

ABSTRACT

The cellular communication industry in Indonesia has grown rapidly in this recent day. This situation has consequences to tighten the competition among cellular network providers. The continuous efforts to enhance the network quality is a key factor that have to be concerned carefully.

This Final Project researches a network optimisation process PT. Indosat at area Metro Trade Center (MTC) Bandung. The optimisation is done to obtain coverage area and optimal service quality because of BTS loss around MTC area. To increase performance and service network quality we have to optimisation process include detail analyzing of network optimisation, measuring key performance indicators (KPIs) parameter, analyzing key performance indicators (KPIs) parameter, analyzing interference, particularly co-channel interference, optimisation is done to the radio frequency level. Optimisation will be done for GSM-900 frequency operation.

As the result of this optimisation process at MTC Bandung a new BTS is planned to be added and optimisation neighbour BTS in order to give a good service at MTC location. The signal quality predicted is above the threshold required by PT. Indosat of -80 dBm.