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Web Accessibility

A complete overview on web accessibility and the European Accessibility Act.

Learn how the requirements will affect you, and let us give you a guide on how to implement accessibility onto your platform.

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Introduction

Why web accessibility matters now more than ever.

In our increasingly digital world, both public institutions and private companies have a duty to make digital content accessible to everyone. <u>In Denmark, approximately 20% of the adult population faces challenges in the digital society</u> due to cognitive or physical disabilities – such as impaired vision, hearing loss, color blindness, dyslexia, or reduced motor skills.

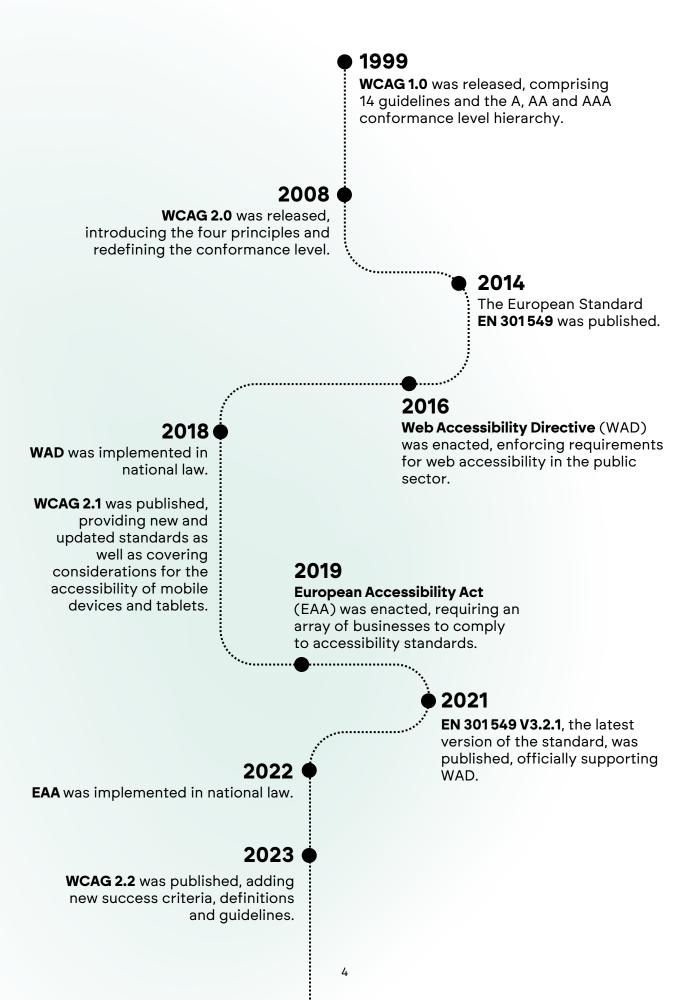
Across the European Union, one in four adults has a disability, making accessible websites essential for equal participation in society. However, as EU Member States began to legislate on accessibility independently, a patchwork of different national requirements emerged, leading to fragmentation. The European Accessibility Act (EAA) aims to dismantle these barriers by establishing common accessibility principles across the Union.

