DISABILITY LAW SERVICE

BEST PRACTICES FOR AN ACCESSIBLE AND USABLE WEBSITE

February 2018

FOREWORD

This guide aims to provide organisations with essential information for compliance with modern website accessibility and usability standards. It was commissioned by The Legal Education Foundation in partnership with Disability Law Service, the author of the guide.

1. INTRODUCTION

1.1 Web accessibility and usability are terms which refer to inclusive practices for ensuring that digital content can be fully enjoyed by everyone. Essentially, the goal is to design digital content – whether a website or app – without barriers or hurdles which can impede its use by disabled people.

1.2 In 2016, the Office for National Statistics data showed that 25% of disabled adults had never used the internet. This was in contrast to 10% of the adult population overall.[1] There are a number of factors influencing the disparity, but a large part of it is due to the challenges disabled people encounter when accessing digital content.

1.3 In light of this, this guide will provide you with an overview of best practices for ensuring your website is accessible and usable for disabled people. The following topics will be covered:

- The legal considerations;
- Groups who may face challenges accessing the net; *and*
- Web accessibility and usability: what are they and how to comply?

1.4 The guide will then conclude by discussing how your organisation's web design process can be improved.

1.5 There was an estimated 6.1 million disabled internet users with access needs in 2016,[2] so the importance of inclusion cannot be overstated.

2. THE LEGAL CONSIDERATIONS

2.1 Failure to make a website accessible could lead to an organisation falling foul of the Equality Act 2010.

2.2 Whilst the Equality Act does not specifically mention websites, it is clear from guidance produced by the Equality and Human Rights Commission that website accessibility is a matter that comes under the scope of the Act.[3]

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[1] Office for National Statistics, 'Internet users in the UK: 2016' (Accessed on 18th December 2017): Please click here.
[2] Freeney Williams Ltd. and Click-Away Surveys Ltd, 'The Click-Away Pound Report 2016: Assessing the online shopping experience of customers with disabilities, and the costs to business of ignoring them.' Available for download here.
[3] "Your rights to equality from businesses providing goods, facilities or services to the public - Equality Act 2010 Guidance for service users", Equality and Human Rights Commission, June 2015. See in particular pages 55 et seq. Website is here.

2.3 This means that if an organisation provides services (whether paid for or not) through a website, then it will be under a duty to make reasonable adjustments under the Equality Act. In essence, this means making changes that will enable a person with a disability to use the service provided. In the context of a website, it means making it accessible and usable.

2.4 The duty to make reasonable adjustments is anticipatory, which means that an organisation should not just wait for a complaint to be made about accessibility. Instead changes should be made in anticipation of likely users and their needs. If a complaint is made then an adjustment will need to be made swiftly.

2.5 If there is a failure to make a reasonable adjustment to render a website accessible and usable, then a claim can be brought against an organisation for discrimination. If the claim succeeds, the court can order the reasonable adjustment to be made and award compensation.

2.6 This is not to say that it will always be reasonable for an adjustment to be made in order to render a website accessible and usable. A number of factors are relevant including the size and resources of the organisation in question. That said – good practice dictates that all websites should be accessible and usable, and by achieving this the risk of a claim for discrimination being made in this regard is removed.

3. AN INCLUSIVE INTERNET

3.1 When we think of disabled people and the internet, it is often too easy to regard the group as being limited to those with visual or physical needs. Rather, there is a large spectrum of disabilities which may present obstacles to a person's ability to access the internet:

- **Auditory Impairments**: May affect the way a user is able to access audio content. An inclusive website would, for example, ensure that web contents with audio incorporate subtitles or make written transcripts available for download.

- **Cognitive and Neurological Impairments**: May affect the way a user is able to understand, navigate and engage with a website. Users with such difficulties may have trouble interpreting language and numbers, understanding certain interface inputs, or face issues with the spatial orientation of the website. An inclusive website may, for example, limit the amount of necessary page navigations or moving contents in order to mitigate some of the issues these individuals experience.

- **Motor and Dexterity Impairments**: May affect the way a user is able to physically interact with the website via a control/input method/tool. For example, websites lacking comprehensive assistive keyboard or mouse support or ones that involve certain orientation and placement cues can cause issues for these users.

