

Rapporteur Group meetings of ITU-D Study Group 1 Question 7

Access to telecommunication/ICT services by persons with disabilities and other persons with specific needs
28 September 2018, Geneva Switzerland

LET'S TALK ABOUT ICT ACCESSIBILITY – THE KEY TO INCLUSIVE COMMUNICATION
AND HOW TO SUPPORT GLOBAL IMPLEMENTATION



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AGENDA:

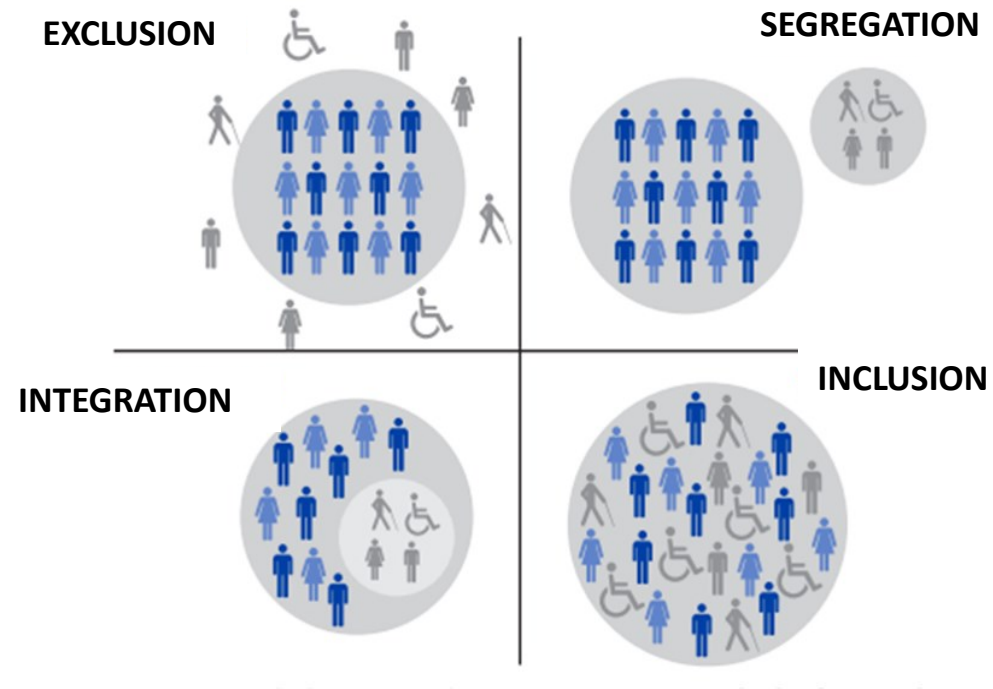
1. ABOUT DIGITAL INCLUSION OF PwD AND ICT ACCESSIBILITY MEANING
2. GLOBAL COMMITMENTS AND ITU'S MANDATES TO FACILITATE ACCESS TO ICTs FOR PwD
3. GLOBAL USERS – UNDERSTANDING CONSUMERS' NEEDS AND RELATED ICT TRENDS
4. UNDESTANDING DEFINITIONS AND CONCEPTS
 - FROM 3E (EQUIPMENT, EQUAL, EQUITABLE) TO 3A (ACCESSIBLE, ASSISTIVE AND AFFORDABLE)
5. ABOUT ICT ACCESSIBILITY BENEFITS FOR:
 - GOVERNMENTS
 - PRIVATE SECTOR
 - ACADEMIA
 - USERS/ALL
6. KEY RESOURCES
7. CONCLUSIONS



AGENDA:

1. ABOUT DIGITAL INCLUSION OF PwD AND ICT ACCESSIBILITY MEANING

WHAT INCLUSION OF PWD MEANS?

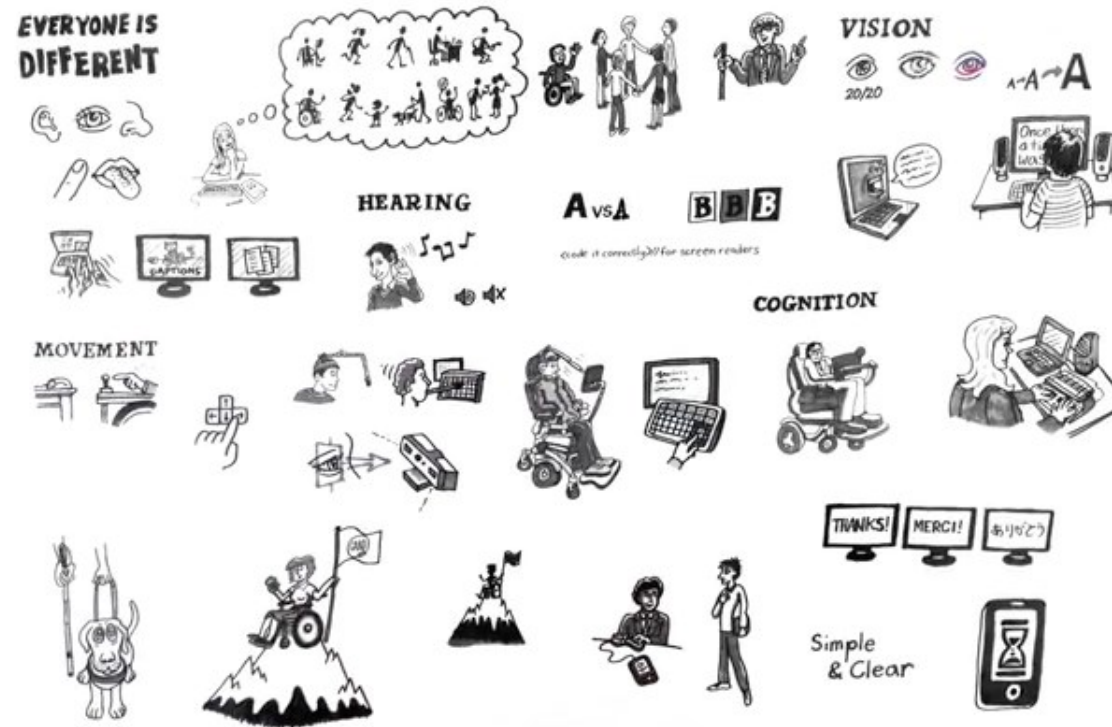


WHAT DIGITAL INCLUSION MEANS?

- **Digital inclusion means empowerment of people through information and communication technologies (ICT)**
- **Digital inclusion is the ability of individuals to access ICTs**
- **The ITU-D digital inclusion activities are designed to promote the accessibility of ICTs and their use for the social and economic development of people with specific needs** such as:
 - ✓ **persons with disabilities (PwD) and elderly,**
 - ✓ Indigenous People and people living in rural areas;
 - ✓ women and girls;
 - ✓ children and young people.

