



with support from

Google.org

Digital Skills, Accommodation and Technological Assistance for Employment:

Supporting the inclusion of persons with disabilities in the open labour market



Scan to read the accessible pdf



Authors: Roberta Lulli, Filippo Sinicato, Álvaro Antonio Couceiro Farjas

Editor: Haydn Hammersley

Graphic Design: Visually Thinking dk

Proofreading: Funka Foundation

Easy-to-Read version: Lila Sylviti

Acknowledgements: Thanks go to our national disability experts from 27 European countries, and to Human European Consultancy for helping us locate and make contact with these experts. We also thank all the employers who responded to the survey and all the Organisations of Persons with Disabilities that agreed to be interviewed. Finally, we would like to show our gratitude to all those who wrote to us to share their personal stories of inclusion in the labour market.



Avenue des Arts 7-8
1210 Brussels Belgium

info@edf-feph.org

www.edf-feph.org

Twitter: [@MyEDF](https://twitter.com/MyEDF)

This report was funded by Google.org

with support from

Google.org

Table of Contents

Glossary	5
Forewords	8
Executive Summary	12
Introduction	14
Explanation of the research	14
Methodology	16
About the European Disability Forum	17
Main Findings	18
Employment of persons with disabilities in the EU	18
Digital Skills	26
Assistive technologies for employment	32
Assistive technologies and Artificial Intelligence	39
Reasonable Accommodation	41
Conclusions	50
Recommendations	52
Digital Skills	52
Assistive Technologies	54
Reasonable Accommodation	56
References	58



Glossary

Assistive devices: external devices that are designed, made, or adapted to assist a person to perform a particular task. Many people with disabilities depend on assistive devices to enable them to carry out daily activities and participate actively and productively in community or professional life.

Assistive technology: any item, piece of equipment, service or product system including software that is used to increase, maintain, substitute or improve functional capabilities of persons with disabilities, or for alleviation and compensation of impairments, activity limitations or participation restrictions.

Disability allowance: payments that persons with disabilities can receive from the State to cover basic living costs and services.

Discrimination: any distinction, exclusion or restriction on the basis of one or several grounds (sex, race, disability, sexual orientation, gender identity, etc.) that damages or nullifies the recognition, enjoyment or exercise of human rights and fundamental freedoms in the political, economic, social, cultural, civil or any other field, on an equal basis with others.

European Union (EU): a unique economic and political union between 27 European countries, as it stands at the time of publication of this report.

General Comment: a General Comment is a treaty body's interpretation of human rights treaty provisions, thematic issues or its methods of work. General Comments often seek to clarify the reporting duties of State Parties with respect to certain treaty provisions and suggest approaches to implementing those provisions.

Member State(s) (of the EU): the EU currently consists of 27 countries, also called "Member States". Each Member State is party to the founding treaties of the European Union and is therefore subject to the privileges and obligations of membership. Unlike members of most international organisations, the Member States of the EU are subject to binding laws in exchange for their representation within the common legislative and judicial institutions.

6 The European Disability Forum

Open labour market: this refers to work in a mainstream or “regular” employment setting, as opposed to a setting that has been created specifically to employ a specific group of employees, such as persons with disabilities.

