



Digital Transformation through Universal Access Strategies

ITU-USF Pakistan Workshop on
“Internet Access and Adoption”

Sameer Sharma
Senior Advisor

International Telecommunication Union
Regional Office for Asia and the Pacific

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Digital Divide to Digital Inclusion

Current Status

- 50% of the world's population is expected to be connected to the Internet by the end of 2019 leaving an estimated 3.8 billion people – unconnected and unable to benefit from key social and economic resources in our expanding digital world

2025 Targets

- By 2025, all countries should have a funded National Broadband Plan or Strategy, or include broadband in their Universal Access and Services definition

Action Items

- Governments must work more diligently to design Universal Access Strategies to disperse the funds collected, ensuring that the USFs meet their mandate of enabling marginalized and underserved citizens to get online for digital inclusion.



ITU at a glance

Meet us

What we do



'Committed to
Connecting the World'

193

MEMBER
STATES

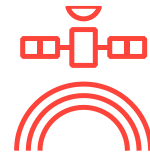
+700

INDUSTRY &
INTERNATIONAL
ORGANIZATIONS

+150

ACADEMIA
MEMBERS

3
Sectors



ITU Radiocommunication

Coordinating radio-frequency spectrum
and assigning orbital slots for satellites

ITU Standardization

Establishing global standards

ITU Development

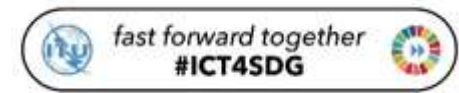
Bridging the digital divide

MEMBERSHIP





ICTs and the SDGs



“The spread of information and communication technology and global interconnectedness has great potential to accelerate human progress, to bridge the digital divide and to develop knowledge societies, as does scientific and technological innovation across areas as diverse as medicine and energy”. Agenda for Sustainable Development (Paragraph 15)



Fast forward the SDGs

Many of the Sustainable Development Goals (SDGs) will not be met unless we accelerate the pace of change. We need information and communication technologies (ICTs) to meet the SDGs.

Talk to us today about how ICTs can help achieve the SDGs.

fast forward together #ICT4SDG

ICTs are catalytic drivers to enable the achievement of all the SDGs

Specifically referenced in the SDG targets:

- SDG4 Quality Education (4b)
- SDG5 Gender Equality (5b)
- SDG9 Industry, innovation and Infrastructure (9c)
- SDG 17 Partnerships for the Goals (17.8, as a means of implementation)



Broadband Commission for SDG 2025 Targets

1. By 2025, all countries should have a funded national broadband plan or strategy, or include broadband in their universal access and services definition.
2. By 2025, entry-level broadband services should be made affordable in developing countries, at less than 2% of monthly gross national income per capita.
3. By 2025 broadband-Internet user penetration should reach:
 - a) 75% worldwide
 - b) 65% in developing countries
 - c) 35% in LDCs
4. By 2025, 60% of youth and adults should have achieved at least a minimum level of proficiency in sustainable digital skills.
5. By 2025, 40% of the world's population should be using digital financial services.
6. By 2025, un-connectedness of Micro-, Small- and Medium-sized Enterprises should be reduced by 50%, by sector.
7. By 2025, gender equality should be achieved across all targets



Policy Leadership in National Broadband Plans, 2008-2018

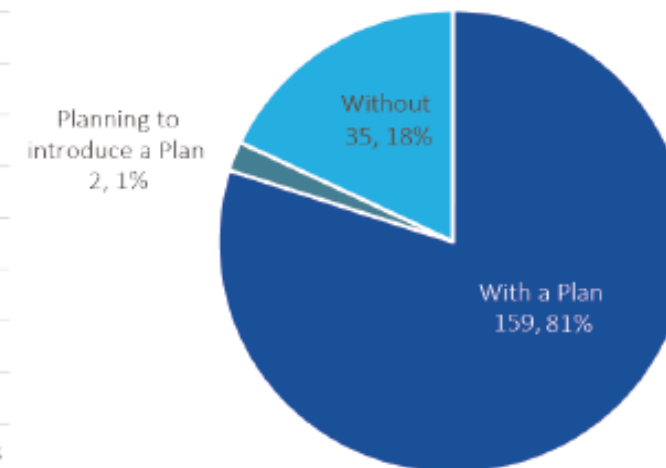
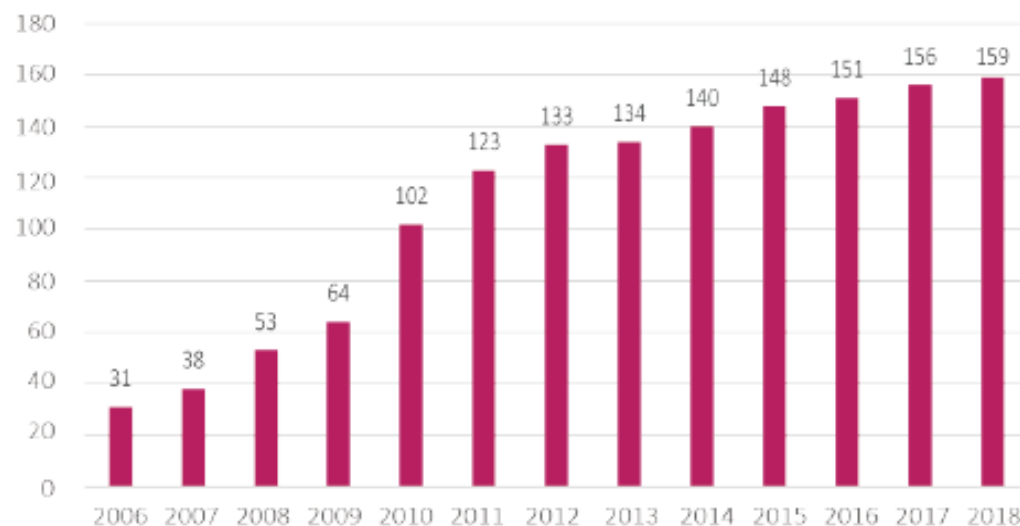
Number of countries that have adopted a Plan or Strategy, planning to adopt or without (left chart); Growth in National Broadband Plans, 2006-2018 (right chart).

Advocacy
Target 1:

**Making
Broadband
Policy
Universal**

By 2025, all countries should have a National Broadband Plan or strategy or include broadband in their UAS definitions

Number of Countries with Broadband Plans
2006-2018



Source: ITU. Note: Charts based on data for 196 countries. National Broadband Plan or strategy includes: a plan, strategy or policy specific to broadband; digital plan, agenda, strategy or policy; ICT plan, strategy, or policy; or a communication plan, strategy, or policy.



Matrix of OECD national broadband targets per coverage and quality

Evolving National Broadband Availability Targets

A technology-neutral approach or a speed-based approach disaggregated to the smallest regional level possible is desirable

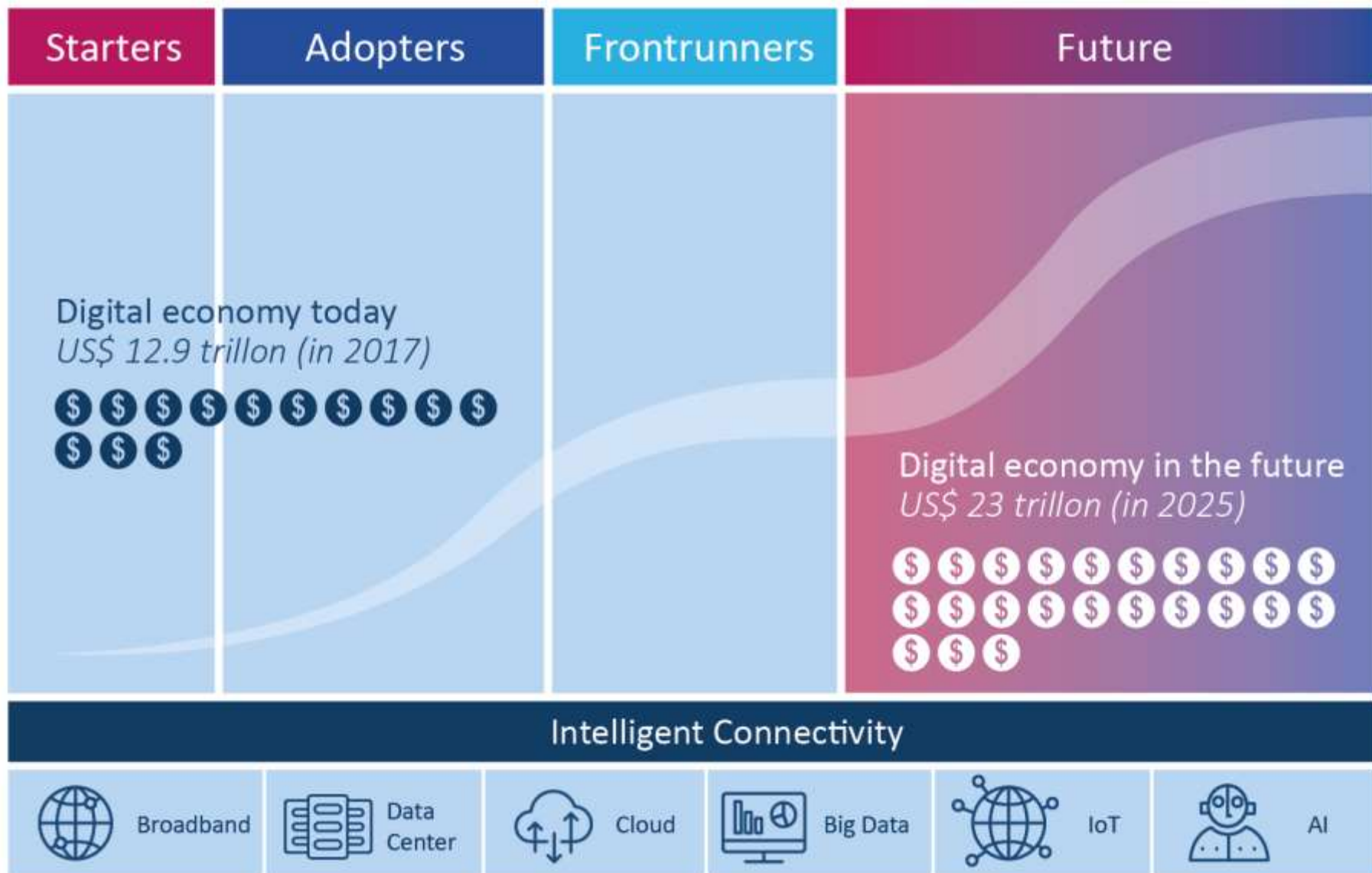




Intelligent Connectivity – The USD 23 Trillion Opportunity by 2025

ICT infrastructure maturity and GDP growth, the 2018 Global Connectivity Index (GCI)

