ABSTRACT

The development of mobile communications technology, growing over time from 1G to 3G. In mobile technology we know that UMTS is a $3^{\rm rd}$ generation mobile technology that will be implemented in Indonesia. The technology before UMTS is the GSM technology that is applied in Indonesia as the $2^{\rm nd}$ generation. UMTS technology will be implemented in Indonesia well, if done with good planning, especially UMTS transmission network design.

In this Final Task, will be studied about UMTS transmission network design with a case study PT.Telkomsel. This includes the planning link budget calculation and the calculation of the capacity of each link in the network configuration is used. In the process of Final Task and transmission network planning is required data BTS location so that the location of the BTS data is then processed for transmission planning process of UMTS network .

This Final Task results a study design of transmission on the UMTS network. This Final Project is expected to be a reference to apply the UMTS network in Indonesia