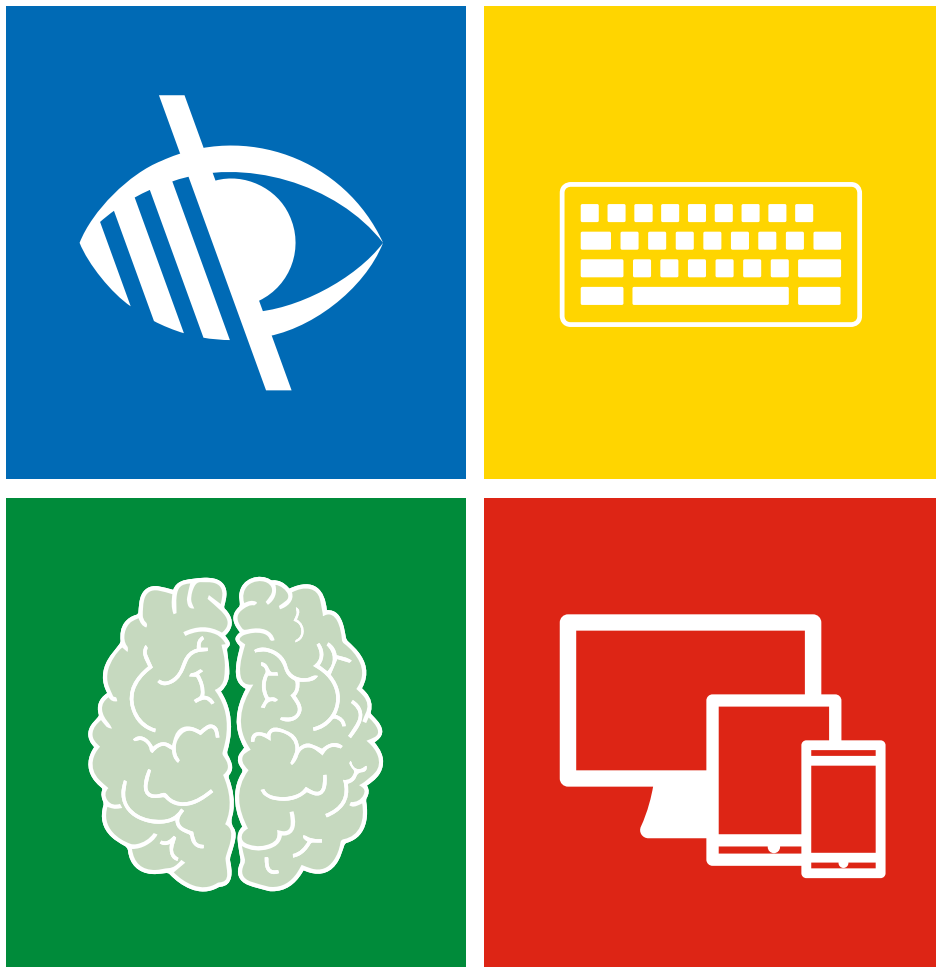


Accessible content

Guide for planning and content production

(Original guide: https://www.hel.fi/static/liitteet/kanslia/TPR/opas_saavutettavaan_sisaltoon.pdf)



Summary and checklists for creating accessible
presentations and websites

Helsinki

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The purpose of this guide

This guide is intended for City of Helsinki employees who create content for websites or other platforms available to the public. The guide is intended to be used as an instruction for creating content.

The purpose of this guide is to provide generally applicable instructions for creating content that would be accessible to all users as far as possible.

This guide does not address website and service planning or technical implementations of publication systems. Furthermore, it does not cover creation or implementation of forms and surveys based on data collection and acquisition. For designers of such technical solutions.

This guide supplements other instructions for planning and creating content provided by the city. This guide does not replace or displace existing guides; follow them where applicable along with this guide.

Follow the instructions you have received concerning topics such as how to use a publication system. Even if you were not able to influence the technical specifications of a system, follow at least the ones that you are able to influence when planning or writing content. Many accessibility goals can only be achieved when the technical properties of a website are fixed, but copy, images and the means of representation can always be made accessible. This guide will help you in this process.

Accessibility involves numerous technical challenges and details which are beyond the scope of this guide. However, with the instructions of this guide, anyone can avoid the worst errors that hinder accessibility in content creation.

What is accessibility?

Accessibility refers to presenting information in a way that is always accessible to everyone. All users must always be able to read (view or listen to) the content regardless of the means of publication or representation of the content.

Accessibility is related to digital services, websites, applications and publications. Accessibility also applies to the physical world, such as eliminating access barriers.

Accessibility means that digital services can be used fairly and equally!

