

ABSTRACT

Cellular technology is currently developing very rapidly where this development has entered the fourth generation or commonly referred to as the 4G LTE (Long Term Evolution) system generation. In the development of 4G technology in Indonesia itself there are still some problems where the problem arises when the network performance has poor network quality caused by the increasing number of users. The actual measurement of signal quality on the 4G network becomes a reference for improving signal quality. Improvements that can be made to ensure the quality of this 4G LTE network service is the drive test method. This network quality measurement can determine the value of several parameters on the 4G LTE network such as RSRP (Reference Signal Receive Power), RSRQ (Reference Signal Receive Quality), SINR (Signal Interference to Noise Ratio), and Throughput. The technique used is the Post Mocrn test drive, Post Mocrn itself is a data collection method to determine a network quality in the NC-SETIABUDI-PANCORAN-02 area with the method used, namely the cluster mobility method. From the parameter results obtained, the RSRP value is in the range -95 dBm to -85 dBm with a good enough category and the percentage obtained is 43.14%, while the RSRQ value is in the range -15 to -10 dBm with normal and percentage categories. obtained as much as 42.61%. The SNR results are in the range of 0 to 10 dBm with a fairly good category and the percentage obtained is 50.61%. Throughput results obtained with the largest percentage is 23.61% with a speed of 25 Mbps to 50 Mbps. Meanwhile, the smallest percentage is around 2.99% with a download speed of 1 Mbps to 2 Mbps. The highest percentage upload speed is 26.45% with a speed of 15 Mbps to 25 Mbps. Meanwhile, the smallest percentage is around 1.52% with an upload speed of 512 Kbps up to 1 Mbps.

Keywords: Drive Test, Cluster Mobility, 4G Parameters, Throughput