The Regulator's Role in Meeting Socio-Economic Goals
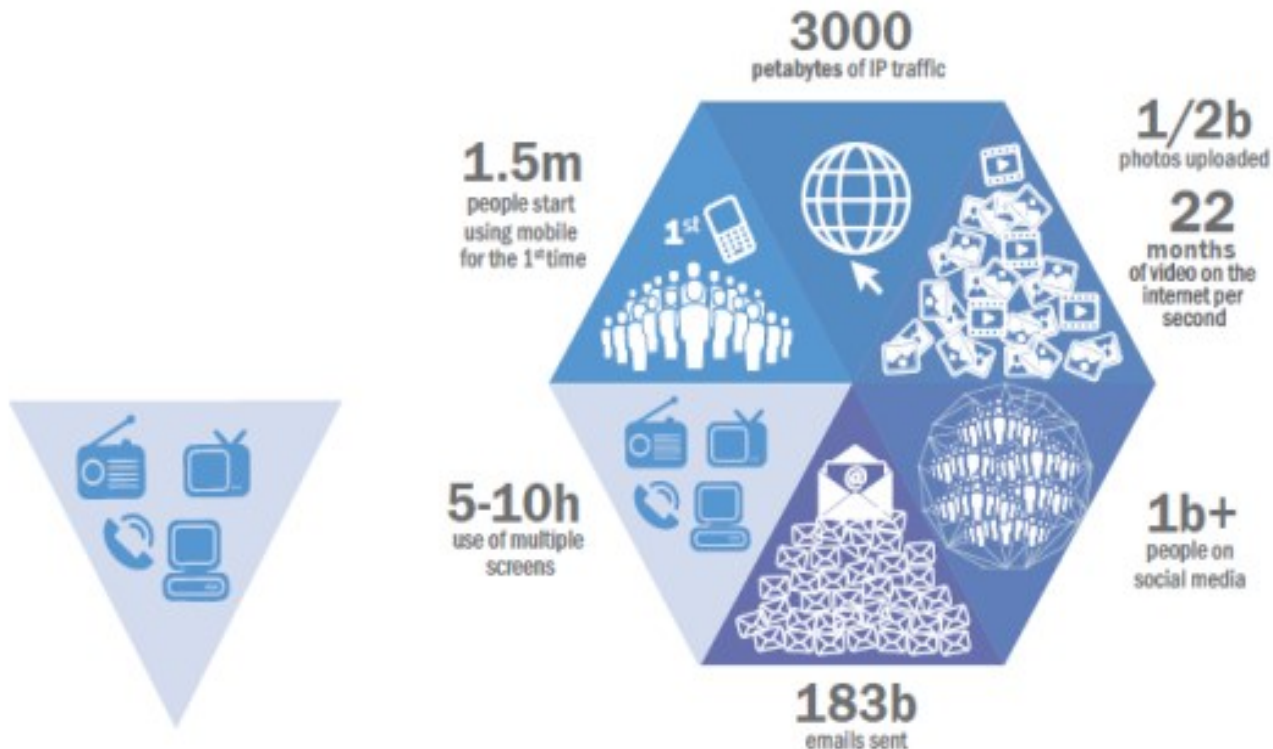
Kemal Huseinovic
Chief, department of Infrastructure, Enabling Environment and E-Applications
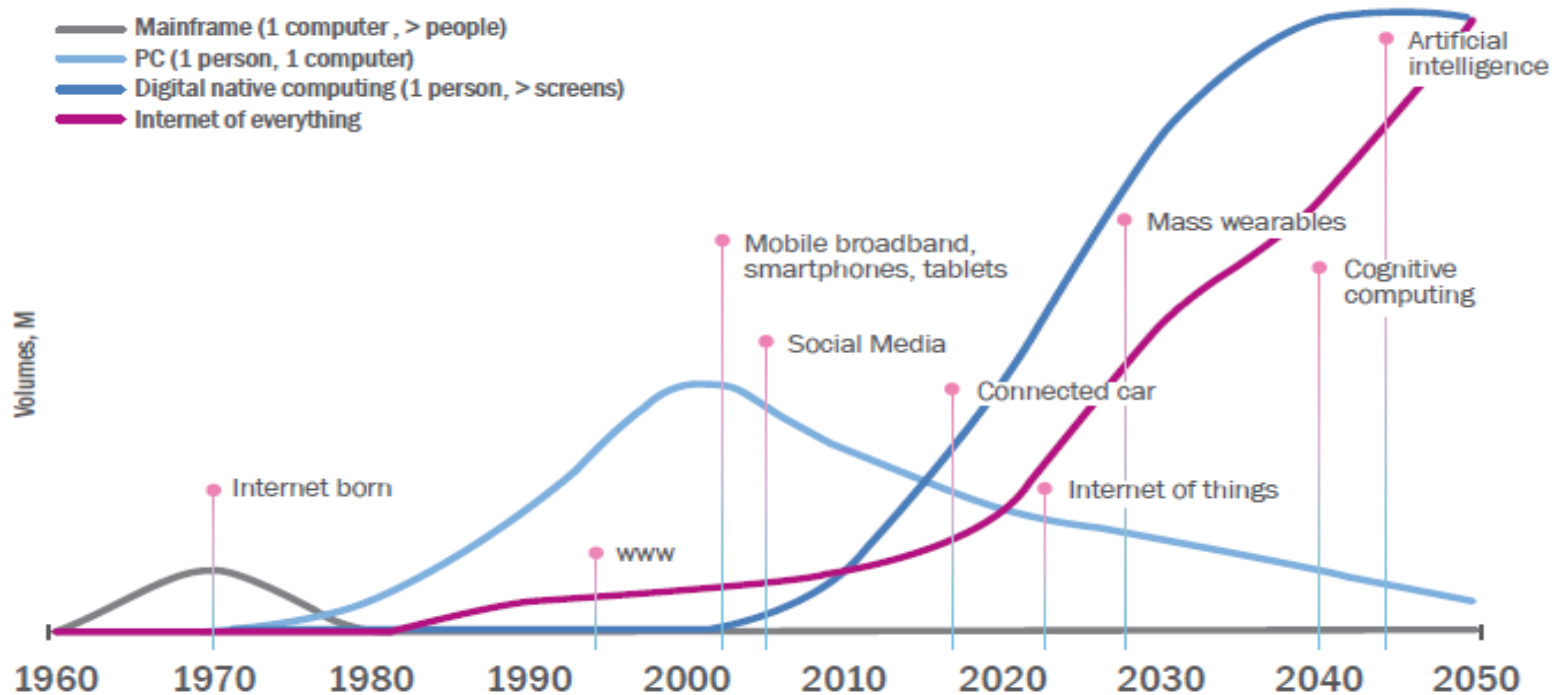ITU Telecommunication Development Bureau (BDT)

