# Creating Accessible Websites

When creating or renovating websites, it is important to ensure that persons with different types of disabilities are able to use your website.

An accessible website is often coded and designed by a website developer who is aware of and follows international standards on accessible design, especially the Web Content Accessibility Guidelines (WCAG) produced by the World Wide Web Consortium (W3C).

The following checklist includes important website terminology to know and a series of questions that are important to consider throughout the process of creating an accessible website. Also included is a list of resources that may be helpful.
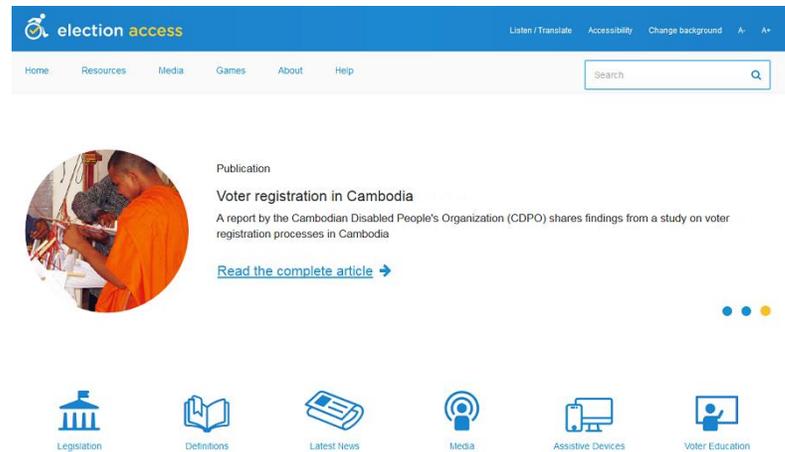
ElectionAccess.org includes several accessible features such as a text-to-speech program and an option to change the background color or change the font size, and a high-contrast color theme.

Source: International Foundation for Electoral Systems

Important Website Terms to Know

Accessibility or **"How to Use this Website" page:**

It is helpful for website users to be able to visit a page entitled "How to Use this Website" or "Accessibility" that describes the accessible features of the website and provide directions for features such as increasing the font size or turning captions on. An example of this type of webpage can be found on the Electoral Commission of the UK's website at http://www.aboutmyvote.co.uk/accessibility

Alternative text, or **alt-text**:

Alt texts are brief text descriptions of an image's content that is displayed when an image is not visible on the page. Persons using screen readers will be able to hear the alt text in place of the image. Alt-texts are usually added through the backend of a website. Suggestions for how to write alt text can be found at: http://webaim.org/ techniques/alttext/

Backend or **Frontend:**

A *backend* is an interface where you (or a web developer) can add new content and code to change the way that the *frontend* of a website looks or behaves. The frontend of a website is the normal view that website visitors and users see.

Breadcrumbs:

To assist a website user in going back to previous pages, the 'breadcrumb' feature is recommended. *Breadcrumbs* are a progression of links that show the user which categories they visited, usually placed at the top of the webpage. It may look something like this: **About Us** >> **History** >> **1950s – 1960s**

MIUSA.org is an example of an accessible website. This is the *frontend* of the website, which any visitor can see and use.

Source: Mobility International USA

Captions or **Subtitles:**

There are two different types of text for videos: Captions and subtitles.

- *Captions* include dialogue and sound notes (e.g. a doorbell chiming, a person speaking with a foreign accent, wind blowing) for people who are deaf or hard-of-hearing.

- *Subtitles* are used for dialogue, but don't include sound notes. For this reason, deaf and hard-of-hearing audiences prefer captioning.

Though YouTube offers automatic subtitles (YouTube calls their service "automatic captioning" even though it is in fact subtitles, as sound notes are not provided) the results are often inaccurate. Until the technology improves, captions should be added manually through YouTube or an editing program such as Final Cut Pro.

Easy-to-read text:

It is a good idea to offer text in an easy-to-read format. *Easy-to-read* is text where the content and illustrations are simplified for ease of use by persons with intellectual disabilities and non-native speakers of a language. Two good examples of easy-to-read formats can be found at www.promotethevote.co.uk/ and http://www.everyvotecounts.org.uk/

Slideshows:

Photo slideshows are a common design feature for websites (see an example at www.dredf.org or www.miusa.org), but they are often not fully accessible. Photo slideshows can still allow screen readers to navigate between slides to the links by providing photo descriptions and captions in the alt text for each photo.

Text-to-Speech:

Text-to-speech is a feature that allows people to click on text to hear the content being read aloud. It is not meant to be a replacement for a screen reader, but is another way to offer website visitors important information, especially those who might have difficulty with reading. Examples of this feature can be found at the Swedish Association of Location Authorities and Regions' website at www.skl.se/english and on the Swedish Election Authority's website at spoxy4.insipio.com/generator/se/www.val.se/

Checklist for Creating Accessible Websites

Hiring Website Vendors

☐ Does the vendor have experience developing accessible websites?

