

"Broadband Wireless Metropolitan Area Networks"

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Abstract: Broadband wireless metropolitan area networks will play a significant role in future network infrastructure, delivering service not only to private terminals but also to thousands of wireless LAN hot spots. The success of the industry resolves around standards, particularly the IEEE 802.16 WirelessMAN[TM] standards. IEEE 802.16 offers a high-capacity medium access control layer which provides for instantaneous bandwidth on demand, adaptive link control, and full Quality of Service support. The topology is point-to-multipoint, with an optional extension for ad hoc mesh networking. Single-carrier and multicarrier physical layers specifications cover 2-66 GHz. With the standards for fixed (stationary) access in place, the IEEE 802.16 Working Group has turned its attention to expanding the standard to specify a system offering both mobile and fixed service.