LOAD BALANCING IN 4G LONG TERM EVOLUTION

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ABSTRACT

Long Term Evolution (LTE) and LTE-Advanced is the next major step towards 4th generation of mobile communications. In this network, resources are shared among all users and the amount of available resource is determined by traffic load. Heavy network load can affect the Quality of Service for users thus it require efficient network management technique. Thus, some method of load balancing is required. In this thesis, we propose a load balancing algorithm for a lightly loaded cell to initiate the handoff process, so that the lightly loaded cell can absorb some load of a heavily loaded cell. System level simulation of an LTE network is done using MATLAB and the findings show performance improvement in number of satisfied users when load balancing scheme is used compared to no load balancing scheme.

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