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Universal service: obligations and requirements in a collaborative digital economy

Dr. Thomas A. Senaji
ITU Consultant

Acknowledgement:
Sofie Maddens
Head, Regulatory and Market Environment Division
Telecommunication Development Bureau (BDT)

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Introduction

- 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

Definitions

- **ITU defines**
  - **universal access : " a situation where everyone can access the service somewhere at a public place, also called public, community or shared access"**
  - **universal service: "a situation when every individual or household can have service, using it privately, either at home or increasingly carried with the individual through wireless devices" (ITU, 2012)**
  - **Universal service** - Service available, as far as possible, to all the people without discrimination on any basis with adequate facilities at reasonable cost; a Universal Service Provider (USP) provides these services.

- Key objectives
  - availability
  - accessibility
  - affordability

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**

Typical focus of strategy to achieve UAS

Infrastructure and Connectivity

Services, Content and Applications

Policy, Legislation, and Regulation

Capacity Building and Innovations

Broadband Devices

Finance and Investment

Privacy and Security

Awareness and skills (digital)

Holistic UAS 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

Impediments to the effectiveness of UAS in Africa (Arakpogun, Wanjiru, & Whalley, 2017)

- poor policy formulation limits the implementation of an effective USF model in Africa,
- inadequate stakeholder engagement,
- lack of accountability,
- inaccurate data,
- undue political influence; and
- the narrow scope of universal service

……all affect the ability of USF to achieve their objectives.

Vision and Scope

- Examples show that universal access and service measures are generally aimed at providing service to:
  - rural areas that are either unserved or underserved,
  - low-population density areas where provision of services is not commercially attractive or even viable
  - other areas and population groups, including very poor urban areas in large metropolitan cities or people with specific needs

Vision and Scope

- Achieving universal access and service to communications is a challenge for all countries
- In order to ensure that universal access and service policy is a central part of the ICT framework and not construed as simply a form of corporate social responsibility, or an act of 'goodwill' by investors in the ICT sector, it is important that:
  - universal access and service polices are properly formulated
  - universal access and service polices are given a proper space in the national policy and legislative frameworks as well as in the institutional framework for telecommunications regulation
  - Holistic view and approach – no silos!!

Defining the Scope of UAS

- 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

Scope of UAS

- Today, more and more countries include broadband in their universal service or universal access definitions.
  - In February 2000, the Estonian Riigikogu (Parliament) enacted the new Telecommunications Act, adding Internet access to its universal service list. It has also been indicated that internet access is a legal right.
  - India was one of the first countries to include broadband in the mandate of its universal service fund in 2006.

- The United States which has had a complete re-think of universal service financing; now the universal service fund has helped increase broadband penetration by providing funding for new lines in rural areas.
- In 2001, Greece amended its Constitution to provide that all persons have the right to participate in the Information Society. The State is obliged to facilitate access to electronically transmitted information, as well as to the production, exchange and diffusion of information.
- In Switzerland broadband has been included in the scope of the Universal Service Obligations since 2008 – the universal service provider charged with USO must provide a broadband connection to the whole population, via DSL or satellite or other technologies (at least 600 Kbit/s downloads and 100 Kbit/s uploads, and monthly subscription < CHF 69

- In Finland broadband access is a legal right and recent national legislation extended USO to cover broadband with the objective of a basic 1Mbit/s broadband connection available to all by 2011.
- Similarly, the Constitutional Court of Costa Rica declared internet access a fundamental legal right in September 2010. The government has thus been urged to adopt the necessary measures to promote its universal service in the country.