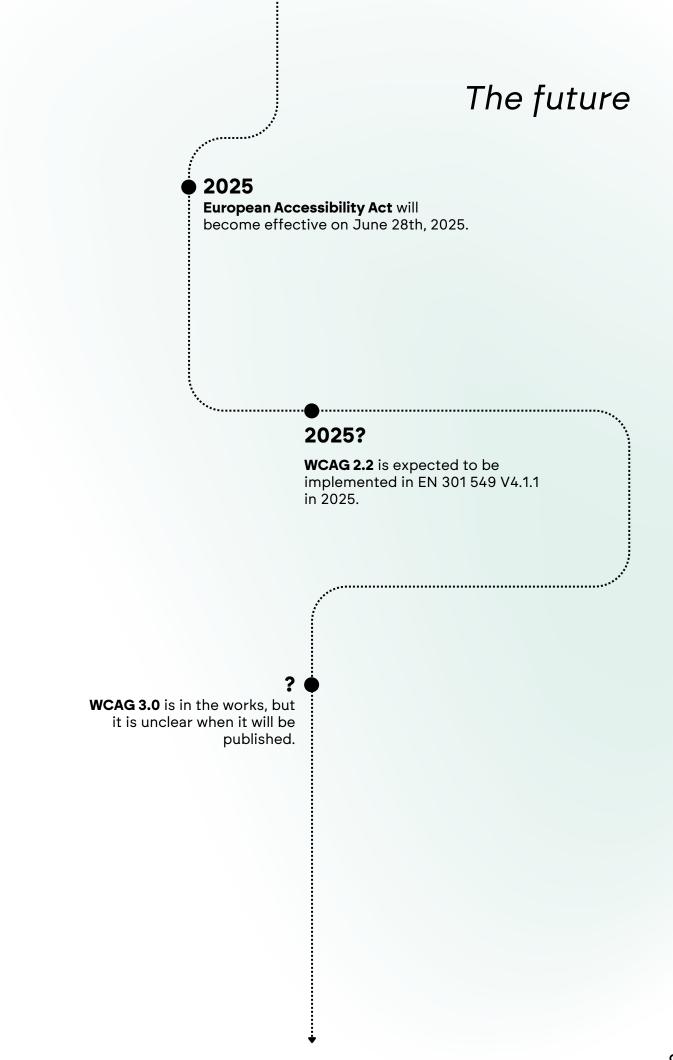
This whitepaper explores the critical aspects of web accessibility, delving into legislation like the EAA and standards such as EN 301 549 and WCAG 2.1/2.2. We'll highlight not only the legal obligations but also the significant value and opportunities that accessibility offers to businesses and society.

So why read on? Because web accessibility isn't just about compliance – it's about reaching a wider audience, enhancing user experience, and contributing positively to society.

Whether you're starting your accessibility journey or looking to refine your efforts, this whitepaper offers valuable insights and practical steps to help you navigate the complexities of web accessibility. Let's take this important step together toward a more inclusive digital future.

Timeline





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Understanding the web accessibility law

Let's face it – web accessibility laws can seem like a maze of technical terms and confusing abbreviations. But don't throw in the towel just yet! We're here to break it down for you, cutting through the clutter to focus on what really matters.

The Web Accessibility Directive (WAD) primarily targets public sector websites and applications. However, the game is changing with the introduction of the European Accessibility Act (EAA). By June 2025, a wider range of private companies will also be required to implement accessibility measures.

These businesses must comply with the standards set out in EN 301 549, a harmonized European standard ensuring consistency in accessibility laws across the EU. The latest version, EN 301 549 V3.2.1, is primarily based on the Web Content Accessibility Guidelines (WCAG) 2.1 published by the World Wide Web Consortium (W3C). However, EN 301 549 doesn't stop there – it also includes additional requirements beyond the WCAG recommendations, covering aspects like software accessibility and hardware interfaces.

Still with us? Great! Let's unpack this a bit more on the following page.

The EAA specifically covers products and services including:

- Computers and operating systems
- ATMs, ticketing and check-in machines
- Smartphones
- TV equipment related to digital television services
- Telephony services and related equipment
- Access to audio-visual media services such as television broadcast and related consumer equipment
- Services related to air, bus, rail and waterborne passenger transport
- Banking services
- E-books
- E-commerce



As stated in the timeline, W3C has already published an updated version of their recommendations called WCAG 2.2. These updates are expected to be incorporated into a new version of EN 301 549 sometime in 2025. So, it's a smart move to just bite the bullet and start aligning with these upcoming requirements now.

For instance, <u>WCAG 2.2</u> introduces new guidelines regarding the size and spacing of interactive elements on your website – think buttons and links. Of course, this requirement is designed to help people with disabilities such as shaky hands and arthritis.

But let's be honest – we've all felt the frustration of having fingers that seem too big when trying to press the tiny buttons on our smartphone screens.



Compliance levels

You might have heard about different "levels" of compliance. Here's the lowdown:

Level A: This is the basic entry point – the minimum level of accessibility. It addresses issues that have the biggest impact on accessibility and are the easiest to fix.

Level AA: This is the mid-tier level, and it's where EN 31 549 requires websites to be. It includes all level A and level AA criteria, addressing a wider range of accessibility issues.

Level AAA: This is the gold standard – the highest level of accessibility. It includes all level A, AA, and AAA criteria, but achieving this level can be challenging and isn't always necessary or feasible for all websites.

