

## **ABSTRACT**

Together with the development of telecommunication world in Indonesia especially in fixed phone technology, either the telecommunication company which have been provide fixed phone services or the new company compete to optimalize their telecommunication network. The increasing demand of customers of fixed phone services has been opened new oportunity for the telecommuication company to provide fixed phone services using efficient bandwidth and transmition media.

This Final Project analyze the implementation steps and the performance of fixed phone services using i-Phone technology which have been implemented at Gading Mediterania Residence Apartment Kelapa Gading East Jakarta by Indosat, PT.

The analyze result will show the benefit of fixed phone services using i-Phone technology compared with PCM 30. Besides that, the analyze result will show either the consentration ratio or the amount of bandwith used, BER (Bit Error Rate), the specification of transmition channel, the formation of access network equipment and the amount of transmition process, the instalation of access network equipment and the integration of transmition system, the integration of access network with local station, and the management of error at Gading Mediterania Residence Apartment Kelapa Gading East Jakarta as a place of experiment. As an acknowledgment, the access network used is UMUX 1500 and SDH with optical fibre as transmition media.