Internet is a developed technology and its use be wide in multimedia application. CDMA 2000 1xEvDO is a wireless network that specifically for data service. Trasmission of multimedia susceptible when it passed through wireless network. So that it necessary datarate control system that can adjust datarate appropriate with condition of channel in transmission of data multimedia. In this research, simulated and analilyzed open loop rate control.

Open loop rate control system started from pilot transmission process by AN (Access Network) then pilot SNR estimated and predicted by AT (Access Terminal). From the result of prediction, AT determinate DRCIndex then transmitting DRC signal to AN. Further AN will transmit traffic signal appropriate with requested datarate (knew from DRC signal). SNR estimation technique is PSAM (Pilot Symbol Assisted Modulation). Prediction is done by using LPC (Linear Prediction Code). Traffic transmission use adaptive modulation scheme (QPSK, 8-PSK, 16-QAM) and Convolutional Encoder with coderate 1/3, 2/3 and 1/5. There are twelve combinations of traffic transmission system choosed appropriate with requested datarate.

After traffic received, AT will measure the throughput. It necessary to know that open loop rate control system is one of link adaptation technique in using sprectrum efficiently. From simulation get the result when open loop rate control implemented, there is different power needed 5.8 dB lower to reach throughput 1.2 Mbps at 3 Km per hour.

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