

Workshop Theme 2: Can Digital Platforms Enable Consumers and Entrepreneurs?

Building an Enabling Environment for Affordable Access to ICTs

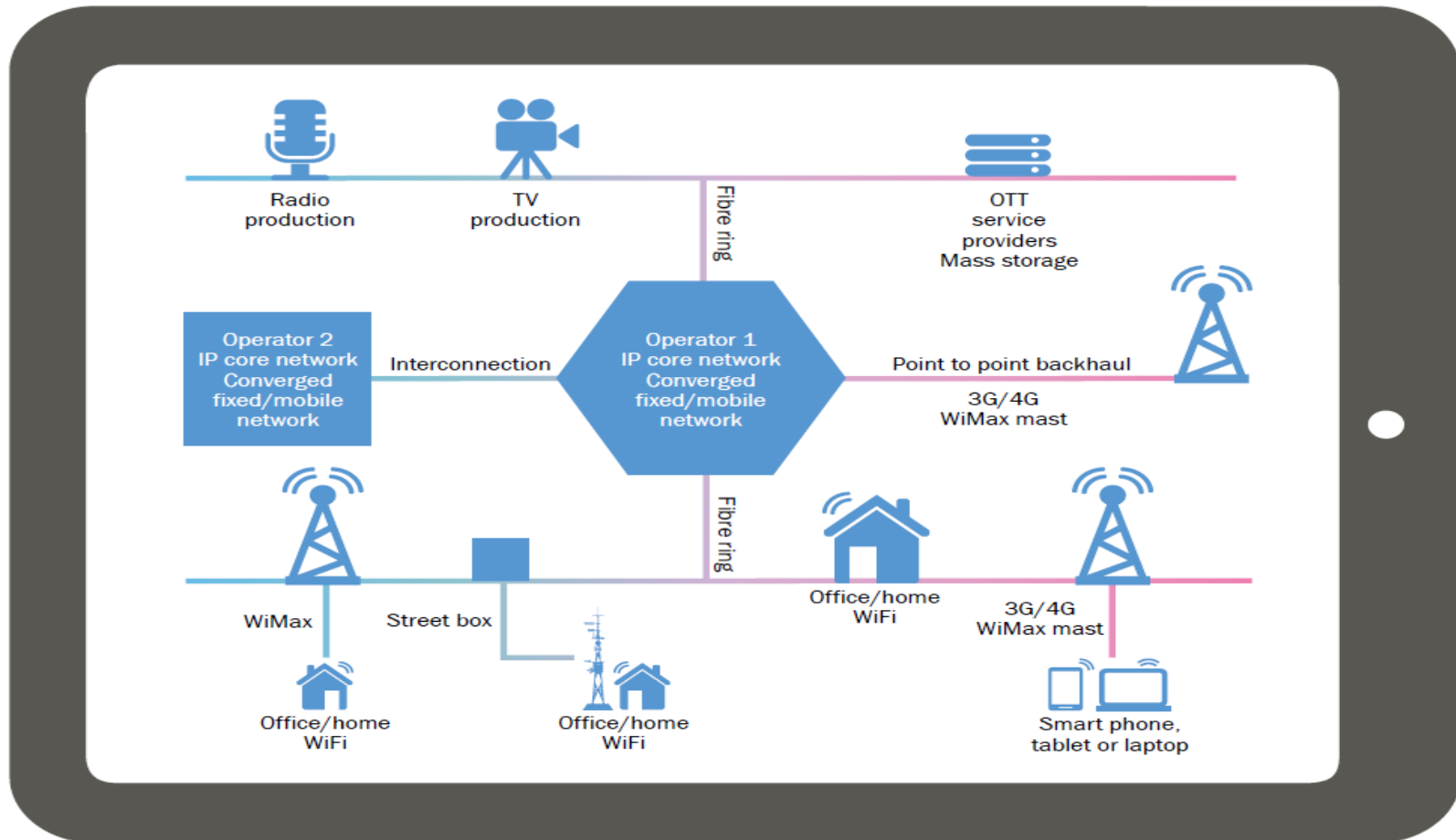
ITU-D SG 6/1 Expert Meeting Consumer Protection in a Digital Collaborative Economy

Chongqing, China

9-11 November, 2016

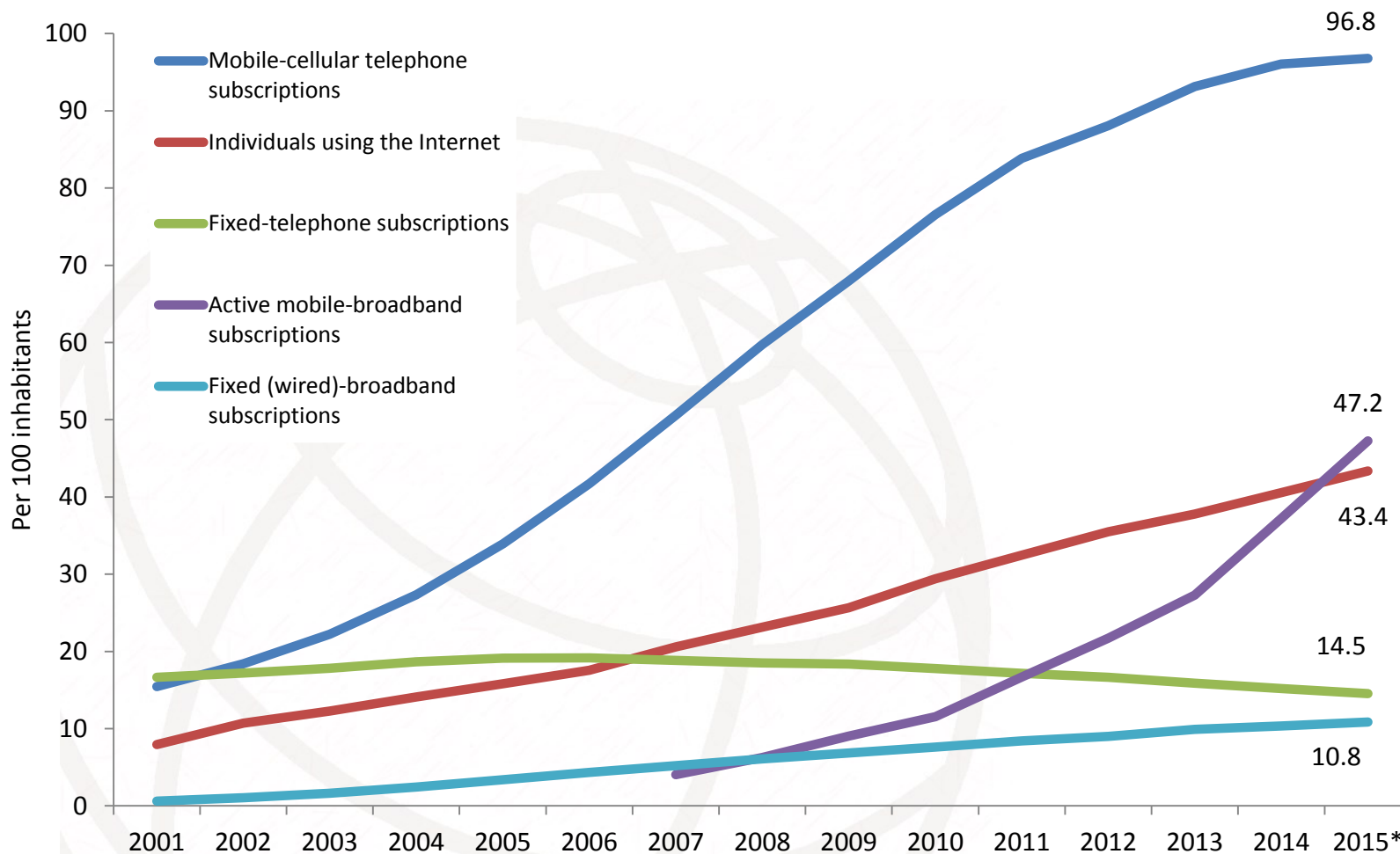


The ICT Sector Today



Source: ITU

Global ICT Developments, 2001-2015



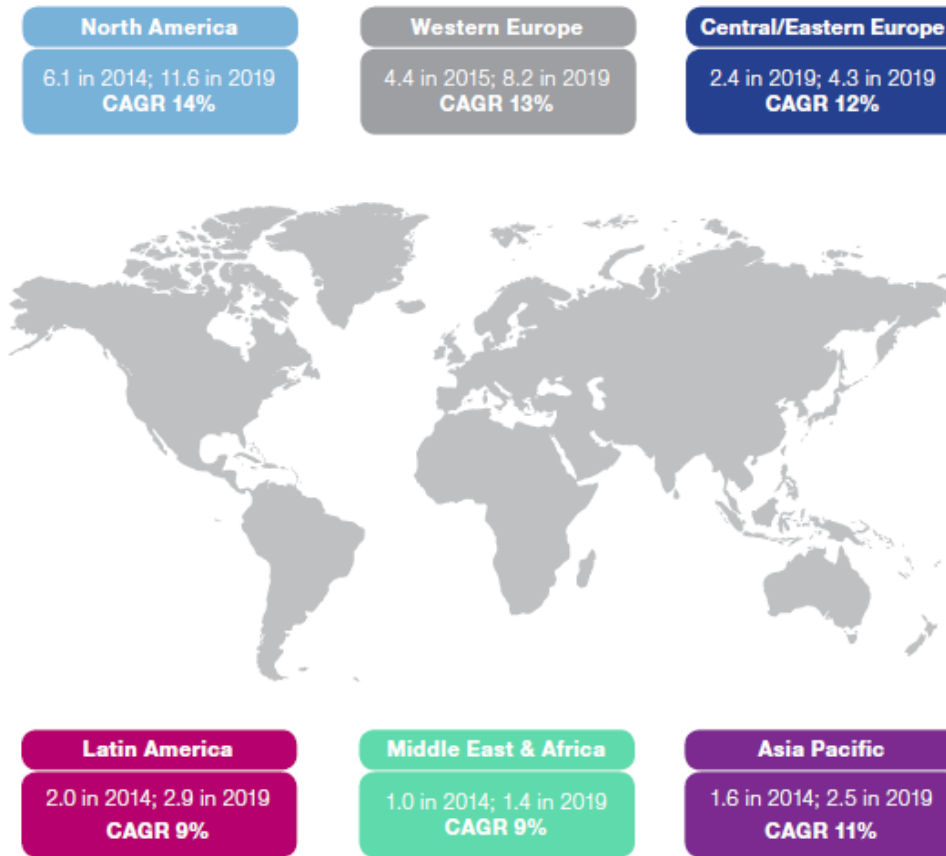
Note: * Estimate

Source: ITU World Telecommunication /ICT Indicators database



But: Growing Digital Divide?

