

Un nuevo criterio basado en calidad de experiencia para el balance de carga en redes LTE

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The increase in traffic and services in mobile networks has made network management a very complex task. This fact has motivated the development of many algorithms in a Self-Organized Network (SON) framework, such as Mobility Load Balancing (MLB). MLB achieves to solve congestion problems by sharing traffic demand among neighbour cells through the modification of handover parameters. However, it presents some limitations in current LTE networks. These limitations have a negative impact on end-user throughput and thus in Quality of Experience (QoE) perceived by end-users. In this paper, a sensitivity analysis of throughput according to Handover (HO) margins is presented and an alternative indicator for tuning HO margins is introduced, focusing on end-user throughput. The assessment is carried out in a trial LTE network. Results show that the proposed indicator improves network performance in terms of end-user throughput from that obtained with classical MLB algorithms.