Abstract

A Worldwide interoperability for Microwave Access (WiMAX) cell which is to be considered in this research applies mesh mode of operation with centralized scheduling. The direct connection between subscribers in many cases without the need of base station gives an improvement of the signal to noise ratio especially among users with short distances but the advantage of the mesh mode is tumbled when the number of users is increased significantly. This is related to the great increment in the overhead, the high processing during hops and the need for complex routing algorithm. Other factors like MAC and PHY layers overheads are studied and taken into account in the calculation of the cell capacity.

References

2. Zhu H., Tang Y. K., and Chlamtac I., Unified Collision-Free Coordinated Distributed


Index Terms

Computer Science          Wireless

Keywords

Capacity, Mesh mode, Overhead, WiMAX.