



ITU Global Symposium for Regulators (GSR-18)

Regulatory Associations Meetings

The ITU Regional Regulatory Associations (RAs) Portal

ITU Telecommunication Development Bureau (BDT)
Regulatory and Market Environment Division (RME)

Geneva, 10 July 2018

HOME

The main goal of the **ICT REGIONAL REGULATORY ASSOCIATIONS PORTAL (RAs)** is to meet the needs of RAs by sharing information from all the regions on activities and initiatives implemented by RAs.

This portal also highlights key activities and findings from ITU publications, studies, research, ITU Study Groups, and data and analysis.

ITU Regional Regulatory Associations Portal



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REGULATORY ASSOCIATIONS



Address book:

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REGULATORY ASSOCIATIONS @ ITU



ITU Global Symposium for Regulators (GSR) Regulatory Associations Meetings

The annual Regulatory Associations (RA) Meetings bring together Regulatory Associations from around the world to discuss key issues, best practices and share Regulatory Association information and experiences with peers. It is organized annually during the Global Symposium for Regulators.

KEY RAS ACTIVITIES AND INITIATIVES:



- [Usage in the digital Ecosystem](#)
- [ICT Infrastructure and Market Structure](#)
- [Tariffs and Affordability](#)
- [Institutional Framework](#)

ITU RESOURCES




- [ICT Regulatory & Market environment](#)
- [International Mobile Roaming Resources Portal](#)
- [The ICT Regulatory Tracker](#)
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REGULATORY ASSOCIATIONS: ADDRESS BOOK



REGULATORY ASSOCIATIONS



Address book:

- Africa
- Arab States
- Asia and Pacific
- Europe and CIS
- The Americas

Regional Regulatory Associations in Europe and CIS

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- ARCTEL-CPLP - Association of Communications and Telecommunications Regulators of the Community of Portuguese Speaking Countries, Lisboa, Portugal
- BEREC - Body of European Regulators for Electronic Communications, Brussels, Belgium
- CEPT - European Conference of Postal and Telecommunications Administrations, Valletta, Malta
- EC - European Commission, Brussels, Belgium
- ETSI - The European Telecommunications Standards Institute, Sophia Antipolis, France
- FRATEL - Réseau Francophone de la Régulation des Télécommunications, Paris, France
- IRG - Independent Regulators Group, Brussels, Belgium
- RCC - Regional Commonwealth in the Field of Communications, Moscow, Russian Federation

Regional Regulatory Associations in Africa

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- ARICEA - The Association of Regulators of Information and Communications for Eastern and Southern Africa
- ARTAC - Assemblée des régulateurs des télécommunications de l'Afrique Centrale
- ATU - African Telecommunication Union, Nairobi, Kenya
- CEMAC - Commission de la Communauté Economique, Bangui, Central African Republic
- COMESA - Common Market for Eastern and Southern Africa, Lusaka, Zambia
- CRASA - The Communication Regulators' Association of Southern Africa, Gaborone, Botswana
- EAC - East African Community, Arusha, Tanzania
- EACO - The East African Communications Entities Organisation, Kigali, Rwanda
- ECCAS - Economic Community of Central African States, Libreville, Gabon
- ECOWAS - Economic Community of West African States, Abuja, Nigeria
- SADC - Southern African Development Community, Gaborone, Botswana
- UEMOA - West African Economic and Monetary Union, Ouagadougou, Burkina Faso
- WATRA - The West African Telecommunication Regulators Assembly

Regional Regulatory Associations in The Americas

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- CANTO - Caribbean Association of National Telecommunication Organizations, Port of Spain, Trinidad and Tobago
- CITEL - Inter-American Telecommunication Commission, Washington D.C., United States
- COMTELCA - Telecommunications Regional Technical Commission (Central America), Tegucigalpa, Honduras
- CTU - Caribbean Telecommunications Union, Port of Spain, Trinidad and Tobago
- ECTEL - Eastern Caribbean Telecommunications Authority, Castries, Saint Lucia
- OOCUR - Organisation of Caribbean Utility Regulators, Georgetown, Guyana, South America
- REGULATEL - Latin American Forum of Telecom Regulators