Inclusion implies mainstream

WHAT DIGITAL INCLUSION OF PWD MEANS?



<https://www.youtube.com/watch?v=6ic8004OR18>

Video (3.56 min)

Everyone is different –Be digital inclusive!

WHAT ICT ACCESSIBILITY MEANS AND WHY WE SHOULD PROMOTE IT?

➤ **Accessibility - general :**

- ✓ “*extent to which products, systems, services, environments and facilities **can be used** by people from a population with the widest range of characteristics and capabilities to achieve a specified goal in a specified context of use*” (ISO TC 159).

➤ **ICT Accessibility:**

- ✓ “***Removing barriers so that persons with disabilities can use ICTs***” (ITU Model Policy Report)

For many modern technologies and in many contexts of use, ICTs can be designed and developed to meet the needs of all users

➤ **ITU-D’s final goal in promoting ICT accessibility to ITU Members is:**

- ✓ **To help develop policies, legislation, regulations, standards and guidelines, to support establishing an ICT accessibility environment;**
- ✓ **To contribute to the development of inclusive digital societies globally.**



AGENDA:

2. GLOBAL COMMITMENTS AND ITU'S MANDATES TO FACILITATE ACCESS TO ICTs FOR PWD

GLOBAL COMMITMENTS TO REDUCE INEQUALITIES AND ACHIEVE INCLUSIVE SOCIETIES

1. UN: Convention on the Rights of Persons with Disabilities (CRPD)

➤ September 2018:

- ✓ 177 countries have ratified the CRPD = >90%
- ✓ 161 countries have signed the CRPD



➤ ICTs and UN CRPD (Art.9 & Art. 30)

- ✓ ensure access for PwD, on an equal basis, ... to information and communications technologies
- ✓ identification and elimination of obstacles and barriers to access, will apply, among other things, to: information, communications and other services, including electronic and emergency services
- ✓ ensure that PwD: ... have access to television programs [and] movies ... in accessible formats

This Convention is one of the most widely-ratified international human rights treaties, which reaffirms that PwD are entitled to the same treatment as everybody else.

2. ICT and SDGs

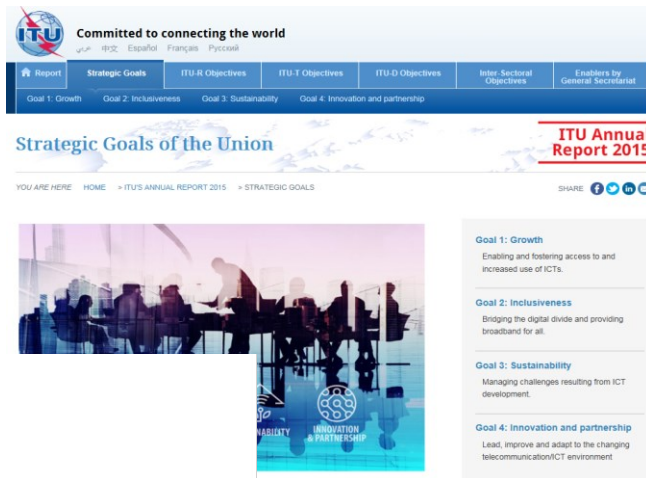
- ICTs are catalytic drivers to enable the achievement of all the SDGs

“The spread of ICTs and global interconnectedness has great potential to accelerate human progress”.
Agenda for Sustainable Development (Paragraph 15)

- SDGs referring specifically to **Persons with Disabilities: 1, 4, 8, 10, 11, 16**
- However ICTs also contribute to:
 - ✓ the educational, economic and social development of PwD
 - ✓ elimination of barriers for enabling PwD their independent life
 - ✓ create inclusive societies (ALL)



ITU-D MANDATES ON ICT ACCESSIBILITY FOR PwD



➤ ITU Strategic Goal 2, Inclusiveness

- ✓ **Target 2.5.B:** *“Enabling environments ensuring accessible telecommunication/ /ICT for persons with disabilities should be established in all countries by 2020”*
- ✓ **New proposal to ITU Strategic Plan Target 2.9 – extended to 2023** (Add 1 to doc 24 to PP 2018)
- ✓ **PP Resolution 175** (Rev. Busan, 2014)

Final Report

World Telecommunication Development Conference (WTDC-17)
Buenos Aires, Argentina, 9-20 October 2017



➤ WTDC -17 Buenos Aires Action Plan:

- ✓ **Output 4.3**
- ✓ **Programme:** *Digital inclusion for empowering women and girls , persons with disabilities and other people with specific needs.*
- ✓ **Regional Initiatives** related to ICT accessibility and PwD :AFR 2&4;EUR3; ASP2; AMS4.
- ✓ **(Annex 2 to Resolution 2) - Study Group 1, Question 7/1** *“Access to telecommunications/ICT services for PwD and other persons with specific needs”*
- ✓ **Resolution 58** (Rev. Buenos Aires, 2017) *“Telecommunication/information and communication technology ICT accessibility for persons with disabilities and persons with specific needs”*

AGENDA:

3. GLOBAL USERS – UNDERSTANDING CONSUMERS' NEEDS AND RELATED ICT TRENDS

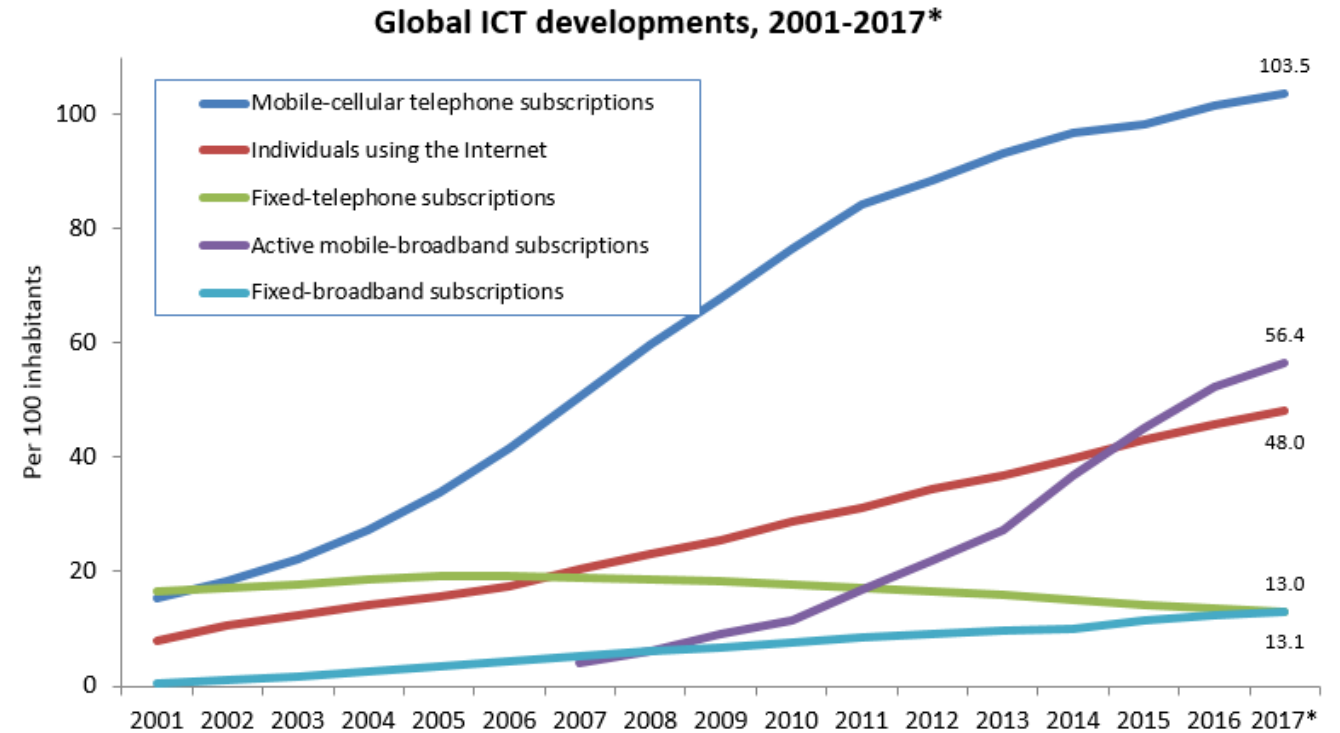
GLOBAL USAGE of ICTs AND IMPACTS

Which are the **global ICT trends**?



- **7,7 billion mobile cellular subscriptions**
- **4.2 billion mobile broadband**
- **3.6 billion Internet users**

(ITU source 2017)



Note: * Estimate
Source: ITU World Telecommunication /ICT Indicators database

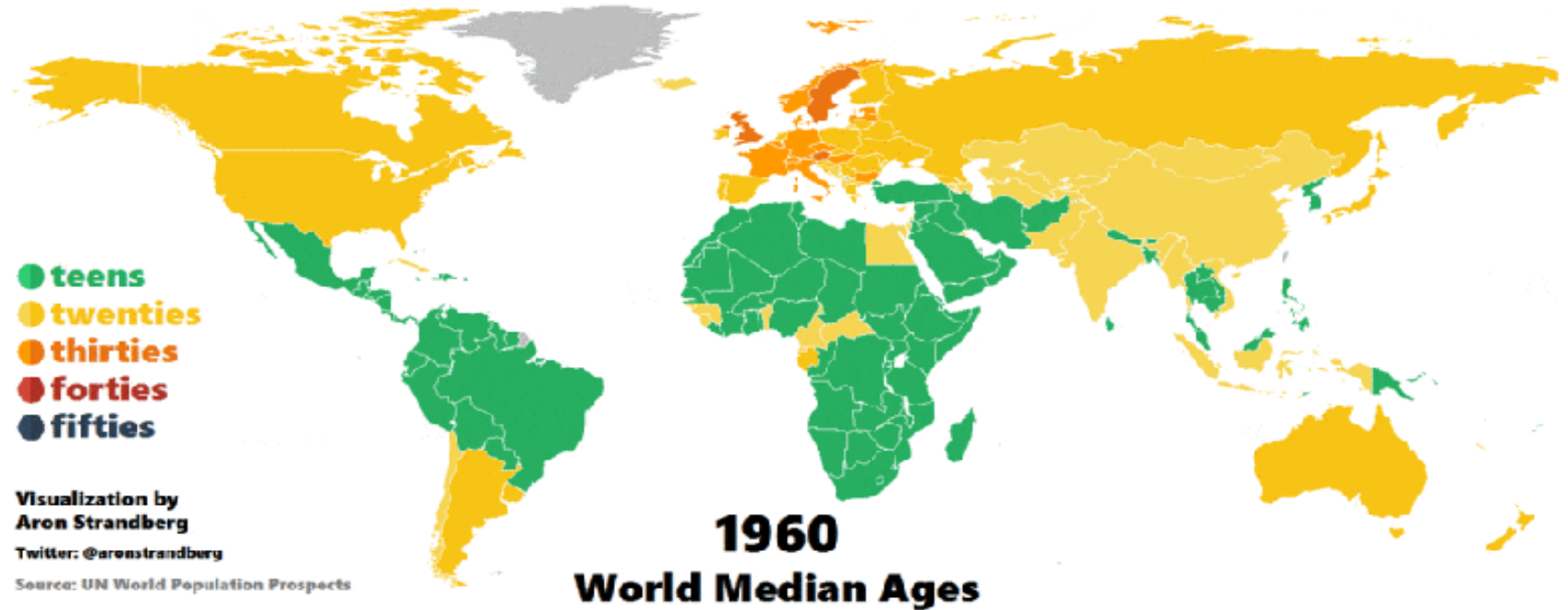
GLOBAL USAGE of ICTs AND IMPACTS



Understanding consumer's needs – Who (will) need accessible ICTs?



- 1.1 billion people live with some type of disability (*UN WHO-2015*)
- 1.1 billion youth at risk of hearing loss due to unsafe listening (*UN WHO-ITU Make Listening Safe Initiative 2015*)
- 2.1 billion people aged 60 and above, predicted by 2050 (*UN Report on World Population Aging 2017*)



Half of the world's population will need accessible ICTs in next 30 years!!!

AGENDA:

4. UNDESTANDING DEFINITIONS AND CONCEPTS

- FROM 3E (EQUIPMENT, EQUAL, EQUITABLE) TO 3A (ACCESSIBLE, ASSISTIVE AND AFFORDABLE)

How ICTs can overcome barriers



I have difficulties to speak



I use e-mails,
voice recognition technology



I have low vision



I grow the font size and
change color contrasts



I am a blind person



I use screen readers, which
read to me everything they
recognize in a site or an app



