

# Accessibility in Thieme products: Implementation of the European Accessibility Act and the Americans with Disabilities Act

# **Contents**

Accessibility in Thieme products: Implementation of the European Accessibility Act and the Americans with Disabilities Act	1
Introduction	2
Definition of accessibility	2
Legal background	2
European framework and national law	2
Positioning on EAA and BFSG	2
Restriction to consumer transactions	3
Classification of the Thieme target groups	3
Global legal requirements and US law	4
Accessibility in the Thieme context	5
Consumers and consumers	5
Commercial customers	5
Overarching view	5
Barriers due to visual restrictions	6
Barriers due to auditory limitations	7
Barriers due to other physical limitations	8
Barriers due to mental limitations	8
How we want to achieve accessibility	ç
Accessibility: a fixed item on the Thieme agenda	9
How we break down barriers	9
Two-senses principle & WCAG standard	9
Removing barriers in digital products1	C
Digital products in the US focus	1
eBooks1	2
eJournals1	3
Conclusion 1	4



# Introduction

Thieme is committed to better medicine and more health in life. We improve health and healthcare by providing the right information at the right time and in the right place. This also includes making our services accessible to people with visual, auditory, motor or cognitive impairments. We are therefore continuously working to improve the accessibility of our digital products and services.

This paper is aimed at anyone who would like to know how Thieme takes the topic of "accessibility" into account for its services. It is addressed not only to employees, but also to external interested parties such as authors, publishers, customers, self-help associations, specialist organizations or service providers of Thieme.

# Definition of accessibility

Section 4 of the Disability Equality Act (BGG) defines the term "accessibility". According to this, "information processing systems, acoustic and visual information sources and communication facilities" are barrier-free if they "can be found, accessed and used by people with disabilities in the generally accepted manner, without particular difficulty and generally without outside help".

# Legal background

# European framework and national law

With the "European Accessibility Act" (EAA), the European Union wants to ensure that digital services can be used by all people - even if the users are physically or mentally impaired. In this way, obstacles that can stand in the way of a self-determined lifestyle are to be removed. The EAA is being implemented in Germany by

- the **Accessibility Improvement Act** (BFSG) and
- an associated, concretizing **ordinance** to the Barrier-Free Accessibility Reinforcement Act (BFSGV).

Like all other economic players, Thieme is currently in a transition period that will end shortly: From June 28, 2025, Thieme will be legally obliged to make e-books and "services in electronic commerce" (explicitly and with the highest priority are web stores) accessible to end consumers.

## Positioning on EAA and BFSG

Thieme expressly welcomes the aforementioned legal development. The new legal framework directly contributes to our goal of being able to provide the right information in the right place at the right time. We are actively working to remove barriers in our products and services and achieve better usability for our customers and customers. Thieme shares the legislator's intention to remove as many barriers as possible for people with disabilities that stand in the way of using our products and services. We are therefore particularly aware of the enormous opportunities that the new legislation offers our customers. However, as a commercial enterprise, we also need to



# strike a good balance between legal requirements, economic feasibility, our purpose and our responsibility as Thieme for society

#### Restriction to consumer transactions

The scope of application of the BFSG is limited to consumer transactions. Consumers are defined as persons who purchase Thieme products privately and not as part of their commercial or freelance activities. Services and products for our commercial target groups therefore do not fall under the legal requirements of the Barrier-Free Accessibility Reinforcement Act. It is therefore important for Thieme to carefully examine the handling of these products and services in order to maintain a good balance between the accessibility of our products and the economic implementation of the requirements, as described above.

## Classification of the Thieme target groups

Thieme primarily addresses a commercial audience that uses our products and services with a particular interest in their duties. Essentially, these are medical practitioners, students of human medicine or chemistry, psychotherapists, members of healthcare training professions and veterinarians.

In addition, Thieme also explicitly targets some products at private individuals who use our products as consumers or patients. Our main target groups can be clustered and categorized as follows:

**Doctor of Human Medicine** 

Commercial customers

Members of medical training professions

By this we mean in particular

- Members of the nursing professions
- Emergency paramedics
- Midwives
- Physiotherapists
- Alternative practitioners

They are categorized as commercial customers.

