ABSTRACT

Smart Telecom as a new operator, developing CDMA2000 1x technology not only the customer enjoyed the voice services but also the data services with high speed access. With the access speed until 153,6 Kbps.

In this final task will analyze about the performance of CDMA2000 1x packet data services network in Smart Telecom Bandung with parameters to be analyze is throughput, delay, and packet loss. Parameters data from OMC and test result. The Analyze also based on traffic queuing model PDSN. Based on work description from PDSN to handle the packet data and from the traffic measurement obtained queuing traffic M/M/1.

From the analysis, the result is arrival rate (λ) is 0,2422 packet/second. Services rate (μ) is 18,59 packet/second. Utilities factor (ρ) is 0,013. With value of ρ < 1, the system is stable. Throughput network for web browsing is 144,8 Kbps, while for FTP download is 125,6 Kbps. For FTP Upload is 92,8 Kbps. Average delay for web browsing is 54,5 ms, while for FTP download is 63,3 ms. For FTP Upload is 68,2 ms.