ITU/KADO Joint Symposium on Building Digital Bridges
10-11 September 2004 - Busan, Republic of Korea

Abstract

Broadband is flourishing in many economies, especially in East Asia. The Republic of Korea's high-speed broadband penetration is nearing 80 per cent of households while connection speeds in the region have reached 40 Mbit/s (roughly 700 times faster than a dial-up connection). But most people in the developing world still have no access to even simple dial-up Internet access. This vast inequality in access to information is creating an information digital divide that threatens to slow the formation of a truly global, inclusive information society.

The current digital divide is not without precedent. Fifteen years ago developing economies were struggling to develop telephone infrastructure. However, a combination of new mobile phone technologies and successful policy implementation has helped reduce an immense telecommunications gap earlier considered nearly insurmountable. Now, mobile phone users outnumber fixed lines throughout the developing world. This success can be repeated.

A new set of wireless technologies is evolving that may offer the key to connecting rural and developing areas to high-speed Internet access. These technologies promise high-speed Internet connectivity over long distances and could be used either as backbone infrastructure or direct connectivity to individual users. Wireless technologies may again prove to be the bridge over the digital divide.

The current digital divide in high-speed Internet connectivity is a growing concern, but one that can be effectively addressed by new technologies and policies, as highlighted at the World Summit on the Information Society (WSIS). However, narrowing the current digital divide will require a new set of **tools to identify digital gaps** and **policy insight to bridge them**.

Symposium Objectives

The objective of the Digital Bridges Initiative is to provide research and stimulate debate on ways to bring the benefits of ICTs to the entire world. To this end, the International Telecommunication Union (ITU) and the Korea Agency for Digital Opportunity and Promotion (KADO) will convene a group of policy makers, telecommunication providers, regulators, academics, statisticians and various other experts, serving in an individual capacity, who can discuss the best ways to:

1. Measure the digital divide by through ICT data collection and compilation into ICT indices.
2. Implement new communication technologies with the goal of expanding access to ICTs.

Through these discussions, the workshop will attempt to build a foundation of tools that can be used to promote ICT access throughout the world, first by identifying areas of acute need, and then by applying technological solutions to reach unserved users throughout the world.

Potential discussion topics throughout the symposium are:

Measuring the digital divide
- What work has been and is currently being done on measuring the digital divide? For example what indexes currently exist and how are they being used?
  - International indices (e.g. DAI, WEF, ORBICOM)
  - National indices (e.g. Korea, Brazil)
- What are the best methods for measuring the digital divide? Is an index better than individual variables? Are inter-country or intra-country indexes best? What kinds of variables should be used?
  - Variables to include
  - Ways to cluster variables
  - How should variables be combined and weighted
  - Robustness checking
- How can the necessary data be obtained? Should regulators and/or national statistical offices collect the data? What kind of assistance is needed to get more developing countries to collect the needed data? What is best practice in terms of data collection and dissemination.
- What is the progress on cross-country, standardized Internet surveys
  - Australia
  - Hong Kong, China

Connectivity
Technology
- What are the key factors when deciding whether to deploy wired or wireless technologies
- Which technologies show the most promise for delivering connectivity to rural and developing areas
- How developed are the technologies and when will they be ready for implementation
- What role will satellite, HAPS and LAPS play in wireless coverage

Access
- Will mobile phones function as low-cost PCs for low-income areas
- What role will community access centres play in delivering access
- Will high-speed mobile technologies in the developing world evolve from mobile phone connectivity (e.g. mobile network up or wired network down)
- How can providers in economies balance the tradeoffs between cost and speed

Use
- What applications can justify the costs of extending connectivity to outlying areas
- Are current usage trends in certain regions (e.g. Asia) applicable to other countries around the world

Regulation/Security
- What new demands will evolving wireless technologies place on spectrum allocation
- What are the security concerns if the majority of infrastructure is wireless
- What health concerns could be raised by high-powered, wireless Internet connections