**Doctor of Veterinary Medicine** 

Commercial customers

*Researchers* and teachers in chemistry (Thieme Chemistry)

Commercial customers

Researchers and teachers in human medicine

Commercial customers

Researchers and teachers in veterinary medicine

Commercial customers



#### Advice for customers (TRIAS-Verlag)

The information services are used in a private context and **the target group is classified as consumers**.

#### *Patients* (Thieme Compliance)

Even though Thieme initially sells products such as information sheets and educational software to commercial customers, the content we create is aimed at patients who need to be informed before procedures. This is therefore a **target group that** is **classified as a consumer.** 

#### *Patients* (Thieme TeleCare)

One focus is on telemedical health programs for chronically ill patients. This **target group is** also **classified as consumers**.

#### Readers with an interest in *medicine* (Communications)

Some of the information is produced by Communications, Thieme's own PR agency for specialist societies, on behalf of specialist societies. They are aimed at people with an interest in medicine who want to find out about their illnesses (e.g. people with diabetes). **The target group is classified as consumers.** 

#### Students in medicine, nursing and midwifery sciences

Students are generally regarded as consumers by law. In the context of Thieme's offerings, students of medicine, dentistry, veterinary medicine, nursing and midwifery are a special target group: they are the only consumers within the meaning of the law who have a need for eBooks for commercial customers due to their educational situation. In the reality of clinical training, for example, doctors and medical students form a single unit: as an integral part of the healthcare system, students work for training purposes in everyday hospital and practice life and are dependent on the exchange with our commercial customers. Students (just like doctors) need up-to-date, evidence-based specialist information when they are involved in commercial healthcare - and therefore acquire this for a commercial context.

This is why **Thieme** does not **treat students** like typical consumer customers (e.g. at TRIAS), but as "**prospective commercial customers**"

In order to continue to promote the acquisition of knowledge for the next generation of medical professionals, Thieme has decided to **distribute** eBooks **for students without restriction** until further notice, even if they are still classified as "consumers" for professional biographical reasons.

#### Chemistry students

As in medicine or nursing, chemistry students also have a decidedly professional, quasi-professional interest in specialist chemical information. This professional interest can no longer be attributed to the consumer-typical private sphere that the legislator may have had in mind when classifying students. Chemistry students are already active on a commercial level in the context of university and private sector work and are therefore treated in the same way as medical students.

# Global legal requirements and US law

Legal accessibility rules based on the **Americans with Disabilities Act** (ADA) have been in place for some time in our international, English-speaking area. **Title II** of the ADA, which was published



in 2024, ensures that people with disabilities have equal access to public services, programs and activities offered by state and local authorities. This means that public entities such as universities and hospitals are required by law to ensure the digital accessibility of the products they make available to their members or the public. This also applies to digital products such as eBooks or platforms that these institutions purchase or license from Thieme. Thieme's **US license customers** have a very strong interest in protecting themselves legally and **require compliance** with the WCAG criteria by the beginning of 2026 as a condition for license renewals.

# Accessibility in the Thieme context

#### Consumers and consumers

We experience the entire spectrum of conceivable barriers among our customers classified as consumers, e.g. cognitive, auditory, visual or even physical limitations. Thieme is therefore actively working to maintain and consistently improve the accessibility of our products and services aimed at these target groups.

## Commercial customers

The situation is different in our commercial target groups. **Here, legal requirements ensure that our customers are "not unfit to exercise the profession in terms of health"**, specifically these are, for example

- Federal Medical Code for the granting of a license to practice medicine,
- Nursing Professions Act,
- Midwifery Act,
- Law on the professions in physiotherapy (Masseur and Physiotherapist Act, MPhG),
- Implementing ordinance to the Heilpraktikergesetz or
- Emergency Medical Technician Act.

These legal framework conditions have a direct impact on the composition of our target group. In the following, we therefore want to address various restrictions and place them in the context of our products and services with regard to our commercial customers.

#### Overarching view

People working in patient care are often physically restricted in a variety of ways. The limitations can occur as a chronic illness (e.g. diabetes, asthma or mental illness) or - although this is much rarer - as a disability (e.g. due to paraplegia or limb deformities). We were unable to obtain reliable figures on the proportion of physically disabled employees in clinics and practices. However, personal discussions with associations and chambers suggest that, overall, a rather small proportion of our clients are "very likely to be prevented from participating in society on an equal footing for longer than six months" because "their physical and health condition deviates from that typical for their age" <sup>1</sup>. Nevertheless, there are initiatives within our target groups that are committed to helping people with physical disabilities and with whom we spoke personally during our research.

