ABSTRACT

Mainstay communication system represent condition which enough in giving the quality of best service to each every user in communication. But, just practically always there problems of arising out, so that given service cannot give satisfaction to user.

This Final Project discussed packet data services performance on PDSN network study case in Mobile-8 telecom. To analyze packet data service performance, several parameters such throughput, delay, packet loss, and jitter are used to know QoS level. PDSN represent data communications band at network of CDMA

To analyze system perception during three months during the month of May - July 2006, during perception known busy hours mean for the service of data packet happened at 10.00-10.59 with incoming data packet mean during perception time three months equal to 33747 packet so that got arrival rate equal to 0,3093 packet/s with delay 16,033 ms. With total mean service rate during 3 months equal to 62,61 packet/s hence data packet system at Mobile-8 telecom can be told to stabilize with utility factor 0,00494 ($\rho < 1$). For the holding of system time during 3 perception months equal to 15,98 ms. Of analysis known mean of throughput during 3 perception months is 440,21 bps, of available bandwidth link equal to 256 Kbps hence used bandwidth equal to 0,2 %, with variation of delay (jitter) equal to 0,1229 ps, while flattening to flatten the amount of packet of loss equal to 8,833 %. From analysis above can be said that performance of data packet system at good Mobile-8, but happened extravagance of very big bandwidth.