Regional Regulatory Associations in Arab States

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- AREGNET - Arab Regulators Network of telecommunications and information technologies, Algiers, Algeria
- EMERG - Euro-Mediterranean Telecom Regulators, Cairo, Egypt
- GCC - Gulf Cooperation Council, Riyadh, Saudi Arabia
- LAS - League of Arab States, Cairo, Egypt

Regional Regulatory Associations in Asia and Pacific

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- APT - Asia-Pacific Telecommunity, Bangkok, Thailand
- PITA - Pacific Island Telecommunication Association, Suva, Fiji
- SATRC - South Asian Telecommunication Regulators' Council, Bangkok, Thailand

REGULATORY ASSOCIATIONS @ ITU



REGULATORY ASSOCIATIONS @ ITU



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The screenshot shows the ITU website's navigation bar with the following menu items: ITU, General Secretariat, Radiocommunication, Standardization, Development, ITU Telecom, Members' Zone, and Join ITU. Below the navigation bar, the page title is "RAS @ ITU". The breadcrumb trail reads: YOU ARE HERE > HOME > ITU-D > REGULATORY & MARKET ENVIRONMENT > RAS @ ITU. The main content area is titled "Global Symposium for Regulators (GSR) - Regional Associations Meetings and outputs" and lists the following events:

- Nassau, The Bahamas, 12 July 2017 - Areas of collaboration focusing on affordable access to ICTs
- Sharm el-Sheikh, Egypt, 11 May 2016 - International mobile roaming (IMR)
- Libreville, Gabon, 8 June 2015 - how to create an enabling environment to enhance access to international fiber communications
- Manama, Bahrain, 2 June 2014 - Broadband Service
- Warsaw, Poland, 4 July 2013 -
- Colombo, Sri Lanka, 1 October 2012 - Future of regulators in the converged ICT sector, roaming and challenges of transnational regulation
- Armenia City, Colombia, 19 September 2011 - sustainability and financial support
- Dakar, Senegal, 9 November 2010 - Status and challenges of regulatory harmonization, International mobile roaming and Transition from analogue to digital broadcasting
- Beirut, Lebanon, 9 November, 2009 - Addressing 21st Century Regulation
- Dubai, United Arab Emirates, 4 February 2007 - Fostering a Global Network of Regional Regulatory Associations
- Hammamet, Tunisia, 13 November 2005 - Fostering a global network of Regional Regulatory Associations
- Geneva, Switzerland, 7 December 2004 - Capacity Building and Resource Mobilization
- Geneva, Switzerland - 7 December 2003 - The beginning

At the bottom of the page, there is a "FOLLOW US" section with social media icons for Twitter, Facebook, YouTube, LinkedIn, and Google+.

KEY RAs ACTIVITIES AND INITIATIVES



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Regional Regulatory Associations - Key Activities and Initiatives



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KEY RAS ACTIVITIES AND INITIATIVES:



- Usage in the digital Ecosystem
- ICT Infrastructure and Market Structure
- Tariffs and Affordability
- Institutional Framework

USAGE IN THE DIGITAL ECOSYSTEM

- BEREC - One year of enforcing Net Neutrality across Europe and moves forward on monitoring business markets
- EC - Digital single market: Bringing down barriers to unlock online opportunities
- ECTEL - Proposed Changes to the Universal Service Fund in the ECTEL Member States
- CITEL - Guide of best regulatory practices to combat fraud of subscription based television signals

ICT INFRASTRUCTURE AND MARKET STRUCTURE

- CANTO - Project: on Broadband Infrastructure and Public Awareness in the Caribbean
- CRASA - Infrastructure Sharing practices in the SADC and development of the SADC ICT and Broadcasting Infrastructure Sharing Guidelines
- CTU - Caribbean Regional Communications Infrastructure Programme (CARCIP)
- SADC - ICT & Telecommunication Infrastructure: Regional Infrastructure Development Master Plan

TARIFFS AND AFFORDABILITY

- COMTELCA - Promotion of affordable Internet Access in Latin America
- ECTEL - Retail Tariff Consultancy 2018
- CRASA - Regional Mobile Telephony Roaming Task Team
- ECTEL - Draft Mobile Electronic Communications (Roaming Services) Bill and Regulations