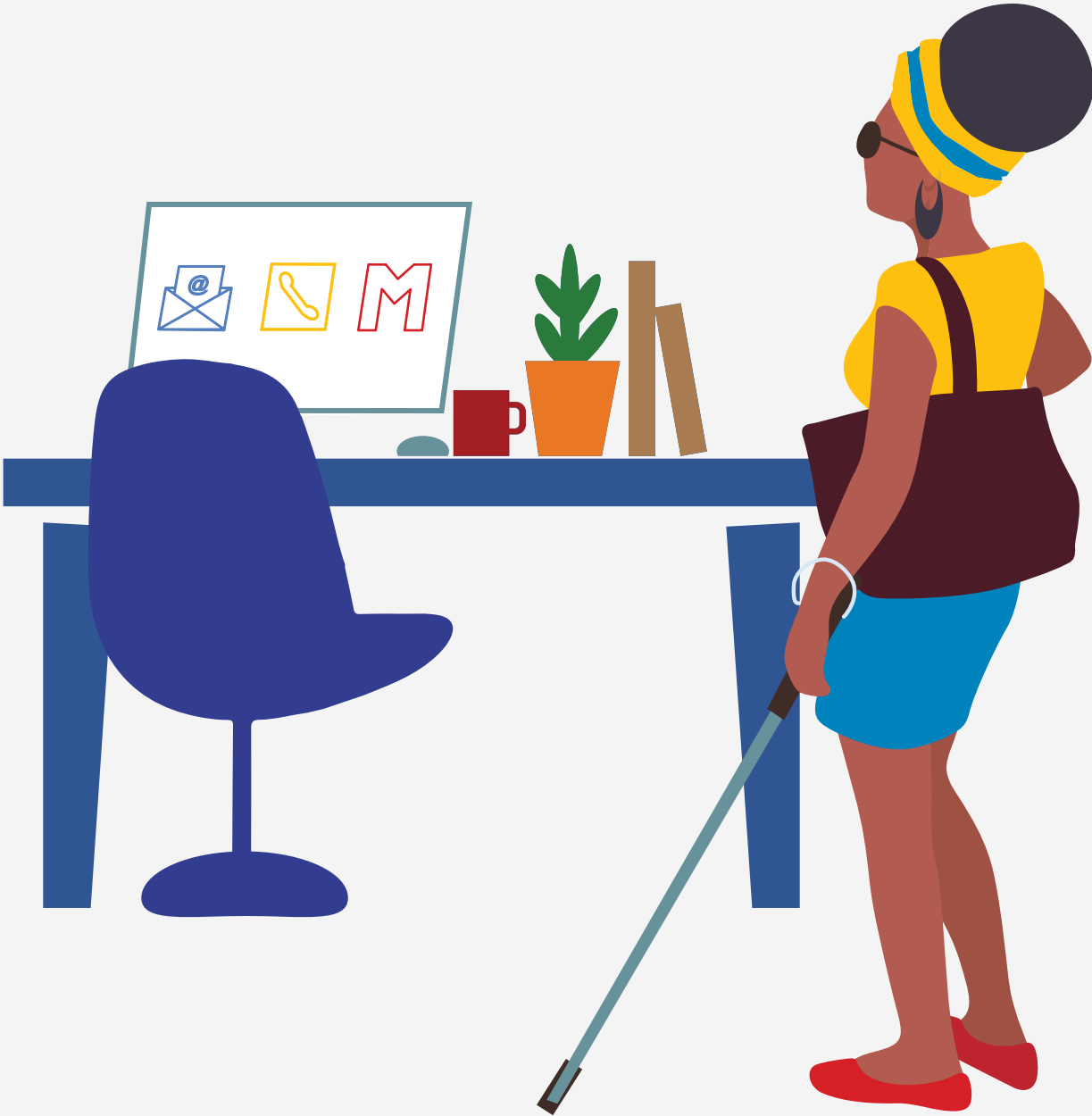
Percentage points: this term expresses the arithmetic difference of two percentages, whereas percent (%) refers to the rate of change. For example, if Country A has an employment rate of 30% and Country B has an employment rate of 60%, Country B’s employment rate is 30 percentage points higher than Country A’s but is also higher by 100%.

Persons with disabilities: individuals who have long-term physical, mental, intellectual or sensory impairments which, in interaction with various barriers, may hinder their full and effective participation in society on an equal basis with others.

Reasonable accommodation: the necessary and appropriate modification and adjustments, where needed in a particular case, to ensure to persons with disabilities the enjoyment or exercise on an equal basis with others of all human rights and fundamental freedoms. To be “reasonable”, the accommodation cannot impose a disproportionate or undue burden. Denial of reasonable accommodation is a form of discrimination.

United Nations Convention on the Rights of Persons with Disabilities (CRPD): an international human rights treaty that reaffirms that all persons with disabilities must enjoy all human rights and fundamental freedoms. The CRPD clarifies that all persons with disabilities have the right to participate in the civil, political, economic, social and cultural life of the community in the same way as anyone else.





