

# ***Global Trends in Telecoms: Introduction to the work of ITU***

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**&**

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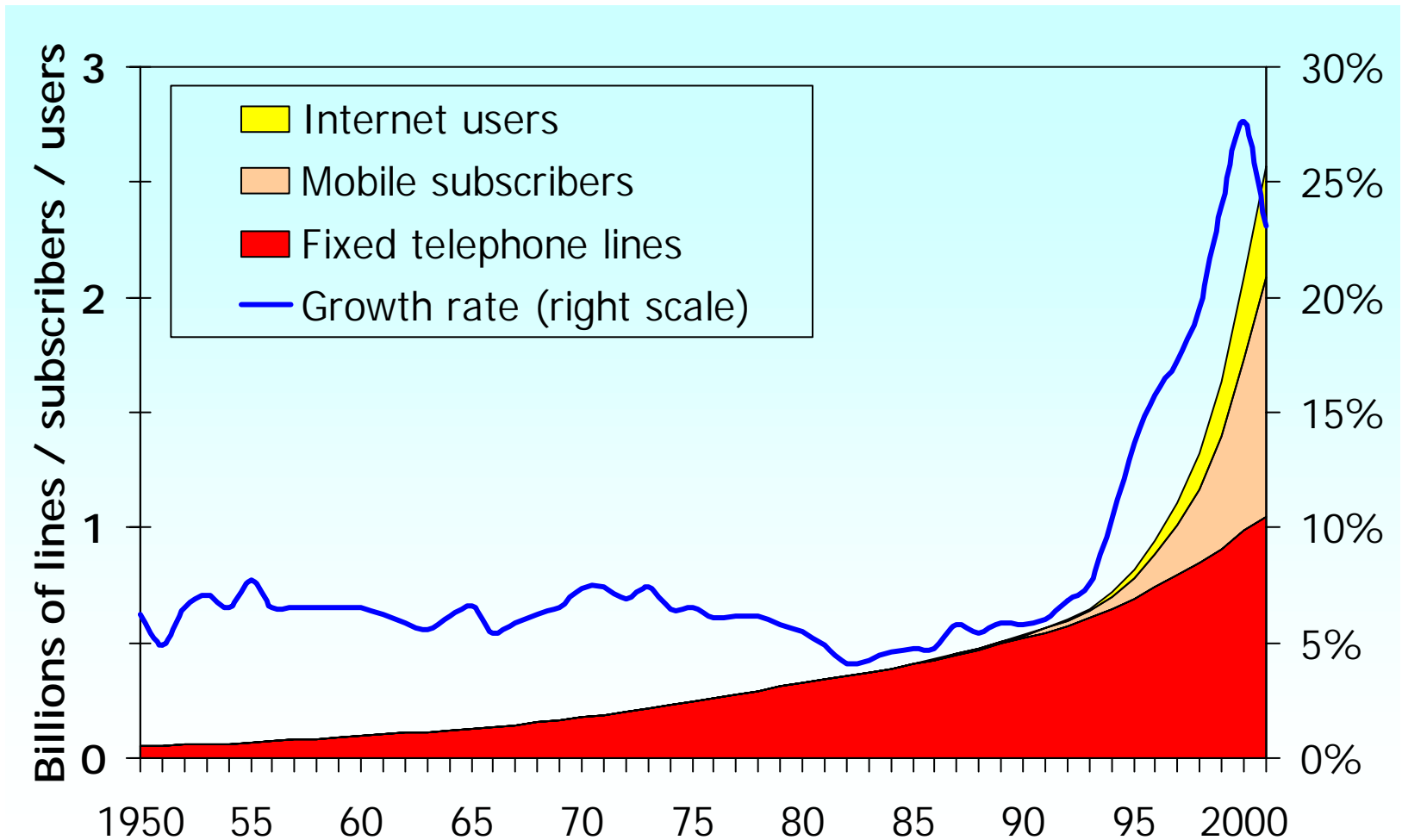
**International  
Telecommunication Union  
(ITU)**



The views expressed in this presentation are those of the authors and do not necessarily reflect the opinions of ITU or its Membership. The author can be contacted by e-mail at [tim.kelly@itu.int](mailto:tim.kelly@itu.int).

