## **ABSTRACT**

Wireless communication technology has growing rapidly, either for voice service or data service. As the technology developed well, data service demand also increasing rapidly. Those move the wireless evolution technology towards the third generation which cause operators start to launch 3G service for it's customers. PT TELKOM, as one of operators, has launched TELKOMFlexi which is based on CDMA 2000-1X to offer packet data service since two years ago. In order to find out the packet data service quality during two years we have to analyze the packet data service performance.

The analysis is based on queue traffic model. Based on PDSN practical job in handling packet data and traffic measurement we will obtain the queue model M/M1. M/M/1's formulas are used for analyzing the parameters such as delay probability, mean waiting time for all customer (in system), mean waiting time for delayed customer (in queue), and mean queue length.

Finally from the analysis we find the delay probability 0,0044, mean waiting time for all customer (in system) 0,0576ms, and mean queue length 0,0044.