Increased Connectivity via improved access, infrastructure and enabling environment

Presentation by
Mongi Hamdi
Head of the CSTD Secretariat
UNCTAD
Outline

- **Overview**
  - ICT Access – the Current Situation
  - ICT Infrastructure – Networks and Traffic
  - ICT Use – the Current Trends
  - Institutional Reforms

- **Forging ahead: Progress and Innovations**
  - Mobile Applications – more than tools for talking
  - Shared Access – the answer to broadband bottleneck
  - **Institutional Environment**: Challenges and Opportunities

- **Summary**: Critical factors for success
The promise of mobile devices is unequivocal.

In developing countries, there are now eight times as many mobile phones as fixed lines, three times more mobile phones than PCs, and twice as many mobile phones as TV sets.

SMS text messaging provides a popular low-cost alternative mean of communication.
Number of Internet users and Internet user penetration rate (2000-2008)

- **Number of Internet users [million]**
  - Africa: 51
  - Asia: 579
  - Europe: 385
  - Middle East: 42
  - North America: 248
  - Latin America and the Caribbean: 139
  - Australia and Oceania: 20

- **Internet user penetration rate [%]**
  - Africa: 5%
  - Asia: 15%
  - Europe: 48%
  - Middle East: 21%
  - North America: 74%
  - Latin America and the Caribbean: 24%
  - Australia and Oceania: 60%

**Date:**
- 31-Dec-00
- 30-Jun-08

**Penetration rate**
Economies with highest number of broadband subscribers (Sept. 2007)

[Bar chart showing the number of broadband subscribers and broadband penetration for various countries.]

- Sweden
- India
- Poland
- Russia
- Turkey
- Mexico
- Australia
- Taiwan, Province of China
- Netherlands
- Brazil
- Spain
- Canada
- Italy
- France
- United Kingdom
- Korea, South
- Germany
- Japan
- China
- United States

Number of broadband subscribers [million]

Broadband penetration [%]

0% 5% 10% 15% 20% 25% 30% 35%

- Broadband Subscribers
- Broadband Penetration (%)
Social Network Services

User-Provided Contents

Online social networking and services based on user-provided content have recently become among the fastest growing areas of the Internet, and the biggest consumers of bandwidth.

Services, such as My Space, Facebook, Friendster, Wikipedia, YouTube, Bebo and Orkut have had explosive growth in the last 2 to 3 years.
Overview: Institutional Reforms

There has been a steady trend towards (PCR): privatisation, openness to competition and foreign investment and liberalization of regulation.

Best practices national experiences:

- Chile was the first country that introduced PCR in South America. The Government took the lead in developing a comprehensive ICT plan, developing e-government services, a comprehensive school network and a curriculum program, and coordinating telecentres.

- The Indian Government set up task forces which led to planning and reform, and both central government and state governments supported PPP to bring telephony and Internet connectivity to rural villages.

- The Singapore Government has played a major role in ICT planning by making direct investments and developing and offering e-government services.

- In addition to planning ICT development, the Chinese government allowed state-owned enterprises to compete with each other and allowed competition among companies connecting to state-owned backbones.

- In the United States, the National Science Foundation (NSF) funded the building of a backbone Internet network, while the universities and research networks paid for their individual connection to the network.
Forging ahead: Progress and Innovations
Mobile phones

- Mobile Applications: more than tools for talking
  - making banking transactions
  - looking for jobs
  - beeping an engineer for farm help
  - increasing agricultural trade
  - reminding patients of medication
  - Maintaining family and social ties
  - encouraging entrepreneurialship and increasing empowerment
Forging ahead: Progress and Innovations
Internet Access

In developing countries, particularly in rural areas, individual broadband access is too costly.

- Shared Access: the answer to broadband bottleneck
- National experiences:
  - India is introducing 100,000 Community Service Centres (CSC). They are financed through public private partnerships.
  - Ghana is introducing 222 Community Information Centres (CIS)
  - South Africa introduced 500 Multipurpose Community Centres

- Success Factors:
  - Inclusion
  - Social sustainability and PPP financing
  - Community monitoring and ownership
  - Outsourcing
Forging ahead: Progress and Innovations

- Radio and TV Broadcasting: Very effective ICT
- Success Factors:
  - Broadcasting time
  - Local content
  - Local languages
  - Government support
Institutional Environment: Challenges

- Multi-thematic perspective
- Coherent national policy

- Institutional challenges lie in a broader context of policy coordination. It requires political, educational, cultural, scientific, legal, regulatory and financial attention.
Regional coordination

Advantages
- economy of scale
- harmonized regulatory frameworks
- platform for information exchange
- shared capacity building and training programmes
Summary: A Vision

End-users

Service operators and providers

Community

Government
Thank you very much for your attention.

Mongi.hamdi@unctad.org

www.unctad.org/stdev