Forewords

Rachael Bleakley

Google.org



At Google.org, we believe that technology has the power to create a more inclusive and equitable world for everyone. We are committed to supporting initiatives that empower individuals with disabilities and enable them to fully participate in the digital economy.

We are proud to have supported the European Disability Forum in conducting this important research on the barriers faced by persons with disabilities in the European labour market. The findings of this report underscore the urgent need for action to address the digital skills gap, improve access to assistive technologies, and ensure the provision of reasonable accommodations in the workplace.

In creating a more inclusive and accessible labour market, everyone has the opportunity to thrive and contribute their unique talents and perspectives. We hope that this report will serve as a valuable resource for policymakers, employers, disability organisations, and technology companies, as we collectively strive to build a more inclusive and equitable future for all.



Yannis Vardakastanis

President of the European Disability Forum



In our modern, fast-paced labour market, technology and digital skills can easily determine a person's professional success. Persons with disabilities, who already face stigma and other disadvantages when it comes to finding employment, are particularly impacted by the increasing space technology occupies in the world of work. Not only are persons with disabilities less likely to be able to develop the digital skills required by the open labour market, but all too often they are denied existing assistive devices or technologies they require to be able to use digital tools at work.

This goes some way to explaining why the gap in employment rates between persons with and without disabilities in Europe is so wide and has remained unchanged in recent years. The trend of persons with disabilities falling into low-quality employment with inadequate wages also refuses to disappear from our continent.

With this in mind, it is clear that full labour-market inclusion of persons with disabilities in our increasingly digitalised society requires bolder measures. However, strong responses are, on the whole, not something we are currently witnessing in the actions of policy makers across Europe. Governments are failing to integrate the digital skills employers need into the curricula of their education systems. This is setting young people up for an almost un navigable transition into the labour market, and it is not only young persons with disabilities who are impacted.

More than 10 years after the ratification of the UN Convention on the Rights of Persons with Disabilities, for many employers the idea of hiring persons with disabilities still seems like an alien concept.

Employers all too often fear the impact it will have on the way their team operates. There is a clear lack of understanding among employers around the steps they can take to better include persons with disabilities, and how to get help from the State in doing so.

However, not all of these concerns are unfounded. As this study points out, in many countries there is insufficient financial assistance on offer to support costs for reasonable accommodations in the workplace, including purchasing assistive devices and technologies. The bureaucracy employers must face to receive such subsidies is also clearly a major disincentive for employers looking to hire more persons with disabilities.

Creating an inclusive labour market should be a key priority to ensure that all kinds of workers, not least persons with disabilities, are welcome in the workforce. As persons with disabilities represent the largest minority in Europe, accounting for approximately 100 million people, failing to do so would result in a societal and economic cost our continent simply cannot afford.

Technology in the workplace has huge potential to turn the tide on Europe's abysmal employment figures for persons with disabilities. However, if we do not urgently improve access to the digital world, both through providing assistive devices and technology in a simple and affordable way, and honing in on the skills persons with disabilities require to make use of them, we are sowing the seeds for a future in which persons with disabilities will be more isolated than ever before.

The time for action is now. Technology is developing fast, and we cannot afford to be left behind in a world that is increasingly moulded by digitalisation. There are still a lot of challenges ahead of us.

However, working together we can pave the way towards a more inclusive labour market for persons with disabilities.

Nothing about us without us!

Executive Summary

EU-level data consistently shows just how much less likely persons with disabilities are to be employed than their non-disabled peers. The latest figures show that the employment gap, the difference in employment rates between persons with and without disabilities, remains stable at around 24 percentage points, with even higher gaps for women and young persons with disabilities.

This report explores how the lack of awareness, provision of assistive technology, reasonable accommodation and development of digital skills contribute to this stark gap.

It shows that, despite the established legal frameworks on reasonable accommodation, in reality they are poorly put into practice. Among the key barriers persons with disabilities face are the lack of awareness by employers about how to offer reasonable accommodation, financial constraints, insufficient support by public authorities and societal attitudes.