Legal Mandate

- **Is there one solution to creating an "appropriate" institutional framework for universal access and service?**
  - **No!**

- **Universal access and service policy may be implemented by the country's National Regulatory Authority (NRA), the ministry responsible for telecommunications or ICT, or an independent agency established to manage and administer universal access and service projects as well as the funding.**
- **Importance of clarity, transparency and accountability!**

Approach and Strategies to Achieve UAS

- **There are a number of different approaches used by various jurisdictions to address universal service requirements. These include :**
  - **Market based reforms and regulatory tools**
  - **Mandatory service obligations**
  - **Cross subsidies**
  - **Access deficit charges**
  - **Private public partnerships (PPPs)**
  - **Universal funds**

  E.g. The Universal Service and Access Agency of South Africa (USAASA) is a State Owned Entity of government established through the Electronic Communications Act, No 36 of 2005, to ensure that ***"every man, woman and child whether living in the remote areas of the Kalahari or in urban areas of Gauteng can be able to connect, speak, explore and study using ICT's.***

Achieving UAS

In Latin America, of the 19 countries covered by a Regulatel study, nearly all countries implemented various mechanisms that directly or indirectly aim to increase investments and access to telecommunications infrastructure in high-cost rural and low-income areas:

- **Universal Service Funds (USFs) that provide partial subsidies for programmes largely aimed at stimulating private sector provision of infrastructure in rural or unserved regions (12 countries out of 10 are using funds)**
- **Other financing methods and project initiatives by national, state and local governments, cooperatives, NGOs and others (13 countries).**

- An increasing number of private operators are also putting in place programmes aimed at expanding coverage in high cost rural areas and to increasing demand among lower income consumers;
- State-mandated and controlled approaches using cross subsidies and other financing mechanisms aimed at state-owned companies

Financing of UAS

Tools:

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 s 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

