Abstract

LTE network is an evolution of GSM network that enables user to download huge capacity data with high speed. LTE provides download speed up to 100 Mbps and upload speed up to 50 Mbps. Based on this speed, user can use multimedia services such as VoIP, video streaming, and to download large data without meaningful obstacle. To support the performance of LTE networks, it needs an efficient scheduling algorithm. Therefore, the author is going to compare several scheduling algorithms that often used in LTE networks through a simulation. The algorithms to be compared are EXP/PF, PF and FLS. The things that's going to be noticed of this research is Quality of Service from these algorithms. The parameters that are going to be analyzed include delay, throughput, fairness, and packet loss.

From the simulation result, it can be concluded that FLS algorithm has better performance than PF algorithm EXP/PF for the real-time data traffic like video. *Keywords:* LTE, QoS, FLS, EXP/PF, PF