<sup>&</sup>lt;sup>1</sup> Definition of "disability" according to SGB IX, § 2 paragraph 1



#### Health suitability for professional life

Legal requirements ensure that our customers are "not unfit in terms of health to exercise the profession", see above.

#### Health suitability of students

We were **unable to** find **any legal requirements regarding physical aptitude for studying medicine**. However, from the time of applying for a study place, the entire procedure is based on the fact that medical students are not blind and that a possible visual impairment is not more severe than the usual selection procedure allows. Almost all universities use the so-called "Test for Medical Degree Programs" (TMS) in the selection process. **Visual skills are essential** for the **majority of the tasks** here. For example, "visual and spatial imagination" and general "visual skills" are explicitly tested. Compensation for disadvantages can be granted in the form of test acceptance - but the content requirements are not reduced.

#### Barriers due to visual restrictions

#### The user's visual acuity is primarily relevant for the use of our digital products and e-books.

For cases of impaired vision, many technical precautions have long been in place to reduce barriers (e.g. adjusting the font size and magnification options for text and visual content such as graphics, photos or videos, as well as changes to screen brightness, contrast or color). Based on customer feedback on our products, we **consider these options to be largely sufficient for users with impaired vision** - further optimizations are currently underway in preparation for the entry into force of the BFSG on 28 June 2025.

#### Blindness/visual impairment

The discussion about a "hierarchy of the senses" shows that the importance of vision for the human spectrum of action is undisputed and highly valued. This is particularly true for our commercial target groups: **Sight is of fundamental and, unfortunately, irreplaceable importance for nursing or medical work.** Without sight, it is not possible to assess the color of lips, the extent of an injury or a patient's facial expressions; neither time-critical reactions (e.g. quickly supporting a patient to prevent a fall) nor simple standard activities (e.g. taking blood) are possible without sight. People without sight are therefore hardly identifiable in our commercial target groups - this is a central reason why Thieme is not providing accessibility for people with visual impairments in its commercially oriented products and services by means of descriptive alternative texts for illustrations until further notice. Further reasons for this are outlined below.

#### Special case: Alternative texts for medical illustrations

After extensive internal and external research (with legal advice), we came to the sobering conclusion for the commercial target groups that Thieme has virtually no options for reducing barriers through alternative texts. There are two main reasons for this:

Thieme customers who are involved in practical patient care become incapacitated as soon as their visual abilities are so severely impaired that the use of alternative texts becomes necessary. Legal barriers prevent their continued use in patient care. We consecutively lose them from our target groups and no longer reach them.



2) Medical images contain a multitude of highly relevant and interactive details - they defy appropriate verbalization. For example, the images of a comminuted fracture are so complex, interactive and rich in detail that not even an extensive verbalization would be able to reproduce the image findings unambiguously and correctly in terms of content. In most cases, Thieme's illustrations are visual evidence of what has already been described in detail in the text - a qualitatively better alternative text than the text surrounding the image (e.g. the book chapter) cannot be produced.

**Medical illustrations show** colors, shapes, shading, techniques, handles, irregular injuries, infections, spatial situations, in short: content that requires such basic visual skills that it **is not possible to** reduce barriers by using **alternative texts with the same information content**. However, as the quality of our specialist content is our top priority, we have decided not to use descriptive alternative texts for medical illustrations in the interests of our duty of care as publishers and the well-being of the patients who are treated on the basis of this specialist information.

In this consideration, Thieme does not recognize any possibilities to reduce barriers for severely visually impaired buyers of eBooks or electronic services with regard to alternative texts to medical illustrations: in the sales and application reality, both the users and the benefits of alternative texts are missing. In such cases, the BFSG recognizes a disproportionate burden, so we refrain from providing alternative texts to images of our commercial customers. In products for consumers, on the other hand, alternative texts complement the images and make them usable for a broader target group.

In order to fundamentally secure this decision, we conducted extensive research (by telephone and e-mail) both externally and internally. QMCED (Quality Management & Central Editorial Department, Thieme's internal team for publishing quality management) was in contact with internal departments at Thieme as well as with medical associations, self-help organizations, student representatives, authorities and lawyers.

The detailed question of alt text creation was evaluated by QMCED with an external law firm for the DACH offerings within the scope of the "European Accessibility Act" and summarized in a separate paper on behalf of the management.

