

ABSTRACT

Long Term Evolution (LTE) is the 4th generation of cellular telecommunications technology, although the 4G network has spread widely in Indonesia at this time, in fact the 4G network is still experiencing many problems that are complained of. Moreover, nowadays, on average, all activities, both in terms of education, social, and economy, have been shifted to virtual. Therefore it is necessary to monitor network conditions, one way to monitor and measure signal parameters is by means of a Drive test. And for this network measurement, it must comply with the KPI (key Performance Indicator) standard. For the site that I will use as a background, the WOS105 area of the Ayahejo area, where this site has existed before but there are some areas that are not affected by signal coverage from the existing sector. So some new sectors are added to cover areas that were not affected by the previous signal coverage. WOS105 is included in the add sector, from there the author can analyze whether areas that previously did not get signal coverage have been exposed to signal coverage. By verifying the WOS105 site. Verification is carried out by adding new sectors to meet all network quality coverage. There are 2 techniques used in this drive test, namely Mobility and Static with 6 kinds of tests, namely Idle, Speedtest CA, Speedt

est Non CA, Ping Test, and Data Service. From the results of the drive test, it can be seen the values of several parameters such as Reference Signal Received Power (RSRP), SINR (Signal Interference to Noise Ratio), and throughput. From the parameter results obtained in sector 4, the RSRP and SINR values for static are very good, namely RSRP -91.63 dBm and SINR 12 dB and for mobility RSRP -95 dBm to 80 dBm and SINR 10 dB to 20 dBm. So with the installation of sectors can overcome areas that have not been covered by the previous signal.

Key word : Drive test, Single Site Verivication (SSV), Throughput, Site WOS105