Abstract

In order to meet requirements of modern mobile users, 3GPP (3rd Generation Partnership Project) has introduced LTE-A (Long Term Evolution Advanced), which improves the throughput and lowers the latency as compared to previous mobile systems. In order to efficiently allocate radio resources to mobile users, number of schedulers is available in literature. However, most of them are either for downlink, or they do not consider the LTE-A uplink functionalities. This paper presents an LTE-A uplink scheduler called (SA) Service Aware scheduler. The SA scheduler is design in accordance with LTE-A uplink specific features. As the simulation results illustrate, the proposed SA scheduling scheme outperforms other contemporary scheduling schemes by achieving better end-to-end delay and maintaining the uplink cell throughput performance.


**Index Terms**

Computer Science  
Information Sciences

**Keywords**

LTE-A, Uplink scheduling, Service aware Scheduler