I have difficulties using a mouse



I surf using a keyboard or a specific
assistive technology device



I am a deaf person

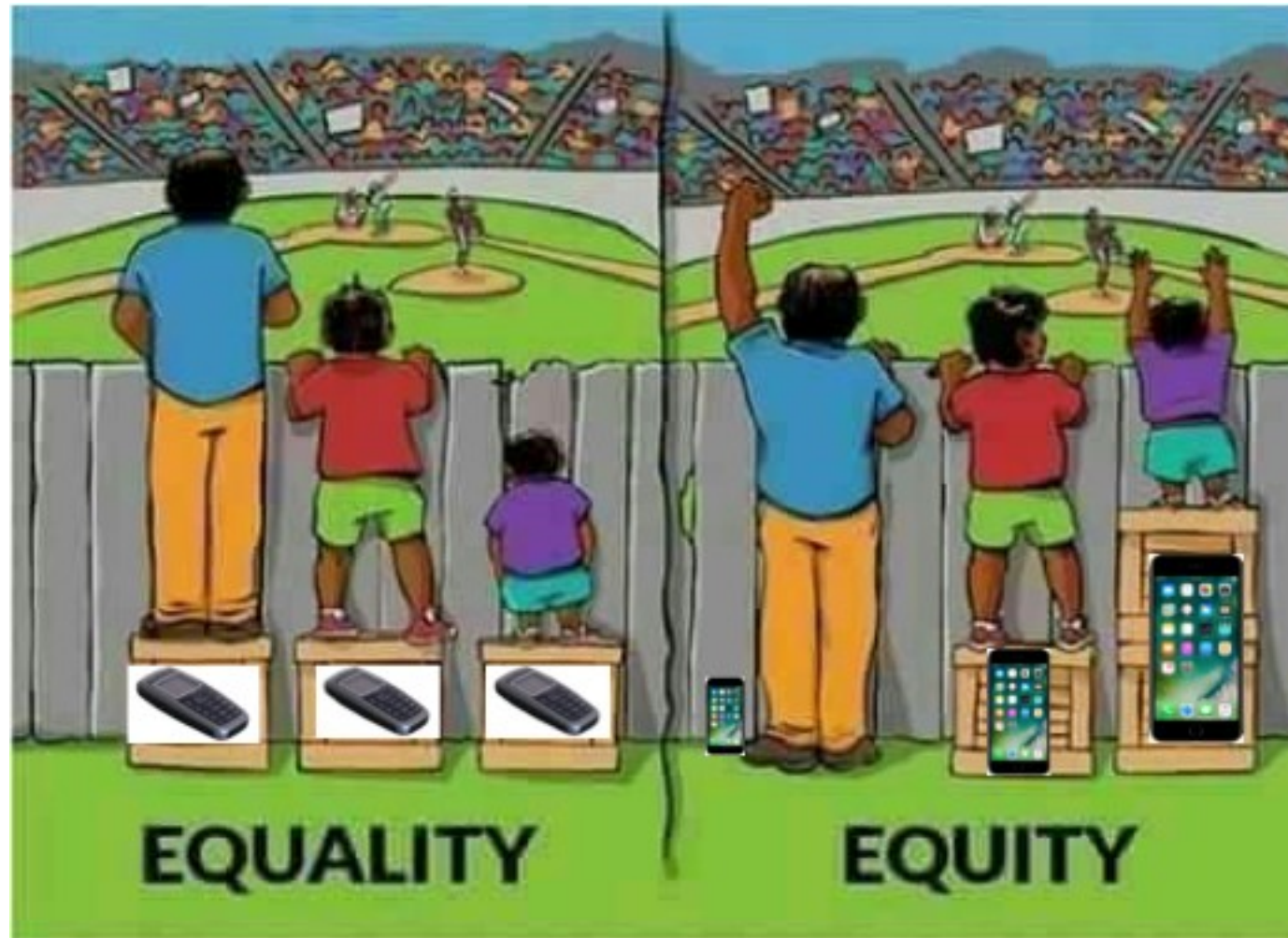


I read the captions in multimedia
content and use text messages

Disability= impairment + barriers (*attitudinal and environmental*)

ICTs can provide PwD with the interface that enable them to communicate and live independently

What is the meaning of accessible ICTs?



Equipment + Equality + Equity = accessible ICTs

An accessible ICT facilitates access to information to ALL users

What do we mean by Accessible, Assistive and Affordable ICTs?

➤ **ACCESSIBLE ICTs = ICTs for ALL**

- ✓ The equipment or the service have **embedded accessibility features from design/fabrication stage**
- ✓ **Can be used by ALL users based on their own capabilities, needs and/or circumstances**
- ✓ Are **compatible with assistive technologies**

❑ **ASSISTIVE Technologies (AT) = *complement to accessible ICTs***

- Is a **separate hardware or software added to equipment or services** to enable persons with more severe disabilities to overcome the barriers they face to access information and communication
- Are **used to enable or compensate users** with functional, motor, sensory or an intellectual **limitations**

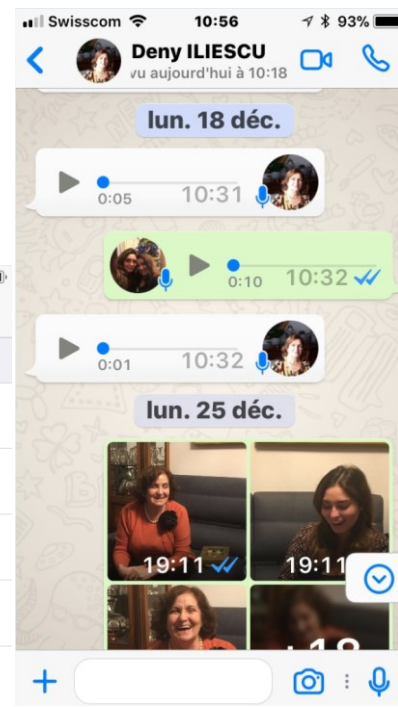
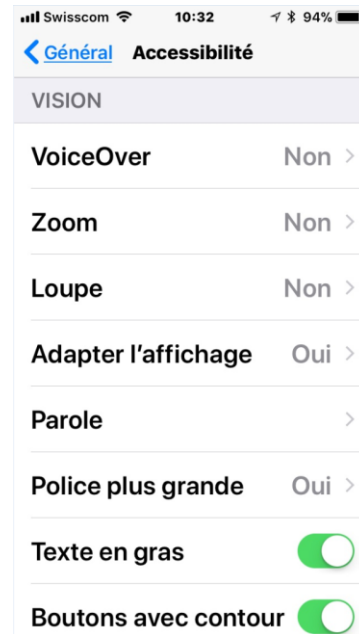
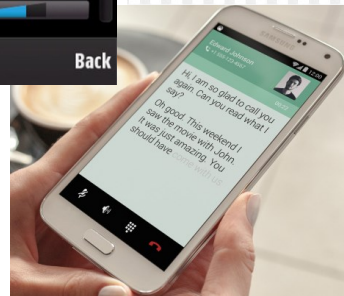
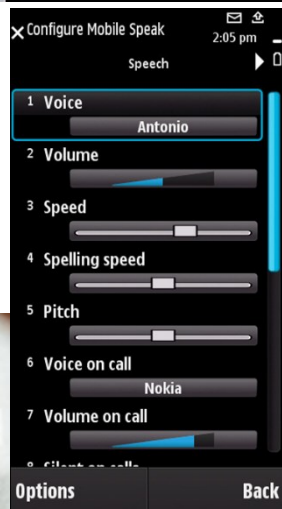
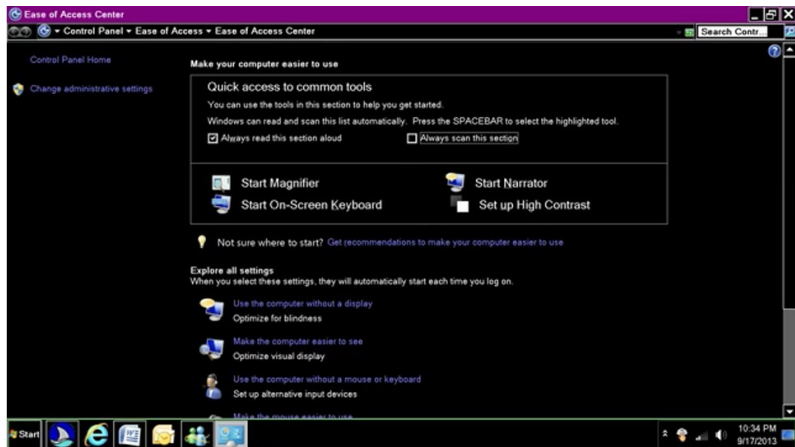
➤ **AFFORDABLE ICTs**