By meeting all level A and AA criteria, your site is considered Level AA compliant, which is the standard required by EN 301549.

The 4 principles of accessibility

The web accessibility chapter of EN 301 549 is based upon four main principles of accessibility. If you understand these four simple yet important principles, you have already come far on your journey towards full accessibility. Known by the acronym POUR, they stand for perceivable, operable, understandable, and robust.



Perceivable

First up is perceivable. This means all information and user interface elements must be presented in ways that people can perceive with at least one of their senses. In plain English, nothing should be invisible to all users. For example, providing text alternatives for images (alt text) allows people who are blind or have low vision to understand what's displayed through screen readers.



Operable

Next is operable. Your website's navigation and interactive elements should be usable by everyone, no exceptions. This includes making sure that all functions are accessible via keyboard navigation, not just a mouse. Some users can't use a mouse due to mobility impairments, so the keyboard becomes their steering wheel.



Understandable

Third on the list is understandable. This principle is all about clarity – both in the content you present and how users interact with your site. For instance, when you provide clear labels and instructions for forms or buttons, you help users know exactly what to do.



Robust

Last but not least is robust. This ensures your content is compatible with a variety of technologies, including assistive tools. For example, websites should be designed so that any important messages or updates (like confirmations or error alerts) are automatically announced to users who rely on assistive technologies such as screen readers. This ensures that all users are kept informed about what's happening on the website in real-time.

Who benefits from web accessibility?

You might be thinking, "So, who really gains from all this accessibility stuff?" Well, the short answer is: **everyone**!

Officially, laws such as the Web Accessibility Directive and European Accessibility Act are designed to make web content more accessible for people with disabilities. We're talking about a wide range: visual, auditory, physical, speech, cognitive, language, learning, and neurological disabilities. According to <u>Eurostat estimates</u>, one in four adults in the European Union has a disability. For persons with disabilities, accessibility isn't just a nice-to-have – it's a must-have for participating in society on equal footing.

But here's the kicker: the benefits of web accessibility spill over to just about everyone else, too. The guidelines often make web content more user-friendly for older people whose abilities might be changing as they age. And let's be real – we've all been there, squinting at our screens in low light or struggling to hear audio in a noisy environment. Accessible design can make those everyday annoyances a thing of the past.

As EU Member States began rolling out their own accessibility laws over the past few years, things started to get a bit messy with different rules here and there. The EU recognized the need for a harmonized standard to remove barriers created by these divergent national laws. Common standards don't just benefit persons with disabilities – it also makes life easier for many businesses by providing a clear set of rules to follow.

The Persona Spectrum

Microsoft has created the Persona Spectrum in order to understand the scope of disabilities and to help foster empathy and better inclusive solutions.



Here, you can find Microsoft's guidelines for inclusive design.

Advantages of implementing accessibility

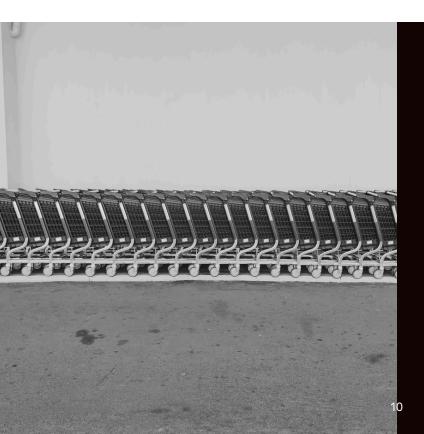
In Kruso we like to see the glass half full – and when it comes to web accessibility, the opportunities are just waiting for you! The benefits of ensuring accessibility goes way beyond compliance, and here are some examples:

Enhance the user experience

Let's face it, an improved user experience is never a bad thing. Customers will benefit from a wider and more socially inclusive offer being able to fully participate in a highly digitalized society. When people feel valued and included, they're more likely to trust and engage with your brand. Plus, showing that you care about accessibility sends a positive message about your company's values, boosting your reputation in the eyes of customers and stakeholders alike.

Unlock a hidden market

For e-commerce businesses it is always a great idea to reach a wider client group. With 1 in 4 European adults living with a disability, imagine the huge purchasing power you are missing out on! Don't leave money on the table by making it tough for millions of people to access your site.



7 % of Danish adults feel limited in purchasing things online. That is more than 350.000 people in Denmark alone.

