

Seminario sobre los aspectos económicos y financieros de las telecomunicaciones para los países Miembros del Grupo Regional de la Comisión de Estudio 3 para América Latina y El Caribe (SG3RG-LAC)



ITU - el Ojo en las TICs y otras herramientas regulatorias

*Santo Domingo, República Dominicana
6-7 Julio 2010*

Carmen Prado-Wagner
División de Entorno Reglamentario y de Mercado
Oficina del Desarrollo de las Telecomunicaciones (BDT)

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Agenda

- Ambiente propicio
- Global Regulators' Exchange (G-REX)
- El Ojo en las TICs – ICT Eye
- ICT Regulation Toolkit
- ICT DEC
- Modelización de costos

Ambiente propicio

Objetivo:

- Establecer un ambiente propicio para las inversiones en el sector de las TICs a través de marcos regulatorios y politicos atractivos

Acciones:

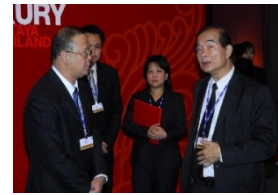
- Simposio Global de Reguadores (GSR) y el Forum de Lideres Industriales (GILF)
- Apoyo a los esfuerzos de armonización regional
- Desarrollo de estudios, lineas directrices, toolkits, mejores prácticas y compartición de información



Simposio Global de Reguladores (GSR)



- Es el unico lugar para los reguladores y hacedores de politicas de países desarrollados y en desarrollo para encontrarse y compartir puntos de vista y experiencias
- Desarrollar un entendimiento común y
- Adoptar lineas directrices basadas en mejores prácticas que tratan aspectos claves de la regulación





10th Global
Symposium
for Regulators
10-12 November 2010
D A K A R
S E N E G A L

Committed to Connecting the World



International
Telecommunication
Union

GSR 2010

- Lugar:** Dakar, Senegal
- Organización:** ITU en colaboración con ARTP, Senegal
- Dirección:** Agence de Regulation des Telecommunications et des Postes (ARTP), Senegal
- Tema:** Propiciando el mundo digital del mañana
- Programa:**
- 1^{er} Día abierto a Miembros del Sector ITU-D
 - 2^{do} Día reservado a Reguladores
- Resultados esperados:** Lineas directrices basadas en mejores prácticas en relación con el tema

<http://www.itu.int/ITU-D/treg>

GSR-10 Documentos de discusión

1. Construyendo hoy el mundo digital del mañana: el impacto de la banda ancha en la economía
2. Regulación del siglo 21
3. La transición del espectro: el dividendo digital
4. La regulación de disputas en el mundo digital
5. El cambio climático y las TICs: cuál es el rol de los reguladores?
6. Cibercrimen
7. Viviendo en la sociedad de la información
8. Midiendo la eficiencia de la regulación

Global Regulators' Exchange (G-REX)

Global Regulators' Exchange (G-REX) - Windows Internet Explorer

Recherche Web | Signets | HP Games | HP Solutions | Snapfish | HP Smart Deals | Courriel | My Mon Yahoo! | Questions/Réponses | Anti-logiciel espion

http://www.itu.int/ITU-D/grex/index.html

Global Regulators' Exchange (G-REX)

ITU International Telecommunication Union

Home : ITU-D : GREX

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Regulatory Reform

ICT EYE Facts & Regulatory Information

Publications

Events

Data & Research

Useful Links

GREX Virtual Tool for Regulators

Address book

Economics and Finance

G-REX, The Virtual Tool For Regulators

The **Global Regulators' Exchange** (G-REX) is a password protected website* for national communications regulators, policy makers and regional regulatory organizations.

This exciting initiative, launched by the Telecommunication Development Bureau (BDT) of the International Telecommunication Union (ITU) in May 2001 provides a vehicle for sharing information, views and experiences on pressing regulatory issues. Regulatory information is key to creating an enabling environment to bridge the digital divide.

The most popular feature of G-REX is the **Hotline** through which regulators and policy makers can pose any question they wish and seek feedback from their colleagues around the world. G-REX Advisors translate all postings into French, Spanish and English and research regulators' websites to find useful information responsive to Hotline queries.

G-REX is managed by the Regulatory & Market Environment Division (RME): regulators.hotline@itu.int

The RME is also in charge of TREG, the Regulatory Knowledge Center, providing key regulatory information such as:

- Websites, names and addresses of regulators and policymakers worldwide
- The most comprehensive listing of telecom
- Regulatory information at regional & country levels
- Profiles (country, regulators and regional)
- Link to the ITU-InfoDev ICT Regulation Toolkit
- Useful documentation on key subjects
- Case studies
- Self-learning material

[Login](#) [Registered Members](#)

* The staff of national communications regulatory bodies, policy makers and regional regulatory organizations interested in registering for G-REX are invited to do so here:

[JOIN US!](#) [New registration](#)

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Contact for this page : BDT Support
Updated : 2008-10-10

http://www.itu.int/ITU-D/grex/policy.asp?PageLanguage=En

Start | Window... | D-REG-TTR... | Inbox - Micr... | 2 Interne... | info amb.do... | Microsoft Po... | RealPlayer: 2... | EN | Local intranet | 100% | 09:56

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Announcements

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Page: of 28

Sort by in order from

	Question	Keyword	Author	Replies	Read	Last Post	
	17 May the WTISD The World Telecommunication and Information Society Day						
	every year ITU come with Spotlight Motto to celebrate WTISD, this year 2010 it's: "Better city, better life with ICTs". let us g	Universal Access	Sami Salih	0	13	25 May 2010 18:53:30 by: Michèle Rioux	REPLY
	ITU - UNESCO Broadband Commission f On Monday, 10 May, ITU and UNESCO launched the Broadband Commission for Digital Development. The main purpose of the Commission is to help encourage countries to actively adopt broadband dev	Internet and broadband	Yulia Lozanova	0	12	24 May 2010 09:35:08 by: Yulia Lozanova	REPLY
	Jammers type approval Criteria and Regulations Dear All, I have been assigned study on Type Approval of Jammers. It is requested to provide country model the criteria (Output Power level, jamming radius etc), license conditions fo th	Other	Ahmed Waqas	0	24	21 May 2010 20:36:53 by: Michèle Rioux	REPLY
	SRD and WAS Dear ALL, Iam requesting your help in differentiate between Short Range Device(SRD) and Wireless Access System(WAS) which are working in the band 2.4 GHz. My concern is how to differentiate	Other	Ibrahim Al-Mawali	2	48	18 May 2010 00:38:13 by: Michèle Rioux	REPLY
	Interconnect Exchange Dear GREX users, In India at present the telecom operators are directly interconnected to each other for their telecom traffic. However, keeping in view the growth of the telecom sector,	Interconnection	N Parameswaran	1	38	11 May 2010 22:53:04 by: Michèle Rioux	REPLY
	world trends in regulation Is there any document about world trends in regulation?						

<http://www.itu.int/ITU-D/finance/>

Economía y finanzas de las telecomunicaciones - Windows Internet Explorer

File Edit View Favorites Tools Help

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http://www.itu.int/ITU-D/finance/index-es.html

Economía y finanzas de las telecomunicaciones



عربي | 中文 | English | Français | Русский

Búsqueda avanzada

[Pagina Principal](#) | [UIT-D](#) : Estrategias de Financiación

Google™ Búsqueda personalizada

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Estrategias de Financiación

[Modelos de Costos](#)

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[Acerca de la UIT](#)

Economía y Finanzas de las Telecomunicaciones

Nuevo

[Desarrollo de Redes de la Próxima Generación \(NGN\): Estudios de Caso](#)

El objetivo de este documento es presentar la situación actual del desarrollo de NGN en diferentes regiones del mundo y examinar el efecto de la transición hacia las NGN en la regulación. Disponible solo en Inglés.

[Terminación móvil: ¿Reglamentar o no reglamentar?](#)

En los últimos años las tasas de terminación móviles - los cargos que los operadores pagan a otro operador ya sea fijo o móvil para terminar llamadas en su red - se ha convertido en una preocupación de los países a través del mundo. El principal objetivo de este documento es analizar los desarrollos sobre la regulación de las MTR en diferentes regiones del mundo y evaluar su necesidad así como el alcance de dicha regulación. Disponible solo en Inglés.