A typical day in the digital world

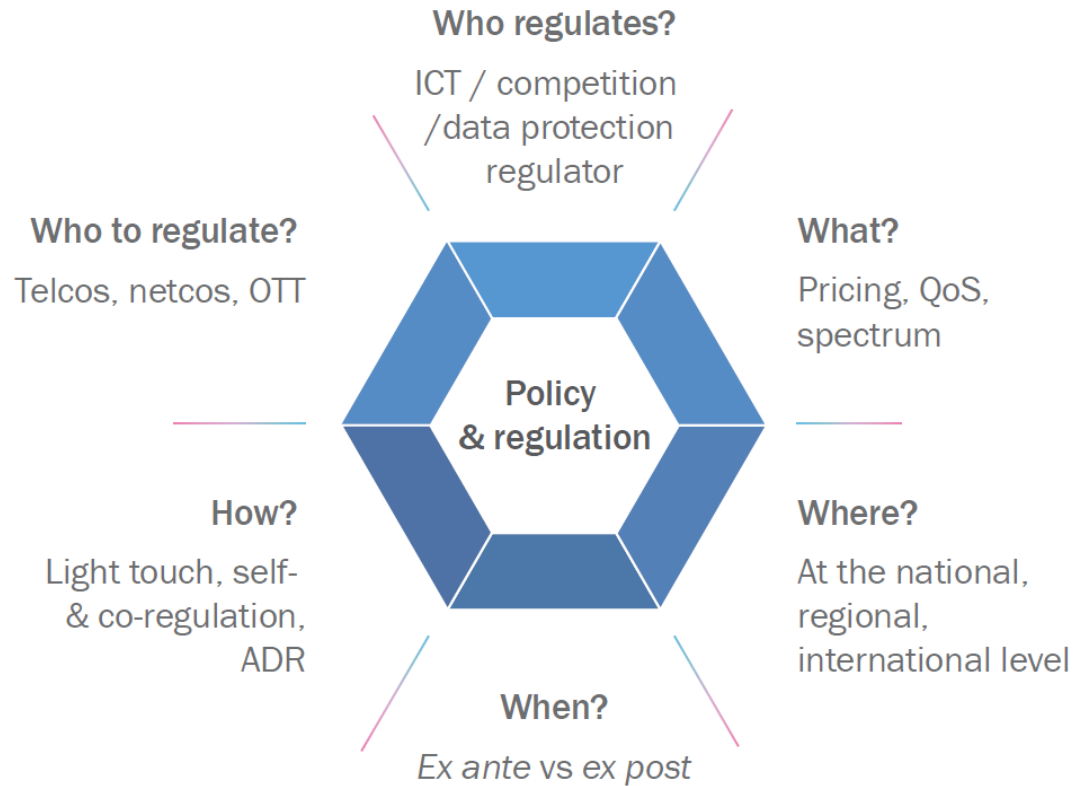1994 → 2014

3000 petabytes of IP traffic

1/2b photos uploaded

1.5m people start using mobile for the 1st time

22 months of video on the internet per second

5-10h use of multiple screens

1b+ people on social media

183b emails sent

Source: ITU.

History of the Future

One to many to any: ICTs from happy few to the masses

Legend:
- Mainframe (1 computer, > people)
- PC (1 person, 1 computer)
- Digital native computing (1 person, > screens)
- Internet of everything

Volumes, M

Labels: Internet born, www, Mobile broadband, smartphones, tablets, Social Media, Connected car, Internet of things, Mass wearables, Cognitive computing, Artificial intelligence

X-axis: 1960, 1970, 1980, 1990, 2000, 2010, 2020, 2030, 2040, 2050

Questions on Regulation

Who regulates?

