Perspectives on Development of the ICT Sector in the Region: What Policy and Regulatory Foundations?

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International Telecommunication Union

Agenda

- ITU in brief
- The Impact of New Technologies
- Reflections on the Changing Policy and Regulatory Environment
- How ITU is responding

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International Telecommunication Union

- International organization where governments and private sector coordinate global telecom networks and services
- Founded in 1865, it is the oldest specialized agency of the UN system
- 189 Member States, 650 Sector Members, 75 Sector Associates

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ITU mission

- Maintain and extend international cooperation in telecommunications
- Technical and policy assistance to developing countries
- To harmonize actions of Member States and promote cooperation between Member States and Sector Members

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ITU mission

- To promote at international level, the adoption of a broader approach to issues of telecommunications in the global information economy and society
- To extend the benefits of telecoms to all the world's inhabitants
- "Helping the world communicate"

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ITU structure: simple view

Radiocommunication Sector (ITU-R)	Telecommunication Standardization Sector (ITU-T)	Telecommunication Development Sector (ITU-D)
Management of the radio-frequency spectrum and satellite orbits used by services such as fixed, mobile, broadcasting, amateur, space research, meteorology, global positioning systems, environmental monitoring and safety of life at sea and in the skies.	Establish internationally agreed technical and operating standards “Recommendations” for networks and services	Assistance to developing countries to facilitate connectivity and access, foster policy, regulatory and network readiness, expand human capacity through training programmes, formulate financing strategies and e-enable enterprises in developing countries

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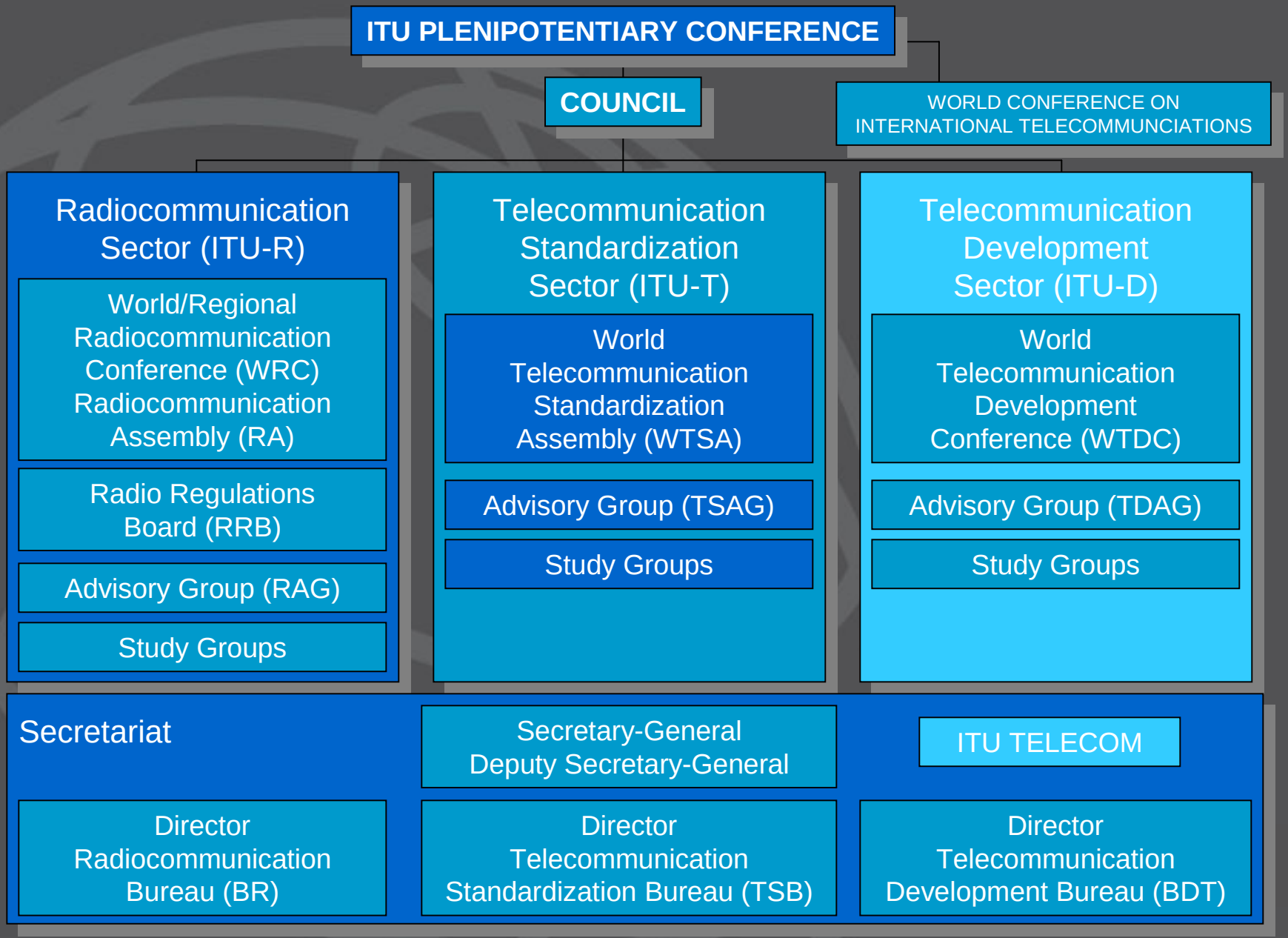
ITU structure: complex view



