ABSTRACT

At this Final Task the consider the planning of optical indoor repeater on Code Division Multiple Access (CDMA) network. There are three main parts that to be discussed, which are the background of repeater using, forward and reverse gain setting, and the influences of repeater to BTS.

In the background of repeater using, the problem that happened in Telkom Grha Citra Caraka (GCC) building to be explained, so that repeater to be needed. In gain setting, the method of forward and reverse gain setting to be explained with tracing per device block, suitable with maximum and minimum requirement. The last one to be explained about the influences of repeater to CDMA network, which repeater can minimize BTS coverage area and the channel capacity decreased.

Every main part has been completed with software in order to help the calculation and graphic visualization that built from Microsoft excel and a program which will visualisize the coverage area from optical indoor repeater antenna.