Results highlight that persons with disabilities face severe challenges as early as the recruitment stage. In fact, employers state that, if they have them, internal HR guidelines on hiring persons with disabilities tend to be tacit rather than based on written and codified internal protocols. Only a quarter of employers that answered the survey have an internal HR policy on hiring persons with disabilities. This hampers their ability to offer accessible hiring procedures and undermines the effectiveness of the recruitment process.

In addition, results from our study indicate that only 1 in 4 employers participate in programmes, either public or private, aimed at improving employment inclusion for persons with disabilities. In this context, Spain and the UK stand out as the only countries where most interviewed employers – 82% and 59%, respectively – take part in such programmes. Considering the sample average, these last figures show how poorly other countries' supportive frameworks are currently performing.

Acquiring assistive technologies is another key challenge. 81% of the employers surveyed do not have policies in place to provide them, and, on top of this, 75% do not even know if their employees are using assistive technology.

The Recommendations section of this report provides a clear path ahead to policy makers, employers and technological companies. The report recommends, among other things, that:

- Policymakers should increase focus on digital skills taught during formal and informal education to ensure persons with disabilities are not left behind. This training must be continued by employers during apprenticeships and internship programmes.
- Employers must invest in accessible technology for all employees, regardless of disability. These investments must be supported by public funds that have to be easy to access.
- Governments must increase the amount of state aid available and – equally importantly – widely publicise how to access it.

Persons with disabilities deserve equal access to the labour market, but, as this report shows, significant improvements are necessary to achieve this. These improvements must be done with the close involvement of persons with disabilities and their representative organisations.



Introduction

Explanation of the research

This research on Digital Skills, Accommodation and Technological Assistance for Employment was conducted by the European Disability Forum (EDF) with the support of Google.org. The aim of the study is to explore the situation of persons with disabilities in the open labour market, focusing in particular on the potential of digital skills training and the use of accessible and assistive technologies to foster inclusion in the workplace.

Digital skills represent an essential component of quality employment. Persons with disabilities, who are statistically less likely to possess these skills, see their employment outcomes severely impacted as a result. At EU level only 50.8% of persons with disabilities are employed compared to 74.8% of persons without disabilities. When considering full-time employment, the figures are even lower: just 20% of women and 29% of men with disabilities are working full time¹.

Limited digital literacy is just one of the reasons behind the poor employment outcomes of persons with disabilities. The insufficient provision of reasonable accommodation, by which we refer to adaptations made to a person's role or working hours, the introduction of assistive devices or technology or changes to the workplace, plays a substantial role. This problem occurs in part due to the employers' lack of understanding around how to provide reasonable accommodations. It is made worse by the limited financial support provided to employers by the State and public authorities. The objectives of the report are:

- to analyse the level of digital and technological skills held by persons with disabilities in Europe and the opportunities that are open to them in the current context;
- to better understand the situation of employees with disabilities regarding the use of accessible and assistive technologies;
- to identify the barriers to providing reasonable accommodation from the perspective of employers, Organisations of Persons with Disabilities (OPDs) and employees with disabilities;

- to highlight good practices and propose recommendations on how to improve the digital skills of persons with disabilities and the use of accessible and assistive technologies to improve employment outcomes.

This report is based on research conducted at both European and national level. We analyse the situation of 26 European Union Member States (all but Luxembourg), plus the UK. Throughout the report we share personal testimonies sent to us by persons with disabilities from all over Europe, giving a clearer insight into how these issues affect people at an individual level.

The study also maps the existing policies that promote employment for persons with disabilities in the EU and the UK. We conclude the report by presenting our own recommendations to policy makers, employers, disability organisations and technology companies. This research will enable EDF and its European member organisations (including the UK) to better influence policy development around inclusive employment and facilitate the implementation of practical solutions in each country.

This report presents all the findings from across Europe in a condensed form. It is accompanied by a separate, more detailed report that compiles country reports from national experts on all of the countries included in this study. This second report can be consulted for more detailed and country-specific information.



Methodology

The report was prepared by the Secretariat of the European Disability Forum with the support of experts in each Member State plus the UK who collected data at national level and drafted the national reports included in the accompanying publication mentioned above. Estonia is the only country for which the report was written directly by EDF, using findings provided to us by researchers voluntarily.

