CREATING ACCESSIBLE DOCUMENTATION

ONCE

grupo social ONCE

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1

MICROSOFT WORD

Introduction

Accessibility in documents is essential to ensure that all individuals, regardless of their visual abilities, can access information equitably. This guide provides recommendations and detailed steps for creating accessible documents in Microsoft Word.

General Requirements

Document format

When saving a document in Word, you should ensure that the most modern format (.docx) is used, as this guarantees compatibility with screen readers, in addition to other built-in features that are lost with earlier formats (.doc) or other formats (.rtf).

This should be verified especially when processing old documents or documents from external sources.

Document structure

When creating a document, you should consider how best to make the content legible and easy to understand. It is therefore necessary to pay attention to the correct use of headings, subheadings and lists. It is recommended to use these elements to facilitate reading, avoiding using them solely for aesthetic or visual layout purposes.

Content organisation

The first step in correctly structuring the content of a document is assigning styles.

1

To apply a style to text in Microsoft Word:

1. Select the text to which you wish to apply a style.
2. Go to the Home tab on the ribbon.
3. In the Styles group, select the desired style (for example, Heading 1, Heading 2, Normal).

Using styles

- The Heading 1 style should be used for the main title of the document. Typically, there is only one text with this style in a document.
- The Heading 2 style should be used for subtitles or main sections.
- The Heading 3 style should be used for subsections within a main section.
- The Normal style should be used for body text.

Unless they are absolutely necessary, headings below level 3 are not usually advisable, as by that point the user will most likely have lost track of the document structure.

TIP

To quickly apply a heading style to text that has already been written, simply place the cursor on that text and press Alt + Shift + Right or Left arrow to switch between heading styles one level at a time.

1

Additional structuring

If you need to further structure content within a level 3 heading, it is recommended to use numbered or bulleted lists to maintain the clarity and organisation of the document.

Creating Accessible Lists

Lists are used to organise content without using styles.

To create a list in Microsoft Word, you need to understand how this format works. It can be applied to text that has already been written, or you can select the format and then start writing.

If applied to existing text, each paragraph break in the selected text will generate a new list item. If you select the format and then write, likewise, each paragraph break (pressing Enter while writing) will generate a new list item.

To end the list, press the Enter key twice to return to the Normal style.

To select the type of list, go to the Home tab on the ribbon. In the **Paragraph group**, select the **desired list type** (numbered or bulleted) and, in the drop-down menu that appears, choose the appearance you want for the list.

Numbered List

For numbered lists, you can select the number format (followed by a bracket, a full stop, Roman numerals or letters). The result will display the chosen appearance.

1. Step one
2. Step two
3. Step three

Bulleted List

For bulleted lists, you should choose the type of bullet (dots, squares, arrows, etc.) WARNING: the use of hollow circle bullets is not recommended, as users with low vision may find them too similar to the letter "o". The result will show the chosen bullet:

- Item one
- Item two
- Item three

Typography

The choice of typeface is an important requirement for users with low vision. Some fonts are designed to imitate handwriting or Gothic lettering and may be aesthetically pleasing in certain contexts. However, for people with low vision, these fonts have a very low level of legibility.

Therefore, when drafting documents, you need to pay attention to the following aspects:

- Selection of clear and legible fonts (sans-serif).
- Adequate font size (minimum 12 points).

Sans-serif fonts

Sans-serif fonts do not have decorative strokes on the letters, although these are not necessarily elaborate features. In many typefaces, they are simply the small extensions found at the ends of letters.

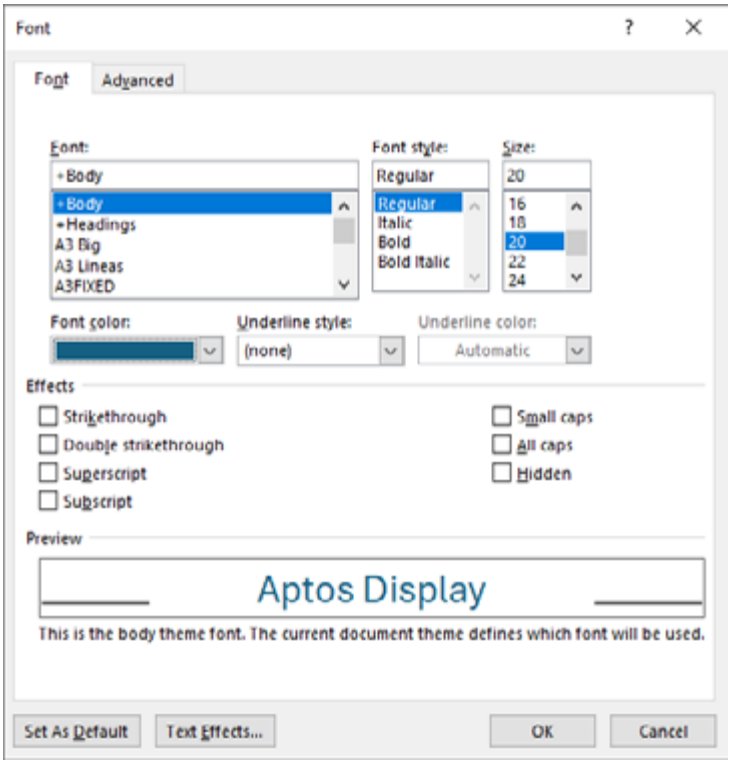
Three of the most common, and therefore most widely used, sans-serif fonts are Arial, Tahoma and Verdana.

If you prefer not to rely on these font names but still want to check whether a font is suitable, look at the lowercase letters "i" and "l". If they appear as simple straight lines (with a dot above the "i"), the font can generally be considered suitable.

Below, we can see both letters, the first in one of the best-known "serif" fonts, Times New Roman, followed by one of the fonts we recommend, Arial. The differences are obvious.

TIP

To quickly access the dialogue box that lets you change all the properties of the selected text (not just the font type, size or colour, but also some more advanced options such as double underlines, strikethrough, superscript, subscript, etc.), press **Ctrl + Shift + M.**



1

Contrast and Colour

Using colour in document text, which is very common, can create accessibility issues for users with visual impairments.

Colour may be used to improve the appearance of a document, but it is also often used to highlight certain parts of the text.

Both uses are acceptable, provided the following criteria are observed:

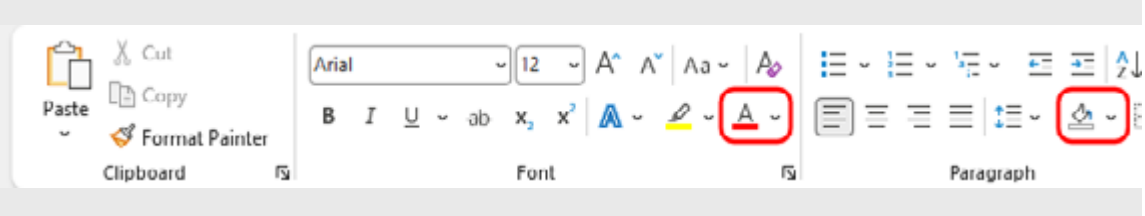
- Make sure there is a high contrast between the text and the background, so that colours do not make the text harder to read.
- If colour is used to highlight content, the same emphasis should also be conveyed in ways that do not rely on colour alone.

Choosing the text colour

In principle, and unless a particular effect is intended (a topic that will be addressed below), it is preferable to always set the font to *"Automatic"* colour. This means that the screen will display according to the colour settings selected in Windows, usually black in the standard configuration and white in high contrast.

Additionally, you should verify that the background is set to *"No Colour"*.

Both values are changed on the Home ribbon, using the **"Font Colour"** button in the Font group and **"Shading"** in the Paragraph group.



1

Highlighting with colours

But what if you want to use colours, for example, to highlight important content?

Poor contrast can be a problem for people with low vision, particularly when their condition affects colour perception, so it is important to check that the text colour provides sufficient contrast against the background. It is also worth remembering that appearance alone can be misleading. What looks like enough contrast at first glance may not in fact be sufficient for people with certain visual impairments.

Free online tools are available that can verify whether the contrast used is correct.

That said, if the use of colours is not purely aesthetic but is being used to highlight content, it is preferable to provide an additional alternative for those users who cannot see the colours or who use a screen reader.

One approach is to add text indicating that particular feature, such as:

IMPORTANT

The use of colours in text should be done bearing in mind the need for universal access to information.

1

Setting the text language

When writing a Word document, the language you are writing in is obvious. But Word doesn't know.

Word—and Office generally—will normally be installed with Spanish as the default language, and will therefore assume that this is the language normally used. However, text in other languages may sometimes be included, sometimes without the user even realising it. This has implications both for the use of the word processor itself and for accessibility.

How can other languages be used unknowingly? Primarily when using text from external sources via copy and paste. This is far more common than it might seem. Such text may come, for example, from websites whose default language is different, even if the content is displayed in translation, or from Word documents or emails created on systems where Office is configured in another language.

