A Comparison Between Low Orbit and Geostationary WLAN-Satellite Hybrid Networks

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Abstract

Communication using satellites networks cover a large segment in voice and television broadcasts, with demand for new applications in remote locations. In this paper, an infrastructure based evaluation is conducted using QualNet Developer 5.0.2 network simulator. The test scenario consists of hybrid WLAN network interconnected via satellites in Low Earth (LEO) or Geostationary (GEO) orbits. The aim of the paper is to determine how satellite networks will accommodate demands for high throughput and low delays. Simulation results will present parametric evaluation by implementing various types of traffic and network loads.