ABSTRACT

At this time the development of the mobile network has entered the 4G era, but the use of 3G HSDPA network earlier that are still much in use. For the 3G HSDPA network conditions must be in good condition and should need to do regular maintenance to minimize the occurrence of errors that lead to less optimal data and voice services on the customer side.

Based on a survey conducted earlier by customers using the operator Telkomsel in Bandung, precisely in the area Sindanglaya, Ujungberung in getting some problems occurred that led to poor quality performance HSDPA networks of Telkomsel, which sometimes despite gets coverage good signal (HSDPA) on Their Mobile , but the throughput on the customer side received were below the standard that has been set operator.

So as to optimize HSDPA network in the region, the value of KPI parameters that must be met for the voice service in this Final Project includes grades Received Code Power (RSCP), Energy Chip Over Noise (Ec / No), PRC Establishment HOSR Fail Rate (Handover Success rate). Call Setup Success Rate (CSSR), Dropped Call Rate (CDR), Call Completion Success Rate (CCSR), and for the value of the parameters that must be met on data services that throughput should reach 90% of the speed of $>= 1$ Mbps. Optimization is done by re-azimuth and tilting antenna simulated using software Atoll 3.2.1 and also add new site.

Keywords: Optimization HSDPA, Key Performance Indicators, Atoll, Nemo, Drive Test