But why is it important to correctly define the language if the text reads correctly?

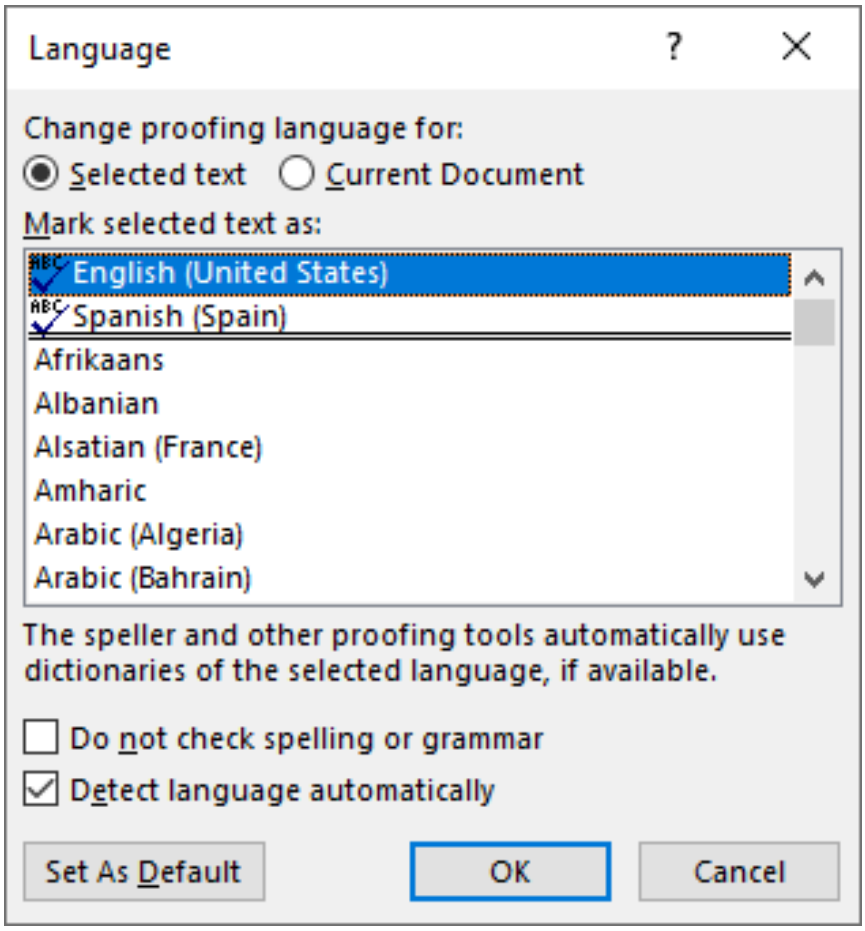
Firstly, for spelling purposes. If spell check is enabled while you type, failing to set the correct language will cause the text to be flagged with spelling errors, because the spelling rules for one language will be applied to text written in another.

Accessibility will also be affected, as screen readers automatically switch the language of the voice synthesiser according to the language Word has assigned to the text. As a result, if a text written in Spanish is tagged as English, the screen reader will use English pronunciation rules and accent patterns.

1

To define the language of a text once it has been written:

1. Select the text.
2. On the Review ribbon, click the Language button and in the drop-down menu, click Set Proofing Language.
3. In the dialogue box that opens, select the language for the text.



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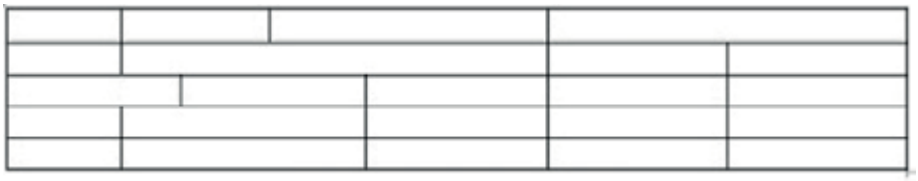
Using tables

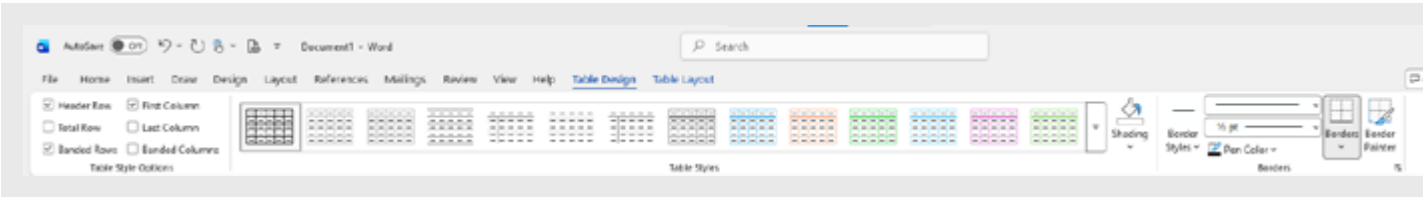
Tables should be kept as simple as possible, avoiding layouts in which the number or size of cells changes from one row or column to the next. For example, a single cell in one row should not become three separate cells in the next.



To achieve this, it is advisable to use the **Table Grid** style as the standard table format.

Once a table has been inserted, place the cursor anywhere inside it to display the **Table Design** tab in Word. You can then choose the required style from the **Table Styles** gallery.

It is also important to identify the header row clearly. To do this, select the **Header Row** option on the same tab, in the **Table Style Options** group.



1

Since tables are intended to present data arranged in rows and columns, they should not be used purely for document layout. The appropriate alternative will depend on whether the layout in question involves multiple columns or just one.

Where a single row is split into two columns, it is preferable to use tab stops, as they are easier to manage. Where a table consists of just one row and one column, it is clear that it is being used only to enclose the text within cell borders. In such cases, paragraph borders can be used instead, as the visual result is virtually the same.

Using images

Images can be included in documents without this posing an obstacle to accessibility.

In any case, the image must have alt text. This text should be descriptive but not exhaustive, avoiding descriptions that are too long or that go into unnecessary detail that does not provide relevant information.

Additionally, you should avoid indicating the type of object. That is, it is not necessary to include in the alt text expressions such as "Image of..." or "Photo of...", since screen readers themselves usually indicate that a graphic object is being described (the exception to this is if what is being described is a screenshot, in which case it is appropriate to specify this, as shown in the example).

To add alt text to an image:

1. Select the image and right-click or press the **Applications** key.
2. In the context menu (right-click, Shift + F10 or the Applications key), select **Format Picture**.
3. In the format pane, click **View Alt Text**.
4. In the **Alt Text** pane, enter a description in the **Description** field.

EXAMPLE

If the document contains a bar chart showing a company's quarterly sales. The following can be included as alt text: *"Bar chart showing the growth in quarterly sales in the first, second and third quarters of the year."*

IMPORTANT

If the purpose of the image is to describe a process, a textual description of that process should be provided in the body of the document, detailing the name and type of the objects shown in the image, as well as all the steps required to carry out the process using the keyboard.

Links

In a Word document, links are commonly used to allow the end user to access other content (which may be web content, other files or even email addresses).

In terms of accessibility, a very common error to avoid is the typical *Click here* links. This is because, when taken out of context, such links do not give the user any meaningful information. Screen reader users may choose to navigate through a document by moving only from link to link.

In that case, links of this kind tell them nothing. It is also quite common for the same document to contain several instances of *Click here*, leaving the user with no way of knowing which one leads where.

To create an accessible link, it is preferable to use an identifiable fragment of the text itself.

For example, in a user guide you want to direct the reader to a web page containing help on a procedure. In that case, you can write a description such "you will find more information on the app's **help page**", where *help page* is a link that leads to the desired address.

To create a link in this way:

1. Select the text that will serve as the link.
2. Open the context menu (right-click, Shift + F10 or the Applications key).
3. Click the **Link** option.
4. In the dialogue box, go to the **Address** field.
5. Enter the path the link will point to (or you can paste it if you have previously copied it from the browser).
6. Click **OK**.

In this dialogue box, you can create an email link or a link to a document. There is also a Text to display field showing the selected text, which can be edited to make the link more informative for screen reader users.

This helps ensure that the link is accessible.

1

Creating tables of contents

In Word, the usual way to create what is generally understood as an index is to use a Table of Contents.

For the table of contents to be useful, it should not go beyond three levels, and for screen reader users to read it properly, dot leaders should be used between the heading text and the page number.

It is not advisable to omit fill characters, since if the title of any chapter ends with a number, the page number will be read aloud by the screen reader immediately afterwards, making it difficult to understand.