[Guía de contabilidad regulatoria](#)

Esta guía se focaliza en la implementación de modelos de contabilidad de costos y el desarrollo de tarifas regulatorias basadas en mejores practicas para apoyar a los Organismos de Regulación Nacional (NRAs) a implementar un modelo de contabilidad regulatoria eficaz. La misma presenta la metodología para identificar los mercados, los operadores con poder significativo en el mercado (SMP) así como diferentes topologías de comportamiento anticompetitivo.

Seminarios y Cursos - Eventos

El ojo en las TIC



Ojo en las TIC

una ventanilla única de información sobre las TIC- incluye los resultados de la Encuesta sobre las **Políticas Tarifarias**

Échele un vistazo

Herramientas, Estudios e Investigaciones

[Empresa Eficiente: Metodologías, Modelación y Aplicación para fines de Regulación Tarifaria](#)

En el presente documento se presentan y analizan las metodologías utilizadas en la modelación de la empresa eficiente, sus ventajas y desventajas, y algunos de los resultados de aplicaciones recientes en los países de Chile, Venezuela y Colombia (esta versión esta bajo revisión).

[Itinerancia internacional móvil](#). Este documento aborda una serie de cuestiones planteadas sobre las tarifas de itinerancia internacional móvil: en qué se diferencian los cargos de llamadas de móvil en itinerancia internacional (es decir, cuando un abonado móvil llama a un número internacional desde su país de origen); cuál es la estructura de costes, ¿se necesita regular estos servicios?

Done

start Presentations LAC2010 Microsoft PowerPoint ... Economía y finanzas ...

Internet

100%

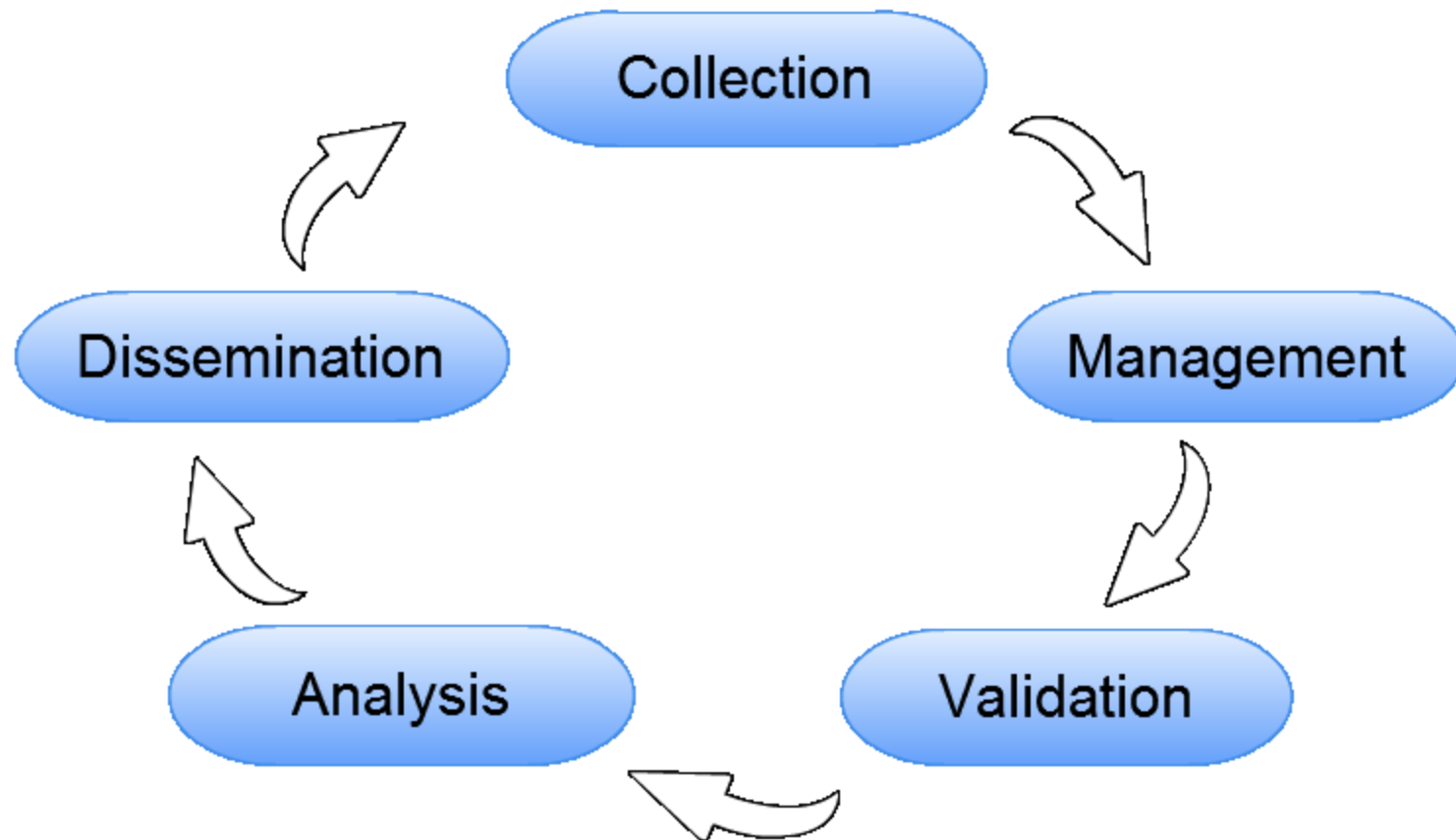
Links 01:44

Guardando un “OJO” en las TICs



- El Ojo en las TICs es la única ventanilla para datos sobre las telecomunicaciones/TICs, que provee datos al día históricos y estadísticas, así como información regulatoria y de políticas tarifarias y más...

Una plataforma que provee un ciclo completo de manejo de datos



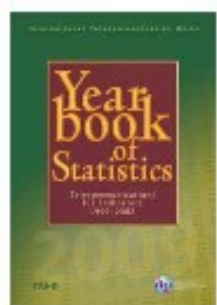
Los datos del OJO en las TICs son utilizados para publicaciones, tales como



Tendencias en las Reformas de Telecomunicaciones 2007: Regular o no regular? Estimulando el crecimiento a través de una regulación efectiva de las TICs



Midiendo la Sociedad de la Información 2010



El libro anual de las estadísticas – Indicadores de las Telecomunicaciones/TICs – 1999-2008

ITU ICT EYE

- ICT Statistics
- Regulatory Information
- Tariff Policies
- Scientific Institutions
- WSIS Stocktaking

ITU ICT EYE

REPORTS

SURVEY LOGIN

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...

ITU ICT Eye

Latest year :

2009

Country profile

Regulatory Information

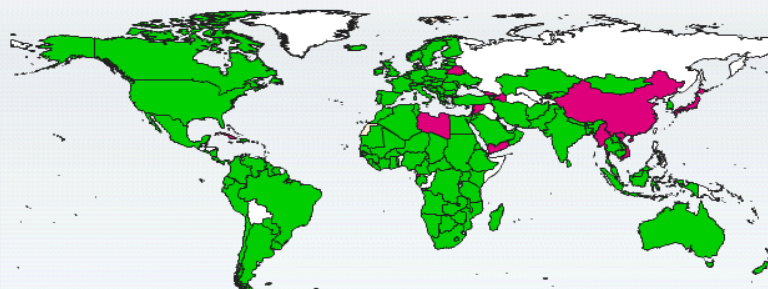
► Seperate Telecommunic

- Level of competition
- Interconnection agreeme
- Interconnection prices
- Reference interconnecti
- Licensing agreements
- VoIP policies
- Spectrum information
- Universal service definiti
- Universal access/service
- Infrastructure sharing

ICT Statistics

Tariff Policies

Does a separate Telecommunication Regulatory Authority exist?



■ Yes
■ No

Source: ITU.

For numerical data, the dynamic legend will appear allowing one to tweak the ranges of values as a percentage of the maximum value.

The designations employed and the presentation of material in this map do not imply any opinion whatsoever on the part of the ITU concerning the legal or other status of any country, territory or area or any endorsement or acceptance of any boundary.

