

Bridging the Broadband Divide: Strategies for Rural and Developing Regions

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Abstract

Wireless growth in developing countries has been explosive in the past five years. More than half of all telephone subscribers in the developing regions of Asia and the Pacific as well as use wireless; for most, their cellphone is their first and only phone. In rural and remote areas of North America, voice services are available by satellite or terrestrial networks. However, broadband is also becoming increasingly important for a variety of Internet applications including distance education, e-commerce, e-government, telehealth, and other services. The shift to IP-based services also offers enormous potential for lower cost voice services (using VOIP) and IP-based video and other multimedia. Broadband is a key requirement for access to these new services. However, Internet access is still very limited, and broadband is still unavailable and/or unaffordable in many rural and developing regions. These conditions severely hamper exploitation of the Internet's potential for social and economic development.

This presentation focuses on strategies to increase broadband access in rural and developing regions, with a particular focus on the Asia/Pacific region, and experiences from North America. It examines lessons from the growth of wireless including the impact of competition on innovative services and pricing, the enormous pent-up demand for communication services, and the increasing irrelevance of past regulatory distinctions. It also examines strategies from the U.S. and Canada to extend infrastructure and to provide targeted subsidies where services would not otherwise be sustainable, with examples from Alaska and northern Canada. The paper then proposes strategies to increase broadband Internet investment and access through such means as limiting exclusivity periods, allowing resale, facilitating use of appropriate technologies, reducing local barriers, and using incentives and targeted subsidies to extend service to rural and isolated communities.