# Telecoms reinvented: Part 1

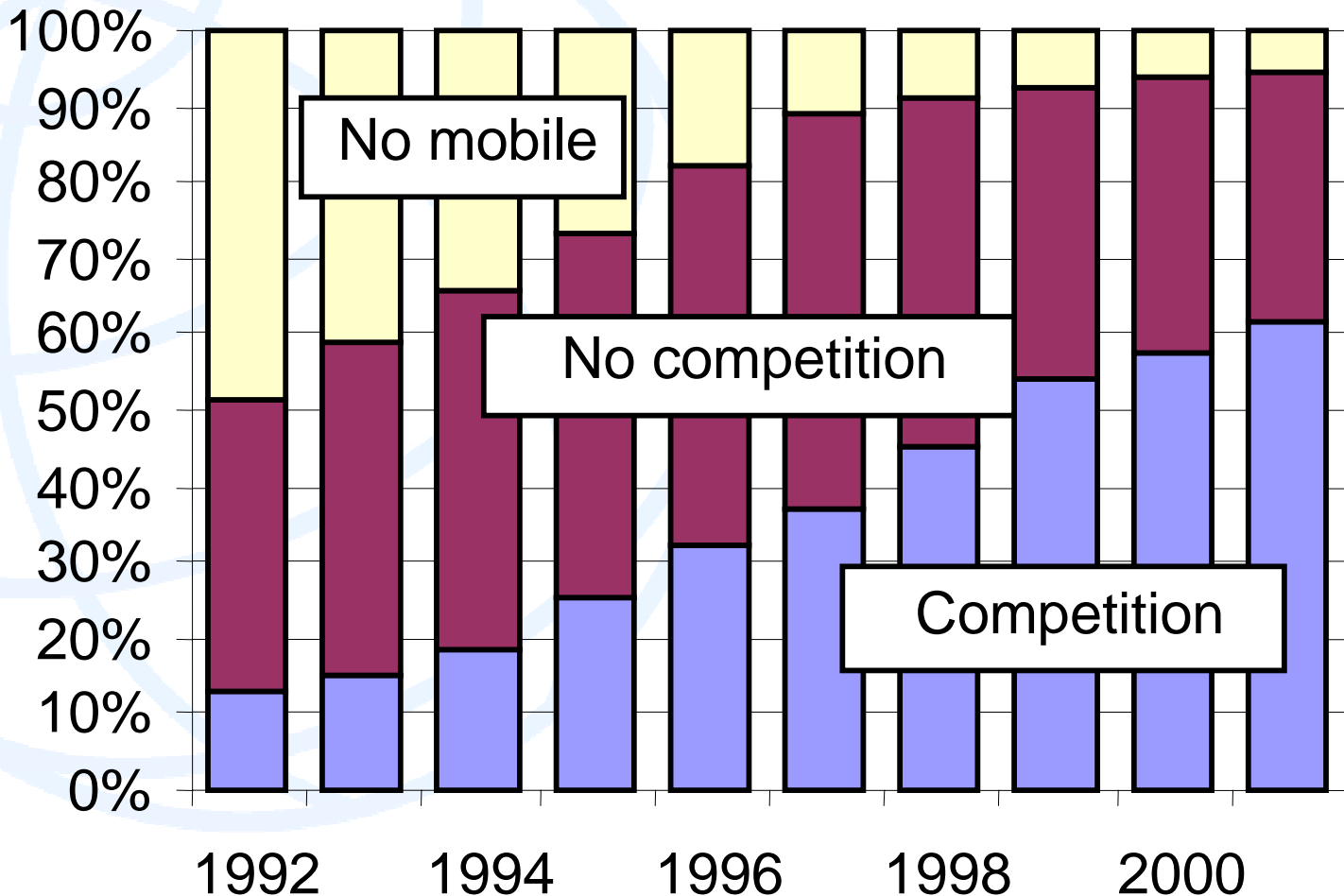
## Huge growth in investment in late 1990s



*“The goal of the 20<sup>th</sup> Century was to achieve “anywhere, anytime, anyone” communications. The goal for the new century should be to achieve “everywhere, always-on, everyone” communications.”*