Macromedia Flash MX plug-in is needed to view / use the map above. Download [here](#).



News

25 May 2010

New website launched with an *interactive data map* and *dynamic reporting* for creating your own reports.

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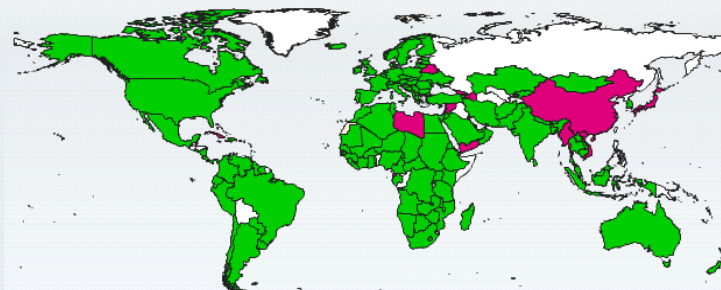
ICT Statistics

Tariff Policies

Topics

Reports

Does a separate Telecommunication Regulatory Authority exist?



Yes
No

Interactive data map

Source: ITU.

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Países donde existe una Autoridad de Regulación de telecomunicaciones separada?

ITU ICT Eye

Latest year :

2009

Does a separate Telecommunication Regulatory Authority exist?

Country profile

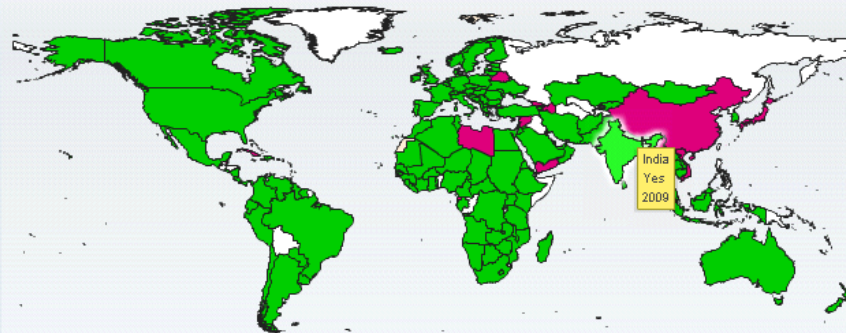
Regulatory Information

► Separate Telecommunic

- Level of competition
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ICT Statistics

