

## ABSTRACT

Currently, all operators compete to give fast data services as customers wish. The challenge doesn't stop after operators successfully providing the fast data service, the next challenge is to maintain the quality of the services that provided. For the sake of the customers satisfaction, the operators must always be ready to present a good quality of data services amid high growing demand for data services.

Optimization is an operator cycles that performed in order to maintain the quality of its service. Optimization that performed regularly is used by the operator to continuously update the data current condition of their network and improve service performance. Optimization was divided into two, one side is the RF and while the other side is BSC and MSC optimization. The process that will be done on the final project is the performance analysis on the RF side. Results that are expected in this final project is to make an analysis of all the problems that occurred during the analysis performance process and take steps for improvement.

From the results of performance analysis found that the quality of CDMA 2000 1x EVDO networks at Telkom Flexi Yogyakarta RO still has many weaknesses. The problem in 43 areas to be evidence that there are still many areas that have a low quality of DRC under 153.6 kbps. The problem occurred because of factors such as obstacle, interference from other sectors, distance and other factors such as interference from other operators. The design of the recommendation can't solve the problem above 100%, especially on the poor performance of the DRC because of the distance and obstacle.

Keywords: optimization, CDMA 2000 1X, EVDO