



## chapter eight

# Conclusions

The World Summit on the Information Society (WSIS) was convened in response to rising awareness of the pervasive power of Information and Communication Technologies (ICTs) and growing concerns that developing countries should not be left behind in the process of building the Information Society. At the Summit, world leaders committed to turning the digital divide into a digital opportunity for all. This Report responds to the call of the Geneva Plan of Action for monitoring WSIS implementation and follow-up, with "analytical work on policies and their implementation" to "clarify the magnitude of the digital divide in both its domestic and international dimensions". The Report series is intended to track progress in WSIS implementation, from the conclusion of the Tunis Phase of the Summit in 2005 to the achievement of the WSIS targets towards 2015 and beyond.

Different statistical techniques are used to monitor the evolution of the digital divide. In terms of penetration rates, developing countries (especially China and India) are gaining on OECD countries in fixed lines, mobile phones, Internet usage and broadband usage. Least Developed Countries (LDCs) are also catching up with developing countries in terms of mobile phones, Internet usage and broadband. However, LDCs are actually falling behind in fixed lines, where there is a widening gap between developing countries and LDCs. The digital divide is shrinking in terms of Internet usage - inequality in the distribution of Internet users around the world has reduced sharply over recent years.

Mobile telephony offers the greatest potential to bridge the digital divide, with rapid growth in the number of mobile cellular subscribers around the world. Developing countries have made important gains in mobile telephony, with mobile phones outnumbering fixed lines by seven to one in LDCs, and by as much as nine to one in Sub-Saharan Africa. In more developed markets, consumers are 'cutting the cord' and increasingly substituting mobile phone ownership for their fixed line. Since the number of mobile subscribers overtook the number of fixed lines in 2002, over a billion new subscribers have been added to mobile phone networks. By the end of 2008, more than half the world's population is expected to have access to mobile phones.

The period 2005-06 was one of startling growth in Internet in many countries, thanks to the boost from broadband, both on fixed and mobile networks. The United States remains the largest Internet market in terms of the number of Internet subscribers, but China is gaining fast and, if cur-

rent growth rates continue, China could overtake the United States within two years. The Digital Opportunity Index (DOI) analyzes the take-up of broadband Internet, as a proportion of total Internet subscribers as one of its indicators. Based on the evidence from the DOI, subscribers in many developed countries are exchanging their narrowband dial-up connection for higher-speed broadband connections, with a long, slow death for dial-up in industrialized economies.

According to the Digital Opportunity Index, 2005/2006 also saw strong growth in third generation (3G) mobile services, particularly in Asia and Europe. Mobile broadband (3G) services are now offered in many developing countries throughout central and eastern Asia, Latin America and the Caribbean. Mobile broadband has grown in speed, with industry promising even higher speeds in the future. W-CDMA networks were operational in 49 countries by the start of 2007, with 24 HSDPA networks in commercial deployment. In 2006, twelve economies had separate networks supporting both W-CDMA and CDMA 2000 1x.

Countries have adopted various national strategies to boost ICT infrastructure and promote digital opportunity. Achieving the goals of the WSIS requires a coherent national strategy, with coordinated efforts by all stakeholders. The Report examines the various strategies that countries have pursued in their efforts to extend access to ICTs, including market liberalization, privatization and competition, and illustrates these strategies with reference to a wealth of country case studies. It discusses the incentives that countries can introduce to promote investment, including liberalization, investor guarantees and protection and fiscal incentives.

However, the Information Society is not without risks, and the Report examines growth in rising online dangers and threats to cybersecurity. The expansion of the Internet is opening up new opportunities for criminals to exploit online vulnerabilities to commit cybercrime acts or even deliberately attack the critical infrastructures of nation states. Viruses, spyware, phishing, identity theft, zero-day exploits, denial of service attacks, zombie botnets, and other vulnerabilities are endangering cyberspace and jeopardizing the very future of the Internet. These risks threaten to undermine user confidence and inhibit the growth of the online world.

Cybercrime is the fastest-growing form of criminality, including both new criminal offences in relation to computers (such as spam, viruses and

hacking), and existing crimes committed using digital or computer technology (such as fraud, harassment, etc.). At the Tunis phase of the WSIS, participants reaffirmed their commitment to deal effectively with the significant and growing problem posed by spam. WSIS Action Line C5 is dedicated to building confidence and security in the use of ICTs. Unless there is progress in building confidence and security in the use of ICTs, users' trust in the Internet may well diminish and this could limit its growth and transformational potential. However, one problem that all cybercrime and spam-fighters constantly face is that the criminal is always one step ahead. Developing countries are especially at risk when electronic networks are used for criminal purposes to harm the integrity of critical infrastructure within countries, as this

further creates barriers to extending the benefits of ICTs.

The Report also reviews current implementation and progress in achieving the WSIS targets. During the WSIS, all stakeholders committed to remaining fully engaged to ensure implementation and follow-up of the outcomes of the WSIS, with multi-stakeholder partnerships a key aspect of the WSIS approach to implementation. The Report reviews some of the initiatives underway around the world to extend the benefits of ICTs to more people, new communities and different cultures. It highlights examples of practical projects being introduced by a range of stakeholders to build a diverse and inclusive Information Society, in which everyone can participate.