Tariff Policies



■ Yes

■ No

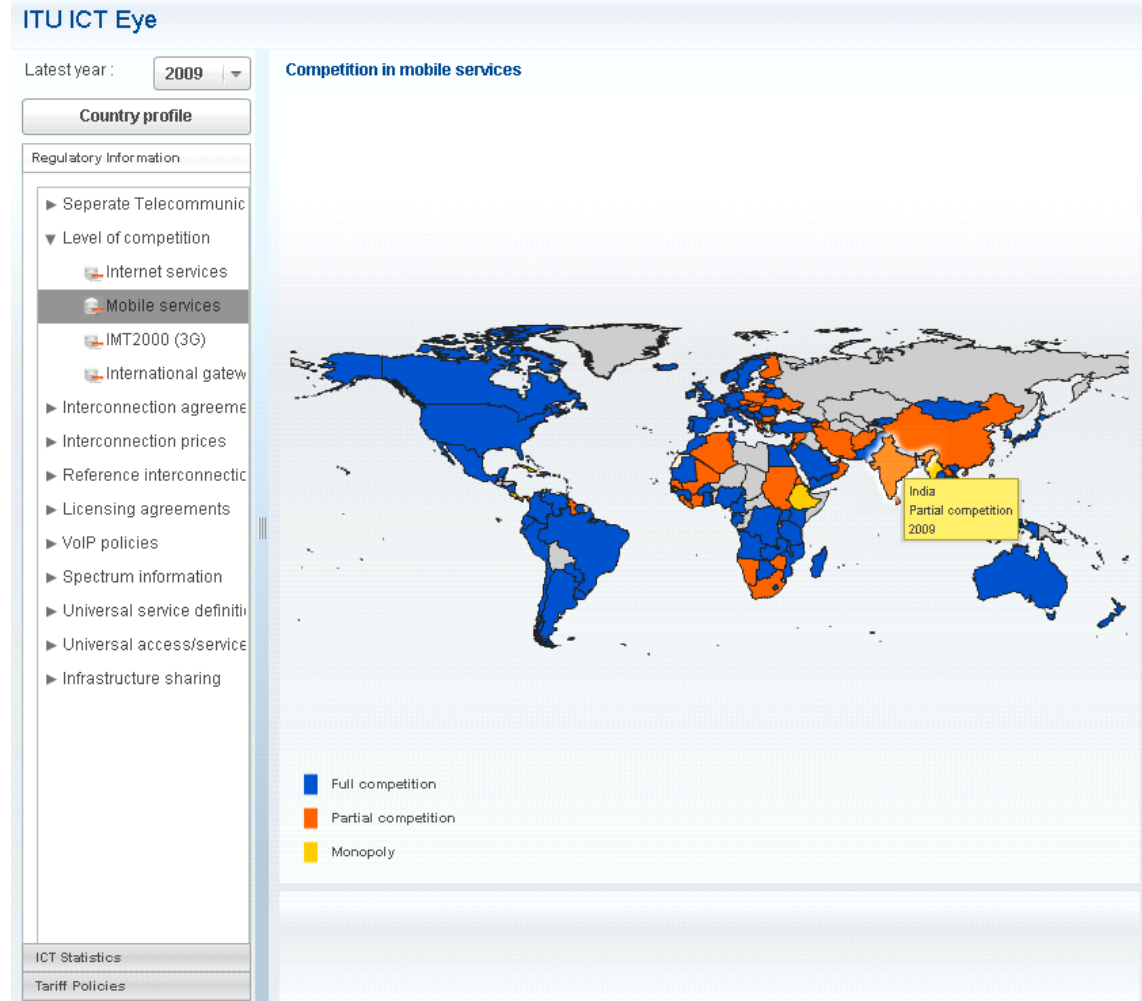


Yes



No

Competencia en servicios móviles

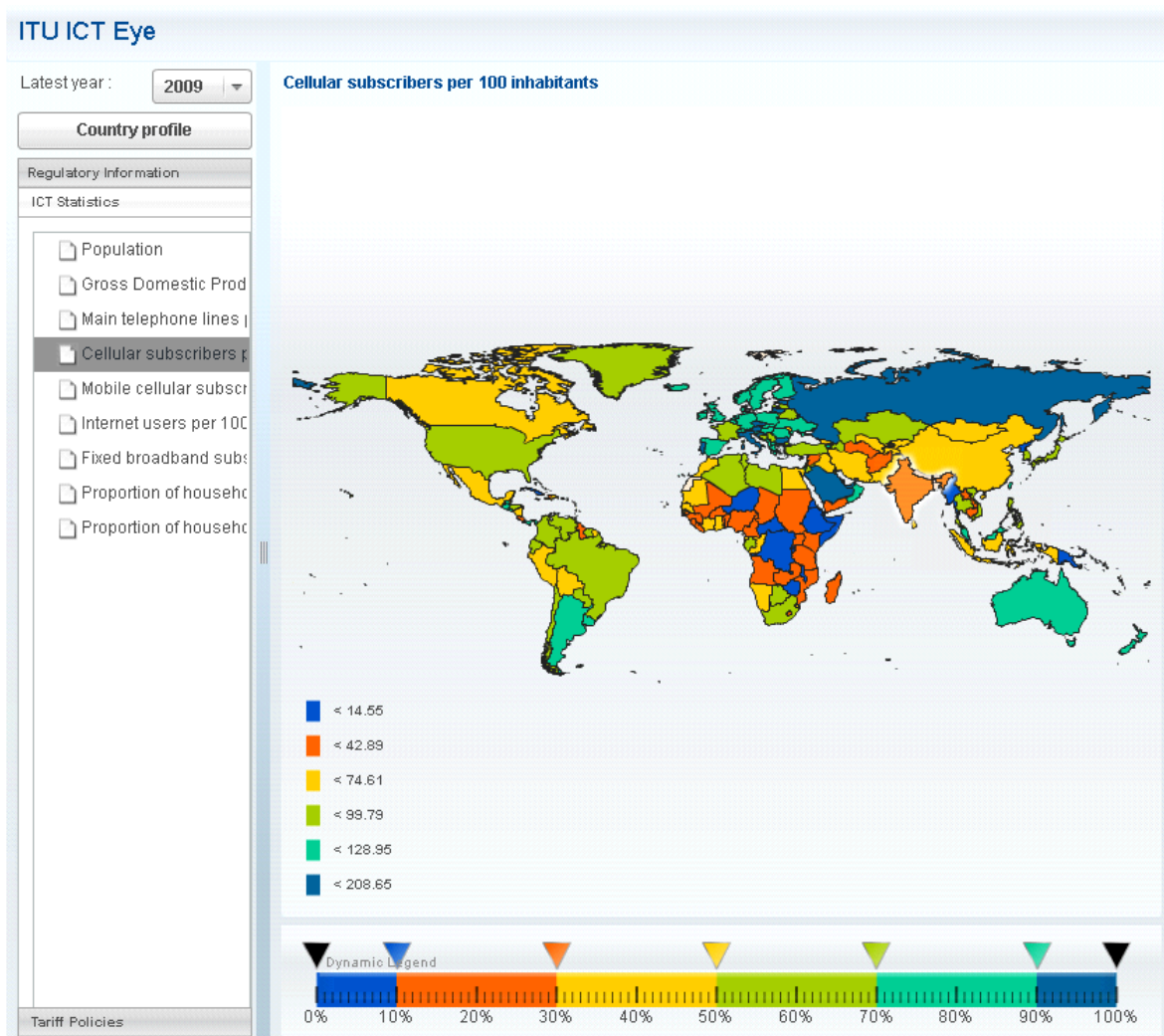


Full
competition

Partial
competition

Monopoly

Abonados a móviles por cada 100 habitantes



<14 <42 <74 <99 <128 <208

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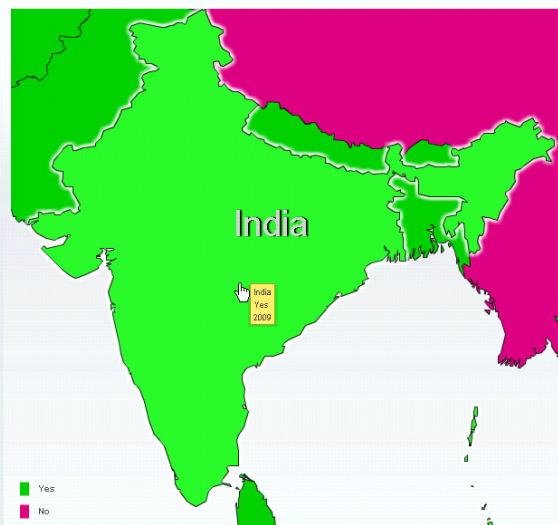
Latest year : 2009

Does a separate* Telecommunication Regulatory Authority exist?

Country profile

Regulatory Information

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► Level of competition
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► Reference interconnecti
► Licensing agreements
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► Universal access/service
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ICT Statistics

Tariff Policies

Level of
competition

Source: ITU.

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India		ICT Statistics 2008		Regulatory Information 2009	
Level of Competition 2009					
Service	Competition	Population	1'181'411'913 (US\$)	Regulatory Authority	
Local services	Full competition	Gross Domestic Product (GDP)	1'223'250'201'126	Name	Telecom Regulatory Authority of India
Domestic fixed long dist	Full competition	Main telephone lines per 100 inhabitants	3.21	Address	Mahanagar Doorsanchar Bhawan, Jawahar Lal Nehru Marg (Old Minto Road),
Inter-national fixed long dist	Full competition	Cellular subscribers per 100 inhabitants	29.36	City	New Delhi - 110002
Wireless local loop	Full competition	Mobile cellular subscribers with access to data communication at broadband speed per 100 inhabitants	0.00	Phone	+91 11 23211934, 23233466, 23220534, 23236308
Data	Full competition	Internet users per 100 inhabitants (calculated)	4.38	Fax	+91 11 23235161
DSL	Full competition	Fixed broadband subscribers per 100 inhabitants	0.45	Email	param.trai@gmail.com , re@trai.gov.in
Cable modem	Full competition	Proportion of households with a computer	4.44	Website	www.trai.gov.in
VDSL	Full competition	Proportion of households with Internet access at home	3.39	Policy Maker	
Leased lines	Full competition	>> ICT Statistics database		Name	Ministry of Communications & Information Technology, Department of Telecommunications
Fixed Wireless Broadband	Full competition	>> Regulatory database		Address	Sanchar Bhawan, 20, Ashoka Road
Mobile	Partial competition	>> Tariff Policies 2009		City	New Delhi - 110001
Paging	n/a	Cost model to determine prices of regulated services		Phone	+91 11 23719898
Cable TV	Full competition	>> More Regulatory info		Fax	+91 11 23711514
Fixed sat	n/a			Email	sidbehura@yahoo.co.in
Mobile sat	n/a			Website	www.dot.gov.in
GWPCS	n/a				
IWT 2000	n/a				
Internet services	Full competition				
Inter-national gateways	Full competition				
>> Regulators database					
Scientific Institutions					

Statistics

Regulatory
information

Tariff
policies

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 **India**

Cost, tariff models and tariff rebalancing 2009

Cost model to determine prices of regulated services

- Yes

Accounting separation situation

- In place

Tariff Rebalancing of fixed telephony services implemented

- Yes

Type of costs on which the cost model is based

	Retail services		Wholesale services	
Historical costs	☒	☐	☐	☐
Current costs	☐	☐	☒	☐
Other	☐	☐	☐	☐

Cost allocation methodology

	Retail services		Wholesale services	
Fully Distributed Costs (FDC)	☐	☐	☐	☐
Long-Run Incremental Costs (LRIC)	☐	☐	☐	☐
Other	☐	☐	☐	☐

Approach applied

	Retail services		Wholesale services	
Top-down	☐	☐	☒	☐
Bottom-up	☐	☐	☐	☐
Hybrid	☐	☐	☐	☐
Other	☐	☐	☐	☐

Interconnection issues 2009

Interconnection charging principle adopted

Telecommunication services 2009

Fixed communications

	With price control	Without price control
Access to network (monthly line rental/subscription fee)	☐	☒
Local voice services	☐	☒
National long distance voice services	☐	☒
International voice services	☐	☒
IP telephony	☐	☒
Internet access (Internet connection) & data services	☐	☒
Provision of links (leased lines)	☒	☐
Other	☐	☐

Mobile communications

	With price control	Without price control
Access to network (monthly subscription fee)	☐	☒
Voice services	☐	☒
SMS	☐	☒
National voice roaming	☒	☐
International voice roaming	☐	☒
Internet access (Internet connection) & data services	☐	☒
Other	☐	☐

Broadcasting services

	With price control	Without price control
IPTV	☐	☒
Mobile TV	☐	☒
Terrestrial TV	☐	☒

Concept of dominance 2009

Concept of "dominance" or Significant Market Power (SMP) defined

- Yes

Criteria used for determining "dominance" or SMP

Geographical	☐
Market share in terms of number of subscribers (or revenues) for the type of market in question (specify in %)	☒
Control of essential facilities allowing access to the end user	☐
Easy access to financial resources	☐
The strength of the countervailing power of consumers	☐
Economies of scale and scope	☐
Barriers to entry	☐
Potential competition	☐
Other	☐

Most common ex ante obligations imposed on operators or providers

Transparency (e.g. publishing RIO and RUO)	☒
Non discrimination	☒
Interconnection and access obligations	☒
Regulatory accounting	☒
Accounting separation	☒
Price control	☐
Other	☐

Next-Generation Networks (NGN) 2009

Status of NGN development

Feasibility study	☒
Planning	☒
Introduction	☒
Implementation	☒
No plans to introduce an NGN system in a short run	☐
Other	☐

ICT Eye Temas

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ICT Statistics Database

As a United Nations agency, the ITU has an obligation to identify, define, and produce statistics covering its sector - the telecommunication/ICT sector. This is in line with other specialized agencies that publish statistics covering their respective field of operations and forms part of the global statistical system of the UN.

