

ABSTRACT

The development of the number of telecommunication service users, especially on data packages in the city of Sumber Cirebon, has caused a decrease in the quality of the data packet network, especially 4G technology. Solutions to improve network quality can be done by optimizing the network. The method used for network optimization is through a drive test on eNodeB sites that have implemented 4G technology. The parameters used by the XL provider are RSRP (*Reference Signal Receive Power*) and SINR (*Signal Interference to Noise Ratio*) where the results of the drive test are then analyzed using Genex Assistant 5.3. The results of measuring the performance of the 4G LTE network in the City of West Sumatra Cirebon show a comparison before and before RSRP optimization, respectively, 33.55% and 44.85%. SINR parameters have a comparison before and before, respectively 31.76% and 34.18%. The results of these two parameters indicate that an area that has building barriers and unstable ground surface contours causes network radiation to not be optimal and during peak hours users will increase and affect network quality.

Keywords : Drive Test, RSRP, SINR, Optimization