World Map: A Growing Digital Divide in the Internet of Everything?
Connected Devices Per Capita from 2014 to 2019; Devices' Compound Annual Growth Rates (CAGR)



Source: CISCO VNI.



4.2 Billion of the world's population are still not using the Internet...

We would like to be there:



Digital Inclusive Society

protection
policy inclusion central affordability regulation cyber
payment mobile
trust money connectivity development electronic goals security financial privacy data
sustainable access bank



What are the Needs of Consumers?

Search

- How will my data be used?
- Search results manipulated?

Shopping

- What if goods don't arrive?
- What redress when shopping cross border?

Payment

- Can I trust new payment methods?
- Will I need to pay extra for some methods of payment?
- Are my bank details secure?

Consuming music and video

- Why can't I access certain services?
- Do I have sufficient bandwidth to watch my film?

Source: GSR 14
presentation



What are the Needs of Consumers?

Gaming and using apps

- This game was not free!
- My credit card has been charged!

Cloud

- Will my data be safe on the cloud?
- What if the service becomes unavailable?

Social media

- My children are exposed to inappropriate content
- We seem to be locked in with Facebook
- I can't get a job because of my profile

Source: GSR 14
presentation



Cross-Cutting Issues

Mandate

Trust

Illegal and
harmful
content

Copyright

Net neutrality

Cost

Privacy and
Data
Protection

QoS

Consumer
redress and
education

Source: GSR 14
presentation



Who and Why Protect Consumer Rights?

- Good competition in the telecoms sector does not necessarily guarantee the people's needs and protect their rights
- Safeguards are necessary to ensure consumer privacy and the citizens' access to all essential telecoms' services, independently of where they are, or, of their social or economic position.
- Clear set of rights often exists in the laws
 - Who is operating the website?
 - No unfair commercial practices
 - Price transparency
 - Right to cancel the order
 - ...
- But who is making sure that digital consumers benefit from these rights?

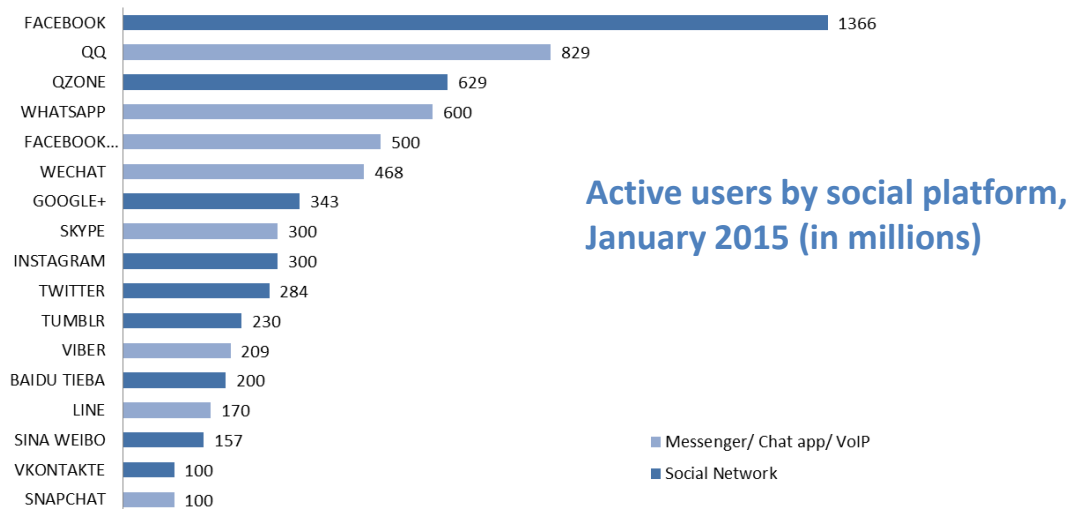


What are the Trends

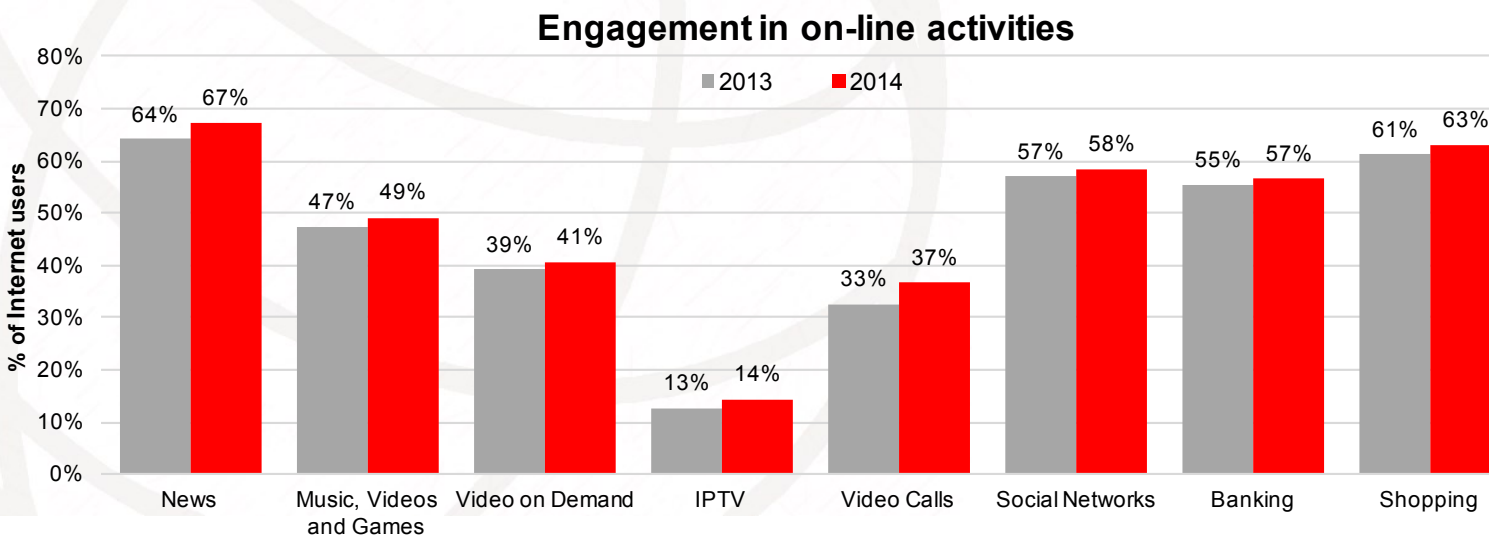
- **There are new players and business models**
 - Need to balance innovation with investment and consumer interests
- **Need for affordable capacity and speed**
 - Broadband trends
 - International Connectivity
- **The interaction of the ICT sector for stimulating growth in the digital economy alongside other sectors needs to be understood**
 - It is essential to have a clear understanding of the complex relationships between regulatory policies and ICT growth
- **New kind of policy and regulatory frameworks are needed**
 - Ladders of regulation
 - Collaborative regulation



Online activities



Source: ITU



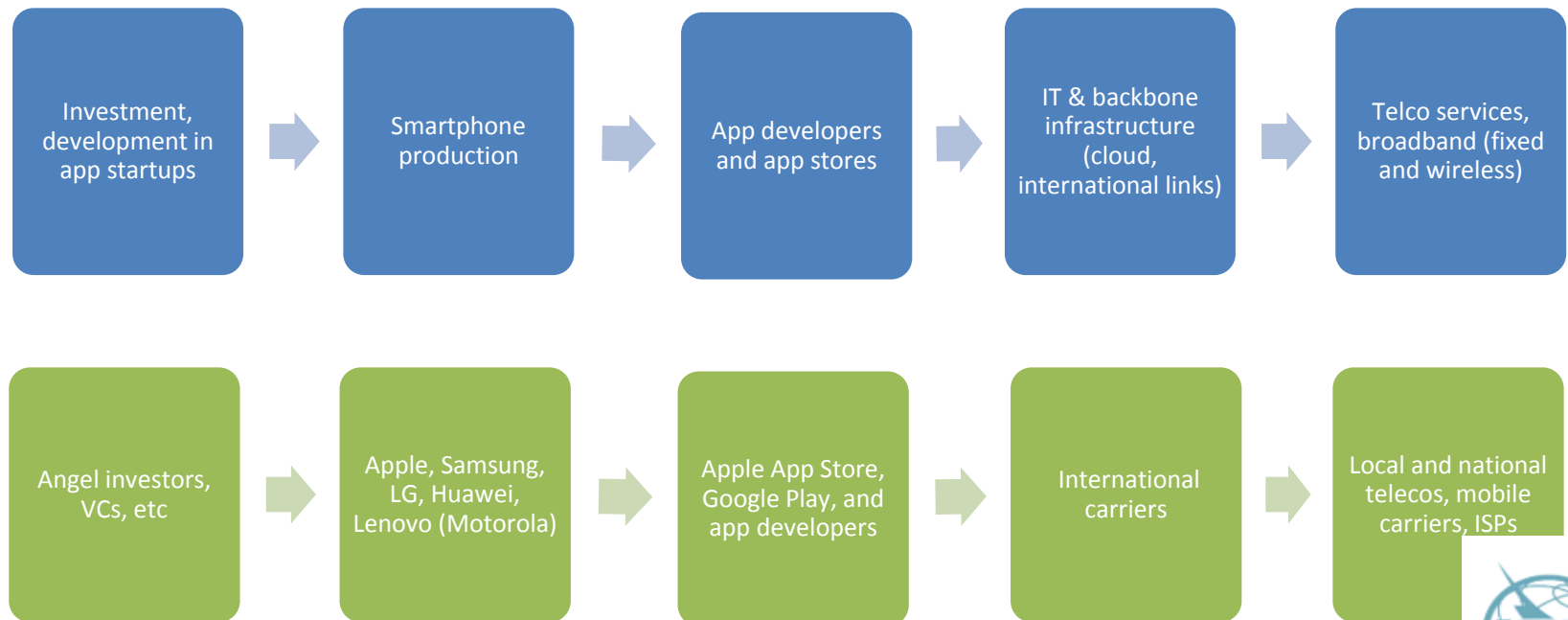
Source: Eurostat - Community survey on ICT usage in Households and by Individuals; IHS Technology databases - TV Media Intelligence Service.