INSTITUTIONAL FRAMEWORK

- COMESA - Regional e-Government framework
- CTU - Caribbean ICT Roadshow

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ITU RESOURCES



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ITU Global Symposium for Regulators (GSR-18)

Regulatory Associations Meetings

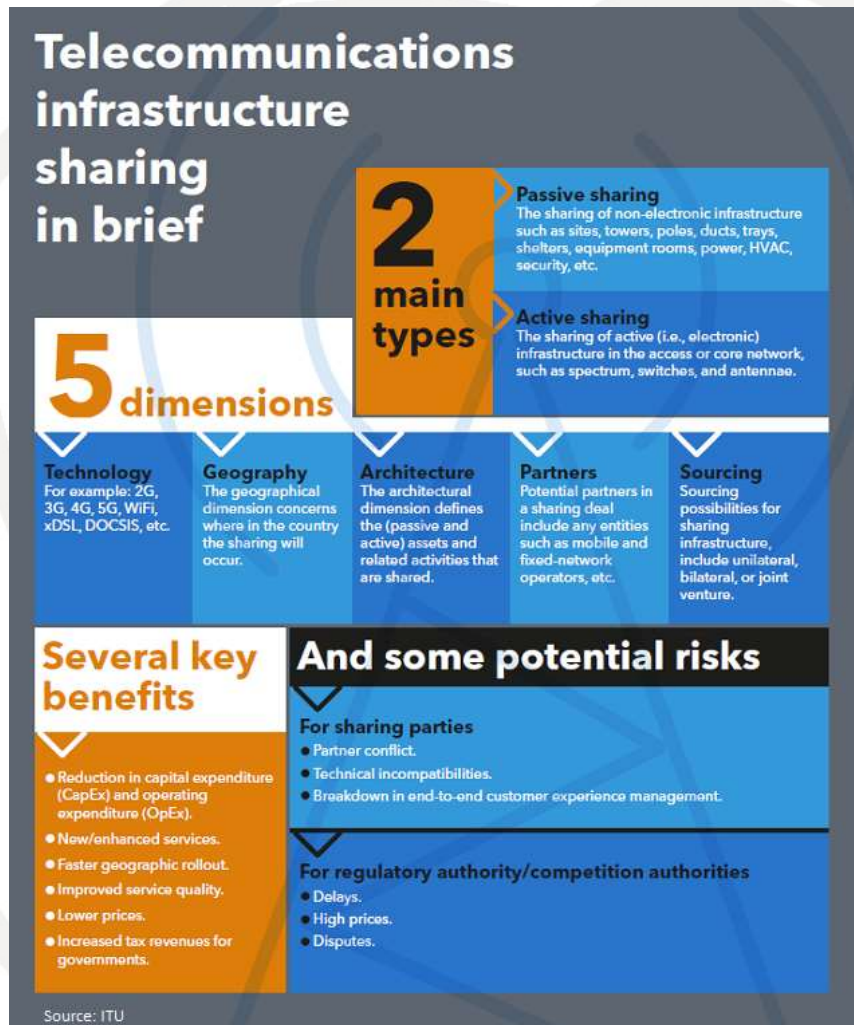
ITU-D Regulation Portals

ITU Telecommunication Development Bureau (BDT)
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Geneva, 10 July 2018



INFRASTRUCTURE DEVELOPMENT AND SHARING



The increase in telecommunication/ICT infrastructure development and sharing has allowed a more efficient roll-out of next-generation networks worldwide.

ITU is working on technical, economic, policy and regulatory research and collecting data on the evolution of infrastructure development worldwide.

ITU INFRASTRUCTURE DEVELOPMENT PORTAL



- Data and Analysis
 - ICTEye Database - Infrastructure Sharing data
 - *All About Infrastructure Sharing Brochure ITU 2018*

- ITU Interactive Broadband Maps
- Status of the transition to Digital Terrestrial Television Broadcasting : Data Miner
- Conformity and Interoperability
- Spectrum Management
- Broadcasting

ITU Infrastructure Development Portal

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The increase in telecommunication/ICT infrastructure development and sharing has allowed a more efficient roll-out of next-generation networks worldwide. ITU is working on technical, economic, policy and regulatory research and collecting data on the evolution of infrastructure development world-wide.

