





GLOBAL
ICT
REGULATORY
TRENDS

THE 5TH GENERATION OF REGULATION TRENDS IN ICT POLICY & REGULATION DEVELOPMENT OF NEXT GENERATION ACCESS NETWORKS MARKET ANALYSIS AND PRICE REGULATION NEW CHALLENGES IN USER PROTECTION NETWORK SAFETY AND INTEGRITY

Agency for Electronic Communications and Postal Services of Montemagns ESFR

ITU Regional Initiative for Europe on Development of Broadband Access and Adoption of Broadband



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- Digital economy comes of age
- Regulation serves as the interface between governments, investors, service and content providers, and consumers
- New market realities call for new regulatory approaches and tools
- Challenges and opportunities go hand-in-hand and ICT regulators are under pressure to make the most of it



# CHANGING PATHS OF THE ICT REGULATOR, REGULATION AND MARKETS

Source: ITU.







## 1 - Holistic regulation to support market transformation

- > Focus of ICT regulation widens
- Convergence blurs boundaries
- > Pace of ICT markets accelerates
- > Technology and business innovation drives transformation across the board

Source: ITU.





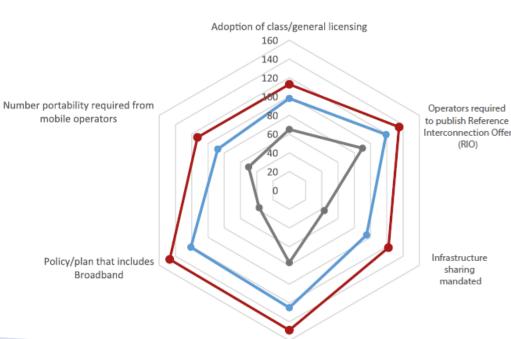


# 2 - Pace and volume of regulation are increasing

- Core regulatory areas still require attention
- New challenges queuing up to accelerate market movement and pace of regulation
- Compromises and trade-offs along the way
- Seeking consensus about most appropriate regulation... or no regulation at all
- > Hands-on vs hands-off

Evolution of regulatory regimes in the ICT sector, worldwide

**2007 2011 2015** 



Individuals allowed to use VoIP

Source: ITU.



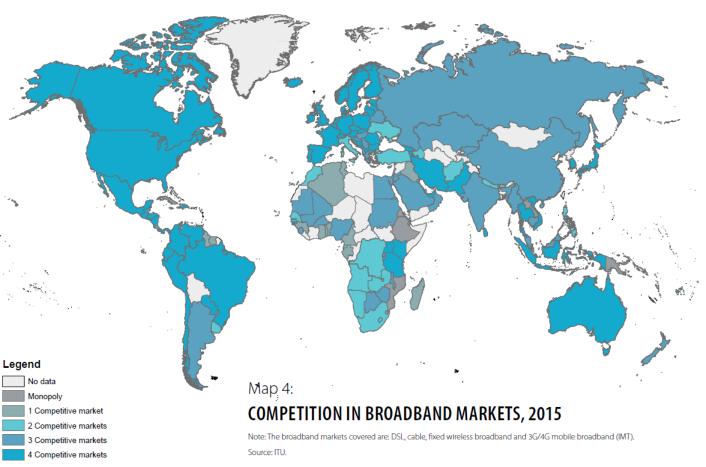
Not enough for ICT regulators to 'go with the flow'. They have to acquire new skills in new areas as newer technologies emerge





# 3 - Regulation as an equalizer

- Competition policy and regulatory frameworks helped drive innovation and growth – regulators have at hand a wide array of investment incentives
- Countries that opened up broadband markets saw more rapid service penetration
- Clear and open regulatory frameworks facilitate the adoption and take-up of new services and applications



Regulation creates more vibrant ICT markets.

The more opened up the broadband market, the more consumers are connected and more rapidly.