- **Speech Impairments**: May affect the way a user is able to interact with a website when voice interaction is required. Users with mutism, cluttering or apraxia may be disadvantaged in such a case. Therefore, alternative ways of interaction/communication should always be provided if possible.

- **Visual Impairments**: May affect the way a user is able to view or interpret the content of the website. For example, web images without text alternatives or audio prompts could present barriers to those with visual impairments.

4. WEB ACCESSIBILITY

4.1 Designing an accessible website means the removal of any discriminatory obstacles which a disabled user may encounter when accessing a website. Essentially, persons with the impairments discussed above should be able to freely, and easily, navigate, perceive, understand and interact with your website.

4.2 How accessible your website can be regarded may depend on a number of factors. In order to assess this, an organisation can of course set its own standards/measures of accessibility. However, it is recommended that a recognised standard is followed due to the complexities of the subject.

4.3 There are a number of international standards your organisation can use.[4] The most common standard is Web Content Accessibility Guidelines (WCAG) 2.0;[5] which was published in 2008 by the World Wide Web Consortium (W3C)[6] through its Web Accessibility Initiative (WAI).

4.4 Other standards such as the USA's Section 508;[7] European Standard EN301 549;[8] and UK government guidelines[9] are based on WAI guidelines.

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[4] Such as, ISO 9241-210:2010 'Ergonomics of human-system interaction -- Part 210: Human-centred design for interactive systems'. Please click here for further information.
[5] WCAG 2.1 is currently in development and is scheduled to be published in 2018.
[6] World Wide Web Consortium, 'About W3C' (Accessed 20th December 2017): Please click here.
[7] For more information, please click here.
[8] For more information, please click here.
[9] UK Government Accessibility Community, 'Making your service accessible: an introduction' (Accessed 20th December 2017): Please click here.

4.5 Deciding which standard to use will depend on individual preferences and business considerations.

5. WEB USABILITY

5.1 A website may be accessible and in compliance with international standards, but may not also be usable. As such, usability determines how disabled users interact with the site in real conditions.

5.2 Unlike with accessibility, there are no established standards of compliance. However, Usability Net cites three necessary considerations for a usable website: effectiveness, efficiency and satisfaction.[10]

5.3 Effectiveness looks at the ability of the user to complete tasks and achieve their goals with the site. Efficiency considers how much effort is required of the user to complete a task (often measured in time). And finally, Satisfaction measures what the user thinks about the site and its ease of use.[11]

5.4 The process for testing a website's usability will likely entail a panel of disabled people who will test the website, using typical aids or assistive software which disabled users may require. The wider and more inclusive the panel – constituting of the impairments discussed in section 3 – the better the outcomes are likely to be.

5.5 Based on the results of the usability study, improvements and refinements can be made to ensure that a website which meets accessibility standards is usable in practice.

6. ACCESSIBILITY: MEASURING AND TESTING YOUR COMPLIANCE

6.1 As discussed above, there are numerous standards which your organisation can use to determine and ensure its web content is accessible. However, with the WCAG 2.0 being the most commonly used, this guide will refer to that standard.

6.2 WCAG 2.0 is a referenceable technical standard. It is also free to acquire and use (as opposed to ISO 9241-210). The benefit of such a benchmark is that it provides your organisation with an internationally recognised standard upon which you can test, comply and rate the accessibility of your website.

[10] Usability Net, 'What is Usability' (Accessed on 20th December 2017): Please click here.
[11] Ibid.

6.3 As part of the WCAG 2.0 standard, there are 12 guidelines which are organised under 4 principles.[12] For each principle, there are testable criteria which are used to assess the website's accessibility.

PERCEIVABLE (The information, contents and user interface of the site must be presentable to users in a way they can understand):

- Provide text alternatives for non-text content.
- Provide captions and other alternatives for multimedia.
- Create content that can be presented in different ways (including by assistive technologies, without losing meaning).
- Make it easier for users to see and hear content.

OPERABLE (The site's user interface components and navigation must be operable):

- Make all functionality available from a keyboard.
- Give users enough time to read and use content.
- Do not use content that may cause seizures.
- Help users navigate and find content.