ICT / competition /data protection regulator

Who to regulate?

Telcos, netcos, OTT

Policy & regulation

What?

Pricing, QoS, spectrum

How?

Light touch, self- & co-regulation, ADR

Where?

At the national, regional, international level

When?

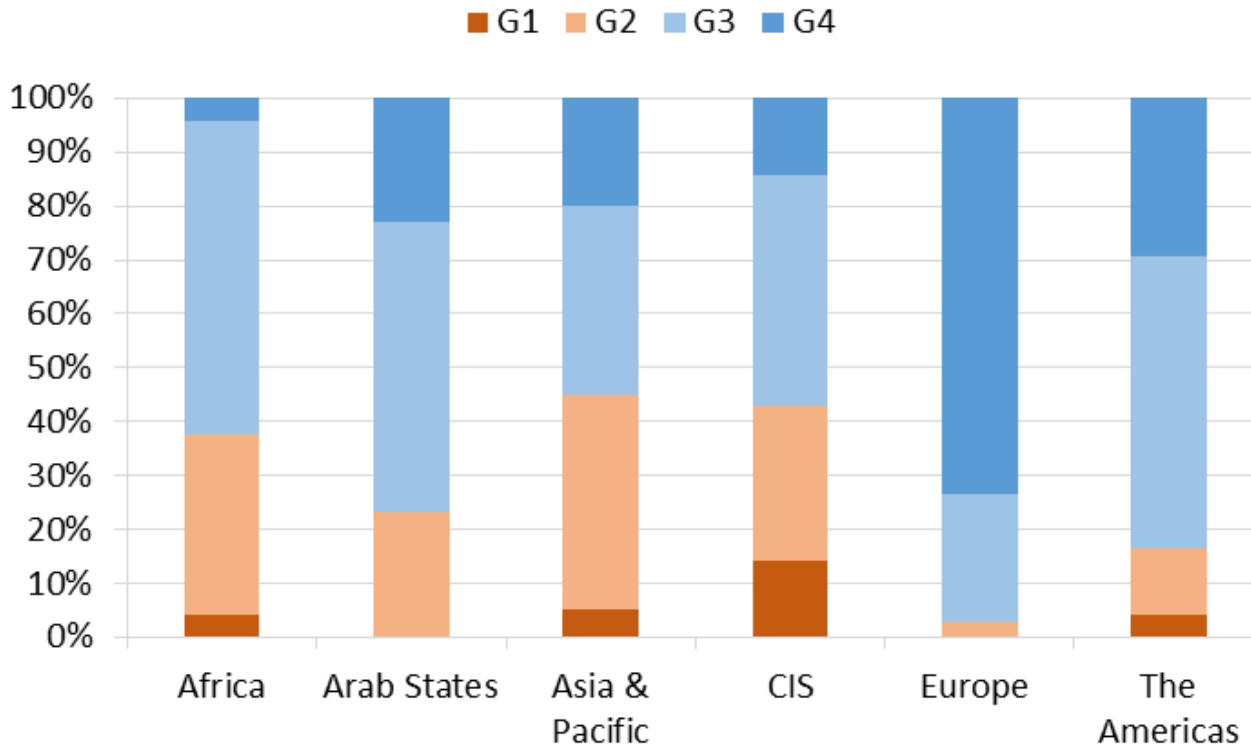*Ex ante* vs *ex post*

Which regulations have shaped the ICT sector?
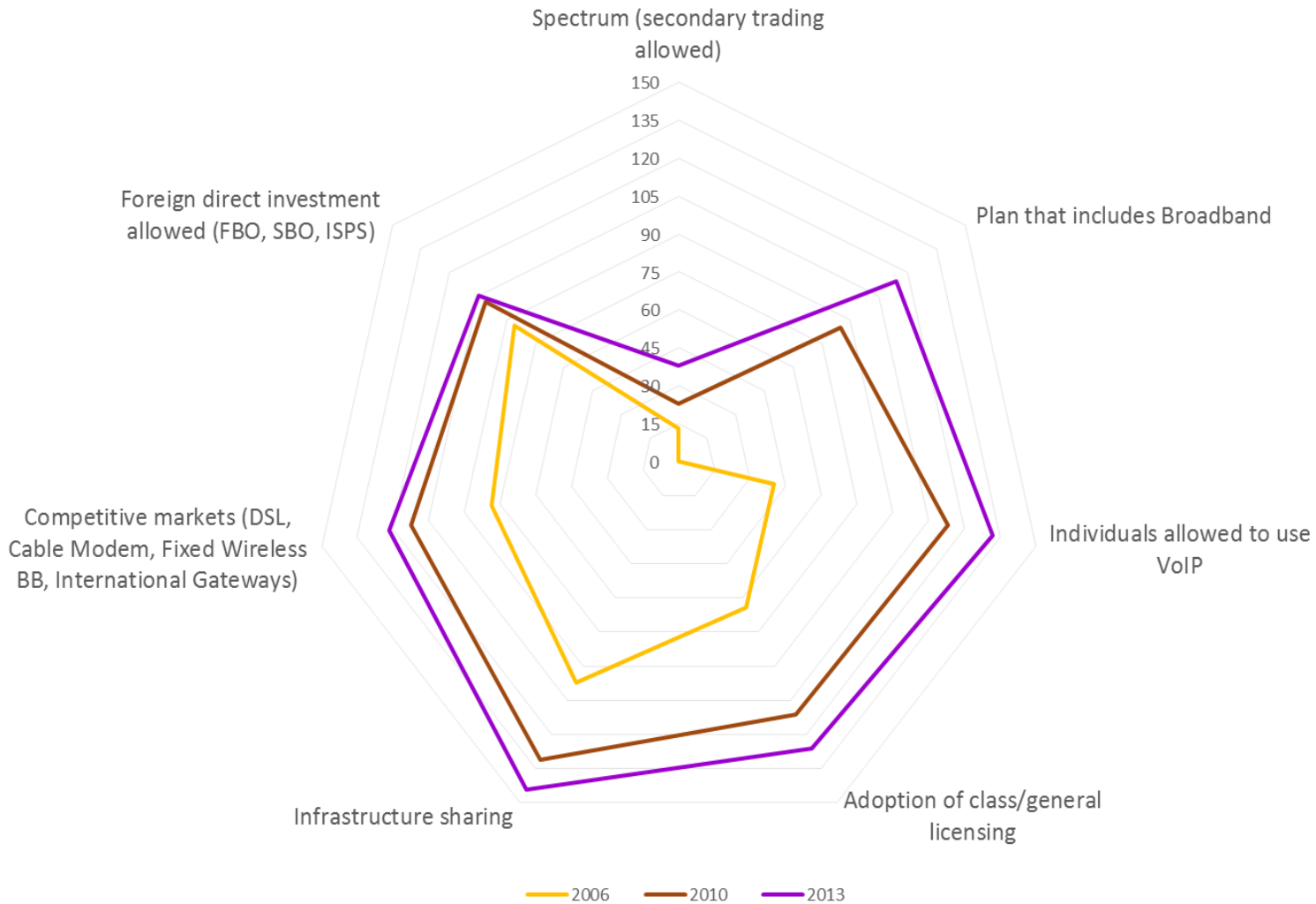
Source: ITU.

Maturity of regulation

Beginning of 2014

Source: ITU.

G4: Integrated regulation – led by economic and social policy

