Accessible Travel Facilitator (ATF)

Module Methodology

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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	

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.

Module Methodology

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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.

Unit 3: How to check if digital content and information are accessible

Unit Overview (Please edit accordingly):

Unit 3 Overview
When preparing travel itineraries for their customers, ATF will need to share tourist information that is available online. By doing so, ATF will need to make sure that this online travel information is also available in an accessible format. In order to provide customers with accessible travel itineraries and tourist information that are available online, ATF will need to conduct accessibility evaluation. The objective of unit 3 as a final unit of module 5 is to introduce learners to the web accessibility evaluation, its requirements, procedures and tools, and to show them preliminary and manual check in practice. Content of this unit is thus divided into 3 parts: • Accessibility evaluation requirements, procedures and tools. • Preliminary check with automated tools • Manual evaluation with one's own judgement In the first part of this unit learners will get acquainted with basic requirements, procedures and tools for assessing the digital accessibility. In this part, the unit will give an overview of basic requirements and methods for conducting accessibility evaluation, as well as a list of evaluation tools and check-lists that can be used to conduct preliminary check. In the second part, the unit will teach learners how to use these tools and conduct a preliminary check by themselves. Preliminary checks can give an ATF an indication of the overall accessibility of tourist information online. In the third part, learners will conduct a manual check in order to learn to recognize the types of errors that appear during preliminary check and for which target groups they may represent a problem. Additionally, as not all accessibility issues may be identified by automated evaluation tools (e.g. appropriateness of image alt-texts), ATFs will need to know how to apply their own judgement, recognize such issues and provide alternatives. In sum up, in this unit, learners will be introduced to the web accessibility evaluation, its requirements, procedures, evaluation tools and evaluation processes. Then they will have an opportunity to learn how to conduct preliminary checks in practice. They will be guided through an evaluation process using different tools, comparing the results manually and using their own judgement to assess whether a specific website is accessible or not, to which extent and to which target groups. Learners will be guided towards finding appropriate solutions for errors that may appear during preliminary check, considering clients with diverse needs.

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.

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.

When preparing travel itineraries for their customers, ATF will need to share tourist information that is available online. By doing so, ATF will need to make sure that this online travel information is also available in an accessible format. In order to provide customers with accessible travel itineraries and tourist information that are available online, ATF will need to conduct accessibility evaluation.

1) **ACCESSIBILITY EVALUATION REQUIREMENTS, PROCEDURES AND TOOLS**

Digital accessibility is a complex process that is dependent on a range of factors, including accessibility evaluation. In this process, we can turn to WCAG standard which sets guidelines on how to make digital content accessible to diverse groups of people with disabilities.

As discussed in Unit 1, digital accessibility has become legally binding for all public institutions and a recommendation for private ones. According to EU Directive, all websites and mobile applications of public sector bodies in Europe should comply with WCAG standard, level AA.

Accessibility evaluation allows us to determine the level of conformance with the WCAG standards and/or the minimum requirements for accessibility of website according to the real users' needs.

Accessibility evaluation is an integral part of digital accessibility, which is a responsibility of website owners and managers. For every website that is bound by the EU directive, the website owners must check its accessibility on a regular basis. At least once a year they need to check the website by themselves, which can be done as a **preliminary check with automatic tools.** This should be complemented with a **manual check** with the aim of revision of results and recognition of those accessibility issues that automatic tools cannot detect.

Additionally, website owners must conduct a **comprehensive evaluation** involving experts and if possible, include also people with disabilities in order to obtain first hand user experience.

Knowing **how to conduct a preliminary check is also important for ATFs**, so that they are able to check whether the online information that they want to share with clients is accessible.

Thus, ATF needs to know how to carry out:
- A preliminary check with automatic tools;
- A manual evaluation of results from preliminary check with tools;
- A manual evaluation of content that automatic tools cannot check (alt-texts, links, table descriptions etc.).

For conducting preliminary check, there are plenty of automated evaluation tools, screen readers and check-lists available online.