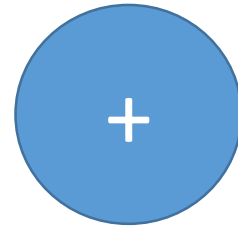
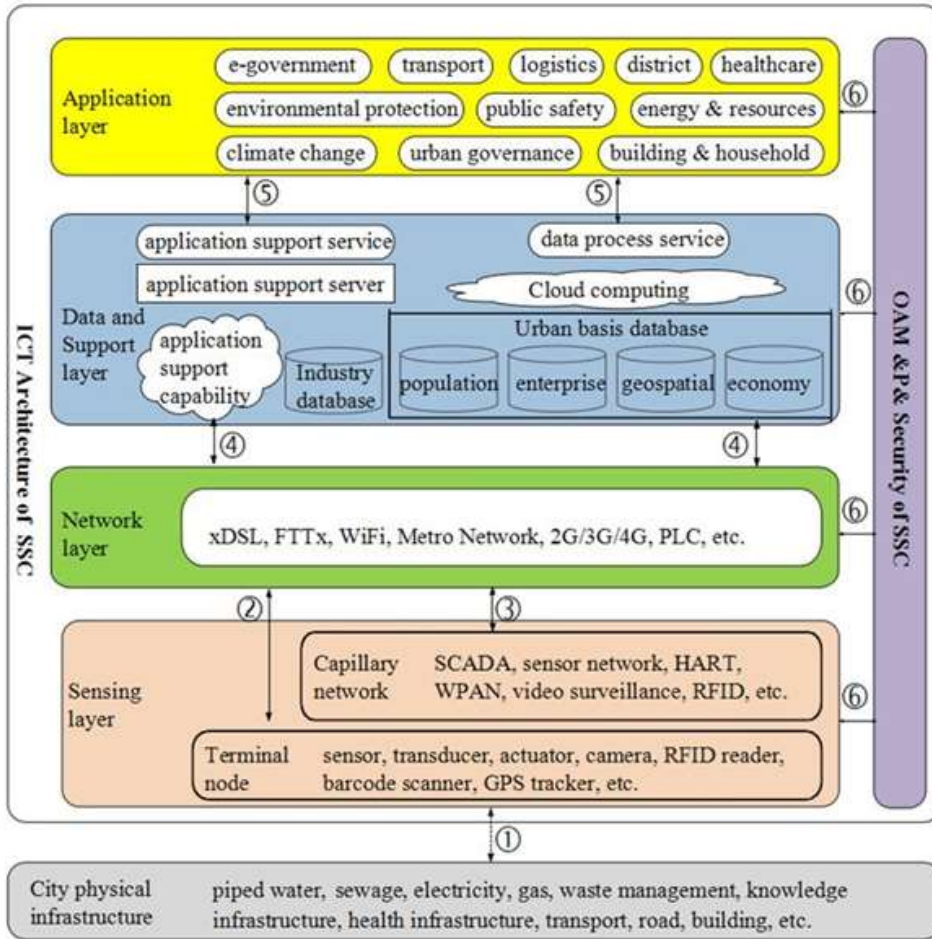
GDP returns among countries with concentrated adoption of ICT infrastructure. Countries with less proactive investment have seen less stellar results.



Source: Huawei.



We are sitting on an opportunity curve in this digital society..



Enabling Environment, Digital Inclusion

Skills and capacity Building

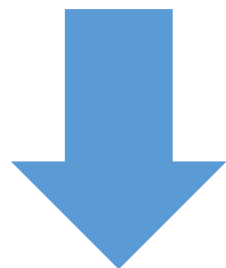
Innovation

Source: ITU-T Focus Group on Smart Sustainable Cities

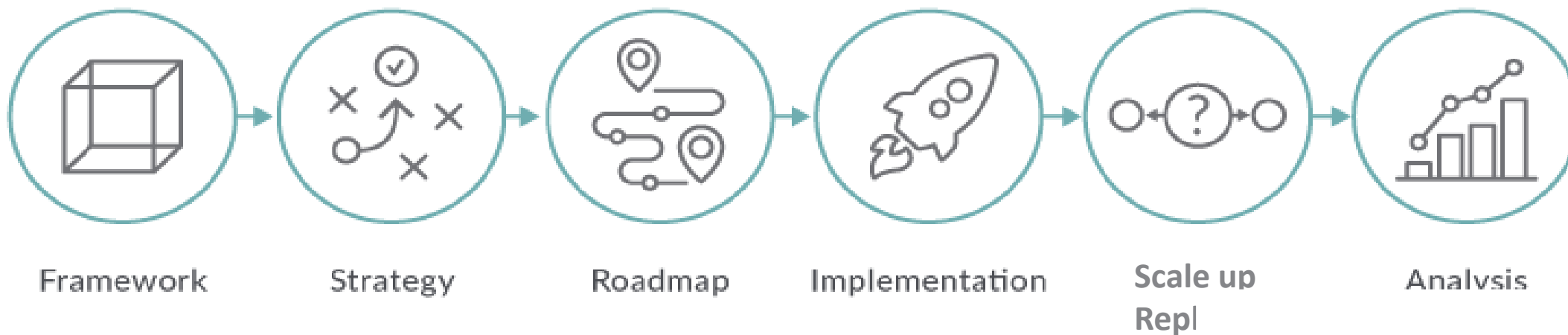


Country/Sector Development priorities:

- Digital Economy agenda
- Universal Health Coverage
- End Hunger, Food Security
- Education for all
- Smart City



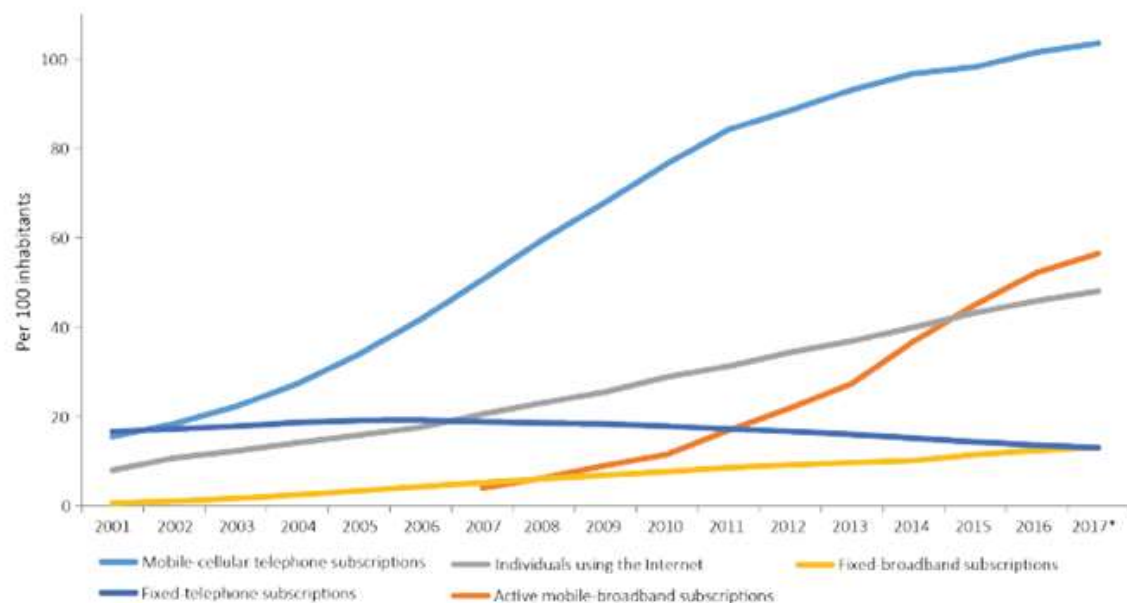
Digital transformation process



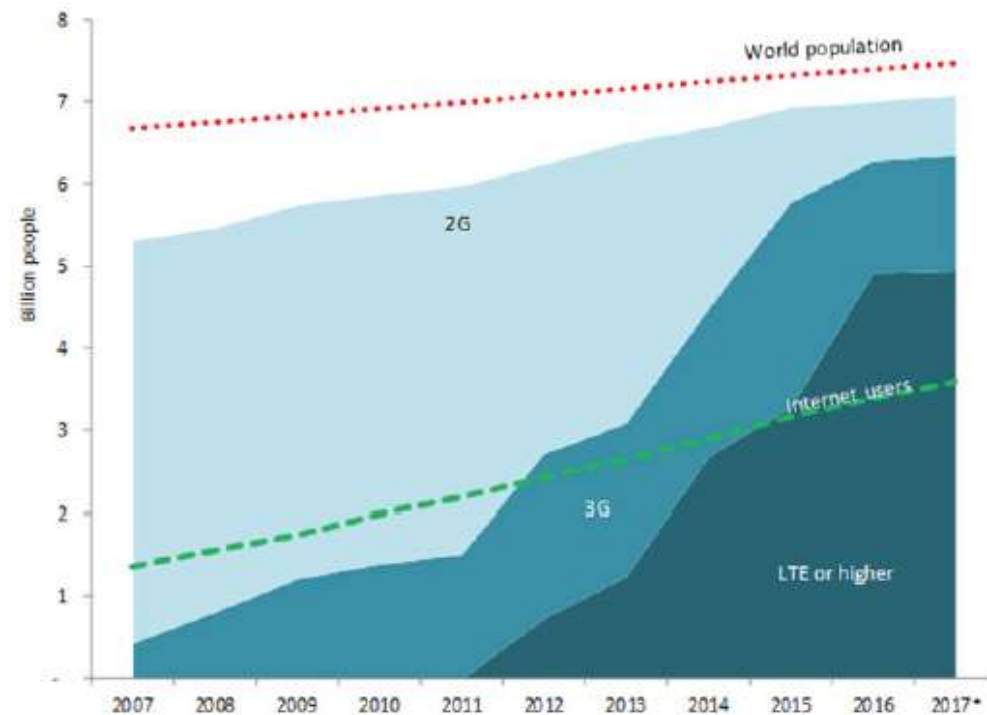


Telecom Status – At a Glance

Chart 1.1: Global ICT developments, 2001-2017*



Notes: * ITU estimate.
Source: ITU.



Source: ITU World Telecommunication/ICT Indicators database (* Estimate)



GSA

Evolution from LTE to 5G - April 2018 Update

LTE and 5G report based on intelligence gathered as part of ongoing industry research and available in GSA's Networks, Technologies and Spectrum (NTS) online database