G3: Enabling investment, innovation and access – dual focus on stimulating competition in service and content delivery, and consumer protection

G2: Basic reform – partial liberalization and privatization across the layers

G1: Regulated public monopolies– command and control approach

ICT services uptake

Mobile cellular subscriptions:
- Almost 7 billion

Mobile broadband penetration:
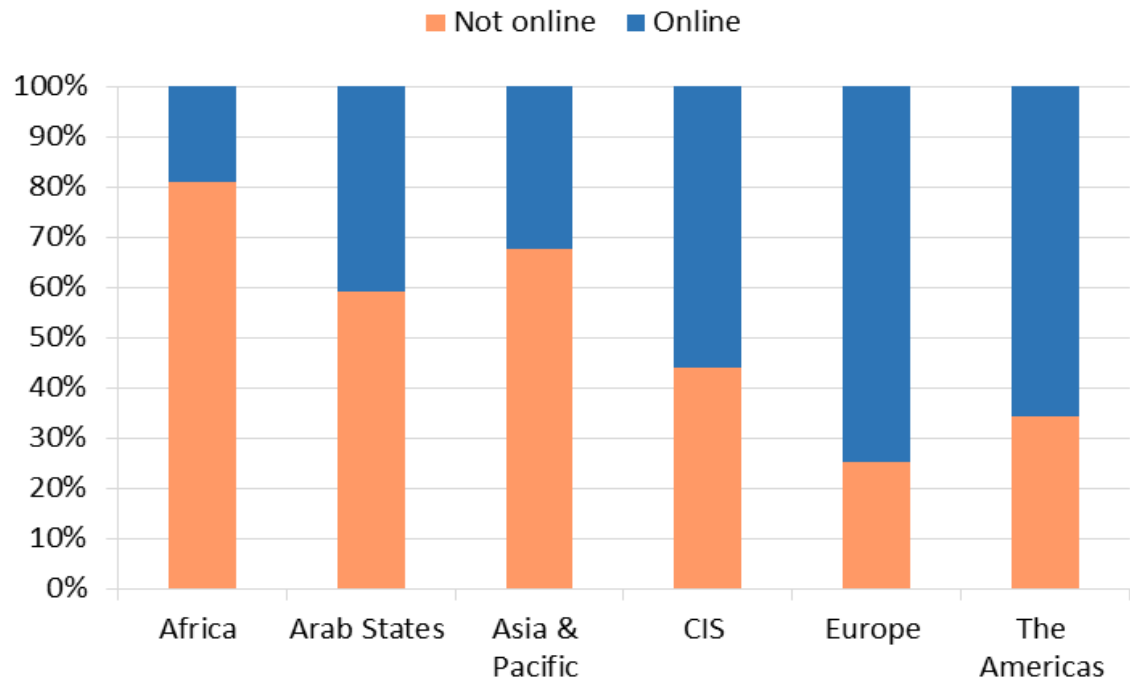- 84% developed countries
- 21% developing countries

Fixed broadband penetration:
- 27.5 % developed countries
- 6 % developing countries