- ✓ The lack of affordability is also a “barrier” to access ICTs.
- ✓ **ALL people, including PwD have to have the economic possibility of acquiring these ICTs**

ICTs must be **Accessible** and **Affordable** for ALL

Examples of accessible ICTs

Inclusiveness and link to universal design



Examples of equipment and software / assistive technology - AT



AGENDA:

5. ABOUT ICT ACCESSIBILITY APPLICATIONS AND BENEFITS FOR

- **GOVERNMENTS**
- **PRIVATE SECTOR**
- **ACADEMIA**
- **USERS/ALL**

Governments:

Why are accessible ICTs important? Which are the benefits? What to do?

- **Accessible ICTs are necessary to ensure that all citizens have access to:**
 - ✓ Public information & communication
 - ✓ Public services (health, e-government, emergency, etc.)
- **When governments and public authorities purchase accessible ICTs they:**
 - ✓ Create an accessible employment environment in the public sector
 - ✓ Deliver better value for money to the citizens
 - ✓ Make them (ICTs accessible) affordable by reducing the cost



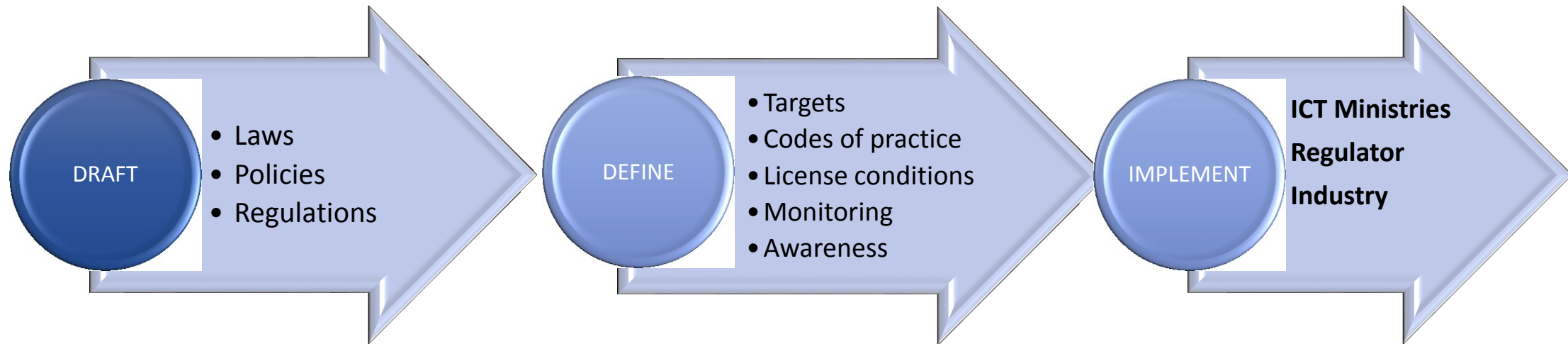
“Considering that public procurement represents 20% of the GDP of an average country though an accessible ICT public procurement policy Governments can develop a prosperous digital market”

- **Through regulating and promoting ICT accessibility, governments will:**
 - ✓ Reduce inequalities
 - ✓ Create an inclusive society in their country
 - ✓ Ensure that all citizens participate to the country’s development
 - ✓ Increase the country’s economic growth



Governments:

How to consider and apply accessibility principles in policy regulation?



Process of developing and updating any general policy

Industry and private sector:

Which are the benefits to develop accessible ICTs?

“When government says you need to build technology a certain way, for vendors like ourselves that’s a very compelling maxim. We need to build products that can be sold to the government. It’s not very practical for us to build multiple versions of our products.” Adobe

➤ **The global market for disability/accessibility is worth :**

- ✓ 2017 \$1.3 trillion / for only 1.1 billion persons that need accessible ICTs
- ✓ 2050 \$+5 trillion / for over 4.3 billion persons that will need accessible ICTs

➤ **People with disabilities are consumers:**

- ✓ Up to 20% will directly benefit from improvements to accessibility
- ✓ An estimate of 50% will benefit indirectly

➤ **Developing accessible ICTs is worth because:**

- ✓ Incentivises manufacturers and suppliers to innovate and produce better
- ✓ Improves over-all quality of ICTs by making them more user-friendly
- ✓ Creates a market for accessible ICTs
- ✓ Improves business benefit



Academia:

Which are the benefits to build in country capacity in ICT accessibility?

➤ **The Academies have an important role in shaping level of education within the countries**

- ✓ Have the educational means to change people mindsets
- ✓ Can adapt curriculum to respond to the demand,
- ✓ Can create professional in ICT accessibility
- ✓ Can determine employability level within the country
- ✓ Can influence future social and economic development of its students



➤ **If the Academies will develop capacities in ICT accessibility they will:**

- ✓ Develop new and innovating ICT solutions for the digital inclusion of ALL
- ✓ Develop universal designed innovative solutions
- ✓ Develop a pull of experts in a topic (digital accessibility) that is highly demanded
- ✓ Promote access to education for All citizens



Why is it important that PwD have access to ICT?



- **ICTs are necessary for PwD** to achieve access to:
 - ✓ Information and communication
 - ✓ Education
 - ✓ Work market
 - ✓ Public services (e-health, e-government, e-emergency)

- **ICTs are fundamental for PwD** to achieve:
 - ✓ Social inclusion
 - ✓ Economic development

- **ICTs are indispensable for PwD** to:
 - ✓ [Transform their thoughts into acts and their dreams into facts!](#)
 - ✓ Enable them to have an independent life such as persons without disabilities

Video link:

https://www.youtube.com/watch?v=S_YaTcKpH7s

To achieve all above ICTs should be accessible!