# Increasing level of competition

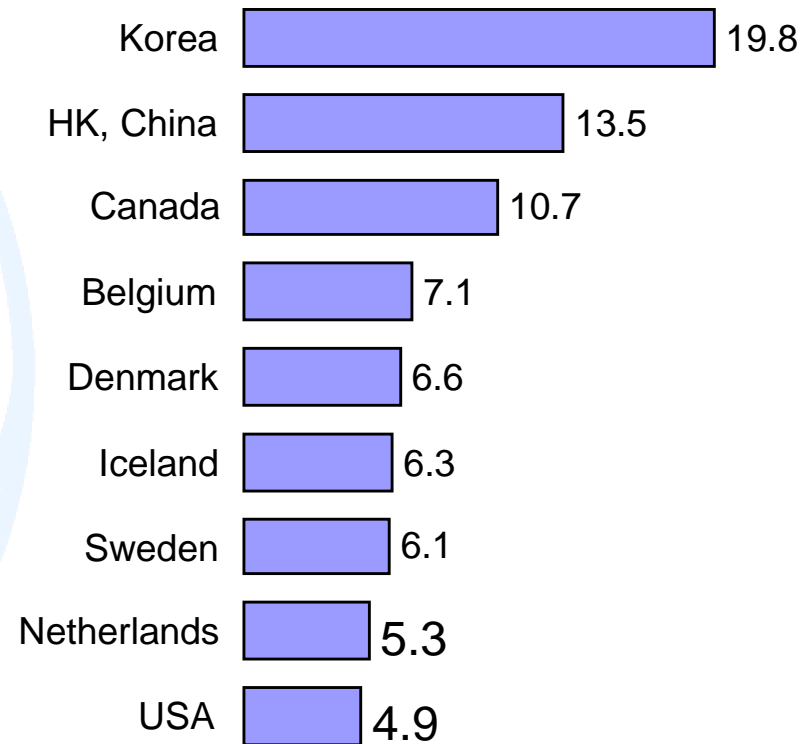
**Countries with competitive mobile markets (%)**





# High rate of technological changes: *Some examples*

- From analogue to digital networks
- From circuit-switched to packet-switched networks
- From voice to data
- From narrowband to broadband
- From 1G, to 2G to 3G mobile