Source: M. Msimang, GSR 2011

How to Achieve UAS

3 Main Public Funding Models:

Ownership or Equity Participation in broadband projects

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

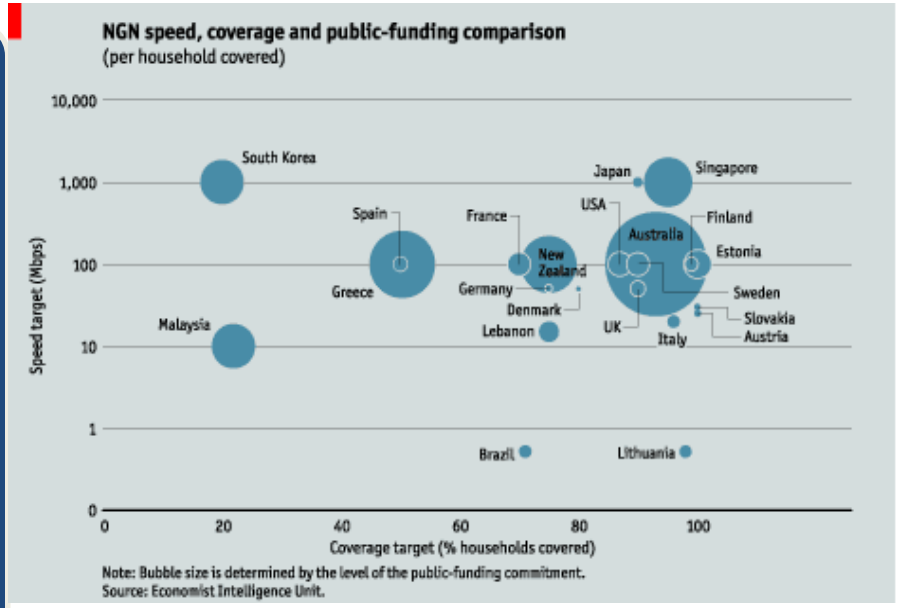
Public Private Partnerships

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

Provision of financial incentives and subsidies

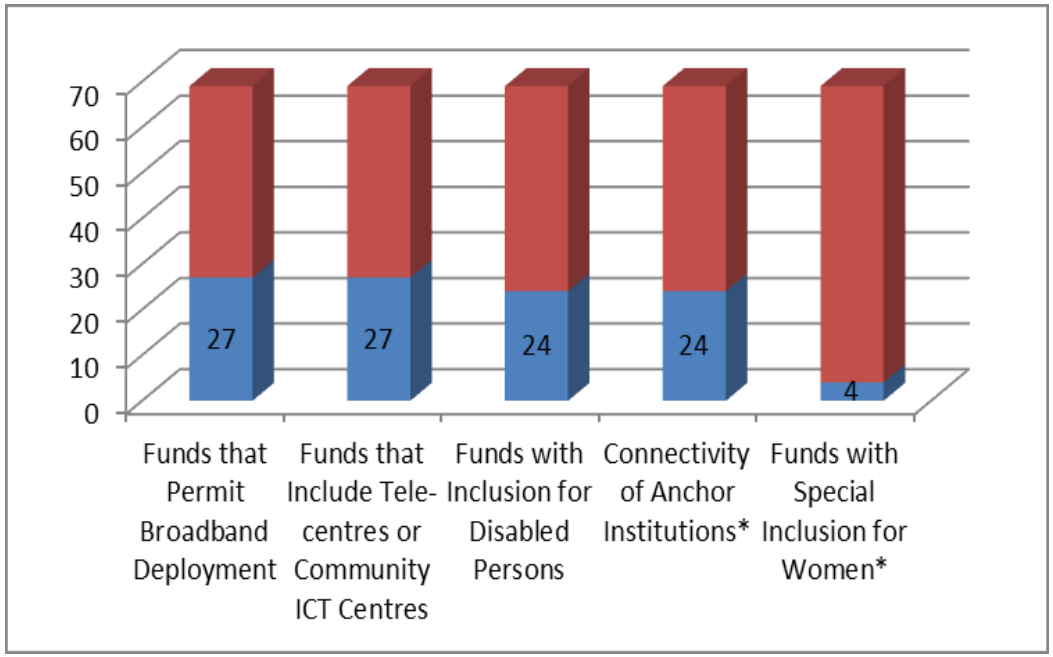
- Latin American countries through the

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



Source: M. Msimang, GSR 2011

Number of Funds Addressing Specific UAS Objectives



Source: L. Dorward, USF Study

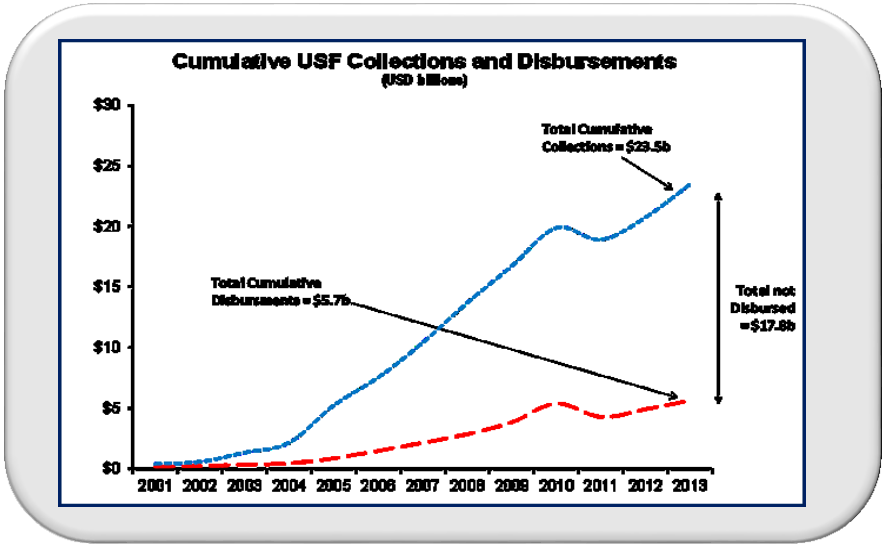
Areas funded by USF

- Broadband deployment
- Telecentres of ICT community centres
- Services for people living with disabilities
- Connectivity of anchor institutions
- Special inclusion for women

Source: L. Dorward, USF Study

Issues with USF

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



Source: E. Sepulveda, ITU Study on USF, 2015

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

Impediments to the effectiveness of UAS in Africa (Arakpogun, Wanjiru, & Whalley, 2017)