Source: EC Digital Agenda Scorecard 2015



What is the APP economy?

- The app economy is all the products and services required to deliver app functionality to end users via mobile broadband services.
- The app economy **VALUE CHAIN** include investors, handset producers, platform developers and communications service providers.



Source: ITU GSR discussion paper THE RACE FOR SCALE: MARKET POWER, REGULATION AND THE APP ECONOMY

Authors: Mr Simon Molloy of System Knowledge Concepts and Mr Scott W. Minehane of Windsor Place Consulting, with significant inputs from Mr Barry Burgan, Associate Dean of Bond Business School, Bond University, Gold Coast, Australia

The full paper can be downloaded <http://www.itu.int/en/ITU-D/Conferences/GSR/Pages/GSR2016/Papers.aspx>

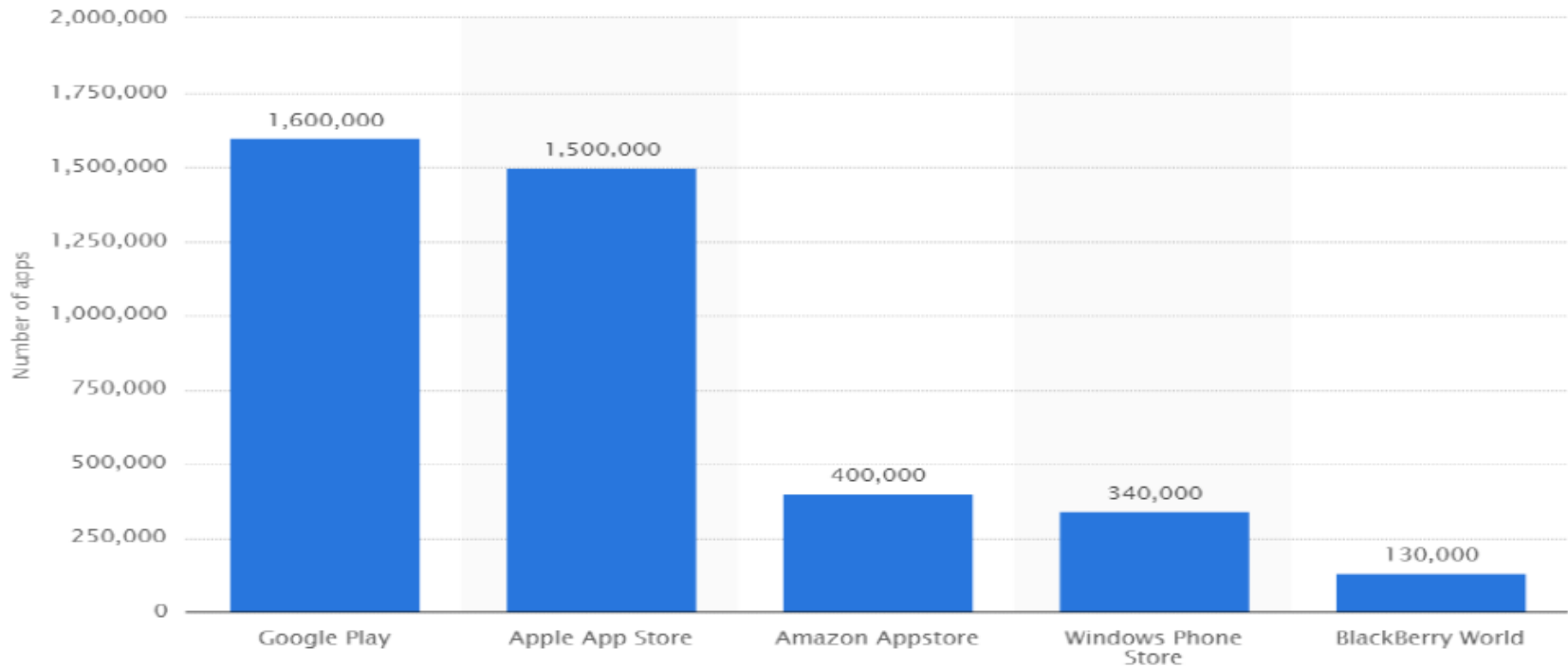


The APP Economy: New Players and Services



The App Economy

Number of apps available in leading app stores as of July 2015



Source: www.statista.com/statistics/276623/number-of-apps-available-in-leading-app-stores/ (accessed 26/12/15)

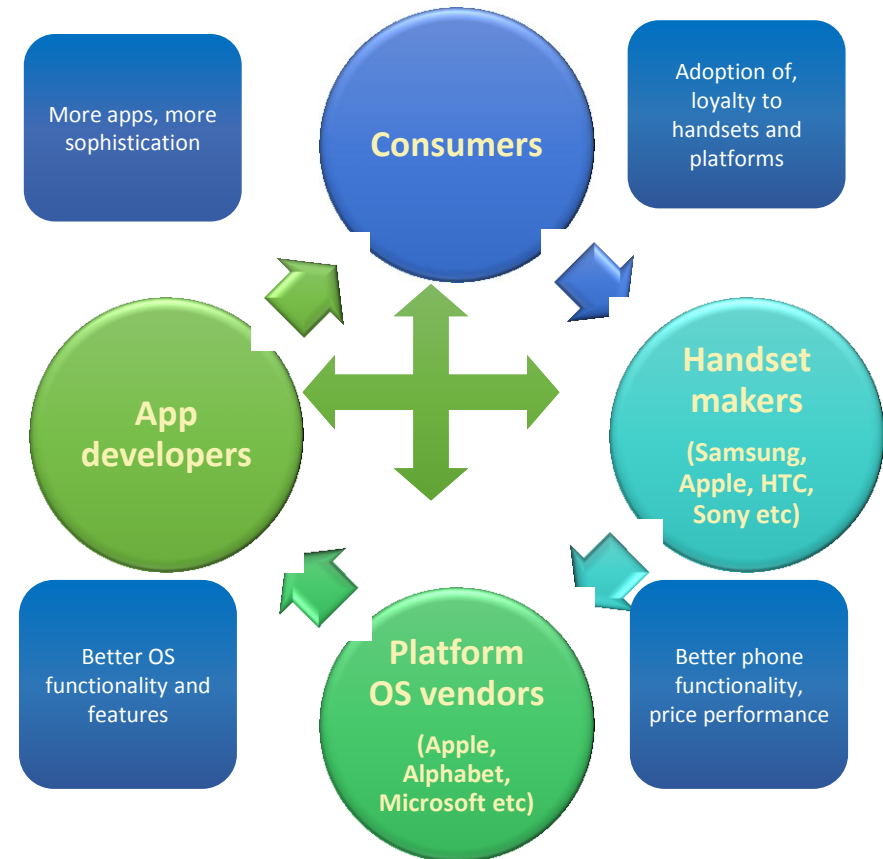
Source: ITU GSR discussion paper THE RACE FOR SCALE: MARKET POWER, REGULATION AND THE APP ECONOMY

Authors: Mr Simon Molloy of System Knowledge Concepts and Mr Scott W. Minehane of Windsor Place Consulting, with significant inputs from Mr Barry Burgan, Associate Dean of Bond Business School, Bond University, Gold Coast, Australia

The full paper can be downloaded <http://www.itu.int/en/ITU-D/Conferences/GSR/Pages/GSR2016/Papers.aspx>

The APP economy ecosystem

- The app economy ecosystem is an interacting set of handset makers, platform owners, app developers and consumers in a highly competitive and dynamic technological environment
- It is characterised by interacting sets of network effects:
 - More consumers per platform, the more profitable will be app development for that platform
 - More apps and better apps will attract more consumers
 - Handset manufacturers achieving greater scale will lower unit costs, fine tune production value chains, enabling more competitive handset market
 - Better handsets mean more consumers and so on...
- Source: **The Race for Scale: Market Power, Regulation and the App Economy, GSR 2016**



The APP Economy: Opportunities for Business AND Consumers

REGULATORS



Security
Rules
Law
Risk management
Cyber-war
Cyber-crime
Protection of assets
Protection of society
Protection of privacy
Protection of traditional market players
Labor protection
Syndicates
Control
Enablement of international digital spaces
Enablement of cross national technologies
Norms
Consumer protection
Enablement of a digital single market



DIGITAL



Free economy
Boundless communication
Full transparency
Business opportunities
High rewards
Freedom of ideas
Money
Open society
Open economy
Open government
New ideas
New ways of working
Flexibility
Connectivity
Global village
Innovation
Entrepreneurship

What are the Trends

- There are new players and business models
 - Need to balance innovation with investment and consumer interests
- **Need for affordable capacity and speed**
 - **Broadband trends**
 - **International Connectivity**
- The interaction of the ICT sector for stimulating growth in the digital economy alongside other sectors needs to be understood
 - It is essential to have a clear understanding of the complex relationships between regulatory policies and ICT growth
- **New kind of policy and regulatory frameworks are needed**
 - Ladders of regulation
 - Collaborative regulation