Everyone has the same rights to access services, find content and use municipal services. Accessibility is a moral duty to serve all citizens equally. Similarly to how ramps are built for persons with reduced mobility, publication content must be provided in a format that is accessible to everyone.

The benefits of accessibility are not solely for persons who have been classified as disabled – accessibility helps everyone who uses the content.

Accessibility means that

- content can be found and accessed by everyone
- content is in a format that is understandable to all
- services and contents are accessible to everyone so that everyone gets the information they need and is able to run their errands
- people are treated equally regardless of their special characteristics

Statutory requirements

Obligated by the EU Directive, the Act on the Provision of Digital Services entered into force in September 2018. The requirements of the Directive and Act are based on a European standard, which is not ready yet. However, the requirements are broadly the same as in the international WCAG 2.1 guidelines. Because of this, the level of accessibility in this guide is derived from definitions in the WCAG guidelines.

Public sector websites and applications must meet the accessibility requirements as follows:

- New websites (also intranet and extranet implementations) by 23 September 2019
- Legacy services by 23 September 2020
- Mobile applications by 23 June 2021

Although accessibility is only linked to digital services in the legislation, the concept should be expanded to all publication activities and content production.

The Directive provides that the accessibility requirements are complied with in so far as they do not constitute a disproportionate burden.

Accessibility statement

Digital services covered by the law must also provide access to an accessibility statement with the following information:

- Which parts of the content do not meet the accessibility requirements and what are the reasons for it?
- A report concerning alternatives for the use of non-accessible digital services
- How to notify an organisation that its website or mobile application does not meet the set requirements?
- Information on a procedure the customer can undertake if they are not satisfied with the reply they received (accessibility legal action)

The objective of the City of Helsinki

The objective of the City of Helsinki is to meet the requirements set for accessibility. The requirements are based on the international WCAG guidelines (Web Content Accessibility Guidelines). The city's objective is to reach Level AA in accordance with the guidelines.

These guidelines list and explain the requirements set for websites at Level AA.

The guidelines for visual appearance are such that they should be followed in all printable brochures or content distributed as files.

How to determine compliance with accessibility requirements?

Compliance with the accessibility requirements involves both content creation and technology. There are different requirements for different types of content. There are varying requirements for text, images, videos and other media types. It is not possible to set unambiguous requirements applicable to all situations.

The requirements are based on international guidelines on how to achieve accessibility in online services.

WCAG guidelines

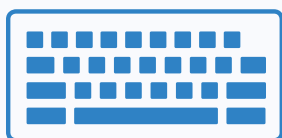
WCAG (Web Content Accessibility Guidelines) is an international set of guidelines, whose version 2.1 is the basis for the requirements set by the current Act. WCAG sets three target levels for accessibility; A, AA and AAA. The requirements of the accessibility directive set by the European Union are based on Level AA of the WCAG version 2.1.

The objective of the City of Helsinki is to reach Level AA of the WCAG guidelines.

The WCAG guidelines set the following accessibility goals



Perceivable: all content and parts of the interface are perceivable with technologies utilised by the users.



Operable: the interface and content must be easily navigable using different kinds of technology, and interface characteristics must not hinder or prevent usage.



Understandable: the content must have a clear structure, the language must be understandable, and the functionality must be easy to comprehend.



Robust: a website must be accessible using various terminal devices, different operating systems and the most common browsers as well as assistive technologies.

WCAG Level AA requirements for publications



1. Perceivable

Content can be seen or heard by everyone

Images and other non-textual content

Corresponding content, readable in a text format, is available for all images and content provided in a non-textual format. It can be included in the text content or provided as an alt attribute for images.

Audio and video (pre-recorded)

The content of pre-recorded video and audio (not live broadcasting) is available in a readable as well as audio format.

Video captions (pre-recorded)

In addition to the soundtrack, captions have been added to pre-recorded videos for hearing-impaired persons.

A text version of the soundtrack or an alternative means of representation (pre-recorded).

In videos where information is provided through audio, content is also presented using an alternative means, such as readable text.

Content structure and means of representation

The site content has been implemented with HTML elements in a manner that is logical and clear to the user.

Content layout

Content has been laid out logically and meaningfully in terms of understanding the topic.

Sensory perception of content

All objects of the interface: buttons, lists, links and focused elements are visually realised in a manner that renders them easy to perceive and understand.

Use of colours

The meaning of content must not be based solely on the use of colours. Colour must not be the only means to give meaning to selections, objects or errors, for example.

Automatic replay of audio files

Do not set audio files to replay automatically when the page is loading. Visible controls must be set for replaying audio lasting more than 3 seconds so that the user can stop or pause the audio replay and adjust the sound volume.