April 2018

Report: Evolution from LTE to 5G, GSA

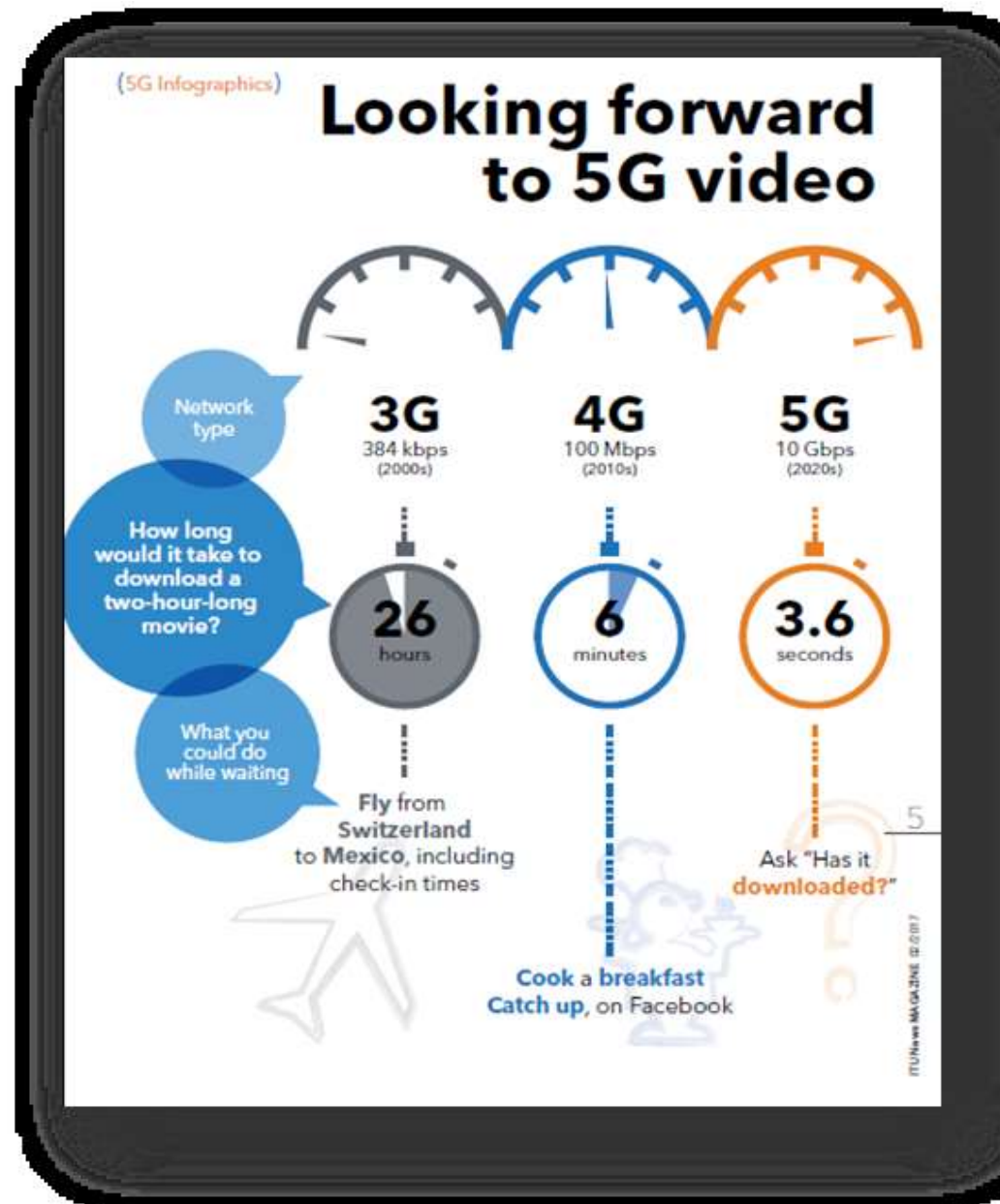
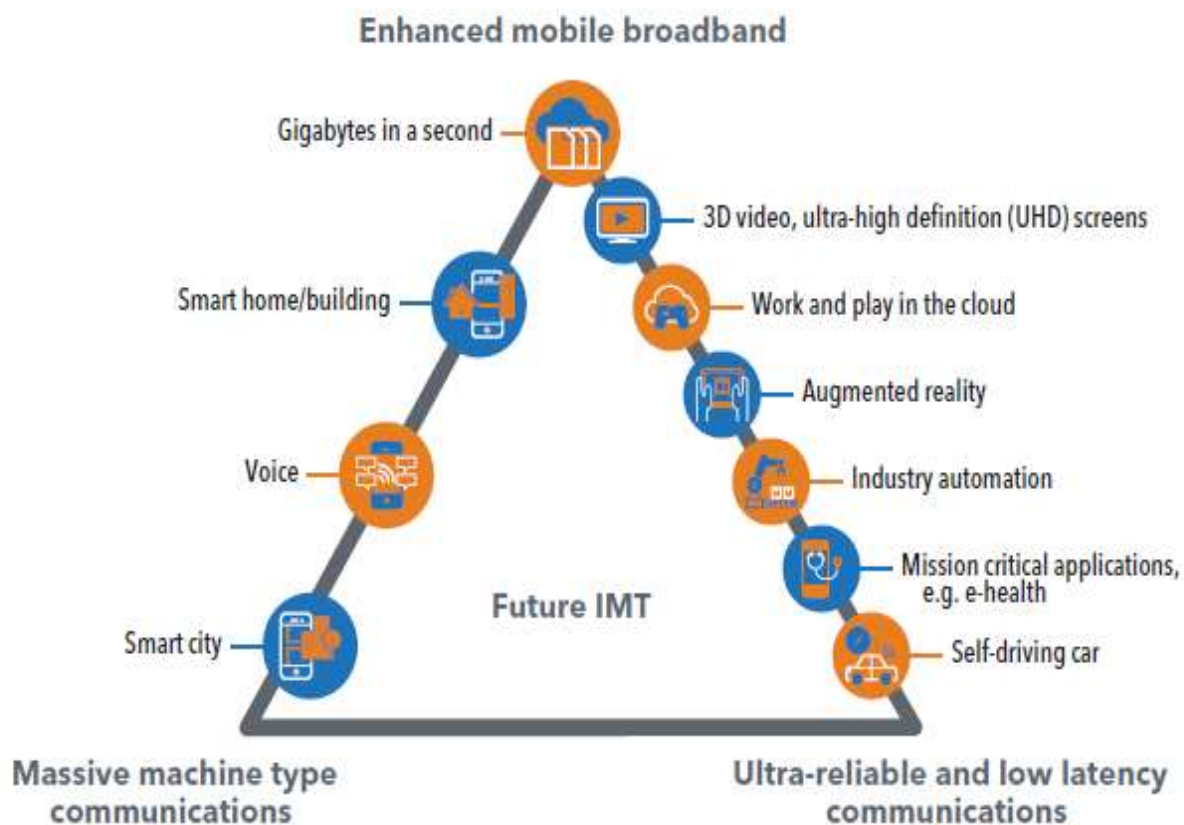
<https://gsacom.com/>

- **858** operators investing in LTE, including pre-commitment trials.
- **672** commercially launched LTE or LTE-Advanced networks in **204** countries, including those using LTE for FWA services, and including **111** LTE-TDD (TD-LTE) networks launched in **58** countries.
- **145** commercial VoLTE networks in **70** countries and **224** operators investing in VoLTE in **102** countries.
- **241** launched networks that are LTE-Advanced in **115** countries.
- **four** launched networks that are capable of supporting user equipment (UE) at Cat-18 DL speeds (within limited geographic areas)
- **680–700** anticipated commercially launched LTE networks by end-2018 (GSA forecast).
- **50** NB-IoT and **15** LTE-M/Cat-M1 networks commercially launched with **58** other operators investing in NB-IoT and **19** other operators investing in LTE-M/Cat-M1 in the form of tests, trials or planned deployments.
- **134** operators that have been engaged in, are engaged in, plan to engage in, or have been licensed to undertake 5G demos, tests or trials of one or more constituent technologies.
- at least **48** operators that have now made public commitments to time-lines for deployment of pre-standards '5G' or standards-based 5G networks in **33** countries.



IMT 2020 : 5G and beyond....

5G usage scenarios from the ITU-R IMT-2020 Vision Recommendation





Cloud Computing, IOT, AI, Big Data , Blockchain Machine Learning

ITU Infographics

Cloud: The engine for digital transformation

The work of the ITU's Telecommunication Development Sector (ITU-D) is essential in achieving the Sustainable Development Goals (SDGs). ITU-D study groups examine specific topics, called questions, and, through their work, help foster socio-economic development for all. #ICT4SDG

What is it?
Cloud computing or "the Cloud" is the delivery of on-demand computing resources—from data storage to applications and services—over the internet on a pay-as-you-go basis. The use of Cloud computing for processing, transmitting, and storing data makes it significant for the provision of public and private services for countries at all levels of development. While Cloud computing is not new in its essence as a technology, major technology advances have made Cloud computing more attractive, economically sustainable, relevant to many, and multi-useful. Cloud services can be applied in a wide range of areas, including for new working styles, supply chain innovation and for government e-services such as education and healthcare.

It is

- a service that can offer
- Communication
- Infrastructure
- Computing
- Data storage
- Network
- Platform
- Software

It is not

- Data centers
- Internet
- Web hosting
- Hosting and outsourcing
- IT services

Key characteristics

- Broad network access** Users can access physical and virtual resources from wherever they need to work.
- Measured services** Pay as you go.
- Multi-tenancy** Every customer enjoys own space over shared resources.
- Rapid elasticity and scalability** Scale up or down quickly and easily to meet demand.
- On-demand self-service** What you need, when you need it. 24/7/365.
- Resource pooling** Physical or virtual resources are aggregated and shared.

Opportunities

- Scalability
- Agility
- Mobility
- Cost reduction
- Efficiencies
- Innovation
- Smart apps
- Big data

Challenges

- Infrastructure and access
- Interoperability
- Jurisdiction
- Appropriate
- Trust and awareness

Pillars of a cloud-savvy strategy

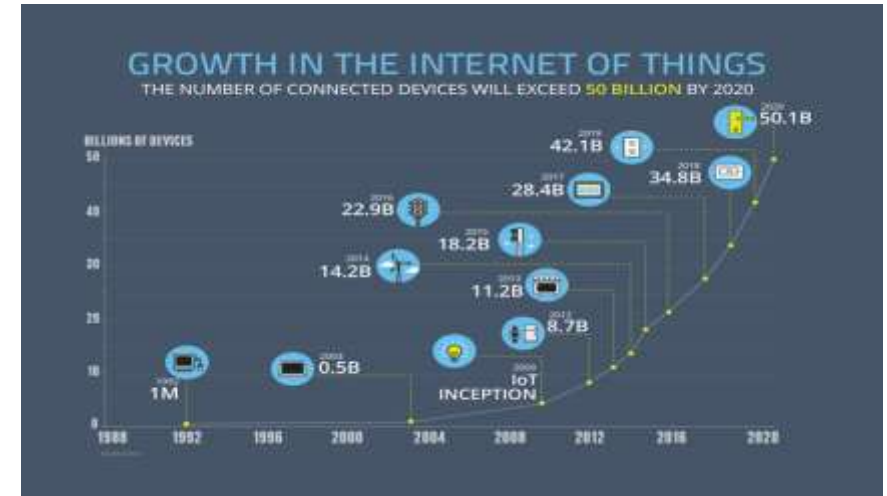
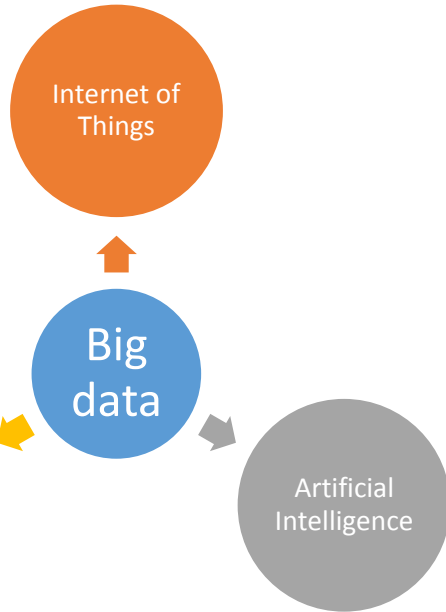
- Infrastructure**: Cloud requires robust infrastructure to provide reliable connectivity across devices and apps.
- Innovation**: Cloud enables innovation at lower cost and greater scale.
- Skills**: It is essential that relevant skills and knowledge to contribute to and fully benefit from Cloud.
- Trust**: Cloud computing relies on the trust established between users, providers, and regulators.

ITU and Cloud computing

All ITU-D Study Group 1 studies the policy and regulatory aspects of Cloud computing as part of the work of Question 3/1. Also at ITU, the ITU's Telecommunication Standardization Sector (ITU-T) and the International Organization for Standardization's Joint Technical Committee for Information Technology (ISO/IEC) are working on providing a set of standards and guidelines in support of cloud adoption. They are called ITU-T Y.3500 and Y.3600 series.

Cloud is a valuable way for governments to deliver effective and efficient services to their constituencies

- Development of Cloud scenarios for applications to fast-forward development towards the achievements of SDGs.
- Studies on topical issues such as big data, Internet of Things, Artificial Intelligence and intelligent storage solutions as well as cross-jurisdiction issues.
- Ongoing standardization work is looking at new Cloud services, trusted intercloud solutions and interoperability for the Cloud.
- Development of a framework for measuring cloud implementation and assessing countries' readiness to enable data-driven policy making.



