FAST - Facilitating Accessibility in Support of Tourism

Accessible Travel Facilitator (ATF)

Module Methodology

Modules and Unit Distribution

Distribution of Modules:

Module	Leading Partner	Units
Module 1 - First aids	OECON	
Module 2 – Dealing with persons with disabilities	SPI	
Module 3 – Communication	BEST	
Module 4 – Problem solving and organisational skills	DEKAPLUS	
Module 5 – ICT - Accessibility of digital content for people with disabilities	INUK	**Unit 1: Introduction to digital accessibility and the needs of people with disabilities in the digital domain** Unit 2: Preparing accessible digital content (texts, multimedia, social media posts) and accessible digital documents (Word, PDF) Unit 3: How to check if digital content and information are accessible
Module 6 – Cultural differences	SSGT	
Module 7 – Design an accessible travel itinerary	NTB	

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Module Outline

Provide a high-level content outline of the Module. Give brief and descriptive titles for each unit and sections within that. *(Please revise accordingly):*

Module: Module 5 – ICT (Accessibility of Digital Content for People with Disabilities)

Module Overview (Please edit accordingly):

- Please add a brief description of the Module in the box below (what will the Module cover overall).

Module Overview
Digital accessibility is a feature that allows as many people as possible (among others people with various disabilities) to view the digital content as easily as possible. Thanks to digital accessibility a bigger number of people can read the same information at different locations and will not have difficulties understanding it. Nowadays people often plan their trips using the internet, therefore it is important that the information is accessible even for travellers with different disabilities. Depending on the disability, people use different assistive technologies to access the web. Therefore, the digital content must be adjusted to their needs and abilities.

Module Objectives:

In this module, the ATF will learn about different types of disabilities and their related ICT needs as well as how to prepare accessible digital content (e.g. accessible documents, web content, multimedia, and social media) so that they can ensure the travellers with disabilities can have equal access to travel information as other people.

Specific module objectives are:

- Acquaint ATF with diversity of disabilities and their ICT related needs.
- Acquaint ATF with the common barriers for PWDs within the ICT domain.
- Acquaint ATF with the benefits of digital accessibility for all people.
- Familiarise ATF with the basic principles and importance of digital accessibility.
- Familiarise ATF with the relevant standards and legislation related to ensuring digital accessibility.
- Acquaint ATF with the components of digital accessibility.
- Teach ATF how to prepare accessible digital content (e.g. web content, multimedia, social media content).
- Acquaint ATF with knowledge on how to prepare accessible digital documents (Word, PDF).
- Acquaint ATF with knowledge on how to prepare accessible online travel information.
- Acquaint ATF with knowledge on how to perform automatic and manual preliminary check of information available online.
- Acquaint ATF with knowledge on how to find and recommend accessible online travel information to clients.

Upon completion of this Module you should be able to:

- Know the relevant standards and legislation related to ensuring digital accessibility.
- Understand the basic principles and importance of digital accessibility.

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- Recognise and understand the components of digital accessibility.
- Understand diverse needs of people with disabilities within the ICT domain.
- Recognise the common barriers for PWDs within the ICT domain.
- Recognise the benefits of digital accessibility for all people.
- Prepare accessible digital content (e.g. web content, multimedia, social media content).
- Prepare accessible digital documents (Word, PDF).
- Perform preliminary accessibility checks of the websites with travel information.
- Find and recommend accessible online travel information.

Units in the Module:

Please list the Units that your Module includes in the table below:

Module: Module 5 – ICT (Accessibility of Digital Content for People with Disabilities)
Unit 1: Introduction to digital accessibility and the needs of people with disabilities in the digital domain Upon completion of this Unit participants should be able to: • Know the relevant standards and legislation related to ensuring digital accessibility. • Understand the basic principles and importance of digital accessibility. • Recognise and understand the components of digital accessibility. • Understand diverse needs of people with disabilities within the ICT domain. • Recognise the common barriers for PWDs within the ICT domain. • Recognise the benefits of digital accessibility for all people.
Unit 2: Preparing accessible digital content (texts, multimedia, social media posts) and accessible digital documents (Word, PDF) Upon completion of this Unit participants should be able to: • Prepare accessible digital content (e.g. web content, multimedia, social media content). • Establish an accessible structure of the digital content (appropriate headings, titles, links, colours, and contrasts). • Prepare easy-to-read texts that are readable and understandable. • Prepare accessible images, multimedia, and tables (writing appropriate alt-text, transcripts, captions, etc.). • Prepare accessible social media content and posts. • Prepare accessible digital documents in Word and use accessibility checker. • Prepare accessible digital documents in PDF and check their accessibility.
Unit 3: How to check if digital content and information are accessible Upon completion of this Unit participants should be able to: • Perform preliminary accessibility checks of the websites with automatic tools. • Perform manual accessibility checks of the websites. • Understand accessibility problems of reviewed websites. • Find and recommend accessible online travel information to clients.