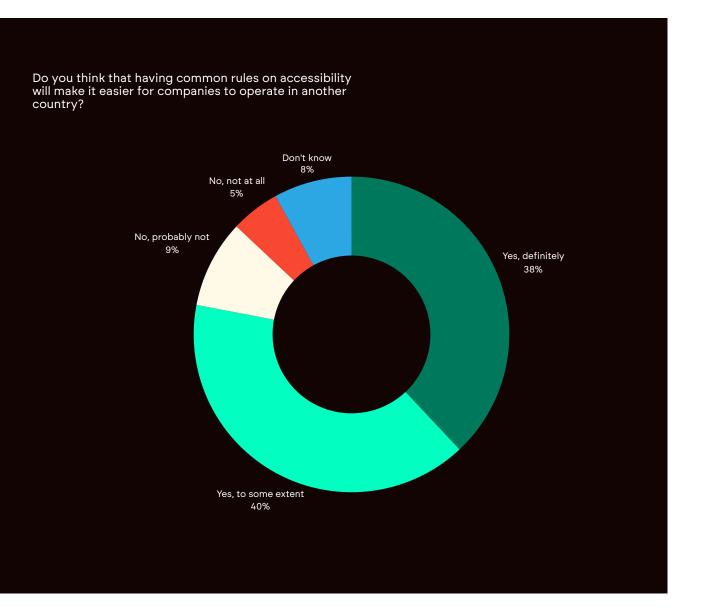
Give your SEO a boost

Making your site accessible isn't just good for users – it's great for Google, too. If a screen reader can navigate your content, so can search engines. Well-structured content, descriptive alt-text for images, and video transcriptions don't just help disabled users; they make your site more understandable to everyone – including Google's bots. Even something as simple as sufficient colour contrast can make a difference for search engines being able to identify the text. It's like killing two birds with one stone!

Easier trading across the EU

Common accessibility standards mean smoother sailing when doing business across EU countries. You'll have the confidence that your products and services can reach every corner of the Union without hitting any roadblocks. In addition,

78 % of Europeans think, having common rules on accessibility in the EU will make it easier for companies to operate in another country.



A shared responsibility

At Kruso, we know that making a website accessible isn't a one-person show – it's more like a well-orchestrated symphony. Everyone from backend developers to content editors has a role to play. After all, if the backend developer doesn't set the stage right, the frontend designer can't put on a good show.

We are not going to list all 50 web accessibility requirements in EN 301 549, but we are going to give you a couple of examples to give you an idea of the extent of web accessibility. If you want to read the entire standard, <u>here</u> is the newest version. For now, let's dive into how each role in your company can pitch in.

UX design and frontend

Sufficient colour contrast:

Ever tried reading grey text on a light grey background? It's like finding a needle in a haystack! Ensuring strong colour contrast isn't just for those with visual impairments; it's for anyone who doesn't want to squint at their screen.

Keyboard-friendly navigation:

Not everyone navigates the web with a mouse – in fact, some users rely solely on their keyboard. By making all interactive elements accessible via keyboard, we ensure all users can access the platform.

Avoid flashy distractions:

Flashing images and moving elements might seem cool, but they can be a real headache – literally! For some users, too much motion can trigger discomfort or even seizures. Let's keep the bells and whistles in check and focus on delivering content without the animation overload.

Content editing

Alt text for images:

A picture might be worth a thousand words, but without alt text, it's just a blank canvas for those using screen readers. By adding descriptive alt text to images, we ensure that all users can 'see' what's on the screen, painting vivid pictures with our words.

Use clear language:

Let's skip the jargon and speak understandable English (or any language we're using). Using a well-structured language without unnecessary foreign words or complex terms makes content accessible to everyone. But no worries, this requirement doesn't mean you have to cut out all personality from your text, just make sure it actually makes sense.

Logical link texts:

"Click here" is so last decade. Instead, let's use link texts that tell users exactly where they're going, like "Go to checkout" or "Contact our support team". It's like providing signposts on a road trip – everyone knows what to expect at the next turn.

Backend development

Semantic HTML coding:

Using the right HTML tags – like <header>, <nav>, and <footer> – helps screen readers and other assistive technologies understand the layout and meaning of your content. It's like giving your website a roadmap so everyone knows where they're headed.

