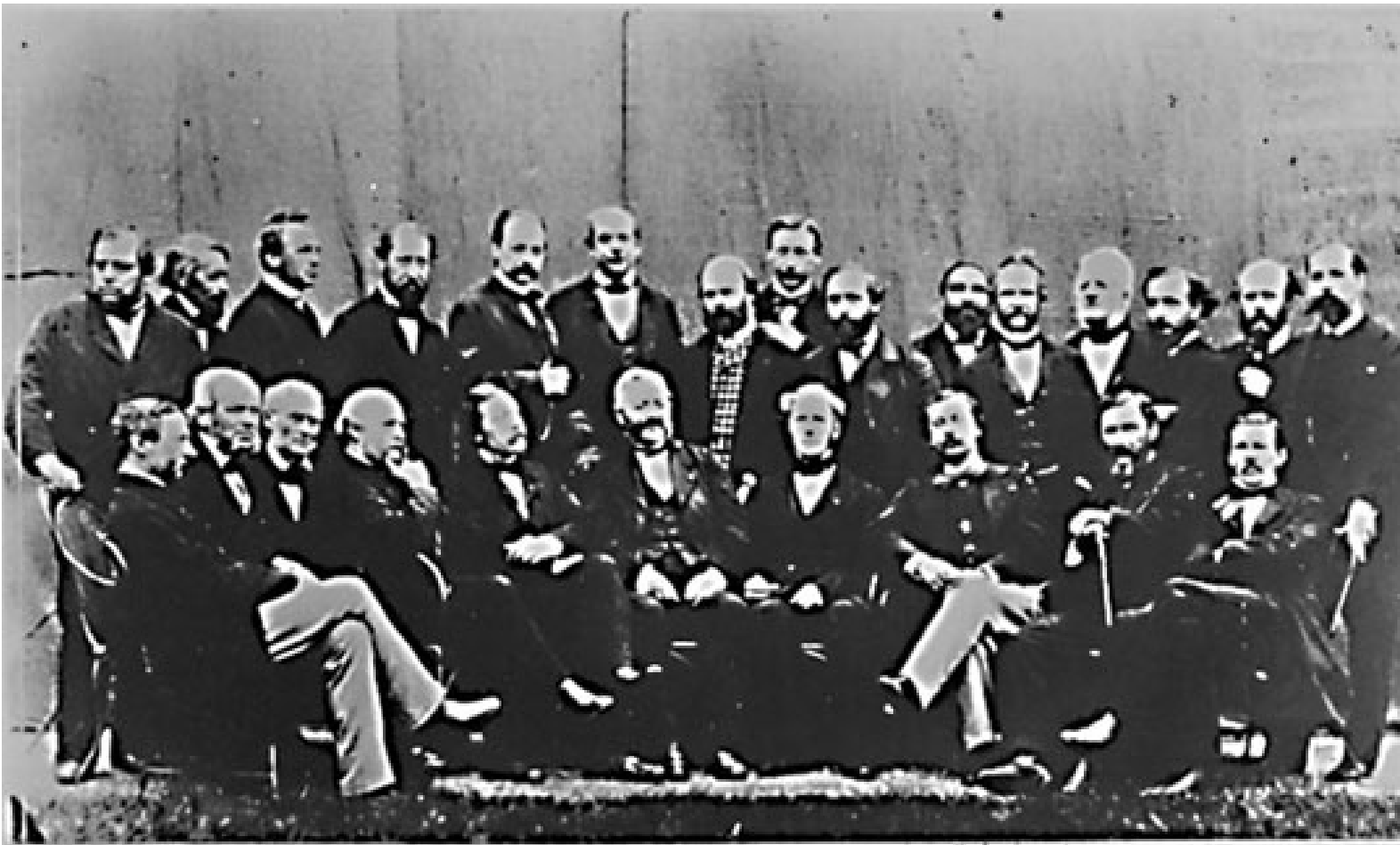# Introduction to the work of ITU and its telecom policy research