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Unit 1: Introduction to digital accessibility and the needs of people with disabilities in the digital domain

Unit Overview (Please edit accordingly):

Unit 1 Overview
Compared to other clients, people with disabilities require more attention to accessible tourism services and destinations. Additionally, for obtaining information online, they need digitally accessible websites, applications and documents. Digital accessibility is a feature that allows as many people as possible to view, interact with and understand the content of websites, applications and documents as easily as possible. Digital accessibility allows people to get acquainted with online content in different locations, on different devices and without difficulty in understanding the content itself, regardless of any disability. Its purpose is to provide access to the Internet to as many people as possible, and in particular older people, people with disabilities (e.g. with physical, sensory and / or cognitive impairments), and people with temporary disabilities (e.g. due to injury, illness or a specific situation such as sunny weather, loud environment, fatigue). Ensuring digital accessibility is especially important today for two main reasons; firstly, the number of people with various disabilities is increasing, and secondly, we are witnessing a rapid digitalisation of society which results in most important social and economic activities being moved to the digital environment. Digital accessibility has become legally binding for all public institutions and a recommendation for private ones. It is regulated by respective standards and regulations (e.g. EU Directive on the accessibility of the websites and mobile applications of public sector bodies, WCAG 2.0/2.1, WAI-ARIA, UAAG, ATAG). At the same time digital accessibility is a responsibility and an investment that benefits clients (be it with or without disability), as well as organisations (be it public or private). Learning about digital accessibility requires knowledge about its basic principles (perceivable, operable, understandable, robust) and components that build up the digital environment (web content, developers, users, browsers and assistive technology, authoring tools, evaluation tools). It is very important to understand how these components are interrelated and how they interact with one another. Only then, we can tackle specifics of making the digital environment accessible for all. Persons with disabilities, depending on the type and severity of their disability, have diverse needs to be addressed in the digital environment. However, despite the fact that ICT has become an essential part of modern information society, people with disabilities face countless barriers when accessing websites or using applications. While inaccessible websites prevent them from accessing useful tourist information online, they are also deprived of an abundance of possibilities for organising their travels. Thus, digital accessibility is a responsibility and an investment that benefits clients (be it with or without disability), as well as organisations. It creates a more vibrant market of their products and services and enables more people to access their services. Digital accessibility is thus crucial for creating holistically accessible tourism. To equip the learners with the necessary knowledge and skills in digital accessibility, in this unit learners will learn about the requirements of relevant legislation and standards within the European environment, get familiar with basic principles of digital accessibility, and get acquainted with components of digital accessibility. The unit will give them a closer look into diverse needs of people with disabilities in the digital domain. It will focus on common barriers

that PWDs face when accessing websites, applications and documents. Learners will also learn about a wide array of benefits and potential uses of digital accessibility from a humanitarian and business perspective. This unit represents a baseline for all further units.

Upon completion of this Unit participants should be able to:

- Know the relevant standards and legislation related to ensuring digital accessibility.
- Understand the basic principles and importance of digital accessibility.
- Recognise and understand the components of digital accessibility.
- Understand diverse needs of people with disabilities within the ICT domain.
- Recognise the common barriers for PWDs within the ICT domain.
- Recognise the benefits of digital accessibility for all people.

Learning methodology – Please describe the way the content is presented

A. Introduction, development of the content:
How can learners be made interested in the topic?
If appropriate, please insert picture, diagram, statistics, videos, etc.

Figure 1: People with diverse disabilities

People with disabilities require more attention to accessible tourism services and destinations. Additionally, for obtaining information online, they need digitally accessible websites and applications. These benefit not only tourists (clients) but also tourism providers (sellers) and society in general. Accessible websites and applications create a more vibrant market and enable more people to access their services, while fulfilling legal and ethical requirements. In order to be able to make ICTs accessible, first we need to understand the needs and barriers that PWDs face in the digital domain.

1.) DIGITAL ACCESSIBILITY AND ITS BENEFITS

Digital accessibility is the ability of a website, mobile application or electronic document to be easily managed and understood by a wide range of users, including users who have temporary or permanent visual, audio, motor or cognitive impairment.

Digital accessibility is an investment that contributes to a greater quality of digital services and brings benefits to all the users. There are two aspects of its benefits, the **humanitarian/ethical aspect** and the **economic aspect.** They are going to be further discussed in this unit.

Figure 2: Humanitarian and economic benefits of digital accessibility

2.) RELEVANT LEGISLATION AND STANDARDS

Digital accessibility has become legally binding for all public institutions and a recommendation for private ones. It is regulated by respective standards and legislative regulations.

