ABSTRACT

The coming of CDMA (Code Division Multiple Access) technology in Indonesia make the world of information telecommunication technology more colorful, with more various technology that can used. Development of CDMA technology till CDMA 2000 1x reached, it can hope accommodate high rate data service on optimal network and frequency allocation that has been exist. This system can give voice and data service with rate 153.6 kbps. CDMA 2000 1x is 2,5 G technology that being line migration CDMAOne to 3G technology, CDMA 2000 3x.

CDMA is a property that call softcapacity, where CDMA capacity influent by transmission parameters, they are information data rate, bandwidth, interference factor, voice activity. CDMA is interference limited system, where system capacity depend on how much interference level can accepted. So transmissi power from each Mobile Station (MS) has to contoled to limit interference. However, power level have to strong enough to quarantee good voice quality, so that need FER specification for a model. Various fiture rate can reduce MS power, when user not active talk.

This final project talk about influent of usage data rate 9,6 kbps and 14,4 kbps (Rate Set 1 and Rate Set 2) to the system to get axtracapacity. When there are extracapacity in the system, can use by the system to give more data rate. So that can get highest network usage with GOS as good as possible.