



Name & Organisation

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Presentation title

Interference Management Framework for LEO Earth Stations: Assessment and Monitoring Techniques

Abstract

focuses on interference management for LEO earth stations (ES) amid the explosive growth of NGSO systems and critical spectrum sharing challenges. A key issue is the dynamic pointing uncertainty caused by rapidly moving NGSO satellites, which renders traditional static assessments unsuitable. A gain Cumulative Distribution Function (CDF)-based methodology is proposed, with steps including characterizing new and existing stations, analyzing propagation path loss, modeling satellite constellations, simulating ES pointing, calculating antenna gain and interference power CDFs, and judging interference based on time-probabilistic protection standards. This approach offers enhanced accuracy, improved spectrum efficiency, broad applicability, and provides a realistic interference picture with clear assessment steps.

Short bio

*He is an engineer at the Shanxi Monitoring Station of the State Radio Monitoring Center/State Radio Spectrum Management Center, Ministry of Industry and Information Technology, China.
His work primarily focuses on satellite monitoring technology, spectrum sharing ,compatibility studies ,and interference avoidance technologies*