Captions for live broadcasts (live broadcasting)

For audio content broadcast live, captions can be used as a synchronised alternative medium; for example, as text displayed simultaneously with the audio.

Description of audio content (pre-recorded)

Soundtrack content is available in a readable format on the website.

Contrast between text and background (minimum)

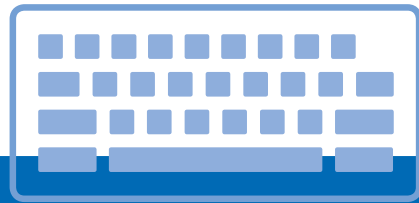
The contrast ratio between the text and background colours must be at least 4.5: 1. Texts of different sizes have different contrast requirements. Check the contrast with an appropriate contrast evaluation tool or web service (such as <https://webaim.org/resources/contrastchecker/>).

Scaling text and content

Content must be scalable by at least 200% without breaking the structure or functionality of the site.

Do not present text as image files on the site

Do not use images to display text or as replacements for text



2. Operable

Content and functionality easily accessible using all kinds of technologies

Using a website with a keyboard

Content must be accessible using only a keyboard. A mouse or another pointing device should not be necessary to reach any content element.

Avoid keyboard traps

In case of content accessible with a keyboard, the user must also be able to leave the content using a keyboard. A keyboard trap refers to content embedded in a page, from which the user is unable to return to the main level using a keyboard.

Flexibility of time-limited functions

As regards time-limited functions, users must have at least one of the following options: pausing the clock (counter), adjusting the length of the time limit, requesting for an extension when time runs out. Exceptions include specific real-time events and a time limit exceeding 20 hours.

Pause, stop, hide moving or updating content

The user must be able to control moving, flashing, scrolling or auto-updating content. The user must be able to pause, stop or hide such content.

No flashing content

The site does not contain anything that flashes more than three times in a second.

Skip links at the start of the page

Add skip links to the pages, leading directly to navigation and content. Enable the user to move directly to the content they need, bypassing elements that are repeated on multiple pages.

Page titles

Pages must have a descriptive title. The title must describe the content or purpose of the page.

Element focus

Elements receive focus in a logical sequence when using a keyboard. The focus order must be meaningful in terms of page content or functionality.

Indicating the meaning of links on a page

The purpose of each link included in the page content must be indicated through the link text and name.

Implement alternative means of finding content on a site

Offer various alternative means to find content on the site; navigation, site map, search, etc.

Sub-headings and form titles describe the content and purpose

Use clear and descriptive title texts to describe the content of a topic and form input fields.

Indicate the active element through visual focus

Ensure that the element activated with a keyboard is clearly discernible and distinguishable from the other elements on the site. The focus element must be indicated with the focus attribute of CSS styles.



3. Understandable

Content and functionality must be understandable

Indicating the language of page content

The HTML root element of the site has been given a lang attribute to indicate the language of the content on the page.

Selecting a form field

When an element has the focus, it will not alter the page content.

Content of form fields, content changes

Page content must not change when the content of a form field changes unless the user has been informed of it.

Indicating errors

If an error is detected during an automatic input check, the input field containing the error must be indicated clearly and the error must be described in a way that the user understands.

Titles and user guidance on pages requesting information from the user

On pages and page sections requiring input from the user, fields must be given clear titles and the user must be instructed on how to provide correct information.

The language of page sections must be indicated if it differs from the default language of the page

Inform the user if the language of a page section changes.

Consistent navigation

Implement navigation components in the same format and then place them consistently across all pages.

Similar appearance of elements and interface components

Design interface elements, user-activated functions such as links and other elements consistently across the entire site. Use auxiliary symbols etc. always with the same meaning.

Error correction instructions

If a user fills in a form field incorrectly, generate a clear error notification and suggest how the information should be corrected. Provide examples.

Error prevention (legal, financial, other)

Minimise any errors in the provision of all types of information (sensitive information in particular).

4. Robust

The site must be robust enough that it can be operated by a variety of terminal devices and assistive technologies

Site structure and content parsing in the browser

Use error-free HTML code. The .HTML element structure and attributes of a site must be accordant with the operating mode determined by the specifications that define them.

Correct use of the name, role and value attributes

Add programmatically read attributes to user interface elements (such as form fields and links) for use in browsers and screen readers. Follow applicable instructions when using these attributes.





Visual

Use of colours

There are many degrees of blindness or sight impairments. Some users are unable to perceive content based on sight, others may perceive content using assistive devices and others are able to see colours but in different ways.