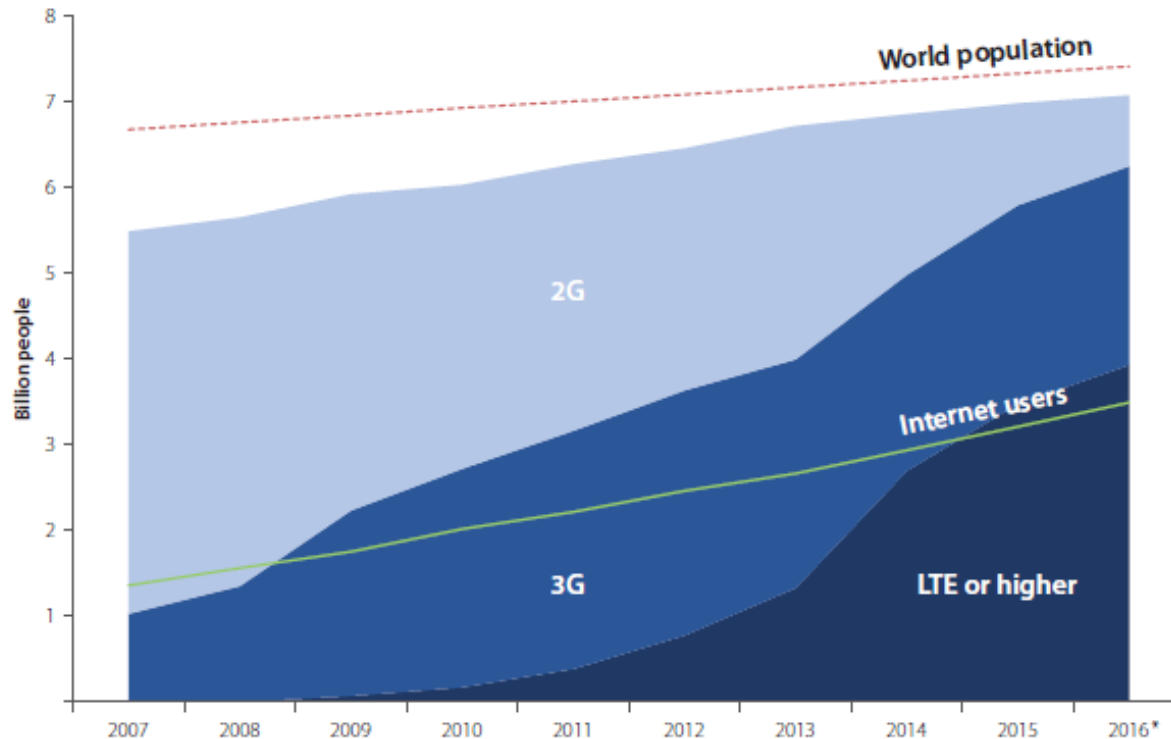




Broadband is becoming increasingly available and affordable...



Mobile network coverage and evolving technologies



Seven billion people (95% of the global population) live in an area that is covered by a mobile-cellular network.

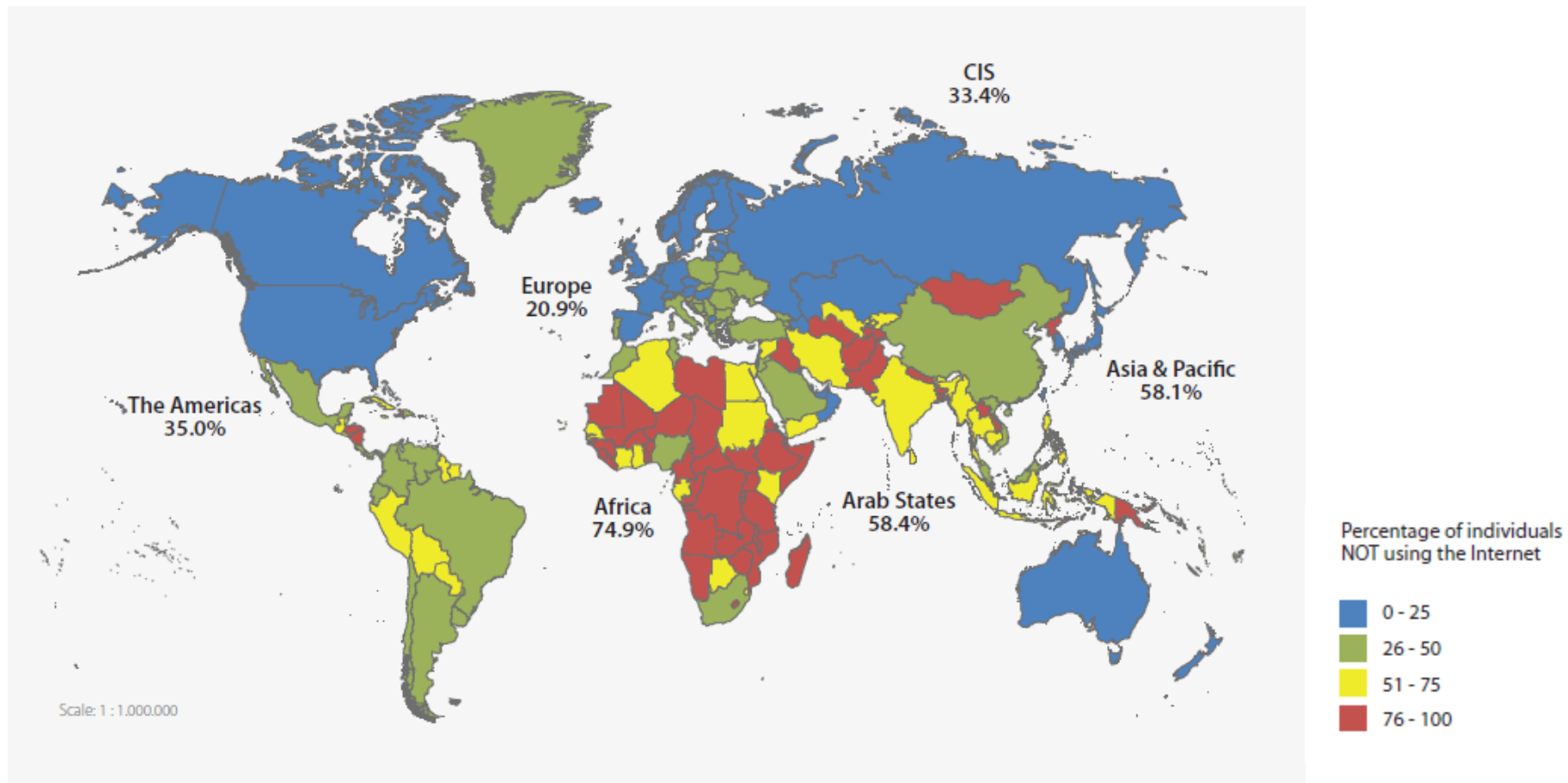
Mobile-broadband networks (3G or above) reach 84% of the global population but only 67% of the rural population.

LTE networks have spread quickly over the last three years and reach almost 4 billion people today (53% of the global population), enhancing the quality of Internet use.

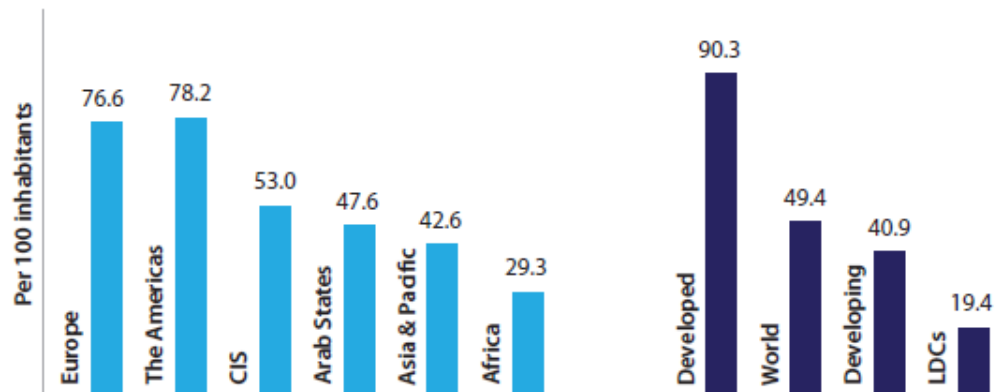
Source: ITU.

Note: * Estimates. Mobile network coverage refers to the population that is covered by a mobile network.

More than half the world's population is not using the Internet



Mobile-broadband subscriptions



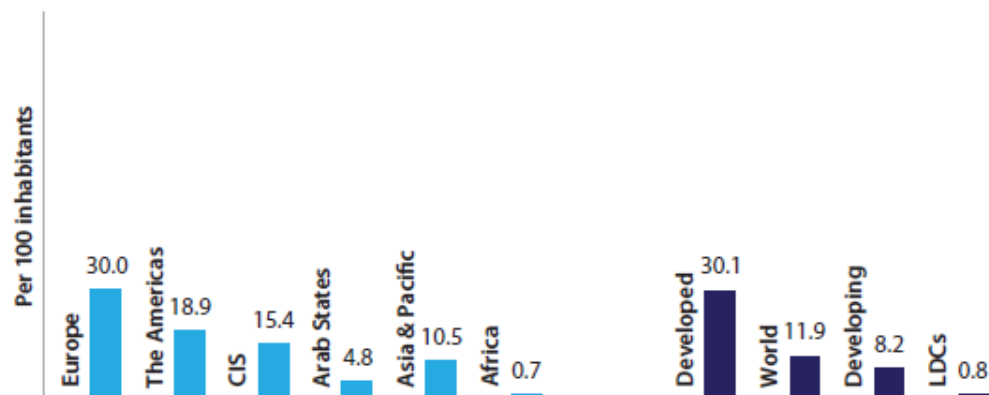
In developing countries, the number of mobile-broadband subscriptions continues to grow at double digit rates, reaching a penetration rate of close to 41%.

The total number of mobile-broadband subscriptions is expected to reach 3.6 billion by end 2016.

