## UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT

Multi-year Expert Meeting on

## TRADE, SERVICES AND DEVELOPMENT

Geneva, 15-17 April 2014

#### **SESSION 1:**

TRENDS IN INFRASTRUCTURE SERVICES SECTORS

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## Trends in ICT services & regulation

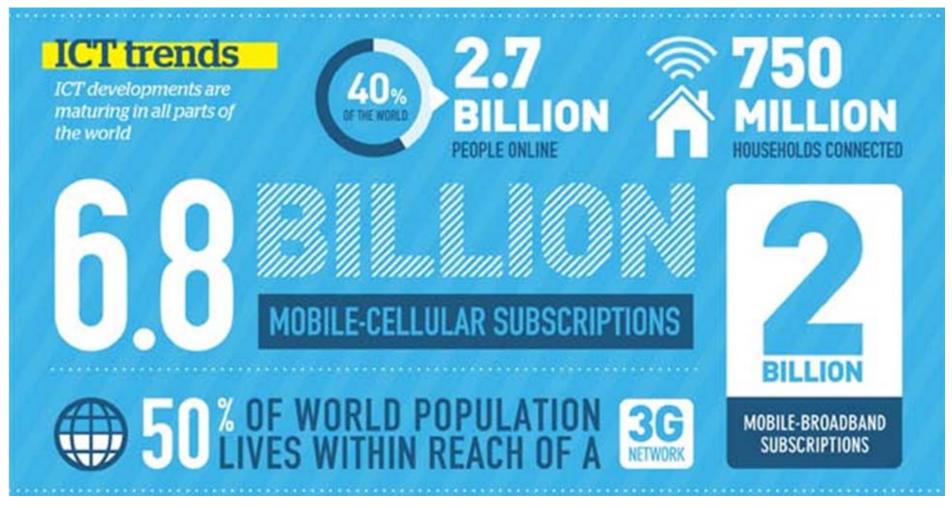
Multi-Year Expert Meeting on Trade, Services and Development, UNCTAD, Geneva, Switzerland 15-17 April 2014

**Youlia Lozanova** 

Telecommunication Development Bureau (BDT)



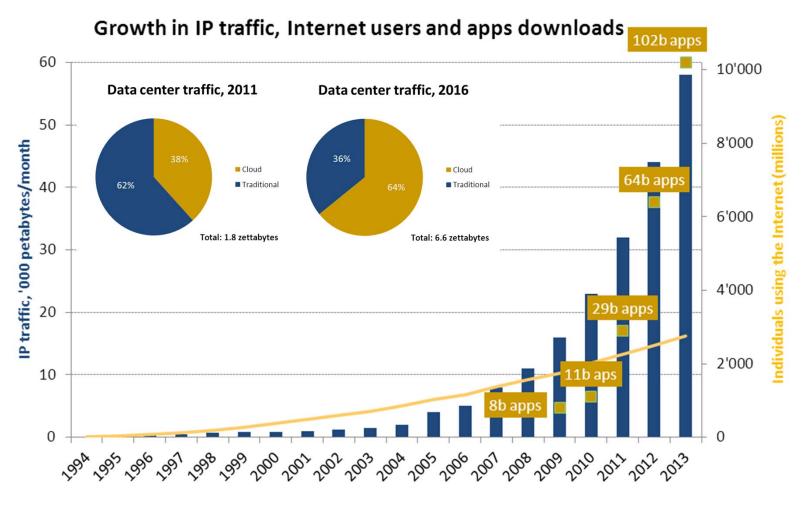
## **Trends in ICT markets**



Source: ITU.



