

Bridging the Broadband divide through Universal Service Funds

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Areas of discussions

- What are Universal Service Funds ?
- Difference between broadband financing and traditional telecommunications financing
- Financing Broadband in rural and underserved areas
- Case Study from Tanzania
- Concluding remarks

USF?

- Purpose-Built Funds to extend communications /ICTs in rural and underserved areas
- Normally contributed by governments, ICT operators and other sources
- Complimentary approach where there is a failure of market

USFs

- Coupled with regulatory authorities
- Coupled within Government departments and ministries
- Independent Funds

Alternate to Funds

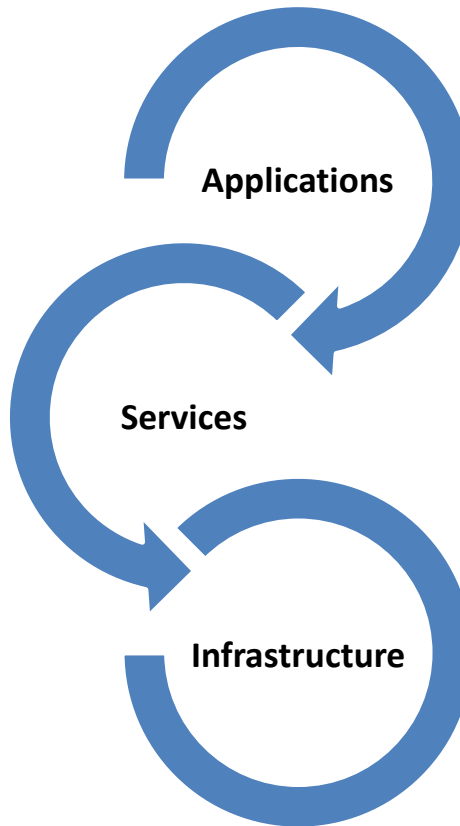
license conditions (obligations of licensees)

regulatory interventions (zoning)

Paradigm Shift

- From legacy services to broadband services

- Vertical markets
- Single service in a single market in a single infrastructure
- Clearly defined infrastructure and services
- Clear and rigid regulation



- Infrastructure is service-agnostic
- The service is application agnostic
- New applications and services
- Emulation of the legacy services
- Ex-post regulation

Paradigm Shift

- It started much earlier than we care to acknowledge.
 - Integrated Services Digital Network (ISDN) by definition was designed to carry multiple services at speeds that could be considered broadband (B-ISDN) around 2Mbps
 - The underlying infrastructure could not support its evolution (circuit switched infrastructure)

Paradigm Shift

- Internet Protocol Evolution
 - Provided the answer for the limitation of circuit switched infrastructure for integrated services
 - Even with the development we continue to define markets using the legacy definitions

What is broadband?

- Infrastructure?
- Services?
- Applications?

Financing Broadband Services

- Sources of Funds
- Sustainability
- Supply side vs Demand side issues

Sources of Funds

- Government Sources
 - Primary infrastructure builders
- ICT services providers
- Regulators
- Users

Sustainability

- Revenues coming from the deployment should support cost of operation
- Should support upgrades and replacement costs
- Should support other administrative costs

Demand side vs Supply side

- Traditionally funding mechanisms for universal access focused on supply side only:
 - Demand was assumed to be there
 - There was not learning curve
 - Traditional services financed are voice services (payphones, mobile voice services, community radios etc)

Demand side aspects

- Support for broadband stems from its promise to provide feature-rich services which can transform social economic situation of rural communities
 - HOWEVER
 - Utilisation of broadband services and application requires development of content, it assumes some level of literacy and some skills to be inculcated in the society.

Demand side

- Funding initiatives should also address these issues
 - Availability of devices (computers, smartphones and phablets)
 - Relevant content
 - Relevant applications and services
 - And most important requisite ICT skills

TANZANIAN CASE STUDY

- NATIONAL ICT BACKBONE (supply side)
 - 7000 kilometres of fibre backbone
 - STM-4 (622Mbps allocated to UCSAF)
- Private Sector Actors (supply side & demand side)
 - Connecting 3 schools per district
 - Connecting hospitals

TANZANIAN CASE STUDY

- SCHOOLS CONNECTIVITY (demand side)
 - Targeting all schools
 - Targeting teacher training
- TELEMEDICINE PROGRAMME (demand side)
 - Connecting hospitals
 - Doctor training for e-health and telemedicine

Concluding remarks

- This discussion was limited to horizontal divide; the vertical divide which is more insidious has not been addressed
- Broadband infrastructure is key in social economic development, as it has multiplier effects

ASANTENI SANA!

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