

# Alternative Text Authoring Guide

Version 1.3

## Contents

Digital accessibility .....	2
Alternative text.....	2
When to write alt text .....	2
<i>Image context</i> .....	3
Authoring best practices.....	3
Examples of images & alternative text .....	4
<i>Example of a short text description</i> .....	5
How to capture alt text in the manuscript.....	5

## Digital accessibility

Digital accessibility ensures that everyone can use digital products and services – mobile applications, documents, multimedia, etc. – regardless of their ability or situation. It benefits a wide range of people including those:

- With permanent disabilities such as blindness, limited hearing, loss of a limb, dyslexia, etc.
- Experiencing short term disabilities that result in eventual recovery, such as an ear infection, migraine, carpal tunnel, etc.
- In a situation or environment that changes how technology is used, such as being in a loud room or in bright sunshine.
- Impacted by technology-based limitations, including a slow and/or no Internet connection.
- With long-term disabilities that are brought on by age, such as sight or mobility loss.

## Alternative text

Images, figures, and graphs used on websites and in documents can often create major barriers when they are not accessible. To make images accessible, alternative text (alt text), must be provided.

Alt text is a short, textual description that conveys the purpose and the relevant content of images and graphs in a concise and unambiguous manner. It can be used by screen readers and other devices, making non-text content available to all users, regardless of their abilities.

## When to write alt text

Alt text is required for

- **Informational Images:** Images that graphically represent concepts and convey information, such as pictures, photos, logos, illustrations, etc.
- **Functional Images:** Images that convey an action, such as buttons or icons. The alt text should describe the functionality of the image.
- **Image Maps:** Images divided into interactive regions (“hotspots”), such as those found in HTML objects. Alt text is needed for the composite image itself and for each hotspot where an interaction can occur.

Alt text is not required for

- **Decorative Images:** Images that are not essential to understanding exposition and do not convey any additional information.
  - Images that are adequately described in the caption or adjacent text.
  - For images that do not have meaning. The image might be included to make the website or document more visually attractive.

## Image context

Images rarely appear in a vacuum. In addition to the image's function, consider the environment where it will appear, rather than solely what an image depicts. Consider this image of the Golden Gate Bridge in San Francisco.



*Figure 1: The Golden Gate Bridge; Credit Wessal/stock.adobe.com*

What is included in the alt text will be different depending upon the image's context and well as the surrounding text. For example:

- In engineering, the alt text might note the structure of the bridge.
- In geography, the alt text might note the cities the bridge connects.
- In art, the alt text might note the light and shadows of the photo composition.
- In some scenarios, this may be considered decorative and may not need alt text.

## Authoring best practices

When writing alt text, consider the following points:

- **Context and redundancy:** Consider the information provided in the figure caption and the body text. The alt text should not be redundant or present the same information. Do not use the caption text as the alt text, as captions are read by screen readers.
- **Describe only what is seen:** Allow users to form their own opinions and conclusions. Do not introduce additional information into the alt text description. Do not interpret, explain, or analyze the material.
- **Phrases to avoid:** Unless it is important to distinguish the type of image (e.g., a painting, photograph, illustration, etc.), avoid phrases like "Depiction of," "Picture of," "Image of," etc. as screen readers automatically announce the presence of an image.
- **Language and style:** Take screen reader functionality into account when writing alt text:
  - The language used in the alt text description, should match the language used in the main article (e.g., articles written in American English should have alt text in American English)
  - Follow the inverted-triangle method and put the most important information first.

- Abbreviations should be spelled out in full (e.g., “Bus. process” should be “Business process”; “no. of images” should be “number of images”), unless the abbreviation is accepted usage (e.g., “R&D”). Remember alt text is intended to be “read” by devices.
  - Use indefinite articles (“a” and “and”) instead of definite articles (“the”). Example: “an architectural drawing”, not “the architectural drawing”, unless there is only one architectural drawing. If the text has already introduced this architectural drawing, it becomes “the architectural drawing”.
  - Write in the present tense and use the active voice.
  - Use third-person narrative style to show neutrality and non-interference.
  - Do not use special characters.
  - Write well and review spelling, grammar, and punctuation.
- **Diversity, equity, and inclusion (DEI):** Gain your readers’ trust and respect, without alienating or “othering” anyone:
    - Use consistent terminology throughout all alt text descriptions found in an article as slight variations may confuse readers.
    - Write in plain language. Avoid jargon, slang, or technical terms unless they are appropriate.
    - Monitor length, vocabulary, and sentence structure to minimize cognitive load.
    - Do not use visual orientation phrases such as “we see,” “shown below,” “can be viewed,” etc.
    - Color should only be mentioned when it is pedagogically important.
    - When describing people, use the language preferred by that group.
    - Use pronouns only when it is clear to whom or what the pronoun refers.
  - **Math content:** In general, math content will be captured as MathML. While not encouraged, if your article contains images of math, please use semantic speech to represent the math content in the alt text.
  - **Images containing text:** Readable text is sometimes presented as images, this includes elements of the image itself, such as labels, as well as logos. When this occurs, the text must be included in the alt text as this is the only way that screen readers will be able to access the information in an image.
  - **Alt text length:** In general, short descriptions are contextual explanations consisting of roughly 140 characters. In most cases, short descriptions can appropriately convey image meaning. As the extended description functionality is not yet supported in the pilot project, the character length can be increased in moderation beyond the 140-character standard if required.

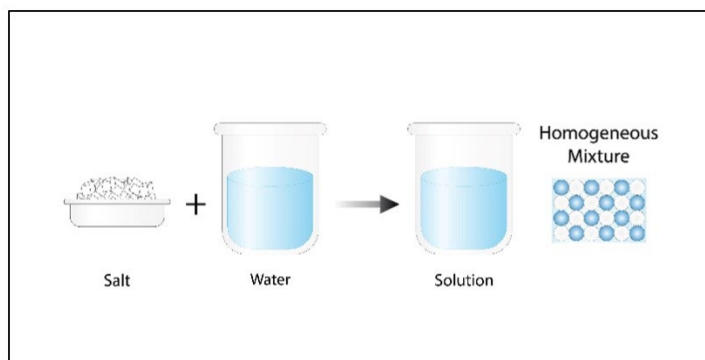
## Examples of images & alternative text

Consider the following example when writing alternative text. Additional samples and guidance are available through:

- [Diagram Center Image Description Guidelines](#)
- [MathSpeak Grammar Rules](#)

## Example of a short text description

Here is an example of an image with a possible short description.



*Figure 2: Short text description example; Credit: PH-HY/stock.adobe.com*

**Short description:** A bowl of salt is added to a beaker of water to create a homogeneous mixture, or solution, of salt water.

## How to capture alt text in the manuscript

Figures and figure captions in the manuscript can be placed as per the Author Guidelines of the respective journal. However, please follow the below instructions for adding alt text to the manuscript:

- Create a separate section with the heading “ALT TEXT FIGURES”.
- List the figure number followed by the respective alt text.
- If a figure does not require alt text, please list the figure number and state “alt text not required”.
- Any figure in the manuscript has to have alt text or the statement “alt text not required”.