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ICT for Development for All: Current Trends, Analysis & Regulation

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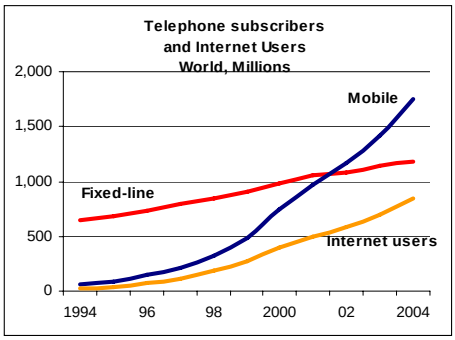
Ladies and Gentlemen,

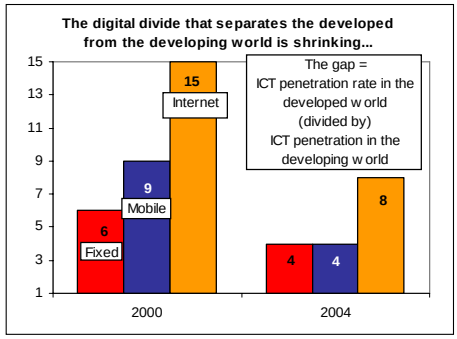
Doreen and I would like to present you with some of the latest trends and analysis in the telecommunication/ICT sector and highlight the importance of regulation, especially in the area of broadband.

ITU is dedicated to helping countries meet the targets agreed at the World Summit on the Information Society (WSIS) to connect all the world's villages, libraries and schools to ICTs by 2015. These ambitious goals, to be met in just nine years, are designed to further enable developing countries to take advantage of the potential of ICTs and to help them meet the UN Millennium Development Goals (MDGs).

More and more digital opportunities…



Source: ITU World Telecommunication Indicators Database.



Source: ITU World Telecommunication Indicators Database.

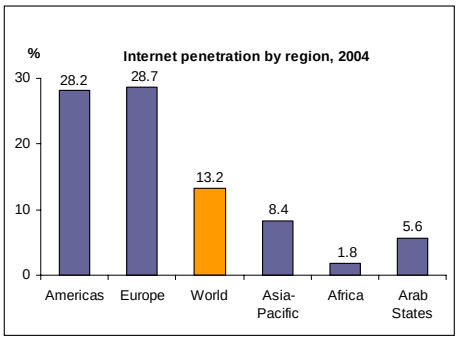
ITU statistics show that by the end of 2004, the telecommunication industry had experienced continuous growth, as well as rapid progress in policy and technology development, resulting in an increasingly competitive and networked world. There are more ICT users worldwide and more people communicating than at any other time in history.

By the end of 2004, the world counted a total of 3 billion telephone subscribers, 1.8 billion mobile subscribers and 1.2 billion fixed lines. Both, the number of mobile subscribers and the number of Internet users more than doubled in just four years. By end 2004, the world had over 840 million internet users, which means that on average 13 % of the world's population was online.

It is true and encouraging, that overall, the digital divide has been reduced. Our statistics show that within four year, from 2000 to 2004, the gap separating the developing and the developed countries has been shrinking in terms of mobile subscribers, fixed telephone lines and Internet users. We measure the gap (or digital divide) by dividing the ICT penetration rate in the developed world by the ICT penetration rate in the developing world. Phenomenal growth rates in the mobile sector, particularly, have been able to reduce the gap from 9 in the year 2000, to 4 by the end of 2004. This gap has also been reduced in terms of fixed lines, from 6 to 4 in four years, and from 15 to 8 in terms of Internet users.

You will find more ICT indicators in the summaries of both reports that have been provided to you.

..but major disparities remain and new divides must be addressed!



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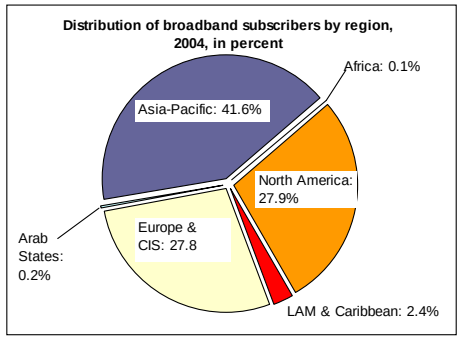


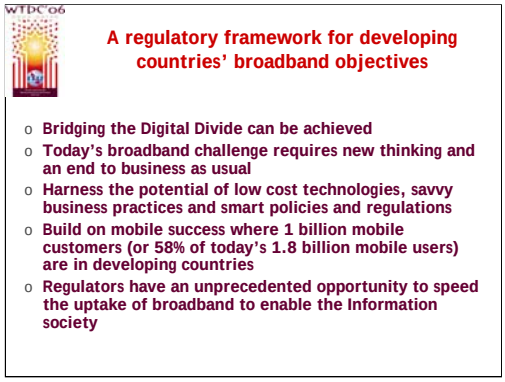
Source: ITU World Telecommunication Indicators Database.

