

ABSTRACT

In the analysis of the submission of this final project, it will discuss improving the quality of base transceiver station coverage where coverage quality is the most important part in the antenna network, antenna coverage or Base Transceiver Station is a geographical range in one area or telecommunications network cell so that users in one particular area can use internet services. provided ranging from 3G to 4G. This Final Project aims to provide a solution to help fix the problem of poor coverage quality and improve the quality so that the use of wireless networks such as smartphones and so on becomes good, considering the pandemic period where smartphone needs are needed, especially School From Home activities. The parameters used in the coverage area of this research are coverage by the signal level, coverage by C/(I+N) level (UL and DL), and coverage by throughput (UL and DL). The research method used in this Final Project is literature study, Atoll software for analysis, simulation data, namely the Papuan Star Mountains area, and theoretical calculations to find the right propagation and then all of them are collected for the smoothness of the Final Project research. Because the simulation area taken is rural in the Bintang Mountains, the Okumura Hatta propagation method is used according to field conditions. With the research method used, of course, the author must collect data through simulation software, look for several studies that support the simulation results of this Final Project to create strong simulation results. After everything is finished, finally run the simulation and write down the results of the research to find the desired results, based on field results which are practically not much different from the simulation and are limited due to the pandemic period, the final results obtained are based on simulations with the right theory and get the right results for mountainous areas. Star.

Keyword - Base Transceiver Stasion, Coverage, Propagation.