Problems related to perceiving colours are very common. The use of colours also involves

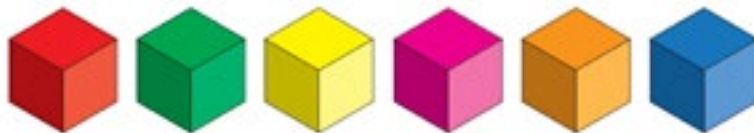
cultural differences which must be taken into consideration.

Check the suitability of the colours on your site here, for example:

<https://color.a11y.com/Contrast/>

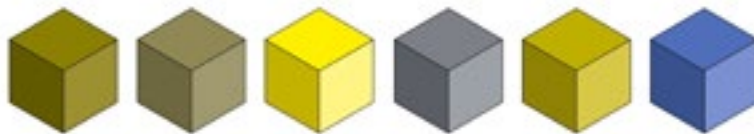
An example of how the colour blind perceive colours

Actual colours



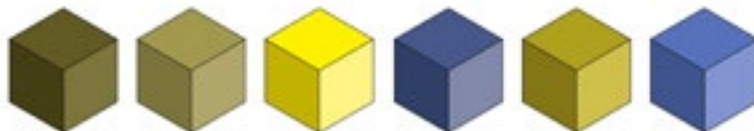
Through the eyes of a red colour blind person (protanopia)

- Relatively rare
- Red colours are missing



Through the eyes of a green colour blind person (deuteranopia)

- Common with men
- Green colours are missing



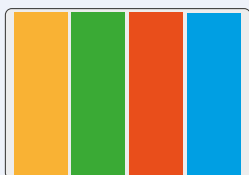
Check at least these:

Use of colours

- Colours are not the only means used to indicate the meaning of a topic.
- Removing colours does not affect the meaning of the content.
- The colours are clearly distinguishable from each other (for the colour blind as well).
- Colours or colour are not over-saturated (very strong).
- The contrast between the colours is sufficient but not too strong.
- Colours are not misleading (in the sense of their cultural perception).
- Colours are muted basic colours.

Aim for these

Plain
basic colours



Combination
of colour,
text and symbols



Sufficient contrast
and font size



Identifiable
without colour



Lack
of colour
does not affect
the message

Incorrect e-mail address!

Name

E-mail



Avoid these

Avoid excessively
gaudy colours



The meaning
is indicated
only by colour



Low contrast
and a small font size



Not distinguishable
without colours



Väri osoittaa
viestin

Correct the items marked in red!

Name

E-mail



Visual

Blind users

Persons who are completely blind or whose eyesight is so limited that they are unable to access information using merely their sight utilise websites with assistive technologies, such as screen readers. A screen reader is an application that transforms website content into speech or reads the text aloud.

Screen readers do not 'see' or understand image files. Alternative content must be provided for images, videos and similar tools for the screen reader to read. This can be done by providing images with alt text that describes the content of the image. Alt text is not necessary for images that do not contain any information or serve a decorative purpose only.

The screen reader reads aloud to the user the entire content of the page while enabling them to follow links and move from one title to the next. You can help blind users by minimising

the content that needs to be listened to and by enabling easy access to the content. Always reproduce the structure of each page identically and do not force the user to listen to the same generic information on each page.

Some of the changes assisting screen readers cannot be made by content producers. Such changes include, for example, attributes of HTML elements in the page's source code that guide screen readers or skip links that can take users of screen readers directly to a certain section of the page. These technical requirements have not been described in this guide for content producers.

The task of content producers is to ensure that the content on a page is laid out clearly and has an appropriate title and that images are provided with good alternative content.

Check at least these:

Blind users

- The page information is available from the text.
- Images have appropriate alternative content, alt text.
- Page content is divided into logical entities.
- All content can be read on the page or, if the information is in a downloadable file, the file has been provided in an accessible format. As an accessible PDF file, for example.
- The HTML structure has been used correctly in the page text: titles, lists, etc.
- Information is not provided exclusively through an image or in a visual style.
- Link text informs the user where the link will take them.
- Enough sub-headings appropriate for the content have been used in the text.
- All content on the page can be accessed with a keyboard.

Aim for these

Provide image content also in a text format

<alt="...">

Brief, concise description of the image content

Content is laid out in logical entities



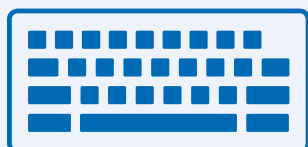
All content can be read on the page



Use the HTML structure correctly

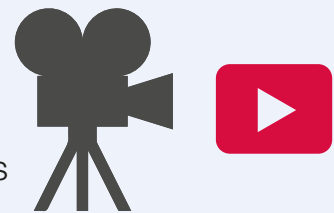
<H1>Abc...
<H2>Def...
<p>Aceatet eos quist...