Despite rapid growth in all of the world's regions, and particularly in the developing countries, major differences in penetration levels persist. Take the Internet, for example. In 2004, almost one third of the population in Europe and the Americas was online, compared to 8 percent in Asia Pacific. Europe has almost 15 times the Internet penetration of Africa, where less than 2 out of 100 people use the Internet. Internet penetration also remains below world average in the Arab States, where less than 6 out of 100 people are online.

The growth of the Internet and new applications is driving demand for access at higher speeds and the introduction of high-speed Internet access is particularly important for the transformation of Information Societies.

Today still, the vast majority of broadband users are in the developed world. Of the world's broadband subscribers, no less than 97 % are located in Asia-Pacific, Europe and North America. Africa, and the Arab States, particularly are lagging behind and many countries have not yet commercially launched high-speed Internet services.

The good news is that high growth rates and technological innovation and progress in the mobile sector are extremely promising and provide exciting opportunities, for example, in the area of wireless broadband. Since mobile is clearly the prevailing (and often only) technology for telecommunication access in developing and rural regions, broadband deployment will be most likely through broadband wireless access (BWA) technologies, for example 3G but also technologies like WiMAX and WiFi. And while by the end of 2004 the world counted some 160 million 3G subscribers, only a fraction of these were in the developing world. In other words: the mobile boom by itself is not enough and increasing efforts must be undertaken to take advantage of the great potential offered by these new technologies. And the right regulatory framework here plays a crucial role.



So what is the right regulatory framework?

The ***Trends report***, being issued today, identifies a regulatory framework designed to enable developing countries to meet their broadband objectives.

Empowered by the WSIS commitments, we are very optimistic that **the digital divide can be bridged and the Information Society achieved in both rural as well as urban areas**.

Why?

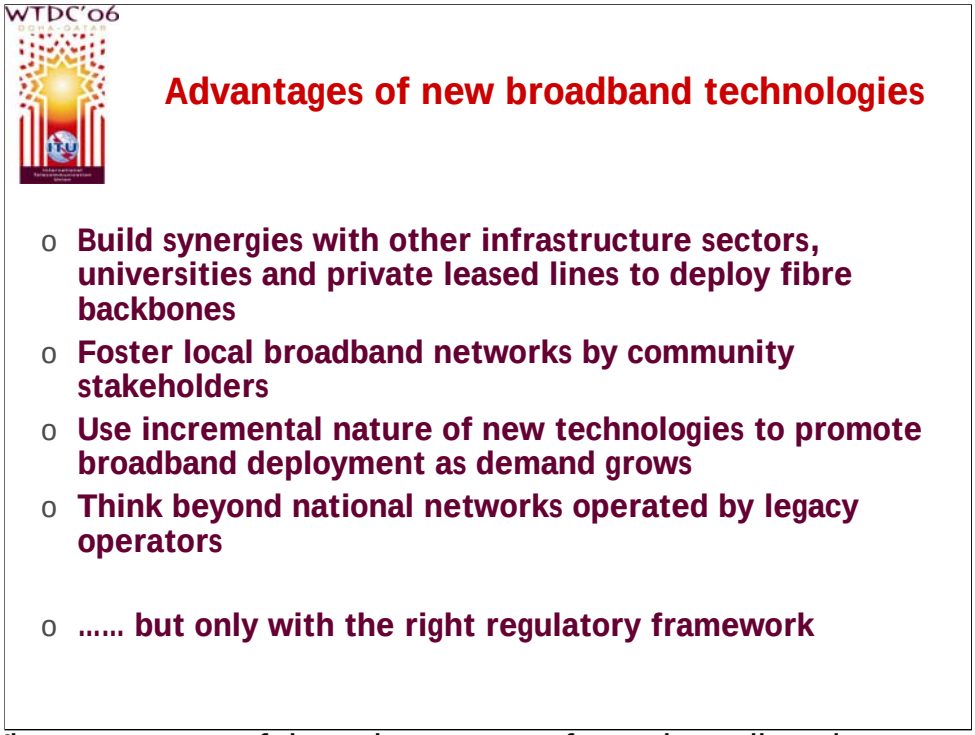
The developing world has already taken great strides with mobile voice networks. Of the 1.8 billion mobile users, 58% are in the developing world. This success has been linked to several key factors. One is that mobile is provided in an **effective regulatory framework**. Today, **87% of countries authorize competition in the provision of mobile services**. **Mobile's success is also due to innovative pricing strategies like prepaid subscriptions and the fact that mobile networks are less costly to deploy than fixed line networks**.

