
This course entitled “An Introduction to ICT Accessibility and Inclusive Design” was prepared and designed by Mada Center, Qatar.

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Competencies

Mada ICT-AID Competency Framework

- D2.3.1, D2.3.2, D2.3.4.

Objectives

- ⊕ Introduce accessibility barriers and features in ICTs
- ⊕ Describe the general standardization framework and benefits
- ⊕ Feature W3C Web Accessibility Initiative (WAI)
- ⊕ Explore major examples of ICT Accessibility Standards and standards making bodies

Learning Outcomes

- By the end of this unit, you should be able to:
- Identify ICT barriers for persons with disabilities
 - Identify accessibility features in ICT
 - Recognize standardization aims and benefits in ICT accessibility
 - Describe major examples of ICT Accessibility standards and standards making bodies
 - Describe the W3C Web Accessibility Initiative (WAI) standardization framework
 - Explain the guiding principles of web Accessibility

Content

1. Promoting digital inclusion of persons with disabilities
2. Accessibility features in ICT
3. ICT accessibility standards
4. Standardization aims and benefits

Standardization Aims and Benefits



Standardization Aims and Benefits

Learning outcomes (4)

- By the end of this section, you should be able to:
 - Demonstrate understanding of the general framework of standardization
 - Recognize standardization aims and benefits in ICT accessibility
 - Identify main standardization bodies

Standardization Aims and Benefits

1. Standardization (1/4):

Standardization involves the development and adoption of mutually agreed specifications, guidelines, and practices for products, services, and processes. Standardization bodies, also known as organizations, are responsible for the development and maintenance of these standards.

The general framework of standardization involves several key elements:

- **Identification of needs:**

Standards are developed in response to the needs identified by industry, consumers, and other stakeholders. These needs can arise from technological advancements, market requirements, or regulatory obligations.

Standardization Aims and Benefits

1. Standardization (2/4):

- **Standards development:**

Once the need is identified, standardization bodies, such as the International Organization for Standardization (ISO), establish technical committees or working groups to develop the standards. These committees include experts from relevant industries, academia, government, and other interested parties.

- **Consensus-based approach:**

The standardization process is typically based on a consensus-driven approach, ensuring that all stakeholders have the opportunity to contribute and provide input. This ensures that the standards represent a fair and balanced view, taking into account the diverse perspectives and requirements of different stakeholders.

Standardization Aims and Benefits

1. Standardization (3/4):

- **Technical specifications:**

Standards consist of technical specifications that define the characteristics, performance requirements, and testing methods for a particular product, service, or process. These specifications provide a common language and framework for manufacturers, suppliers, and consumers to ensure interoperability, compatibility, and quality.

- **Implementation and compliance:**

Standards are voluntary, but they are widely adopted by industry players to ensure consistency, safety, and reliability. Compliance with standards enhances market acceptance and facilitates the exchange of goods and services between different parties.

1. Standardization (4/4):

- **Review and revision:**

Standards are reviewed periodically to ensure that they remain relevant and up-to-date. This revision process involves reassessing the needs, incorporating technological advances, and addressing emerging challenges or gaps.

2. Aims of Standardization in ICT Accessibility (1/4):

The aims of standardization in ICT accessibility are as follows:

- **Consistency:**

Standardization aims to provide consistent accessibility across different digital platforms.

This means that individuals with disabilities should be able to access and use ICT regardless of the device or software they are using. By defining a set of consistent guidelines and specifications, standardization ensures that accessibility features are implemented consistently across different technologies, promoting a cohesive user experience for individuals with disabilities.

2. Aims of Standardization in ICT Accessibility (2/4):

- **Legal and Regulatory Compliance:**

Standards often form the basis for legal and regulatory requirements related to ICT accessibility. By complying with these standards, organizations can ensure that they meet legal obligations and avoid potential legal issues or penalties related to discrimination or exclusion of individuals with disabilities. Compliance with accessibility standards not only helps organizations stay on the right side of the law but also demonstrates their commitment to inclusivity and social responsibility.

2. Aims of Standardization in ICT Accessibility (3/4):

- **Quality Assurance:**

Standardization establishes processes and criteria for evaluating and improving the accessibility of ICT products and services. By defining clear and measurable accessibility standards, organizations can assess their offerings and make necessary improvements to ensure they meet the needs of individuals with disabilities. This focus on quality assurance leads to the development of higher-quality, more usable, and accessible technology.

2. Aims of Standardization in ICT Accessibility (4/4):

- **Interoperability:**

Standardization aims to facilitate interoperability between different ICT systems and devices, including assistive technologies. By adhering to standardized accessibility guidelines, developers can ensure that their products are compatible with a wide range of platforms and devices, enabling seamless interaction and communication.

3. Main standardization bodies (1/2)

The main standardization bodies for ICT accessibility are:

- **World Wide Web Consortium (W3C):**

W3C is a global community that develops web standards, including accessibility guidelines and specifications. The Web Content Accessibility Guidelines (WCAG) developed by W3C are widely recognized and followed to ensure web accessibility.

- **International Organization for Standardization (ISO):**

ISO develops and publishes international standards across various industries, including information technology. ISO/IEC JTC 1/SC 35 is the subcommittee responsible for standards related to IT accessibility, including the ISO/IEC 40500 standard for web accessibility.

3. Main standardization bodies (2/2)

- **International Telecommunication Union (ITU):**

The ITU prioritizes telecom accessibility, encompassing e-accessibility, conversational services, and accessibility for the elderly and individuals with disabilities.

- **European Telecommunications Standards Institute (ETSI):**

ETSI produces globally-applicable standards for telecommunications, including ICT accessibility. ETSI Technical Committee Human Factors (HF) develops accessibility-related standards for user interfaces, products, and services, ensuring the usability and accessibility of ICT systems.

Standardization Aims and Benefits

Quizzes (4)

1. Why is periodic review and revision of standards necessary in the standardization process?
2. Which organization is responsible for the development of international standards covering a wide range of industries and sectors?

Final Evaluation

1. List and briefly describe five accessibility features commonly found in ICT?
2. Explain the aims of standardization in the field of ICT accessibility?
3. Identify and briefly describe two organizations or standards-making bodies that contribute to the development of these accessibility standards?
4. Identify and Explain two specific ICT challenges faced by Persons with Disabilities?

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