The Impact of New Technologies

- Technology-driven industries like the communications sector have historically been characterized by steady growth punctuated by “giant leaps” forward, usually when “new” technology is introduced
- Usually also corresponds to periods of rapid economic growth

Impact of New Technologies

- This historical pattern has been repeated numerous times:
  - 1840's: telegraph
  - 1870's: telephone
  - 1890's: radio telegraphy or "wireless"
  - 1920's: radio broadcasting
  - 1950's: television broadcasting
  - 1960's: geostationary satellite communications
  - 1970's: computer communications
  - 1980's: optical communications
  - 1990's: Internet and mobile communications

1865: ITU Created

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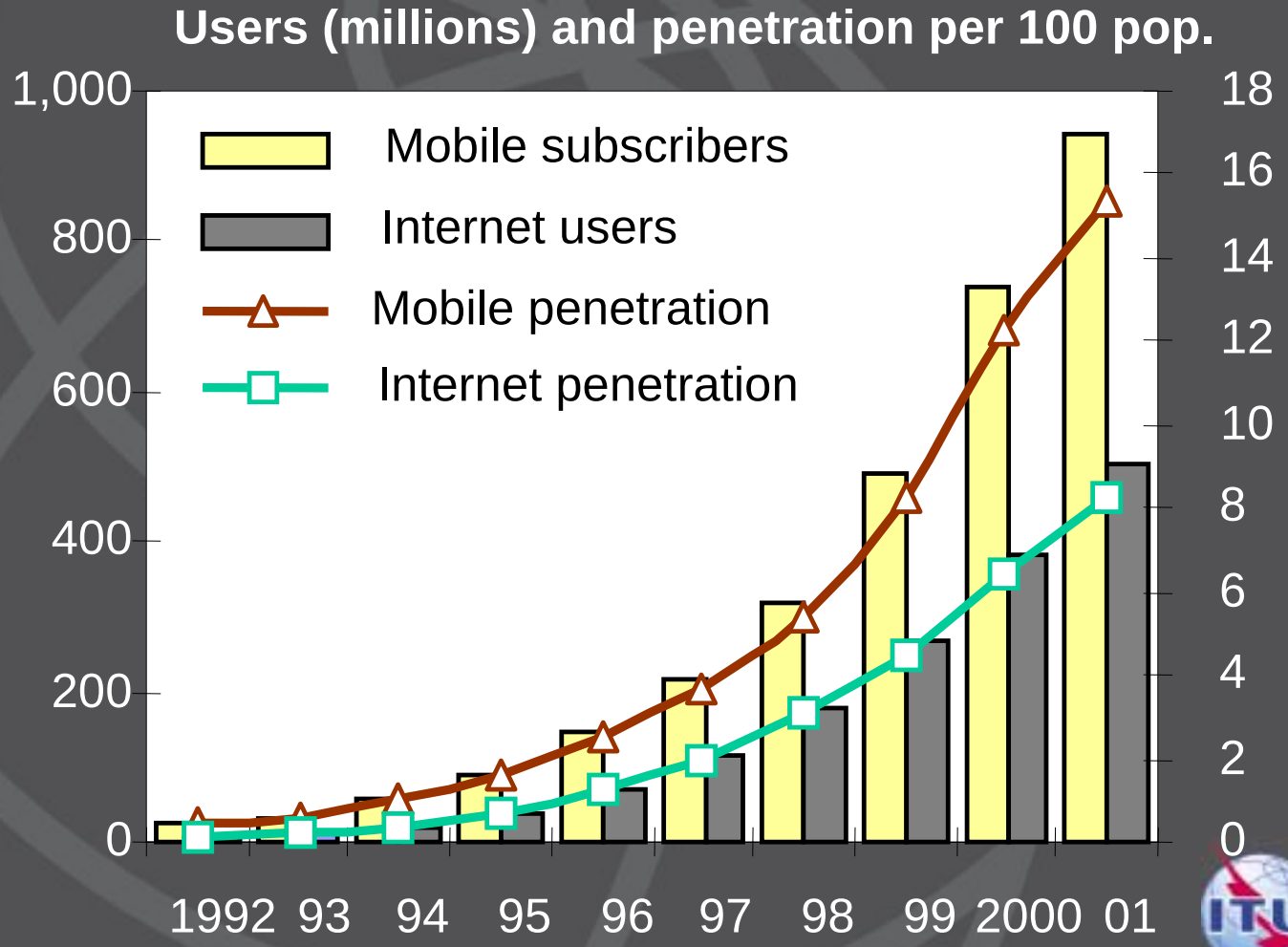
Impact of New Technologies