Fixed-broadband subscriptions

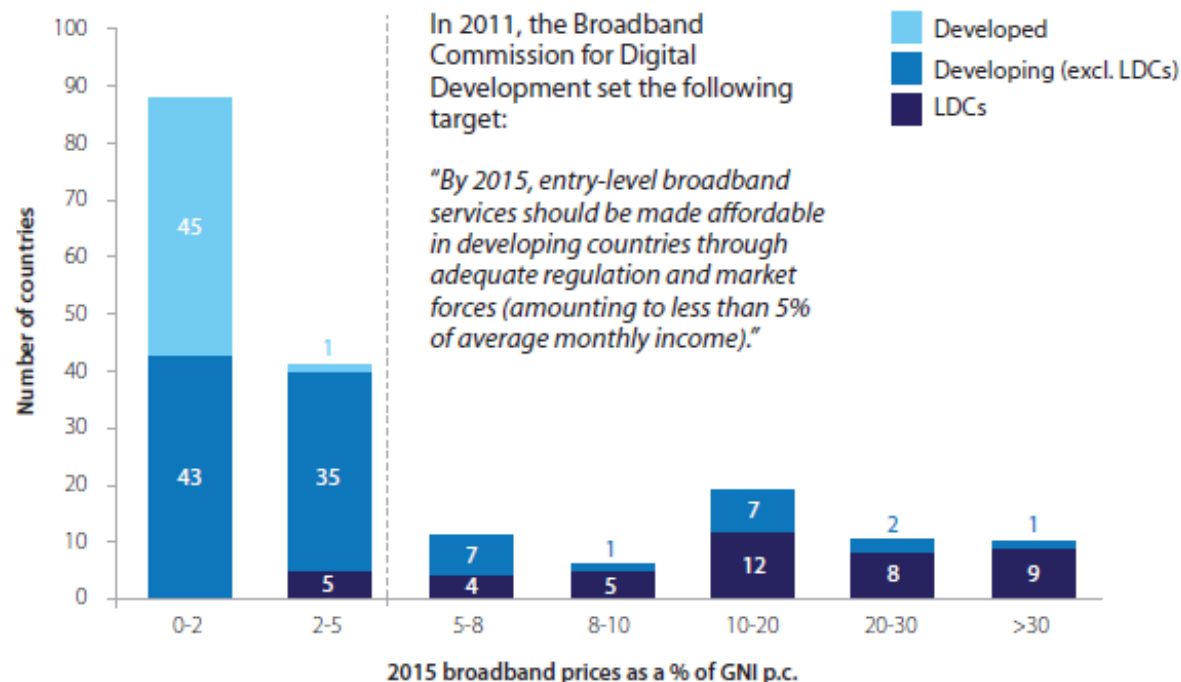
Fixed-broadband penetration remains at below 1% in Africa and the LDCs.

Strong growth in China is driving fixed broadband in Asia and the Pacific, where fixed-broadband penetration is expected to surpass 10% by end 2016.



ICT PRICES

By end 2015, 83 developing countries had achieved the Broadband Commission's affordability target



Five LDCs achieved the Broadband Commission target, but in the majority of the world's poorest countries broadband remains unaffordable.

Source: ITU. Note: Broadband prices refer to the most affordable service: either fixed or mobile broadband.

What are the Trends

- There are new players and business models
 - Need to balance innovation with investment and consumer interests
- **Need for affordable capacity and speed**
 - Broadband trends
 - International Connectivity
- **The interaction of the ICT sector for stimulating growth in the digital economy alongside other sectors needs to be understood**
 - **It is essential to have a clear understanding of the complex relationships between regulatory policies and ICT growth**
- New kind of policy and regulatory frameworks are needed
 - Ladders of regulation
 - Collaborative regulation