ITU

AI for Good Global Summit

Accelerating progress towards the SDGs

#AIforGood

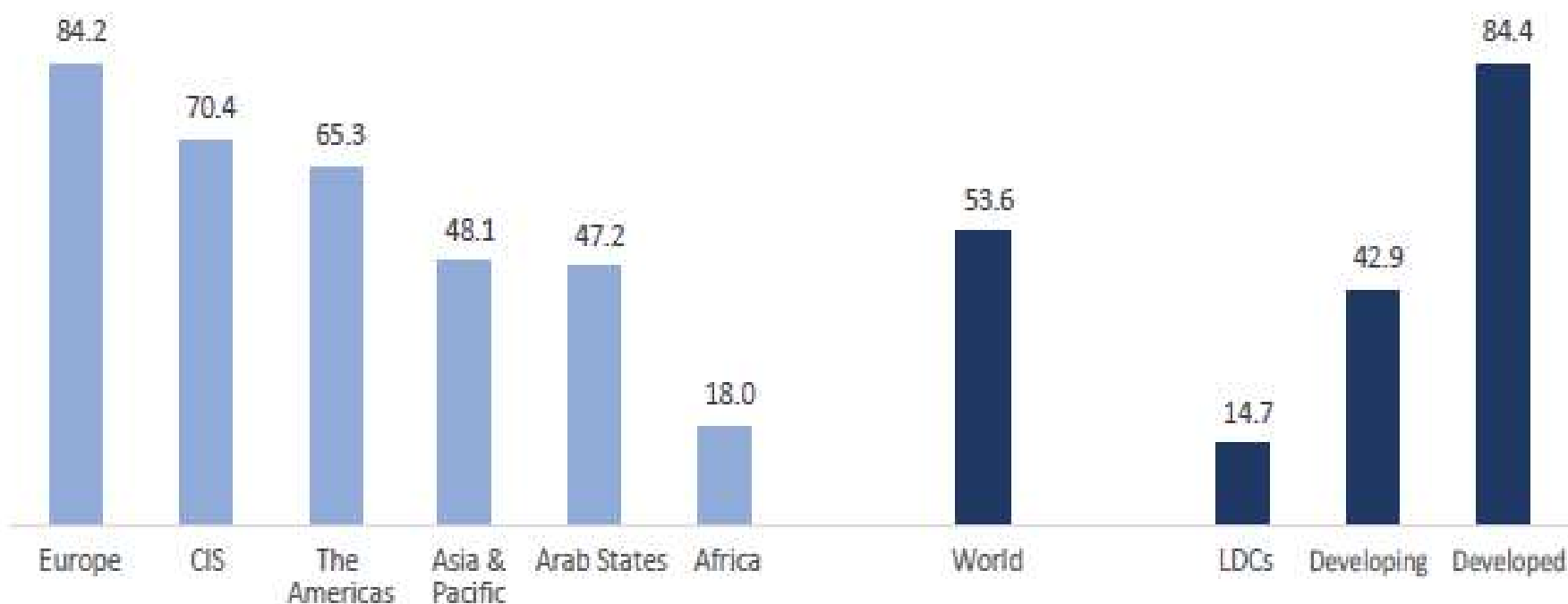
In partnership with XPRIZE

Focus Group on Technologies for Network 2030: ITU- T SG 13

32 UN Agencies (May 2018)
35 innovative project proposals leveraging the power of ICT



Proportion of households with Internet access, 2017*



In developed countries, the proportion of households with Internet access at home is twice as high as in developing countries.

Only 15% of households in LDCs have Internet access at home. In these countries, many Internet users are accessing the Internet from work, schools and universities or from other shared public connections outside the home.

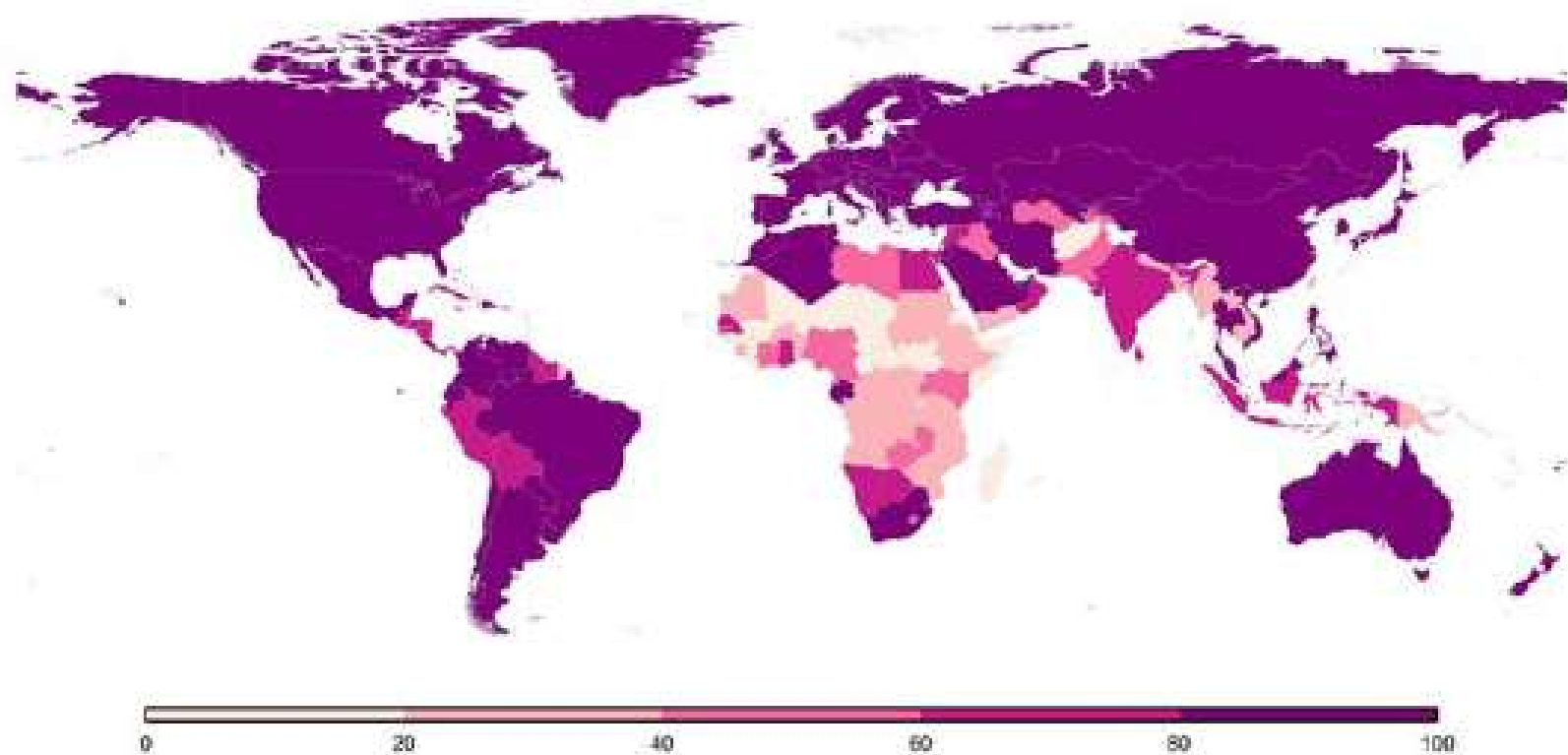
Source: ITU.

Note: * Estimates. CIS refers to the Commonwealth of Independent States.



70% OF THE WORLD'S YOUTH ARE ONLINE

Proportion of youth (15-24) using the Internet, 2017*



Source: ITU.
Note: * Estimates.

In 104 countries, more than 80% of the youth population are online.

In developed countries, 94% of young people aged 15-24 use the Internet compared with 67% in developing countries and only 30% in Least Developed Countries (LDCs).

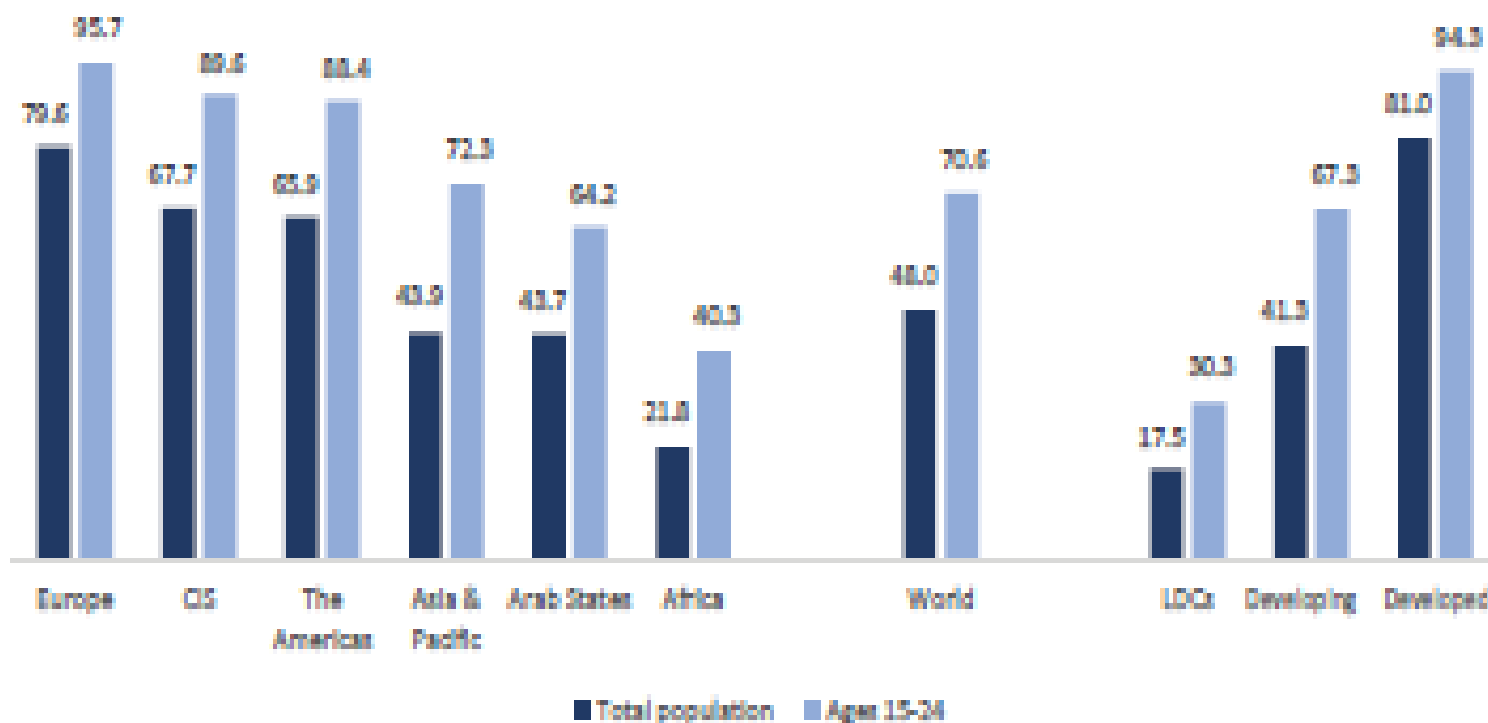
Out of the 830 million young people who are online, 320 million (39%) are in China and India.

Nearly 9 out of 10 young individuals not using the Internet live in Africa or Asia and the Pacific.