The collection of over 100 telecommunication/ICT indicators is one of the main activities of the unit. The ITU's Market Information and Statistics (STAT) Division collects its Telecommunication/ICT data directly from governments by means of an annual questionnaire that is sent to the government agency in charge of telecommunications/ICT. This is usually the Ministry or the regulatory agency. The STAT Division verifies and harmonizes data, carries out research, and collects missing values from government web sites and operators' annual reports, particularly for countries that do not reply to the questionnaire. Market research data are also used to cross-check and complement missing values.

The indicators/statistics published in this publication are used to back up ICT sections in inter-governmental publications such as the UNDP Human Development Report, the World Bank World Development Indicators and the United Nations Statistical Yearbook. Data are available in a number of formats including printed publications, CD-ROM, and by electronic download.

The flagship publication, the Yearbook of Statistics, has been published annually for almost three decades and is widely respected as the world's leading source of ICT statistics.

The electronic database, World Telecommunication/ICT Indicators, available both in a user-friendly CD-ROM and by electronic download, provides an important historical perspective of the Information and Communication Technology (ICT) industry, with annual time series dating back to 1960 and extending until 2008 - for over 100 items and some 200 economies.

Some key and popularly requested ICT/telecommunication data are provided for free, at <http://www.itu.int/ITU-D/ict/statistics/>. Users also have free access to our presentations; definitions and references of handbooks and links to other relevant sites and information sources.

ICT Statistics by indicator

Select Year

[1. Basic indicators: Population, GDP, ratio of mobile cellular subscriptions to fixed telephone lines](#)

[2. Fixed telephone lines](#)

[3. Mobile cellular subscriptions](#)

[4. Internet: users, total subscriptions, broadband subscriptions](#)

[For definitions, see Telecommunication/ICT Indicators Handbook 2010](#)

Thematic
reports

Select output:

PDF

Excel

HTML

PDF

View Report

Close Report

Main Telephone Lines

	Main (fixed) telephone lines			Main (fixed) telephone lines per 100 inhabitants		
	(000s)		CAGR			CAGR
	2003	2008	2003 - 08	2003	2008	2003 - 08
1 Afghanistan	36.7	101.1	22.5	0.16	0.37	18.2
2 Albania	255.0	343.6	6.1	8.26	10.93	5.8
3 Algeria	2'147.0	3'314.0	9.1	6.73	9.64	7.4
4 American Samoa	10.7	10.4	-0.6	17.65	15.71	-2.3
5 Andorra	35.2	37.4	1.2	47.41	44.28	-1.4
6 Angola	85.0	114.3	6.1	0.54	0.63	3.1
7 Anguilla	5.4	5.8	1.3	43.05	39.10	-1.9
8 Antigua & Barbuda	38.0	38.0	-	46.76	43.86	-1.3
9 Argentina	8'603.9	9'742.8	2.5	22.63	24.43	1.5
10 Armenia	563.7	626.0	2.1	18.42	20.34	2.0
11 Aruba	37.4	38.5	0.6	38.51	36.47	-1.1
• • •						
230 Wallis and Futuna	1.7	2.7	9.9	11.37	17.75	9.3
231 Yemen	693.9	1'117.0	10.0	3.50	4.87	6.9
232 Zambia	88.4	90.6	0.5	0.79	0.72	-1.9
233 Zimbabwe	300.9	348.0	2.9	2.41	2.79	3.0
World	1'136'464.5	1'252'448.6	2.0	17.82	18.49	0.7

Tema: Información regulatoria

ITU ICT EYE

ICT Statistics

Regulatory Information

Tariff Policies

Scientific Institutions

WSIS Stocktaking

ITU ICT EYE

REPORTS

SURVEY LOGIN

Regulatory Knowledge Centre

The information and communication technology (ICT) sector is in the midst of remarkable transformation fuelled by a combination of technological, market, policy and regulatory developments. These changes include unparalleled numbers of voice telephone subscribers, the rise of IP-enabled networks and Voice over IP (VoIP) services, initial - yet promising - deployment of fixed-line broadband and broadband wireless access (BWA) services and intelligent radio devices. The market and technological developments are exerting pressure on the current regulatory framework. How will regulation change?

One of the core functions of BDT is the collection, analysis and dissemination of information on telecommunication regulatory trends and practices, collectively known as the Regulatory Knowledge Centre. This site is an online one-stop-shop for the latest ICT regulatory information. The data is drawn from an annual regulatory survey, which dates back to 1994. Each year the survey is adapted in order to reflect changes in the sector.

Since the start of the survey, the number of countries with separate regulators has grown by over 200%; the number of countries that have privatized has doubled and the number of countries providing competitive basic services has grown by over 500%. To view the latest trends, select the desired reports from the right hand menu.

Regional Reports

Select Region

Select Year

[Level of Competition](#)

[Status of the main fixed-line operators](#)

[Countries with a separate regulator](#)

[Laws and Regulations by region](#)

[Interconnection agreements and prices / Reference](#)

[Interconnection Offers \(RIOs\)](#)

[Licensing agreements](#)

[Dispute resolution decisions](#)

[Countering spam legislation and responsible countering spam authority](#)

[IP Telephony](#)

[Spectrum information](#)

[Sector Structure - Private Sector Participation](#)

Country Reports

Country

[Country Snapshot](#)

[Country Profile \(includes contact details, market structure and regulatory environment\)](#)

[Regulators Profile \(Includes details on the Regulators structure, financing and functions\)](#)

[Universal Service Profile \(Includes details on the Universal Service coverage, programs and financing\)](#)

[Address Book](#)

Thematic reports

Country reports

Select output

PDF

Excel

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PDF

View Report

Close Report



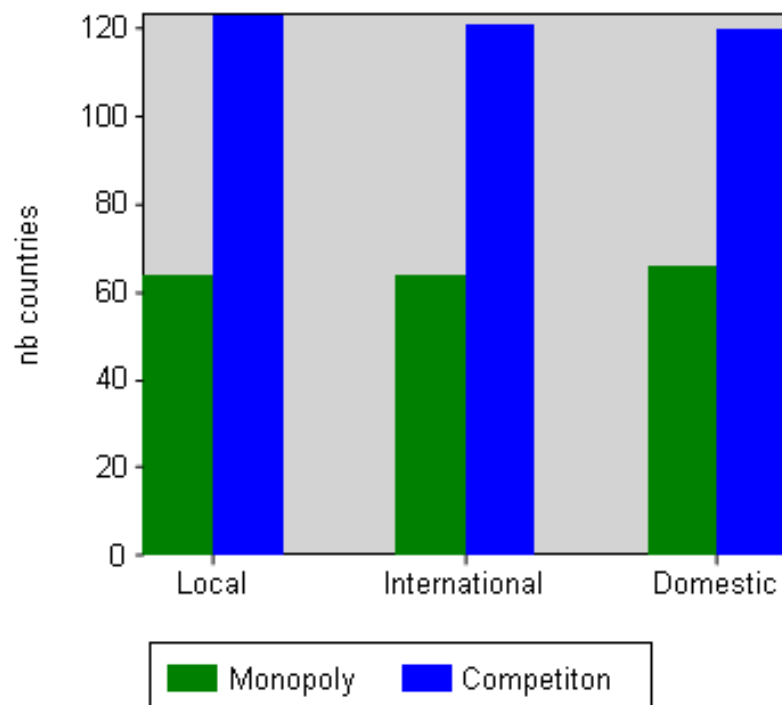
**International
Telecommunication
Union**

