ITU Regulatory Tools: Enabling the Information Society

Joint Facilitation Meeting on WSIS Action Lines C2, C4 and C6, ITU Headquarters, Geneva, Switzerland
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Snapshot of regulatory trends

Regulatory agencies, world (cumulative)

Source: ITU World Telecommunications Regulatory Database
Snapshot of regulatory and market trends

Competition in selected services, world, 2007

- Monopoly
- Competition

Growth in fixed lines, mobile & Internet, in billions, 1996-2007

Source: ITU World Telecommunications Regulatory Database
GSR08
11-13 March, Pattaya, Thailand

Attendance: 536 Participants from 97 countries
Organization: ITU in collaboration with the Ministry of Information and Communication Technology and the National Telecommunications Commission (NTC)
Chair: National Telecommunication Commission - Thailand
Theme: *Six degrees of sharing:*
Innovative infrastructure sharing and open access strategies to promote affordable access for all
Programme: - 1st day open to the private sector
- 2nd day reserved for regulators and policy makers
Output: Best practice guidelines on innovative sharing strategies to promote affordable access for all
GSR Past Editions

2007 Next-Generation Network (NGNs) Regulation
Dubai, United Arab Emirates

2005 Regulation in the Broadband World
Hammamet, Tunisia

2004 Licensing in an Era of Convergence
Geneva, Switzerland

2003 Promoting Universal Access to ICT's
Geneva, Switzerland

2002 Regulating for End-users
Hong Kong, China

2001 Effective Regulation
2000 Launching the dialogue among Regulators
Geneva, Switzerland
GSR08 Best Practice Guidelines on Innovative infrastructure sharing and open access strategies to promote affordable access for all

- **Appropriate Regulatory framework**
  ...We recognize the need for an appropriate regulatory framework fostering broadband access including Internet, to enable the development of infrastructure-based competition, in addition to service-based competition, and the emergence of new innovative players at the national level.

- **Competition and investment incentives**
  ...We recognize the importance of ensuring that regulatory policy does not restrict competing market players installing their own independent facilities, and that it promotes open access to international capacity and international gateways (for example, collocation and connection services at submarine cable landing stations).

- **Sharing of regulatory practices**
  ...Regulators recognize the need for an appropriate level of international and regional harmonization to ensure that best practice regulatory policies on sharing are widely spread, and regional organizations have an important role to play in this regard.

...
The 10 GSR 08 Discussion Papers

- Overview: What do we mean by 6 Degrees of Sharing?
- Mobile Sharing
- Extending Open Access to National Fibre Backbones in Developing Countries
- Breaking Up is Hard to Do: The Emergence of Functional Separation as a Regulatory Remedy
- International Gateway Liberalization: the Singapore experience
- Spectrum Sharing
- WRC-07 Results and Impact on Terrestrial Broadband Wireless Access Systems
- End User Device Sharing
- IPTV and Mobile TV: New Challenges for Regulators
- International Mobile Roaming Regulation – An Incentive for Cooperation
Trends in Telecommunication Reform 2008: Six Degrees of Sharing (Coming soon!)

Trends in Telecommunication Reform 2007: The Road to Next-Generation Networks (NGN)

Trends in Telecommunication Reform 2006: Regulating in a Broadband World

Trends in Telecommunication Reform 2004/2005: Licensing in an era of convergence

May 2008
Welcome to ITU’s ICT Eye

ITU, the UN specialized agency for telecommunications, has its “eye” on ICTs and is recognized around the globe as the leading provider of timely and comprehensive telecommunication/ICT statistics and trends.

The ICT “eye” website is a one stop-shop for ICT information and provides telecommunication/ICT indicators and statistics, regulatory and policy profiles, national tariff policies and scientific institutions, and much much more...

Please select a country/economy from the map or select from the following list:

Macromedia Flash MX plug-in is needed to view / use the map above. Download here.

Map used with permission from the United Nations Cyberschoolbus, Outreach Division, DPI.

The boundaries and names shown on this map do not imply official endorsement or acceptance by the International Telecommunication Union and the United Nations. All content linked to this map was created by the International Telecommunication Union.

www.itu.int/icteye
International Telecommunication Union

Switzerland

ICT Statistics 2007

- Population: 7,483,972
- GDP (US$): 387,201,549
- Fixed telephone lines per 100 Inhab.: 66.81
- Mobile cellular subscribers per 100 Inhab.: 168.18
- Computers per 100 Inhab.: 88.0
- Internet users per 100 Inhab.: 61.6
- Broadband Internet subscribers per 100 Inhab.: 32.07
- International Internet bandwidth (Mbps): 71.464
- Radio sets per 100 Inhab.: 99.92
- TV sets per 100 Inhab.: 57.78
- Population covered by mobile signal: 100.0