Page is accessible using only a keyboard



Avoid these

Information is only provided through images



Fragmented content on pages



Content is in the attached files



Self-made formatting

↑
Abc
font-size: 24px

Need to use a mouse





Visual

Consideration of partially sighted persons

Users with deteriorated eyesight may still be able to use the content by sight, but a visual look designed for the normally sighted will not work for them. Many partially sighted persons use assistive means such as zooming in the content, utility programmes of the operating system (enlarging) or a separate optical assistive device.

Content producers are able to influence how the content can be accessed by partially sighted persons.

Partially sighted persons can be assisted by adding symbols to the page, grouping content into clear entities, leaving enough empty space around content elements, using a clear font type and enabling the enlargement of font sizes and zooming in the content.

The default size for text in browsers is 16 px (CSS pixels). Smaller font sizes should not be used on websites. So, do not decrease the font size unnecessarily. A website may provide a bigger font size for the user to select. Even

without this possibility, users may enlarge content on the page by zooming in using the Ctrl and + buttons (Win) or Cmd and + buttons (Mac). Test that the site remains functional even when enlarged.

In file-format documents (Word or PDF), font size depends on the type of font used. A certain font type may look as large at 10 points as another would at 12 points. With printable files or presentations displayed on a screen, the size of each font must be checked separately. The text spacing should be larger than the font size, at least 120% of the font size. In sub-headings, spacing may be the same as the font size, and spacing in major headings may be slightly smaller than the font size. Also leave enough space above sub-headings. You should lay out the text of publications primarily intended for screen reading in one column, and the line length should not exceed 80 characters. Fonts sans serif should be the preferred fonts.

Check at least these:

Partially sighted users

- The used font type is clear and legible.
- The text is large enough with sufficient spacing (see the instruction above).
- The contrast between the text and background is sufficient.
- The page structure is clear and logical.
- Use HTML elements, such as headings, correctly.
- The site structure does not break when zooming in the browser.
- The meaning of the content is not indicated only by colour.

Aim for these

Avoid these

Text is large enough with sufficient spacing

Abcdef
ghijklmn

Small font and spacing is too tight

Abcdefghijklmn
opqrstuvwxyzåö
abcdefghijklmnopqrstuvwxyzåö

Good contrast

Abc

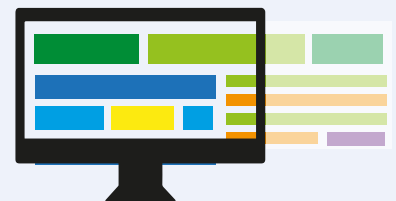
Low contrast

Abc

Page supports zoom



Site breaks when zooming



Colour is not the only source of information

Submit ▶

Colour is the only source of information



Font type is easy to read

Abc

Font type is hard to read

ABC



Auditory

Consideration of hearing-impaired persons

The deaf and the hearing-impaired must be taken into consideration when creating content particularly in the case of files with audio content. This means video and audio files in particular. If pre-recorded content is presented on a page, an alternative medium to use the content must be provided. Alternative media include, for example, sign language interpretation, video captions or readable text captions for the video content. Of these, the easiest to implement are video captions and adding text that describes the content to the page.

Information content in digital services must meet the accessibility requirements when the information content is available to users of the service. However, if time-based media is published in a digital service intended for the public, the service provider must make the pre-recorded time-based media accordant with the accessibility requirements within 14 days of the date of the first publication of the media or its republication.

Make sure that signal tones are not the only means of conveying messages to users. Signal tones are impossible to perceive for the deaf and hearing-impaired, and most hearing users also keep the computer loudspeakers muted, which renders signal tones inoperative.

If the content is pre-recorded, such as an interview, make sure that there is no disruptive noise in the background during the speech.

Check at least these:

Consideration of hearing-impaired persons

- Videos have captions or at least provide an explanatory text for reading.
- Content is not provided exclusively as an audio or video file.
- Content has been divided into clear entities.
- Visual means are used in presenting the content.
- Make sure that users have, if necessary, the possibility to make contact through other means than by telephone only.