- By end 2015, some 3.2 billion **people will be online** (individuals using the Internet)
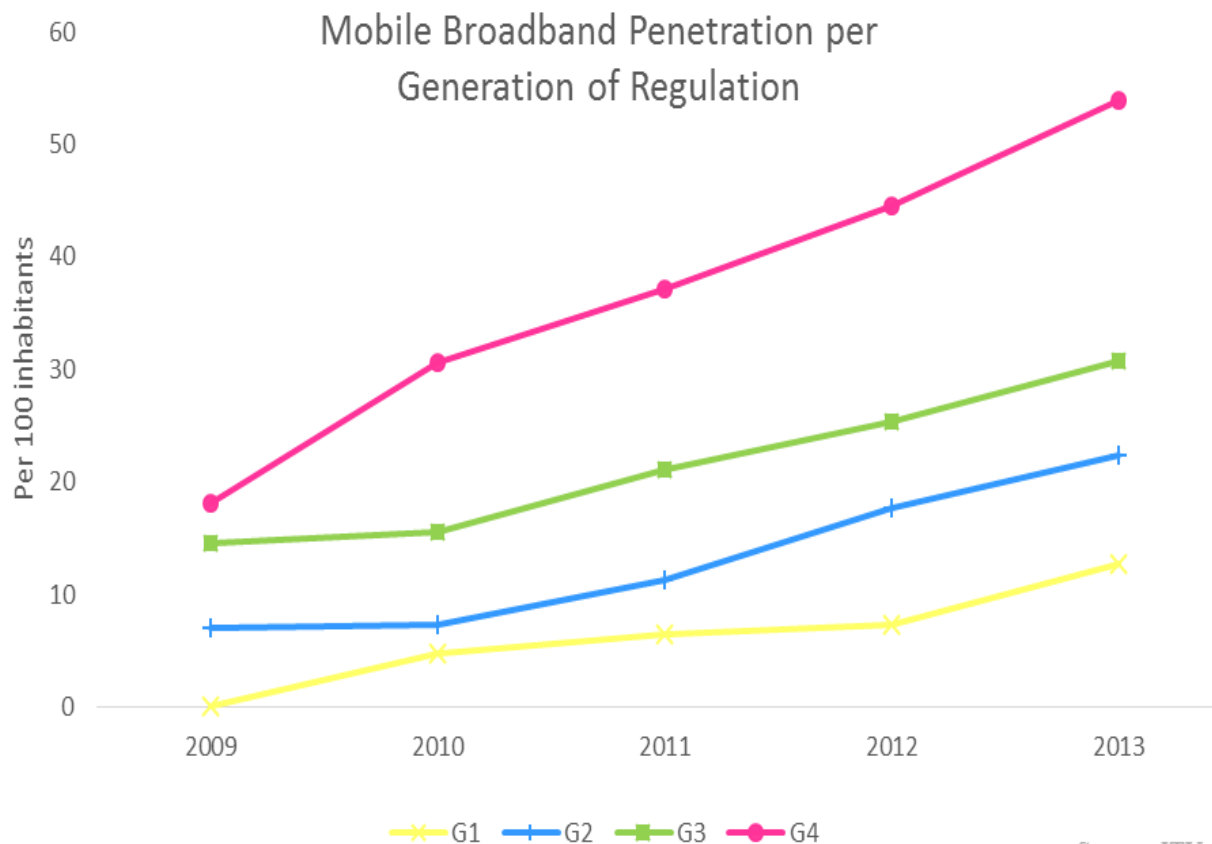
Who's online?

