# Accessible Document and PDF Guide

**Authors**:

James Church, Digital Accessibility Compliance Officer at Kent County Council

**Version**:

1.0

**Last updated**:

11.12.2019

# **Introduction**

Under the [Public Sector Bodies (Website and Mobile Applications) Accessibility Regulations 2018](https://www.gov.uk/guidance/accessibility-requirements-for-public-sector-websites-and-apps), all public sector websites and apps must meet accessibility standards ([WCAG 2.1 AA](https://www.w3.org/TR/WCAG21/)) and publish an accessibility statement explaining how accessible the website is. This includes all content and documents hosted on websites and systems.

As a member of staff of a public sector organisation, you must ensure that the documents and PDFs that you produce for publication on a website or system are developed in accordance to the accessibility considerations and checks detailed in this document. You must also ensure that existing documents that are actively used are reviewed and that any accessibility issues identified are resolved.

This document focuses on structuring the content within a document for accessibility. For advice on how to write with accessibility in mind, please see the Plain English Guide.

**Please do not upload your documents into online PDF checkers. This results in you losing control over the information within your document and constitutes a possible data breach under GDPR.**

# **Documents**

Most documents and files produced are created using Microsoft Word, PowerPoint and Excel. Microsoft facilitate accessibility in numerous ways including their Accessibility Checker and controls to rework content. Follow the guidance in this section to ensure your document is accessible.

## **Microsoft Accessibility Checker**

Microsoft’s Accessibility Checker is built into Microsoft Word, PowerPoint and Excel and will continuously review and notify you of common accessibility issues in your work. We recommend that this is turned on at all times and that you actively review issues and warnings that it notifies you of.

If turned on, you’ll be able to see an Accessibility button in the status bar at the bottom of the program. If not, you can turn it on by going to: Review, Check Accessibility. Once turned on, select the ‘Keep accessibility checker running while I work’ option to keep it on.  The checker can then be accessed at any time by clicking on the button in the status bar or in the Review tab.

The checker will identify accessibility issues and suggest fixes, whilst also providing warnings for possible issues that you can investigate and make your own judgement on. For more information on how to use and troubleshoot Accessibility Checker, [please see Microsoft’s Support Website for the tool.](https://support.office.com/en-us/article/improve-accessibility-with-the-accessibility-checker-a16f6de0-2f39-4a2b-8bd8-5ad801426c7f)

### **Errors**

Accessibility Checker will pick up the following issues:

1. **No Alternative Text** – all images and objects should have alternative text for assistive technologies to read if the image cannot be seen by the user. This should be sufficiently descriptive of the image. If the image is purely decorative, this can be marked as decorative within the issue fix options.
2. **Low Contrast** – text should meet a contrast ratio of at least 4.5:1 against the background colour, whilst large text or objects should meet a ratio of at least 3:1. The suggested fix is to adapt the colours to increase contrast.
3. **Missing Table Header** – tables should have a header row to help the screen reader convey information about where the user is in the table and what it is presenting.
4. **No Slide Headings** – each slide in PowerPoint should have a heading in place which is clear to the user.
5. **Poor Alignment** – images and objects should be aligned to the left to ensure that screen reader users can interact with it and navigate the page.

### **Warnings**

The checker will pick up on the following warnings that may require your judgement on whether a fix is necessary.

1. **Low contrast** – if the checker cannot be certain about contrast between two elements, such as when the background is an image containing multiple colours, it will flag as a warning. [WebAim’s Contrast Checker](https://webaim.org/resources/contrastchecker/) is a good way of manually checking this.
2. **Sheet tabs** – in an Excel, each sheet should be given a meaningful name.
3. **Slide titles and order** – in PowerPoint, slides should be given unique, meaningful titles and be ordered logically.

## **Additional Checks**

The built-in accessibility checker is a good way to baseline your document’s accessibility, but the tool will not pick up a number of other accessibility issues. Therefore, you will need to do your own checks to ensure your document meets the following considerations.

1. **Sensory characteristics** – ensure that your document does not rely on sensory abilities. An example is ‘see the red text for more information’.
2. **Link purpose** – links should be clear and descriptive in context. Avoid text links such as ‘Click Here’ and ‘Read More’.
3. **Alt text** – it is up to you to determine whether alternate text for images and objects is sufficient to describe the object, or whether it is a decorative object.
4. **Text in images** – your images should not contain text unless it is essential to what the image is conveying such as in diagrams or logos. If there is essential text in your image, you can use it providing that an accessible alternative is in place on the page (for example, the image has a short alt text description and is fully described in text on the page or in a long description tag).
5. **Headings** – for all headings, ensure you use headings within the ‘Styles’ pane in the ‘Home’ tab. This structures them properly for accessibility in terms of navigating the page.
6. **Videos** – ensure that videos have captions and a textual transcript at a minimum. If the video conveys information that is visual, it should be described by the narrator in the video otherwise you also require audio descriptions for the video.
7. **Audio** – ensure that audio has an associated text transcript and controls to play, stop and pause it.
8. **Bookmarks** – if your document is particularly long, use bookmarks to help the user navigate. For more information on how to do this, please see the [Microsoft tutorial on using bookmarks](https://support.office.com/en-gb/article/add-or-delete-bookmarks-in-a-word-document-or-outlook-message-f68d781f-0150-4583-a90e-a4009d99c2a0).
9. **Text justification** – do not justify text as it creates inconsistencies in how it is displayed which can affect users with disabilities (e.g. spaces between words are different sizes).
10. **Document titles** – if the file name is not clear, ensure the document title is set manually by going to: File, Info, Properties, Advanced Properties, Summary, Title. Ideally, you should look to adopt naming conventions for files that are clear and accessible.

