Reparto de tráfico en redes 5G con segmentación

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In 5G and beyond wireless systems, Network Slicing (NS) feature will enable the coexistence of extremely different services. In sliced Radio Access Networks (RANs), an optimal traffic sharing among cells is key to guarantee Service Level Agreement (SLA) compliance while minimizing operation costs. The configuration of network functions leading to that optimal point may depend on the slice, claiming for slice-aware traffic steering strategies. This work presents the first data-driven algorithm for slice-aware traffic steering by tuning handover margins. The tuning process is driven by a novel indicator showing the imbalance of SLA compliance among neighbor cells per slice. Performance assessment is carried out with a system-level simulator implementing a realistic sliced RAN offering services with different throughput, latency and reliability requirements. Results show that the proposed algorithm improves the overall SLA compliance by 9% in only 15 minutes of network activity compared to the case of not steering traffic, outperforming a legacy mobility load balancing approach.