Accessible ICTs are good for **ALL!**

Helps:

- ✓ Persons with disabilities to access ICTs and have an independent life
- ✓ Aging populations to easier access ICTs
- ✓ Immigrants, refugees or illiterate people to use accessible features to facilitate communication
- ✓ Governments to increase country's social and economic development
- ✓ Industry and manufactures to develop better products and increase market opportunities
- ✓ Private sector to attract more costumers and increase their business value
- ✓ Academies to provide inclusive education and innovating ICT solutions for the digital inclusion
- ✓ **ALL of us!**

ICT accessibility enables communication for ALL and ensures digital inclusive societies!



AGENDA:

6. KEY RESOURCES

ITU-D KEY RESOURCES TO PROMOTE ICT ACCESSIBILITY

STUDY GROUP Question 7/1 REPORTS to WTDC

- **ITU-D works with ITU members through STUDY GROUP on “Access to telecommunication ICT services by PwD and with specific needs”**
 - ✓ **Governments** to develop ICT accessibility policies and regulations
 - ✓ **Industry** to define and manufacture accessible ICTs
 - ✓ **Public and private sector** partners to ensure that ICT access and services are accessible, affordable, equitable for ALL
 - ✓ **Academia** to empower people through technology education and training
- **FINAL REPORTS issued and presented to WTDC (2010,2014,2017)**
 - ✓ Many countries have already created ICT accessibility policy frameworks on public ICT access, mobile communications, TV/video programming, public procurement of accessible ICT and accessible government websites.
 - ✓ These reports presents: good practices, outlines challenges and proposes recommendations and guidelines based on country experiences.
 - ✓ **ALL Reports are available in all 6 UN languages**

<https://www.itu.int/pub/D-STG-SG01.07.4-2017>



Through our joint work, we protect and support everyone's fundamental right to communicate!

ITU-D key resources to promote ICT accessibility

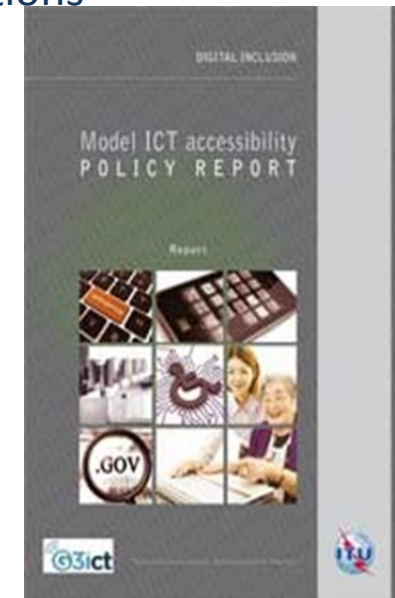
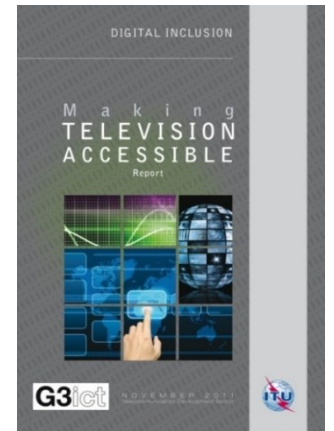
REPORTS:

- ❑ Model ICT Accessibility Policy;
- ❑ Making TV accessible;
- ❑ Making Mobile Phone and Services Accessible

- Provides policy guidelines and legal and regulatory framework
- Designed to help countries develop their own accessibility policies and regulations
- Modular design includes stand-alone sections on:

1. Model ICT legal, policy and regulatory framework
2. Model ICT accessibility framework on public access
3. Model mobile communications accessibility policy framework
4. Model television/video programming accessibility framework
5. Model web accessibility policy framework
6. Model accessible ICT public procurement policy framework

- ✓ All Available in [Arabic](#), [Chinese](#), [English](#), [French](#), [Russian](#), [Spanish](#), [e-book version](#)
- ✓ Accessibility of PDF report checked and edited by [BarrierBreak](#)
- ✓ Available at URL: www.itu.int/en/ITU-D/Digital-Inclusion/Pages/Reports.aspx



ITU-D KEY RESOURCES TO PROMOTE ICT ACCESSIBILITY

3 Self-paced training courses - ICT Accessibility the Key to inclusive communication

➤ **new! Self-paced training courses on:**

- ✓ Enabling Communication for All through ICT Accessibility
- ✓ ICT accessibility policy, regulation and standards (public procurement)
- ✓ Achieving ICT Accessibility through Public Procurement

➤ **Training courses on Public Procurement of accessible ICTs**

On-line tutor lead through ITU Academy -upon request



ITU Academy
Self Paced Online Training
**ICT Accessibility:
The Key to Inclusive
Communication**
Invest 8 hours to get certified
www.itu.int/en/ITU-D/Digital-Inclusion
ITU Regional Initiative for Europe on Accessibility, Affordability and Skills Development

MODULE 1:
Enabling Communication for All
through ICT Accessibility

MODULE 2:
ICT Accessibility Policy
Regulations and Standards

MODULE 3:
Achieving ICT Accessibility
through Public Procurement

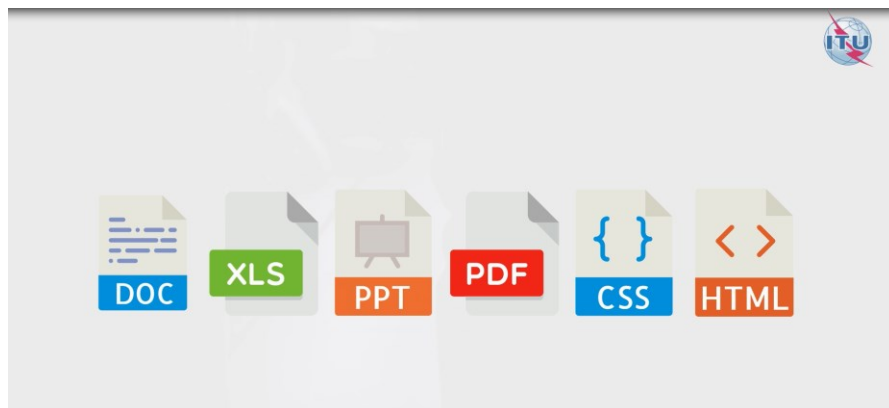


ENROLL TODAY: To take the course and earn the certificate you can enroll today at ITU Academy !

www.itu.int/en/ITU-D/Digital-Inclusion/Persons-with-Disabilities/Pages/Self-Paced-Online-Training-on-ICT-Accessibility.aspx