#### Barriers due to auditory limitations

Auditory skills are also relevant for the use of our digital offerings. They are required, for example, when our content contains physiological or pathological sounds (e.g. of the lungs or heart) for training and further education purposes. In the case of limited auditory abilities (e.g. hearing loss), the existing technical options help to reduce barriers (in particular adjusting the volume or using headphones). Based on customer feedback on our products, we consider these options to be largely sufficient for users with impaired hearing. Further optimizations are currently underway in preparation for the entry into force of the BFSG at the end of June 2025. For users without hearing ability (deaf users), our products have so far only occasionally offered visual text alternatives to explain audio content (subtitles for videos). In 2025, we will gradually expand this so that Thieme videos are generally provided with subtitles that reproduce the dialog contained in the video as text by the time the BFSG comes into force in June 2025



#### Deafness

Working as a nurse or doctor with reduced hearing is likely to be somewhat easier than working without sight. It will also always be at risk of remaining incomplete. Many auditory stimuli have to be processed by those caring for patients in everyday clinical practice. The crepitating sounds of a fracture, a rattling lung sound or the alarm signals in an intensive care context are just a few examples of this - communication between doctor and patient would also be massively impeded if the person providing treatment were deaf. In order to evaluate the above-mentioned legal suitability regulations with regard to practice, we have carried out broad-based research in the context of vision. The results presented above are also largely transferable to other physical limitations (such as hearing).

# Barriers due to other physical limitations

There are other barriers that arise in our digital offerings due to limited or a complete lack of tactile capabilities. These barriers are removed as part of ongoing product optimization, provided we can positively influence them as an economic player. For people with paralysis, for example, who use our electronic products, we ensure that our content is prepared in such a way that it be used with software-supported controls for a mouth-controlled mouse, for example. Further details can be found in the project notes for the Accessibility project<sup>2</sup>. There are also technical aids (e.g. corresponding hardware) that are outside our sphere of influence. In addition, we are not aware of any physical limitations on an olfactory or gustatory level that are amenable to barrier removal in the context of digital media use.

#### Barriers due to mental limitations

We **do not** experience or expect **any extraordinary forms of mental impairment in our commercial target groups**. The recruitment tests for medical training professions are generally aimed at selecting the most mentally capable applicants, the formal entry requirements for medical studies even include excellent Abitur results - and the high demands of everyday clinical practice are, in our view and experience, incompatible with reduced mental performance potential.

We adapt our specialist information to the needs of our target groups, but without resorting to particularly simple language. This is because we are experiencing a kind of conflict of interest between our direct and indirect target groups. Our direct, commercial target groups have found initial test products (information sheets) in simple language to be unhelpful: customer complaints sometimes also focus on the editorial processing of our content in books or magazines, which is perceived as being too simplistic - with strong simplification, there is also a risk of linguistic inaccuracies and a loss of content quality. Our **commercial target groups believe that products in simple language cannot provide comprehensive information.** Due to these fears, we are currently experiencing a low level of interest in products in plain language among our commercial target groups, while we are certain that **patients would benefit from such products in educational discussions**.

<sup>&</sup>lt;sup>2</sup> Accessibility project status - Production management - WIR.wissen (thieme.de)



# How we want to achieve accessibility

# Accessibility: a fixed item on the Thieme agenda

From fall 2021 to December 2024, ensuring accessibility at **Thieme was a project affiliated with the management.** The aim was to understand and evaluate the legal requirements and their impact on our company, identify affected products and services, raise awareness of the issue among those responsible and provide them with clear recommendations for action.

The project was completed at the end of 2024 and responsibility for accessibility was handed over to the relevant stakeholders in the Thieme Group. As a result, accessibility no longer remains an issue that places external demands on our products, but **is considered and implemented in all areas at all times.** The aim and challenge here is to maintain a good balance between legal requirements, economic feasibility and our responsibility as the Thieme Group for society and the environment.

#### How we break down barriers

# Two-senses principle & WCAG standard<sup>3</sup>

At Thieme, we are constantly working to improve the accessibility of our digital products and services. In doing so, we are guided by the so-called "**two-senses principle**":

• Those who cannot hear should see, and those who cannot see (and therefore read) should be able to hear our content.

