

ABSTRACT

WCDMA/3G is the term used for the generation of mobile phone technology to-3, this technology is the development of 2nd generation (2G). And represents the evolution for the capacity, data speeds and new service capabilities. Services related to WCDMA is a good data transfer service in the form of voice data and non-voice high-speed data. WCDMA needed to provide high bit rate services that enable images and video with high quality sent and received via the wireless network and is also expected to provide access to the Internet with a high bit rate as well.

This Final Project was to discuss the radio network performance TELKOMSEL WCDMA/3G in several areas in the province of Yogyakarta. Network optimization will be based on the data drive test measurements of logfile data, and data to be analyzed include the E_c / I_o , RSCP, and TxPower of network performance and the impact on call setup and call drop. The results of the analysis will be a reference in making a simulation which will provide network optimization recommendations. To help analyze traffic data and measurement data are then used software and Nemo Actix Analyzer, this software will help engineers in viewing and processing data, so it can be analyzed properly.

Analyzing result with existing tools will provide optimization solutions that can be done to increase the value of E_c / I_O and RSCP as a cause of decline in the value of KPI, KPI values will be increased according to the desired value.

Keywords: drive test, WCDMA, Call setup failure, failur Handover, Call Drop, E_c / I_O , RSCP, and KPI