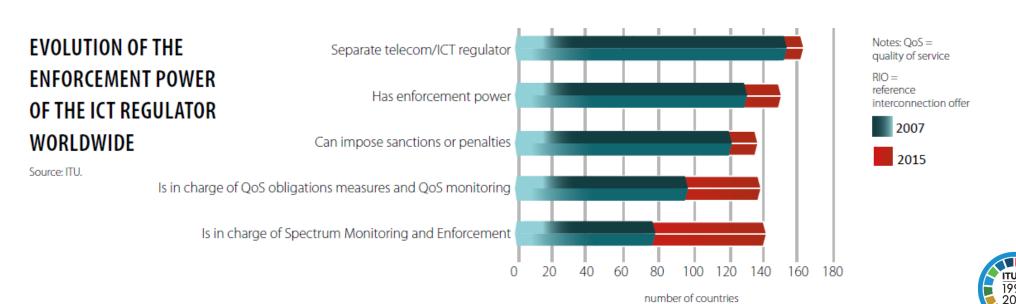






## 4 - Focus moves to monitoring and enforcement

- Regulatory monitoring over ICT networks reinforced in interconnection, infrastructure sharing, QoS
- OTTs, OSPs have become enforcement priority without clear rules or specific tools for enforcement
- Issues like taxation of global players and quality of information on social media have given rise to passionate global debate







## 5 - Convergence, divergence

#### TOPICAL ISSUES AT STAKE AND REGULATORY INTERVENTION

Note: This list is indicative and not exhaustive.

Source: ITU.



Many ICT regulators have addressed	Some regulators have addressed	Some ICT regulators are looking into		Issues on ICT regulators' horizon
<ul> <li>Competition</li> </ul>	<ul> <li>Privacy &amp; data protection</li> </ul>	OTTs/OSPs	•	Autonomous driving car
<ul> <li>Licensing</li> </ul>	Net neutrality	<ul> <li>e/m-applications</li> </ul>	•	Blockchain
Price regulation	Spectrum trading	Digital financial services	•	Electronic currencies (e.g., bitcoin)
<ul> <li>Interconnection</li> </ul>	Structural separation	Internet of Things	•	Automated Electronic Trading
Number portability	<ul> <li>ICT accessibility</li> </ul>	Cloud computing		Counterfeiting

- Established regulatory practices in competition, licensing, interconnection etc. converge
- Existing regulation challenged no clear, single regulatory pattern to follow
- New issues constantly emerging

- Regulation in disrupted areas will likely lead regulators off beaten path
- > To regulate or not to regulate and how?
- ➤ Global issues needing action from international community

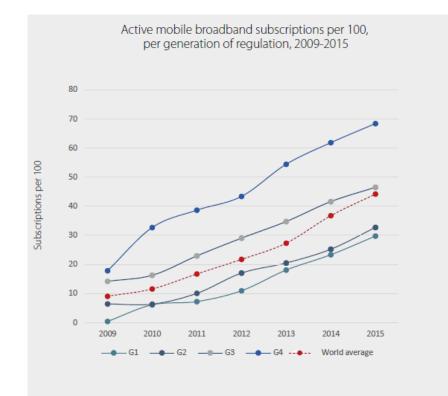






## 6 - Good regulation has impact

- Good regulation was proven to have positive impact on mobile cellular, mobile-broadband and fixed broadband penetration
- Analysis demonstrates just how crucial the role of good regulatory frameworks is:
- ➤ The most advanced countries in terms of ICT regulation, those in the 4th generation of regulation, outperform everyone else by far with almost 70 per cent mobile broadband penetration in 2015 compared to a world average of 44 per cent
- ➤ Countries with less sound regulatory frameworks, those in the 1<sup>st</sup> and 2<sup>nd</sup> generation, are falling further behind the world average