Dr Tim Kelly

Head, Strategy & Policy Unit, ITU

Men in Beards: The ITU in 1865

ITU in brief

- UN specialized agency, concerned with the development of telecommunication networks and services worldwide
- 141 years old
- 190 Member States; 650+ Sector Members
- Around 790 staff / 83 nationalities
- 2005 budget = CHF164m (USD 130m)
- Secretary-General: Yoshio Utsumi (Japan)
- Deputy Sec-General: Roberto Blois (Brazil)
- Website: http://www.itu.int

ITU structure

Plenipotentiary Conference

World Conferences on Int'l Telecoms

Council

Radiocommunication

World/Regional Radiocommunication Conference (WRC) Radiocommunication Assembly (RA)

Radio Regulations Board (RRB

Advisory Group

Study Groups

Telecom Standardization

World Telecommunication Standardization Assembly (WTSA)

Advisory Group

Study Groups

Development

World/Regional Telecommunication Development Conference (WTDC)

Advisory Group

Study Groups

Secretariat

Secretary-General Deputy Secretary-General

TELECOM

Director Radiocommunication Bureau (BR)

Director Telecom Standardization Bureau (TSB)

Director Telecom Development Bureau (BDT)

Who pays what?

- ITU has 190 Member States plus 650+ Sector Members and Associates
  - ➢ Each chooses to pay a certain number contributory units e.g. US = 30, Malawi 1/16
  - ➢ For Member States, 1 unit = CHF 318'000
  - ➢ For Sector Members, 1/2 unit = CHF 31'800
  - ➢ For Associates, 1 unit = CHF 10'600
- ➢ Main budget = CHF 163m in 2005, of which:
  - ➢ CHF 106m (64.6%) from Member States
  - ➢ CHF 21m (12.8%) from Sector Members & Associates
  - ➢ CHF 13.1m (8.0%) from sale of publications
  - ➢ CHF 28.3m (17.3%) from cost recovery, interest, etc
  - ➢ CHF 1.5m (0.9%) from funds-in-trust (for development)

According to the International Telecommunication Constitution (Marrakesh, 2002), the role of ITU is:

- International cooperation in telecommunications
- Technical assistance to LDCs
- To promote technical development
- To extend the benefits of telecoms
- To promote telecoms for peaceful use
- To harmonize national policies
- To promote telecoms in cooperation with other national and regional bodies

But what does ITU actually do?

- Spectrum allocation and registration
- Coordination of national spectrum planning
- International telecoms standardization
- Collaboration in international tariff-setting
- Cooperation in telecoms development assistance
- Measures for ensuring safety of life
- Policy reviews, information exchange
- Extension of universal access

International Treaties

- Constitution and Convention of ITU
  - ➢ Two complementary treaties, containing mainly housekeeping details but also some longstanding international commitments (e.g. common carrier tradition)
  - ➢ Major update in 1992; minor updates in 1998 & 2002
- International Telecommunication Regulations
  - ➢ Thin (10 Articles) treaty concerning mainly accounting practices. Last update 1988 – under review since 1998
- Radio Regulations
  - ➢ Thick (>10'000 pages) treaty governing use of radio spectrum. Updated every WRC

Development

- World Telecom Development Conference (Doha, March 2006)
- Study Groups
- Telecommunication Indicators reports and databases
- Regulatory assistance
- Technical cooperation
- Regional offices (11)
- Director: Hammadoun Touré (Mali)

Radiocommunications

- World Radio Conference
  - Geneva, June 2003
- ITU-R Recommendations
- Stewardship of radio frequency & satellite orbits
  - Radio Regulations
  - Master International Frequency Register
- Safety of life services (Maritime, Aeronautical, etc.)
- Director: Valery Timofeev (Russia)

Standardization

- World Telecom Standardization Assembly
  - ➤ Brazil, October 2004
- ITU-T Recommendations
- Stewardship of international numbering plan
  - ➤ Country codes
  - ➤ Universal International Freephone
  - ➤ ENUM
- Collaboration with the Internet community (e.g. IETF, ICANN, IGF)
- Director: Houlin Zhao (China)

