## **ABSTRACT**

Access data developing on the mobile characteristic of cellular technology at this time grow rapidly together with higher information necessity. This caused by some factors, such as the ability of movement data communication, reliable system which is more increase and time and place unlimited so that consumers can do access data rapidly, reliable and comfortable(fast, reliable and enjoyable network)

EV-DO is the wireless data technology which is used by one of Indonesian provider, PT. Mobile-8 that is implemented on the network cellular communication CDMA 2000 1x EV-DO as the developing of CDMA 2000 1x technology. This technology appears as the answer of customer's necessity for the fast access data. Because of that in this final assignment will be analyze the data packet performance of EV-DO that use CDMA 2000 1x EV-DO network applicated by PT.Mobile-8 Jakarta.

The analyzing of data packet performance of EV-DO is applicated on the PDSN EV-DO which use EV-DO network including service time problem, delay, utility, throughput, and also packet loss. The result of analysis will be compared with standard of PT.Mobile-8 Jakarta and the calculation theory will also be added in the analysis.

Some results that can be gained from the parameters analysis on March 2006 are: average services rate system on the busy hour is 246,553 packet/second which happen between 11.00 to 11.59, average utility factor is 70,866 %, average throughput system is 397,52 Kbps and bandwith used in system is 39,75 %, average packet loss on the system is 9.846%. Gained result from this research in EV-DO network indicate the stable network quality in using network resource and it has a good quality performance.