Level of Competition

UN Classification: Africa

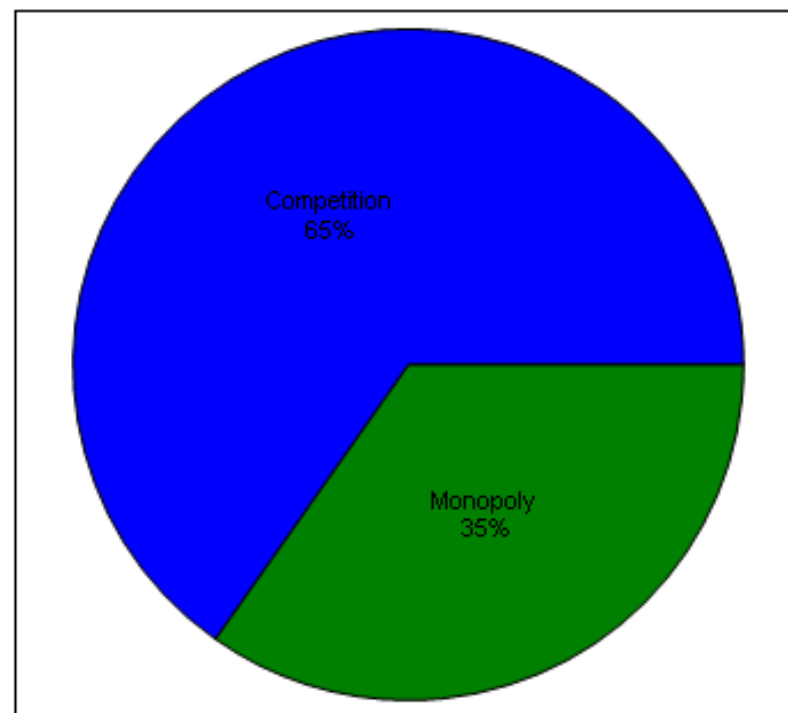
Country	Local services	Domestic fixed long dist	International fixed long dist	Wireless local loop	Data	DSL	Cable modem	VSAT	Leased lines	Fixed Wireless Broadband	Mobile	Paging	Cable TV	Fixed sat	Mobile sat	GMPCS	IMT 2000	Internet services	International gateways
Algeria(2)	P	P	P	P	C	C	...	P	C	P	P	...	...	...	...	P	...	C	P
Angola(1)	C	C 2003	C	M	C	C	M	...	C	M	C	...	...	M	C	...	C 2006	C	M
Benin(2)	M	M	M	...	...	M	...	...	M	...	C	C	...	...	...	...	...	...	...
Botswana	C 2007	C 1998	C 2007	...	C 1998	C 2007	...	C 1998	C 1998	C	C 1998	...	...	C 1998	C 1998	C	C 1998	C 1998	C 2007
Burkina Faso(2)	M	M	M	C	C	C	C	P	P	C	C	C	C	P	P	P	P	C	M
	Remarks: The public company has a monopoly on local and domestic and international long-distance service that expires on 31 December 2005																		
Burundi(2)	C	C	C	C	C	C	...	C	C	...	C	C	C	...	C	C	C	C	...
Cameroon(2)	M	M	M	C	C	...	...	P	...	...	C	C	C	...	...	C	...	C	...

Competition in fixed basic services
World 2009



ITU World Telecommunication Regulatory Database

Basic services
World 2009



ITU World Telecommunication/ICT Regulatory Database

Country Profile: Brazil 2009

Select output: PDF Excel HTML PDF View Report Close Report



**International
Telecommunication
Union**

International
Telecommunication
Union

Regulatory Authority (2009)

Name Agência Nacional de Telecomunicações - Anatel

Address SAUS Quadra 06 Blocos C, E, F e H - CEP: 70.070-940

City Brasília - DF

Telephone +55 61 2312 1711

Fax +55 61 2312-2244

Email secbc4@anatel.gov.br

Website www.anatel.gov.br

Policy Maker (2009)

Name Ministério das Comunicações

Address Esplanada dos Ministérios, Bloco R, CEP: 70044-900

City Brasília - DF

Telephone +55 61 3311-6000

Fax +55 61 3311-6000

Email gabinete@mc.gov.br

Website www.mc.gov.br

Status of the main fixed-line operators (2009)

Operator	Status
Oi	Fully private
Telesp	Fully private
Embratel	Fully private

Level of Competition (2009)

Local services	Domestic fixed long dist	Inter-national fixed long dist	Wireless local loop	Data	DSL	Cable modem	VSAT	Leased lines	Fixed Wireless Broadband
C	C	C	C	C	C	C	C	C	...

Mobile	Paging	Cable TV	Fixed sat	Mobile sat	GMPCS	IMT 2000	Internet services	Inter-national gateways
C		C	C	C	C	C	C	C

Remarks: As a result of privatization of the formerly state-owned companies in 1998, a temporary duopoly was created for fixed telephony. As of 2002, there are no limits to the number of licenses, except for technical

Tema:

Políticas tarifarias



English

ITU ICT EYE

ICT Statistics

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REPORTS

SURVEY LOGIN

Tariff Policies Database

The objective of this database is to track and show trends in the application of Tariff Policies related to pricing, cost/tariff models, analytical accounting, interconnection charges, management of universal service and price control in different countries.

Data is provided annually by Telecommunication Regulatory Authorities and Network Operators. This reflects the situation of the organization at the date the questionnaire is completed.

Reports

☒ Current survey type

☐ Old survey type - questions that are no longer asked in current survey

Region

Teledensity level

GDP level

Year From To

- ☐ Telecommunication services
- ☐ Cost and tariff models
- ☐ Tariff rebalancing of fixed telephony services
- ☐ Interconnection issues
- ☐ Concept of dominance
- ☐ Next Generation Networks (NGNs)
- ☐ Site sharing for terrestrial mobile services
- ☒ Survey question

Show statistics

Survey reports



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Tariff Policies

Concept of Dominance

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International
Telecommunication
Union

International
Telecommunication
Union

Selected years 2006 - 2009

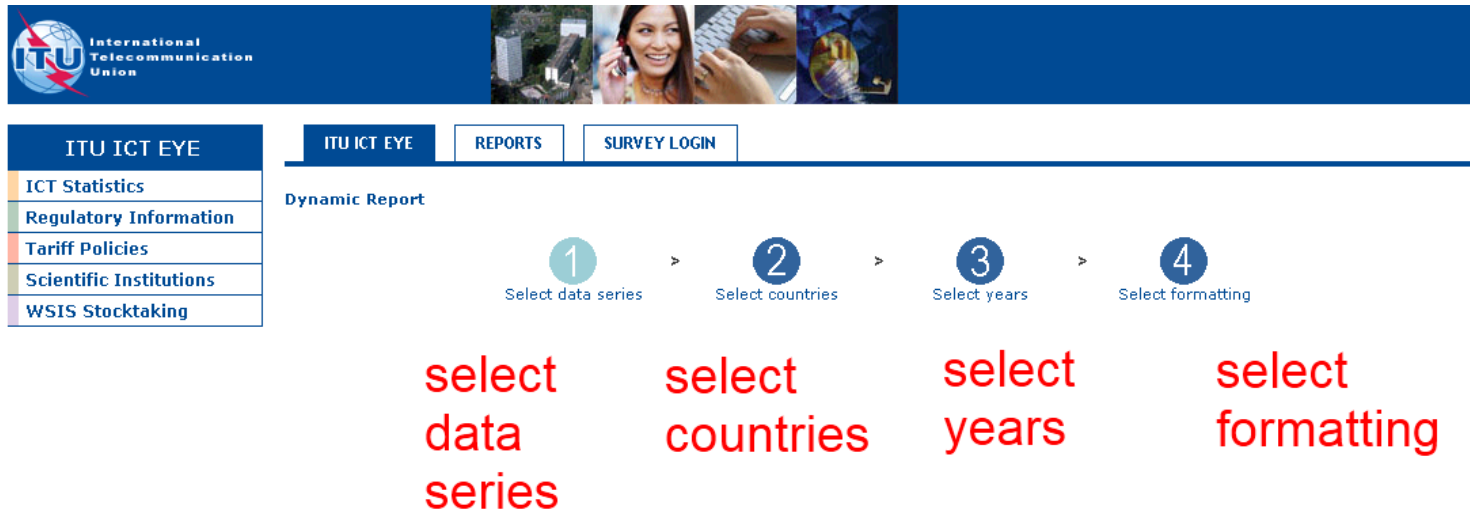
Is the concept of "dominance" or Significant Market Power (SMP) defined in your country?

Only one answer possible		Graph		
1. Yes	2006	67.65 % 23/34		
	2007	75.00 % 54/72		
	2008	71.05 % 27/38		
	2009	71.88 % 46/64		
2. No	2006	32.35 % 11/34		
	2007	25.00 % 18/72		
	2008	28.95 % 11/38		
	2009	28.13 % 18/64		

What criteria are used in determining "dominance" or SMP?