YOUTH ARE AT THE FOREFRONT OF INTERNET ADOPTION

Proportion of individuals using the Internet, by age, 2017*



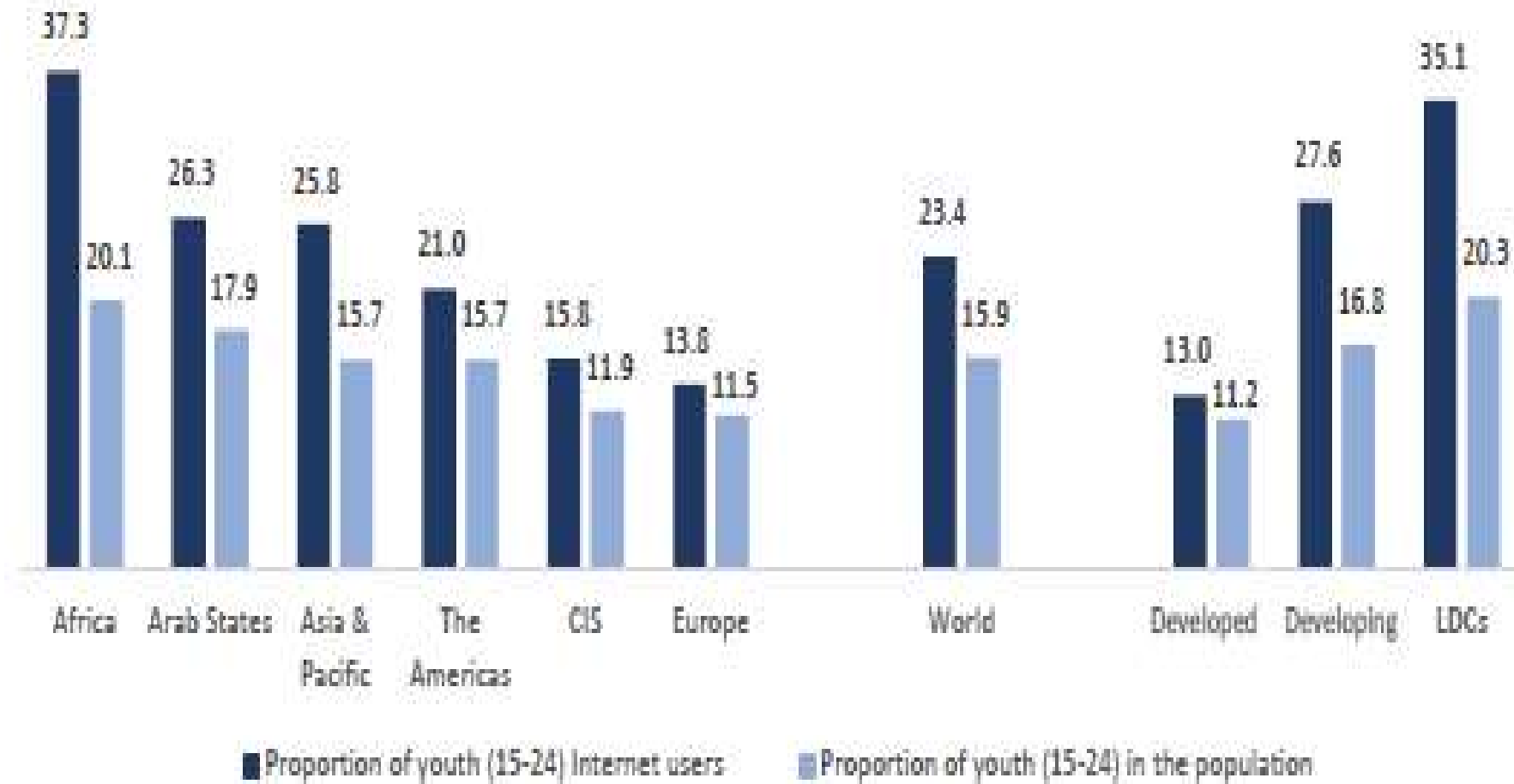
The proportion of young people aged 15-24 using the Internet (71%) is significantly higher than the proportion of the total population using the Internet (48%).



Proportion of Youth (15-24) Internet users and Youth in the population, 2017

Young people represent almost one-fourth of the total number of individuals using the Internet worldwide.

In LDCs, 35% of the individuals using the Internet are young people aged 15-24, compared with 13% in developed countries and 23% globally.





Internet user gender gap (%), 2013 and 2017*



The proportion of women using the Internet is 12% lower than the proportion of men using the Internet worldwide.

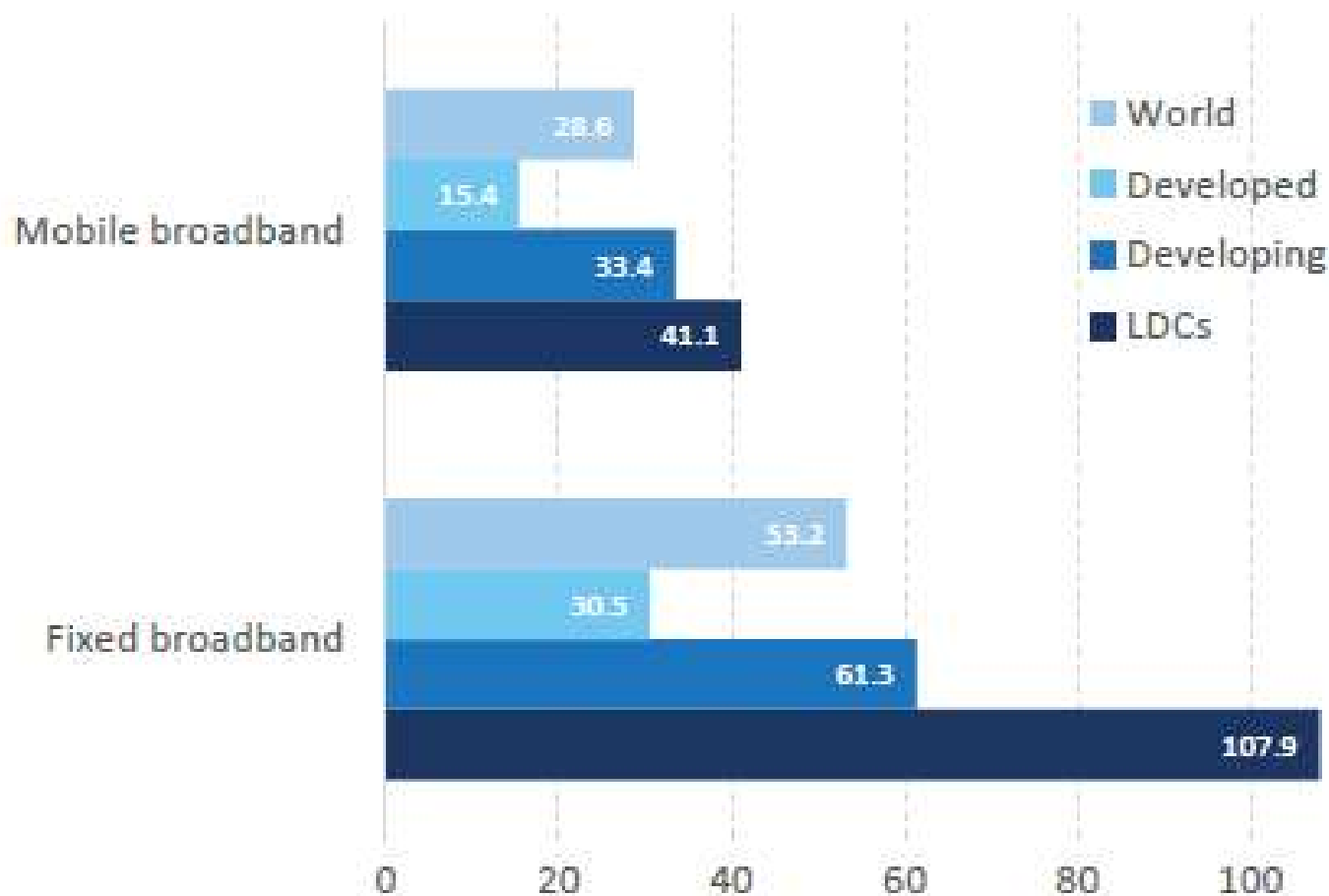
While the gender gap has narrowed in most regions since 2013, it has widened in Africa.

In Africa, the proportion of women using the Internet is 25% lower than the proportion of men using the Internet.

In LDCs, only one out of seven women is using the Internet compared with one out of five men.



Broadband prices in PPP\$, 2016

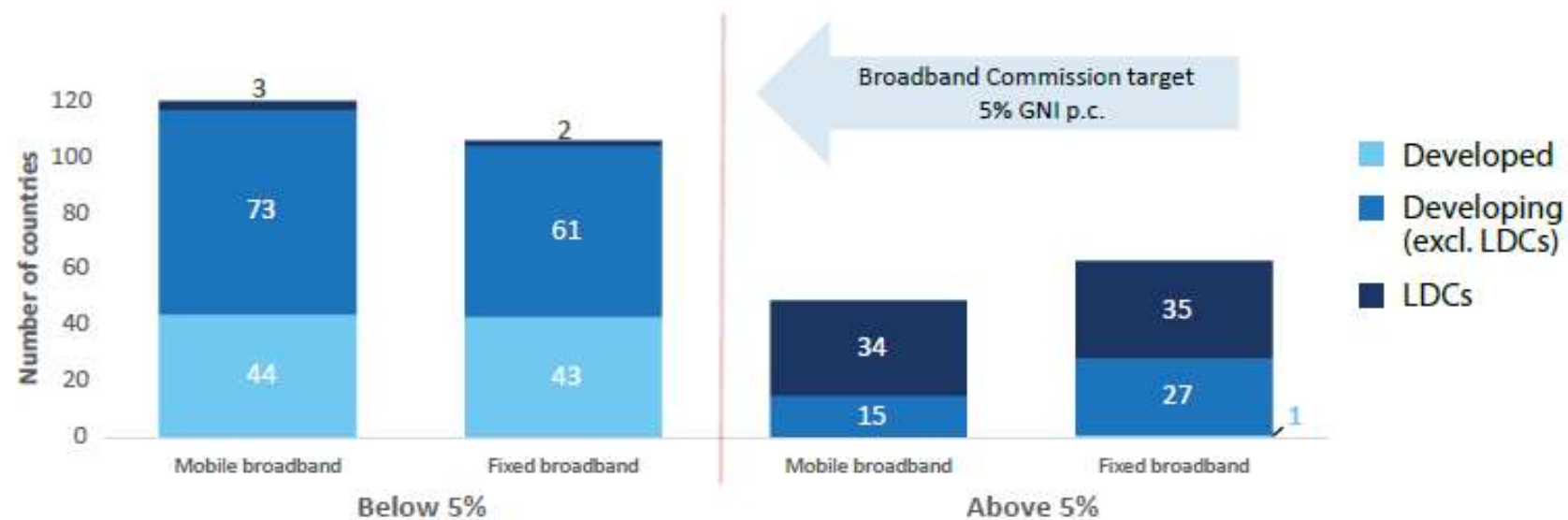


In LDCs, on average, an entry-level fixed-broadband subscription is 2.6 times more expensive than an entry-level mobile-broadband subscription.

Source: ITU.

Note: Based on simple averages including data for 167 countries. Prices are based on entry-level plans with a minimum data allowance of 1 GB per month. PPP\$ refers to prices in international dollars, calculated using purchasing power parity (PPP) conversion factors instead of market exchange rates.

Broadband prices as a percentage of GNI per capita, 2016



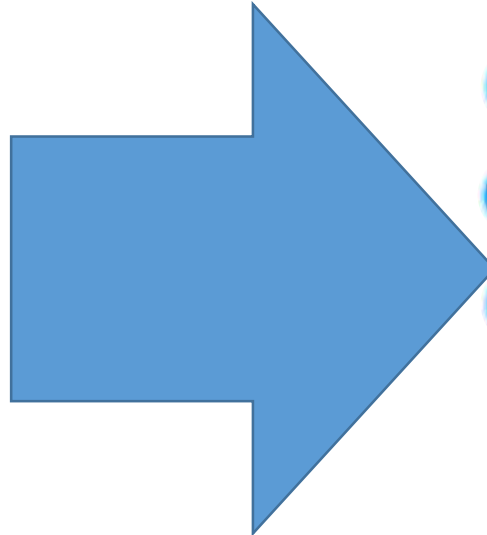
Mobile broadband is more affordable than fixed-broadband services in most developing countries. However, mobile-broadband prices represent more than 5% of GNI per capita in most LDCs and are therefore unaffordable for the large majority of the population.



Source: ITU.

Note: Based on data available for 169 countries. Prices are based on entry-level plans with a minimum data allowance of 1 GB per month.



ITU-WHO : ICTs for better health outcomes : e Health (SDG 3)



-  mDiabetes
-  mCessation
-  mSmartlife
-  mHypertension
-  mCervicalCancer
-  mAgeing
-  mTuberculosis_Tobacco
- 



India , Philippines : mCessation

ITU- WHO FG-AI4H (July 2018)
Standardized assessment framework for the evaluation of AI-based methods for health, diagnosis, triage or treatment decisions.