We analysed the situation in the UK and in the following EU Member States: Austria, Belgium, Bulgaria, Croatia, Republic of Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain and Sweden. Luxemburg is the only EU Member State that is not part of the study due to difficulties finding suitable experts on the topic.

EDF prepared questionnaires for employers and OPDs and shared them with all the national experts who collected data using the following methodology:

- Quantitative research including primary sources such as questionnaires to employers, and secondary sources from Eurostat, National Statistical Institutes, the European Disability Expertise, and other available EU and national studies.
- Qualitative research including primary sources such as country-level surveys to National OPDs, disability related entities and public bodies.
- Secondary research on the national context, using various national datasets.

The survey was disseminated between March 2023 and September 2023. National experts collected 565 completed questionnaires from employers and conducted 82 interviews with OPDs.

Through the survey and interviews the national experts explored:

- reasonable accommodation as a Human Resources (HR) procedure by employers,

- mapping of trends in the use of accessible and assistive technologies in the workplace,
- the main limitations experienced by employees with disabilities in acquiring accessible or assistive technology that meets their needs,
- the barriers for persons with disabilities related to digital skills,
- good practices and effective solutions for persons with disabilities to acquiring digital skills needed in quality employment.

EDF also collected 64 testimonies from persons with disabilities across Europe and the UK on:

- experiences and limitations of the use of accessible and assistive technologies in the workplace,
- experiences of barriers to employment related to the lack of digital skills,
- experiences of having reasonable accommodation provided or refused,
- good and bad practices regarding reasonable accommodation in the workplace.

About the European Disability Forum

The European Disability Forum (EDF) is an independent organisation of persons with disabilities that defends the interests of more than 100 million persons with disabilities in Europe. We are an independent non-governmental organisation (NGO) that brings together representative organisations of persons with disabilities from across Europe. We are run by persons with disabilities and their families. We are a strong united voice of persons with disabilities in Europe.

Main Findings

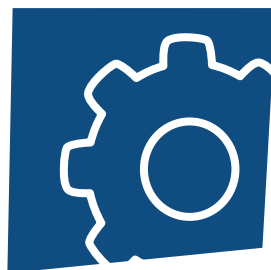
Employment of persons with disabilities in the EU

The employment situation of persons with disabilities in the labour markets is well depicted in the country reports (see accompanying report containing all national findings) and questionnaire responses from employers, included in this study.