By region, 2014

Not online   Online

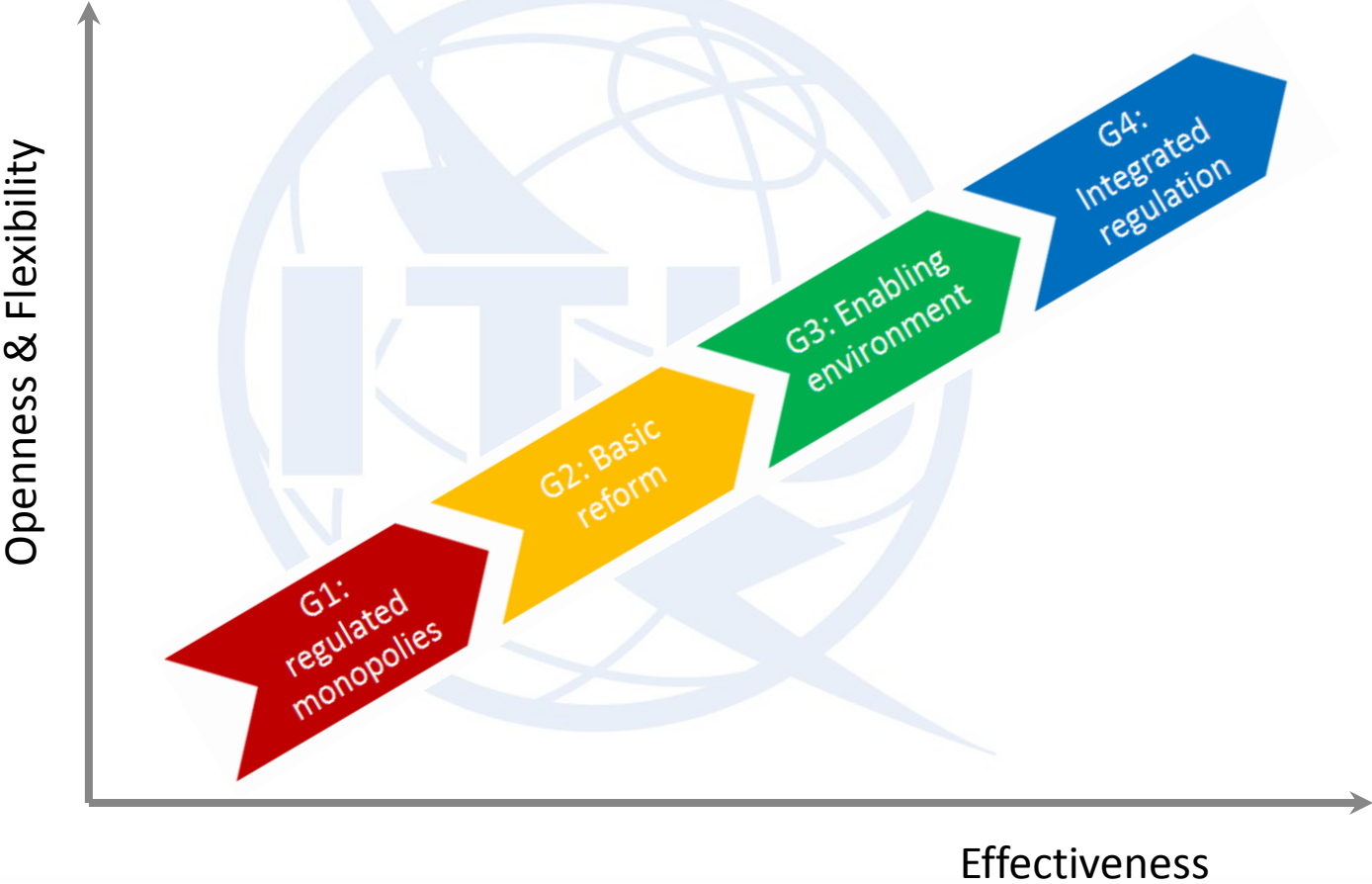Source: ITU World Telecommunication/ICT Indicators database

Better regulation – greater growth?

Evolution of mobile broadband penetration, by generation of regulation, 2009-2013

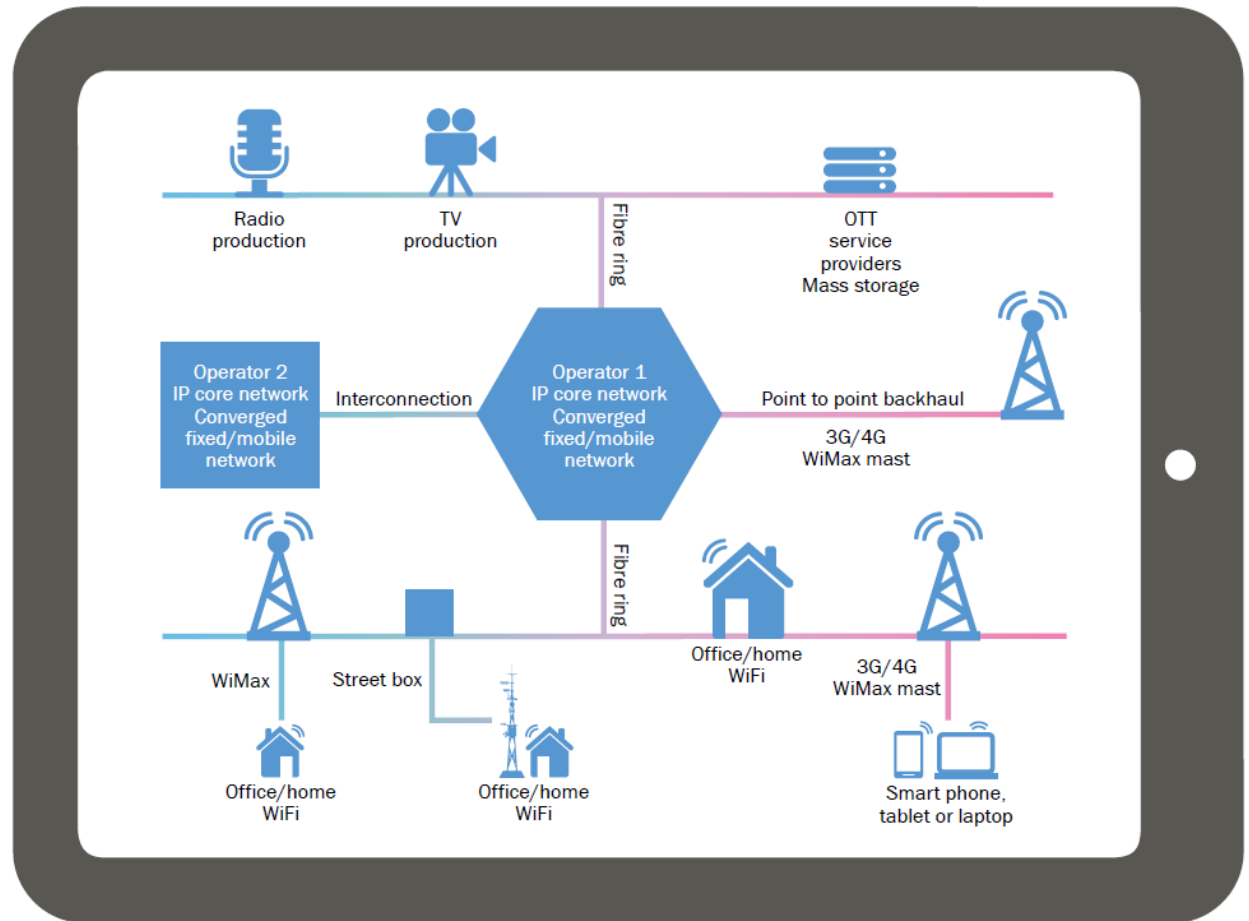Note: Based on data for 122 countries over the entire period.
Source: ITU.

