Introduction of Handover Manager for Better Handover Latency and Handover Throughput during Leo Satellite Handover

Abstract

LEO satellite has an important role in global communication system. They have advantages
like low power requirement and lower end-to-end delay, efficient frequency spectrum utilization between satellites and spotbeams over MEO and GEO satellites. So in future they can be used as a replacement of modern terrestrial wireless networks. There are a lot of handover techniques for LEO satellites like seamless handover (SeaHO-LEO), PatHO-LEO. In our proposed work we have suggested a new handover technique for SeaHO-LEO by introducing a Handover Manager (HM) during the handover process and by simulation we have also shown that it a better approach by comparing it with other existing handover techniques as it reduces the handover latency, propagation delay, call blocking probability more than any other technique.

References

- Satellite Mobility Pattern Scheme for Centrical and Seamless Handover Management in LEO Satellite Networks, Ays˘eg˘ul Tu˘ys˘uz and Fatih Alag˘oz
- Y. H. Kwon and D. K. Sung, "Analysis of handover characteristics in shadowed
Introduction of Handover Manager for Better Handover Latency and Handover Throughput during Leo Satellite Handover


Index Terms

Computer Science Communications

Keywords

Handover Latency Leo Mobile Node (mn) handover Manager (hm)