

## ABSTRACT

CDMA2000 1x EV-DO was the improvement from the latest CDMA, it was CDMA 2000 1x, that was built to accommodate the need of asymmetric data communication with higher data rate relative for the capacity until 2,4 Mbps (downstream) and 153 Kbps (upstream).

The problem is how far CDMA2000 1x EV-DO could be good in transfer data. So, in this project will analysis the performance of CDMA2000 1x EV-DO from throughput side. The throughput test do with several scenario, there are throughput test for single user and multi user, the test from several distance between AT and base station, single sector and multi sector test, the test for fixed point and mobile, and function HARQ protocol test.

The result of throughput test for single user shows that maximal data rate  $\pm 900$  Kbps, for multi user (6 users), each user get minimal data rate 128 Kbps, for sector test, each user get maximal data rate  $\pm 800$  Kbps. From all of the scenario tests could be concluded that the maximal output of throughput is 83% from the maximal specification of CDMA2000 1x EV-DO, that was 2,4 Mbps.