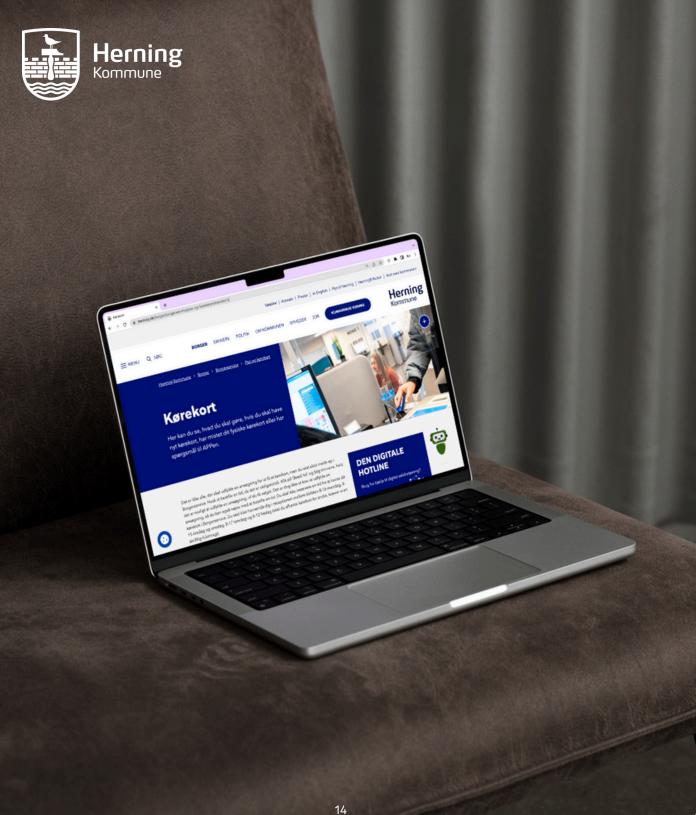
Design APIs with accessibility in mind:

APIs are the messengers between the server and the user interface. If they don't speak the right language, the message gets lost in translation. By designing APIs that support accessibility features, we make sure that data is delivered loud and clear to everyone who needs it.

If you keep these requirements at the top of your minds every time you create new content on your platform, you have already come a long way. Remember, accessibility is a constant work in progress, not a finish line you can cross once and for all.

Case: Building an accessible platform for Herning Municipality

Located right in the middle of Denmark, Herning Municipality serves a community of around 90,000 inhabitants. They found themselves in need of a new digital platform that could effectively support both their employees and citizens. That's where Kruso came in. We listened closely to their needs and rolled up our sleeves to build a climate-friendly and ambitious design that meets best-in-class requirements for web accessibility.



The challenge: Modernization with accessibility at its core

Herning Municipality needed a significant update to their digital platform – not just a fresh design but a technical overhaul as well. With over 2.5 million page views annually, the website had to be exceptionally user-friendly for both citizens and the municipality's content editors.

Their primary goals were clear:

- Enhance usability for all users
- Introduce a new, modern design
- Maintain a strong, unwavering focus on web accessibility in compliance with WCAG 2.1 guidelines

Introducing Publify

As part of our solution, we utilized Publify, a user-friendly, secure, and welltested web platform developed by Kruso specifically for public organizations. Publify is based on the Umbraco CMS and adds a range of specialized functions that public organizations typically require for digital communication and services.

Key features of Publify:

- Standard solution with flexibility: Publify includes the most important components for a municipal website. At the same time, it allows each municipality the flexibility to customize individual features and create a unique design that supports their identity.
- Collaborative development: Municipalities using Publify can collaborate to develop new modules and features, sharing costs and benefits, and continually improving their web solutions.
- Built-in web accessibility: Importantly, web accessibility is built into Publify as a standard. Accessibility considerations are embedded from the codebase up, ensuring compliance with WCAG 2.1 guidelines and EN 301 549 standards.
- Climate-friendly design: Publify is designed to be environmentally conscious, minimizing the ecological footprint of the municipality's web presence.

We have worked with a significant number of Danish municipalities, many of whose websites we have built on Publify – including Herning Municipality. By choosing Publify, they benefited from a platform where accessibility and usability are not afterthoughts but foundational elements.