# EVOLUTION OF MOBILE BROADBAND, PER GENERATION OF REGULATION, 2009-2015

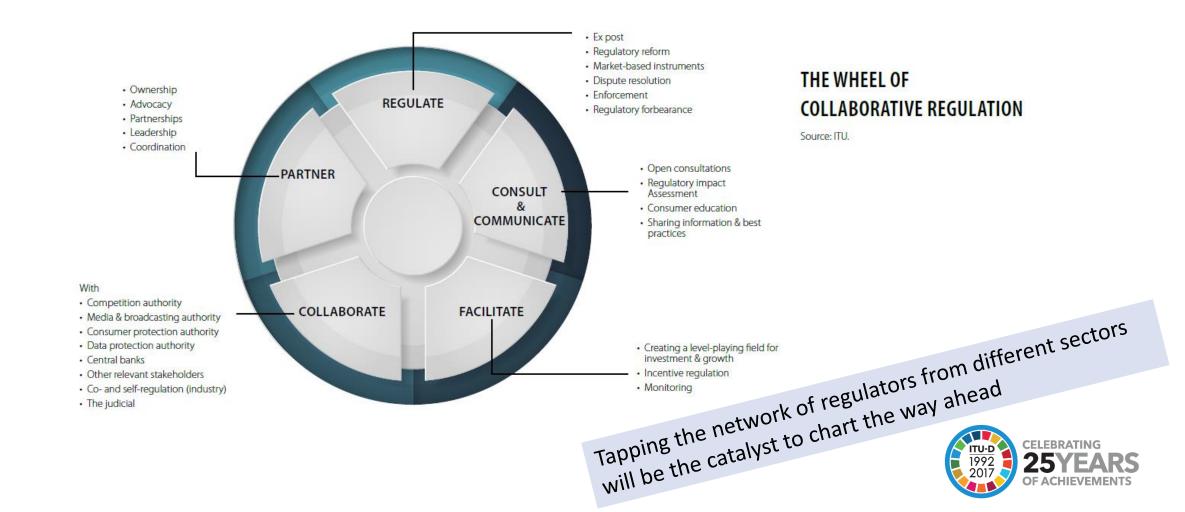
Note: Values represent the average mobile broadband penetration of countries in the respective generation.

Source: ITU.





## 7 - Collaborative regulation fast-track for digital economy







GLOBAL ICT REGULATORY

0UTL00K 2017

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Tracker by Country	Country Card	Tracker by Region	Comparison Map	Generations of Regulation	
Select an option					
ICT Regulatory	Fracker 2015				•
Cluster	C1: Regulatory Authority	C2. Regulatory Mandate	C3. Regulatory Regime	C4. Competition Framework	Overall Score
Max Score:	20	22	30	28	100
Country					
Afghanistan	13.00	20.00	22.00	16.67	71.67
Albania	18.00	17.00	26.00	21.00	82.00
Algeria	18.00	17.00	18.00	11.00	64.00
Andorra	4.00	9.00	10.00	0.00	23.00
Angola	17.00	20.00	18.00	10.67	65.67
Antigua & Barbuda	8.00	11.50	10.00	15.33	44.83
Argentina	18.00	20.00	23.00	28.00	89.00
Armenia	19.00	16.50	15.00	28.00	78.50
Australia	18.00	19.50	28.00	27.00	92.50
Austria	18.00	16.50	28.00	27.00	89.50

