ABSTRACT

Demand for mobile communication services increase fast. A new technology needed for solved this problem. CDMA 2000 1x mobile communication system is deployed to provide high-speed mobile internet services. The CDMA 2000 wireless system will feature a number of enhancements over the present wireless systems while maintaining complete backward compatibility. This system offers good quality of services, maximum capacity, and wider coverage.

A new problem had founded, a user which communicate had drop call suddenly. Base Transceiver Station coverage likes more smaller in same as increasing of user. With a fast and easy deployment, the micro-celluler system gives benefits for users as well as services providers. However, the installation and flexible operation of enormous number of base stations are the most serious problems in deployment of the micro-cell network. To solve these problems from various standpoints, optimization of fiber optic technology in STO Cijaura for radio access network, if the capacity is not enough, reconfiguration of fiber optic access network will be held.

This optimization process gives performance 10.21 dB and 21x E1 used for coverage users in four field. This process also not make performance of fiber local access network drop because that reconfiguration process did not needed.