

## **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 technologies 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 alternative 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. Komselindo Bandung. Each base station represents morphology conditions that exist in Bandung City ( urban and sub urban) .This availability will be based on ITU standard for CDMA 2000-1X devices specification.*

*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 . Result of analysis indicate that applied link propagation have fulfilled availability. This conclusion relied on some condition that is area coverage 16 Base Stations have covers all area in Bandung city, Eb/No conditions pursuant to Reachable specification of ITU with using directional three sector antenna, specification of peripheral especially the power transmitted have fulfilled ITU specification.*