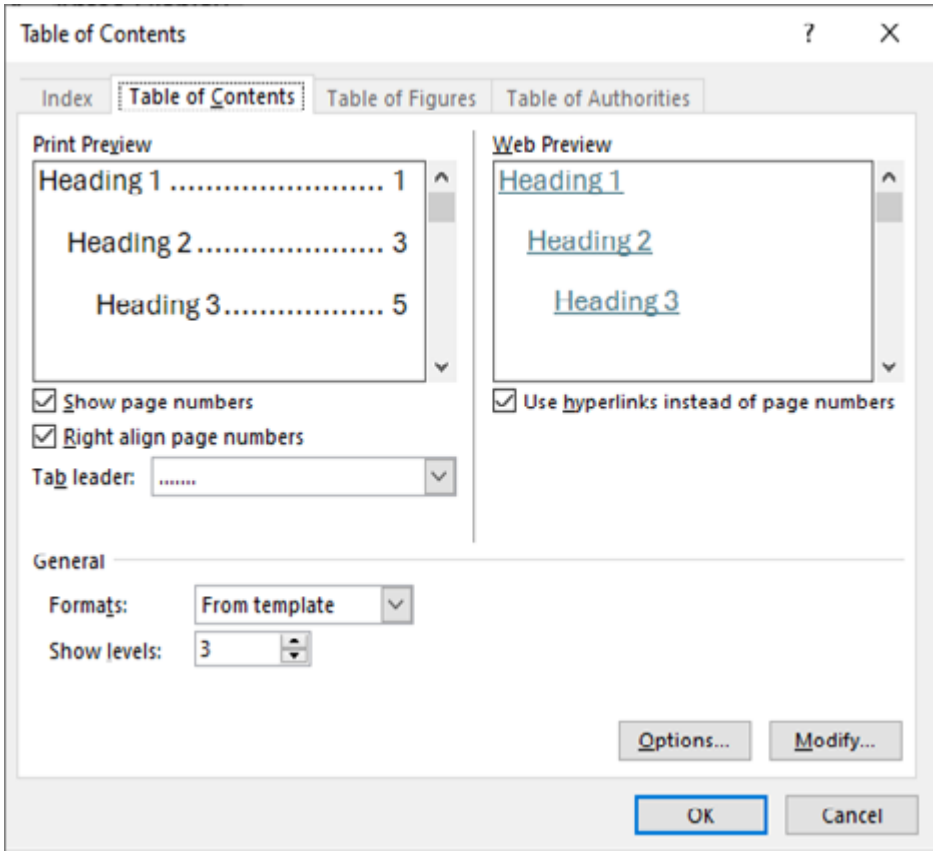
When inserting it, you should tick the option to use hyperlinks instead of page numbers. This does not remove the page number; rather, it ensures that clicking on any part of the table of contents entry, and not just the page number, will navigate to the selected location in the document.

To create an accessible table of contents, follow these steps:

1. Select the location by placing the cursor where you want to insert the table of contents (usually at the beginning of the document).
2. Go to the **References** tab on the ribbon.
3. Click the **Table of Contents** button in the Table of Contents group.
4. Select the **Custom Table of Contents** style.

The **Table of Contents** dialogue box opens, allowing you to configure how the table will look.

1. Tick the **Show page numbers** and **Right align page numbers** checkboxes.
2. For **Tab leader**, choose "points".
3. Tick the **Use hyperlinks instead of page numbers** checkbox.
4. Check that **Show levels** is set to 3.
5. Click **OK**.



2 MICROSOFT OUTLOOK

Introduction

Accessibility in emails is crucial to ensure that all individuals, regardless of their visual abilities, can access information equitably. This guide provides recommendations and detailed steps for creating accessible emails in Microsoft Outlook.

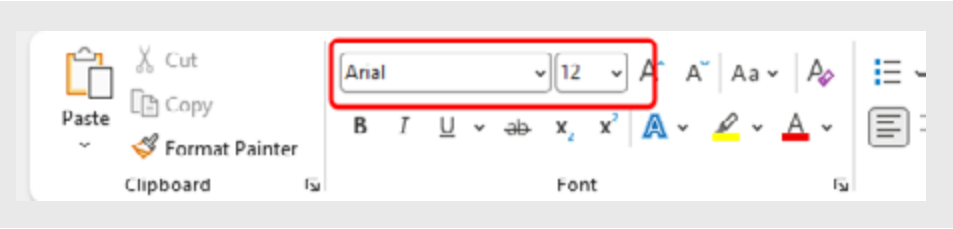
Font format

Since Outlook is, in practice, a word-processing environment in which messages are written and sent to other users, the same principles already covered for Microsoft Word should be applied, with a few additional precautions.

The typeface should be a sans-serif font (Arial, Tahoma, Verdana or similar) and in a size no smaller than 12 points.

To select the font type and size in a message:

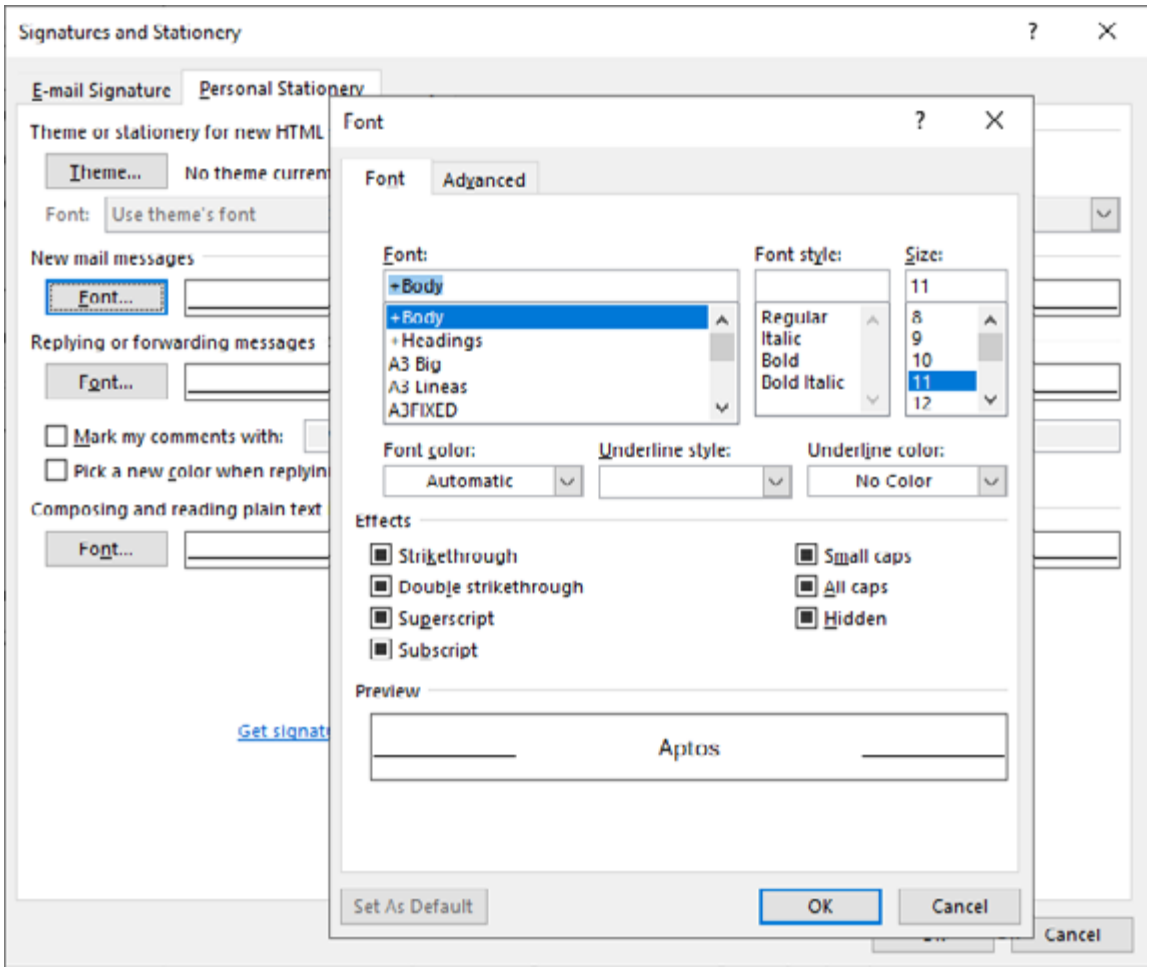
1. Go to the **Message** tab on the ribbon.
2. In the **Basic Text** group, select the font (Arial, Verdana...).
3. In the same group, select the desired font size from the corresponding drop-down menu.



2

This step will change the font in each new message. However, it is preferable to configure Outlook so that every new message uses an accessible font by default.

1. In the main Outlook window, go to **File** and click **Options**.
2. In the **Options** dialogue box, go to the **Mail** category.
3. Click the **Stationery and Fonts** button.
4. In the new dialogue box that opens, there are three **Font**... buttons which respectively allow you to change the font for new messages, for replies and forwards, and for plain text messages. Each of these leads to a new dialogue box for selecting all the characteristics of the typeface.