ITU-D KEY RESOURCES TO PROMOTE ICT ACCESSIBILITY

Video Tutorials on the creation of accessible digital documents and remediation

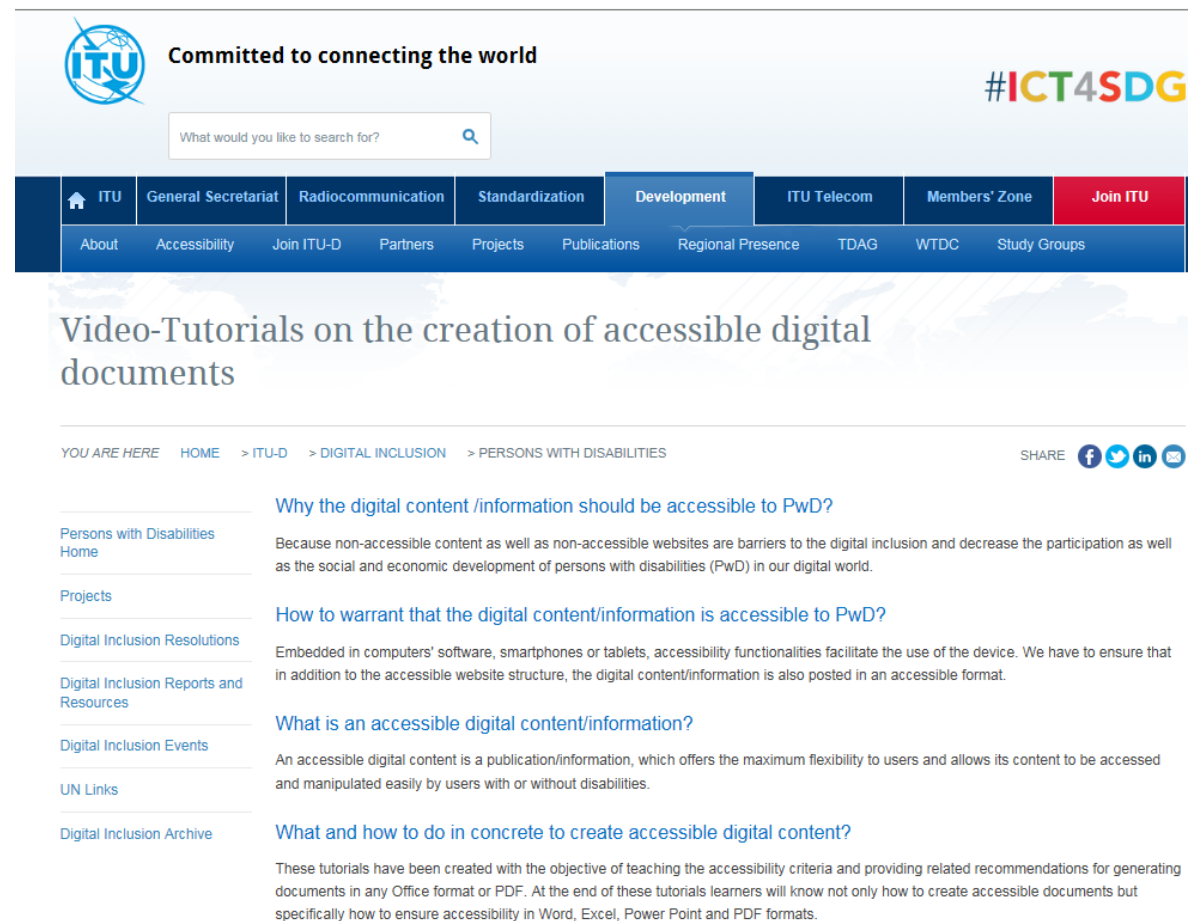


➤ **new! 5 Videos tutorials on the creation of accessible digital documents and remediation**

✓ **General** – video link

- ✓ **Word**
- ✓ **PDF**
- ✓ **Excel**
- ✓ **PPT**

➤ **Available in English, French and Spanish**



The screenshot shows the ITU website interface. At the top, there is the ITU logo and the slogan 'Committed to connecting the world'. A search bar is present with the placeholder text 'What would you like to search for?'. Below the search bar is a navigation menu with tabs for 'Home', 'General Secretariat', 'Radiocommunication', 'Standardization', 'Development', 'ITU Telecom', 'Members' Zone', and 'Join ITU'. Underneath this is a secondary menu with links for 'About', 'Accessibility', 'Join ITU-D', 'Partners', 'Projects', 'Publications', 'Regional Presence', 'TDAG', 'WTDC', and 'Study Groups'. The main content area features a heading 'Video-Tutorials on the creation of accessible digital documents'. Below the heading, there is a breadcrumb trail: 'YOU ARE HERE > HOME > ITU-D > DIGITAL INCLUSION > PERSONS WITH DISABILITIES'. To the right of the breadcrumb trail are social media sharing icons for Facebook, Twitter, LinkedIn, and Email. The main content area contains several sections with blue headings and text:

- Why the digital content /information should be accessible to PwD?**
Because non-accessible content as well as non-accessible websites are barriers to the digital inclusion and decrease the participation as well as the social and economic development of persons with disabilities (PwD) in our digital world.
- How to warrant that the digital content/information is accessible to PwD?**
Embedded in computers' software, smartphones or tablets, accessibility functionalities facilitate the use of the device. We have to ensure that in addition to the accessible website structure, the digital content/information is also posted in an accessible format.
- What is an accessible digital content/information?**
An accessible digital content is a publication/information, which offers the maximum flexibility to users and allows its content to be accessed and manipulated easily by users with or without disabilities.
- What and how to do in concrete to create accessible digital content?**
These tutorials have been created with the objective of teaching the accessibility criteria and providing related recommendations for generating documents in any Office format or PDF. At the end of these tutorials learners will know not only how to create accessible documents but specifically how to ensure accessibility in Word, Excel, Power Point and PDF formats.

ITU-D key resources to promote ICT accessibility

Nacional Program on Web Accessibility “Internet for @ll”



- **Raise awareness among the Government** and stakeholders involved in ICT accessibility to understand that:
 - ✓ Providing public accessible information (digital content and websites) is a win-win
 - ✓ Enabling PwD access to information, study and work will improve their social and economic development as well as their participation and contribution in overall country development.
- **Develop national capacities (train-the-trainers) based on international standards in web accessibility in:**
 - ✓ Development of accessible digital content (Word, PDF, PP Excel) and documents remediation
 - ✓ Design, develop and maintain accessible websites**so that the countries can replicate these capacities and develop experts in web accessibility, who will ensure that the public (and private) information and services is available to all citizens including PwD.**
- The Program also propose a **self-sustainable model to raise funding for digital training of end users/PwD in the use of accessible websites.**
- **Incentivize governments /decision makers to lead by example and create of a national digital ICT accessibility ecosystem** thus enabling digital and social inclusion of ALL citizens.

