## **ABSTRACT**

One aspect of the work in radio network optimization that tries to get actual network data in the field is the drive test. As a result of technological advancements, drive tests can now be be completed more quickly and easily on a mobile device utilizing software like G-NETTRACK PRO. The stages will be used in this investigation, commencing with the measurement of signal quality (RSRQ) and signal strength (RSRP) using G-NETTRACK PRO software. The nPerf Speedtest software is used to find the optimum eNodeB location to assess download speed, upload speed, latency, and jitter based on the findings of the signal strength and quality measurements. The results of the analysis showed that 1 eNodeB was detected, namely eNodeB 301085 with an average RSRP for Tanah Merah Village is -103.66 dBm and the average RSRQ value for Tanah Merah Village is -13.88 dB.

Keywords: Drive Test, QoS, 4G LTE, Telkomsel