ABSTRACT

High speed internet access is one that telecommunication service users expect. However, this has not been achieved optimally because of the limited frequency resources and the number of telecom operators that are also competing in the same business, resulting in the resources being fragmented.

One solution to overcome the problem is by using scheduling techniques in order to improve performance in meeting user needs equally and fairly, although with limited resources. In this final project has been tested the technique of scheduling maximum C / I (Max C / I) on eNodeB Martadinata and enchanced proportional fair (EPF) on eNodeB Halmahera owned by XL Axiata cellular operator in Bandung city using Huawei iManager U2000 software.

Based on the simulation of cell performance and user performance on Max C/I, that is with the number of general user number 110-145 users, total DLSCH users 1500-2700 channels, total users with data in the downlink queue delay 40-65 ms, number of UE number in session max 1700-3400 times DLSCH channel used, cell downlink RLC throughput 2,8-9,3 Mbps, downlink used RB number 0-90, SINR 23-28 dB, CQI 12-15, and downlink user RLC throughput 0.7- 4.8 Mbps. For simulation result data from cell performance and user performance in EPF, that is general user number 130-165 users, total DLSCH users 2300-2900 channels, total users with data in the downlink queue delay 50-85 ms, number of UE number in session max 22200-3700 times DLSCH channel used, cell downlink RLC throughput 2,7-6,5 Mbps, downlink used RB number 0-90, SINR 25-26 dB, CQI 13-14, and user downlink RLC throughput 0-6, 5 Mbps.

Keywords : **eNodeB, QoS,** *maximum C/I, enhanced proportional fair, throughput, fairness.*