Aim for these

Content is
in a legible
format



Videos
have
captions



Content
is visual



Several
possible
ways
to make
contact



Content
in clear entities



Avoid these

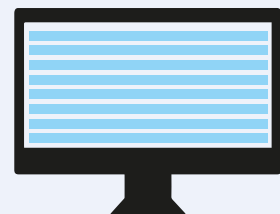
Content is
only in
a pre-recorded
format



Content
in videos
without
text
equivalent



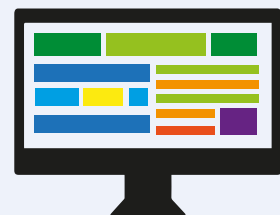
Too long
volumes of text



Telephone
is the only
means
of contact



Complicated
page structures
and menus





Physical and motor limitations

User assistance

A user may have a permanent or temporary disability, innate or acquired later in life, which limits their computer use. The limitation may have resulted from an illness, accident or even advanced age. Physical limitations make computer use more difficult but do not completely hinder it. In the most serious cases, advanced technical aids are needed to use a computer. A physical limitation may slow down the user considerably, so they may find difficult functions or unnecessary phases in content search particularly frustrating.

The range of physical and motor limitations is particularly wide. Such limitations include, for example, trembling, involuntary body

movements, incomplete moves, inability to carry out tasks that require precision or even missing limbs. Users are often unable to use websites with a pointer, such as a mouse, or they move the pointer with a keyboard or other tool. When a site can be used with a keyboard like blind persons do, it becomes more accessible to persons with motoric impairments as well.

When designing a site, ensure that its functions do not require great precision. This means that you should use elements that are sufficiently large and distinct, leave enough space between elements to distinguish them from each other and design the element layout well.

Check at least these:

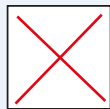
Physical and motor limitations

- Elements that can be selected by the user are distinct.
- Elements that can be selected by the user are sufficiently large.
- Elements, links, navigation links or form elements have not been placed too close to each other.
- The beginning of the main content (main header and lead paragraph) is high enough on the page to be seen without scrolling down on the page.
- All site functionality is accessible with a keyboard and without a mouse.
- Touch-screen functionality has been considered in the design and the elements are large enough to be selected with a finger.
- Do not set time limits for performing functions or ensure that there is enough time.

Aim for these

Avoid these

Elements
are large



Yes

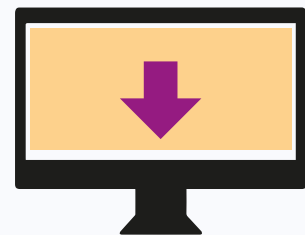
Controls
requiring
precision

☒ No

The beginning
of the main
content is
instantly visible



Site
requires
scrolling



Elements
have been
grouped
correctly and
loosely

Lorem ipsum

Dolor sit amet

Elements
are close
to each
other

Lorem ipsum

Dolor sit amet

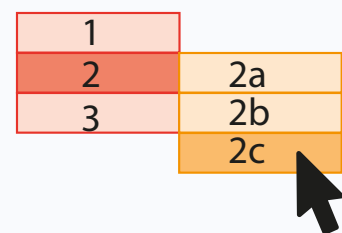
Lorem ipsum

Dolor sit amet

Site can be
navigated using
the Tab button
on the keyboard



Mouse hover
function and
auto-opening
selections



No time
limits
for functions

Lorem ipsum

Submit 

Time-limited
functions





Cognitive and linguistic limitations

Facilitating perception

Cognitive and linguistic impairments and various learning difficulties play a major role in accessibility. These impairments affect people's ability to understand information and learn new things. The impairments hinder comprehension of read or heard content.

It is noteworthy that such impairments do not necessarily affect a person's intelligence. It is a question of sensory and perception problems.

A website can take into account cognitive impairments by providing content in various formats. Acknowledging cognitive limitations is not limited to content but covers other design

elements on the website as well. The limitations should be taken into account so that the website can be used as effortlessly as possible. Users should not be bothered unnecessarily by moving content, changing images or animations.

Since cognitive limitations may be linked to different impairments with various degrees of severity, many instructions are available to acknowledge these limitations. All the instructions assist some users to some extent. There is no instruction which would be applicable to everyone.

Check at least these:

Cognitive and linguistic limitations

- Use clear, muted colours.
- Use plain and proper standard language.
- Do not use figures of speech, idioms or difficult expressions.
- Align text to the left, preferably in a single column.
- Avoid using underlining, boldface and italics in the text.
- Do not type in capital letters.
- Text is divided into short and succinct entities using sub-headings, lists and images.
- Say only one thing in each sentence.
- Support the text with images, symbols, videos or soundtracks.
- Highlight the most important content on the page visually.
- Links and functions that can be selected by the user are informative and understandable.
- The content is succinct and simple.
- If there are moving, changing or flashing elements on the page, users can stop or remove all of them.
- Users are given tips and instructions so that they can easily anticipate all the functions.