Impact on Regulation?

Openness & Flexibility

G1: regulated monopolies

G2: Basic reform

G3: Enabling environment

G4: Integrated regulation

Effectiveness

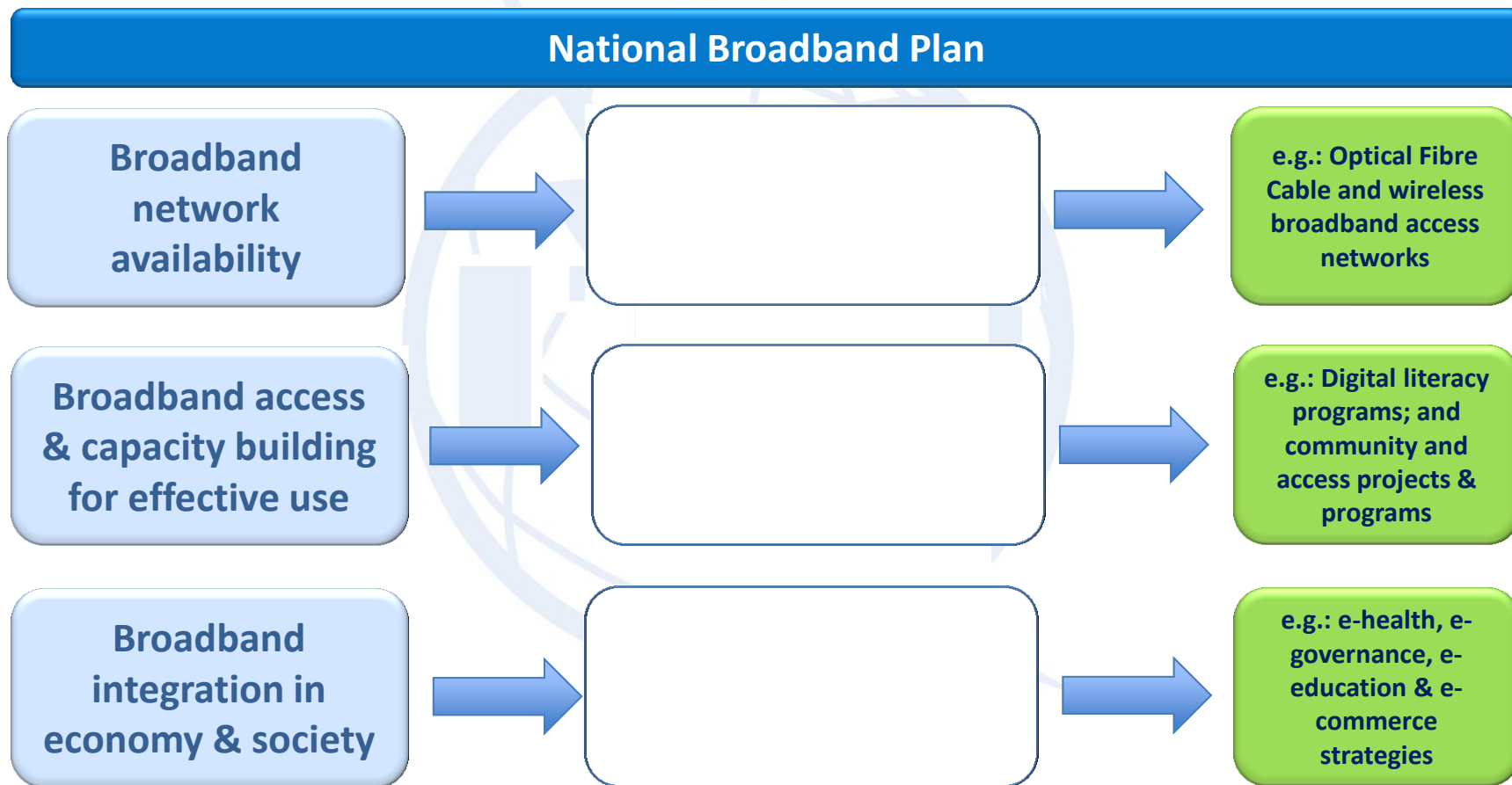# The ICT Sector Today

Source: ITU

Broadband Policy – «Way Forward»

➢ **To achieve SDGs through ensuring **connectivity for all**, a National Broadband Plan is key!**

