

ABSTRACT

Cigadung Bandung area is a sub-urban area and residential areas that require the quality of mobile communication services both voice and data. Based on the results of the initial survey conducted both voice and data services indicated problems Low Coverage and Low Quality which impact on the low performance of LTE network in the Cigadung Bandung area.

In this Final Project conducted data analysis LTE network that will be obtained by the drive test method to be reviewed in the Cigadung Bandung area. Measurement of LTE network performance is done by using Nemo Outdoor software for data retrieval and data processing drive test include measurement on RSRP parameters (Reference Signal Received Power, SINR (Signal Interference to Noise Ratio), and Throughput From the results of the test drive will be analyzed by using Nemo Analyzer for reporting software, Map Info for digital mapping, and Google Earth for real morphological conditions and earth surface contour Optimization will be done with the aim of increasing the value of each parameter.

From the test drive results can be optimized LTE network performance in the area Cigadung Bandung. The standard value of KPI in Telkomsel operator that must be fulfilled for LTE network is Reference Signal Received Power (RSRP) ≥ -100 dBm, Signal to Interference Noise Power (SINR) > 0 dB, and PS Throughput > 12 Mbps.

Keywords: LTE, RSRP, SINR, Throughput, Drive Test