In this unit, we will get acquainted with the main legal acts and standards that apply to European market, and focus especially on the WCAG guidelines and EU Directive on the accessibility of the websites and mobile applications of public sector bodies.

3.) BASIC PRINCIPLES OF DIGITAL ACCESSIBILITY

WCAG guidelines that represent the main digital accessibility standard are designed around four basic principles of digital accessibility (perceivable, operable, understandable and robust). This unit will briefly explain their meaning in relation to how they can be applied to practice.

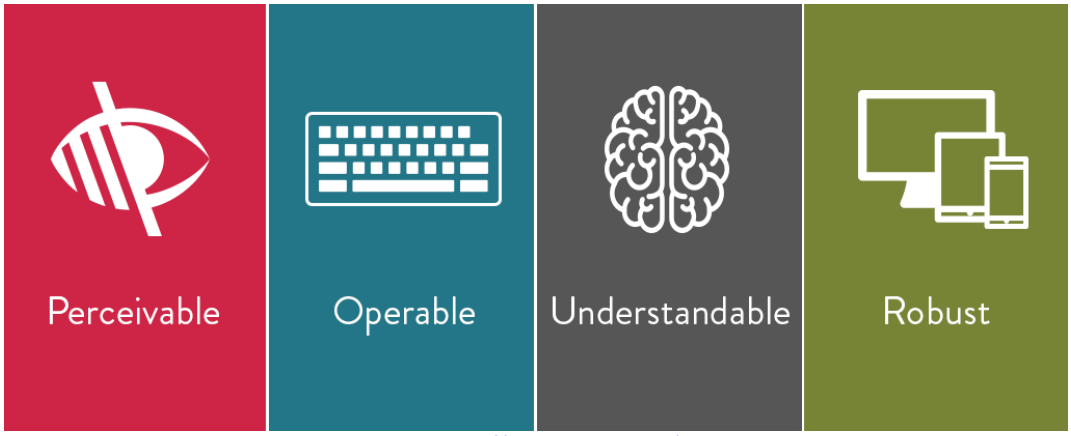

Figure 3: Basic principles of digital accessibility (Source: https://bthechange.com/make-your-website-more-accessible-to-people-with-disabilities-132f59d19292)

4.) DIGITAL ACCESSIBILITY COMPONENTS

Learning about digital accessibility requires also knowledge about components that build up the digital environment (web content, developers, users, browsers and assistive technology, authoring tools, evaluation tools). Only by understanding these components, how they are interrelated and how they interact with one another can lead us to creating digitally accessible websites, applications and documents.

Figure 4: Digital accessibility components and their interrelations (Source: Archive INUK)

5.) THE NEEDS AND BARRIERS OF PEOPLE WITH DISABILITIES IN THE DIGITAL DOMAIN

In order to be able to make ICTs accessible, first we need to understand the needs and barriers that people with disabilities (PWDs) face in the digital domain. As we have learnt in previous modules, there are several types and degrees of severity of impairments that we may encounter in our customers:

- **Hearing loss affects deaf and hard of hearing people** that may have difficulties grasping on information that are provided in an audible form. People with hearing loss require visual and/or haptic clues.
- **Visual loss affects blind or partially sighted people** that may have difficulties grasping on information that are provided in a visual form. People with visual loss require audio and/or haptic clues.
- **Multisensory impairment occurs in a combination of hearing loss and visual loss** that may have difficulties grasping on information that are provided in a visual and audible form. People with multisensory impairment require haptic clues.
- **Sensory processing difficulty may occur with neuro-diverse people** that face under-sensitivity or over-sensitivity. People with sensory processing disorders require adaptations in the degree of stimulation coming from their environment.
- **Cognitive impairment** affects people that have trouble remembering, learning new things, concentrating, or making decisions that affect their everyday life. People with cognitive impairment require information provided in an easy-to-read and easy-to-understand form with well thought layout and structure, simple language, pictograms and visuals to support or replace the written information etc.

- **Physical impairment** affects people that may face barriers in their physical environment. People with physical impairment require barrier-free physical space, equipment and aids, as well as a comprehensive set of accessibility information about the space, equipment and physical aids.