☐ Are they able to provide suggestions for accessible features?

☐ Does their portfolio contain examples of accessible websites?

☐ Have they developed websites that are certified by an external organization as being accessible, such as WebAIM (www.webaim.org)?

Website Backend

☐ Is the backend accessible so that web managers with disabilities can use it with ease?

☐ Is there alt-text for photographs and images?

Website Content

Navigation and Directions

☐ Does the website have a page entitled "How to Use this Website" or "Accessibility"?

☐ Are breadcrumbs available on the website?

Slideshows

☐ Are there descriptions and captions in the alt-text used for each photo in the slideshow?

Text

☐ Is content organized clearly and logically?

☐ Is alt-text provided for website features that may not be supported (for example, applets or plug-ins like Flash)?

☐ Are there text summaries of graphs and charts, for people who are using screen readers?

☐ Is text offered in an easy-to-read format?

Video and audio files

☐ Are captions provided for videos posted on the website?

☐ Are transcripts provided for audio files, such as radio broadcasts?

Downloads

☐ Are Word documents or PDFs available in large font versions **or** instructions on how to make the font size of these documents larger?

☐ Are PDFs accessible for persons using screen readers? For instructions on how to make accessible PDFs, visit www.usability.com.au/resources/pdf.cfm

Website Design

Color and font

☐ If you ignore color, is it easy to tell the difference between a title, a subtitle, a hyperlink, or another type of special text?

   o   To help make text different, use larger or smaller text, or bold, italic or underlined text

☐ Is a sans serif font (which is easier to read) used most of the time?

   o   Examples of sans serif fonts are Arial, Tahoma, Trebuchet MS, and Verdana.

☐ Are there less than 3 different types of fonts being used?

User options

☐ Is there a high-contrast mode? For an example, visit http://www.promotethevote.co.uk/

☐ Are there options to increase the text size, **or** directions on how to increase the font size?

☐ Is there an option to listen an audio version of the website (text-to-speech)?

Testing Websites

☐ Before the website is launched, have persons with disabilities (especially those using screen readers) tested the website? This could be a requirement of your contract with the vendor.

☐ If funds are available, has the website been evaluated and certified by an organization such as WebAIM?

   o   WebAIM offers evaluations for free, but requires all compliance issues to be resolved. Visit www.webaim.org/services/certification/

Additional Resources

General Accessibility

- The World Wide Web Consortium (W3C) has **Web Content Accessibility Guidelines** (WCAG): http://www.w3.org/TR/WCAG20/

- WebAIM provides introductory information regarding web accessibility: www.webaim.org/articles/

- The *Web Accessibility Initiative* has a list of guidelines and accessibility standards at www.w3.org/WAI/guid-tech.html and www.w3.org/standards/webdesign/accessibility

- Lighthouse International provides web accessibility guidelines for persons who are blind or have low vision: www.lighthouse.org/accessibility/design/web/

Website Backend, Design and Content

- *Alt-text:* Guidelines on how to write alt-text: http://webaim.org/techniques/alttext/

- *Captions:* Information about web captioning: ncdae.org/resources/factsheets/captions.php

  - Instructions for adding captions or subtitles to videos uploaded on YouTube can be found here: https://support.google.com/youtube/answer/2734796?hl=en

- *Color:* To see an example of how a website might appear to persons with different types of colorblindness, visit http://colorfilter.wickline.org/

- *Easy-to-read text:* The International Federation of Library Associations and Institutions offers an overview of easy-to-read at http://www.ifla.org/files/assets/hq/publications/professional-report/120.pdf

- *Navigation:* See examples of "How to use this website" or "Accessibility" webpages:

  - Philippine Commission on Elections website at http://www.comelec.gov.ph/?r=home
  - Electoral Commission of the UK's website at http://www.aboutmyvote.co.uk/accessibility

- *PDF Downloads:* For instructions on making PDFs accessible, visit: www.usability.com.au/resources/pdf.cfm

- *Slideshows:* See an example of a photo slideshow at www.miusa.org

- ***Text-to-speech:*** Examples of text-to-speech can be found at these websites:

    o Swedish Association of Location Authorities and Regions' website at www.skl.se/english
    o Swedish Election Authority's website at spoxy4.insipio.com/generator/se/www.val.se/

Testing Websites

- Companies that offer accessibility testing include WebAIM (http://webaim.org/) and Interactive Accessibility (http://www.interactiveaccessibility.com/).

- WebAIM offers evaluations and certifications for free, but requires all compliance issues that are identified to be resolved. Visit www.webaim.org/services/certification/ for more information.

- WebAIM also offers a tool known as WAVE (www.wave.webaim.org/), which can help web developers evaluate the accessibility of their web content. Though it is a valuable resource, it cannot replace an accessibility assessment done by an expert.