

ABSTRACT

As times goes by, the level of human need to communicate even greater. Demands to provide services guaranteed even in motion, the operator must optimize the performance of existing network. In mobile communication systems often get the customer complaints that occurs due to lack of good power level and the quality of the received signal.

In this final project will be analyzed the 3G network data that obtained by drive test method. The results of this drive test will be analyzed the 3G network data with reference to the parameter RSCP (Received Signal Code Power) and E_c/N_0 (Energy per Noise Carrier). RSCP is the value of the received signal power level of the mobile phone and E_c/N_0 is the value of the quality level of the connection line 3G networks. Optimization will be done with the aim of achieving a good value of these parameters.

Results of this final project can optimize the network in the Cirebon city. Reazimuth, mechanical tilting, and electrical tilting are the recommendation made to achieve the best performance of this network. After optimization the value of $RSCP \geq -90$ dBm increased by 1.42% and for the value of $E_c/N_0 \geq -12$ increased by 14.62%.

Keyword : 3G, RSCP, E_c/N_0 , Drive Test