Text contrast and colour

Once the size and type have been defined, the colour must be set, which as a general rule should be **Automatic**.

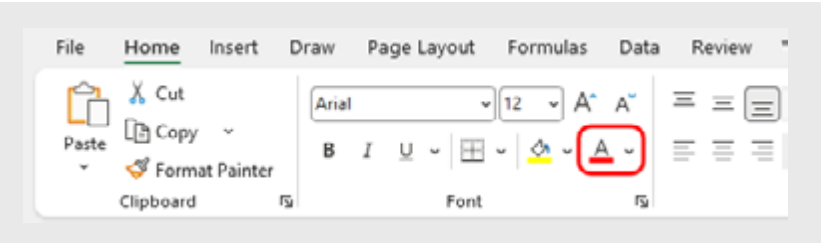
As in the previous section, the colour can be set for all messages, distinguishing between new messages and replies or forwards, although it is more likely that the text colour will be changed on a case-by-case basis in specific messages.

To change the text colour:

1. On the Message tab of the ribbon.
2. In the Basic Text group, select Font Colour.
3. Choose colours that provide a high contrast between the text and the background.

IMPORTANT

You should always choose a colour that provides sufficient contrast with the background, and if the colour is not merely aesthetic but conveys content (for example, to particularly emphasise a statement in the message), the change of colour must be accompanied by a textual alternative for users who cannot see the colours or who use a screen reader.



2

Styles

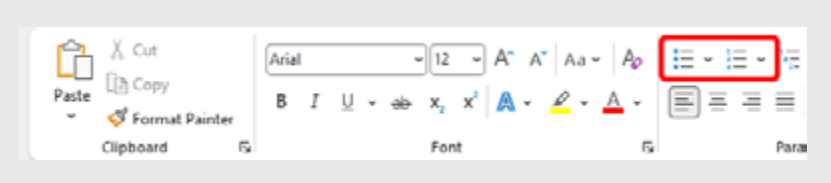
If required by the length or content of the email, the text should also be structured in an accessible way, using styles and numbered or bulleted lists.

To apply styles:

1. Select the text to which a style will be applied.
2. Go to the **Format Text** tab on the ribbon.
3. In the **Styles** group, select the desired style (for example, **Heading 1, Heading 2, Normal**) (you can also switch between heading styles by pressing Alt + Shift + Right or Left arrow on the selected text).

To create Numbered and Bulleted Lists:

1. Select the text.
2. Go to the **Message** tab on the ribbon.
3. In the **Paragraph** group, select the desired list type (numbered or bulleted).



2

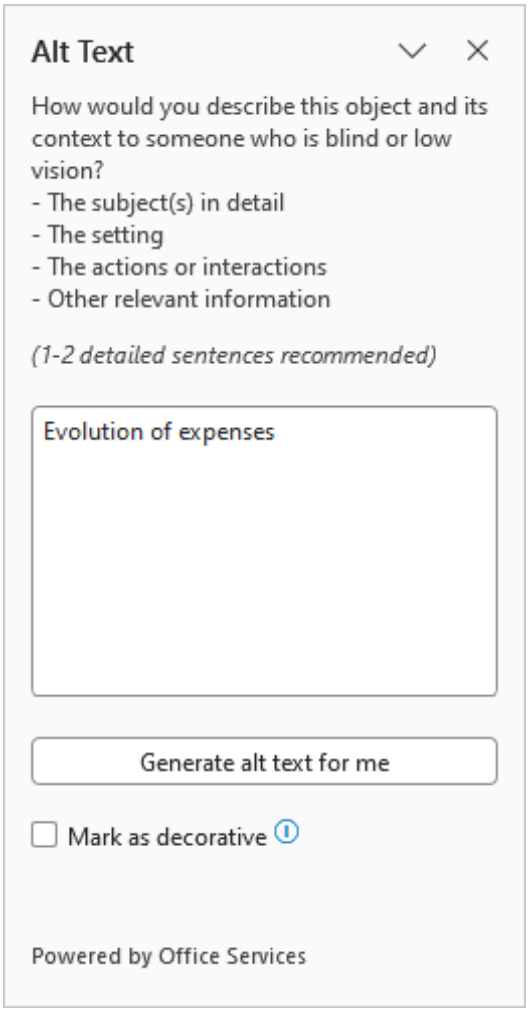
Images

Images are not especially common in emails. However, when one is included, it is most likely intended to support the content of the message. With this in mind, it is **important** to remember that an image **must never** be the only way of conveying information, so you should:

- Add **alt text** to the image that briefly describes it.
- Provide a textual description of the content or processes illustrated by the image.

To add **Alt Text**:

1. In the context menu of the image (right-click, Shift + F10 or the Applications key with the image selected), select **View Alt Text**.
2. In the Alt Text pane, enter a description in the **Description** field.



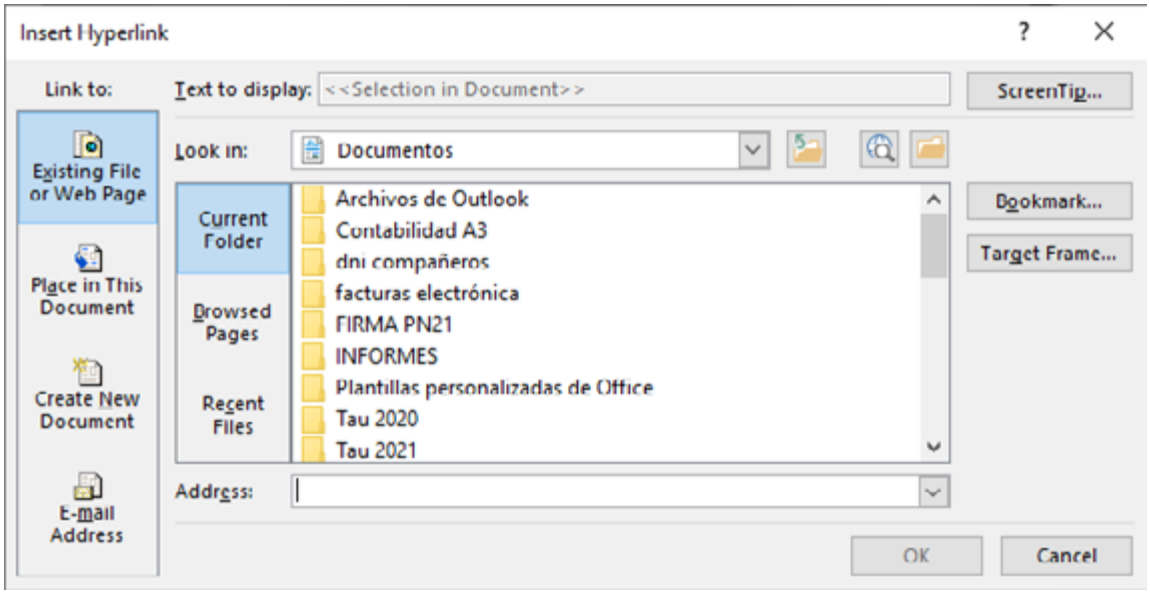
2

Links

To insert links in an email in an accessible manner, follow these steps:

1. Select the text you wish to convert into a link.
2. Open the context menu (right-click, Shift + F10 or the Applications key) and select the “Link” option.
3. Enter the URL in the “Address” field.
4. Make sure the text shown in the “Text to display” field is descriptive, avoiding expressions such as “click here” or “see more”.

It is important to bear in mind the accessibility of links, even if a “copy-paste” is performed from another source, such as a document or a web page.



3 MICROSOFT EXCEL

Introduction

Excel is a highly comprehensive tool for the quantitative analysis of information which, when used properly, facilitates presentation and decision-making in the business environment. It is therefore essential that it is accessible to all.

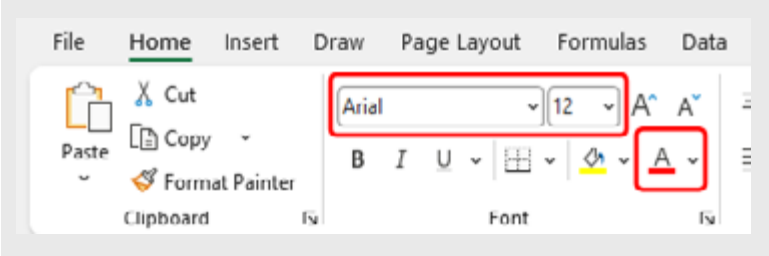
This section addresses the key design considerations for making spreadsheets created in Excel accessible and manageable.

Format

As in the previous sections, font and colour selection should follow an accessibility criterion, which logically remains the same:

- Use of sans-serif fonts (Arial, Tahoma, Verdana and similar).
- Font size no smaller than 12.
- Automatic colour.