- In the last part of the twentieth century, the almost simultaneous arrival of two major innovations — mobile phones and the Internet — not only changed the face of communications, but also gave impetus to dramatic economic growth

Mobile and Internet: identical twins born two years apart?



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20 years of history of policy & regulatory reform

- ~20 years ago, AT&T formally agreed to the break-up of the Bell system
- 10 years ago, around 10 countries had some measure of fixed-line competition
- 5 years ago, in concluding the WTO basic telecoms agreement, some 70 countries committed to telecoms market liberalization
- Countries with privatized operators and some degree of competition are now in majority among ITU Member States

The Policy & Regulatory Conundrum

- Widely accepted that clear policies and sound regulatory foundations are needed to attract investment, foster development of new technologies, applications, services
- Yet failures, unanticipated difficulties, continuing delays, in LDCs, emerging and developed countries...
- Policy and regulatory reform has generally proceded at much slower pace than technology development or market and services potential

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Why?

- Different national priorities…
- Entrenched interests always resist change
- All policy makers and regulators - both new and old - struggling to address changes resulting from convergence of information and communication (ICT) sectors

Reshaping the Debate

- "We, the representatives of the peoples of the world, assembled in Geneva from 10-12 December 2003 for the first phase of the World Summit on the Information Society, declare our common desire and commitment to build a people-centred, inclusive Information Society where everyone can create, access, utilize and share information and knowledge, enabling individuals, communities and people[s] to achieve their full potential and improve their quality of life in a sustainable manner."
  - Draft opening paragraph of the World Summit on the Information Society Statement of Principles, Sept 2003

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Reshaping the Debate

- National telecommunication infrastructures are now much more important than platform for voice
- Underlying prerequisite for deployment of advanced national info-communications networks
- Build-out of networked economies and national information societies has considerably raised the public policy stakes

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Thinking about telecoms as an infrastructure industry

- What is an infrastructure industry?
- Without broad access by all segments of society, all other economic activity is difficult, costly or impossible
  - Other examples: power, transportation, water, sewage
- Why has government always paid attention to infrastructure industries?
  - Potential for market failure & public interest
- With recent telecoms crisis (and very public failures in infrastructure industries), reflection on the role of regulation of infrastructure industries is warranted…

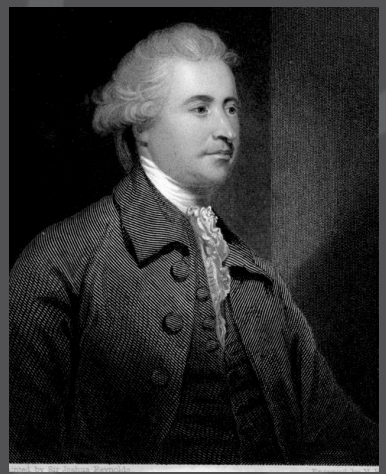
How should we see Regulation?