Today, advances in broadband wireless access technologies encourage us to believe that **the mobile miracle can be repeated with other ICTs, such as the internet and broadband,** given the right regulatory conditions.

Regulators have an unprecedented opportunity to speed the uptake of broadband to enable the Information Society.

Today's broadband challenge requires new thinking, and an end to business as usual.

Old regulatory practices designed to protect legacy operators can be re-tooled as broadband-promoting regulatory frameworks.



What are some of the advantages of new broadband technologies?

Fibre networks are becoming less expensive to deploy. Increasingly, developing countries are building synergies with other infrastructure sectors—like the energy and transport sectors—as well as with universities and private companies to deploy national fibre backbone networks. In India, for example, gas and rail companies have laid fibre optic cables and are offering broadband services.

Access networks reaching end users, even in remote rural areas, can be deployed at a very local level, by community stakeholders such as local governments, schools, NGOs, or aid agencies from international and other organizations.

Unlike legacy infrastructure, that was expensive and required national networks, many new broadband technologies can be deployed on an incremental basis as broadband demand grows. Again, this opens the world of broadband provisioning to a whole new range of players—given the right regulatory framework.

Broadband regulation means a new vision of:

- **Reduced regulatory burdens**
- **Innovative incentives**
- **Coordinated efforts by all links in the broadband value chain to unleash commercial and non-commercial deployment opportunities**
- **Carefully tailored regulations opening the door to both large and small-scale broadband providers.**

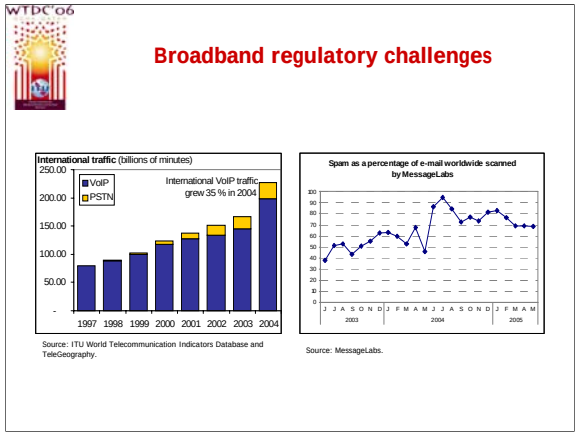
The new vision for broadband regulation means:

- reducing regulatory burdens

-providing innovative incentives

-and coordinating efforts by all links in the broadband value chain to unleash commercial and non-commercial deployment opportunities.

Regulations can be carefully tailored to open the door to both large and small scale broadband providers. For example, regulators can apply light licensing or even general authorization regimes to small, local players, rather than imposing the kinds of regulatory obligations required of large, nation-wide operators.



Broadband also raises new regulatory challenges.

The rapid rise of Voice over IP (VoIP) is turning the old telecom business model on its head, but has also offered a cheaper communication alternative to millions of users across the world.

In fact, international VoIP increased by 35 per cent from 2003 to 2004 as shown in this slide.

The rise of VoIP has crystallized the delicate balancing act that many regulators perform: encouraging low cost access to ICT services on the one hand and the desire to protect incumbent operators on the other.

Spam is another challenge raised by broadband. Approximately 70 per cent of all e-mail traffic by mid 2005 was Spam.

So far, existing anti-spam laws have had little effect. Most laws target spammers, not the ISPs that carry spam, and require considerable investigative and enforcement resources – which can be problematic especially for developing countries.

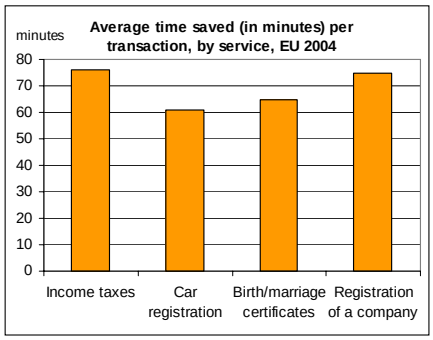
The time may be ripe for anti-spam authorities to expand their efforts to include working with ISPs who can be instrumental in the fighting spam.

How?