Our solution: Integrating accessibility from the ground up

At Kruso, we believe that accessibility should be considered from the very beginning of any project. For Herning Municipality, we developed a solution built on the Umbraco open-source CMS. This platform offered the flexibility needed to incorporate various integrations and tailor the website specifically to the municipality's needs, all while ensuring an outstanding user experience for content editors.

To ensure the website met the rigorous guidelines of the European standard EN 301549, we embedded accessibility into every stage of the project.

Collaborating with accessibility experts

To make sure accessibility was deeply embedded in every aspect, we collaborated with experts from Inklusio (now part of Useit Denmark) and Special Minds IT. Special Minds IT brings unique insights by employing individuals with autism, providing valuable perspectives on usability. Useit conducts user testing with people who have different functional impairments, ensuring that the digital solutions are truly accessible to all.

While we regularly utilize automated tools like SiteImprove to test and enhance accessibility, the partnership on Herning Municipality's platform highlighted the immense value of involving experts for manual reviews. The insights of Inklusio and Special Minds IT offered a new depth of understanding what features in fact works best for users when it comes to web accessibility.

Implementing EN 301 549 standards

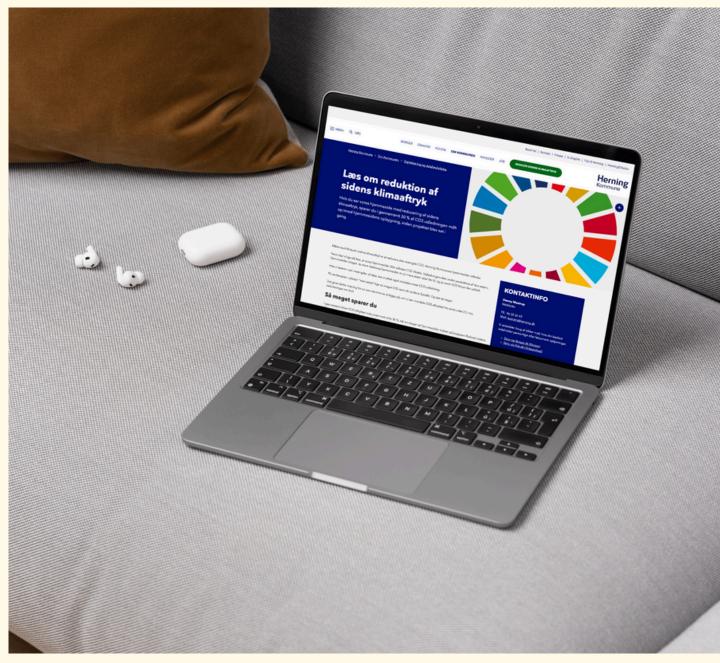
Throughout the development process, we focused on several key areas to meet and surpass the principles and guidelines of accessibility:

- Perceivable content: We provided text alternatives for all non-text content, ensuring that images and multimedia are accessible to users with visual impairments. We also implemented proper color contrast ratios to make text and images easier to identify.
- Operable interfaces: All functionalities are accessible via keyboard navigation, which
 makes the website usable for individuals who cannot use a mouse. We also avoided
 design elements that could cause seizures or physical reactions, adhering to
 guidelines on flashing content.
- Understandable information: We used clear and simple language throughout the site, making content more accessible to people with cognitive disabilities. Instructions and labels are straightforward, helping users to navigate and interact with the website effortlessly.
- Robust technology: By using clean, semantic HTML code, we ensured compatibility with various assistive technologies like screen readers.

The result: A benchmark for an accessible digital future

The end product is a climate-friendly and highly accessible digital platform that meets rigorous accessibility standards. Citizens of Herning Municipality can now navigate the website with ease, regardless of any disabilities they may have. The site not only sports a fresh, modern design but also offers robust functionality tailored to both users and content editors.

By thinking about accessibility from the get-go and partnering with specialists, Herning Municipality has set a model that other public and private institutions can follow. Together, we've contributed to a more inclusive digital future, proving that when you prioritize accessibility, everyone wins.



Top 5 most common mistakes in web accessibility

by Anders Frey Birkmose, CIO and Partner in Kruso

After years of working with web accessibility on public platforms, I've noticed the same mistakes happening repeatedly. They're often easy fixes, but many organizations don't know where to start. Here are five of the most frequently mistakes and how to avoid them:

Treating accessibility as something we fix at the end of the project Web accessibility isn't easy, and it can be cumbersome to repair it, if the website hasn't taken accessibility seriously when building it. Yes, it is possible to add an extra layer of code to fix the errors, but if the website was built correctly from scratch, you wouldn't need to.

