

ICT REGULATION TOOLKIT

Providing
practical advice and
concrete best practice
guidelines to enable access
to ICTs for all



The ICT industry is rapidly evolving, giving rise to complex regulatory challenges globally. In response to this, ITU and *infoDev* entered into a cooperative arrangement, with one of the goals being the creation of the ICT Regulation Toolkit. The web-based toolkit currently consists of five modules:

- Competition and price regulation
- Authorization of telecommunication services
- Legal and institutional aspects of regulation
- Radio spectrum management
- New technologies and their impact on regulation

The toolkit resources can be accessed at www.ictregulationtoolkit.org

Each module presents content on an incremental basis, beginning with a high-level summary of the topic and going deeper to provide reference documents and more detailed analysis.



MODULE INFORMATION

Competition and price regulation

Pricing, competition and interconnection decisions are key to the promotion of widely available, affordable and high quality ICT services. Regulators strive to undertake a thorough analysis of the likely

consequences of their decisions on investment, service quality, market and retail prices. This module addresses the following topics:

- Regulation and competition policy
- Measuring interconnection costs and establishing interconnection rates
- Impact of VoIP on traditional telephony interconnection arrangements
- Opportunities and challenges for developing country regulators
- Exchanging internet traffic and internet exchange points (IXPs)
- Price regulation and competition

“Como regulador, el “Toolkit” es una referencia de increíble utilidad para conocer las buenas prácticas regulatorias y su evolución. De esta manera, considerando las circunstancias específicas de México, podemos diseñar la regulación que mayor impulso dé a las telecomunicaciones.”

**Clara Álvarez, Comisionada,
Comisión Federal de Telecomunicaciones, México**



Authorization of telecommunication services

This module contains resources on a broad spectrum of licensing and authorization trends, covering issues faced by regulators and regulated service providers. It highlights recent trends towards lighter authorization and licensing practices that reduce barriers to market entry. It includes case studies and various samples of documents used in the licensing process. More information on the following topics is available:

- Authorization practice and procedures
- Individual licences
- Competitive licensing processes
- Fees
- Special authorization situations
- Re-farming of spectrum

“Like most regulators, the struggle to continue the provision of effective and relevant regulation in a communications orbit marked by constant change is a daunting reality. I am committed to full use of this toolkit in the regulatory authority of which I am in charge. Having served as a trainer in certain aspects of ICT regulation, I strongly recommend flexible use of the toolkit both as a working instrument and a training aid.”

**John Prince, Executive Director,
Telecommunications Authority of Trinidad and Tobago**



Radio spectrum management

This toolkit aims at giving regulators a comprehensive appraisal of spectrum management principles and practices by exploring the related market, regulatory and technical aspects that are currently challenging traditional spectrum management approaches. The discussion is available under the following topics:

- Policy and planning
- Authorization
- Pricing
- Monitoring and compliance
- International affairs
- Developing spectrum management capacity

“Knowledge sharing and capacity-building support through the toolkit will be of vital importance for the developing countries in the background of a multi-operator multi-service multi-technology competitive scenario.

The toolkit seeks to prepare regulators as they face convergence and next-generation networks in the coming years along with other increased complexities such as competition, interconnection and price regulation.”

**Rakesh Kumar Bhatnagar, Advisor,
Telecommunications Regulatory Authority of India**



Legal and institutional aspects of regulation

This module discusses the rationale for regulating in the ICT sector. It also assesses the relevance of different factors that have an impact on regulation such as legal tradition, convergence and interaction with other national laws. This discussion is captured in the following topics:

- Why regulate?
- Legal context of regulatory reform
- Elements of an effective regulator
- Impact of convergence on regulation
- Organization and institutional approaches
- Approaches to regulation
- Functional aspects of regulation

“For those, in the developing world especially, the increasing pace of technological change creates the need for a tool that can help regulators anticipate new trends and have access to impartial and up-to-date information on best practices. This is the unique niche that the ICT Regulation Toolkit has filled, and proudly so. I have been involved in the review process of the toolkit and I am confident that it provides a wealth of resources that allow regulators to think globally and act locally. For this reason, I have no hesitation in recommending it to my fellow colleagues.”



**Patrick Masambu, Executive Director,
Uganda Communications Commission**

New technologies and their impact on regulation

The premise of this module is that regulatory activities and organizations must reflect both changing technologies and market developments taking place in the ICT environment. In trying to provide a vision for the future of ICT regulation, the module discusses the conventional regulatory practices and assumptions that are being challenged by the rapid technological developments in the sector. Through the discussion

of the topics below, it seeks to encourage strategic approaches in the development and implementation of regulatory practices.

- Technological trends
- Implications of technology on the economics of the overall market structure
- The new regulatory paradigm
- Focus on innovation – technology leapfrogging

“Les régulateurs ainsi que les opérateurs apprécieront cet outil qui leur permettra de répondre de manière approfondie aux défis posés par l’interconnexion. A cet effet, ils pourront examiner les différents aspects de l’interconnexion en se focalisant sur ses défis et ses enjeux. De plus, c’est un outil de référence pour tout lecteur s’intéressant aux aspects techniques, juridiques et tarifaires de l’interconnexion. Lesdits aspects sont présentés à travers des exemples illustrés tirés de différents marchés reflétant divers niveaux de concurrence de par le monde.”



