

ABSTRACT

3G network with the advantages of high speed data access brings features voice call, video calls and mobile Internet to meet the needs of consumers. With the increasing number of service providers, the quality of service would have to be increased to cope with the competition. Failures of network functions should be addressed to bring more optimal network quality.

In this final project the 3G network performance analysis obtained from the data drive test using the software TEMS Investigation. The analysis is done to optimize the network performance by analyzing the failures that occurred and determine the pace of optimization.

From the results of the initial test drives were done then obtained which is less precise orientation of the antenna so that there is a network of poor quality due to overshooting of the neighbor site. Once optimized by changing the orientation of the antenna tilting and then obtained an improved RSCP value in the range = -87 dBm previously without any optimization of the range = -90 dBm. While the value of E_c / N_0 decline in the range = -13 dB, which previously no optimization performed in the range = -11.2 dB.

Keyword : 3G, WCDMA, Drive Test, RSCP, E_c/N_0 , Tilting.