Level of Competition 2007

- Service: Competition
- Local services: Full competition
- Domestic fixed long dist: Full competition
- International fixed long dist: Full competition
- Wireless local loop: Full competition
- Data: Full competition
- DSL: Full competition
- Cable modem: Full competition
- VSAT: Full competition
- Leased lines: Full competition
- Fixed Wireless Broad-band: Full competition
- Mobile: Full competition
- Paging: n/a
- Cable TV: Full competition
- Fixed sat: Full competition
- Mobile sat: Full competition
- GMPCS: Full competition

Tariff Policies 2006

- Price of domestic telecommunication services
  - On the basis of the individual production costs of each service
  - Set by the State
- Tariff model - type of costs
  - Current costs
  - Historical costs
- Universal service policy
  - Mandatory contribution to a universal service fund
  - Obligatory investment in unprofitable areas
  - State-imposed limit on the monthly subscription fee
- State-imposed limits on installation charges
- State-imposed limits on the price of domestic calls
- Time period for absorbing access deficit
  - None
- Tariff rebalancing strategy - elements
  - None

Regulatory Information 2007

- Regulatory Authority: Office Fédéral de la Communication (OFCOM)
  - Name: OFCOM
  - Address: 44, rue de l'Avenir
  - City: 2501 Bienne
  - Phone: +4132 327 55 11
  - Fax: +4132 327 55 55
  - Email: emilf@bakom.admin.ch
  - Website: http://www.ofcom.ch

- Policy Maker: Département fédéral de l'Environnement, des Transports, de l'Energie et de la Communication (DETEC)
  - Name: DETEC
  - Address: Secrétariat General du DETEC Palais Fédéral Nord
  - City: 3001 Berne
  - Phone: +41 31 322 41 11
  - Fax: +41 31 322 95 76
  - Email: http://www.wwek.admin.ch/index.html?lang=fr

- Status of the main fixed-line operators

- Operator: Swisscom SA
  - Status: Partially private

More Regulatory info

Next page...
Module 1: Regulating the Telecommunications Sector: Overview

Module 2: Competition and Price Regulation
Fair competition, Interconnection and access, Prices, Benchmark price regulation, Data requirements, Effective price regulation.

Module 3: Authorization of Telecommunications Services

Module 4: Universal Access
Principles and basic concepts, Market shortfalls and development gaps, Roles of the government and the private sector, Scope of support beyond the market, Principles of cost-effective support, Funding sources and mechanisms.

Module 5: Radio Spectrum Management
Current trends, Technical aspects, Scope of spectrum use and issues, International administrative framework, National institutional arrangements, Authorizing spectrum use and Assigning frequency bands to users and technologies, Stakeholders, Spectrum Pricing, Monitoring and enforcement, and Capacity building for regulators.

Module 6: Legal and Institutional Framework
Laws and regulations, International treaties and agreements, WTO, National legislation and regulation; Institutional arrangements for telecommunications regulation; Regulatory processes; Relationships with judiciary and competition authorities; Governance, Realistic design options, Human resources and capacity building.

Module 7: New Technologies and Impact on Regulation
New technologies and applications, Convergence, Internet's impact on networks, business models, market structures, and regulation; Broadband, the way forward.
Module 6. Legal and Institutional Framework

The telecommunications sector has undergone extensive changes in recent decades, from a monopoly structure to one of competition, motivated by the evolution of new technologies and services, the growing importance of telecommunications for national economies and the development of international trade in telecommunications services. This module provides an analysis of how countries have undertaken regulatory reform to adapt to these changes, and explores the legal and institutional framework necessary for effective regulation. The module is organized in seven chapters:

1. Introduction
   The introduction provides a roadmap of the study and an overview of the objectives of the module.

2. Why Regulate?
   This chapter briefly discusses the need for regulation to ensure the market transition from monopoly to competition and to safeguard the public interest.

3. Legal Context of Regulatory Reform
   This chapter provides an overview of different factors that may impact regulation, such as: (i) the different legal and cultural traditions of each country; (ii) the national and international commitments undertaken by the government; (iii) the impact of other legislation that impact the sector; and (iv) level of maturity of the market.

4. Impact of Convergence
   This chapter examines the impact of convergence on regulation of the sector, analyzing how regulators have responded to convergence with more flexible and streamlined regulatory frameworks and how ICT-related laws have impacted the sector.

5. Elements for an Effective Regulator
   The objective of this chapter is to identify what it means to be an effective regulator, and the different dimensions of effectiveness, including structural and financial independence and functionality.

6. Organizational and Institutional Approaches to Regulation
   This chapter provides a detailed analysis of the organizational and institutional approaches to regulation, and discusses institutional design options, the separation of power and relationship of the regulator with other entities, the legal status of regulators, their funding process, staffing procedures and ethical conduct.