Zouakia Rochdi, Analyste en régulation des télécommunications, Agence nationale de réglementation des télécommunications (ANRT), Maroc

“This is the single most helpful regulatory tool that I have seen. It has such a tremendous potential to assist all the staff at the INCM, as well as to help me too. I am very happy to have been here today to see the how easy it is to use this legal module and how much information is so easily accessible.”



Salomão Manhiça, Chairman, INCM, Instituto Nacional de Telecomunicações de Moçambique, Mozambique, at the launch of the toolkit at WSIS, Tunisia (2005)

«L'évolution continue des technologies de l'information et de la communication constitue une opportunité de développement accessible à tous les pays, à condition d'assurer un environnement propice à l'attraction des investissements et un espace transparent équitable, objectif et efficace de concurrence saine et loyale entre les différents intervenants. Pour cela, les régulateurs ont un rôle central à jouer dans l'assurance qu'ils sont appelés à instaurer. Dans ce sens et en tant que régulateur, je pense que le nouveau kit d'aide en ligne constitue un moyen efficace et pertinent pour renforcer les capacités des régulateurs en les tenant au courant des derniers développements en matière de réglementation des télécommunications.»



Ali Ghodbani, Président, Instance nationale des télécommunications de la Tunisie (INTT), et Président, GSR 2005

“The ICT Regulation Toolkit is a critical resource for regulators, both in developed and developing countries. With its origins in the well known 2000 Telecommunications Regulation Handbook, its credibility and usefulness is already established. The revised toolkit builds on this reputation and is essential reading for all regulators needing to gain access to the leading thinking on effective regulation, especially in a converging environment.”



Tracy Cohen, Councillor, Independent Communications Authority of South Africa (ICASA)

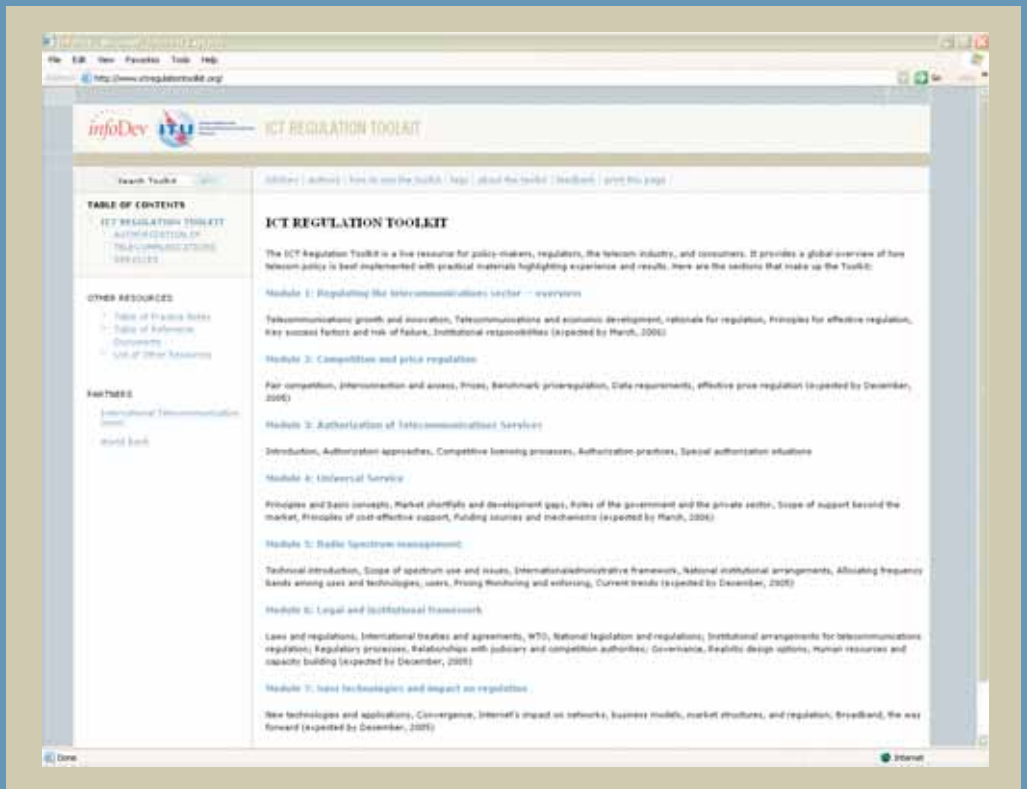
«En tant que régulateur, le kit d'aide en ligne sera une aide précieuse à la décision qui va nous permettre de nous tenir au courant des derniers développements en matière de réglementation des TIC, un secteur en perpétuelle évolution. De manière plus précise, il mettra à la disposition des régulateurs les meilleures pratiques de réglementation dans des domaines très complexes et très variés, tels que le contrôle et la gestion des fréquences, la fixation des prix de détail et d'interconnexion, la fourniture de nouveaux services, les obligations de service universel et de partage des infrastructures, etc. Pour les régulateurs, ce sera un outil qui va certainement devenir incontournable pour le renforcement de leurs capacités.»



Modibo Camara, Directeur général, Comité de régulation des télécommunications (CRT), Mali

The new online ICT Regulatory Toolkit is the product of a Cooperation Agreement between ITU and *InfoDev*.

The toolkit is intended to be a live resource for policy-makers, regulators, industry and consumers. It is designed to provide instant access to the latest information and analysis on key regulatory issues.



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