- A premise: innovation, technologies, markets, services, policies and regulation are deeply interlinked…
- Suggests the role of policy making and regulation is about finding the “steady state” between multiple forces

How should we see Regulation?

- “Liberalization”, “privatization”, “deregulation” are tools: not the definition of an end-goal policy agenda
- The appropropriate “steady state” depends very much on national conditions and priorities
  - Innovation & creative destruction vs stability & monopolies & oligopolies

Perhaps it’s about balance



- “All government, indeed every human benefit and enjoyment, every virtue, and every prudent act, is founded on compromise and barter we give and take; we remit some rights, that we may enjoy others."

  – Edmund Burke, English Statesman, 1775

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Perhaps it’s about balance

- The history of regulation has always been about compromise and bartering of privileges and responsibilities to achieve public policy objectives
- Regulators, the instruments of regulation, are a necessary balancing influence — to remit some rights so that we may enjoy the benefits of others

How do we find the Balance?

- How do we build next-generation policy and regulatory frameworks that foster growth in network economies and information societies?
- How do we foster the debate and share national experiences?

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How ITU is Responding

- International community looks to ITU as an independent, neutral body for technical, regulatory and policy assistance
- Facilitate international dialogue that generates and disseminates new knowledge on emerging issues in policies, regulation and governance
- Monitoring and evaluating indicators is essential to this process to measure bridging the digital divide

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Telecommunication Development Sector

- See http://www.itu.int/itu-d/
- Director: Hammadoun Touré (Mali)
- Many IP and Internet related initiatives
- Internet Training Centres Initiative for Developing Countries
- E-Strategy Unit (e.g., IP and VOIP seminars)
- “Industry standard” telecommunication indicators reports and databases
- Regulatory assistance & technical cooperation
- Many regional offices

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Telecommunication Development Sector cont'd

- Study Groups Period 2002-2006
- Examples of related activities:
  - 19/1: Implementation of IP telephony in developing countries
  - 12-1/2: Examination of broadband communications over traditional copper wires, taking into account certain aspects of technologies, systems and applications
  - 19/2: Strategy for migration from circuit-switched networks to packet-switched networks
  - 20/2: Examination of access technologies for broadband communications

Examples of ITU-D activities related to ICT networks

- Technical assistance, advice, case studies, national IP-based networks design consulting, symposia:
  - IP Symposium for CEE and CIS States, Moscow (Sept 2003)
  - South-South Cooperation and Cost-effective Access to the Internet in Africa (Cameroon, 15-17 July 2003)
  - IP Symposium for Africa (Rwanda, 7-9 July 2003)
  - ITU Symposium: African ICT Roadmap to Achieve NEPAD Objectives (Arusha, 1-3 April 2003)
  - IP Networking and IPv6 for Engineers working in PTOs in the framework of the Centre of Excellence (Mauritania, 19-23 May 2002);
  - IP Technologies and Applications for Arab region (Tunisia, 17-19 June 2002)

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ITU-D Sector Reform Unit (SRU)

- See www.itu.int/ITU-D/treg/
- Organizes annual “Symposium for Regulators” allowing world’s policy makers and regulators to share national experiences
- Prepares annual reports on latest “Trends in Telecommunication Reform”

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Effective regulation and Internet case studies

- Country Case Studies on Effective Regulation
  - ITU Member States request information and models with regard to independence and operation of regulatory agencies
  - With assistance of Member States, ITU prepares and publishes case studies on how administrations established regulatory bodies and the results
  - Morocco, Peru, Botswana, Brazil, Singapore
  - See www.itu.int/ITU-D/treg/Case_Studies/
- Internet case studies show how countries have fostered deployment of IP-based networks
  - See numerous country case studies at www.itu.int/spu/

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ITU Strategy and Policy Unit

- Strategic research, workshops & reports on emerging policy and regulatory issues:
  - Promoting Broadband
  - Competition Policy in Telecommunications
  - Improving IP Connectivity in the Least Developed Countries
  - Trust in Critical Network Infrastructures
  - Multilingual Domain Names
  - 3G Licensing
  - Broadband
  - Fixed Mobile Interconnect
  - IP Telephony (VOIP)
  - Electronic Signatures and Certification Authorities
- For more information: http://ww.itu.int/spu/

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Thank you

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