

## ABSTRACT

PT. Telekomunikasi Indonesia (TELKOM) developing CDMA2000 1x technology to support the new services that is TelkomFlexi which enable to the user can pleasant not only voice services but also the high speedly data services. With access rate until 153 Kbps. And provide facilities that exist on the CDMA2000 1x network through Packet Data Network to connect packet data service.

This Final Duty research about performance analyzing Packet Data Network at TelkomFlexi Jakarta. The parameter that being used to analyse performance are throughput, delay, packet loss and link utilities. And to determine traffic forecasting for several years to go is it link bandwidth can handle the traffic growth .

Data was take in the different point, for throughput analyze its take in 9 BSC-PDSN link, PDSN-WAP link, and PDSN-Internet link. For the delay analyze used roud trip time delay.

Based on the research result and analyze the parameter performance of Packet Data Network that is ASR have got the average value equal to 94.32%. Its mean more than the minimun ASR TelkomFlexi. And the delay system is 7 ms. The throughput for BSC link is 214.78 Kbps with link utilities is 19.95 %, PDSN-WAP link is 34.54 Kbps with link utilities is 1.69 %, and PDSN – Internet link is 1790.06 Kbps with link utilities is 44.75 %. And traffic forecasting existing link bandwidth is the link bandwidth is still enough to handle the traffic growth.

Keywords : *delay, throughput, utilitas, bandwidth occupancy, packet loss*