

## **ABSTRACT**

This drivetest was conducted by a company called PT. Nexwave is more precisely in the Tebet area, South Jakarta City. This drivetest activity aims to identify and constitute a process of measuring the communication system in the Kencana Permai I Area, Kebayoran Lama District, South Jakarta City, to collect realtime information about the quality of the BTS signal from the transmitter / BTS to Mobile (MS) or vice versa with use a cellphone that already has a special feature for this measurement. There is a special map to find out the number of measurements of the good and bad level of the frequency signal in the Kencana Permai I area in the genex probe software and the genex assistant on the laptop used in this drivetest activity. This process will then be reported or reported to the RSS and to the operator and then the engineering department will solve the problems encountered. In this activity, there are several parameters that will be needed, such as looking for RSRP (Reference Signal Received Power), SINR (Signal Interference to Noise Ratio), PCI (Physical Cell Id), and the EARFCN (E-UTRA Absolute Frequency Channel Number). This activity is carried out using a running car and also requires supporting hardware equipment such as a laptop, GPS G-STAR IV, Data Cable, Smartphone and HAS4 Dongle. This drive test activity also contains obstacles, such as roads for drive tests that are dead-end or impassable. The obstacle will be captured and all data results in the application used will also be captured for the reporting process to the operator.

**Keywords** : Engineer, RSRP, SINR, PCI, EARFCN, Drivetest, Hardware, Software, Genex.