Abstract
In this study, a novel adaptive QoS-based scheduler for WCDMA wireless networks is proposed and investigated. The objective is to maximize the aggregated throughput while satisfying the QoS requirements that is the maximum packet delay. This scheduler shall assign "channels" to contending users based on a set of criteria, namely, the mobile stations' estimated transmitter power, user-preset transmission rate and QoS constraint. The scheduler will be tested for multimedia traffic under WCDMA platform. We shall compare through system level simulations of the downlink channel the enhancements provided by the proposed scheme with Power Earliest Deadline First (PEDF). The proposed algorithm show outstanding improvement in the total system throughput while minimize the average packet delay.