

Wireless Broadband Access Evolution and Technologies

Dr. Patrick L. Perini
Qwest Advanced Technologies
4001 Discovery Drive, STE 340
Boulder, CO 80303

Abstract- Traditional broadband services (DS1, DS3, OC-3, etc.) delivered via wired (copper and fiber) network infrastructures are now being offered via wireless technologies. High demand for such services and deregulation of the communications business is accelerating the development of wireless broadband technologies as competitive local exchange carrier's (CLECs) and inter-exchange carriers (IEC) move to offer broadband services using these wireless technologies. We shall present many of Qwest's (formerly U S WEST) broadband services currently offered, and illustrate the wireless technologies evolving to provide these services. We will describe technologies that are capable of delivering high speed data services to both small business and residential customers as well as those technologies that offer high bandwidth (DS1, DS3, OC-3) services to high capacity customers. In addition, perspectives from the incumbent local exchange carrier (ILEC), formerly known as U S WEST, regarding the use of this technology for expanding their services is discussed. Finally, new wireless broadband technologies for the home are accelerating demand for high bandwidth services to the home. We will discuss some of these new devices, and their implications to broadband access services.