

Abstract

Nowadays telecommunication technology has been massive, began from CDMA to GSM, until today 3G technology which is high-speed data package. Various kinds of improvements have been repeatedly repaired to improve speed access and convenience in data connection. In Indonesia is currently in the middle of preparing LTE network to meet the needs of the customer data access. The increased of internet users' customers can cause networks density in telecommunication networks Downlink scheduling is one solution that can be done to support data access.

Downlink scheduling that can be used are Round Robin and Best CQI. Round Robin is working in turns one after another, this scheduling will provide resource block users who came first and the next user who comes into the queue. While the Best CQI scheduling is the scheduling that considers the CQI (Channel Quality Indicator) as a strategy to provide the data to the user access rights.

To evaluate the performance of Round Robin and Best CQI scheduling that is simulated, it is used the parameter number of users, SNR, transmission schemes Single Input Single Output (SISO), Multiple Input Multi Output (MIMO). The results show that the Round Robin and Best CQI scheduling can result in good throughput for each scenario tested. In addition, to improve throughput at the Round Robin scheduling and Best CQI can enlarge the bandwidth so as to improve the overall throughput.

Keywords: *LTE, downlink scheduling, round robin, best CQI, parameter.*