

# Using MS Word to make an accessible and navigable PDF

How to create a master word document, which will be quick and easy to convert into a branded, usable and accessible PDF.

## Abstract

This document tries to show how versatile and navigable a well produced PDF document can be. All the formatting and metadata is applied in Word, no additional formatting has been done in Acrobat. The only work added in Acrobat is to force the document to open with bookmarks displayed and to specify the base language.

If you follow the advice given in this document and HSE's style guide you will have a word document you can keep as a master copy. The master copy is quickly converted to PDF at the touch of a button.

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## **Branding**

All HSE's online content must carry the corporate brand. The simplest way to make a word document in the HSE or HSC brand is to download one of our templates from the style guide.

Other options include sending your document to CDS3 to have it converted by them into the HSE brand, or making your own.

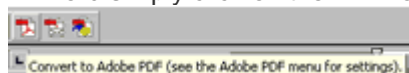
## Accessibility

It is important that all documents produced for the website are accessible. We have a moral and legal obligation not to discriminate against any of our users. PDFs can be made accessible to work with a range of assistive devices.

### Direct from word

The most accessible versions of PDF documents are documents converted to PDF direct from Word, without opening any additional software. Though you still need to have the Adobe suite loaded onto your PC to do this.

In Word simply click on the PDF logo, usually in the top left corner of the screen.



### Scanning

The least accessible type of PDF document is when a paper copy is simply scanned to PDF. Without any additional work you've produced something that:

- looks hideous;
- is massive (file size);
- is inaccessible; and
- cannot be scanned by search engine spiders.

Never publish a scanned PDF without first converting the images to text, see below.

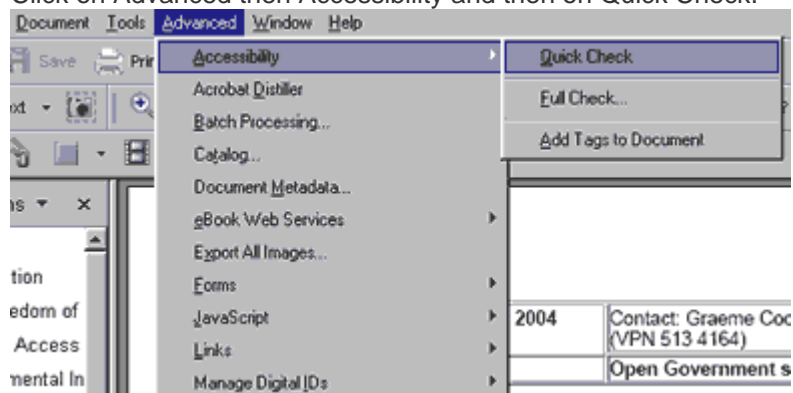
If you do scan in hard copy publications then please scan at 300dpi and perform an OCR paper capture. This converts the images of text into actual text, and so reduced file size and becomes accessible.

Since January 2006 we have not accepted scanned documents on the website, they must have the additional work undertaken to make them accessible.

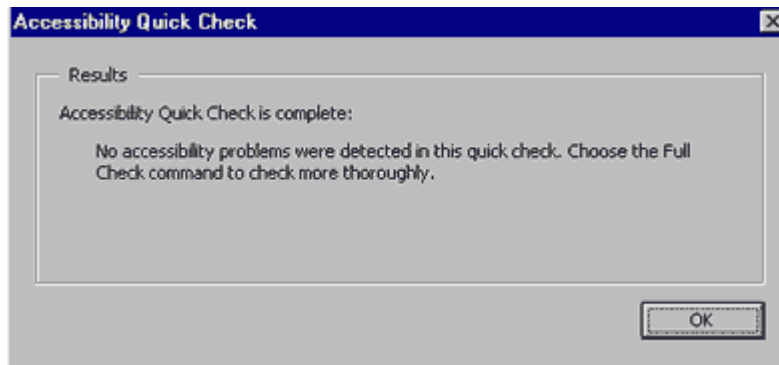
### Checking accessibility

Please check that the PDFs you produce are accessible the Quick check feature in Acrobat 6 is helpful and easy to use.

Click on Advanced then Accessibility and then on Quick Check.



You'll then receive a notification as to whether the document is accessible or not.



If the document passes the 'Quick Check' it is considered to have structure. Machines then understand that headings are headings and paragraph text is within paragraphs. Screen readers will generally encounter fewer errors when trying to read the document.

