

Abstract

Current data on the needs of service users is very high. It is observed from the increasing demand for data services on the mobile phone users. this triggers a new technology, so the mobile phone network operators are competing to implement a network that supports data services, one of which operator XL. Currently XL AXIATA node B still many who use the transport network ATM (Asynchronous Transfer Mode). Due to the increasing demand for data services, leading to increase bandwidth transport operators. Consequently ATM network is not adequate to accommodate data services due to insufficient bandwidth. Therefore at this time there should be migration to IP networks (Internet Protocol) based, in which IP-based network has enough bandwidth to accommodate wide and allows a data service requests from users.

In this final project has researched about migration planning and configuration on node B. Started by finding the parameters of the observed views of the data for at least 1 month RNC as a major problem that is doing the migration (Congestion, payload downlink HSDPA and HSUPA uplink payload). Followed by doing drive test to take samples in accordance with the node B Throughput parameter to enter into the process of planning, migration and configuration, after observing the data that the RNC to get the results then analyzed as a recommendation for the company XL fore.

Of this research results that have been obtained using the observed parameters, namely, the data congestion experienced changes that previously had values of 1.44% at the ATM transport links and a steady decrease to 0%. In the payload parameters HSDPA downlink direction before increasing the value 4226.67 9246.34 Kbps to Kbps. In the payload parameters HSUPA uplink previously increased value to 555.54 Kbps 341.71 Kbps.

Keywords : Congestion, Payload downlink HSDPA, Payload uplink HSUPA, Throughput, IP, ATM