National Broadband Plan		
Broadband network availability		e.g.: Optical Fibre Cable and wireless broadband access networks
Broadband access & capacity building for effective use		e.g.: Digital literacy programs; and community and access projects & programs
Broadband integration in economy & society		e.g.: e-health, e-governance, e-education & e-commerce strategies

Source: ITU

Broadband Policy – «Way Forward»

➢ **Regulators may have both lead and support roles, depending on scope and capacity (many dimensions of broadband plans)**
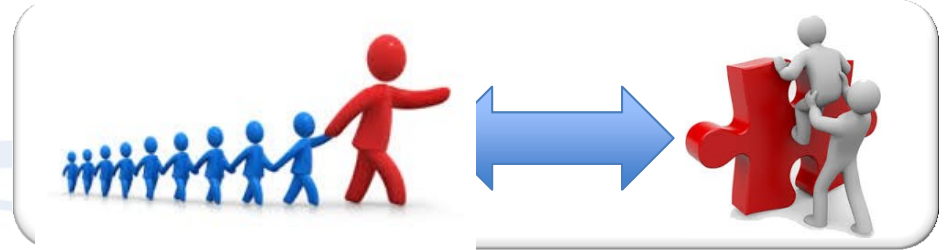
focus areas include

- ❑ **Regulation**
- ❑ **Statistics**
- ❑ **Spectrum**
- ❑ **Consumers**
- ❑ **Civil works**
- ❑ **Capacity building**
- ❑ **eGovernment, education and ehealth sectors**

Source: ITU

Your BDT

- Be part of a **first-rate collborative neutral platform** that engages stakeholders

- **Attend, engage and network** at our world-class events such as GSR, WTIS, Girls in ICT Day, ITU ICT Leadership Retreat etc...

- **Gain access** to our top-rated online toolkits, databases, statistics, guidelines, seminars and workshops

- **Benefit** from our indepths expertise

- **Be part** of a «**network** of renouned **experts**»

- **Be part** of a neutral platform to keep a headstart on **Collaborative Regulation**

Thank you!

IEE Mandate

To facilitate international cooperation and collaboration in the provision of cutting-edge technical and institutional assistance, and to support the roll out and upgrade of telecommunication/ICT infrastructure and services for economic and social development.

We assist with

- ➤ developing an **Enabling Environment** that fosters a transparent and forward-looking legal and regulatory framework, to stimulate investment and promote universal, ubiquitous, affordable and secure access to ICTs
- ➤ enabling and facilitating a **cross-sectoral collaborative approach** through linking education, healthcare, finance, agriculture and other sectors to ICT to address challenges from a converged environment
- ➤ the **utilization of appropriate technologies** to build or extend **telecommunication infrastructure** and adapt to the rapidly changing telecommunication / ICT environment, and
- ➤ **we empower people to access and use** telecommunications/ICTs for their social and economic benefit through mobile apps for education, healthcare, the environment and banking, online government services, digital skills development of women, youth and Indigenous Peoples, ensuring accessible ICTs for persons with disabilities and encouraging girls and young women to take up ICT careers and be ICT creators.

What we do for our Members

Regulatory and Market Environment Division

We assist Member States and ITU-D Sector Members in developing an enabling environment by organizing world class events and knowledge exchange platforms to share knowledge and expertise on topical economic, policy, legal and regulatory issues; enhancing dialogue and cooperation among experts across various sectors and fostering mechanisms to allow for collaborative regulation across the sectors; as well as through targeted assistance and activities including reports and research as well as the development and implementation of national ICT policies and plans, the creation and adaptation of legal and regulatory frameworks to foster innovation and investment in the sector.

ICT Applications and Cybersecurity Division

We devise national strategic planning frameworks and associated toolkits for ICT applications and services, promote the development of a cross-domain mobile application framework to improve service delivery through mobile communications, and help improve healthcare and education through the implementation of large-scale ICT applications and services in collaboration with stakeholders. We also assist countries in developing national cybersecurity strategies and national computer incident response teams, provide customized national and regional assistance on cybersecurity matters, and jointly produce the Global Cybersecurity Index to promote a global culture of cybersecurity.

Telecommunication Technologies and Network Division

We assist Member States and ITU-D Sector Members and Associates to maximize the utilization of appropriate new technologies for the development of their information and communication infrastructure and services. We also assists Member States and ITU-D Sector Members and Associates to plan, build, operate, upgrade, manage and maintain technologies applicable in their networks and services. This includes the development of the Telecommunications and Information infrastructure and applications Internet Exchanges and the Transition from IPv4 to IPv6.

Spectrum and Broadcasting Division

We assist Member States by (1) providing information through guidelines, trends, case studies and publications on the relevant issues (2) establishing customized national policy framework on broadcasting and spectrum management or roadmaps (3) making tools available to developing countries for efficient management of spectrum (4) supporting regional cooperation to mitigate cross-border frequency interferences (5) organizing training seminars and developing training materials.

Special Initiatives Division

Our work takes a holistic approach and includes promoting digital skills development for women, youth and Indigenous Peoples, encouraging girls and young women to take up ICT careers, development of model policies, regulations and guidelines to ensure telecommunications/ICT accessibility for persons with disabilities, capacity building on ICT accessibility implementation, and raising awareness among ITU members on policies, legislation, regulations and practices that promote digital inclusion, including through advocacy campaigns, publications, blogs, events and training programs.