All three characteristics can be changed on the Home ribbon, using the Font, **Font Size** and **Font Colour** buttons.



3

Data presentation

When designing a worksheet, the aim is usually to present information clearly, often by using colour and patterns of blank and completed cells to help users identify the most important information quickly.

Where worksheets need to be used with accessibility tools, the use of colour does not have to be ruled out, but care must be taken to ensure sufficient contrast. If in doubt, it is best to choose strongly contrasting light and dark colours and to avoid combinations that may be difficult to distinguish, particularly black, green and red. Nor is there any need to avoid using cell borders to highlight data in the table.

That said, these very useful features should not be ruled out. What matters is that they must not be the only means used, and they should be avoided only where they create difficulties for users of assistive technology.

Creating uniform tables

Table uniformity refers not only to how the data is presented, but also to its consistency within the sheet. A basic rule to bear in mind is to avoid including decorative empty cells.

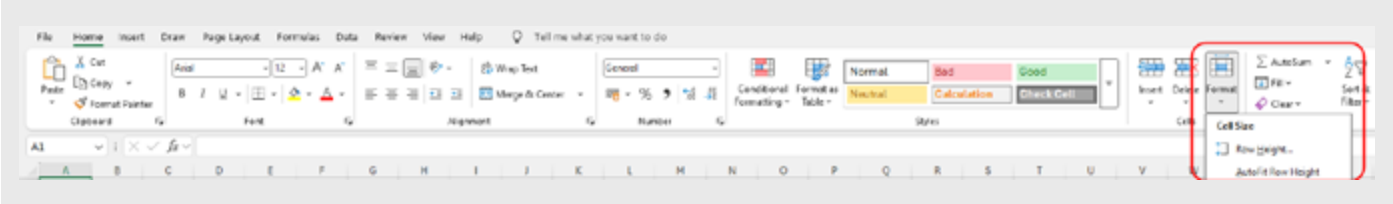
In Excel, column widths and row heights can be adjusted to visually create spaces between data. Empty rows and columns are a clear obstacle for screen reader users, as they force them to search around the worksheet for information. Leaving the first rows and columns blank is particularly problematic, since users will generally begin by moving through the first column in search of content.

To change the row height and width:

1. Go to the Home ribbon.
2. Click the Format button and expand it.
3. Click Row Height.
4. Enter the desired height.
5. Repeat the process but clicking the Column Width button.

Another indicator of a correctly formed table is the logical arrangement of data. This, although it may seem obvious, is not always the case.

Row and column headers should occupy the first rows and columns, trying as far as possible not to accumulate multiple header rows/columns (this is explained in more detail in the section on merging cells). It is equally important that totals appear in the last rows and columns, as the final element of the tables, sharing the same rows and columns.



3

Merging cells

Merged cells are very common in spreadsheets, and in some cases they are almost essential.

They allow longer content to be displayed without making some columns disproportionately wide or causing newly entered data to hide content already in the sheet.

From an accessibility point of view, the use of merged cells should be kept to a minimum. In particular, they should generally be limited to headers that need to span more than one column.

To understand the accessibility issues they can create, it is essential to test the table by moving through it with the cursor. While merged cells may cause no visual difficulty, they can be particularly problematic for screen reader users. As explained above, the main accessibility issue arises when data is presented linearly and the logical structure of the table becomes unclear. A blind user tends to interpret the table like a chessboard, with a succession of rows and columns that facilitates navigation.

The inclusion of merged cells creates irregular cursor movement. When a column is headed by a cell merged across three or more cells, the way it behaves will depend on the direction in which the cursor moves, on whether the merged cell is preceded by unmerged cells, and on whether it is reached from columns to the left or right.

A	B	C
Year – Month		**Place**
2009	December	Valladolid
2008	July	Toledo
2007	September	Seville
2006	January	Zaragoza
2005	March	Barcelona
2004	May	Santiago
2003	September	Madrid
2003	December	Burgos
2001	May	Cordoba

Although this behaviour can be understood, it places an extra burden on screen reader users, who may have to explore the entire worksheet in order to follow the data logically.

In short, applying a few basic principles of data organisation and formatting can make the difference between a worksheet that is both accessible and usable, and one whose data may technically be accessible but is extremely difficult to use.

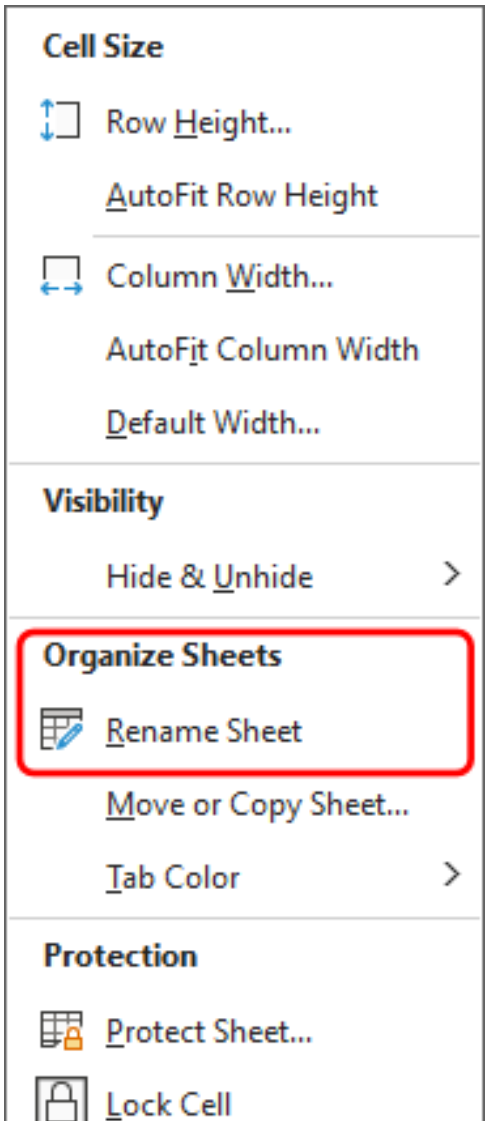
Sheet labelling

If more than one table is to be included in the sheet and it contains a significant amount of data, it is preferable for the workbook to have a separate, correctly named sheet for each table, so that users can tell what data each sheet contains without having to open it.

To enter a name for a sheet:

- Go to the sheet you wish to rename.
- Go to the "Home ribbon".
- Click the "Format" button.
- In the drop-down menu, select the "Rename Sheet" option.
- The focus will be placed on the tab with the sheet name (which by default will be something like "Sheet1"), already selected, and you simply need to type the new name and press "Enter".

You can also do this with the mouse by double-clicking on the sheet name and renaming it.



3

Accessible charts

To create a chart, first select the data you wish to represent. You should include the cells containing labels for the rows or columns so that chart titles, axes, legends, etc. are automatically generated.

Charts are inherently inaccessible to blind users. For users with some remaining vision, however, it is essential to ensure **sufficient colour contrast** and a **size** that makes the data easy to see clearly.

You should avoid making the chart the central focus of the workbook. Charts are a support to the workbook, so the focus of the workbook should be on the data. Charts do not have to be placed on the same worksheet as the data they are based on, and can instead **be moved to a separate sheet**. This not only prevents users of assistive technology from coming across the chart in the middle of the data, but also gives the chart more space, making it easier to read –which is, after all, its purpose. It is also easier to locate it on its own sheet within the workbook.

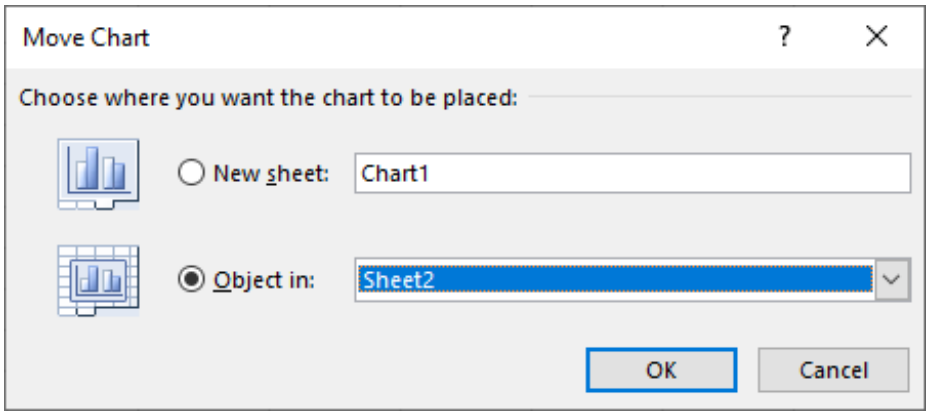
Once the chart has been inserted in the sheet, it can be moved to a new sheet.
To do this:

1. Select the chart (if using a screen reader, locate the object with Ctrl + Shift + O).
2. In the context menu (right-click, Shift + F10 or the Applications key).
3. Select the **Move Chart** option.

