

ABSTRACT

The absence of an indoor network and building material is one of the causes of enodeB's signal being blocked, which makes the signal weak. The Dago Suites Apartemen is one of the targets for indoor network planning, because based on the analysis results, the average of RSRP and SINR values are still below the XL operator standard, which is ≤ -90 dBm for RSRP and ≥ 5 dB for SINR.

The Indoor Building Coverage is the right solution to improve signal quality in the building. The steps to do in this cellular network planning is starting from determine the location, Drive Test and Walk Test, calculating the Capacity Planning and Coverage Planning, and simulation using the RPS (Radio Propagation Simulator) software. The parameters analyzed from the simulation are RSRP and SINR.

The results of Indoor Building Coverage planning in Dago Suites Apartement building at 1800 MHz obtained simulation result for RSRP parameter values on the ground floor, 2nd floor, 5th floor, 7th floor, and 17th floor respectively are -52.75 dBm, -39.52 dBm, -40.35 dBm, -44.75 dBm, and -45.07 dBm and for the SINR parameter values on the ground floor, 2nd floor, 5th floor, 7th floor, and 17th floor respectively are 14.66 dB, 18.24 dB, 19.12 dB, 14.06 dB, and 16.01 dB. The results obtained from this plan have reached the standard RF parameters used by XL operators.

Key Word : *Indoor Building Coverage, LTE*