## The sky is the limit



Source: ITU, Trends in Telecommunication Reform 2013: Transnational aspects of regulation in a networked society

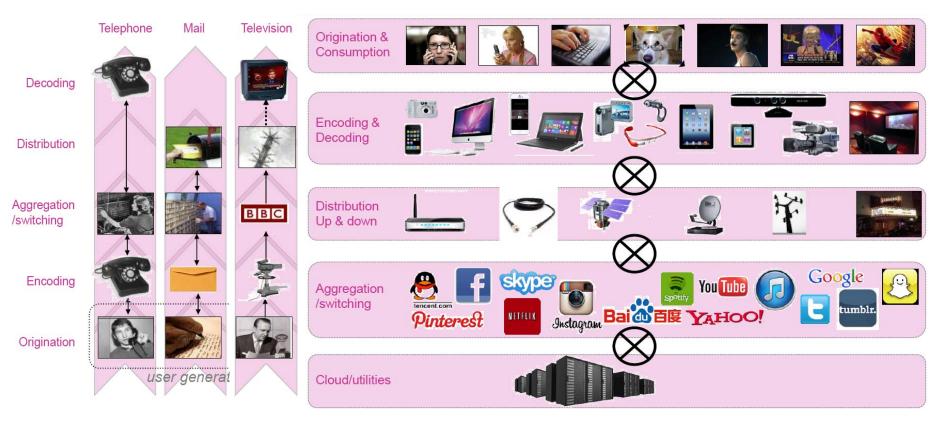
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## ICT industry: past & present

#### **Past: vertical**

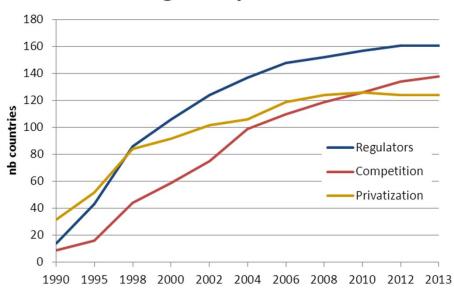
#### **Present: horizontal**



Source: The Boston Consulting Group.

## Shaping markets, creating opportunities

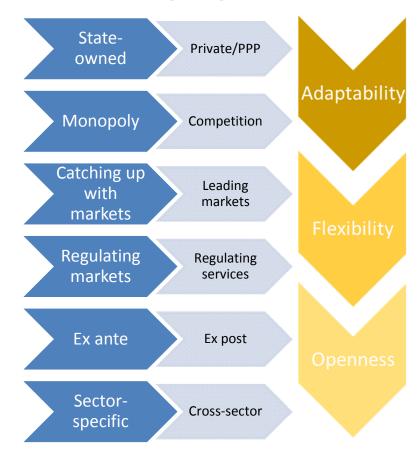
#### **Regulatory trends**



#### In 2013, there were:

- 161 national ICT regulators
- 124 competitive ICT markets
- 123 private/ized incumbents

#### **Evolving regulation**

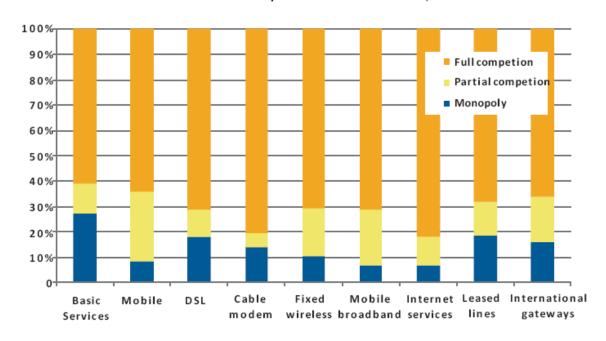


Source: ITU.

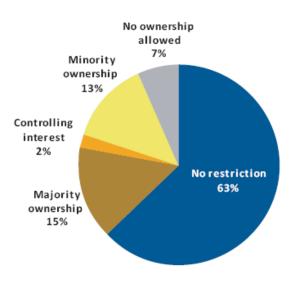


## **Competition**

#### Level of competition in ICT markets, 2013



#### Foreign ownership in the ICT sector, 2013

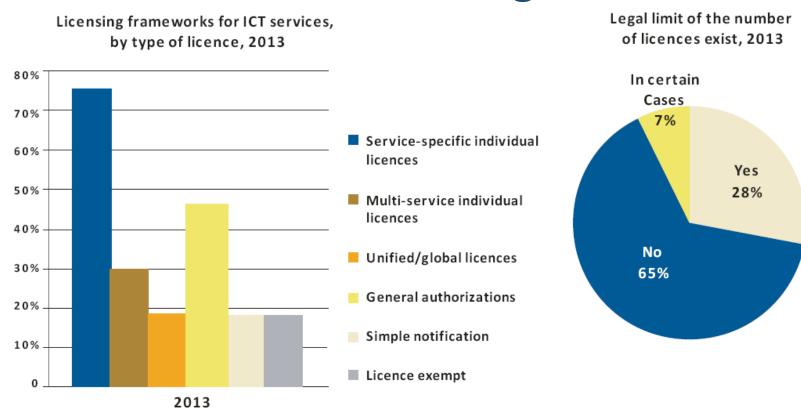


Source: ITU, Trends in Telecommunication Reform Special Edition (2014)