This principle is based on the fact that the central senses for perceiving the environment **are sight** and hearing and that these compensate for each other in the event of limitations.

We are aware that there are also people who **have both visual and hearing impairments**. These people are confronted with double barriers, as they may also only be able to perceive assistive technologies (such as subtitles for videos, which are intended to help people with impaired hearing) to a limited extent. We have decided to use this principle as the basis for assessing the accessibility of our products and services. Seeing and hearing are the two central senses for media use. By removing barriers to limitations in both areas, we assume that people with dual limitations will also find a way to use our products by combining various assistance options.

If the basic technical requirements are met, the internet and its digital offerings should be both findable and accessible for everyone. However, a barrier-free design is crucial for usability. It should compensate for individual limitations to such an extent that the digital offering can be used largely without impairment. Based on our broad-based research, the following **main barriers in digital offerings** have been identified for our products:

• Texts / form fields / graphic elements, e.g. contrast between text and background are too low or colors are too similar (for people with visual impairments),

<sup>&</sup>lt;sup>3</sup> The Web Content Accessibility Guidelines (WCAG) are an international standard for the accessible design of websites that will be <u>binding</u> for public bodies in the European Union from September 23, 2019 for new websites and from September 23, 2020 for existing websites and from June 23, 2021 for mobile applications with <u>WCAG 2.1 Level AA. WCAG 2 Overview | Web Accessibility Initiative (WAI) | W3C</u>



- Fields, buttons and other elements cannot be selected using the keyboard and thus
  prevent control and navigation using the keyboard (for people with motor impairments),
- lack of subtitles for videos (for people who are hard of hearing or deaf),
- Missing alternative texts for images, graphics, forms, etc. (for blind people).

In addition, there are many other measures that can only form a coherent concept of digital accessibility when taken together. **Thieme strives to meet the international standard of the WCAG (Web Content Accessibility Guidelines).** Based on these criteria, our digital offerings and services can be uniformly evaluated in terms of accessibility.

## Removing barriers in digital products

#### Digital offerings and services

Digital offers and services at Thieme are aligned by the product managers in such a way that they meet the accessibility criteria according to WCAG level 2.1 AA by 2028. To this end, the e-products have been prioritized according to their relevance<sup>4</sup>. Meeting the WCAG criteria is an ongoing process that runs in parallel in all of our digital offerings, as a result of which we are recording minor successes in several products at the same time - such as the redesign of our ECP-Patient offering, which enables patients to record their personal and health-related data from home before a medical procedure.

The other level that has a central influence on the accessibility of our digital products **is the content level**. We have been creating a good basis here for many years with our clean, sensible data structure. **Accessibility of our text content is a given.**<sup>5</sup>

#### Auditory and visual elements

For Thieme as a healthcare provider, it is crucial improve health and healthcare with the right information at the right time, in the right place and in the right form. In terms of accessibility, images, video and audio files are a particular challenge.

Thieme will refrain from providing alternative texts for medical illustrations in the European market until further notice in order to comply with our duty of care as a publisher, as already explained in the chapter "Special case: Alternative texts for medical illustrations "(p. ).6

For **video files with an audio track**, we will offer automatically generated subtitles in the original language as soon as the law comes into force. Our existing videos will also be subtitled so that subtitles are available for all Thieme videos that are created using the standard production process and the corresponding video playback software.

#### Responsibility and safeguarding

At Thieme, the product managers are responsible for determining the accessibility status quo of their products and creating an accessibility implementation roadmap. To this end, **centralized automated tests of compliance with the WCAG criteria** are planned to ensure permanent accessibility.

<sup>&</sup>lt;sup>4</sup> More detailed information is available internally at <u>Project setup - Production management - WIR.wissen</u>



You will find support from a Thieme team whose core competence is the user experience, i.e. the experience and context of use of Thieme customers when using our products. In this context, Thieme **offers a wide range of** internal **information and support services** for the implementation of accessibility and creates **awareness of the topic within the Thieme Group.** For example, the Thieme-internal <u>Accessibility Starter Kit</u> was created, which explains the first five steps on the way to greater accessibility in our digital products and services

To ensure that accessibility is taken into account in all of the Group's products and services, the requirements are included in the so-called "Solution Delivery Lifecycle" (SDLC) and corresponding rules are defined that can be monitored and analyzed. In this way, accessibility is integrated into our existing responsibilities as well as into current and future products and processes.

