Understanding the needs of Persons with Disabilities
ICT Accessibility

Regional Event for the Americas
Accessible Americas: Information and Communication for ALL
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1 billion people live with some form of disability
Defining Persons with disabilities

Disability is the interaction between persons with impairments and attitudinal and environmental barriers that hinders their full and effective participation in society on an equal basis with others.
United Nations Convention on the Rights of Persons with Disabilities - CRPD

- Governs the rights of Persons with Disabilities

- Covers a range of issues including employment, health, education, participation in political and public life, culture, leisure and sport as well as access to information
UN Convention on the Rights of Persons with Disabilities

159 signatories; 151 ratifications

Source: http://www.un.org/disabilities/
Article 9 – ICT Accessibility

- To enable persons with disabilities to live independently and participate fully in all aspects of life, States Parties shall take appropriate measures to ensure to persons with disabilities access, on an equal basis with others . . . to information and communications, including information and communications technologies and systems . . .

- These measures, which shall include the identification and elimination of obstacles and barriers to accessibility, shall apply to . . . Information, communications and other services, including electronic services and emergency services.
**ICT Accessibility in the United Nations Convention on the Rights of Persons with Disabilities - CRPD**

- **Article 30** of the CRPD requires State Parties to “take all appropriate measures to ensure that Persons with Disabilities . . . enjoy access to television programmes [and] films . . . in accessible formats.”
What kind of barriers do they face?

- Deafness/hard of hearing
- Blindness/low vision
- Limited motion/reduced dexterity
- Impaired cognition
What do we mean by accessible ICTs for persons with disabilities?

Accessibility means what **the user requires** to gain functional access to ICT and ensures such functionality is provided:

- If you cannot see a typical screen you need a way to understand what is on it.
- If you cannot hear the information, you need a way to get that information.
- If you cannot input a command on a device, you need a way to do this.
Accessibility features for the blind and people with low vision

**Challenge:** Cannot see screens, navigate websites, use touch screen keyboards, read electronic books and emails, etc

**Solutions:**
- Screen readers for computers and mobile phones
  - Converts information into speech or Braille display
- Gesture-based screen readers for touch screen tablets and phones
- Tactile markers, tactile and/or audible feedback
- Adjustable font sizes
- Text to speech functionality
- Screen magnifiers
- Audio description and audio subtitles for TV
Accessibility features for deaf and hard-of-hearing

- **Challenge:** Cannot hear callers or automated electronic messages, access emergency services

- **Solutions:**
  - Volume adjustment and speakers
  - Relay services
  - Video relay services
  - SMS and MMS
  - Visual or vibrating alerts
  - Call logs
  - Hearing aid compatibility
  - Video/TV captioning and signing

**Screen of Hamilton CapTel captioning service**

**Itu International Telecommunication Union**

**Committed to connecting the world**

**Audience not hearing you?** Use Closed Captioning!
Accessibility features for limited mobility

- **Challenge:** cannot use limbs, flex fingers, press or navigate buttons on a phone, or a mouse on a computer

- **Solutions:**
  - Voice recognition to activate voice commands for computers and cell phones
  - Auto text
  - Anti-shake apps
  - Adapted keyboards and mice
  - Well designed remote controls and EPGs
  - Formal help schemes for the elderly and those with registered disabilities to tune or retune set top boxes or TV receivers

A single switch mounted on a wheelchair
ITU-D’s Activities in Promoting Accessible ICTs

- Participate UN work on accessibility issues (IASG)
- WSIS Forums
- ITU Taskforce on Accessibility
- ITU-D Rapporteurs and Study Group1- Q7 meetings
- Connect a School, Connect a Community toolkit module on “ICTs for the education and job training of persons with disabilities”
- ITU-G3ict e-accessibility tool-kit
- Making Mobile Phones and Services Accessible and Making TV Accessible Reports
- Model ICT Accessibility Policy Report

http://www.itu.int/ITU-D/sis/PwDs/index.phtml
ICT Accessibility Solutions and Guidelines

ITU-G3ICT

Model ICT Accessibility Policy Report

Will be launched this afternoon!
Addressing Accessibility is good for everyone

Accessibility features

Help:
- Aging populations
- Immigrants and refugees
- The illiterate

Facilitate:
- Social inclusion
- Education
- Jobs
- E-government services
- Emergency service
Thank you for your attention!

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