ABSTRACT

The increase of the number of subscribers of a mobile network operator not only affects to the operator income, but can also result in a decrease in network performance. Decrease in network performance in South of Bandung *city precisely in the* Soreang *region. To avoid a decreasing quality of the network it must be done with the network optimization by using drive test method. This method is a way to get 3G network conditions data. Software used is Nemo Analyze 5.20 that serve for data retrieval and data processing to measure parameters such as* Ec/No, RSCP *(Received Signal Code Power). Each parameter has a standard value determined by each operator.*

Drive test method is a way to get data from the 3G *network conditions on the ground, so from these data can be optimized* 3G *network performance. In this final project, the optimization of* 3G *networks by performing physical antenna tuning as tilting.*

The results of the analysis of drive test before this shows that the area of the overshooting bad spot on the site should MARGAHURIP area serving bad spot on a site closer ie DSKIANGROKE site or site BANJARAN. The optimization process is done by mechanical tilting at the site MARGAHURIP and site DSKIANGROKE. Mechanical tilting MARGAHURIP site before 0 and after optimization by means of down tilting to 5 . Site DSKIANGROKE mekanikal tilting before 3 after optimization becomes 2 by way of Up tilting. Drive test results show that area after the bad spot is no longer overshooting to MARGAHURIP site to site but more dominant BANJARAN closer distance.

Keywords: 3G, RSCP, Ec/No, Overshooting, Network optimizations.