Multiple answers possible		Graph		
1. Geographical	2006	0.00 % 0/0		
	2007	44.44 % 20/45		
	2008	37.50 % 12/32		
	2009	45.45 % 20/44		

Reportes dinámicos: 4 Pasos



The screenshot displays the ITU ICT EYE website interface. On the left is a navigation menu with the ITU logo and links to ICT Statistics, Regulatory Information, Tariff Policies, Scientific Institutions, and WSIS Stocktaking. The main header includes the ITU logo, the text 'International Telecommunication Union', and a banner image. Below the header are three tabs: 'ITU ICT EYE', 'REPORTS', and 'SURVEY LOGIN'. The 'Dynamic Report' section features a four-step process flow:

- 1 Select data series
- 2 Select countries
- 3 Select years
- 4 Select formatting

Below each step, the text is repeated in red: 'select data series', 'select countries', 'select years', and 'select formatting'.

Select output HTML

View Report

Close Report



International Telecommunication Union

Dynamic Reporting

				Value
Africa	Algeria	Internet users per 100 inhabitants (calculated)	2005	5.844
			2006	7.376
			2007	10.337
			2008	11.928
		Retail Fixed communications - price control of Internet access	2005	
			2006	
			2007	
			2008	
			2009	Without price control
		Competition in Internet services	2005	Full competition
			2006	Full competition
			2007	Full competition
			2008	Full competition
			2009	Full competition
		Proportion of households with Internet access at home	2005	3.000
			2006	4.500
			2007	6.750
			2008	8.438
	Angola	Internet users per 100 inhabitants (calculated)	2005	1.143
			2006	1.908
			2007	2.837
			2008	3.052
		Retail Fixed communications - price control of Internet access	2005	
			2006	
			2007	
			2008	

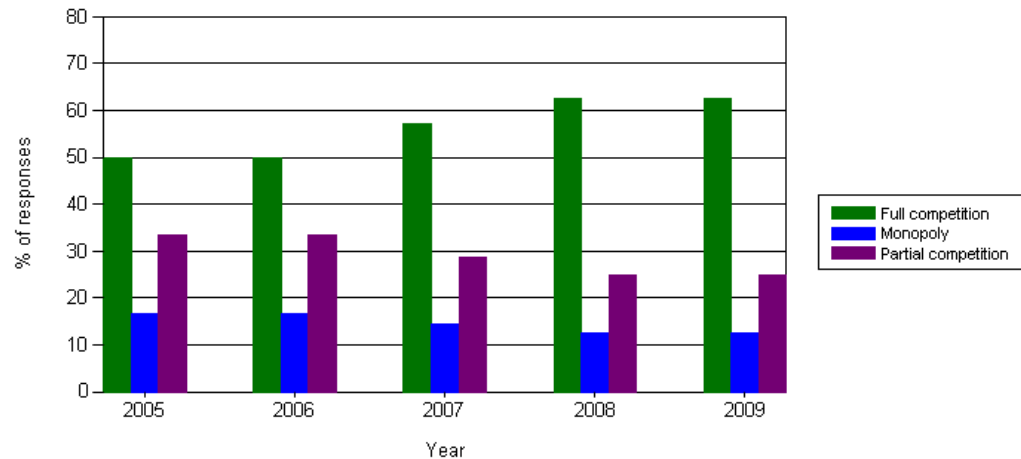
Reportes dinamicos: resultados

Select output

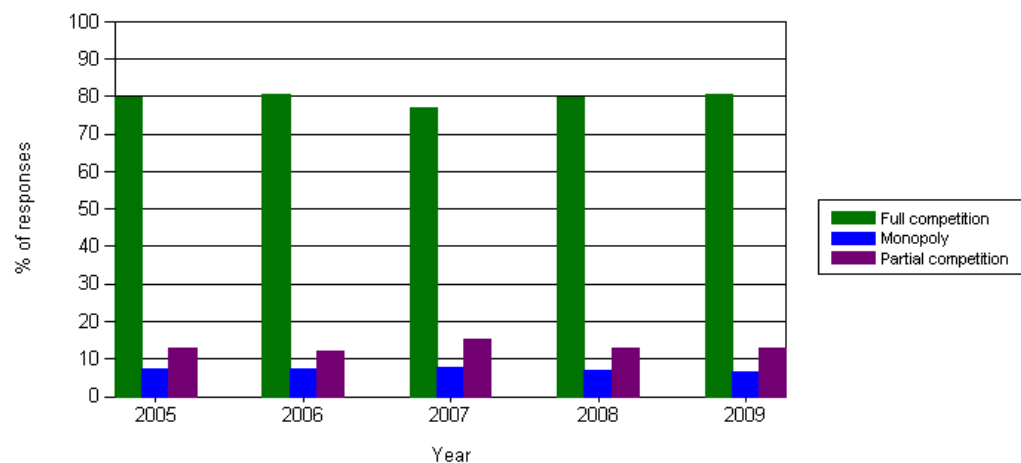
HTML

View Report

Close Report



World - Competition in Internet services
Source: ITU



Recopilación de datos



English

ITU ICT Eye

[ICT Statistics](#)[Regulatory Information](#)[Tariff Policies](#)[Scientific Institutions](#)[WSIS Stocktaking](#)[ITU ICT EYE](#)[REPORTS](#)[SURVEY LOGIN](#)

Each year the ITU/BDT undertakes a series of surveys in order to assess the latest trends and developments in the ICT sector. Survey data is entered by authorized users only, as defined by their organizations. Each user will be given a dedicated user name and password in order to complete the survey.

User name Password ☐ Remember Me



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The **ICT Regulation Toolkit** is a live resource for policy-makers, regulators, the telecom industry, and consumers. It provides a global overview of how telecom policy is best implemented with practical materials highlighting experience and results. [► More](#)

TOOLKIT

- [► Table of Contents](#)
- [► Table of Practice Notes](#)
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- [► Translations](#)

ICT REGULATION TOOLKIT: YOUR FEEDBACK

We invite you to participate in this survey to know more about your experience using this toolkit.
[► ENTER SURVEY](#)

EVENTS

- [► Global Symposium for Regulators 2008 \(GSR08\)](#)
Pattaya | 11-13 Mar 08
- [► Training Workshop for Regulators and Policy Makers in Eastern and Southern Africa](#)
Addis Ababa | 6-9 Nov 07

[► More events](#)

Module 1: Regulating the Telecommunications Sector: Overview

Telecommunications growth and innovation, Telecommunications and economic development, rationale for regulation, Principles for effective regulation, Key success factors and risk of failure, Institutional responsibilities.

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[Overview in French](#) | [in Spanish](#) | [in Russian](#) | [in Chinese](#) | [in Arabic](#)

Module 2: Competition and Price Regulation

Fair competition, Interconnection and access, Prices, Benchmark price regulation, Data requirements, Effective price regulation, Infrastructure sharing.

[► Executive Summary](#) | [► Table of Contents](#) | [► PDF Version](#) | Updated: May 2010

Module 3: Authorization of Telecommunication/ICT Services

Overview of ICT Authorization, General authorizations and open entry approaches, Competitive licensing processes, Fees, Authorization practices and procedures, Special authorization situations, Unified and multi-service authorization regimes.

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Module 4: Universal Access and Service

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.

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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.

[► Executive Summary](#) | [► Table of Contents](#) | [► PDF Version](#) | Updated: April 2009
Downloadable version of this module [in French](#) | [in Spanish](#)

Module 6: Legal and Institutional Framework

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

[► Executive Summary](#) | [► Table of Contents](#) | [► PDF Version](#) | Updated: November 2006



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The ICT Regulatory Decisions Clearinghouse (ICTDec) is an online resource that provides a one-stop access point to decisions originating from ICT decision making bodies such as telecommunications regulators, industry ombudsmen and specialized dispute resolution tribunals. Currently, ICTDec provides unified and simplified access to thousands of decisions available on the Web, as well as to selected decisions unavailable online.

