

## ABSTRACT

Code Division Multiple Access (CDMA) is one of new technology revolution form in cellular communication world. It is motivated by higher needs of spectrum efficiency, larger capacity, and also high quality voice and high data rate capability serves. CDMA 2000-1X wireless system is one example of new cellular standard technology that capable to put ready voice and data services up to 153.6 kbps data rates and has been deployed by some cellular operators. CDMA 2000-1X wireless system is an alternatif next generation networking deployment. On BTS (Base Transceiver Station) to MS ( Mobile Station ) signals propagation process, most problem that faced off is losses that caused by high buildings, Trees and others. This losses can't more than threshold value named MAPL ( Maximum Allowable Path Loss).

This final project would be analyzed about propagation link availability between Base Station and Mobile Station CDMA2000-1x cellular networking based at base station that had by PT. Mobile 8 Bandung.

Steps of performed within analysis of this radio link propagation covers MAPL determination, reverse link budget, forward link Budget, cell radius determination with Hata propagation models, and traffic analysis such as drop call rate, call failure rate, call success rate and BTS load. Others be conducted drive test to get parameter such as  $E_c/I_o$ , FER, MS Tx\_Pwr, and RSSI for voice and data service.

Result of analysis of link propagasi show the happening of overlapping usher cell which if abundant earn to cause the happening of dropcall. While at analysis traffic, site banjaran own highest storey level dropcall. For deive test analysis show district which there be still not yet been served better.