Solution: Make accessibility a criterion in the early design phase of building your website.

Over-reliance on automated testing

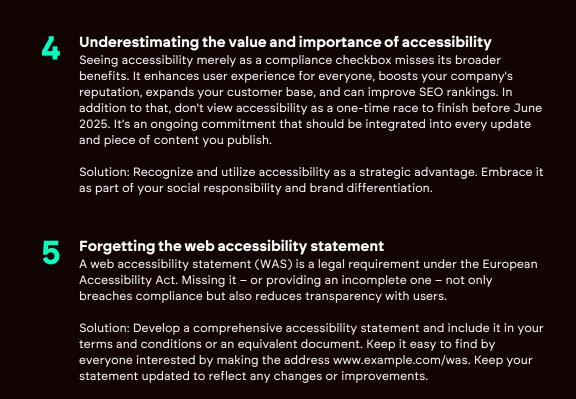
Automated tools are a great place to start, but they catch only about 50% of accessibility issues. They miss nuances that require human judgment, like the context and clarity of link text or the appropriateness of alt descriptions.

Solution: Combine automated tests with manual reviews. Conduct user testing with people who have disabilities. External experts can provide valuable insights that internal teams might overlook.

Neglecting to educate content editors

Even if your site's code and design are accessible, untrained content editors can introduce barriers. They're often responsible for adding images, videos, and text that need to be accessible as well, but they are often forgotten in the training process, perhaps because you have many content editors all uploading content to your website.

Solution: Make accessibility a shared responsibility across all departments. Train your content editors on accessibility best practices. Teach them about descriptive alt text, proper heading structures, and creating accessible documents and forms.



Web Accessibility Statement

Your accessibility statement should include:

- A general description of the service in accessible formats
- Necessary explanations for understanding the service
- A description of how accessibility requirements are met

This information must be publicly available in both written and oral formats, accessible to people with disabilities.

Avoiding these common mistakes requires a proactive, organization-wide approach. Accessibility isn't just about meeting legal obligations; it's about providing equal access and enhancing the user experience for all. By integrating accessibility into your culture and processes, you contribute to a more inclusive digital world.

Step-by-step guide: How to get started

Navigating the path to web accessibility can feel daunting but breaking it down into manageable steps makes the journey much more approachable. Here's a straightforward guide to help you kick-start your accessibility efforts:

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Educate yourself and your team

Understanding the fundamentals is crucial.

Dive into resources:

- There is plenty of information on accessibility available online, so just start exploring content from reliable sources! A great place to start could be the free online course from W3C, the organisation behind the WCAG guidelines: Introduction to Web Accessibility.
- Familiarize yourself with the Web Content Accessibility Guidelines (WCAG).

Why it matters:

- A solid grasp of accessibility principles ensures everyone understands the importance.
- By reading this whitepaper, you're already making great strides!



Assess your current situation

Identify where your company stands regarding accessibility.

Conduct an audit:

- Use automated tools to perform an initial assessment of your website.
- Keep in mind that automated tests catch only about 50% of accessibility issues.

Involve real users:

- Engage users with disabilities to provide feedback.
- This hands-on approach uncovers insights that tools might miss.
- Estimate the scope:
- Determine whether you're starting from scratch or if some guidelines are already met.
- Understanding the workload helps in planning and resource allocation.



Make a strategic plan

Now that you have discovered your gaps, outline a roadmap for implementing accessibility improvements.

Prioritize changes:

- Focus on critical areas like checkout processes or key customer interactions.
- Address issues that impact the largest number of users first.

Delegate responsibilities:

- Assign tasks across different departments developers, designers, content editors and the marketing division all need to be involved.
- Sometimes, a simple spreadsheet goes a long way make an Excel sheet to help you track progress and accountability.

Set realistic timelines:

• Break down the plan into achievable milestones leading up to and beyond June 2025.



Involve all stakeholders

Accessibility is a team effort.

Continuously educate your team:

- Ensure everyone understands how accessibility affects their role.
- Provide training sessions or workshops if needed.