ICTDec integrates two services in a single Web-based resource:

- A Web search engine of websites belonging to ICT decision making bodies
- A catalogued repository of ICT regulatory decisions

[more]

Browse Decisions by Theme

- Authorisation/Licensing
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 - Antitrust disputes
 - Mergers and acquisitions
 - Subsidies and similar financial issues
- Consumer Protection
 - Quality of Service
 - Regulation of content
 - Sales and Marketing
- Interconnection and Price Regulation
 - Mobile Termination
 - Co-location
- Scarce Resources Management
 - Infrastructure sharing
- Universal Access/Service
- New Technologies
- Network access and resale
- Privacy
- Sanctions
- Procedural issues and jurisdiction

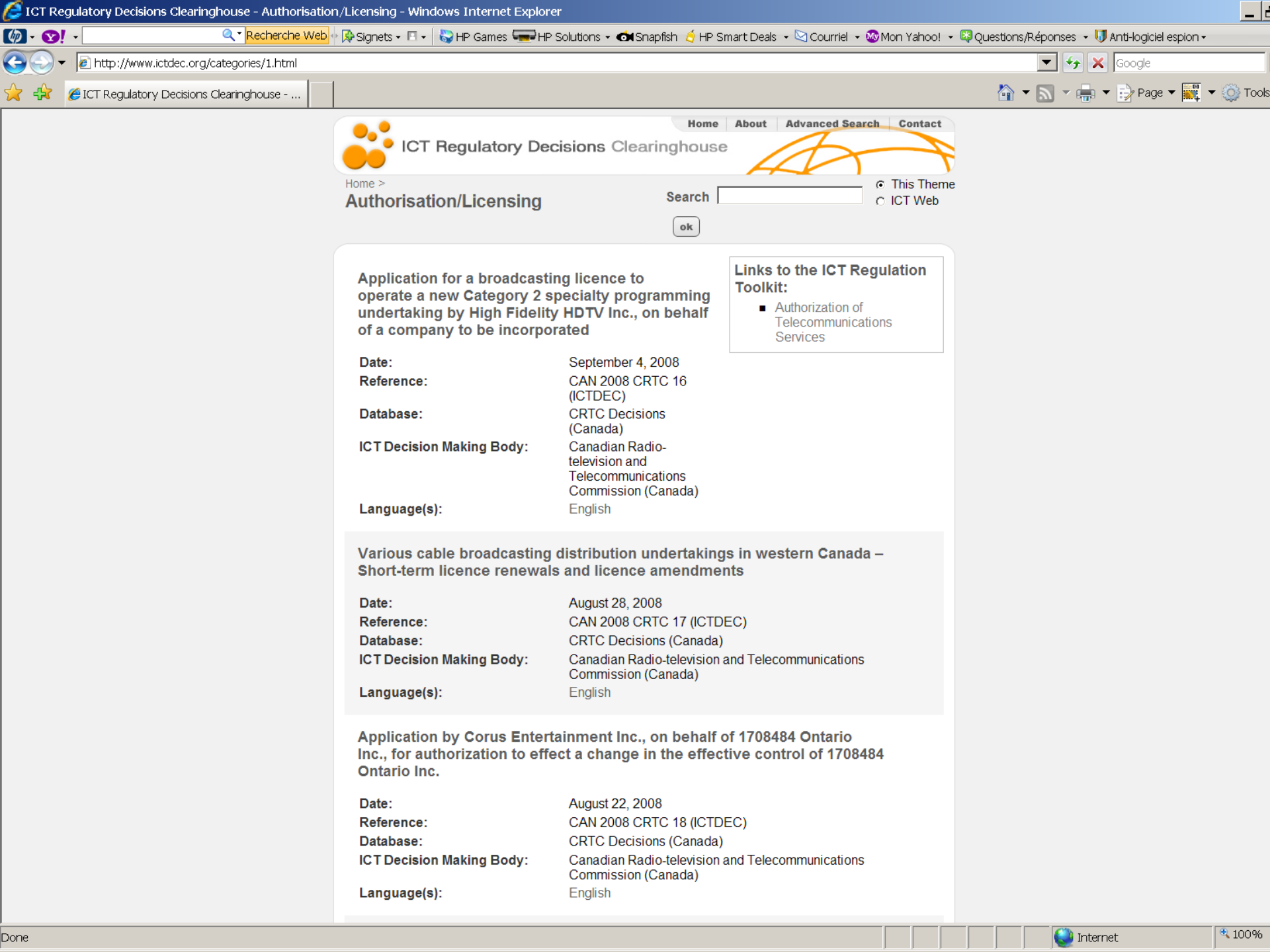
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Financing Strategies

[Cost Models](#)[Publications](#)[COSITU](#)[Events](#)[Useful Links](#)[Regulatory Reform](#)

Economics and Finance of Telecommunications

News

Developments of Next Generation Networks (NGN): Country Case Studies

The aim of this document is to present the current situation of NGN development in different regions of the world and to examine what effect the transition towards NGNs is having on regulation.

Mobile Termination Rates: To Regulate or not To Regulate

Over past few years mobile termination charges — the charges that mobile operators levy on each other and on fixed network operators for terminating calls on their networks — have become a concern in many countries throughout the world. The main aim of this paper is to analyze the development of MTR regulation in the different regions of the world and to evaluate the necessity and the scope of such regulation.

Regulatory Accounting Guide

This guide focuses on the implementation of cost accounting models and the development of regulatory policies, based on best practices, to help National Regulatory Authorities (NRAs) implement a regulatory accounting model. It also provides a methodology to identify markets, Significant

ICT-Eye



The ICT Eye

a one stop-shop for ICT information - including results from the [Tariff Policies Survey](#)

What is the eye?

Tools, Studies and research

Efficient Operator: Methodologies, modeling and application for tariff regulation

This study sets forth and analyses the methodologies for fixing tariffs used in the modeling of an efficient operator, focusing on the advantages and disadvantages and looking at the results of a number of recent applications in Chile, Venezuela and Colombia.

International Mobile Roaming Regulation – An incentive for cooperation

This paper addresses a variety of issues raised by international mobile roaming charges: how do they differ from charges for non-roaming international mobile calls (i.e. when a mobile subscriber calls an international number from its home country); what is the structure of their costs; is there a need for regulatory intervention and, if so, how could they be regulated; and finally, is cooperation and coordination on international mobile roaming regulation beneficial?

Estudios sobre Economía y Finanzas

- Itinerancia internacional móvil;
- El impacto de la liberalización de gateway internacionales;
- Guia sobre Contabilidad Regulatoria,
- Empresa Eficiente: Metodologías, Modelación y Aplicación para fines de Regulación Tarifaria;
- Guia sobre la aplicación de la modelización economica en el sector de las telecomunicaciones;
- En preparación: Estudio sobre Broadband
- Y otros interesantes estudios publicados en el sitio web Finance....

www.itu.int/ITU-D/finance/

Actividades de Formación

ITU Formación de Expertos sobre la modelización de costos de redes - Nivel II Avanzado

Formaciones regionales organizadas en coordinación con los CoEs:

- 1. Países Arabes:** Damascos, Siria, Agosto 2010;
- 2. El Caribe:** Kingston, Jamaica, Septiembre 2010;
- 3. Africa:** para países de habla inglesa en Lilongwe, Malawi, Octubre 2010
- 4. Asia Pacífico :** Bangkok, Tailandia, 15-19 Noviembre 2010
- 5. América Latina:** Noviembre, 2010
- 6. Africa:** para países de habla francesa, Ouagadougou, Burkina Faso, Noviembre o Diciembre 2010

Para más información

- Telecommunication Development Bureau
 - www.itu.int/net/ITU-D/
- Regulatory and Market Environment Division :
 - www.itu.int/ITU-D/treg/
 - www.itu.int/ITU-D/finance/
- The Global Symposium for Regulators GSR :
www.itu.int/ITU-D/treg/Events
- TREG : www.itu.int/ITU-D/grex/
- ICT Eye : www.itu.int/ITU-D/ICTEYE/
- ICT Regulation toolkit : www.ictregulationtoolkit.org/
- Trends in Telecommunication Reform
 - www.itu.int/ITU-D/treg/publications/

Muchas gracias por su
atención

[carmen.prado\[at\]itu.int](mailto:carmen.prado@itu.int)