Thailand : Planned BHBM Initiative with WHO

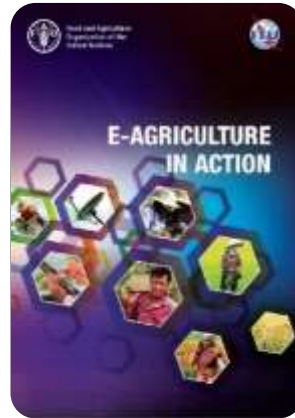
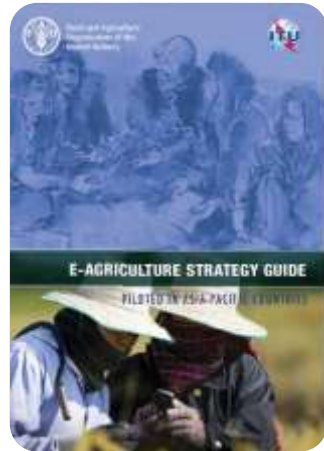


ITU-FAO: Cooperation in E-agriculture



FAO-ITU National E-Agriculture Strategy / Solutions

- **2015-2016:** Bhutan and Sri Lanka
- **2016-2017:** Philippines, Papua New Guinea, Fiji and Afghanistan
- **2018: Pakistan**



**E-AGRICULTURE
IN ACTION:
BLOCKCHAIN
FOR
AGRICULTURE
OPPORTUNITIES
AND
CHALLENGES**



15-17 Nov 2018, Nanjing, China





Digital Financial Services – Asia-Pacific



Mongolia (2017)

Digital Financial Services (DFS) and Digital Financial Inclusion (DFI) Ecosystem in Mongolia: A study with focus on cross-sectoral policy and regulatory collaboration

China (2018-2020)

Cooperation with World Bank as well as Bill & Melinda Gates Foundation as part of FIGI project

India (2018)

Capacity building on Understanding Digital Payments

Thailand (2018)

Regional training on Distributed Ledger Technologies

Ongoing discussions during various regional forums, e.g. ITU Regional Development Forum 2018 (Bangkok)- Thank UNCDF to share experience in 2018

[Best Practice Guidelines on Collaborative Regulation for Digital Financial Inclusion \(2016\)](#)

[Focus Group Digital Financial Services \(FG DFS\) \(2014-2016\)](#)

[Focus Group on Digital Currency including Digital Fiat Currency \(FG DFC\)](#)

[Focus Group on Application of Distributed Ledger Technology \(FG DLT\)](#)

[FIGI Project \(ITU, World Bank, Bill & Melinda Gates Foundation\)](#)



ITU activities global (examples)



United 4 Smart Sustainable Cities (U4SSC): SDG 11



U4SSC is a United Nations Initiative coordinated by ITU and UNECE that advocates for public policy to encourage the use of ICTs to facilitate and ease the transition to smart sustainable cities.

U4SSC was launched by **ITU and UNECE** to respond to the Sustainable Development Goal 11: "Make cities and human settlements inclusive, safe, resilient and sustainable"



UN4SSC developed set of KPI criteria to evaluate ICT's contributions in making cities smarter and more sustainable, and to provide cities with the means for self-assessments in order to achieve the sustainable development goals (SDGs).

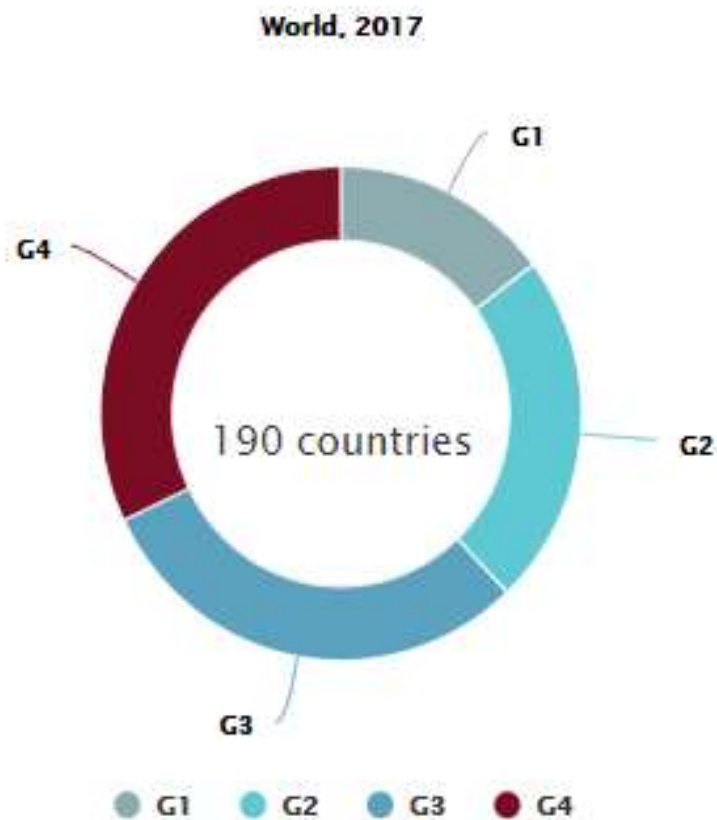




Evolution of Generations of ICT Regulation 2007-2017

Evolution of the generations of ICT regulation, 2007 – 2017

World



Definitions

G4: Integrated regulation, led by economic and social policy goals

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

G2: Opening markets, partial liberalization and privatization across the layers

G1: Regulated public monopolies, command & control approach

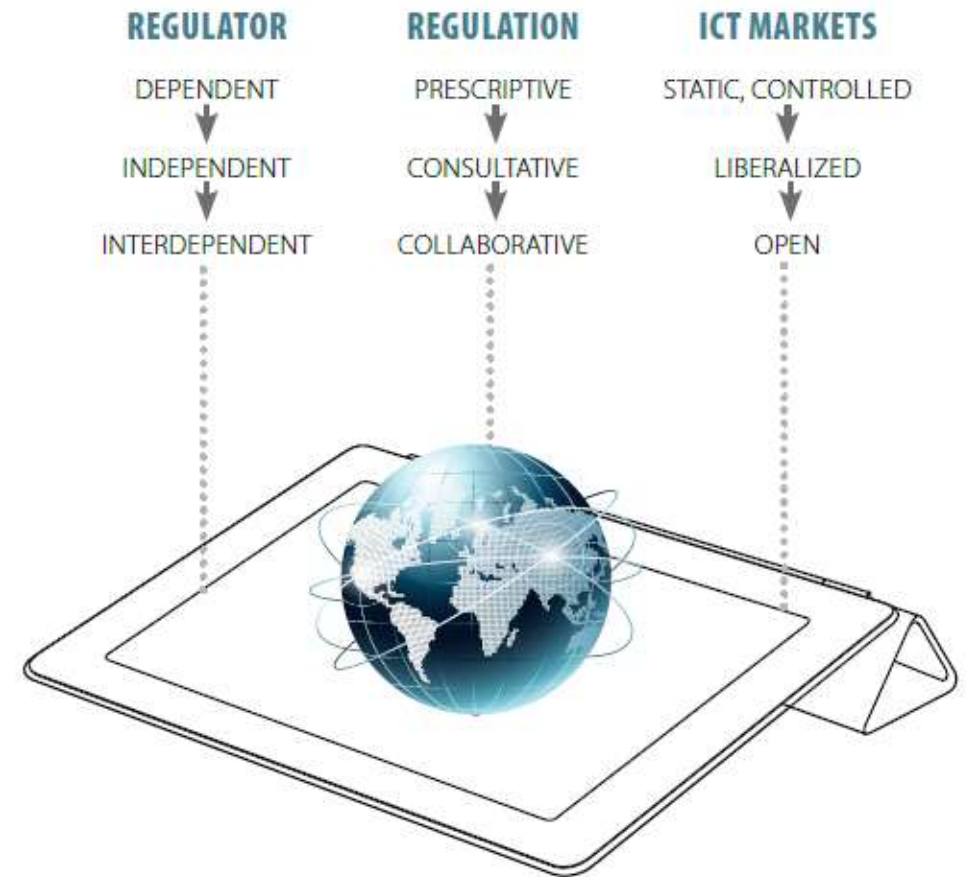


Regulation For The Digital Economy

- 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.





Collaborative Regulation

Benefits



- Strengthened **institutional capacity, legal mandate** of the regulator, sound regulatory regimes and **enhanced competition**
- **Hands-on, inclusive regulation** and decision-making featuring tools and processes
- Teaming with other sector regulators to address multi-sector issues – **shared sector-specific expertise and responsibility for decision-making**
- Focus on **how** to collaborate and **with whom**
- Not a silver bullet

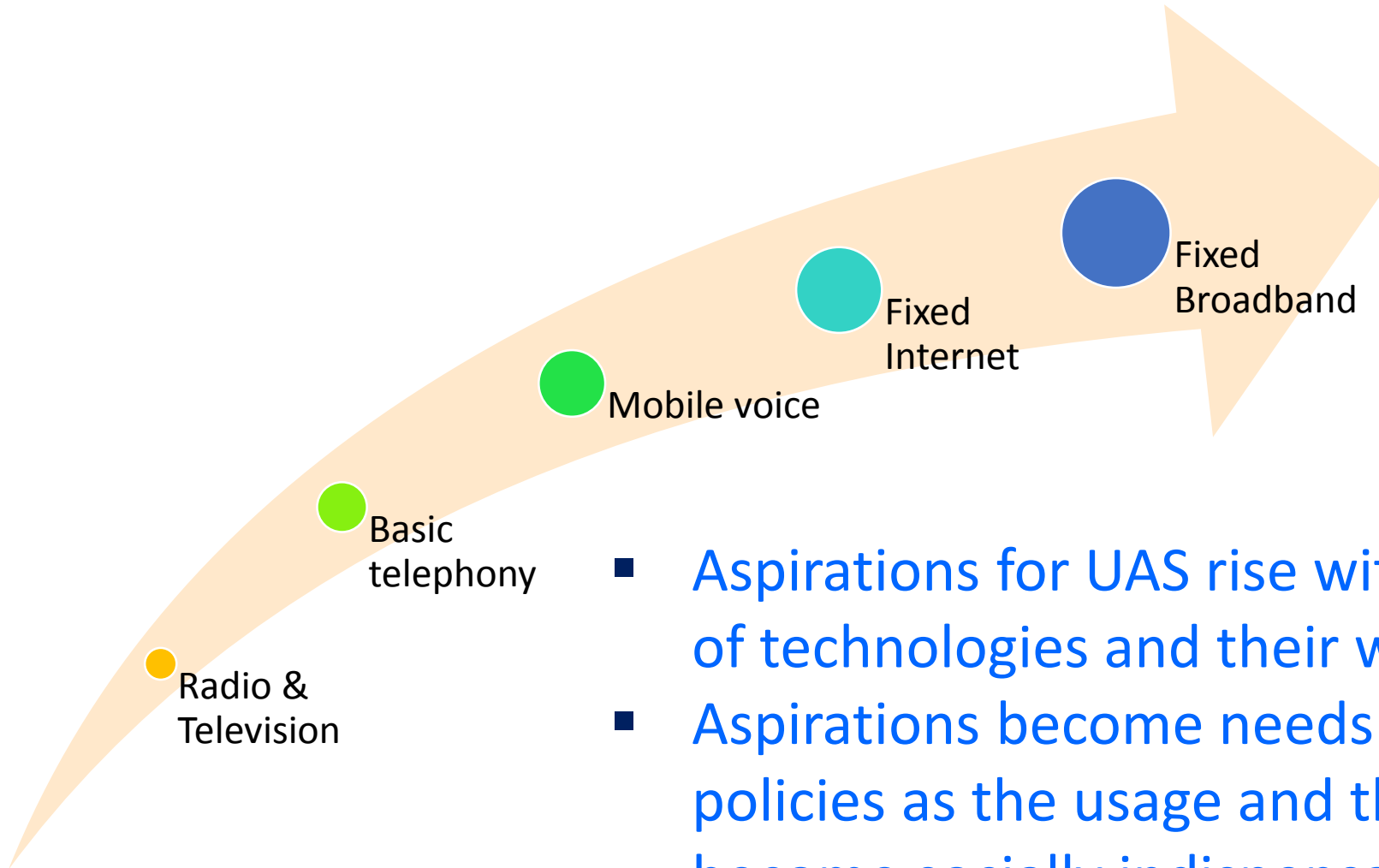
Challenges



- Slow pace or difficulties to carry out a **policy review/ development**
- Develop new **strategic thinking** about regulatory priorities and challenges
- Comply with **government procedures & rules**, jurisdiction issues
- **Capacity** of the ICT regulator to handle new issues (expertise & staff development, motivation)
- Get the **evidence** to support decision-making
- The more important the matter, the more complex the collaboration
- Institutions working in **silos**, turf wars



Universal Access & Service– The Rise of Aspirations & Needs



- Aspirations for UAS rise with the dynamic evolution of technologies and their wide-spread adoption
- Aspirations become needs and a goal for UAS policies as the usage and the utility of technologies become socially indispensable



Why UAS? Why A Strategy?

