

ABSTRACT

The telecommunication system that is currently developing rapidly allows the public to enjoy a variety of communication and information technology telecommunication services in the form of the 4G LTE (Long Term Evolution) system. The 4G LTE network offers higher quality services and high data transmission speeds. The problem is, it often happens that the quality of the network owned by Telkom University does not support or is worse than the service quality standards required by international standards. So, even though the quality of the telecommunications network prepared by large providers is very good and sophisticated, the internet-based services received by users when accessing the network through the local network at Telkom University are still considered poor. This study aims to analyze the 4G LTE network at the Tokong Nanas Building (GKU) using the drive test method. This method is a method of collecting data directly in the field to find out the actual conditions experienced by network users using certain devices. The data obtained during the drive test is in the form of 4G LTE signal strength parameters, namely RSRP (Reference Signal Received Power), RSRQ (Received Signal Reference Quality) and SNR (Signal to Noise Ratio). Based on the research results, it can be concluded that the signal strength on the RSRP parameter with a signal range above -90 dBm is on the 4th floor with a percentage of 87.17% in a good category. Meanwhile, the RSRQ parameter with a signal range above -7 dB is on the 3rd floor with a percentage of 1.11% in a good category and the SNR parameter with a signal range above 11 dB is on the 3rd floor with a percentage of 11.11% in a good category.

Keyword— RSRP, RSRQ, SNR, G-NetTrack Pro, drive test