

## ABSTRACT

Growth of WLAN base on Wi-Fi ( Wireless Fidelity) standard 802.11b able to answer the necessity of information exchange on wireless that makes communication flexible and more practical. Along with time growth emerge idea to provide assorted of service, include voice over WLAN

To provide voice service over WLAN, there are some factors which must be paid attention to, such as trade off delay and packet loss. Moreover for the case of multifloor, multiwall indoor building require some special calculation because the appearance of some factor such as material attenuation, scattering and also multipath. Those factors have an effect on signal propagation and perhaps on quality of application service.

This Final Duty study voice performance over WLAN with case study in E Bulding STTTELKOM. Specification of E Bulding close to multiwall, multifloor building type. The research conclude that wall gives significant attenuation for 12-14 dB, while glass gives 3 dB and wood gives 2 dB atenuation. Those materials atenuation influence voice quality especially for it's packet loss that reach 25%.

Key words : WLAN, 802.11b, propagation, attenuation, voice

*STTTELKOM*