UNDERSTANDABLE (The site's information and its operation via the user interface must be understandable):

- Make text readable and understandable.
- Make content appear and operate in predictable ways.
- Help users avoid and correct mistakes.

ROBUST (The site's compatibility with current and future assistive technologies and users must be maximized):

- Maximize compatibility with current and future user tools.

6.4 For each of the above guidance, there are three ratings, or grades, of accessibility: A, AA, and AAA.

[12] Please click here.

6.5 The grades correspond to the degree to which a website conforms to the guidance; with grade A being the lowest acceptable rating.

6.6 It is up to each organisation to decide which rating it wants to meet. But as a reference, UK government guidelines and Business Disability Forum (BDF) recommend grade AA as a minimum.

6.7 The W3C provides a guide to understanding WCAG 2.0.[13] There are also tools available which your organisation can use to measure/rate accessibility.[14]

6.8 However, not everything can be checked via an automated tool, so a manual audit is essential. Therefore, an outsourced audit of your website's accessibility may be necessary if your organisation does not have the internal resources or experience to conduct the review.

7. THE DESIGN PROCESS

7.1 With the foregoing considerations in mind, your organisation should also begin to think how your web content design process can be improved so accessibility is not an afterthought.

7.2 The W3C lists three important components essential for accessibility; which should be considered as part of the web design process: [15]

- **Content**: Includes any part of the site, including text, images, forms, and multimedia, as well as any markup code, scripts, and applications.
- **User Agents**: Refers to the software that a person may use to access web content, including desktop graphical browsers, voice browsers, mobile phone browsers, multimedia players, plug-ins, and some assistive technologies.
- **Authoring Tools**: Refers to the software or services that a person may use to produce web content, including code editors, document conversion tools, content management systems, blogs, database scripts, and other tools.

7.3 Each component interrelates and supports the other as part of the process for designing accessible digital content.

[13] Please click here.
[14] The W3C provide a resource page of 'Web Accessibility Evaluation Tools'. Please click here.
[15] W3C, Web Accessibility Initiative, 'Accessibility Principles: How People with Disabilities Use the Web': Please click here.

7.4 What this means, is that designers/developers should have access to the tools/licenses (authoring tools) they need to not only design the content, but also for ensuring that the content is compliant with WCAG 2.0 guidance.

7.5 As an example, an inclusive web content design process may seek to incorporate – from conception through to publication – the WCAG 2.0 guidance in the following way:

- **Project Outline**: Here the purpose, message, type of content and service which the website/content aims to produce, should be outlined/decided. When doing so, an inclusive design approach would ensure that consideration is made to disabled users; and thoughts as to potential accessibility obstacles of any such content are highlighted.

- **Project Scope**: What is the budget for the project? An inclusive design approach would ensure that any proposed budgets are adequate for ensuring that the content can be designed so as to be accessible and usable.

- **Wireframes and Site Architecture** (site architecture includes the sitemap and wireframes of the pages; while wireframes provide a guide for defining content hierarchy on the page):

  At this stage of the design, you want to ensure that the site map is clear and simple. With the wireframes, you want to ensure that the content is organised in such a way that users can easily understand and follow.

- **Visual Design**: Once a blueprint for the site or its contents have been agreed as part of the previous step, the next phase will be to design its visual style. This phase will play a critical role for visually impaired users.

- **Site Testing**: Before launch of the site or publication of content, the website should be tested to gauge its accessibility and usability. This is critical as there may be unexpected issues which need addressing before launch.

- **Website/Content Launch**: After launch, there may be feedback from users which will need addressing. Be prepared to reasonably respond and implement any necessary changes to the website/content.

8. CONCLUSIONS

8.1 Accessibility and usability of digital content is important both from a legal compliance perspective, and to ensure that your organisation takes an equal rights approach towards its online presence.

8.2 In reality the work entailed in changing an existing website, or starting a new one, in a manner designed to ensure accessibility and usability, may be a challenge for smaller organisations which are resource limited.

8.3 The solution may be in outsourcing to consultancies that can deliver a comprehensive solution, sometimes working in association with your web-designers. Such consultancies will work first on accessibility and then provide a panel of disabled users to assist in delivering usability. AbilityNet and Freeney Williams are two examples of the type of consultancy that may be able to assist.