Itu.int/go/tracker





### **Digital Economy**

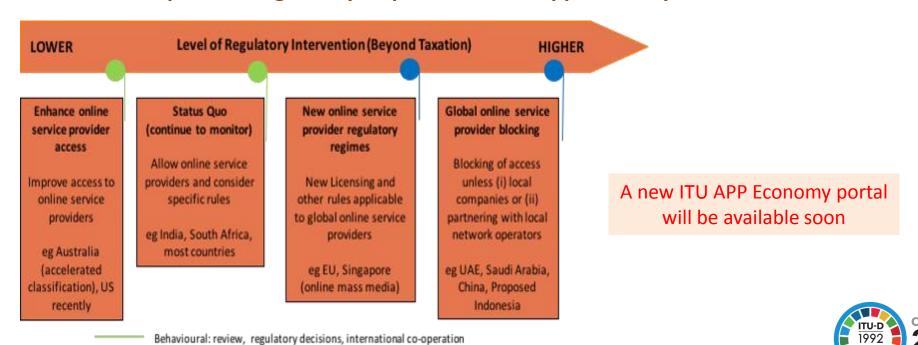


#### ITU is working on the App Economy from the point of view of:

- ✓ New Business Models
- ✓ The dynamic perspective of Telecommunicating/ICT regulation in the changing markets and new opportunities
- ✓ Socio-economic impact of the App Economy
- ✓ Region/countries case studies (e.g. Africa)

#### Continuum of possible regulatory responses on the App Economy

Structural: Legislative amendments or issuing of subsidiary legislation



Source: ITU





## **QoS Regulation Manual**



#### A one stop shop reference manual for regulators and market players

- QoS framework from a technical perspective, drawing from the work done by ITU-T on QoS standardization (ITU-T Study Group 12)
- QoS regulatory framework and the role of National Regulatory Authorities (NRAs) in addressing QoS
- Traffic management, QoS parameters and Key Performance Indicators (KPIs)
- Broadband QoS measurement, examining different measurement tools and platforms. The economic principles for QoS regulation
- Network neutrality and its regulation worldwide
- Consumer protection and privacy aspects
- QoS enforcement
- Good practices
- Country case studies

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Regulatory and Market Environment

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Global ICT Regulatory
Outlook 2017

A new landmark publication of ITU released

A new landmark publication of ITU released

Find a launch in 2000, the annual Global Symposium for Regulatory (GSR) provides a unique venue for regulations and gology-markers from bride developed and developing countries to mater and exchange views and developed and developing countries to mater and exchange views and developed and developing countries to mater and exchange views and developing countries to mater and exchange views and developed and developing countries to mater and exchange views and developed and developing countries to mater and exchange views and developed and

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To be released in October 2017, free of charge!



#### #ICT4SDG



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#### LET'S ROAM THE WORLD - ITU International Mobile Roaming (IMR) Resources Portal

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During the last several years significant policy and regulatory actions have taken place to tackle the problem of high International Mobile Roaming (IMR) service prices at national, regional and international level. The aim has been to reduce what is viewed as excessively high mobile roaming retail prices but also to find longer term solutions to introduce competition in this market.

Recognizing the importance of this key issue, this portal gathers information on all the activities done by ITU in this area as well as about activities and initiatives done by Regulatory Associations, Regional and International Organizations and other stakeholders. It also highlights key findings from ITU Publications, studies, research, ITU Study Groups, and data and analysis on IMR from the ITU ICT Eye.

Following the success of the ITU Global Dialogue on International Mobile Roaming (IMR), that took place at the ITU Headquarters in Switzerland (18 September 2015), as part of the LET'S ROAM THE WORLD Initiative launched in 2015 by Mr Brahima Sanou, Director of the ITU Telecommunication Development Bureau, ITU organized the IMR

Consultation Meeting on International Mobile Roaming held in Geneva from 15 to 16 September 2016, The objective of this Consultation was to bring together Regulatory Associations, Regional and International Organizations, Consumer Associations and Private Sector Associations to discuss and collaborate on defining the building blocks for International Mobile Roaming (IMR) Strategic Guidelines.

