

## ABSTRACT

In this time industrial requirement (company) to intranet service and internet progressively mount, however voice service remain to represent biggest contributor in every communications that happened, so that required [by] technology capable to accommodate all requirement of the service with high speed data and throughput. Technology Wireless represent one of the technological solution alternative at ISM (industry, medicine and scientific) band having the character of unlicensed by owning excellence in easier peripheral installation, quickly, flexible and also can reach just area where and cheaper relative when compared to cable technology which limited to existing infrastructure and also can give amenity transfer of good information in the form of voice and data between consumer in an network with high speed.

Ready of service base on data and voice at wireless media with quality of good is not a matter which is easy to be done. A lot of factors which can be considered to be perform decreases like package error, jitter and delay. That become one of reason why would need study before applying voip over wireless data network.

In this final duty, will be analysed the ability of network wireless representing backbone of data communications from PT.Semen Padang to Teluk Bayur harbour to overcome the voice or service Voip. Analyse the this network wireless ability will be done with two parameter that is delay and level of data traffic wide at the wireless network. Then to equip this study, also calculation the wide of voice traffic that would be overcome at this wireless network. Result expectation is studied will become the consideration for PT.Semen Padang in implementation of service Voip at network wireless becoming its backbone data communications