**Broadband subscribers  
per 100 inhabitants,  
September 2002**

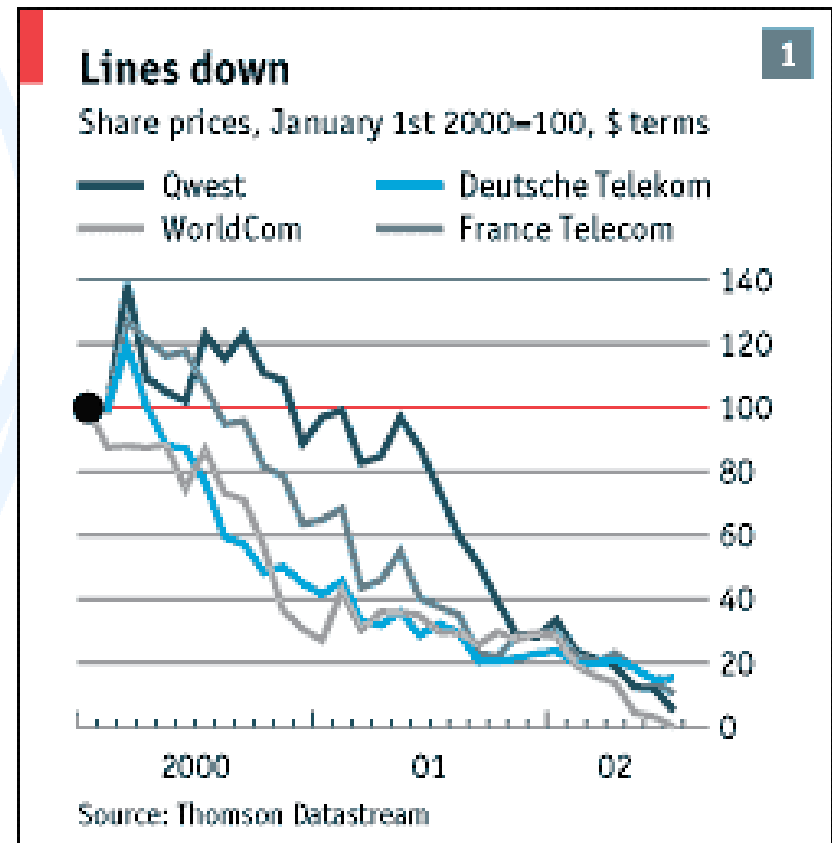
*Source: ITU.*



# Telecoms reinvented: (Part 2)

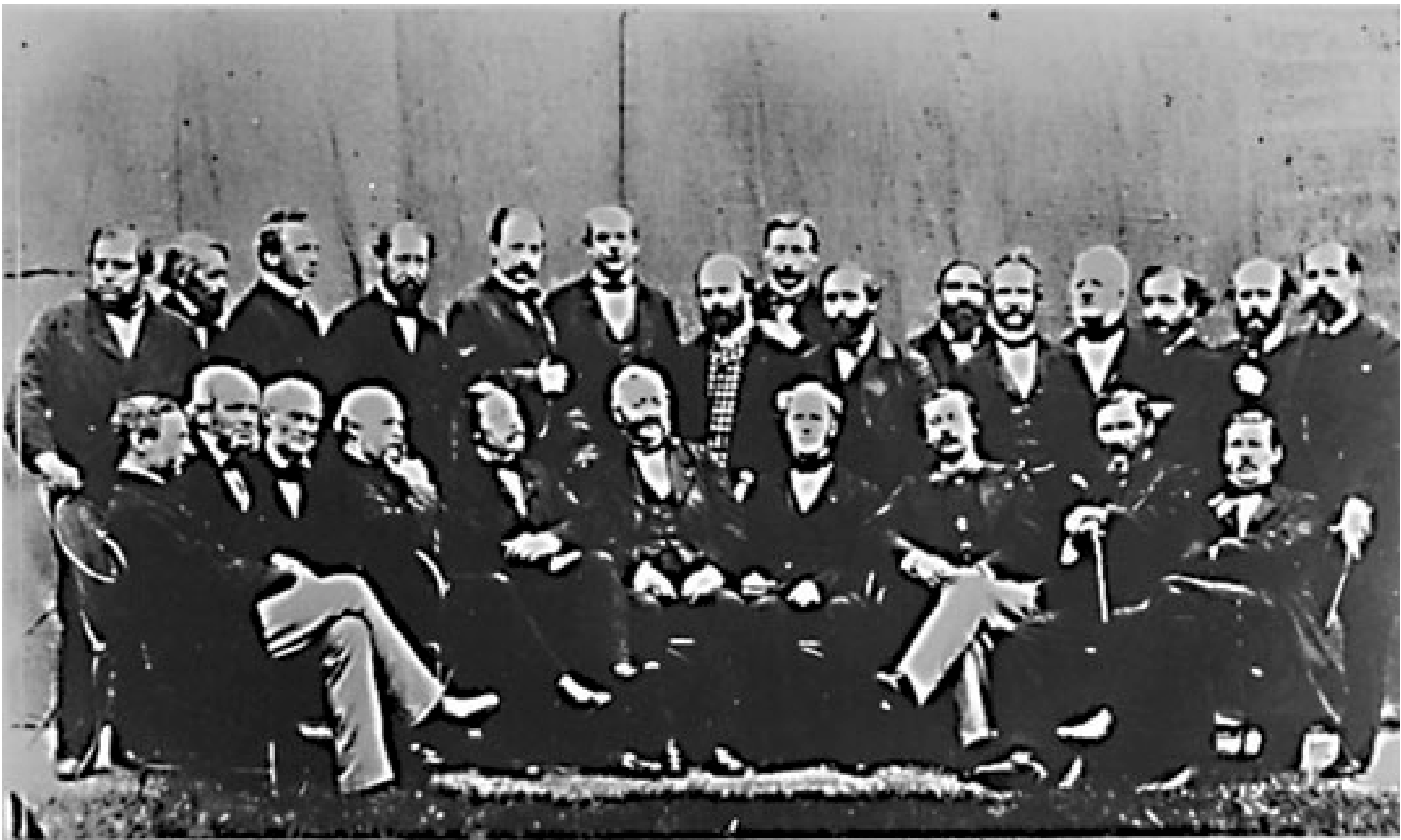
**Over-investment + hyper-competition + Technological change = over-capacity**

- Trillions of US Dollars lost in shareholder value
- Leading companies in heavy debt or bankruptcy
- Thousands of jobs lost
- What does it mean for telecoms development?
  - Falling investment
  - No demand for privatisation share issues
  - Overcapacity



Source: Economist, 18 July 2002

In 1865, the founders of ITU had already lived through the first cycle of boom and bust in telegraphy



Denmark, Bavière, Norvège, Wurtemberg, Belgique, Portugal, Secrétaire, Suisse, Bade, Turquie, Prusse, Italie, Grèce, Secrétaire, Espagne  
 Pays Bas, Bavière, Hanover, France, Belgique, France, Suède, Espagne, Russie, Autriche



