Abstract

Low Earth Orbit (LEO) satellite networks are foreseen to complement terrestrial networks in future communication. LEO satellites have important advantages such that low end-to-end delay and power requirement and more efficient frequency spectrum allocation due to frequency reuse between satellite and spot beams. But the speed of LEO satellites is much higher than
mobile nodes. As a result the handover occurrence is more. Handover may degrade system performance depending upon techniques employed by the satellite systems. So an appropriate handover scheme must be devised to increase system performance. This paper introduces a new handover algorithm which optimizes between the cost of handover and quality of service (QOS) parameters. Also it decreases handover delay. Simulations indicates that this algorithm is better than current algorithms in shorten transmission delay and minimizing handover cost.

References

An Optimum Cost Handover Algorithm for LEO Satellites

Foundation of Computer Science, New York, USA

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**Index Terms**

Computer Science  Wireless Communications

**Keywords**

Satellite handover  QOS  LEO satellite:Mobile Node (MN)