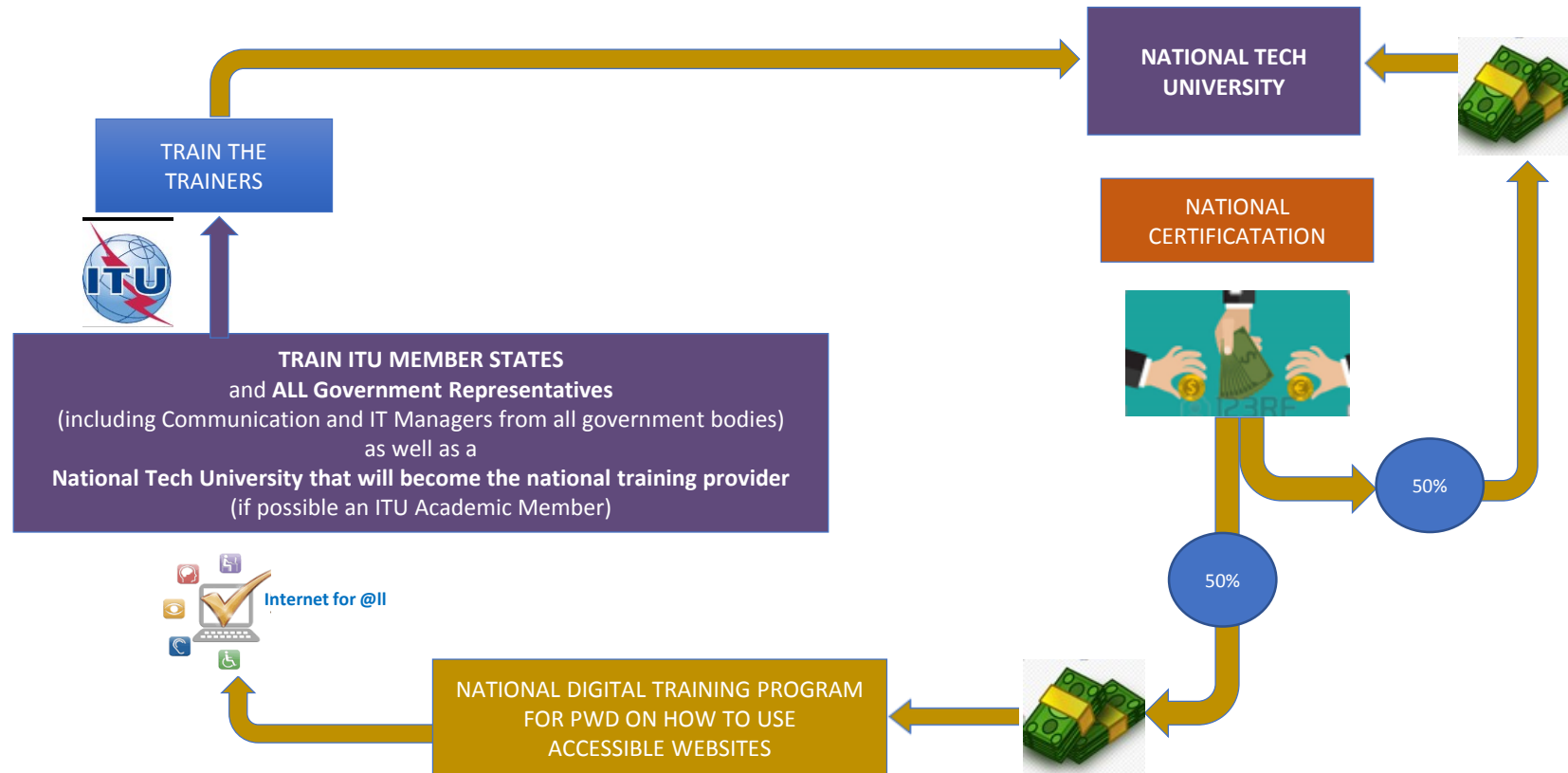


ITU-D key resources on ICT accessibility

National Program on Web Accessibility “Internet for @ll” –

360° Self-sustainable educational model for web accessibility implementation

- ✓ ITU will raise awareness, enhance country’s knowledge in web accessibility and provide related curriculum
- ✓ The country’s training provider will ensure the dissemination of the curriculum at the national level, also providing certification
- ✓ The funds generated by the national certification will be shared between the national training provider and a national fund that will serve to train PwD to navigate the Internet through accessible websites
- ✓ All parties will benefit from this educational model: government, national education system, service providers and end users



Impact of web accessibility on the lives of PwD



**Web Accessibility Issues:
Experiences
of Individuals with
Disabilities**

▶ ⏪ 🔊 0:00 / 1:59

⌵ ⚙️ 📺 🗉

Web Accessibility for people with Disabilities

A YouTube video player thumbnail with a black background and white text. The text reads "Web Accessibility Issues: Experiences of Individuals with Disabilities". Below the text is a video player interface with a play button, a skip back button, a volume icon, and a progress bar showing 0:00 / 1:59. On the right side of the player are icons for a list, settings, a screen, and a full screen button. Below the player is the video title "Web Accessibility for people with Disabilities".

Video link: <https://www.youtube.com/watch?v=3LTwtRCpHO4>

AGENDA:

6. CONCLUSIONS

CONCLUSIONS:

KEY ISSUES ON ICT ACCESSIBILITY TO BE CONSIDERED BY POLICY MAKERS

1. **Raise awareness among all national key stakeholders** (Government, Broadcasters, Industry, Private Sector, Academia, NGOs etc)–about the need to promote ICT accessibility;
2. **Build consensus and inclusive policy-making** through encouraging national and regional debates to promote ICT accessibility.
3. **Mainstream ICT accessibility** through inclusive language, definitions, and provisions in national policies, laws & regulations;
4. **Identify key steps on ICT accessibility for industry makers and local content providers** such as making accessible content and devices(public and mobile phones, TV sets) available;
5. **Promote ICT accessibility also as a business opportunity;**
6. **Establish clear targets, periodic monitoring and evaluation** to ensure implementation of national ICT accessibility policies and services;
7. **Encourage national trainings and educational programs** on disability topics;
8. **Promote ICT accessibility in local context and language** (for example of voice recognition and text-to speech interfaces);
9. **Involve and consult with end users/PwD in all national related processes in ICT accessibility** embracing the principle of '*nothing about us without us*'.

***EVERYBODY'S WORK IN ICT ACCESSIBILITY CAN MAKE A DIFFERENCE
BUT ONLY WORKING TOGETHER WE CAN MAKE THE CHANGE!***

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For more information: ITU-D Digital Inclusion Division:

<https://www.itu.int/en/ITU-D/Digital-Inclusion/Persons-with-Disabilities/Pages/Persons-with-Disabilities.aspx>