#### Advice and support

Thieme's internal **Accessibility Service Point follows developments on the subject of** accessibility both on the legislative side and in the publishing industry. In addition, there are very good and valuable relationships with affected associations such as the Deutsche Blindenstudienanstalt e.V. (blista) or the NikoWerk Stuttgart.

## Digital products in the US focus

As already mentioned in the chapter Global legal requirements and US law (p.4), Thieme's US target groups are commercial **license customers** from US institutions such as libraries, schools and clinics. They have **a very strong**, **legally motivated interest in accessible products** for **digital offerings in the USA**. A cross-functional international Thieme team is working in a task force to fulfill as many of the WCAG criteria as possible within this year (2025). As this is also a major challenge in terms of time given the amount of data in our products, the focus is currently on a good roadmap for the process. This should not only highlight which criteria will be fulfilled by which date, but also clarify whether and in which areas Thieme will live with limited accessibility. This applies in particular to long-standing, "old" data records.

The basic **assessment of accessibility on digital offerings** in the US focus is congruent with the assessment for digital products and services in general.

**Content** in text form generally has good accessibility, while videos and images still present us with challenges.

The implementation of subtitles for **videos** described above also applies to products that we sell in the USA.

We believe that the approach of dispensing **with alternative texts** for medical illustrations should at least be examined for the USA. Instead of textualizing medical illustration content (which is inadequate in terms of content), consideration could be given to fulfilling the requirement for an alternative text in a formal manner with a standard alternative text and justifying the omission of content in the alternative text itself (see above). The decision will ultimately be made by those responsible on site in line with the market.

Technically, all digital Thieme products are hosted on the overarching "Thieme Serve" platform. This means that all products that are already on the platform or will migrate to it in the future will also benefit from the accessibility adaptations implemented for a product. On the



<u>Accessibility on Thieme Serve - Thieme Serve - WIR.wissen</u>, all those interested internally at Thieme can gain an insight into the approach of the "Accessibility on Thieme Serve" task force.

#### **eBooks**

At Thieme, we distribute our eBooks in the industry-standard ePub and ePDF formats. The same accessibility criteria apply to both formats as for all other digital products and services - the WCAG criteria. As the different formats have different technical properties, their accessibility can be promoted differently in each case.

#### *ePub*

Thieme has **opted for ePub as an accessible eBook format**, as it offers users many options for adapting the presentation of content to their individual needs and limitations due to features such as a responsive layout and setting options for font type and size, for example

In our content, we have long attached great importance to a clear data structure without hierarchical jumps in the headings. Together with other features such as executable internal and external links, this ensures good, barrier-free orientation and navigation in the document, even with assistive technologies such as keyboards and screen readers

We pay a lot of attention to permanently optimizing our ePubs for use with screen readers. We have already mastered challenges such as the structured, clear voice output of tables and lists or defining the document language. In other areas, such as the handling of mathematical and chemical formulas, we are still working on solutions.

These technical features are complemented by a high-contrast style sheet that enables our content to be perceived in a barrier-free way.

Thieme has not used technically restrictive rights management in its ePubs (so-called DRM) for several years now. This ensures that our content can be used with any type of reading technology, including assistive technologies such as screen readers.

In order to improve all these adjustments, we are in close contact with stakeholder associations who verify the procedure for us in tests.

#### *ePDF*

PDF is a widespread e-book format that is also used as standard at Thieme. Our specialist book content for our commercial target groups is published in both ePub and ePDF formats, while the guidebook content at TRIAS for private customers and consumers is generally only published in ePub format.

In order to create accessible PDF documents, the so-called "tagged PDF" is used, which enables PDFs to be read in alternative output media such as screen readers or on a Braille display. In addition to the WCAG criteria, the internationally valid PDF/UA standard is decisive for accessibility. However, creating PDFs in accordance with this standard presents Thieme with enormous challenges. The reason for this is that business partners in the prepress and layout implementation in the specialist book sector do not have the technical capabilities to create PDF files in accordance with the PDF/UA standard. Thieme uses the widely used 3B2 typesetting

<sup>&</sup>lt;sup>6</sup> PDF/UA: How to create accessible PDFs. | Adobe



**system**<sup>7</sup> for book and, in some cases, journal typesetting. This is characterized by the fact that it enables a **high degree of standardization and automation** and still delivers **high-quality typesetting** that cannot be achieved with other typesetting systems.