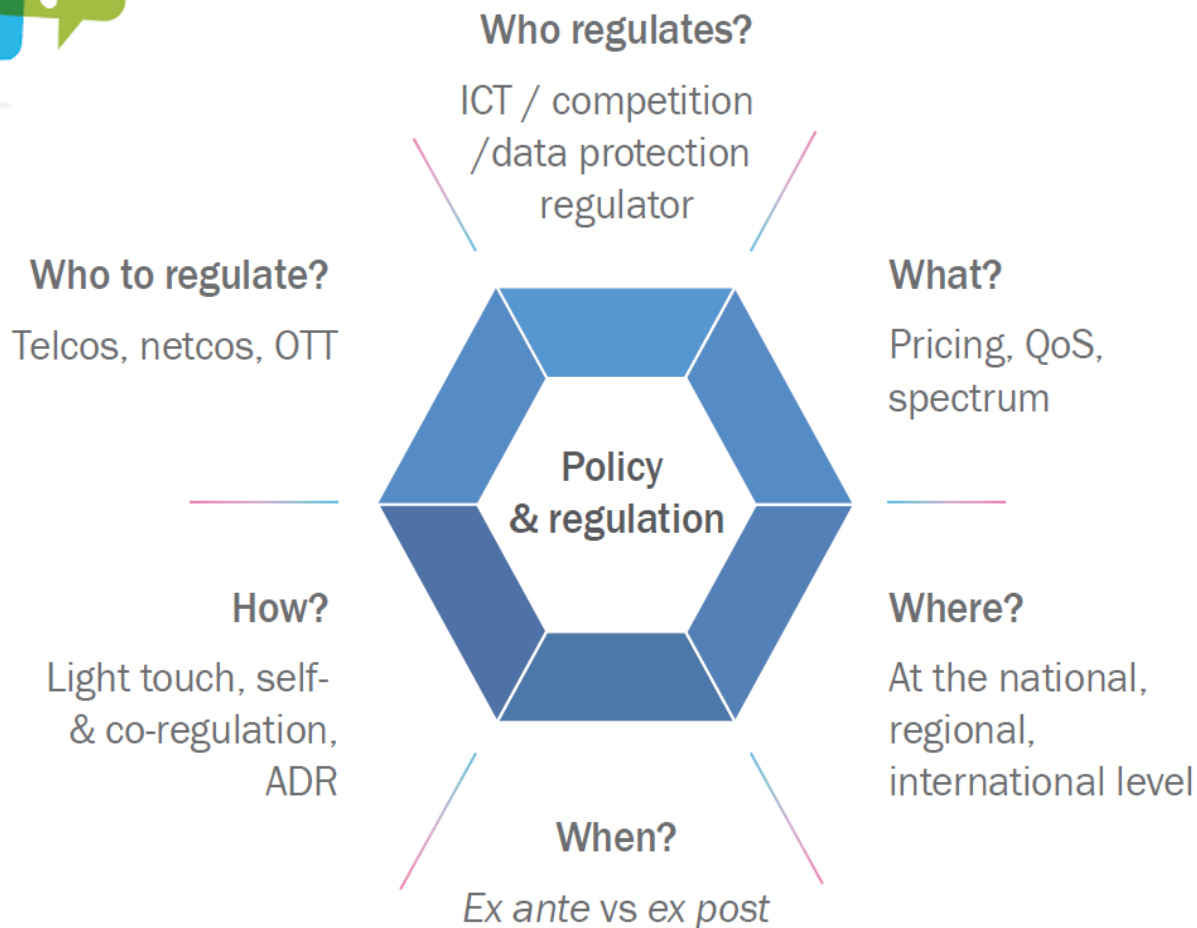


Ecosystem Needs and Interactions



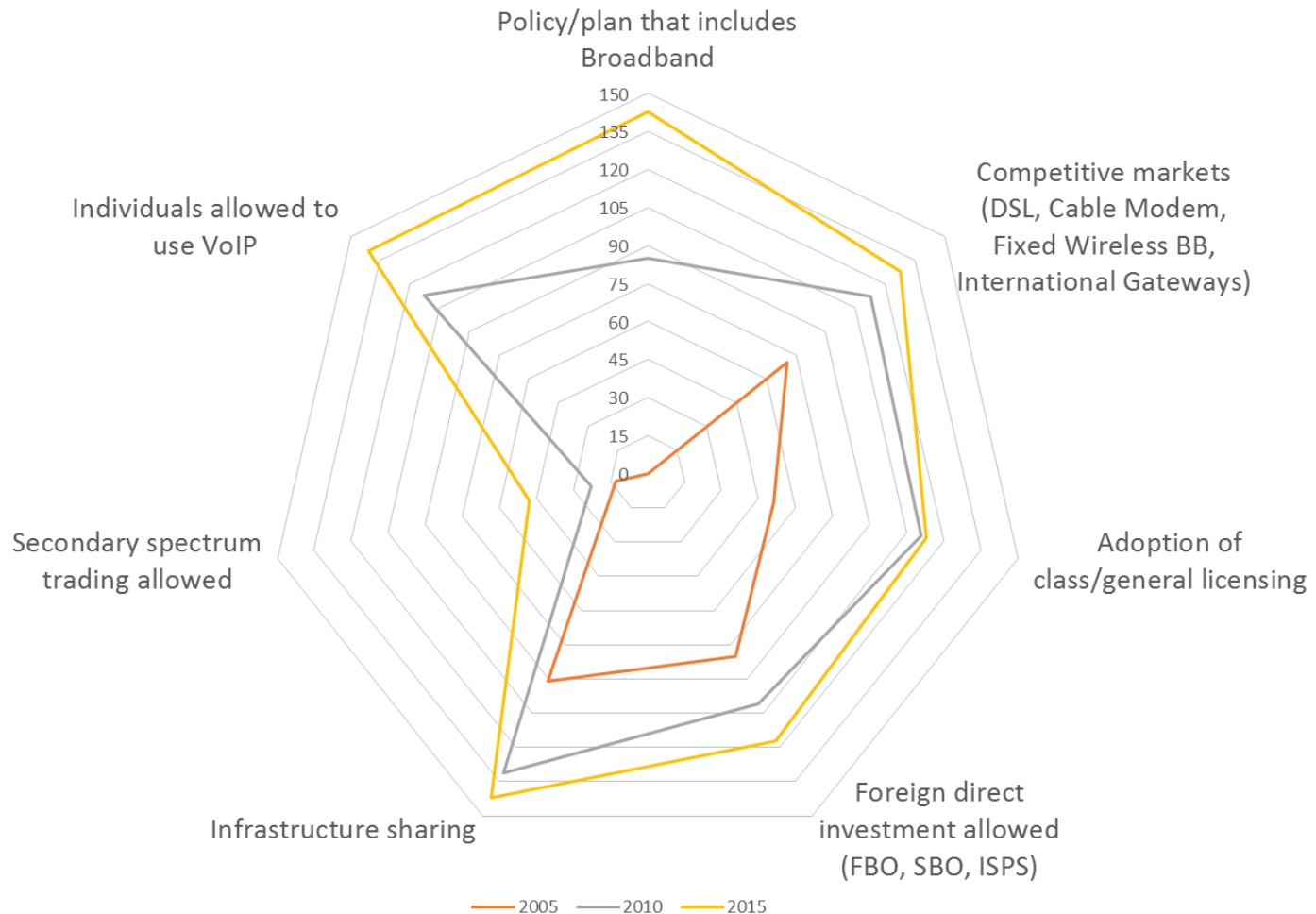


Questions on Regulation



Screening regulatory practices

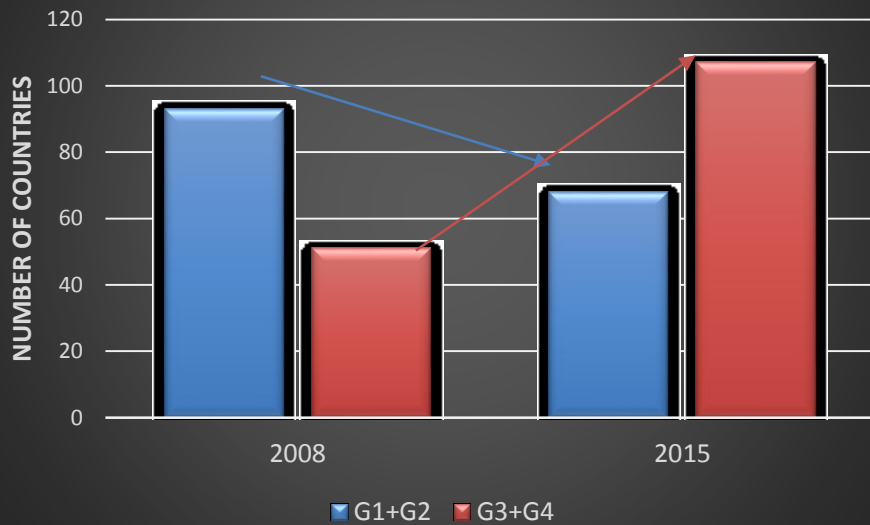
Which regulations have shaped the ICT sector? 2005-2015



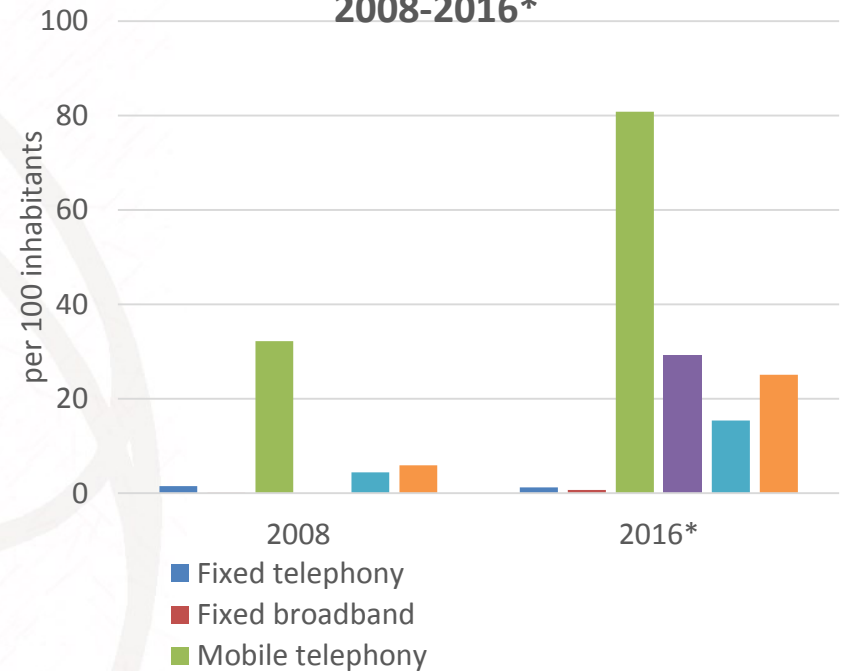
Source: ITU ICT Regulatory Tracker, 2015

The interplay of ICT markets and regulation

Evolution of ICT regulation, world, 2008-2015



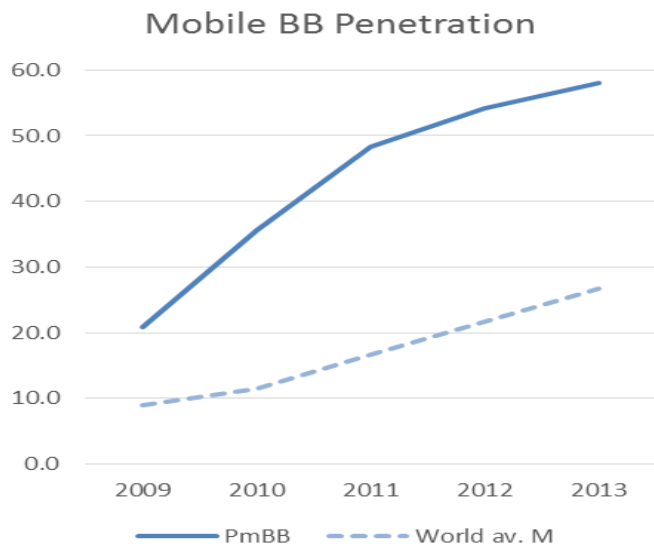
Evolution of penetration of key ICTs, 2008-2016*



Generation of Regulation

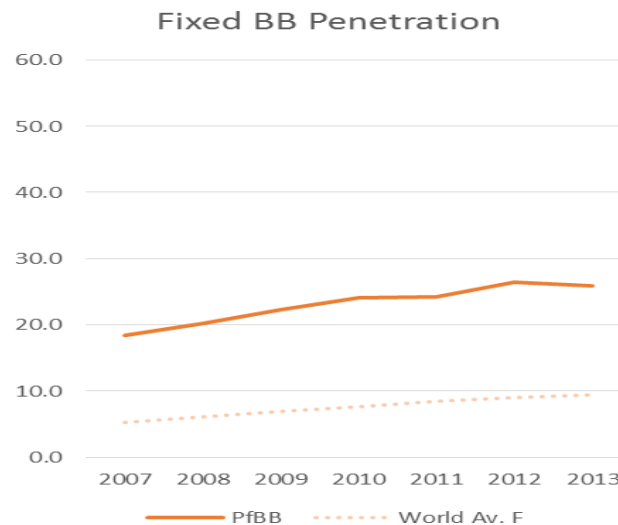
- G1: Regulated public monopolies** without an independent regulator
- G2: Basic reform**, separate regulatory bodies, partial liberalization and privatization
- G3: Regulation for enabling investment**, innovation and access, stimulating competition
- G4: Integrated regulation**, the regulator as a partner for development and social inclusion
- G5: Collaborative regulation**, define the foundation, platforms and mechanisms for working with other sector regulators

Winning formulas for broadband



Source: ITU

- Competition in mobile broadband
- Competition in international gateways
- Mobile number portability enabled
- Band migration allowed
- Infrastructure sharing for mobile (either allowed or mandated), including MVNOs
- National broadband plan adopted



Source: ITU

Regulatory measures

- Competition in DSL/cable
- Fixed number portability enabled
- Infrastructure sharing for fixed either allowed or mandated
- Converged licensing framework in place
- National broadband plan adopted



What are the Trends

- There are new players and business models
 - Need to balance innovation with investment and consumer interests
- **Need for affordable capacity and speed**
 - Broadband trends
 - International Connectivity
- **The interaction of the ICT sector for stimulating growth in the digital economy alongside other sectors needs to be understood**
 - It is essential to have a clear understanding of the complex relationships between regulatory policies and ICT growth
- **New kind of policy and regulatory frameworks are needed**
 - **Ladders of regulation**
 - **Collaborative regulation**

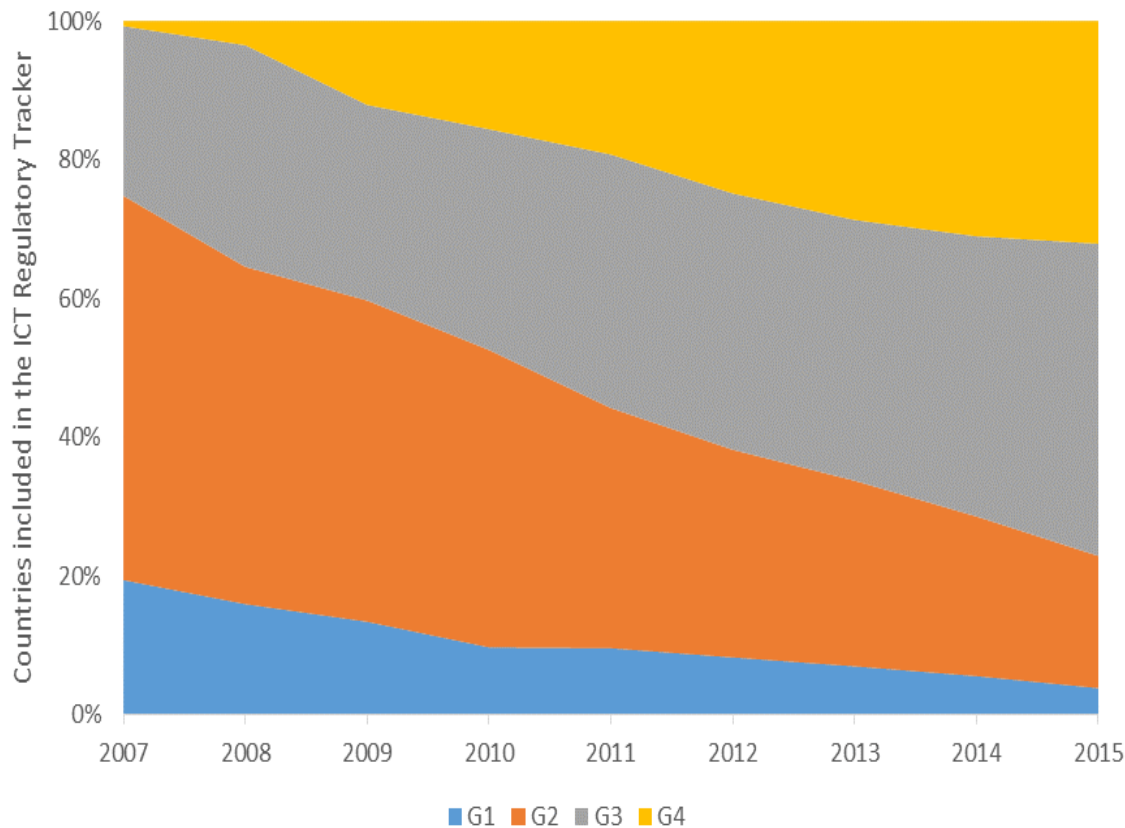


Tracking Regulatory Trends

- The dawn of the global digital economy has opened the way to a ladder of regulation or five generations of ICT regulation
- The interaction of the ICT sector for stimulating growth in the digital economy alongside other sectors needs to be understood
- New kind of policy and regulatory frameworks are needed
- It is essential to have a clear understanding of the complex relationships between regulatory policies and ICT growth
- Need to quantify trends and learn from successful experiences