Gen. Secretariat

- Plenipotentiary Conferences
  - ➢ Antalya, November 2006
- Hosting secretariat for World Summit on the Information Society (WSIS)
  - Geneva phase, 10-12 December 2003
  - Tunis phase, 16-18 November 2005
- ITU Council
- ITU News: www.itu.int/itunews/
- Support services (e.g. IS, languages)
- ITU TELECOM (WORLD 2006, in HK, December 2006))
- Policy, research and workshops (SPU)

Telecom Policy Research: Main programmes

- **ITU New Initiatives Programme**
  - ➢ **Begun in 1999**
  - ➢ **Around 17 workshops held to date**
- **Building Digital Bridges**
  - ➢ **Begun in 2004**
  - ➢ **Development of "Digital Opportunity Index"**
- **Main research/data publications**
  - ➢ **ITU Internet Reports: 7 editions since 1997**
  - ➢ **World Telecom Development Report: 7 since 1994**
  - ➢ **Trends in Telecom Reform: Annual since 1998**
  - ➢ **World Information Society Report: 1st edition, 2006**
  - ➢ **WSIS Stocktaking Database (More than 3'000 ICT projects)**

New Initiatives Programme

- **Workshops: Recent examples include:**
  - **"Regulatory environment for future mobile multimedia services (June 2006, Mainz)**
  - **"What rules for IP-based NGNs?" (March 2006)**
  - **"Tomorrow's Network Today" (October 2005)**
- **Country case studies**
  - **More than 50 studies completed**
  - **See www.itu.int/casestudies.**
- **Resource websites**
  - **See www.itu.int/ni.**
- **Published reports**

Bits and Bahts:
Thailand Internet Case Study
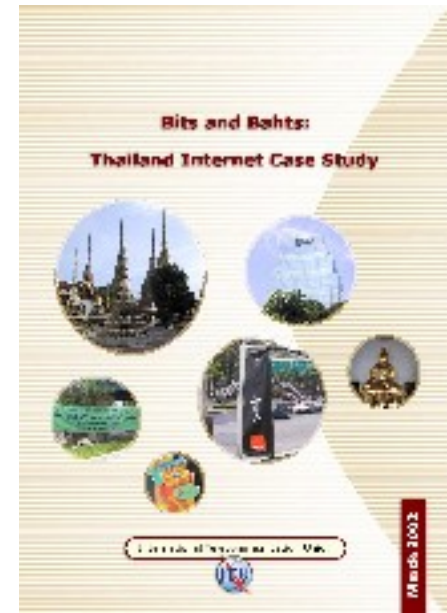
Upcoming workshops

- **Digital Opportunity Forum (31 August/1 September 2006, Seoul)**
- **Market mechanisms for spectrum allocation (November 2-3, 2006, Geneva)**
- **The Future of Voice (January 2007, Geneva)**
- **2006-07 work programme questionnaire** (see: **http://www.itu.int/osg/spu/ni/questionnaire06-07/index.html**)
- **Other possible future topics include:**
  - **Peer-to-peer**
  - **IPTV**
  - **E-government**
  - **E-health**
  - **> Digital Identities**
  - **> Info Society in 2015**
  - **> Wireless Networking**
  - **> Content without frontiers**

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Building digital bridges

- **Multi-stakeholder partnership involving ITU, MIC Korea, KADO, UNCTAD, LBS and other partners**
- **Workshop, Sept 2004, Busan, Rep. of Korea**
- **WSIS Thematic Meeting on multi-stakeholder partnerships for bridging the divide, June 2005, Seoul**
- **Launch of "Digital Opportunity Index" at WSIS in Tunis, November 2005**
- **Workshop on "Digital transformation in the information society", with London Business School, Geneva, 1-2 June 2006**
- **Launch of *World Information Society Report*, 5 July 2006**

