

## ABSTRACT

*Tanjung Barat Jakarta Selatan area is the urban area one that has a fairly high population density. The need for quality mobile communications services primarily in the data are required for the addition of a site. After done measurement, it turns out that the site was already on air affect the performance of other sites that have an impact on the low level of performance of 4G network in the Tanjung Barat .*

*At the end of this Project, carried out the measurements to verify a new site that is in good shape or not by the method of drive test SSV. Drive test is done using software Genex and Genex 3.15 Probe Assistant. As for the territorial case studies at the end of the Project is to take the Tanjung Barat Jakarta Selatan. From the results of measurements done the analysis later found problems. For that to be done in the area of optimization. Optimization results calculated manually and then adapted to the conditions of the field to be implemented.*

*Based on the results of the analysis there is a problem of bad coverage 1, which has a value of RSRP drive test before range-104 dBm to-101 dBm and implementation after range-99 dBm to-87 dBm, bad coverage 2 which has a value of RSRP drive test before-109 dBm to-90 dBm and implementation after range-96 to-85 dBm. The average number of successes is 86% before RSRP after doing a test drive after being 98%.*

*Key words: 4G/LTE, 4G, Genex Optimization Probe, Genex Assistant, Map Info 12.0.*