Evolution in ICT Regulation, 2007-2015



Legend:

(ICT Tracker score points)

1st generation ≥ 0 < 40

2nd generation ≥ 40 < 70

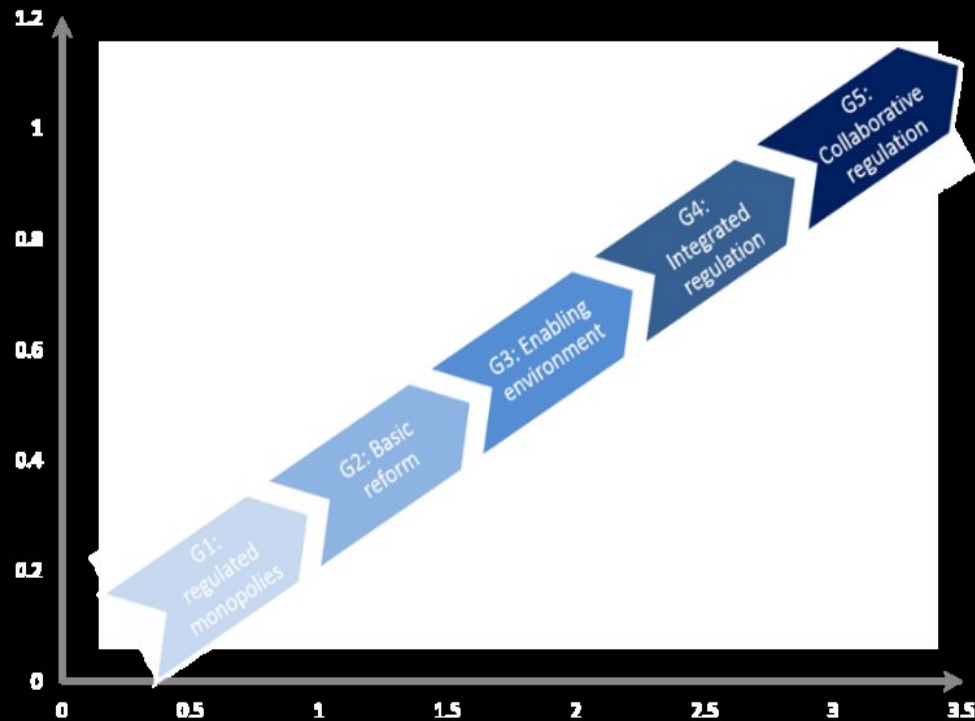
3rd generation ≥ 70 < 85

4th generation ≥ 85 ≤ 100

Today we are entering the era of 5th generation regulation

Source: ITU ICT Regulatory Tracker, 2015

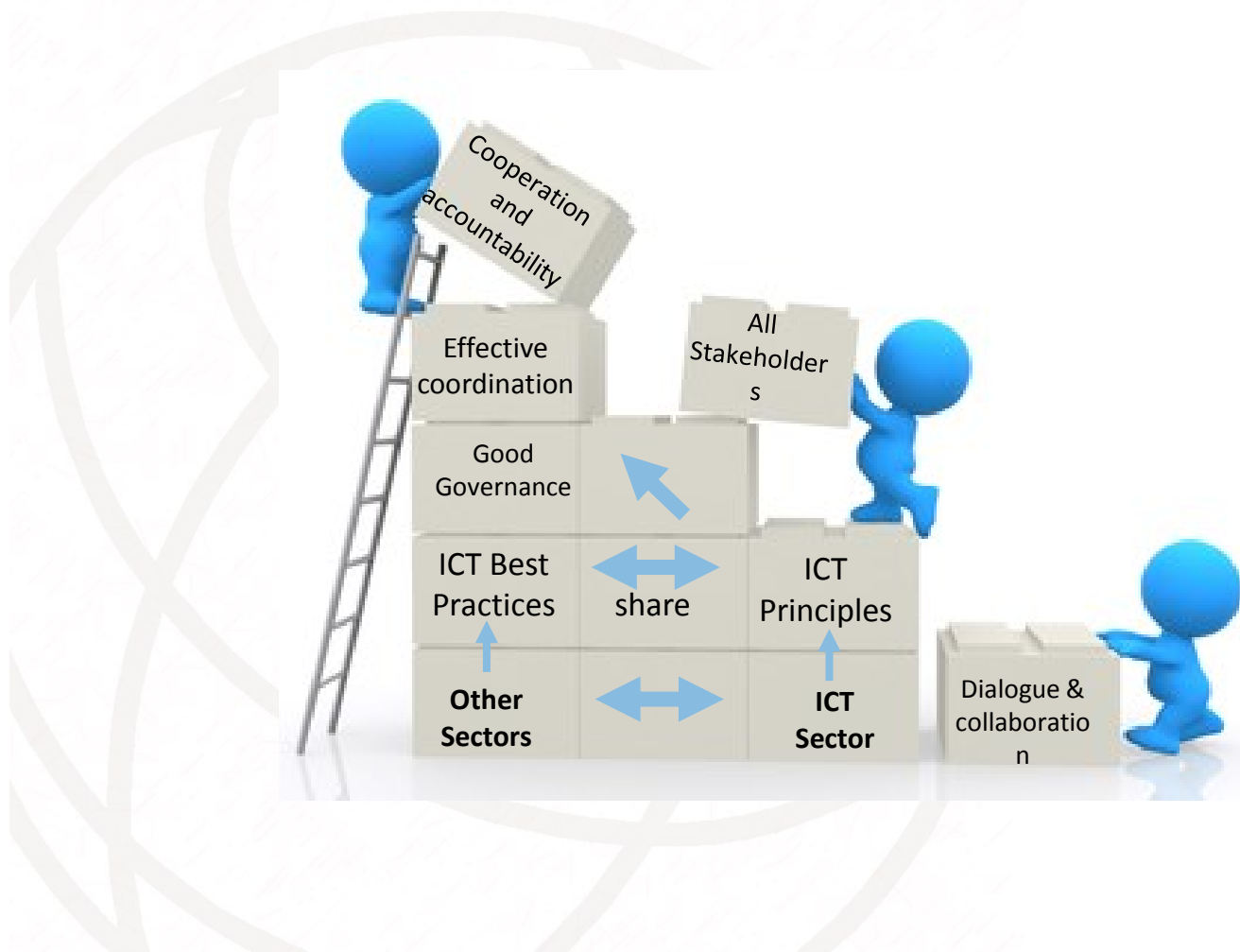
Generations of regulation



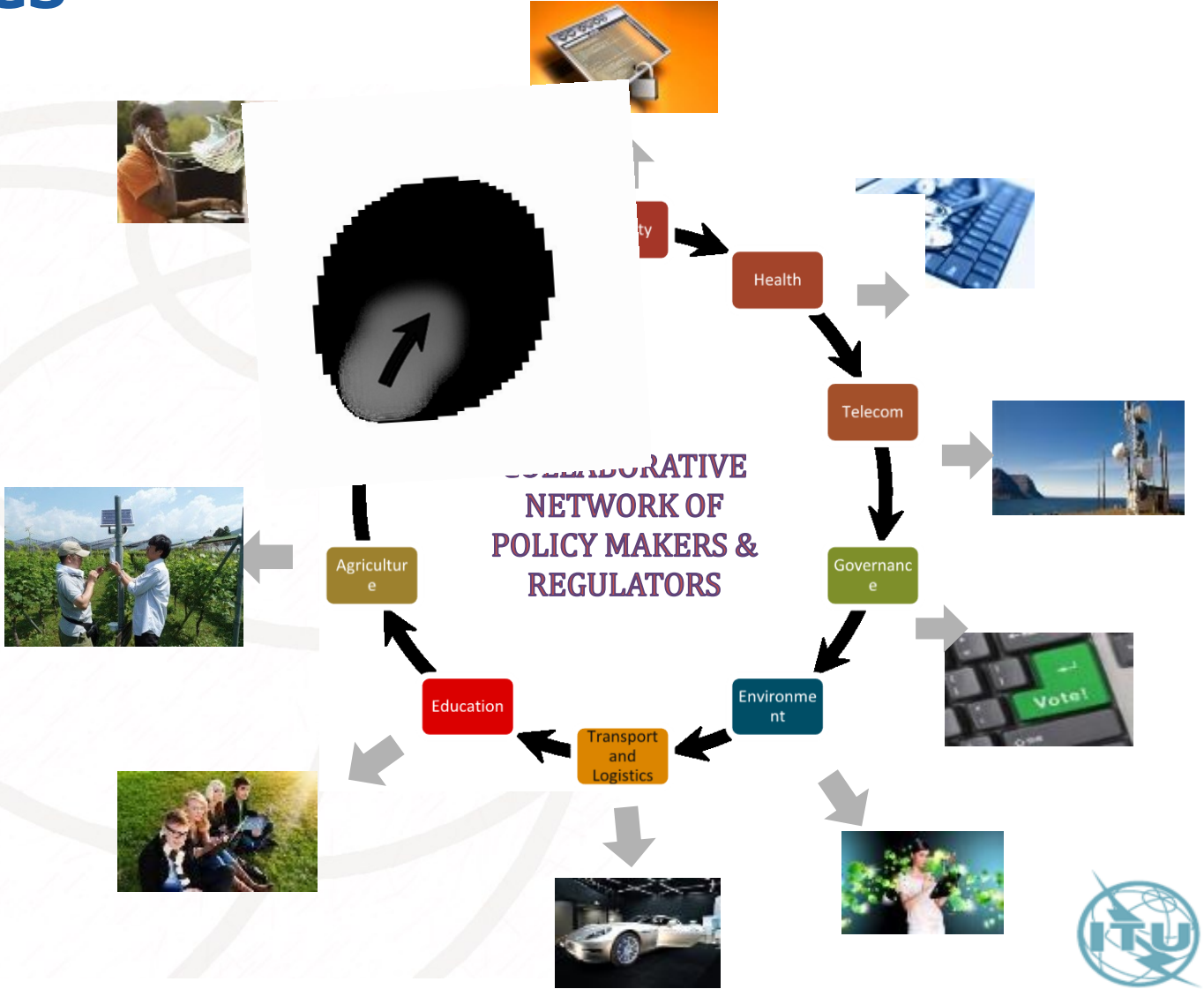
- G1: Regulated public monopolies** without an independent regulator
- G2: Basic reform**, including the creation of separate regulatory bodies, partial liberalization and privatization across the layers
- G3: Regulation for enabling investment**, innovation and access, with focus on stimulating competition
- G4: Integrated regulation**, with an evolving role of the regulator as a partner for development and social inclusion
- G5: Collaborative regulation**, with the need to define the foundation, platforms and mechanisms for working with other sector regulators to help achieve the Sustainable Development Goals