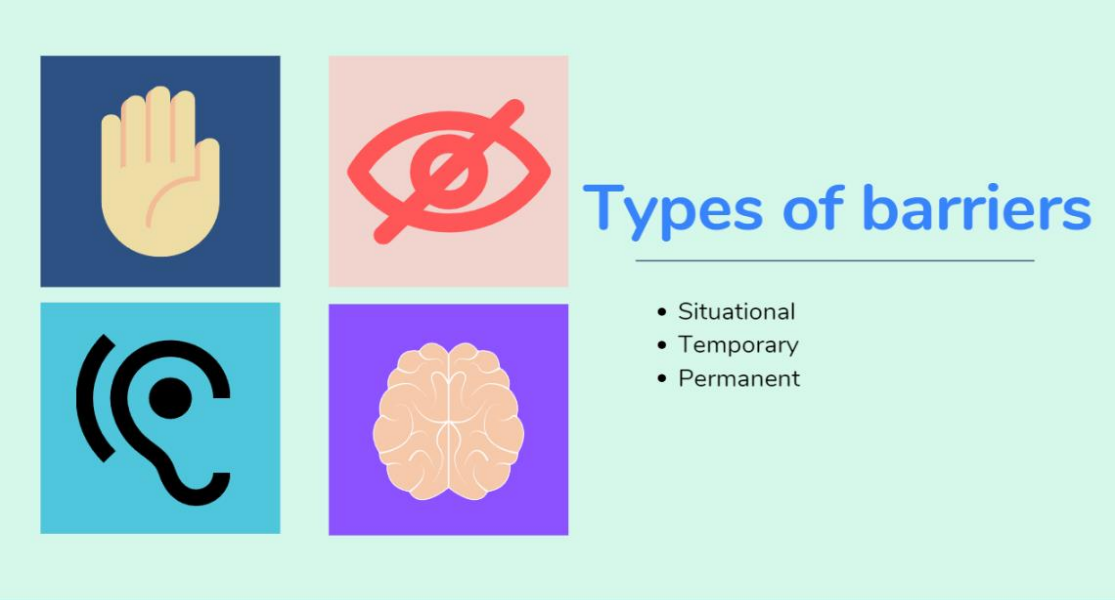

Figure 5: Types of barriers (Source: Archive INUK)

Before tapping into the question as of how we can support people with diverse impairments in the digital domain, it is good to know that impairments and barriers can be **situational, temporary or permanent** and that we all can at one point in our lives face any of these barriers.

B. Learning activities and material required:
Please describe the proceeding in detail.
Please describe the required material with special regard to variation of media and interactive/collaborative work.

Unit 1 consists of five interconnected parts and a final questionnaire.

Firstly, the teacher will introduce the meaning and benefits that digital accessibility brings to both, clients as well as organisations be it from a humanitarian or economic perspective. The benefits will be discussed through group discussion.

Secondly, a brief overview of legislative and standardization framework that regulate digital accessibility will follow. Learners will be acquainted with relevant legislation and standards that lay out specific rules and recommendations for creating a digitally accessible digital environment.

Thirdly, basic principles of digital accessibility (perceivable, operable, understandable, robust) will be presented and discussed in relation to PWDs ICT needs. The teacher will lead the discussion.

Fourthly, the components that need to interact with one another for creating a good digital accessibility of websites, applications and documents will be presented and reflected through group work and a follow-up discussion.

Lastly, diverse types of disabilities will be introduced. The teacher will guide students step by step through diverse needs of people with disabilities when using ICTs, as well as barriers that they face in the digital domain. The content will be presented using practical examples and will include individual and group work.

Overall, the teacher will encourage students towards rethinking their own understanding of the topic through diverse activities using methods such as desktop research, analysis, group work and a follow-up discussion in order to get a deep insight into common barriers that people with disabilities face in the digital domain.

The unit will conclude with a final individual questionnaire/test.

C. Reflection and setting phase – closing of unit, assignment (optional):
This could be short summarising of content; an exercise; a short group work and/or discussion; a self-studying exercise/homework; some questions to be answered; a test etc.

Unit 1 provides learners with an introduction to digital accessibility and its benefits, with an overview of relevant legislation and standards on digital accessibility in the European environment, with basic principles that represent a baseline for creating digitally accessible websites, and with the components of digital accessibility. Finally, diverse types of disabilities and barriers for PWDs in the digital domain are discussed through a series of practical examples.

This unit represents a baseline for all further units. Before moving on with the units, learners will be recommended to reflect on what they learned in unit 1 through the following activities:

- Review of presentations,
- Review of group tasks and discussion conclusions,
- Review of references,
- An individual questionnaire/test.

D. References and material recommended for further study:

- Universal declaration of human rights
- UN Convention on the rights of persons with disabilities (CRPD)
- European strategy fort he rights of persons with disabilities 2021-2030
- European Directive on the accessibility of the websites and mobile applications of public sector bodies
- EN 301 549 - Accessibility requirements for ICT products and services
- European Accessibility Act
- W3C Accessibility Standards Overview
- Web Content Accessibility Guidelines (WCAG)
- Authoring Tool Accessibility Guidelines (ATAG)
- User Agent Accessibility Guidelines (UAAG)
- ARIA, the Accessible Rich Internet Applications
- Understanding the four principles of accessibility
- Essential Components of Web Accessibility
- Make your website more accessible to people with disabilities
- Diverse Abilities and Barriers
- Disability and Health Promotion – Disability Barriers to Inclusion