An example of machines understanding the content type is Google giving heading text greater importance than paragraph text.

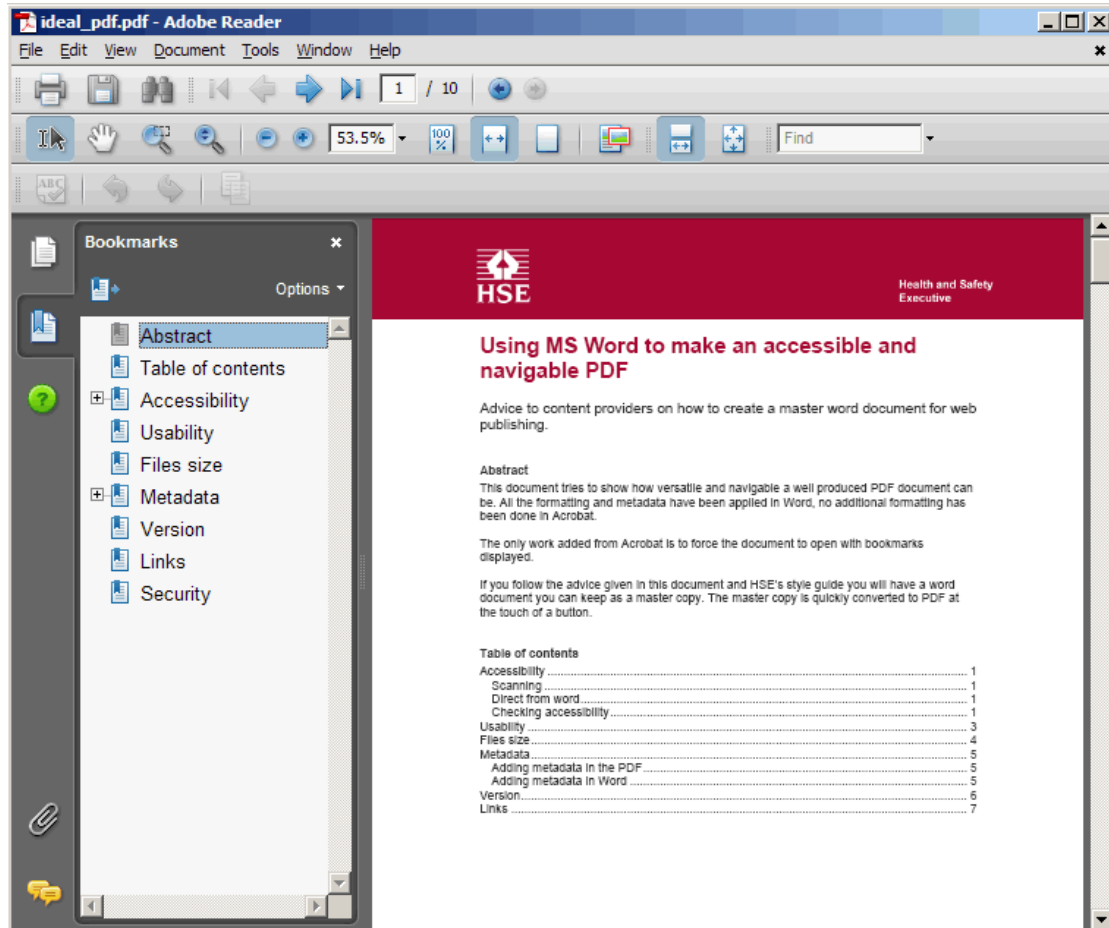
Passing the 'Quick Check' is the minimum requirement for online publishing.

You may choose to do a 'Full Check' to make the document more accessible, this will be beneficial where a document contains more than one language, or where you expect users to download it and convert into other formats, or where the document contains images important to its comprehension.

## Usability

PDF documents are a download once and then view off-line at your leisure product. To make navigating the PDF easier it is recommended that Word styles are fully utilised which can then be used to create a clickable Table Of Contents and Bookmarks. Forcing documents to open with bookmarks ensures the user knows that useful feature is present.

Screen shot of a PDF with the bookmarks folder open.



To ensure the document can be found please Metadata on page 6.

## Files size

Acrobat documents should not exceed 1.5mb per 100 pages. That equates approximately to 15kb per page. Occasionally documents will be larger than this as the content necessitates it, for example documents containing lots of photographs or tables.