For more information on making Office documents accessible, see [Microsoft Office’s Accessibility Centre.](https://support.office.com/en-us/article/Office-Accessibility-Center-Resources-for-people-with-disabilities-ecab0fcf-d143-4fe8-a2ff-6cd596bddc6d)

**Note**: The checker may say that it is not compatible with the file type of your document. If this happens, ‘Save As’ and create a new version of the document and select ‘Ok’ when it asks to convert the file to the latest file type.

# **PDFs**

Many documents are converted to PDFs for publishing, particularly when online. PDFs are fixed and non-editable by design, but this causes problems for users who require compatibility with assistive technologies. However, there are steps you can take to ensure that your PDFs are accessible.

If possible, please explore alternative formats to PDFs when publishing online such as HTML web pages on your website and Word documents.

## **Converting from Office Format**

If you’ve created your document in Microsoft Office and would like to export it as an accessible PDF, firstly ensure that your document is accessible by following the steps in the Document section of this guide.

To create an accessible PDF, click: Export, Create PDF. Click on the ‘Options...’ button and ensure that the following options are selected:

1. Create Bookmarks Using Headings
2. Document structure tags for accessibility
3. PDF/A Compliant

After choosing these options, click ‘Publish’ to create the accessible PDF.

## **PDF Accessibility Checks**

Once you have created an accessible PDF, you should check that it is accessible before publishing. We recommend using Adobe Acrobat (Reader or Pro) for these tests, whilst Microsoft Edge will let you test against most of the requirements as well.

1. **Reading** - using a screen reader, ensure that all parts of the PDF are distinguishable. Text should read as written; links should be clear in purpose and images should read their alt text and this should be appropriate.
2. **Title** - ensure that the PDF has an appropriate title
3. **Bookmarks** - if the document is longer than a page, ensure that bookmarks are present, working and that they parallel the document structure
4. **Contrast** – minimum contrast requirements are met for text (min. 4.5:1) and non-text/large text (3:1)
5. **Sensory Characteristics** - instructions should not rely on sensory characteristics such as colours
6. **Images** - images should have alternatives and should not have text in them
7. **Tables** - tables should have descriptions and headers
8. **Logical Order** - tab through to ensure that the content reads in a meaningful order via the tags given to elements.

There is also a built-in accessibility checker for PDFs in Adobe Acrobat Pro (see Adobe Acrobat Pro section of this guide).

## **Adobe Acrobat Pro**

Acrobat Pro is another common way of creating PDFs which has its own powerful accessibility checker built in to evaluate PDFs once they have been created.

For detail on how to use Acrobat to evaluate and repair accessibility, see [WebAIM’s guide to Acrobat and Accessibility.](https://webaim.org/techniques/acrobat/acrobat)

For a breakdown of what the Full Accessibility Check within Adobe Acrobat picks up and how to fix each issue within the program, see [Adobe’s Accessibility User Guide](https://helpx.adobe.com/uk/acrobat/using/create-verify-pdf-accessibility.html#check_accessibility_of_PDFs).

## **Scanned Documents**

Scanned documents and PDFs are a major accessibility challenge. Scanning creates an image of the content which assistive technologies cannot interpret - for example, text within this scan cannot be read by a screen reader or magnified. Because they still need to meet accessibility requirements, you will need to perform additional steps to scanned documents to ensure they are accessible.

It is recommended that documents that will be published are not scanned or do not contain any scanned items. If the information can be collected in a digital way (for example, an online form), you should explore avenues to improve your processes.

If you must publish a scanned document (such as for a statutory process), then there are still options to improve accessibility. Some software packages such as [Adobe Acrobat](https://acrobat.adobe.com/uk/en/acrobat/how-to/ocr-software-convert-pdf-to-text.html) contain optical character recognition (OCR) capabilities which can help convert non-text information into accessible text format. You could also include the scan in an otherwise accessible PDF, class the scan as an image and ensure there is an equivalent accessible alternative within the PDF (e.g. alt text).

## **Hand-Drawn Elements**

Your PDFs and documents may contain hand-drawn items such as drawings, signatures and annotations. These are non-accessible by default but there are numerous techniques to improve their accessibility.

You should determine if there is a way to digitalise or change the format of your hand-drawn elements. Example techniques include:

* Adding your drawing to the document/PDF as an image, then providing a suitable accessible alternative such as a text description or alt text
* Using digital signature and annotation methods.

# **Non-Accessible Documents**

If you have a non-accessible document on your website, you need to detail these documents as well as your plan to fix any issues on your accessibility statement.

There are exemptions under the Public Sector Bodies regulations related to the following types of document:

* Microsoft Office documents published before 23rd September 2018, unless updated or part of an active administrative process of the website
* Online maps providing there is a suitable accessible alternative to what the map is displaying (e.g. a text address to represent a pin on a map)
* Third party content that is neither funded nor developed by your organisation
* Heritage collections
* Content on ‘archive’ websites (not updated or content that is not needed for active administrative processes).

Even if your document is exempt, it is good practice and still an existing legal requirement under the Equality Act to explore making your document accessible.