INTERNATIONAL ACTIVITIES/INITICIATIVES

**Body of European Regulators of Electronic** 

. BEREC adopts Guidelines on the Wholesale Roaming

Communications (BEREC)

#### RECENT ITU ACTIVITIES ON ROAMING

- · A Case Study of ONA: East Africa One Network Area Roaming Initiative - 2016
- ITU-T Recommendation D.97 on methodological

More ITU-D

- · 'Roam-like-at-home': EU moves closer to ending roaming charges, by ITU News. (June 2017)
- The Republic of Korea moves to scrap monthly mobile service charges - fees which have historically been a key driver for telecoms' industry profitability due to mounting consumer pressure. (June 2017)
- · Finland's telcos are seeking a one-year stay from impending EU-wide roaming charges (June 2017)
- . Roaming in Cuba: AT&T is the latest US telco to sign a roaming agreement with ETECSA for voice, texts and data (August 2016)
- . Kenya: Safaricom Drops Roaming Charges by Up to 99% (July 2016)
- . EU First results of the roaming public consultation (March 2016)
- FU New rules on roaming charges and open Internet (October 2015)
- · Bilateral agreement between Belgian and Luxembourg telecoms regulators (April 2015)
- . GSMA GSM Roaming and Coverage Maps
- · African Union (AU) International Mobile Roaming Guidelines (September 2013)
- . APT Working Group Report on IMR (May 2012)
- Trans-Tasman mobile roaming joint Australia-New Zealand IMR investigation
- . Ofcom's website on IMR for UK consumers

#### LET'S ROAM THE WORLD INITIATIVE

This initiative was launched by Mr Brahima Sanou,

### Let's roam the world

- > BDT Director's Let's Roam the World Initiative;
- > ITU-D IMR Portal for research, data and analysis related to IMR
- > IMR Strategic guidelines coming soon









# GSR-17 Living in a World of Digital Opportunities









Regulators were invited to identify innovative and collaborative policy, regulatory and business measures needed to lift the barriers and achieve affordable access to the digital world in the following areas:

- Infrastructure and connectivity: innovative measures at the international, national and local levels
- Consumer access: to ICT services (subscription, plans, platforms and apps) and devices (smartphones, tablets, computed-based, etc.)
- Market and business opportunities: market access, sustainable models, cross-sectoral approaches and economic incentives
- Funding and financing: private funding, partnerships, public financing and regulatory incentives to support affordability and sustainability in uneconomic markets.







## **Key themes**

- I. Strengthening the regulatory foundation for affordable access to digital services
- II. Further adapting and scoping incentives for delivering digital services
- III.Next-generation incentives for affordable digital services







# I. Strengthening the regulatory BUENOS AIRES 2017 foundation for affordable access to digital services

Recognizing the transformative power of regulatory instruments for reducing the cost of ICT infrastructure deployment and the adoption of end-user services, we reiterate their relevance and call for strengthening and further streamlining rules and practices. We recall and reconfirm the importance of such measures and incentives, as iterated in the GSR best practice guidelines from previous years.







# II. Further adapting and scoping BUENOS AIRES 2017 incentives for delivering digital services

Building on the foundation of such widely-recognized practices, we furthermore call for recalibrating current regulatory paradigms for the digital markets of the future keeping in mind that the affordability of digital services depends on multiple factors related to their infrastructure, cost, resale and provision.

Governments and regulators should do more to address the affordability and use of digital services by promoting policies and regulatory measures









# III. Next-generation incentives for affordable digital services

We believe it's important that today's fastevolving markets – rich in innovative digital technologies, products and services – continue to thrive and grow.

We further reiterate that an open, collaborative approach to regulation can go a long way towards addressing affordability of digital services.

Regulators from all sectors where digital services have become available need to cooperate proactively.







#### **GSR17** Best Practices Guidelines

Consultation and BPG Available at: <a href="http://www.itu.int/en/ITU-D/Conferences/GSR/Pages/GSR2017/GSR-17-Consultation.aspx">http://www.itu.int/en/ITU-D/Conferences/GSR/Pages/GSR2017/GSR-17-Consultation.aspx</a>





## **GSR18**

# **Geneva, Switzerland**





# Theme: **Exploring new** regulatory paradigms in a digital economy

**Dates: 9-12 July 2018** 

