UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT

THE DIGITAL DIVIDE REPORT:

ICT DIFFUSION INDEX 2005

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PREFACE

Regardless of how we measure it, there is an immense information and communication technology (ICT) gap, a “digital divide”, between developed and developing countries. A person in a high-income country is over 22 times more likely to be an Internet user than someone in a low-income country. Secure Internet servers, a rough indicator of electronic commerce, are over 100 times more common in high-income than low-income countries. In high-income countries, mobile phones are 29 times more prevalent and mainline penetration is 21 times that of low-income countries. Relative to income, the cost of Internet access in a low-income country is 150 times the cost of a comparable service in a high-income country. There are similar divides within individual countries. ICT is often non-existent in poor and rural areas of developing countries.

The Internet is a unique form of ICT. It is efficient and general purpose, designed to carry any type of data and support any application. This efficiency and generality is achieved by a design, which keeps the network simple while allowing the users at the “edge” of the network to invent applications and provide content and services. In addition to innovation, the bulk of the investment takes place at the edge of the network.

Since its inception, we have hypothesized that, while not a cure-all, the Internet could raise the quality of life in the developing world. This has led us to conduct hundreds of national "e-readiness" studies, train technicians and policymakers, run pilot studies, develop and deploy applications, and convene hundreds of conferences, including the recent World Summit on the Information Society (WSIS). We have demonstrated viable applications in health and veterinary care, education, agricultural markets, advice, and transportation, entertainment and games, news, personal communication (text, voice, video) and e-government. Yet, after all of this activity, Internet connectivity is nearly non-existent in rural areas of developing countries and, when it is available in urban areas; it is decidedly inferior to the service in developed countries.

We have hoped that national ICT policies of private sector participation, competition and effective regulation (PCR) would close the digital divide. While they have helped to reduce it slightly in certain areas, the digital divide persists, particularly among the least developed countries. Anticipated returns are insufficient to attract capital to build networks in low-income countries. While valid, PCR has limits. Pure competition does not exist in telecommunication. Duopoly is common and services are often either not available or have only a single provider in many areas within both developed and developing countries.

If we are to close the digital divide, we must go beyond PCR policy by coupling it with proactive government planning, investment and procurement. After updating UNCTAD's Information and Communication Technology Diffusion Index for 2005 and documenting the digital divide, this report presents case studies in which proactive governments have gone beyond PCR to create successful ICT policy. This leads us to discussion of proposals to construct public Internet backbones which would provide neutral connection points for competing service providers — the type of eclectic strategy seen in our successful case studies. There are roughly one billion people in about 800,000 villages in developing countries without any kind of connection. Providing each village with a high speed Internet connection would be a daunting task, a "Grand Challenge", but we believe that this goal could be achieved.

In line with the commitments taken in the Tunis Agenda for the Information Society, UNCTAD will continue to work with other stakeholders, including ITU, to measure progress in bridging the digital divide.

Dr. Supachai Panitchpakdi
Secretary-General of UNCTAD

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