ABSTRACT

LTE technology is a new technology that support a communication in mobile communication. This technology have been in place in many cities of Indonesia. Cianjur is one of the city that get LTE service. In this town LTE just built by Indonesian Operator in November. So there need network optimization to achieve targets in planning. KPI parameters that use to be a target in LTE is Accessibility, Retainability, Mobility, and Integrity.

This final project use two methods, there are observation and discussion method. Observation method is taking a measurement LTE parameter, Analyzer measurement report and simulates to optimization LTE network. Discussion method is by asking to an expert in mobile communication especially in drive test and optimization.

The optimization result of this final project is the change of value on bad spot 1 in Cagendang street, there is a change of RSRP value from -111.6 dBm to -95.8 dBm, SINR value from -2.6 dB to 12.5 dB, and throughput from 533 kbps to 16 mbps. In the bad spot 2 of Sukamaju village, there was a change of RSRP value from -110.4 dBm to -93.3 dBm, SINR value from -3.3 dB to 11.5 dB, and throughput from 533 kbps to 15 mbps.