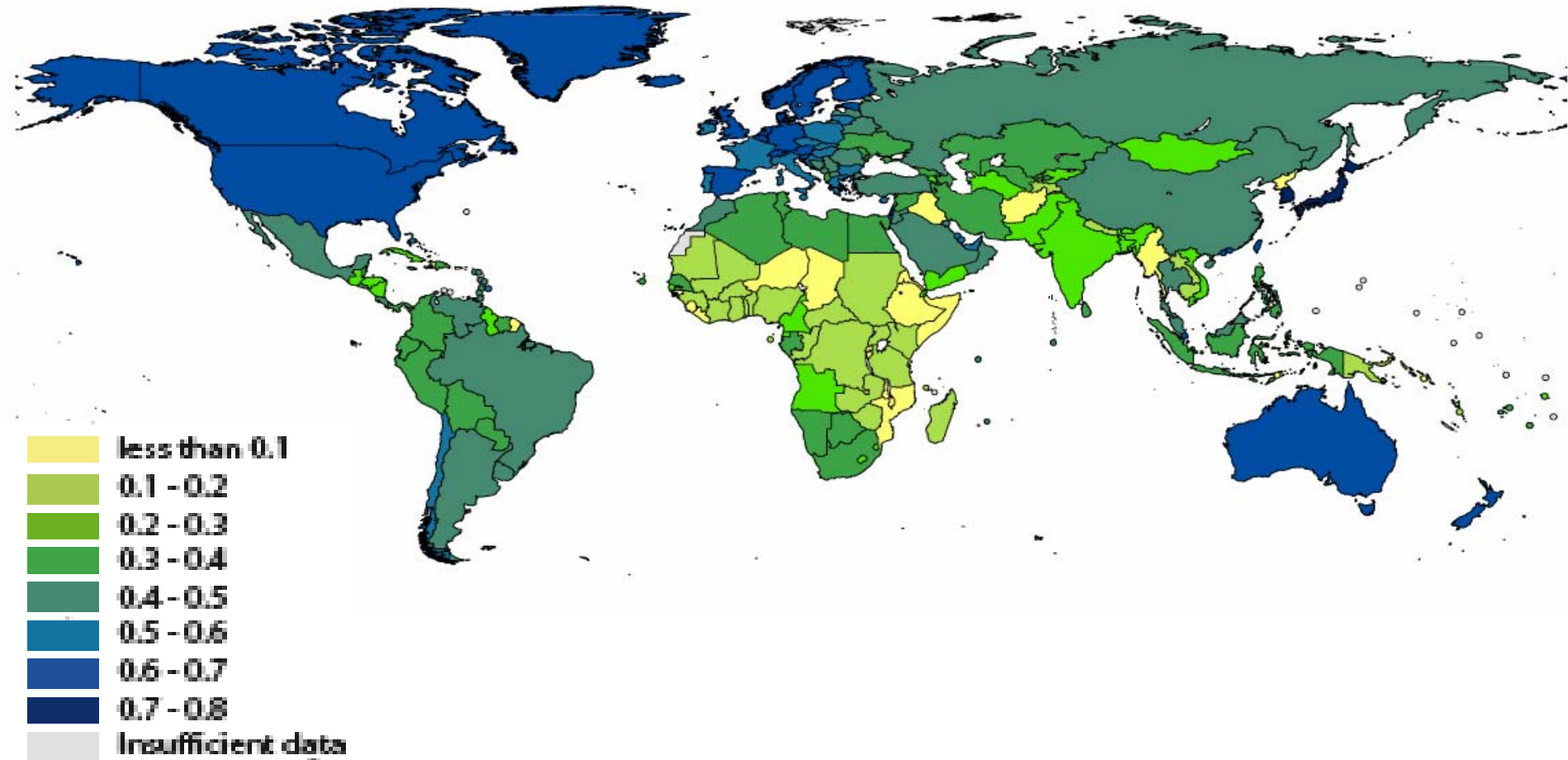# A new tool for international comparisons: Digital Opportunity Index

- **A composite index made from 11 separate indicators**

- **Structured around:**
  - **Opportunity (e.g., Coverage and tariffs)**
  - **Infrastructure (e.g., penetration rates for individuals and households)**
  - **Utilisation (e.g., access to Internet and broadband connections)**