## ITU in brief

- **UN specialized agency, concerned with the development of telecommunication networks and services worldwide**
- **138 years old**
- **189 Member States; 650+ Sector Members**
- **Around 790 staff / 83 nationalities**
- **2002 budget = *circa* CHF172m (USD 115m)**
- **Secretary-General: Yoshio Utsumi (Japan)**
- **Deputy Sec-General: Roberto Blois (Brazil)**
- **Website: <http://www.itu.int>**

# ITU structure

**Plenipotentiary  
Conference**

**Council**

**World Conferences on  
Int'l Telecoms**

**Radiocommunication**

**Telecom Standardization**

**Development**

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

**World  
Telecommunication  
Standardization  
Assembly (WTSA)**

**World/Regional  
Telecommunication  
Development  
Conference (WTDC)**

**Radio Regulations  
Board (RRB)**

**Advisory  
Group**

**Study  
Groups**

**Advisory  
Group**

**Study  
Groups**

**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 189 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 315'000
  - For Sector Members, 1 unit = CHF 63'000
  - For Associates, 1 unit = CHF 10'500
- **Main budget = CHF 172m in 2002, of which:**
  - CHF 113m (65.7%) from Member States
  - CHF 22m (12.8%) from Sector Members & Associates
  - CHF 14m (8.1%) from sale of publications
  - CHF 15m (8.7%) from cost recovery, interest, etc
  - CHF 4m (2.3%) from funds-in-trust (for dev't)



## According to the International Telecommunication Constitution (Minneapolis, 1998), 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**

# Little reminder...

**Plenipotentiary  
Conference**

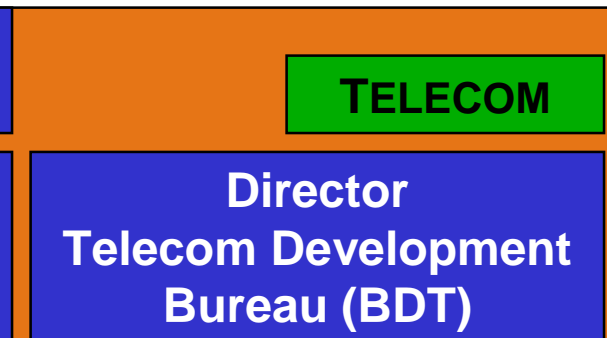
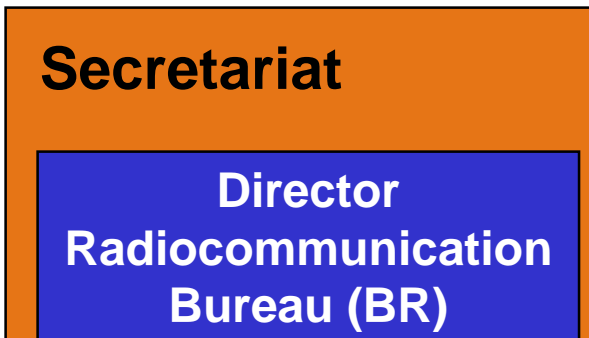
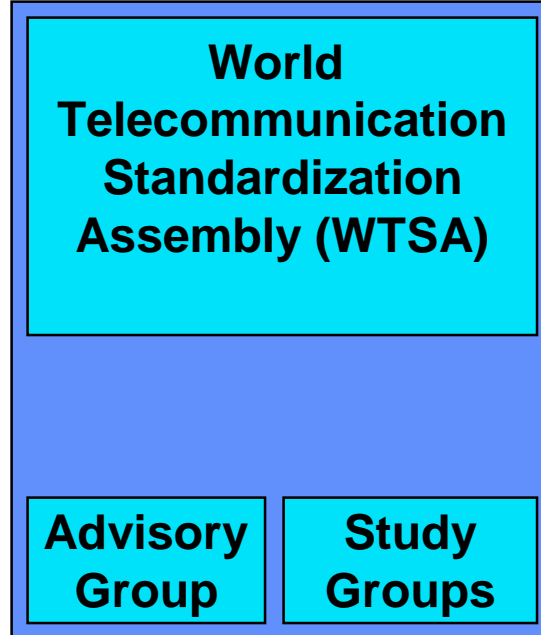
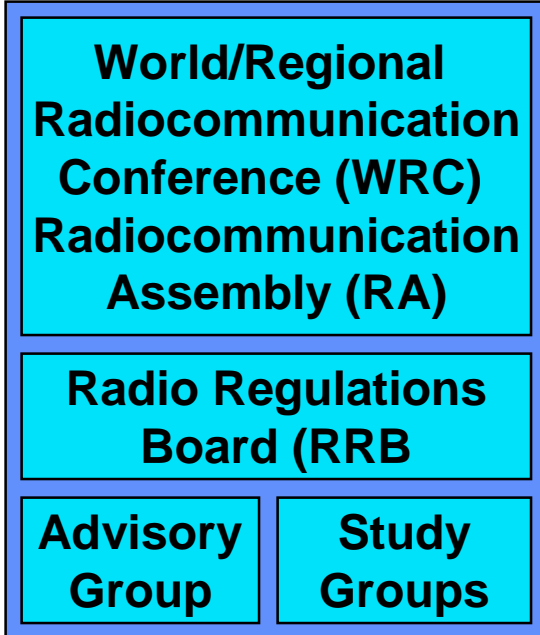
**Council**