7. Functional Aspects of Regulation
   This chapter provides an analysis and overview of the regulator’s competences, mandate and regulatory procedures, including decision-making procedures, accountability of regulatory activities, and dispute resolution and enforcement procedures.

See also:
Legal and Institutional Aspects of Regulation: Executive Summary
2 Why Regulate?

To understand the role of regulation in enabling the growth and development of the information and communications technology (ICT) sector and the requirement of a strong legal and regulatory framework for effective regulation, first it is necessary to discuss the need for regulation. This Chapter provides an overview of the reasons for regulation given the structural changes in the telecommunications sector from monopoly to competition, and the importance of regulation in transitioning to an effective competitive environment and fostering the long-term development of the ICT market.

CONTENTS

2.1 Evolution of Regulatory Reforms
2.2 Regulation in Transition to Competitive Market
2.3 Regulation in a Fully Competitive Environment
2.4 Benefits of Regulation

REFERENCE DOCUMENTS

ITU Effective Regulation Case Study: Morocco
ITU Telecommunications Competition through a Wireless License
Feedback to Regulators from the Private Sector
European Competitive Telecommunications Association Regulatory Scorecard 2005
The global information and communication technology (ICT) sector is in the process of continual change brought about by technological innovation and convergence. Sector liberalization and increased private sector participation. While these trends have contributed to the strong economic growth of the sector, they have also made the task of ICT decisions making bodies more complex. As a result, there is a need to continuously improve the decision making processes of regulatory and oversight bodies in the ICT sector.

The purpose of this database is to facilitate the global exchange of information, experience and precedents among stakeholders in order to promote the application of effective decision making techniques. [more]

Browse Decisions by Theme
- Authorisation/Licensing
- Competition Policy
- Consumer Protection
- Interconnection and Price Regulation
  - Mobile Termination
  - Co-location
- Scarce Resources Management
- Universal Access/Genics
- New Technologies

Browse Decisions by Region or Member Countries
- Africa
- Arab States
- Asia & Pacific
- Europe & CIS countries
- The Americas
Economics and Finance of Telecommunications

News

**New! COSITU Guide on Data Collection for the Application of the COSITU Model**

This data collection guide is a follow-up to the COSITU user manual. It provides a methodology to help telecommunication regulators and operators to efficiently calculate costs, taxes related to trade in international traffic, interconnection rates between local operators, and tariffs for national and international telephone services, both fixed and mobile, on the basis of a rigorous cost model.

**Trends in Economics and Finance: The Use of Economic Modelling in Telecommunications**

In the telecommunication industry, economic modelling techniques such as regression analysis, simulations and linear programming are powerful tools that can aid decision making for governments, regulatory authorities and telecommunication operators. Nevertheless, in many countries such techniques are often underemployed. The aim of this report is to describe the various economic modelling techniques and how they can be used to solve practical problems facing the telecommunication industry.

**Reports on Market Liberalization for CEE countries and Baltic States**

This report on the theoretical and practical aspects of the significant market power in telecommunications was prepared by Prof. Dr Paul J.J. Welfens (welfenspj@bdiol.com), President of the European Institute for International Economic Relations at the University of Wuppertal in Germany. It is part of a series of ITU telecommunication studies analyzing economic aspects of telecommunications carried out by ITU/BDT’s Regulatory and Market Environment Unit (RME).

**Survey on tariff policies, tariff models and calculation methods on national telecommunication service rates**

**Call for Case Studies: Tariff policies, tariff models and methods of harmonization:**

**ICT-Eye**

The ICT Eye

A one-stop-shop for ICT information

What is the eye?

**ITU work on financing**

**COSITU SD: the ITU model for the calculation of Costs, Tariffs and Rates for Telephone Services**

Negotiating tariffs or rates is a delicate matter, whether it is for a new operator entering a liberalized market or a regulator wishing to set affordable tariffs for national calls without compromising competitiveness among operators.

**New! Regional diagnosis of telecommunication policies, strategies and regulations, and the development of Information and Communication Technology (ICT) use in the areas of education, health and disaster risk in rural areas, isolated regions and marginalized urban areas.**

Available only in Spanish

**New! Study: On the application of cost models in Latin American and Caribbean countries**

**Study: Financing paradise for the Information Society**

**Study: IP-based networks: Pricing of telecommunication services**

**Project: Regional assessment of the telecommunication market in Latin America and the Caribbean: Agendas for Connectivity in the Americas**

**ITU work on economics**

**Expert Dialogues**

**Adjusting Forecasting Methods to the Needs of the Telecommunication Sector in collaboration with the International Institute of Forecasters**

**Managing Risk in the Competitive Environment of the Telecommunication Sector**

**Investing in telecommunications and ICTs in Developing Markets: Shifting the Paradigm**
Thank you!

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