- The terms Universal Access (UA) and Universal Service (US) are used in a wide variety of contexts to describe or demonstrate objectives and policies that governments implement to ensure that all their citizens have access to the benefits of modern economic life
- They refer to the ability of everyone, regardless of region or location, socio-economic status, ethnicity, gender, disability, or any other factor, to access services
- Where market forces do not fully address the gaps, countries are faced with the need to define a strategy to achieve UAS and to manage and finance it in a marketplace increasingly characterized by competition



Elements of Holistic Approach

UAS policies generally cover the following key areas:

- Defining the *vision and scope* of UAS policies and actions
- Assigning entities to oversee the *implementation* of the UAS policies
- Presenting the *targets* for the services and the population groups in the UAS scope, with a defined timeframe for achievement.
- Presenting the *approach and strategies* to be employed to achieve UAS targets – USO, licensing, etc.
- Planning *funding sources and disbursement* methods



Defining Scope

- Some of the main steps to develop the scope of universal access and service (UAS) and related program include:
 - ICT sector review
 - Demand analysis
 - Financing and subsidy estimation
 - Prioritization of projects



Financing of UAS

Countries should not focus solely on the creation of a Universal Service Fund and see it as the only way in which universality will be achieved - such Funds are a tool amongst tools

	CASH (DIRECT)	IN KIND (INDIRECT)
PRIVATE	Infrastructure rollout Device subsidies	Mandatory USAF obligations
PUBLIC	Equity investment PPP Disbursement of USAF subsidies Commitment of Stimulus plan funds	Tax incentives Spectrum licensing Rights of way Risk guarantees



Key Success Factors for Internet Adoption

Role of Government

- Build National Leadership for broadband
- Build Digital Highways: Support national backbone networks
- Create Critical Demand : e-government applications
- Reduce taxes and import duties on telecom/ICT equipment & services
- Strengthen digital skills and digital literacy
- Digital Inclusion

Role of Regulator

- Predictable regulatory framework & Mandatory transparent consultation process
- Review and adapt legal frameworks to take into account digitalization
- Review universal service measures, including Rights of Way (RoW) regulations
- Infrastructure sharing framework
- Make available Spectrum for Wireless Broadband Services at affordable prices
Trial License for new technologies

Role of Industry

- Investment in infrastructure
- Innovation and deployment of new technologies
- Develop different business models and introduction of e-government services
- Infrastructure Sharing
- Join PPP initiatives for a win-win outcome



ITU-USF (Pakistan) Workshop on "Internet Access and Adoption"

<https://www.itu.int/en/ITU-D/Regional-Presence/AsiaPacific/Pages/ITU-USF-%28Pakistan%29-Workshop-on-Internet-Access-and-Adoption.aspx>

ITU Committed to connecting the world

ITUPP DUBAI 2018 29 October - 16 November Dubai, United Arab Emirates

ITU General Secretariat Radiocommunication Standardization Development ITU Telecom Members' Zone Join ITU

About Accessibility Join ITU-D Partners Projects Publications Regional Presence TDAG WTDC Study Groups

ITU-USF (Pakistan) Workshop on "Internet Access and Adoption"

YOU ARE HERE HOME > ITU-D > REGIONAL PRESENCE > ASIA & PACIFIC

SHARE

10-11 October 2018, Islamabad, Pakistan

Organizers

Objectives

Internet has completely revolutionized the way of life, the economy, the government, and the way the private sector conducts business. But in order for the developing nations to take full advantage of this opportunity, affordable internet access has to be widely accessible and adopted by the citizens – and particularly rural citizens since majority of populations in the developing world lives in villages.

Keeping this in mind, ITU and USF Pakistan decided to initiate a 2-day workshop around "Internet Access and Adoption" in Islamabad, Pakistan.

The main objectives of the workshop are to:

- bring together governments, USF practitioners, innovators and financiers to examine what is needed to encourage additional capital flow to the rural areas;
- identify barriers to internet access and adoption in rural Pakistan;
- identify stakeholders, champions and good practice programmes fostering digital transformation;
- inculcate a greater capability to innovate using emerging concept of "Next Generation USF" or "USF 2.0";
- analyse case studies on different countries of Asia-Pacific region, so that international best practices could be considered;
- draw out lessons learned from existing efforts as well as explore new innovative solutions that could be used to form policy or develop models that could be disseminated outside the country, in the region.

Who should attend?





Thank You



Promoting US : Role of Government

- a. Formulating a national policy that identifies appropriate and realistic universal access/service objectives that take into account the differences between universal access—public access to ICTs—and universal service—household or private access to ICTs.
- b. Including all citizens, regardless of gender, ethnicity, socio-economic level or geographic location, in national universal access/service objectives.
- c. Reviewing universal access/service policies, regulations and practices periodically to adapt to the evolving nature of ICT services and the needs of end users.
- d. Conducting periodic public consultations to the extent possible with stakeholders to identify their needs and modify accordingly universal access policies, regulation and practices.
- e. Designing universal access policies, regulations and practices in order to create incentives for the private sector to extend universal access to communications services.
- f. Establishing a fair and transparent telecommunication regulatory framework that promotes universal access to ICTs.
- g. Adopting technologically neutral licensing practices enabling service providers to use the most cost-effective technology to provide services for end users.
- h. Adopting a framework of interconnection rates linked to costs.
- i. Reducing regulatory burdens to lower the costs of providing services to end users.
- j. Developing an effective regulatory body responsible for implementing policies directed towards assuring the best quality reliable services at the most affordable prices that meet the needs of consumers—existing and future.
- k. Promoting competition in the provision of a full range of ICT services to increase access, affordability, availability and use of ICTs.



Promoting US : Role of Industry

- The lessons learned from the initial experiences developing countries have achieved with mobile cellular services can be applied to a broader range of ICT services to foster universal access. These lessons include providing services in a competitive framework, using new technologies that offer both innovative services and affordable pricing options (e.g., pay as you go options such as pre paid cards) to a wide range of end users.
- Other measures to promote affordable ICT equipment could include national manufacturing of ICT equipment, reduced customs tariffs and duties, and end-user loans to foster affordability of ICT equipment.
- A full range of public access options can be developed, including the creation of public telecentres.
- Local input (including the content useful for local populations) into projects increases their long-term financial sustainability.
- Educating local people on the benefits of ICTs and their use increases their long-term financial sustainability



Financing of UAS

3 Main Public Funding Models:

Ownership or Equity Participation in broadband projects

- Australia, Brazil, New Zealand, Malaysia, Sweden and South Africa;

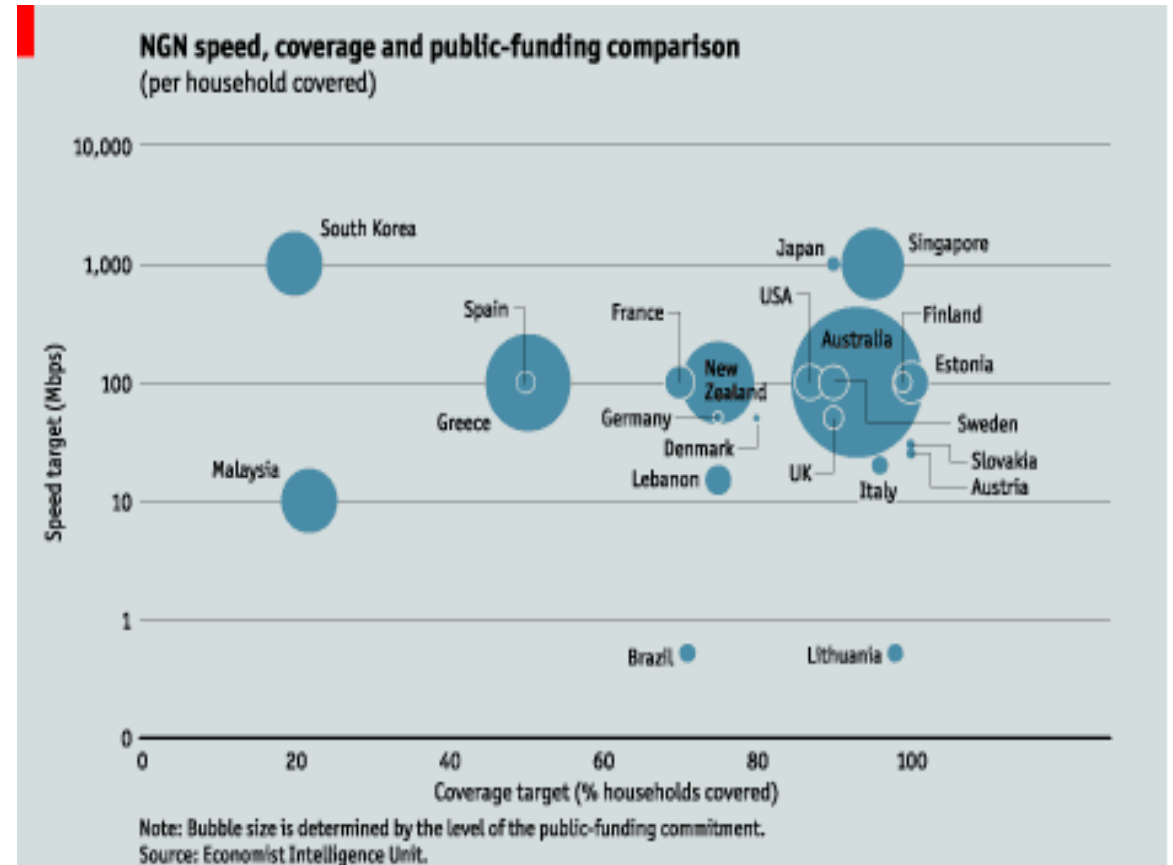
Public Private Partnerships

- broadband infrastructure deployment projects undertaken in France, Thailand, Kenya and Tanzania;

Provision of financial incentives and subsidies

- Latin American countries through the use of first-generation Universal Service Funds
- China, Japan, the USA and EU through broadband stimulus packages.

Increasing reliance on *Public Funding* for high cost broadband networks





Why UAS? Why A Strategy?