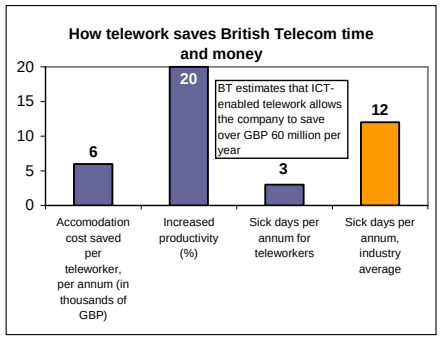
One possibility is the establishment of enforceable codes of conduct that would require ISPs to prohibit their customers from using the ISP as a source of spam.

If regulators the world over enforced such codes of conduct maybe your inbox would not be so cluttered with spam!

ICTs increase productivity, save time and money, contribute to social development and much more…



Source: ITU adapted from EU.



Source: ITU adapted from Broadband Stakeholder Group, 2004

As Doreen has just mentioned, the pace of broadband hinges on the regulatory framework. Why do countries want to speed up broadband deployment?

There is increasing evidence that some of the applications that are having the greatest impact on the economy and the society are closely linked to broadband uptake.

It has been recognized that ICTs are a tool for social and economic development in many ways, for example, through the ICT sector's direct impact on the economy. But the greatest impact of ICTs, is indirect by transforming the way individuals, businesses and other parts of the society work, buy, interact, and communicate. ICTs have truly transformed the world and while it is actually not that easy to measure the concrete and quantifiable impact of ICTs, there are growing efforts to assess the change that ICTs have made. There are a number of studies highlighting how ICTs increase economic growth, particularly through their abilitiy to raise productivity, but progress is also made through a number of applications and services, for example e-commerce or e-government, and countries, organizations and businesses are starting to measure impact, for example, in terms of time saved by citizens that use e-government applications or money saved by businesses that have introduced teleworking. These are just some of the examples that highlight the potential of ICTs on social and economic development and confirm what has been highlighted by the WSIS.

The WSIS's expectations are high - the promises the Information Society holds

- **WSIS documents include over two dozen references highlighting that ICTs can help**
  - «increase broadly-based economic growth»
  - «support sustainable development»
  - «improve socio-economic development»
  - «increase confidence in the future»
  - «achieve the internationally agreed development goals and objectives, including the Millennium Development Goals»
- **To exploit the potential of ICTs:**
  - Increase access to ICTs, including broadband access
  - Track progress on digital opportunities & the WSIS targets and identify and evaluate impact of ICTs, including on the MDGs

One of the major arguments made during the World Summit on the IS was about the promises and potential that ICTs hold, for example, by contributing to economic growth, supporting sustainable development but also by helping achieve internationally agreed development goals and objectives, including the Millennium Development Goals.

To exploit the potential of ICTs, countries need to continue to increase access to and use of ICTs, including broadband access

We must also continue to track progress on digital opportunities (including the WSIS targets) and identify and evaluate the impact of ICTs, including on the MDGs. These are some of the topics raised in the World Telecommunication Development Report and the Trends Report and we will be more than happy to answer any questions you might have.

Thank you.

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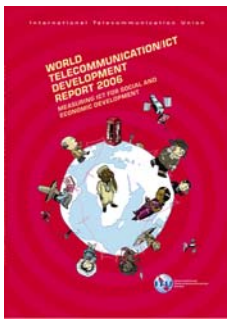
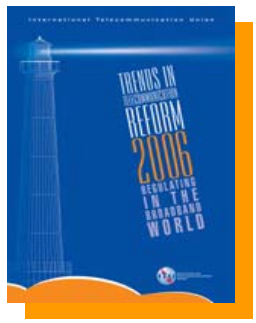
World Telecommunication/ICT Development Report 2006: Measuring ICT for Social and Economic Development



Trends in Telecommunication Reform 2006: Regulating in a Broadband World



We are delighted to be here with you today to launch two major ITU reports, the 2006 *World Telecommunication Development Report* on Measuring ICT for Social and Economic Development and the 2006 edition of *Trends in Telecommunication Reform: Regulating in a Broadband World.*

These two reports examine current trends and developments in the telecommunication/ICT sector, highlight the importance of information and communication technologies for development, and will assist countries in meeting the targets agreed at the World Summit on the Information Society (WSIS) to connect all the world's villages, libraries and schools to ICTs by 2015. These ambitious goals, to be met in just nine years, are designed to further enable developing countries to take advantage of the potential of ICTs and to help them meet the UN Millennium Development Goals (MDGs).

Thank you

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