DATA AND ANALYSIS

Infrastructure development based on sharing offers numerous business opportunities with strategies designed to make the use of passive and active infrastructure more efficient and also contributes to lower prices for end-users.

Does infrastructure sharing result in lower prices for end-users?

Region	Yes	No	No data available
Africa	15	5	10
Arab States	6	3	5
Asia & Pacific	10	4	8
CIS	2	1	5
Europe	16	3	14
The Americas	8	6	14

Source: ITU, 2017

- ICTEye Database - Infrastructure Sharing data -2017
- Download the *All About Infrastructure Sharing Brochure ITU 2018* (soon available)

ITU INTERACTIVE TRANSMISSION MAPS

The Interactive Transmission Maps are a cutting-edge ICT-data mapping platform to take stock of national backbone connectivity (optical fibres, microwave links and satellite earth stations) as well as of other key metrics of the ICT sector.

Access to the ITU Interactive Transmission Maps

REGULATORY STRATEGIES FOR IS

- Achieving an enabling policy and regulatory framework conducive to infrastructure sharing.
- Identifying existing platforms (transmission and contribution networks) suitable for infrastructure sharing.
- Enabling competition in access networks and providing positive environmental impacts.
- Providing positive incentives to roll out to underserved and remote areas.
- Pricing should provide for the right incentives for investments in infrastructure (in a form of reasonable return on investment), but should not be used as an artificial barrier to entry for new market players.
- Improving quality of service (QoS), especially in the rural areas.
- Ensuring positive impact on the wholesale and retail information and communication technology (ICT) and broadcasting services prices.

- International Experiences

- Research and Activities
 - ITU Report on ICT Infrastructure Business Planning Toolkit
 - ICT and Infrastructure requirement for 5G
 - ITU Study Groups Work (e.g. ITU-D SG 1 Strategies and policies for the deployment of broadband in developing countries)

- Regulatory Strategies for Infrastructure Sharing

ALL ABOUT INFRASTRUCTURE SHARING 2018

All about Infrastructure Sharing 2018

The increase in telecommunication ICT infrastructure development and sharing has led to more efficient use of the generation network (GEN) network. Infrastructure sharing opportunities to expand and improve the use of GEN, which is more accessible and less expensive for digital transformation. It also includes the sharing of resources and best practices on research, development, testing, approval and implementation.

During our discussion at the ITU Global Spectrum for Regulators (GSR) 2018 and in the 2018 World Telecom Summit, we explored the importance of sharing resources, regulatory and policy, and the role of sharing practices in digital transformation. Regulatory and policy frameworks are key to ensuring the performance of networks and the quality of service for end-users. Such frameworks can contribute to lowering operating expenses for infrastructure providers and service providers.

ICT infrastructure is key to the growth of ICT and economic development. It is also the ICT infrastructure that is essential for the growth of the Sustainable Development Goals.

Regulatory and policy frameworks are needed by ITU and other stakeholders to ensure the quality of service for end-users. The framework provides an overview of the key issues and the implementation of the framework. It also includes a list of key issues and a list of key issues to be addressed to ensure the quality of service for end-users.

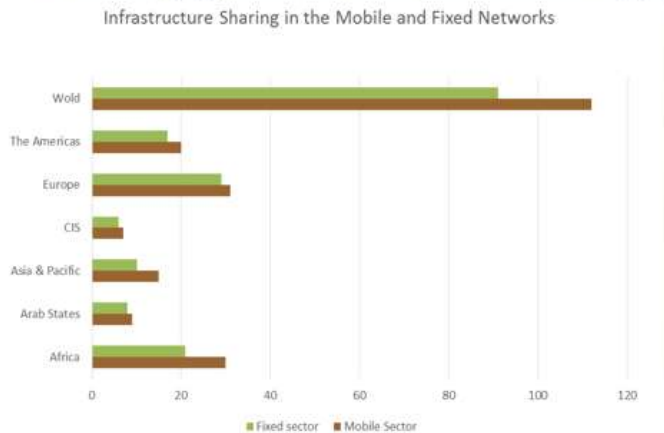
Stefano Riccio
Director of the ITU Development Bureau

For more information, visit <https://www.itu.int/ITU-T/infrastructure-sharing/>

For the full version of the report, visit <https://www.itu.int/ITU-T/infrastructure-sharing/>

Is infrastructure sharing practiced in your country?

