# USF Policies for ICT Use and Digital Skills

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## Agenda

#### Broadband

- Global Objectives, What is it, Why is it important, Status today
- Key elements
- Tools for Broadband Adoption
  - Subsidies
  - USF and Digital Skills
- USFs are still underutilized
  - Opportunity with digital skills
- Examples
- Summary

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## **Broadband Objectives**

- We encourage widespread, affordable, high-quality broadband for all focused on both deployment and adoption, including infrastructure, devices and **Digital Skills**.
  - Competitive markets
  - Abundant spectrum for broadband
  - Targeted government programs to address market failures
- Intel works with policy makers and partners to unlock the benefits of broadband and ICT for all:
  - Private networks using fixed wireless
  - Workforce development and STEM
  - <u>Al for youth</u>
  - Appointed member of Oregon Broadband Advisory Committee
  - Past experts on broadband commission <u>WG</u>
  - Broadband Publications







#### Why Broadband and What Is It

- Broadband is Good for Society
  - <u>Economic growth</u>, creates Jobs (necessary for todays jobs), is important in healthcare for telemedicine, and studies show it helps SMEs, and <u>improves social outcomes</u>.



Need for speed and latency for use of applications and services by a single user

#### Broadband and Computers

Figure 1.9: Households with a computer and Internet access (%), 2020 or latest available data



#### Note: Country averages.

Source: ITU. Broadband Commission: the State of Broadband 2022

ITU 2023

# Key Elements of Broadband

- Broadband = Deployment and Adoption
- 5 A's of Broadband
  - Access = infrastructure (Networks and Devices)
  - Affordability
    - High cost areas
    - Low income
  - Awareness/Interest
    - What can BB do for me = knowledge and enticing applications
    - Will my ID and data be safe = security
  - Ability
    - How do I do this = Digital skills teaching
    - Advanced digital skills for workforce
  - Additional factors
    - fear
    - embarrassment
    - language barriers
    - Lack of communal support







#### Tools for Broadband Deployment and Adoption

- National Broadband Plans
  - Raul Katz study shows planning grew broadband in LAR
  - Malaysia BB grew 20% after national plan in place
- Broadband Mapping
- Make Spectrum Available
- Encourage sharing of ROWs
- Incentives
  - Use of existing USF
  - Direct govt funding
  - Tax reductions
  - Share govt ROWs
- Digital Skills Programs
  - Digital literacy
  - Advanced digital skills, STEM, and Workforce development

# Underutilization of USF Continues

- According to recent ITU and A4AI Reports USFs are still underutilized;
- The ITU study examined 43 such funds and found that 20 had used 50 percent or less of the funds, 8 of these used less than 25 per cent, and 3 had used no funds at all (ITU, 2021; <a href="https://www.itu.int/dms\_pub/itu-d/opb/pref/D-PREF-EF-2021-ECO\_FIN-PDF-E.pdf">https://www.itu.int/dms\_pub/itu-d/opb/pref/D-PREF-EF-2021-ECO\_FIN-PDF-E.pdf</a>)
- Reasons included poor governance unclear or unmeasurable objectives, poor coordination and unfair process to allocation of resource, all contributing to underutilization, misallocation and inefficient use of resources.
- According to Alliance for Affordable Internet (A4AI); <a href="https://webfoundation.org/docs/2018/03/Using-USAFs-to-Close-the-Gender-Digital-Divide-in-Africa.pdf">https://webfoundation.org/docs/2018/03/Using-USAFs-to-Close-the-Gender-Digital-Divide-in-Africa.pdf</a>)

-A majority of African countries have a USF in place that is collecting funds. 37 African countries (or almost 70%) have a USF set up, and 62% of these funds are considered 'active'. However, most governments are failing to spend the USF funds collected.

-In 2016, USAFs across Africa disbursed just 54% of funds collected. Across all 37 USFs in Africa, unspent funds total an estimated US\$408 million — enough to bring 6 million women online, or to provide digital skills training to 16 million women and girls.

## **USF Examples for Adoption**

• A4AI study in Latin America: <u>https://a4ai.org/wp-content/uploads/2022/01/USAF-Report-English.pdf</u>

#### Costa Rica - Connected Homes Program

- Program has been active since 2015. An ITU WSIS Prize Winner Project. Provides subsidized Internet connections and computers to low-income households (up to 80 percent of subsidy for computer and broadband).
- Financed by National Telecommunications Fund (FONATEL- Universal Service Fund in Costa Rica) is part of Telecommunications Superintendence (SUTEL), the Costa Rican telecommunications regulator.
- During COVID-19, extended the coverage of program by 46,462 additional households, thus surpassing the goal of 140,496 beneficiary households to 186,958 households

#### Dominican Republic

 Dominican Telecommunication Institute (INDOTEL) is also implementing comprehensive connectivity projects that include social components. The project "Connect the Unconnected" (Conectar a los No Conectados) includes actions from both connectivity and access supply and demand side.

# Summary

- Broadband and ICT use are essential
- Govt. Incentives required for market gaps
  - Use existing Universal Service Funds
  - Direct govt funding
  - Tax reductions
- Establish Digital Skills programs using USF for the un/underserved
  - Digital literacy
  - Advanced digital skills for future workforce
    - STEM
    - Al programs, advanced coding, etc.

#### Intel Broadband E-book



#### US Broadband Funding

- US providing billions in Broadband funding for the unserved, and disadvantaged (~23% of Americans without home internet)
  - American Rescue Plan <u>Capital Projects Fund</u>: 10 billion for projects including broadband
  - Infrastructure and Jobs Act Broadband Programs through NTIA
    - BEAD: 42.45 billion for deployment and adoption
    - Middle mile: 1 billion for middle mile projects
    - Tribal Funding: added 2 billion for tribal broadband projects
    - Digital equity Acts: 2.75 billion for digital inclusion and equity programs (literacy, etc.)
  - FCC Affordable Connectivity Program <u>ACP</u>: 30 75 dollars/month toward subscription, 100 toward a device
  - FCC emergency Connectivity Fund <u>ECF</u>: 7.17 billion for schools to buy devices for students, as well as Wi-Fi routers.
- Additional Resources
  - <u>Connected Nations</u>