Aim for these

Avoid these

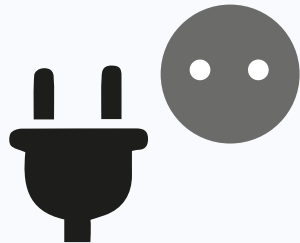
Align text
to the left



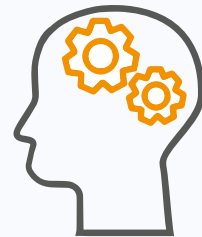
Italics,
underlining and
upper case

DON'T
DO THIS!

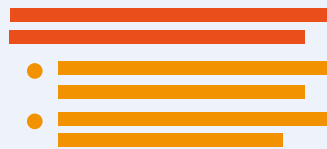
Support text
with images
and symbols



User is required
to remember
things from
previous pages



One topic
for one
paragraph



Large
text volumes



Links and
functions
can be
anticipated

Attach the file

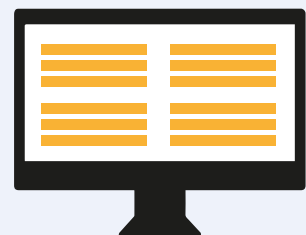
Generic links
that do not
convey
any information

Add

Highlight
the most
important
content



Content
does not
stand out
sufficiently





Cognitive and linguistic limitations

Linguistic limitations

Linguistic limitations can be most easily dealt with by producing good-quality content in plain language. This limitation applies to a very large number of users. Some users are in this group because of an illness or disability. However, the category also includes persons who do not have or cannot prove a disability. Users with another native language need to be able to read plain Finnish and benefit from simple language.

It has been estimated that there are approximately 500,000 persons in Finland who need simple language. Nevertheless, a much larger pool of people will benefit from content written in plain language.

In reality, many persons with Finnish as their native language benefit from plain language. For example, official language used in authority activities or administrative tasks may contain terms and concepts that are not understood well enough or in the same way by everyone.

The more difficult or important the topic being communicated, the simpler the language needs to be.

The fault with misinterpreting content does not lie with the reader, but the writer!

Check at least these:

Linguistic limitations

- Content is provided in plain language, using understandable expressions.
- The content has no special terminology used in the administrative sector, but common words.
- All the terms required to understand the topic are explained at the beginning of or later in the text.
- The text addresses only one topic at a time.
- The topics are addressed in a logical sequence.
- The topics are expressed concisely.
- Lists and distinct paragraphs are used in the text to clarify the topics at hand.
- Difficult topics are illustrated with examples.
- There are images or diagrams to support and enhance the text.
- There are enough sub-headings that describe the content well.

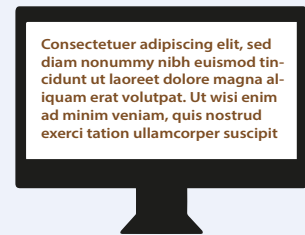
Aim for these

Avoid these

Use clear standard language



Special terminology and difficult expressions



Provide the content in other formats as well



Content that requires memorising



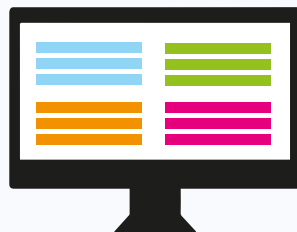
Show instructions and give examples



Industry-specific jargon



Break down the topic into small entities



Too much content in a bundle



Use sub-headings, write coherently



Illogical sequences of content





Documents shared as files

Besides the website guidelines presented hereinabove, the same guidelines regarding clarity of content, good linguistic presentation and visual appearance apply to documents that can be printed and shared as files. If a presentation is shared as a file, application-specific settings must be taken into account in order to make the content accessible.

In the Word, Excel and PowerPoint applications of Microsoft Office, you can create content in a way that is correctly identified by screen readers. You can also make accessible PDF files generated by these applications.

If an accessible PDF file is generated with the Adobe InDesign application, you must take that into account in export tagging.

File accessibility is based on website-like technology. The content consists of elements similar to a website. Firstly, follow all the instructions above regarding the clarity and visual look of the content. Secondly, use applications in accordance with the following guidelines.

Microsoft Word

Add alternative content for images as alt text and use the built-in styles in Word to format the document.

Microsoft PowerPoint

Add alternative content for images as alt text. Use built-in PowerPoint styles and elements as slide styles. Add descriptive captions for links. Make sure that the content slides are in the order in which they are intended to be read.

Microsoft Excel

Add alternative content for images as alt text. Add descriptive captions for links. Name tabs in a way that describes their content and remove empty tabs. Use a clear table structure and descriptive titles in columns.

Adobe PDF

When saving files in PDF format, select the option 'Best for electronic distribution' from the PDF options.

Check at least these:

Documents shared as files

- The content complies with all the requirements presented above in terms of clarity and visual appearance.
- You have used the built-in software features that affect accessibility.
- Image content is also provided in a text format.
- The document structure has been created using built-in styles in the application, not through visual formatting only.
- The PDF file has been saved in a format intended for electronic distribution.