Infrastructure sharing is more and more applied in all regions for both mobile and fixed networks. The ITU Survey shows that infrastructure sharing occurs more in the mobile (126 out of 140 countries applying) than the fixed sector (91 out of 112 countries applying).



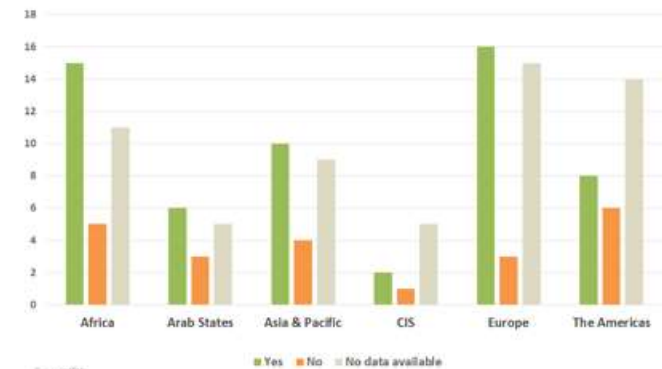
It is interesting to note that in mobile networks, infrastructure sharing is mostly based on commercial agreements rather than on a specific regulatory mandate.

Does infrastructure sharing result in lower ICT service prices for end-users?

In most countries, infrastructure sharing could result in lower prices for end-users, as shown in green in the graph.

However, several countries in all regions reported that data is not available or that NRAs do not monitor prices.

Does infrastructure sharing result in lower prices for end-users?





ITU INTERNATIONAL MOBILE ROAMING (IMR) PORTAL

As part of Mr Brahim Sanou, BDT Director's Initiative LET'S ROAM THE WORLD

IMR STRATEGIC GUIDELINES

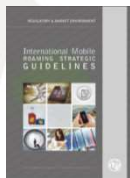


The IMR Strategic Guidelines were developed with inputs from stakeholders during the ITU Consultation Process (held during 2016 and 2017), including from regional regulatory associations (RAs), international organizations, consumer and private sector associations. The aim of this report is to build the foundation for harmonized guidelines around the world to improve the delivery of IMR services for the benefit of consumers, to reduce what are generally perceived as high mobile roaming retail prices, and to enhance efficiency and transparency of retail roaming prices and services.



"I am sure that these IMR Strategic Guidelines will become an important tool that enables all stakeholders to have a common understanding of the complexities of IMR to foster harmonized solutions at national regional and international level. We all need to continue working together to make ICTs even more affordable for all, including when roaming the world."

Mr Brahim Sanou, Director,
ITU Telecommunication Development Bureau (BDT)



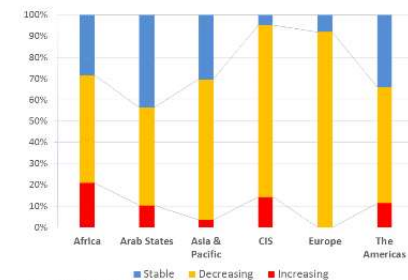
• [Download the ITU IMR Strategic Guidelines](#)

ALL ABOUT IMR 2018



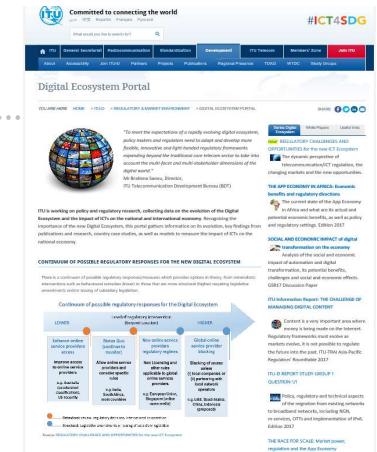
This brochure presents a quantitative analysis of data collected by ITU on international Mobile Roaming (IMR) regulatory and policies strategies, as well as a brief introduction to the future of IMR in particular on roaming for Internet of Things (IoT) and Machine-to-Machine (M2M) communications.