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Operational Blueprint for a Successful USF	Best Practice Examples
Well-articulated policy with respect to how Universal Service (US) will be achieved and organized	Malaysia Uganda
Development of an appropriate and well-defined legal and regulatory framework permitting maximum flexibility	Chile Peru Colombia
Establishment of the USF as separate, independent (autonomous) entity	Nigeria Pakistan Thailand
Clear definition and delineation of fund responsibilities	Chile Colombia Uganda
Development and clear definition of measurable overall Fund objectives which can subsequently be tracked and monitored	Colombia Pakistan Malaysia
High level of transparency, visibility and accountability to all stakeholders	India Peru
Active participation in and input from all concerned stakeholders regarding fund objectives and administration	Canada Morocco
Guidelines and procedures for working with other funding sources	Afghanistan Mongolia
Ensure that full range of sustainability elements and ancillary services are taken into consideration in both policy formulation and project definitions	Bolivia Indonesia Ghana
Fair and unbiased process to allocate subsidy and /or project	Colombia Nigeria
Incentives for project participants	Chile Dominican Republic
The need for digital inclusion as part of the USF	Bulgaria Jamaica

Source: L. Dorward, GSR 2013

UAS Obligations

- A liberalizing market moves away from forced **obligations** towards a regime where the cost of universal access and service (**UAS**) provision is shared proportionally among all industry participants and all players have an opportunity to participate in the provision of **UAS**, typically through a competitive mechanism (http://www.ictregulationtoolkit.org/toolkit/4.3)

- So, whether to impose obligations or not depends on the extent of liberation

UAS Requirements

- Knowledge and skills - for all citizens
- Policy, legislation, regulation
- Appropriate technology
- Investment models
- Funding models
- Institutional arrangements for administration of the USF
- Spectrum
- Infrastructure sharing – both passive and active components
- ….Incentives - fiscal, regulatory etc.

UAS Collaborations

- Manufacturers: core networks, transport, access and end user devices as the need may be
- Energy/ power suppliers
- Social sector
- Industry
- Academia
- Development partners
- Consumer organisation
- Civil society

References and Reading Materials:

Sofie Maddens (2015). Head, Regulatory and Market Environment Division Telecommunication Development Bureau (BDT). **ITU-MCMC International Training Programme, 26-28 August 2015. Kuala Lumpur, Malaysia**

http://www.usaasa.org.za/

ICT Regulation Toolkit. "Overview of approaches to universal access and service" http://www.ictregulationtoolkit.org/toolkit/4.3

Arakpogun, E. O., Wanjiru, R., Whalley, J. (2017). Impediments to the implementation of universal service funds in Africa A cross-country comparative analysis. *Telecommunications Policy, 41* (7), 617 – 630. archive

2011 Best Practice Guidelines on Regulatory Approaches to advance the deployment of broadband, ITU (2011) at https://www.itu.int/ITU-D/treg/Events/Seminars/GSR/GSR11/consultation/GSR11_BPG_E.pdf; "Universal Service and Access: Toolkit," ITU (2013) http://www.itu.int/en/ITU-D/Projects/ITU-EC-ACP/HIPSSA/Documents/FINAL%20DOCUMENTS/FINAL%20DOCS%20ENGLISH/us_toolkit.pdf.

"Universal Access and Service: Southern African Development Community (SADC) Guidelines," ITU, (2013) http://www.itu.int/en/ITU-D/Projects/ITU-EC-ACP/HIPSSA/Documents/FINAL%20DOCUMENTS/FINAL%20DOCS%20ENGLISH/us_crasa_guidelines.pdf;

"Universal Access and Service in Southern Africa: Assessment Report" ITU (2013); "Universal Access and Service: Knowledge-based Report," ITU (2013) http://www.itu.int/en/ITU-D/Projects/ITU-EC-ACP/ICB4PAC/Documents/FINAL%20DOCUMENTS/uas.pdf;

"Universal Access/Service: Assessment Report," ITU (2013) http://www.itu.int/en/ITU-D/Projects/ITU-EC-ACP/HIPCAR/Documents/FINAL%20DOCUMENTS/ENGLISH%20DOCS/universal_service_and_access_assessment.pdf

Thank you!