Aim for these

Provide image content also in a text format

<alt="...">
Brief, concise description of the image content

Good contrast and the text size is large enough



Use the paragraph styles of the application

<heading>Abc...
<sub-heading>Def...
<text>Aceatet eos quist...

Font type is easy to read

Abc

Use the built-in accessibility features of the software

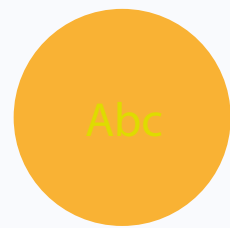


Avoid these

Information is only provided through images



Low contrast and the text size is too small



Self-made formatting

Abc
font-size: 24 pt

Font type is hard to read

ABC

Non-accessible documents



Number and incidence of persons with mobility and functional impairments in Finland

In Finland, there are many more people with different degrees of functional impairments than is generally believed. Many diseases and disabilities make it more difficult to use online content permanently or temporarily, and the range of functional impairments varies a lot. Many users have various functional impairments.

It is estimated that there are approximately 500,000 adults in Finland with insufficient literacy skills. 'Insufficient' means that these persons are unable to adequately comprehend the content they read, although they are able to read mechanically.

Through the digitalisation of services and self-service systems, these persons end up in a situation where they are unable to access the services to which they are entitled. In addition to these half a million users, an even larger number of users would benefit from plain language. A large number of average users also have occasional difficulties in understanding content on websites and in services, although they do

not have any functional impairments that would hinder their usage of these services.

Similarly, we can conclude that good visual design also benefits people with no visual handicaps or other functional impairments, such as the elderly.

Good design helps all users. It is particularly important to users with mobility and functional impairments.

It is difficult to estimate the exact number of users with special needs: the severity degree of the functional impairment may be mild or may not have been diagnosed for everyone while some users have a number of special needs. Thus, it is not possible to sum up the number of different types of disabilities. The same functional impairment affects many areas of accessibility at the same time.

Users with special needs can be grouped according to the type of impairment, for example.

Vision-related impairments: e.g., the blind, visually impaired, partially sighted, presbyopia

Auditory impairments: e.g. the deaf, hard of hearing

Other impairments related to perception:

e.g. dyslexia, cerebral palsy, autism, central nervous system diseases

Motoric impairments: e.g. cerebral palsy, multiple sclerosis, Parkinson, brain damage, rheumatic diseases, advanced age

Cognitive impairments, perception:

e.g. mental disability, autism, central nervous system diseases, dyslexia

Linguistic and comprehension-related impairments:

e.g. mental disability, autism, insufficient literacy, advanced age, immigrants

Roughly 1.5–2 million people would benefit from better accessibility.

Links

WCAG guidelines:

<https://www.w3.org/TR/2008/REC-WCAG20-20081211/>

Accessibility

Finnish Federation of the Visually Impaired <https://www.nkl.fi/fi/etusivu/saavutettavuus-esteettomyys>

Accessibility testing for online services:

Social enterprise Annanpura, www.annanpura.fi

Assesses whether texts are in plain language:

The Finnish Association on Intellectual and Developmental Disabilities,

Finnish Centre for Easy language, <https://selkokeskus.fi/in-english/>

Programme production in sign language

information on how you can, e.g. subscribe to Kuurojen video programme production in the sign language:

<http://www.kuurojenliitto.fi/fi/viestint%C3%A4/viittomakielinen-ohjelmatuotanto#.WV8nJellfIU>

The Finnish Association of the Deaf:

<http://www.kuurojenliitto.fi/en/>

Accessible listening environment,

The Finnish Hearing Association: <https://www.kuuloliitto.fi/toiminta/vaikuttaminen/kuunteluymparisto/>

Accessible listening environment brochure:

https://www.kuuloliitto.fi/wp-content/uploads/2017/03/esteen_kuunteluymprist_-esite.pdf

Counselling and materials on accessibility,

the Finnish Association of People with Physical Disabilities:

<https://www.invalidiliitto.fi/esteettomyys/esteettomyyskeskus-eske>

Online service counselling for the elderly,

the Finnish Association for the Welfare of Older People:

https://www.seniorsurf.fi/http://www.vtkl.fi/fin/toimimme/seniorsurf_toiminta/

Accessibility symbols of the City of Helsinki:

<https://www.hel.fi/helsinkikaikille/en/accessibility-symbols>

The word "Helsinki" is written in a bold, blue, sans-serif font. It is centered within a blue-outlined speech bubble that has a rectangular top and a pointed bottom.

Helsinki