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## Licensing



Source: ITU, Trends in Telecommunication Reform Special Edition (2014)

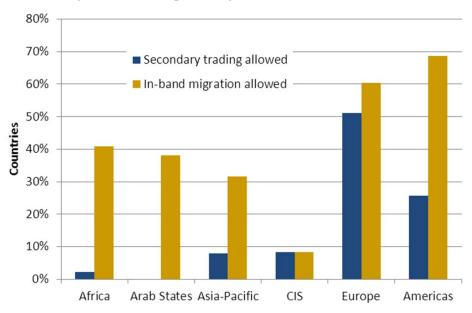


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## **Need for more spectrum**





Source: ITU ICT Eye, www.itu.int/icteye

#### **Issues**

- Scarce resource
- Growing demand
- Competitive interests

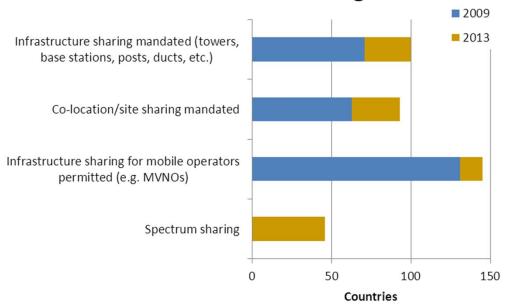
#### **Regulatory response**

- Technology neutrality
- New licensing schemes
- Differentiated geographical approach
- Market-based mechanisms

### International Telecommunication

## **Sharing**

#### Infrastructure sharing



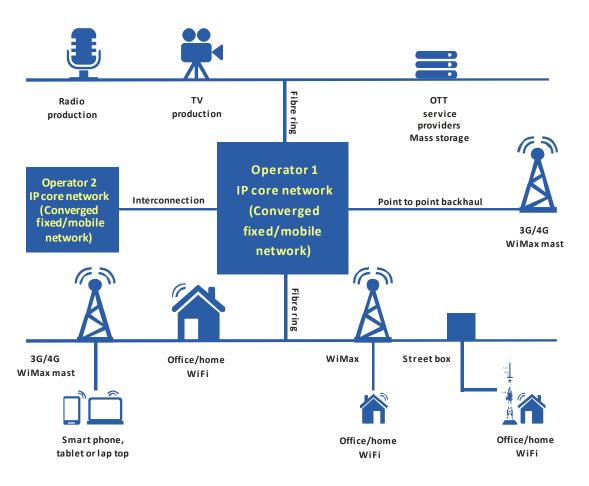
Source: ITU ICT Eye, www.itu.int/icteye

#### Why share?

- Makes economic sense
- Allows for leverage available resources
- Intensifies intra-modal competition
- Gives rise to new business models
- Attention to be given to investment incentives
- Share with other utilities: a win-win scenario