This can also be done from the ribbon:

1. Select the chart.
2. Go to the **Chart Design** ribbon (if this ribbon is not visible, the chart has not been correctly selected).
3. Click the **Move Chart** button.

A dialogue box appears in which you can choose whether to move the chart to an existing sheet, by selecting "**Object in**" and choosing the destination from the drop-down list, or to a new sheet, by selecting "**New sheet**" and entering the sheet name in the corresponding text box.



4

MICROSOFT POWERPOINT

Introduction

Microsoft PowerPoint is designed to present content visually. It should therefore be understood primarily as a graphic aid for oral presentations. This has clear implications for accessibility, since documents created in PowerPoint are not, strictly speaking, intended to communicate content on their own, but rather to support a spoken presentation and, in many cases, to capture the audience's attention.

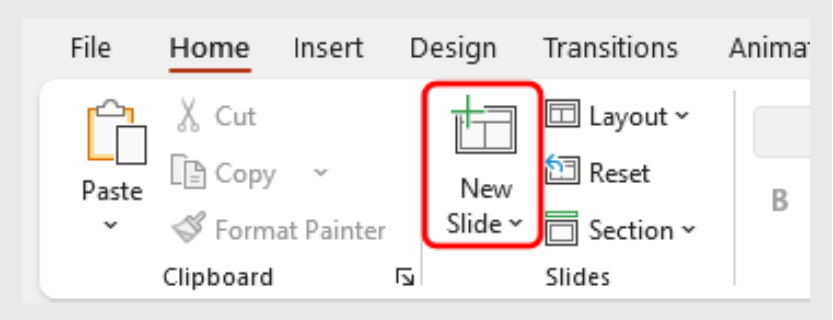
This guide provides recommendations and detailed steps for creating accessible presentations in Microsoft PowerPoint, to ensure that all individuals, regardless of their visual abilities, can access information equitably.

Using Built-in Slide Layouts

PowerPoint presentations are made up of pages called **slides**, to which different **objects** can be added, such as text in different styles, multimedia content, tables and charts. Unlike in Word, there is no stage at which a slide is treated as complete and a new blank one is created automatically. Instead, users add new slides to the presentation as they need them. When creating a new slide, they can either start with a blank slide and add the necessary objects themselves, or choose from a range of pre-designed slide layouts that already contain objects and can then be edited, removed or supplemented to suit the intended design.

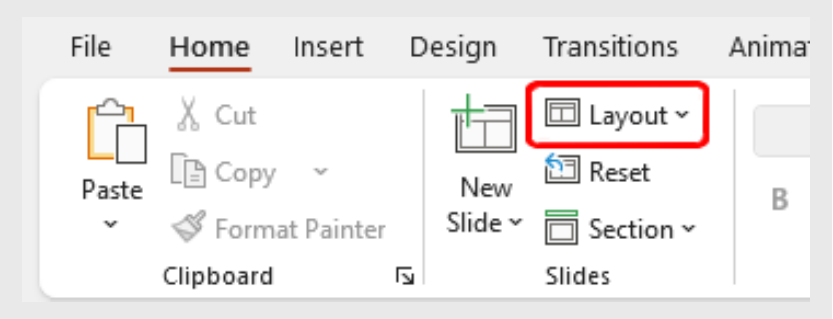
It is preferable to use PowerPoint's built-in slide layouts rather than creating slides from scratch, as these layouts are optimised for accessibility. To include a pre-designed slide:

1. Go to the **Home** tab.
2. Expand the **New Slide** button in the **Slides** group.
3. Select the type of slide to be inserted.



If you wish to change the layout of a slide that has already been inserted:

1. Go to the Home tab.
2. Expand the Layout button in the Slides group.
3. Select the new layout you wish to apply.



4

Using Clear and Legible Fonts

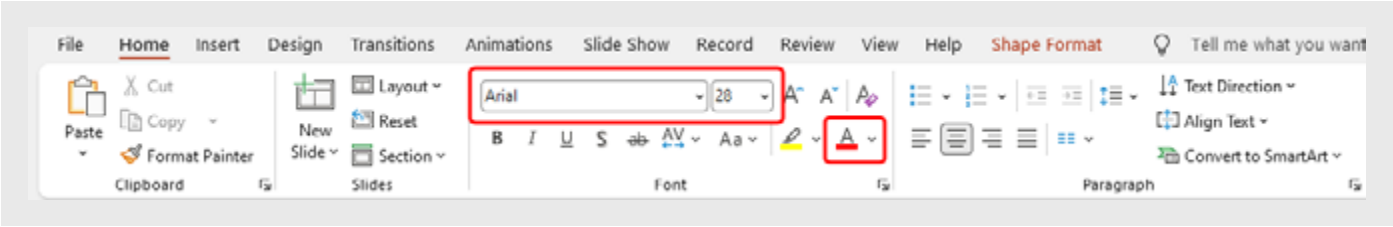
In PowerPoint presentations, font size is not usually a problem, since PowerPoint uses larger fonts by default than Word does. As a general rule, font size should not be reduced below 24 points for titles or 18 points for body text.

As for colour, unlike in other Office applications there is no Automatic colour setting, so particular care should be taken to ensure sufficient contrast between the text and the background.

Finally, the same precaution applies to font choice: sans-serif fonts such as Arial, Tahoma or Verdana should be used.

To change these three characteristics (size, colour and type):

- Select a **Text object** on the slide.
- On the **Home** ribbon, within the **Font** group, you will find the **Font, Size** and **Font Colour** buttons.
- Each of the three, once expanded, allows you to select the desired value.



4

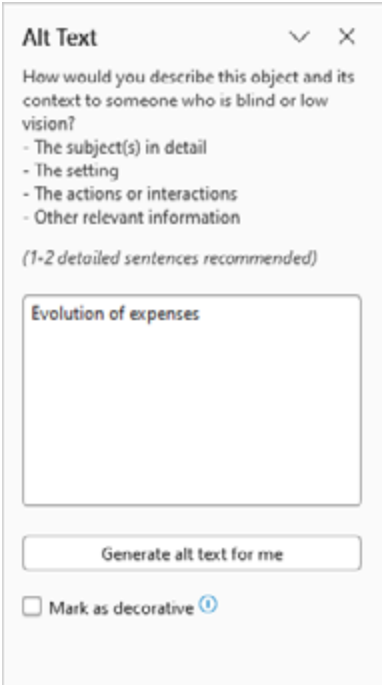
Adding Alt Text to Images

As explained above, PowerPoint is designed primarily for visual impact, so it makes extensive use of graphic content such as images, organisation charts, flow charts and graphs.

To ensure an acceptable level of accessibility, all such content must have alternative text. This text should be descriptive without being exhaustive, and should avoid unnecessarily long descriptions or irrelevant detail. Additionally, you should avoid indicating the type of object. That is, it is not necessary to include in the alt text expressions such as "Image of..." or "Photo of...", since screen readers themselves usually indicate that a graphic object is being described (the exception is if what is being described is a screenshot, in which case it is appropriate to specify this, as shown in the example).

To add alt text to an image:

1. Select the image and right-click or press the Applications key.
2. In the context menu, select View Alt Text.
3. In the Alt Text pane, enter a description in the Description field.



Example: "Bar chart showing Trends in expenditure."

IMPORTANT

If the purpose of the image is to describe a process, a textual description should be provided on the slide itself, detailing the name and type of the objects shown in the image, as well as all the steps required to carry out the process using the keyboard.

4

Setting the Reading Order

In a PowerPoint presentation, content is read aloud in the order in which it was created, not in the order in which it appears on screen, so this needs to be taken into account when creating the presentation. As noted at the beginning of this section, a good first step is to choose one of PowerPoint's built-in slide layouts, as these already provide the correct reading order for the objects. In practice, however, it is often necessary to add new elements to slides after the presentation has been created, and this can affect the reading order. To correct the order of the objects (or simply verify that it is correct):

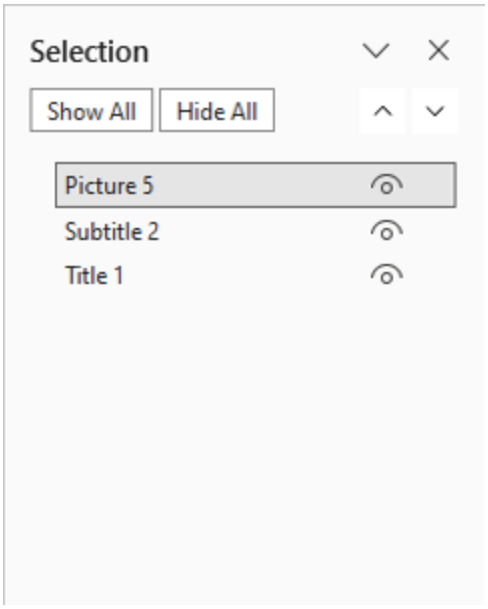
1. Go to the **Home** ribbon.
2. In the **Drawing** group, expand the **Arrange** button.
3. Select **Selection Pane**.
4. In the pane that opens, the list of objects on the active slide is displayed.
5. To change the order:
   - With the mouse, drag each object to the correct position.
   - With the keyboard, select the object and press **Shift + Tab** to locate the **Bring Forward** button to move the object up, or **Send Backward** to move it down.
6. Make sure that the elements in the Selection Pane are in the correct reading order.

