as a IP PBX server which is usefull to provide video service for users.*

*Then, result of analysis shows that Video call quality at WLAN STT Telkom using SIP protocol, still in good range such as one way delay is 0-150 ms, Jitter is 0-20ms. Then, all of experiment and MOS shows that VoIP service at WLAN STT Telkom using SIP protocol is good enough. So, It is according to ITU-T recommendation show that this research can be implemented at WLAN STT Telkom.*

**Keyword :** *Asterisk IP PBX, WLAN, Video Call , SIP*