ABSTRACT

Rapidly growing number of network providers on Code Division Multiple Access (CDMA), forcing service providers to further strengthen its network and optimize customer service and quality that will be given. In order to better serve our customers with the required network that has good performance. For that we need to be optimized in these networks, both in quality and capacity of a Base Transceiver Stations (BTS) as an interface both to transmit and receive between Mobile Phones (MS) and Base Station Controller (BSC), which can reduce the call drop and blocking and increasing call success.

In this thesis discusses the performance analysis and network optimization of CDMA 2000-1X network operator Smart Jakarta. Network optimization is based on data measurement and drivetest, as for data analysis, including Ec / Io, Mobile Receive Power, Mobile Transmit Power, Forward FER, call drop, call success, and handoff, it is necessary for post-processing software tools, this software will assist engineers in viewing and processing data, so it can be analyzed properly.

In the measurements that have been done to the average value in accordance with Key Performance Indicators obtained MRP (29.14%), MTP (60.2%), FER (74.3%), and Ec / Io (92.2%) Results This shows the performance of the Smart network for service in the Jakarta area are in poor condition. While the event parameters measured by the percentage dropped by 6.7% Call Rate and Call Setup Success Rate 95.07%.

Keywords: CDMA 2000-1X, analysis, optimization, performance