IMPORTANT

The order in which they are displayed is the reverse of the order in which they will be read aloud; in other words, it will start reading from the last item and work its way up the list.

Furthermore, if the presentation is sent in auto-play mode (.ppsx), bear in mind that objects can be moved, appear and disappear with various visual and sound effects, and these characteristics apply to the objects on each slide and also to the transitions between slides.

Animations on slide objects should be avoided, as should automatic transitions between slides, since they may prevent the user from accessing all the content of each slide (due to lack of time).



5

CREATING ACCESSIBLE PDFS FROM MICROSOFT APPLICATIONS

Introduction

PDF is a file exchange format used to distribute documents created on any platform, program or operating system. The key point is that regardless of the origin or destination of the file, its appearance will not change—it will retain graphics, formatting, typefaces, etc. Consequently, the ultimate goal is to preserve the appearance, and this is what the PDF-generating tools are designed to do. Furthermore, an interpreter program is needed to access them. The most commonly used program is Adobe's Acrobat Reader.

To create a PDF, the usual approach is to start from a document created with a content-generating program. A PDF can be created from an image, a Word document, an Excel spreadsheet, a PowerPoint presentation, or documents created with advanced page layout programs (QuarkXPress, InDesign), etc.

Accessibility in PDFs

In terms of accessibility with screen readers, the most important aspect of the PDF format is tagging.

When a document is opened in this format, texts, images, etc. are visible, but internally all the PDF content is stored in tagged objects. Thus, a heading of any level will be tagged as <H1>, <H2>, etc. (depending on its level). Plain texts will be <P>, images <Figure>, and there are categories for almost any type of element in a text.

This tagging and its internal order is what provides the reader with the information needed to correctly read the content aloud.

In terms of visual accessibility, as in the rest of the sections of this course, the font type, size and colour should provide easy viewing and sufficient contrast between text and background.

5

Creating accessible PDFs from Microsoft applications

As most users do not have professional PDF editing software, the following explains how to create accessible PDFs from Microsoft applications.

It may seem obvious, but the basic requirement for an accessible PDF is that the source document itself must already be accessible.

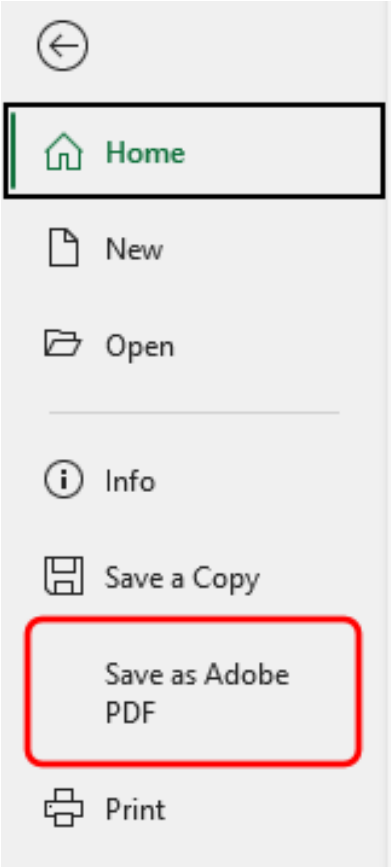
If a Word, Excel or PowerPoint file has been created using unsuitable fonts, poor contrast or untagged images, converting it to PDF will not correct any of those issues. In that sense, the essential requirement for accessibility is to ensure that the original document is accessible from the outset.

How to generate the PDF

Save as PDF

To save a file as PDF from Word, Excel or PowerPoint:

1. Go to **File**.
2. Select Save as Adobe PDF.
3. Select the name (by default it will be the same as the source file) and the location where the file will be saved.
4. Click **Options** (the different processes depending on the type of source file will be detailed in the following sections).
5. Click **Save**.



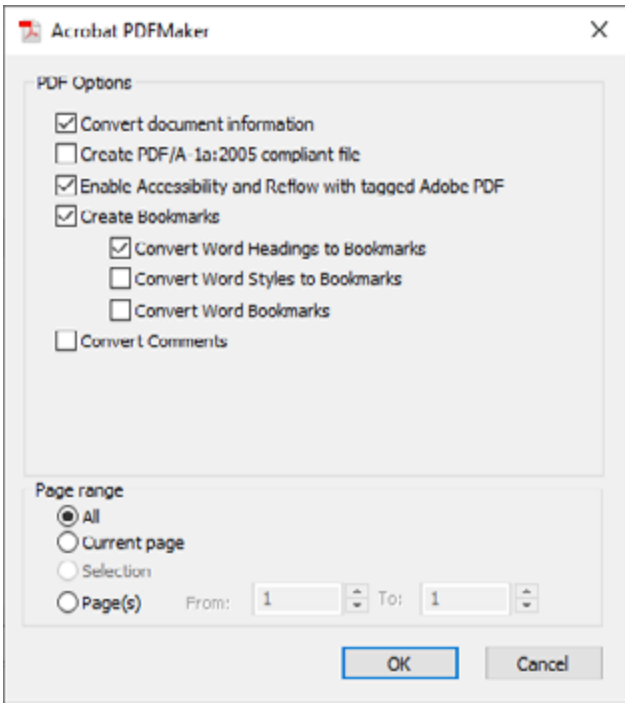
5

Options in Microsoft Word

Once the **Options** button has been clicked in the **Save as PDF** dialogue box in Microsoft Word, a dialogue box is displayed that allows you to configure the characteristics of the PDF that will be generated from the Word source.

The options that must be ticked are:

- **Enable Accessibility and Reflow with tagged Adobe PDF.** As previously explained, the PDF arranges its content in a tag structure that the screen reader accesses to correctly interpret the objects and the reading order. By ticking this option, all the information of this type that is also stored in Word is "translated" into the PDF tag language.
- **Create Bookmarks and Convert Word Headings to Bookmarks.** This option activates the possibility of creating a PDF-specific index using the heading structure (see above, in the Word section, where we discussed assigning the Heading 1, Heading 2, etc. styles to generate the table of contents. Adobe does something similar in its PDFs.)
- The remaining options are not necessary.



In this same dialogue box, there is the option of filtering which part of the document is to be converted (All, the current page –i.e., the page on which the cursor was located when the menu was accessed–or a specific range of pages).

Once you have verified that the desired options are ticked, click **OK** to return to the dialogue **Box Save as PDF** dialogue box (described above) and click **Save**.

5

Options in Microsoft Excel

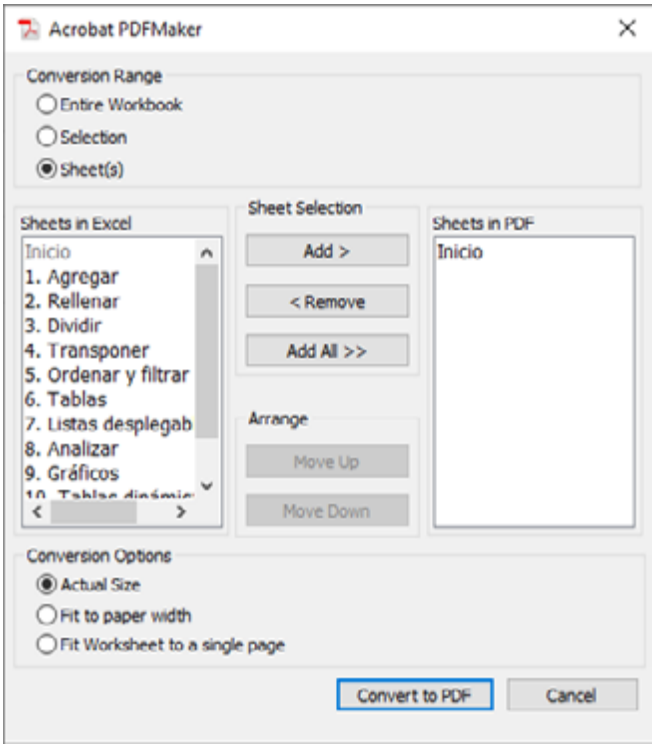
When you click Save as Adobe PDF in an Excel workbook, the first thing displayed is a dialogue box that allows you to select which parts of the workbook to convert (the entire workbook, a previously selected range of cells, or specific sheets).