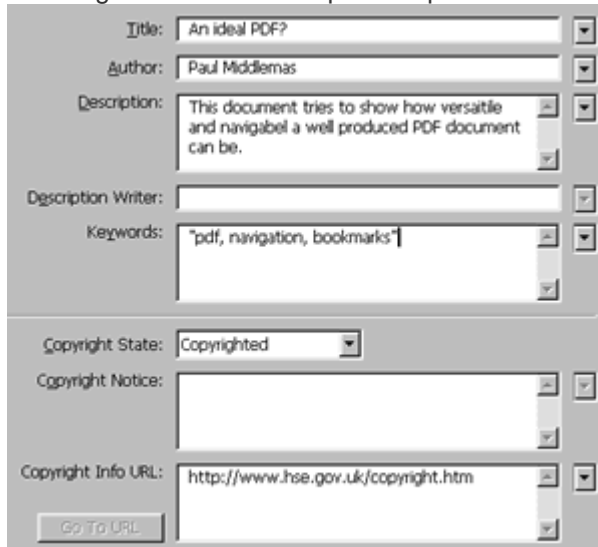
Sometimes there needs to be 'pay-off' between accessibility and file size. Compressing a PDF through distiller can dramatically reduce the file size. Unfortunately it will also remove any links and the document structure. However, such a document will still be much more accessible than any scanned in document.

## Metadata

Metadata in PDFs can either be imported from the source Word document or can be added directly using Adobe Acrobat. The preference is to have the full and correct metadata in the source Word document.

### Adding metadata in the PDF

There are two ways to add metadata to PDFs, the best way is to click on Advanced then Metadata and fill in the fields. Custom metadata can also be added, but until further work is done on the website server there is no benefit, or indeed a tried and tested mechanism for ensuring such data can be picked up.



The screenshot shows the Adobe Acrobat Metadata Editor dialog box. It contains several fields for entering metadata:

- Title:** An ideal PDF?
- Author:** Paul Middlemas
- Description:** This document tries to show how versatile and navigabel a well produced PDF document can be.
- Description Writer:** (empty)
- Keywords:** "pdf, navigation, bookmarks"
- Copyright State:** Copyrighted
- Copyright Notice:** (empty)
- Copyright Info URL:** <http://www.hse.gov.uk/copyright.htm>

A "Go To URL" button is located at the bottom left of the dialog.

### Adding metadata in Word

In Word See File and Properties. Then fill in the fields as appropriate.



The screenshot shows the Microsoft Word Properties dialog box for the file "anidealpdf.doc". The "General" tab is selected, and the following fields are filled:

- Title:** An ideal PDF?
- Subject:** This document tries to show how versatile and navig
- Author:** Paul Middlemas
- Manager:** (empty)
- Company:** Health & Safety Executive
- Category:** (empty)
- Keywords:** pdf, navigation, bookamrks
- Comments:** (empty)
- Hyperlink base:** (empty)
- Template:** Normal.dot

There is a checkbox for "Save preview picture" which is currently unchecked. "OK" and "Cancel" buttons are at the bottom.

## Version

We want as wide a range of users as possible to access our documents, while at the same time getting the best out of the software, so a compromise is required. Our standard therefore is to save to version X - 2. Where X is the latest version.

At the time of writing (summer 2007) Acrobat reader version 8 is the latest version of the reader. At this time we ensure our documents are therefore made compatible down to version 6. Thus reaching everyone who has readers 6, 7 and 8. While also getting some of the accessibility features from 6 such as document tagging and read out loud.

Documents converted to PDF from Word are automatically converted to be compatible with Acrobat reader version 5, this is acceptable as Word adds the document structure thus making it accessible.

## Links

PDF documents support links. However the Online team have no access to software that will automatically check PDF's for broken links. Any links added to PDFs will, in time, become broken. Any documents on the website only linked from PDFs will register as orphan files and are likely to be deleted.

We not publish PDFs that have links, we will remove any links we find in PDFs.

## Security

You can add various levels of security to PDF documents. Generally, there is no need to add security, users cannot edit content on the HSE website. Adding security may create barriers to usability. For example, Adobe's online tool that converts PDF to plain text will not work on protected documents, or you may prevent users from pasting some of the content into their own company policies.