Where market forces do not fully address the gaps, countries are faced with the need to define a strategy to achieve UAS and to manage and finance it in a marketplace increasingly characterized by competition

Universal access/service policy adopted	Yes	30	9	26	4	37	26	132
	No	9	7	8	3	5	6	38
If yes, please indicate website where universal access/service policy and regulation are made available		16	6	20	4	27	21	94
Definition of universal service/access exists	Yes	34	11	31	5	39	28	148
	No	7	9	6	7	2	5	36
Voice services included in Universal service/access definition *	Voice telephony services	14	3	4	0	15	7	43
	Fixed line private residential service as part of universal service definition	22	10	16	5	36	19	108
	Fixed line public payphone service as part of universal service definition	23	7	17	5	27	20	99
	Individual mobile cellular service as part of universal service definition	13	7	18	0	4	12	54
	Public mobile payphone service as part of universal service definition	14	3	8	0	2	8	35

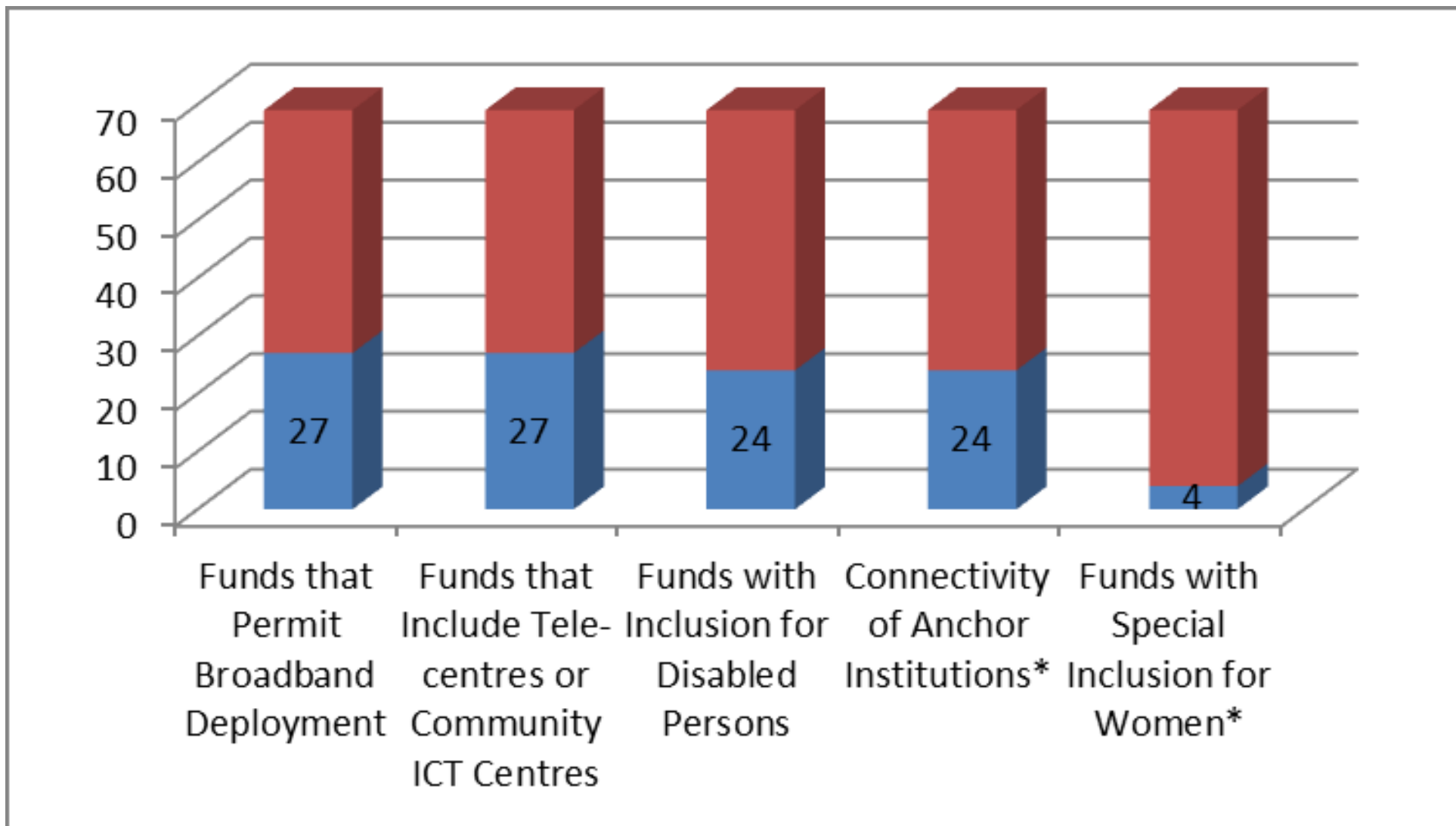


Why UAS? Why A Strategy?

Internet services included in Universal service/access definition *	Dial-up Internet access as part of universal service definition	20	8	11	1	24	9	73
	Broadband as part of universal service definition	18	7	19	1	16	17	78
Other services included in Universal service/access definition *	Telecentres as part of universal service definition	21	7	12	0	1	13	54
	Schools (primary, secondary post secondary)	14	4	16	1	1	15	51
	Health centres	11	4	13	0	1	13	42
	Emergency services as part of universal service definition	24	10	17	3	25	15	94
	Services for impaired/ elderly	12	4	11	1	27	16	71
	Women and girls	5	0	1	0	0	1	7
	Refugees and displaced persons	0	0	0	0	0	0	0
	Directory services as part of universal service definition	14	7	5	3	28	6	63

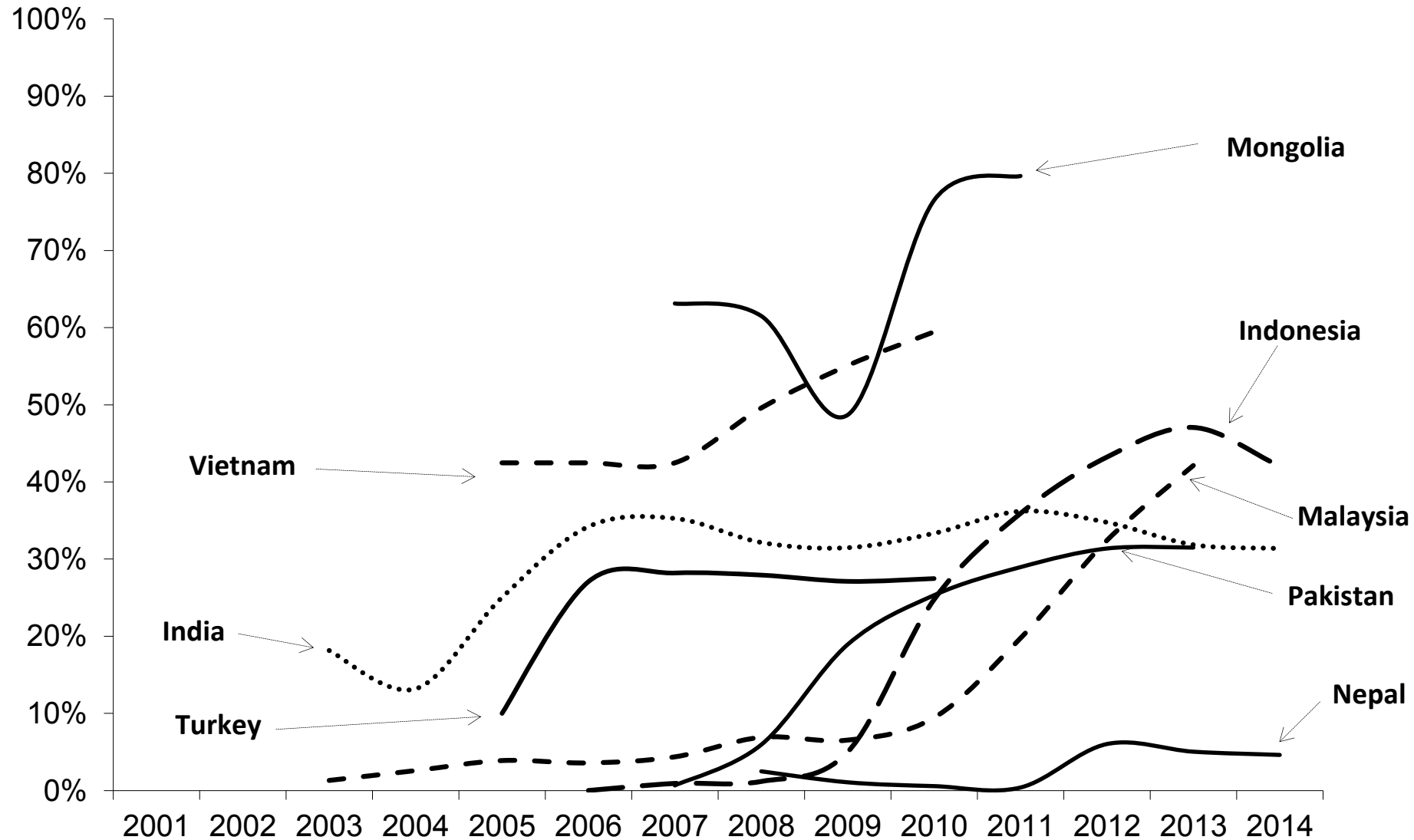


Number of Funds Addressing Specific UAS Objectives





Cumulative Use of Funds in Asia

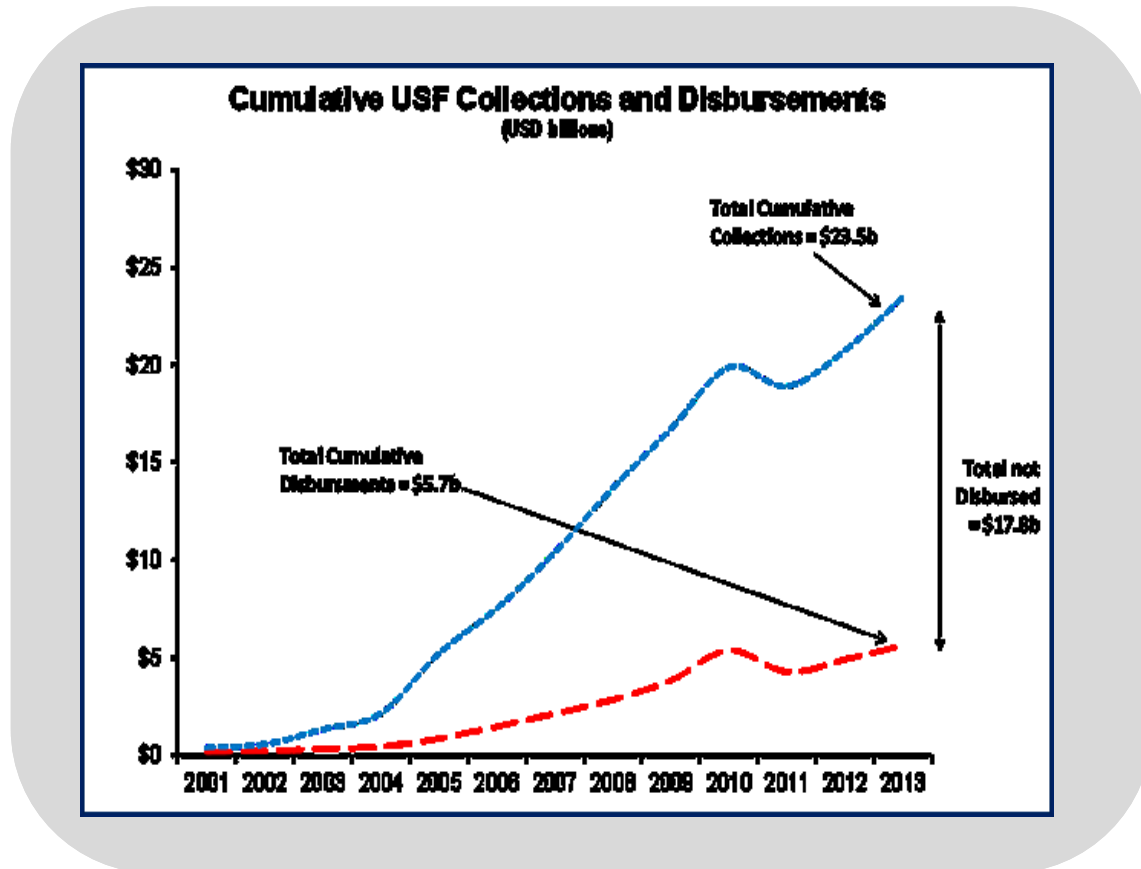


Cumulative use of Funds in Asia – snapshot 20001-2014



Issues with USF

- Across 34 Developing Countries under study, there has been a cumulative USF disbursement gap of US\$ 17.8 billion



- **Root causes of non-disbursement:**

- The **USF financial framework** (e.g. the collection mechanism) is not conducive to disbursement
- **USF Fee is transferred to the NTF** or withheld from USFA (responsibility over fee)
- The **USF legal and regulatory frameworks** (legal basis, enabling regulation and scope) are not conducive to disbursement
- The **USF institutional arrangements** (administration) are not conducive to disbursement