

ABSTRACT

Mobile communications operators that provide LTE network services, have a service standard that has been ditepkan by each operator. In XL Axiata operator there is a customer complaints report in Cisaranten Baru Bandung area related to unstable signals, this can reduce customer satisfaction, so it is necessary to do an optimization in the area.

In this Final Project will be optimized on 4G network in Cisaranten Baru Area Bandung which will be obtained with motede drive test, this measurement is done by using Genex Probe software and for this drive test result will be analyzed using Genex Asisstant software. Meanwhile, the parameters used to measure the quality of 4G data services are RSRP (Reference Signal Received Power), SINR (Signal to Interference and Noise Ratio), and Throughput. Optimization will be done in Bandung Cisaranten Area with the aim of increasing the value of each parameter.

Based on the results of the analysis there is a low SINR problem at the location of complaint 1 which has a SINR before (before optimization) value of 5 to 10 dB, complaint 2 ranges from -20 dB to -5 dB, complaint 3 ranges from 0 to 5 dB and implementation after In optimization) ranges from 10 to 20 dB percentage 54.84%. Low Throughput problem at complaint 1 location with DL throughput before value ranges from 20000 to 30000 Kbps, then at complaint 2 location with value before range 0 to 5000 Kbps, then at complaint 3 location with value before range 5000 until 10000 Kbps and implementation after 20000 range Up to 30000 Kbps with a percentage of 39.00%.

Keywords: Optimization, Drive test, Genex Probe, Genex Asisstant