IMR VOICE, SMS & DATA Retail price, 2017



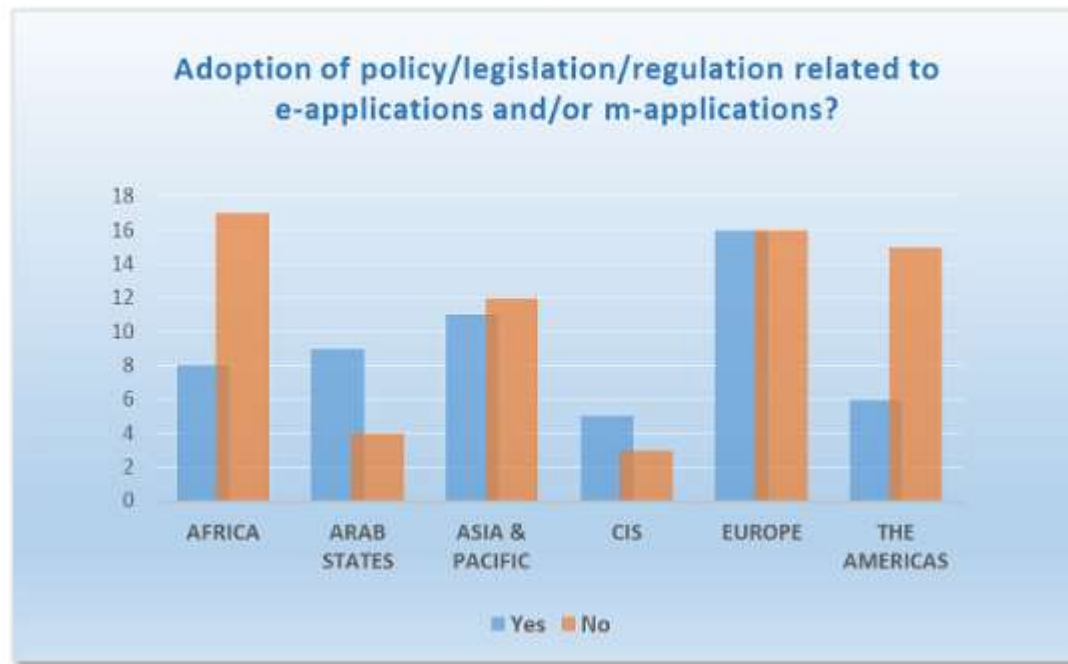
The trend for IMR voice and data retail prices, over the past three years, seems to be decreasing in all regions (yellow), as reported by NRAs. However, in Africa, 6 countries out of 28 have reported that IMR voice prices are still increasing. In Europe, 29 out of 32 countries reported that IMR prices decreased considerably, following the European Union (EU) IMR Directives.

ITU DIGITAL ECOSYSTEM PORTAL



ADOPTION OF SPECIFIC REGULATION

55 over 122 countries reported in 2016 the adoption of policies, regulation/legislation related to e-applications and m-applications and their relationship with and across other sectors of the economy.



Source: ITU Regulatory Survey 2016, ICTEye

QUALITY OF SERVICE (QoS) REGULATION PORTAL

QOS MANUAL

The QoS Regulation Manual serves as a one-stop shop for QoS regulation in ICTs. It refers to different standards and regulatory practices from various regions and countries worldwide. It is intended to be used as a guiding tool for telecommunication/ICT regulatory agencies or ICT Administration (e.g., ICT Ministry) in charge of Quality of service (QoS) and Quality of Experience (QoE) parameters and measurements, as defined by the ITU-T, as well as enforcement mechanisms.