Source: ITU

Building Blocks for Collaborative Regulation



REGULATORY COLLABORATION Examples





THANK YOU

ITU-D SG 6/1 Expert Meeting Consumer
Protection in a Digital Collaborative Economy

Chongqing, China

9-11 November, 2016



Backup slides

ITU-D SG 6/1 Expert Meeting Consumer
Protection in a Digital Collaborative Economy

Chongqing, China

9-11 November, 2016





ITU: A brief overview

193 Member States

567 Sector Members

159 Associates

60 Academia



ITU-R: ITU's Radio-communication Sector globally manages radio-frequency spectrum and satellite orbits that ensure safety of life on land, at sea and in the skies.



ITU-T: ITU's Telecommunication Standardization Sector enables global communications by ensuring that countries' ICT networks and devices are speaking the same language.



ITU-D: ITU's Development Sector fosters international cooperation and solidarity in the delivery of technical assistance and in the creation, development and improvement of telecommunication/ICT equipment and networks in developing countries.

Headquartered in Geneva,

4 Regional Offices

7 Area Offices.

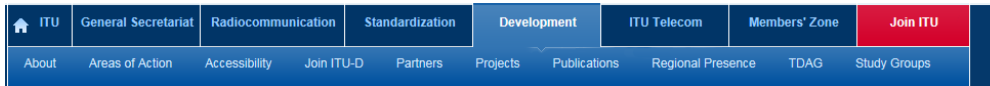
ITU BDT



The Telecommunication Development Sector (ITU-D) fosters international cooperation and solidarity in the delivery of technical assistance and in the creation, development and improvement of telecommunication and ICT equipment and networks in developing countries.

Please visit : www.itu.int/en/ITU-D/Pages/default.aspx

ITU/BDT Regulatory Activities



Regulatory and Market Environment

YOU ARE HERE HOME > ITU-D > REGULATORY & MARKET ENVIRONMENT

SHARE    

Global Symposium for Regulators (GSR) 2016

Sharm el-Sheikh, Egypt, 11-14 May 2016



GSR

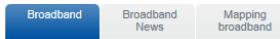
Since its launch in 2000, the annual Global Symposium for Regulators (GSR) provides a unique venue for regulators and policy-makers from both developed and developing countries to meet and exchange views and experiences. The meeting fosters an open dialogue between regulators and industry.

- GSR16: **Be Empowered, Be included!** Building blocks for smart societies in a connected world, **11-14 May 2016, Sharm el-Sheikh, Egypt**
- GSR15: **Mind the Digital Gap - Regulatory incentives to achieve digital opportunities**, 9-11 June 2015, Libreville, Gabon
- GSRs Best Practice Guidelines and documents

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 Broadband Thematic Reports Series
- Publications on Economics & Finance
- Other publications



- Broadband Thematic Reports
- Case studies
- GSRs and Best Practice Guidelines
- ITU Broadband Atlas **New**
- ITU Broadband Atlas in 3D **New**
- Broadband Commission for Digital Development
- Broadband Commission Reports
- Understanding patents, competition and standardization

HIGHLIGHTS

Events Links

- ITU Regional Economic and Financial Forum of Telecommunications/ICTs for Latin America and the Caribbean
Brasilia, Brazil

Global Symposium for Regulators (GSR-16)

Trends in Telecommunication Reform 2016: Regulatory Incentives to Achieve Digital Opportunities

- Investment strategies to foster the deployment of broadband and access to the digital economy,
- Network sharing and co-investment regulation,
- Regulation and the Internet of Things (IoT),
- Interoperability in the digital ecosystem,
- Smart regulation to facilitate m-services and applications uptake and diffusion

Broadband Thematic reports Publications on economic and Finance

The ICT Tracker



50
INDICATORS



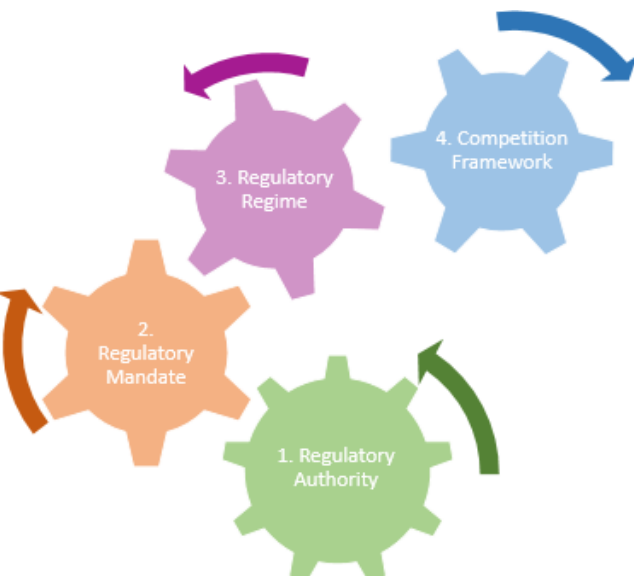
Source: ITU ICT Regulatory Tracker, 2015

ICT Regulatory Tracker - Complete set of data available



Microsoft Excel interface showing the ICT Regulatory Tracker data. The spreadsheet is titled "Matrix ICT Regulatory Tracker" and displays data for various countries across four main categories: 1. Regulatory Authority, 2. Regulatory Mandate, 3. Regulatory regime, and 4. Competition Framework. The data is organized into columns for each category, with sub-columns for specific indicators. The table includes a header row for "Max Categories Points" and a main data table with columns for "YEI", "COUNTRY", and various regulatory indicators.

Max Categories Points		1. Regulatory authority										2. Regulatory mandate										3. Regulatory regime										4. Competition Framework									
YEI	COUNTRY	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10
7	2000	Albania	2	2	2	2	2	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	2000	Andorra	2	2	2	2	2	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	2000	Anguilla and Barbuda	2	2	2	2	2	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	2000	Argentina	2	2	2	2	2	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Global Symposium for Regulators (GSR)

- GSR brings together **heads of national telecom/ICT regulatory authorities** from around the world and has earned a reputation as the global annual venue for regulators to **share their views and experiences on the most pressing regulatory issues** they have identified
- **GSR fosters a dynamic Global Industry Regulators Dialogue (GRID)**, between regulators, policy makers, industry leaders and other key ICT stakeholders
- GSR's Global Dialogue provides a **neutral platform for ITU-D Sector Members** to share their views on major issues facing the ICT sector
- GSR includes a series of **pre-events**:
 - ✓ A Thematic Pre-Conference
 - ✓ The Private Sector Chief Regulatory Officers Meeting
 - ✓ The Regulatory Associations Meeting



Global Symposium for Regulators (GSR) ²

15 Annual Editions of GSR since 2000



GSR2000
Establishing a regulatory body



GSR2001
Effective regulation



GSR2002
Promoting Universal Access to ICTs



GSR2003
Promoting Universal Access to ICTs



GSR2004
Licensing in an era of convergence



GSR2007
The Road to Next Generation Networks (NGN): Can regulators promote investment and achieve open access?



GSR2005
Developing a new regulatory framework to promote broadband deployment and access in developing countries



GSR2008
Six degrees of sharing: Innovative infrastructure sharing and open access strategies to promote affordable access for all



GSR2009
Hands-on or Hands-off? Stimulating growth through effective ICT regulation



GSR2010
Enabling Tomorrow's Digital World



GSR 2011
Smart Regulation for a Broadband



Global Symposium for Regulators(GSR)

15 Annual Editions of GSR since 2000 (cont.)



GSR 2012
Why regulate in a Networked Society?



GSR 2013
4th-Generation Regulation:
driving digital
communications ahead



GSR14
Capitalizing on the potential
of the digital world



GSR15
Mind the Digital Gap -
Regulatory incentives to
achieve digital opportunities



Be Empowered, Be Included!
*Building Blocks for Smart Societies
in a Connected World*

More Information

- Telecommunication Development Sector
 - <http://www.itu.int/ITU-D/>
- ICT Regulatory Tracker
 - <http://www.itu.int/ITU-R/>
- ITU ICT Eye
 - <http://www.itu.int/icteye/>
- Publications on Economics & Finance
 - <http://www.itu.int/pub/D-PREF-EF/en>