

ABSTRACT

Technological developments in Indonesia currently reach the 4th generation of LTE. One area that applies LTE technology is the district of Bandung precisely at Lembang West Java. From the results of the test drive in the previous year it was found that the value of RSRP and SINR has not been as expected by the customers, causing the signal reception on the customer side to be less good.

In this final project is done optimization process to improve the quality of Long Term Evolution (LTE) network in the area. Methods performed on the optimization process is the drive test and analysis of the results of the test drive in accordance with the standard operator Telkomsel. The parameters that become the reference in the optimization process include the RF part of the network that is RSRP and SINR. Type of optimization is done by doing re-tilting and re-azimuth on EnodeB which simulated by software of Atoll 3.3.

Based on the optimization results, the number of RSRP data parameters that did not meet the standard was 32.49% and after being optimized it became 28,47%. So the percentage of RSRP that does not meet the standard decreases by 4,02%. For the number of SINR parameter data that does not meet the standard is 17.767% and after being optimized it became 15,512%. So the SINR percentage that did not meet the standard decreases by 2,255%. So that the results can be recommended for operators as a consideration in improving LTE network services.

Keywords : LTE , Drive Test, Tilting, Azimuth, SINR, RSRP, Atoll.