

## ABSTRACT

As the improvement of the Indonesia's telecommunication world, up until recently Telkom Flexi has been successfully planted in our societies' mind as one of the leader in order to serve communication features based on CDMA 2000 1x network. According to government policy which is ruled in PERMEN KOMINFO number 01/PER/M.KOMINFO/1/2006 date 13 Januari 2006 about PENATAAN PITA FREKUENSI that inform to all CDMA provider to change their frequency (migration) from 1900 MHz into 800 MHz, in this case with full awareness Telkom Flexi is also migrate its frequency which is planned to begin in Jakarta, West Java, and Banten that will due in December, 31<sup>st</sup> 2007.

Frequency migration can be described as the replacement of the frequency ribbon where the characteristic of the lower frequency is to have less damping and resistance so that in common its signal coverage is more far and simply reliable and better quality. In this final assignment, will include everything that related to QoS in Telkom Flexi Bandung in using frequency of 1900 MHz and 800 MHz which right up until now still in the process of settling so that hopefully will be overlayed before January, 1st 2008.

As for the perimeters that will be studied are drop call, data traffic, and user throughput. Also to completed this final assignment, the database using Borland Delphi 7 is also used. As for the results from drop call analysis in last three months in 2007 when still using 1900 MHz frequency showed that the rate of drop call is approximately 3% which is considerably bad compare with the 800 MHz frequency's drop call that reflected in 2-3%. The average throughput from 800 MHz is also show better results, in this case is faster, than 1900 MHz. As based on the drive test analysis in 800 MHz showed that optimalization process can increase QoS performance especially drop call with decreasing transmitted power and antenna downtilting methods.

Keyword : migration, overlay, drop call, throughput, drive test, database.