2) PRELIMINARY CHECK WITH AUTOMATIC TOOLS

Preliminary checks can give an ATF an indication of the overall accessibility of tourist information online. Conducting a preliminary check using one of the automated Web Accessibility Evaluation Tools (such as WAVE) in combination with screen readers can greatly enhance the understanding of accessibility barriers of a specific website.
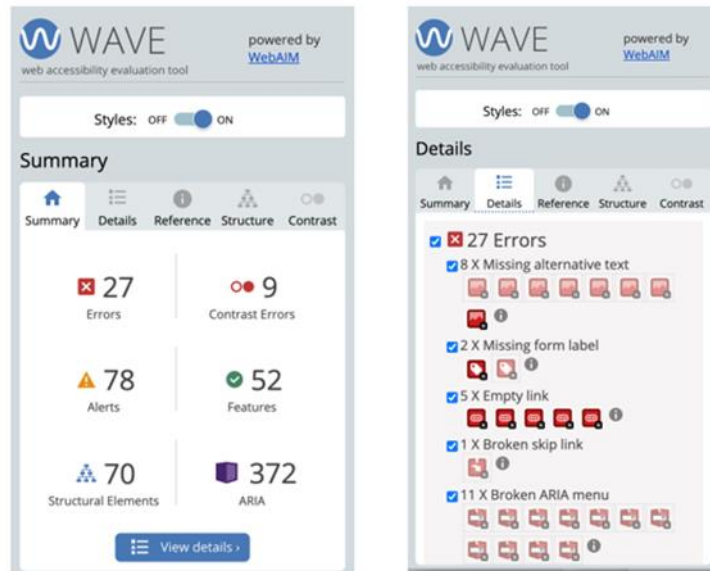

Figure 1: Results of a preliminary check with an automatic tool Wave

Nevertheless, such an initial evaluation is only one part of the web accessibility. The tools cannot provide a complete understanding of the accessibility issues of a website. Thus, a human dimension is crucial in our efforts towards web accessibility.

In order to provide accessible information to their clients, ATF will need to conduct also a manual check going step by step through the errors identified with evaluation tools. As not all accessibility issues may be identified by these tools (e.g. appropriateness of image alt-texts), ATFs will need to know how to apply their own judgement. ATF can also consult people with disabilities to make sure that the itineraries are as accessible as possible.

3) MANUAL CHECK USING ONE'S OWN JUDGEMENT

Manual check should always be complementary to any preliminary check using automated evaluation tools. Firstly, because not all accessibility issues may be identified by these tools (e.g. appropriateness of image alt-texts). Secondly, because there are differences between the tools which may also bring differences in results. Results need to be carefully revised in order to:

- Understand the identified errors and how they influence accessibility for different types of users;
- Recognize errors that automated tools were not able to;
- Provide alternative solutions (e.g. prepare alt-text, transcripts to video content, description of tables etc.).

However, manual check can also be used with the aim to get the first impression on the accessibility of a website. Accessibility of a website depends on many factors, some of which are more complex than others to an untrained eye. Some of the accessibility issues can be noticed even without using any specialized tools - you just have to know what to look for. Thus, manual check can be conducted as a quick evaluation without the use of any specialized tool, for instance:

- Checking the adequacy of a website structure;
- Checking navigability of a website using a screen reader (including navigation through keyboard only);
- Checking the adequacy of the customization of user experience;
- Checking accessibility of text and its alternatives to all non-text content e.g. images, audio and video recordings;
- Providing transcript for video and/or captions for audio content;
- Checking accessibility of images and recognizing appropriate alt-text for images;
- Providing appropriate alt-text for different types of images.

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 3 consists of three interconnected parts and a final questionnaire.

Firstly, learners will be acquainted with accessibility evaluation requirements, processes and tools. They will get familiarised with diverse automated tools and check-lists as a starting point for the practical part of the unit. The presentation will consist of the teachers' desktop and spoken presentation. Learners will be invited to review the given resources and get acquainted with diverse evaluation tools and screen readers. Through a set of practical activities, they will try how evaluation tools, screen readers and a TAB button work, and can help with conducting preliminary check.

Secondly, learners will test two automated tools, compare and discuss the results. They will be invited to use their own judgement on interpretation of the results. Most of the work will be done in groups and the teacher will lead the discussion after the exercise is completed.

Thirdly, a comprehensive exercise of conducting a manual check using one's own judgement will follow. The teacher will guide learners through the process and support them in discussion about alternative solutions to identified errors. Most of the work will be done in groups.

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 3 provides learners with an overview of accessibility evaluation requirements, processes and tools. It guides them through a preliminary check using different automated evaluation tools and screen readers, and it teaches them how to conduct a manual check as a crucial part of any preliminary check. The unit is designed as an experiental unit based on learning-by-doing principles. After this unit, learners will be able to check accessibility

of existing websites both with automated tools as well as manually, in order to provide their customers with accessible travel itineraries and tourist information online.

At the end of the module, learners will be recommended to reflect on what they learned in previous units 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:
- [EU Directive on the accessibility of the websites and mobile applications of public sector bodies](#)
- [WCAG](#)
- [Hot to meet WCAG (Quick reference)](#)
- [Guidelines for using Accessibility checker](#)
- [Easy Checks - A First Review of Web Accessibility](#)
- [Web Accessibility Evaluation Tools](#)
- [Web Accessibility Evaluation Tools List](#)
- [Screen readers](#)
- [Using Combined Expertise to Evaluate Web Accessibility](#)
- [Conformance Level to Accessibility Standards](#)