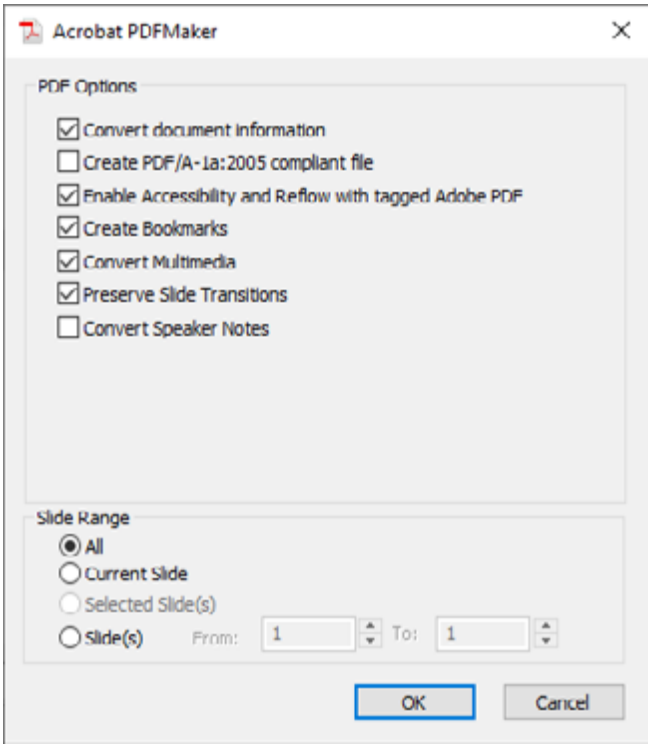
Additionally, you can define how the content fits on the page (these are similar options to those that need to be set when printing in Excel).

Once these parameters have been defined, click **Convert to PDF** to access the **Save As** dialogue box.

In that dialogue box, click **Options**, and in the dialogue box that opens, verify that the **Enable Accessibility** and **Reflow with tagged Adobe PDF** and **Create Bookmarks** options are ticked (which, unlike in Word, does not present further options).

Once these options are ticked, click **OK** to return to the save dialogue box to complete the process.





5

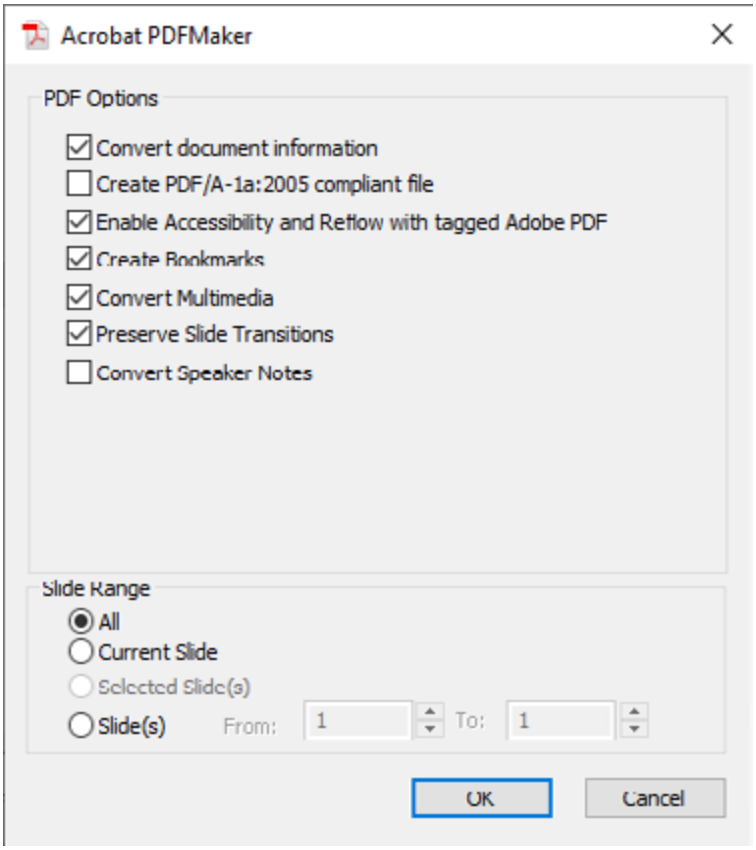
Options in Microsoft PowerPoint

For PowerPoint, the conversion options that should be ticked are:

- Enable Accessibility and Reflow with tagged Adobe PDF.
- **Create Bookmarks.**
- **Convert Multimedia.** Ticking this checkbox means that multimedia objects will be retained in the PDF, for example a video. If it is unticked, in that same example, the video will be replaced by a still image of its first frame.

Additionally, you can select whether to convert the entire presentation, the slide that had focus when Save as Adobe PDF was accessed, or just a specific slide.

Once the conversion has been configured, click **OK** to return to the **Save as PDF** dialogue box to complete the conversion process.



6

THE ACCESSIBILITY ASSISTANT IN MICROSOFT OFFICE

Introduction

The Accessibility Assistant is a tool built into Office 365 that is available in Word, Excel, Outlook, OneNote and PowerPoint.

It performs three functions: finding accessibility issues, explaining why each of the detected issues could be a problem for people with disabilities, and providing guidance on how to fix each issue.

VERY IMPORTANT

This automatic review process cannot detect all issues. Furthermore, some of the issues the Accessibility Assistant might flag will not necessarily be errors that need to be fixed.

The Accessibility Assistant has certain limitations. For example, it cannot detect whether information is conveyed solely through colour, assess whether alternative text is appropriate, or check whether a video includes subtitles. In some cases, it may even miss errors that can be identified manually, such as insufficient contrast in font colours.

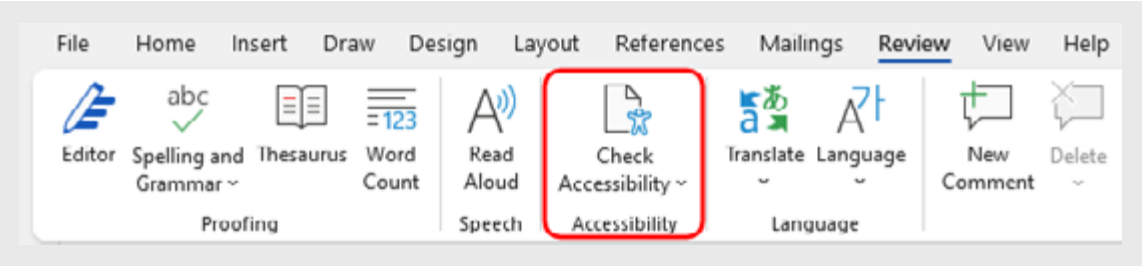
For this reason, a manual review of the file is also essential to ensure that all the guidance given throughout this course has been applied correctly.

Accessing the Accessibility Assistant

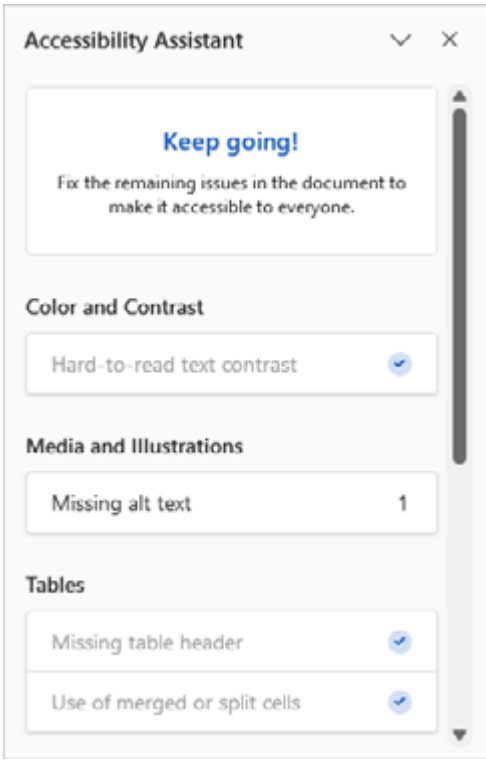
Once you have finished creating the content in the Microsoft Office application (a Word document, an Excel workbook, a PowerPoint presentation or an Outlook message), it is time to use the Assistant to carry out an initial accessibility review that can alert you to any issues that need to be addressed.

To access the Assistant:

1. Go to the **Review** ribbon.
2. Click the **Check Accessibility** button.
3. A pane opens showing the detected errors.



This pane is organised into buttons that group each type of detected error. Clicking the button in the pane displays details of the issue, explains its consequences and, in many cases, allows it to be fixed directly—for example by adding alt text to images, changing the appearance of a table or modifying the font colour. For each type of issue, you can also move through all the instances found in the document.



NOTE

This guide was produced using the Office Microsoft 365 MSO version (version 2506 build 16.0.18925.20216) 64-bit and Adobe Acrobat version 2025.001.20467 64-bit.

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