

The Role of IEEE Standard 802.16 in Promoting Worldwide Broadband Access

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Abstract

While the world's data transmission capacities are growing at an enormous rate, relatively few users have broadband access to them. Wired solutions have limitations that prevent ubiquitous deployment. Broadband wireless access (BWA) is an alternative that offers quick build-out at a low cost. Global standardization is a critical issue for the success of broadband wireless access systems. Within the IEEE 802 LAN/MAN Standards Committee, the 802.16 Working Group on Broadband Wireless Access, with hundreds of participants worldwide, has completed the WirelessMAN air interface standard for fixed broadband wireless access networks. Supporting industry groups have blossomed, and relationship with regional standardization activities as well as with ITU have been fruitful. This work will provide the basis for a competitive industrial developments in support of interoperable technology that can support a wide variety of applications. Technology based on this standard is set to open up new opportunities to bring voice, data, and video services to more of the world's population. New developments in the IEEE 802.16 Working Group will provide additional features, including support for mobile users.