

Mobile WiMAX Network Deployment Considerations and Analysis

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Abstract

This paper tries to present the engineering and economic challenges the network operators are faced with in the case of implementing a WiMAX network. The paper begins with a comparison between WiMAX performance and other competing technologies that are available on the market at this moment. The purpose of this comparison is to get a feel of the performance that can be obtained. Results of simulations from field trials are presented and discussed. Next some critical technical issues of a typical WiMAX network deployment are presented and solutions are discussed. Finally a brief economic analysis of a theoretical rollout is discussed. The reasoning behind a network deployment is explained and simulation results are interpreted.