

## ABSTRACT

HSDPA is a 3.5G technology, the development of UMTS. The main goal of HSDPA is to increase user throughput in downlink and to reduce the delay transmission of data packet. This due the development technique in node B. It is Fast Packet Scheduling which is mechanism to determine which packet of user to be transmitted first during one TTI.

This final project analyze three algorithm scheduling, there are Round Robin, Maximum C/I dan Fair Channel Dependent Scheduling. It use FTP traffic based on parameter of delay, throughput and fairness. These algorithm are tested in two scenarios, they are the impact of the increasing user and changing distances. These scenarios are modeled on ns-2 ( ns-allinone-2.0) and addition EURANE ( Enhanced UMTS Radio Access Network Extension) modul.

Based on the result of simulation in first scenario for three algorithms, the increasing of user number make the value of throughput user is decreased whereas delay value is increased. In second scenario, the increasing of distance between user and node b make the throughput value is decreased. Therefore, from all scenario it cant concluded that the highest fairness value is achieved by Fair Channel Dependent Scheduling, maximum throughput is Maximum C/I and the largest delay in Round Robin.

**Keywords : HSDPA , Fast Packet Scheduling, Fairness, Round robin, Maximum C/I and Fair Channel Dependent Scheduling (FCDS)**