## Regulatory challenges in the digital age

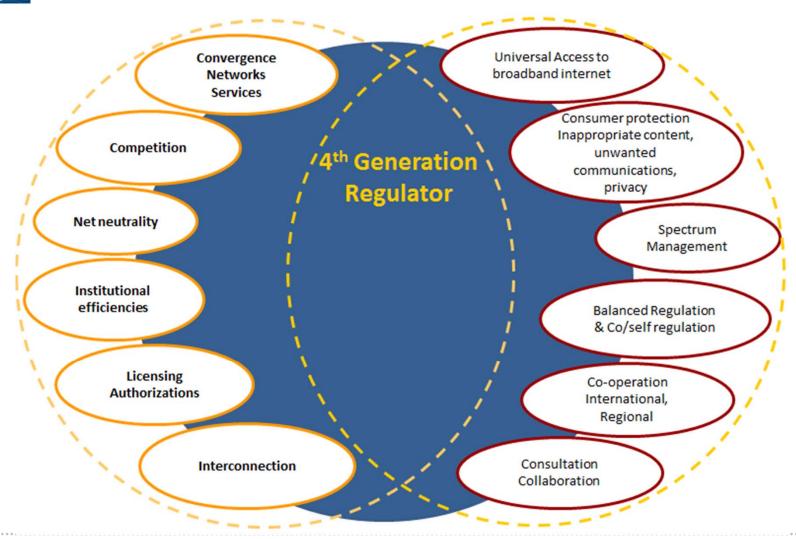


Source: ITU, Trends in Telecommunication Reform Special Edition (2014)

- Secure sufficient investment
- Maintain a levelplaying field
- Universal access
- ✓ Anti-trust policies
- Cybersecurity & data protection
- Interconnection
- ✓ Interoperability
- ✓ Net neutrality
- ✓ Transition to IPv6
- Innovation
- ✓ Content regulation



## **Regulation 4.0**





#### **Broadband Plans**

Legislation

Legislators
Judiciary
Law enforcementAgencies
Police

Ministry of internal affairs
Other Ministries

Policy Ministry of ICT/ Communications Regulation

ICT regulator
Data protection agency
competition agency

CIRTs/CERTs
END International &
USERS regional organizations

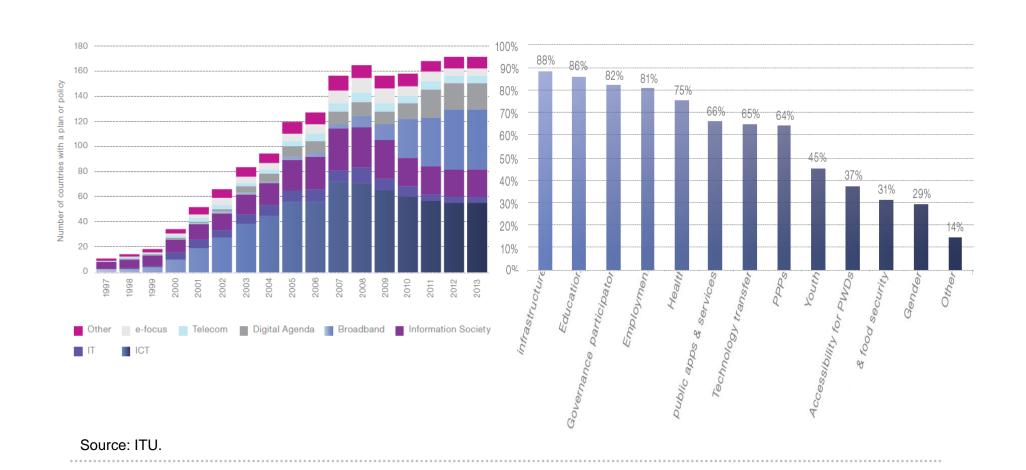
**Operations** 

Network& service providers Vendors Research institutes Standardization organizations

Source: ITU.



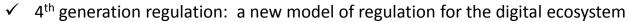
## **Changing Focus of Broadband Plans**





## **ITU Reports**

#### **Trends in Telecommunication Reform Special edition**



- ✓ White spaces: managing spaces or better managing inefficiencies
- ✓ Interconnection charging models in a national broadband network environment
- Digital broadcasting and online content delivery
- ✓ Digital transactions in today's smart society
- ✓ The Need for More IP Addresses

www.itu.int/trends-special



## Trends in Telecommunication Reform 2013: Transnational aspects of regulation in a networked society

- ✓ Net neutrality: a regulatory perspective
- Spectrum policies in a hyperconnected digital mobile world
- ✓ International roaming services: a review of best practice policies
- ✓ Global and regional IP interconnection

#### **Broadband Thematic reports in 2013:**

- Developing successful Public-Private Partnerships to foster investment in universal broadband networks
- Competition and regulation in a converged broadband world



- Strategies for the deployment of NGN and NGA in a broadband environment – regulatory and economic aspects
- ITU Study on Taxing telecommunications/ICT services: an overview
- Regulating broadband prices





# Thank you! youlia.lozanova@itu.int