Encourage collaboration:

- Foster open communication between departments to prevent unnecessary duplicate work.
- Share successes and challenges to keep everyone motivated.



Recognize it as an ongoing process

Start making the necessary changes, keeping in mind that accessibility is an ongoing commitment.

Iterative testing:

- Continuously test updates both automatically and manually.
- Integrate into daily operations:
- Make accessibility a standard part of your content creation and development workflows as well as your onboarding of new employees.

Stay informed:

- Keep up with updates to WCAG guidelines and industry best practices.
- Adjust your strategies accordingly to remain compliant and user-friendly.

Kruso is here to help you navigate

We hope we haven't scared you off with all this information. Don't worry, we're here to help you every step of the way. At Kruso, making websites accessible isn't just something we do; it's what we excel at.

Why choose us?

We've built countless websites for public institutions, including municipalities and government agencies. In fact, we developed the website for the Danish Agency for Digital Government, the authority responsible for overseeing these accessibility regulations in Denmark.

Our front-end developers are highly experienced in web accessibility. For them, integrating accessibility features is second nature – a routine part of their development process.

We know that not all existing code can be tweaked to meet accessibility standards. Sometimes, starting fresh is the most efficient and cost-effective solution. We're adept at assessing what's best for your specific situation.



Our goal is to demystify web accessibility and make it attainable for your organization. With our expertise and collaborative approach, we're confident we can help you achieve full compliance while enhancing the overall user experience of your website.

Your options with Kruso

We recognize that no two businesses are the same, and each organization has unique needs and challenges. We are committed to tailoring a plan that's just right for you, but here are three different approaches to give you something more tangible to take as your starting point.

Expert assessment

What we do: Provide a professional evaluation of your current website's accessibility status and offer actionable optimization suggestions. Ideal for: Organizations that want to understand where they stand and get guidance on immediate improvements.

How it helps: We'll conduct software-based evaluations using tools like Siteimprove to assess your site. But we don't stop there – we incorporate manual reviews to catch issues that automated tools might miss. This combined approach ensures a more comprehensive understanding of your site's accessibility.



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Redesign with accessibility in mind

What we do: Create an entirely new design for your website, integrating accessibility from the ground up.

Benefits: When accessibility is considered from the start, it's much easier to implement effectively. Upgrading older designs can be challenging and sometimes more costly than starting anew.

Ideal for: Those ready for a fresh look and improved user experience, ensuring compliance without the headache of retrofitting old code.

Our approach: We embed accessibility into every phase – from design to development – using best practices like ARIA tags and semantic HTML. We also train your team on how to maintain accessibility moving forward.

Comprehensive overhaul with expert testing

What we do: Develop a completely new website design, collaborating with external experts who specialize in accessibility testing. We can involve users with disabilities, like individuals who are blind, to test your site – offering insights you can't get from automated tools alone.

Why it matters: The rules for accessibility can be interpreted in multiple ways, and there are often gray areas that require expert judgment. Automated programs catch only about 50% of accessibility issues. Human testers can identify subjective issues that machines miss, such as the meaningfulness of alt text descriptions. By partnering with external specialists, we ensure that these gray areas are thoroughly addressed, providing you with the highest level of compliance.

Ideal for: Organizations seeking the highest level of assurance that their website is fully accessible and compliant with all regulations.

Additional support: We provide training for your teams, prepare documentation, and offer ongoing support to ensure your site remains accessible as standards evolve.

Ready to take responsibility?

Web accessibility is more than just a legal requirement – it's an opportunity to make the digital world more inclusive and user-friendly for everyone. We know that taking the first steps can feel overwhelming, but you don't have to navigate this journey alone.



Key points to remember

Start early

June 2025 might seem far off, but implementing accessibility changes takes time. Getting started now can save you headaches down the line.

Understand the standards

Familiarize yourself with EN 301 549 and WCAG 2.1/2.2 guidelines. Knowing what's expected makes compliance much easier.

Think ahead

With WCAG 2.2 on the horizon, aligning with these upcoming guidelines now can future-proof your website.

Accessibility benefits everyone

While these standards aim to assist those with disabilities, the improvements often enhance the user experience for all visitors.

If you're interested in learning more about web accessibility and the European Accessibility Act, don't hesitate to reach out.



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