- **Separate indices for fixed and mobile as well as a combined index**

- **Launched at WSIS Summit in Tunis**

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DOI Indicators

	Indicator	Goal post	Indicator weight	Category weight
Opportunity	**Percentage of population covered by mobile**	**100**	**33%**	**33%**
	Internet access tariffs as a % of per capita income	**.16**	**33%**	
	Mobile tariffs as a % of per capita income	**.20**	**33%**	
Infrastructure	**Proportion of households with a fixed telephone**	**100**	**20%**	**33%**
	Mobile cellular subscribers per 100 inhabitants	**100**	**20%**	
	Proportion of households with Internet access	**100**	**20%**	
	Mobile Internet subscribers per 100 inhabitants	**100**	**20%**	
	Proportion of households with a computer	**100**	**20%**	
Utilization	**Internet users per 100 inhabitants**	**85**	**33%**	**33%**
	% of fixed broadband in fixed Internet subscribers	**100**	**33%**	
	% of mobile broadband in mobile Internet subscribers	**100**	**33%**	

Source: ITU/UNCTAD/KADO "Digital Opportunity Index", see http://www.itu.int/osg/spu/statistics/DOI/index.phtml.

DOI rankings worldwide, 2005
Covering 180 economies

less than 0.1
0.1 - 0.2
0.2 - 0.3
0.3 - 0.4
0.4 - 0.5
0.5 - 0.6
0.6 - 0.7
0.7 - 0.8
Insufficient data

Publications: ITU Internet Reports

**A series of reports tracking the development and policy implications of the Internet, with latest data**

- **2005: The Internet of Things**
- **2004: The Portable Internet**
- **2003: Birth of Broadband**
- **2002: Internet for a Mobile Generation**
- **2001: IP Telephony**
- **1999: Internet for Development**
- **1997: Challenges to the Network**

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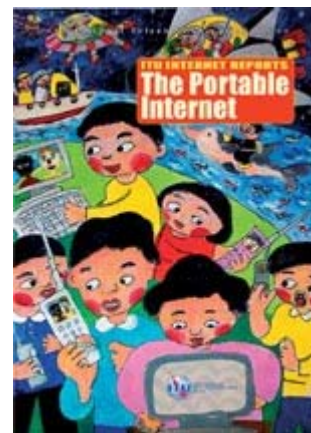
Other research-oriented publications

- **World Information Society Report**
  - **Inaugural edition, 5 July 2005**
- **World Telecom Development Report**
  - **A series of reports on broad themes (e.g measuring access, restructuring, mobile)**
  - **Includes World Telecom Indicators**
- **Trends in Telecom Reform**
  - **Reports focusing on regulatory issues (e.g., VOIP, effective regulation, spam)**
  - **Annual regulatory questionnaire**
- **WSIS stocktaking database**
  - **See www.itu.int/stocktaking.**
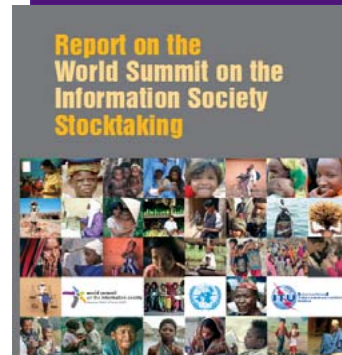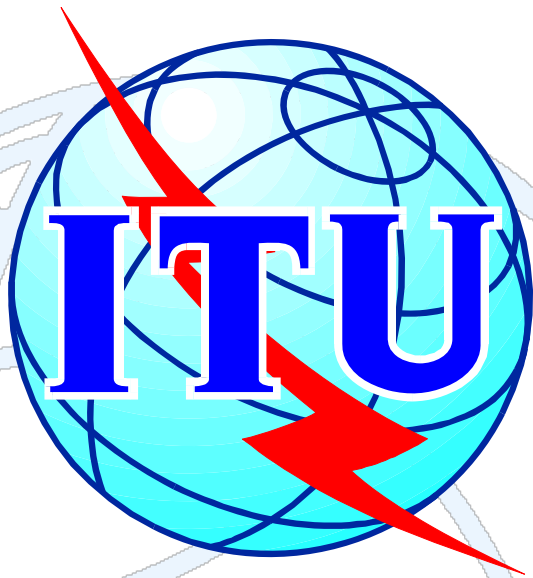
Thank you

For more information, please see:
http://www.itu.int/spu

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