At Thieme, we use multi-column layouts due to the wealth of specialist information conveyed in our publications.

At the same time, even a PDF that complies with the PDF/UA standard has properties that make it very difficult for people with disabilities to use the document. The **fixed layout**, one of the biggest advantages of PDFs when exchanging data, **severely restricts users with visual impairments in handling the files**. It cannot be adapted to individual needs. For example, the **multiple columns in the layout often** lead **to orientation problems** if, for example, a strong zoom is used to compensate for visual limitations.

**Reworking existing PDF files takes a lot of time and money** and often does not lead to a satisfactorily accessible result, as the options for subsequently improving **accessibility in the PDF** are **limited**.

For these reasons, Thieme **offers ePubs as an accessible version of our eBooks**. Of course, we are still in contact with our service providers and representatives from the industry to keep checking how we can generate accessible PDFs in the medium term.

## eJournals

The European Accessibility Act (EAA) explicitly excludes periodicals, which is why journals for the European market are not a focus on Thieme's path to greater accessibility for the time being.

US legislation (ADA) makes no distinction here; periodicals are also covered by the law there. At the same time, Thieme's competitors in the international Scientific, Technical & Medical Publishing (STM<sup>8</sup>) are placing an increasingly recognizable value on the accessibility of their products. The focus here is on open access articles, as these are public and therefore theoretically also freely accessible to consumers.

Thieme publishes journal articles as ePDF and HTML on Thieme Connect. This is the Thieme online platform that provides access to medical and scientific e-books and e-journals for commercial target groups. The challenges are therefore similar to those for our eBooks and digital products.

#### Thieme Connect

Thieme Connect essentially consists of HTML texts, images, videos and PDF files for download.

The factors for increasing accessibility on Thieme Connect are the same as those described in the chapter <u>Barrier reduction in digital products</u> (p.10). The HTML version in particular offers a wide range of options for making our content accessible, as users can easily adapt it to their individual needs and a wide range of assistive technologies are geared towards HTML pages.

<sup>&</sup>lt;sup>7</sup> Arbortext 3B2 - Wikipedia

<sup>8</sup> Home - STM Association



Thieme Connect is currently undergoing a design overhaul. The presentation of content and navigation on the pages are being optimized to improve usability for users and at the same time reduce barriers.

Our **main challenge for science journal articles** is therefore also the **alternative texts for illustrations**. This is why Thieme focuses here.

#### **ePDF**

PDF as an accessible format has already been discussed in the chapter ePDF (p.12). Due to the restrictions for Thieme described there and the weaknesses of the format itself, Thieme is not pursuing the approach of making these PDFs accessible for the time being, as already explained. Of course, we are keeping an eye on developments and will address the issue in the medium term. For the time being, we will ensure that people with disabilities can use the HTML version of the article available on Thieme Connect. This offers users many more options for adapting the presentation to their personal needs and is considerably more accessible than a PDF file.

# Conclusion

Thieme shares the spirit and intent of current accessibility laws such as the European Accessibility Act and the Americans with Disabilities Act. Our corporate mission is to improve health and healthcare with the right information in the right place at the right time - Thieme therefore has a strong interest in the unhindered dissemination of its offerings and is constantly striving for effective barrier reduction.

As part of an internal accessibility strategy, Thieme proactively identifies and utilizes opportunities that present themselves for effective barrier reduction. In particular, the accessibility criteria of the "Web Content Accessibility Guidelines" are applied. Thieme also follows the recommendations of the German Publishers and Booksellers Association and seeks legal advice on implementation issues. Where it is not reasonably possible to establish sufficient options for reducing barriers, Thieme applies applicable law (in particular § 16 BFSG and/or § 17 BFSG in conjunction with the criteria from Annex 4 of the BFSG).

In Europe, the current priority according to the Accessibility Reinforcement Act is on **e-books and software intended for this purpose that is made available to consumers** (Section 1 (3) No. 4 BFSG), as well as **on services that are aimed at consumers in electronic commerce** (Section 1 (3) No. 5 BFSG).

In the international US market, the focus is on our **digital products and services**, **which we** sell **via licenses to US institutions such as schools and clinics**.

In both cases, Thieme pursues an approach that focuses on a good balance between legal requirements, economic feasibility, our purpose and our responsibility as Thieme for society.