CONTENT



2. Quality of Service (QoS) framework (technical)
3. QoS Regulatory Framework - Role of NRAs
4. Traffic Management
5. QoS Parameters and KPIs
6. Broadband QoS measurements
7. Economic principles of QoS regulation
8. Network neutrality and its regulation
9. Consumer Protection and Privacy
10. QoS enforcement
11. Conclusion and guidelines

EVENTS AND TRAINING

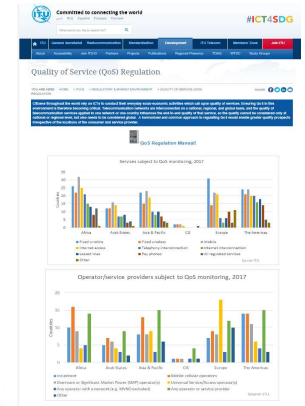
Training:

ITU Academy: Quality of service training programme



RESOURCES

- SADC QoS country experiences (2017)
- WATRA QoS country experiences (2017)
- BEREC [guidelines](#), [NN regulatory assessment methodology \(2017\)](#)
- ITU-T Study Group 12 on Performance, QoS and QoE ([Work Programme](#))
Technical [Recommendations](#)





Global ICT Regulatory WORLD Outlook 2017

The ITU Global Initiative on International Mobile Roaming (IMR) and the ITU IMR Resources Portal
A new landmark publication of ITU released!



GSR

Since its launch in 2000, the annual Global Symposium for Regulators (GSR) provides a unique venue for regulators and policy-makers from both developed and developing countries to meet and exchange views and experiences. The meeting fosters an open dialogue between regulators and industry.

- [GSR18: New Regulatory Frontiers](#)
8-12 July 2018, Geneva, Switzerland
- [GSR17: Living in a World of Digital Opportunities](#)
11-14 July 2017, Nassau, Bahamas
- [GSRs Best Practice Guidelines and documents](#)

ONLINE TOOLS

We have designed and are constantly enhancing a series of resource and collaborative platforms for regulators, policy makers and the broader audience.

- [ICT Regulatory Tracker](#) **NEW!**
- [Digital Ecosystem portal](#)
- [QoS Regulation portal](#)
- [International Mobile Roaming Resources](#)
- [ICT Regulation Toolkit](#)
- [ICT Eye](#)
- [ITU ICT Regulatory Decisions Clearinghouse, ICTdec](#)
- [G-REX, the Regulators' Exchange](#)

PUBLICATIONS & STUDIES

We produce a number of flagship reports including [Trends in Telecommunication Reform](#) focusing on best practice regulation to enable ubiquitous broadband markets to thrive. Various thematic studies provide valuable viewpoints and strategies on multiple issues that affect regulation and economics in a converged broadband world.

- [Trends in Telecommunication Reform Series](#)
- [ITU Thematic Reports Series](#)
- [Publications on Economics & Finance](#)
- [EUIPO-ITU Report: The economic cost of IPR Infringement in the Smartphones Sector](#)
- [Global ICT Regulatory Outlook 2017](#) **NEW!**
- [Other publications](#)

SURVEYS

In order to build an extensive knowledge base, inform analysis, and facilitate decision making, we conduct annual surveys on the most pressing issues in the area of ICT policy, regulation and finance.

- [ITU Telecommunication/ICT Regulatory Survey](#)
- [ITU Tariff Policies Survey](#)

About us

Quick links

The main purpose of our work is to provide the tools for an effective policy, legal and regulatory environment for the ICT sector.

- We convene global and regional forums to discuss global trends in regulation for Sector Members and other national and international stakeholders, through organizing the Global Symposium for Regulators (GSR) as well as strategic dialogues on topical policy, legal, regulatory, as well as on economic and financial issues and market developments.
- We provide data, research and analysis and tools to support our members in defining, elaborating, implementing and reviewing transparent, coherent and forward-looking strategies, policy, legal and regulatory frameworks as well as in moving towards evidence-based decision-making.
- We provide knowledge exchange tools and platforms to enable inclusive dialogue and enhanced cooperation to help countries achieve a more inclusive information society and to raise national and regional awareness about the importance of an enabling environment.
- We provide direct assistance to countries and regions on an enabling environment for smart connected societies.

HIGHLIGHTS

ICTEYE

Events

Links

- [ITU Regional Economic Dialogue of Telecommunications/ICTs](#)
Mexico DF, Mexico
4-6 September 2018
- [ITU Capacity Building Programme on Quadplay: Costing and Pricing of Infrastructure Access for Arab Region](#)
Rabat, Morocco
9-12 July 2018



International Telecommunication Union

Committed to connecting the world