**World Conferences on  
Int'l Telecoms**

**Radiocommunication**

**Telecom Standardization**

**Development**





# 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 1994 & 1998

## ● International Telecommunication Regulations

- Thin (10 Articles) treaty concerning mainly accounting practices. Last update 1988 – under review in 2002

## ● Radio Regulations

- Thick (>10'000 pages) treaty governing use of radio spectrum. Updated every WRC



# Development

- **World Telecom Development Conference (Istanbul, March 2002)**
- **Study Groups**
- **Telecommunication Indicators reports and databases**
- **Regulatory assistance**
- **Technical cooperation**
- **Regional offices (11)**
- **Director: Hammadoun Touré (Mali)**



# *Radio*communications

- **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)**



# **S** *standardization*

- **World Telecom Standardization Assembly**
  - **Montreal, Sept-Oct 2000**
- **ITU-T Recommendations**
- **Stewardship of international numbering plan**
  - **Country codes**
  - **Universal International Freephone**
  - **ENUM**
- **Collaboration with the Internet community (e.g.IETF, ICANN)**
- **Director: Houlin Zhao (China)**





# Gen. Secretariat

- **Plenipotentiary Conferences**
  - **Marrakesh, Sept-Oct 2002**
- **World Telecom Policy Forum**
  - **March 2001, IP Telephony**
- **ITU Council**
- **ITU News: [www.itu.int/itunews/](http://www.itu.int/itunews/)**
- **Support services (e.g. IS, languages)**
- **ITU TELECOM (WORLD 2003)**
- **Policy, research and workshops (SPU)**



# ITU New Initiatives Programme

- Launched in 1999, under the Strategy and Policy Unit
- Workshops
  - **Electronic Signatures and Certification Authorities**
  - **IP Telephony**
  - **Fixed-to-Mobile Interconnection**
  - **Regulatory implications of Broadband**
  - **Licensing of 3G Mobile**
  - **Internet diffusion in ASEAN**
  - **Multilingual Domain Names (ITU/WIPO)**
  - **IP connectivity in LDCs**
  - **Critical Network Infrastructures**
  - **Competition Policy in Telecoms**
  - **Promoting Broadband (April 2003)**
- **Country case studies**



“.. New topics of a regulatory, policy or other nature of high-current interest ...”  
*Council Decision 496*



**world summit  
on the information society**  
Geneva 2003 - Tunis 2005

- **A world summit in two phases**
  - **First Phase, December 10-12, 2003, Geneva**
  - **Second Phase, November 16-18, 2005, Tunis**
- **What are the key issues?**
  - **Addressing the digital divide**
  - **How can ICTs help to achieve the Goals of the Millennium Declaration?**
  - **Pervasive computing and communications**
- **Outputs = declaration and action plan**
- **Website: [www.itu.int/wsis/](http://www.itu.int/wsis/)**

# For more information: [www.itu.int](http://www.itu.int)



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Development  
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Members' area  
and TIES

Site Map

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**The ITU**, headquartered in Geneva, Switzerland is an international organization within the [United Nations System](#) where governments and the private sector coordinate global telecom networks and services.

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ITU TELECOM WORLD 2003  
Geneva, 12-18 October 2003

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- **ITU Library facilities:**
  - **Top floor, Montbrillant Building**
  - **Open 9am to 5pm**
  - **PC-equipped**
- **Research materials (papers, case studies, etc.) online:**
  - **[www.itu.int/osg/spu/](http://www.itu.int/osg/spu/)**
- **Studies on aspects of the information society:**
  - **[www.itu.int/visions/](http://www.itu.int/visions/)**