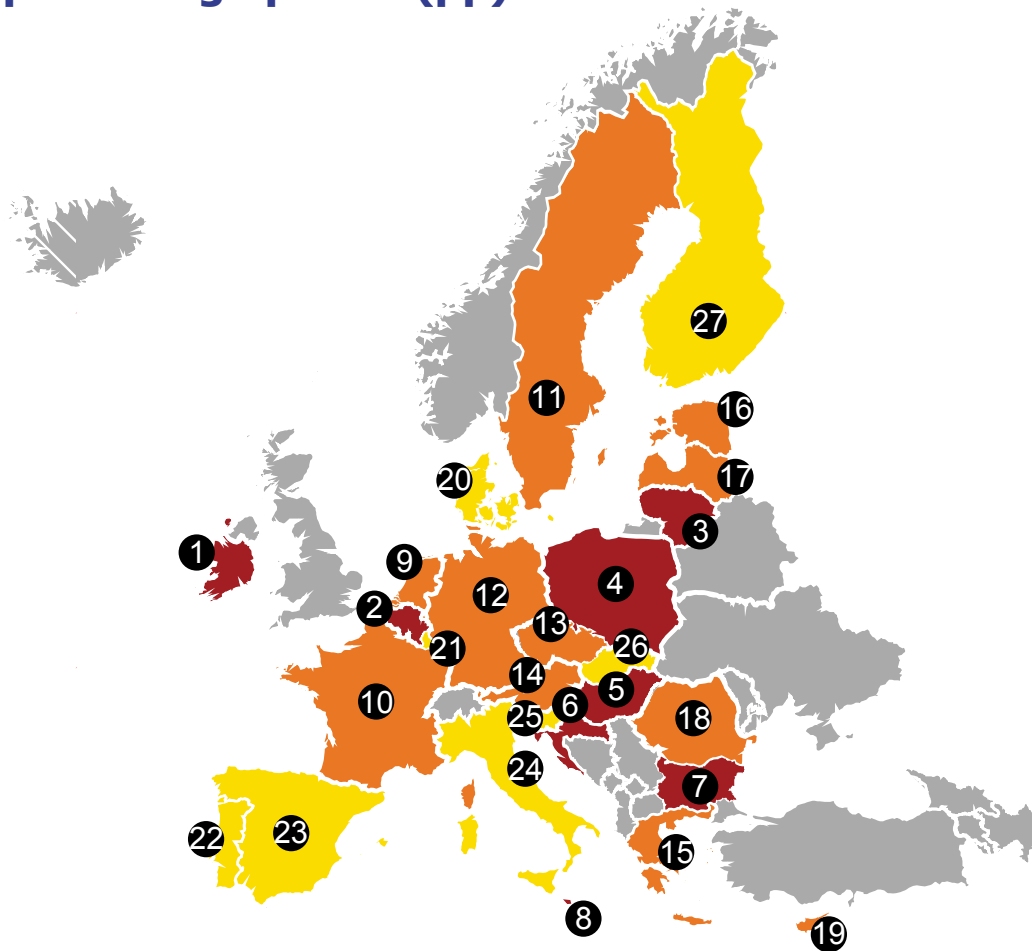
The Member States of the EU plus the UK take a range of different approaches to promoting the employment of persons with disabilities. For example, almost all EU Member States have quota systems in place. These differ from country to country regarding the percentage of workers with disabilities an employer should employ, whether it extends to the private sector or only the public sector, and in terms of the size of the companies or organisations that are obliged to adhere to the quota system.

In addition, nearly all EU Member States plus the UK provide support for reasonable accommodation in the form of grants, tax subsidies or direct provision of equipment. Despite this, the provision of reasonable accommodation, that would allow persons with disabilities to carry out their work, remains one of the key barriers they face. Reasonable accommodation is guaranteed as a right to workers under the EU Employment Equality Directive (Council Directive 2000/78/EC2) but has proven to be one of the most difficult rights to implement across the Member States.

Preliminary results show that the disability employment gap ranges from 13 to 37 percentage points depending on the country in question. A more in-depth analysis shows that societal misconceptions and stereotypes still play a substantial role in hindering progress. So do financial constraints on the support that can be offered to employers and employees alike, and lack of awareness around training programmes. Findings suggest that these factors have a different impact depending on the nature of an employee's disability. It is suggested that visually impaired individuals benefit from a larger number of opportunities and learning programmes than other subgroups. On the other hand, persons with intellectual disabilities are shown to be the most neglected when it comes to support for finding and retaining employment



Disability employment gap different EU Member States in percentage points (pp)



● Countries 30 pp and over (8)

- | | |
|----------------|----------------|
| ① Ireland 37 | ⑤ Hungary 32.4 |
| ② Belgium 35.3 | ⑥ Croatia 36 |
| ③ Lithuania 35 | ⑦ Romania 32 |
| ④ Poland 31.3 | ⑧ Malta 30.1 |

● Countries between 20 pp and 30 pp (11)

- | | | |
|--------------------|----------------|-----------------|
| ⑨ Netherlands 25.2 | ⑬ Czechia 22.7 | ⑰ Latvia 20.8 |
| ⑩ France 20.8 | ⑭ Austria 23.8 | ⑱ Bulgaria 29.5 |
| ⑪ Sweden 25.7 | ⑮ Greece 25.9 | ⑲ Cyprus 25.7 |
| ⑫ Germany 24.2 | ⑯ Estonia 26.2 | |

● Countries under 20 pp (8)

- | | |
|------------------|-----------------|
| ⑳ Denmark 9.9 | ㉔ Italy 14 |
| ㉑ Luxembourg 8.5 | ㉕ Slovenia 18.8 |
| ㉒ Portugal 13.1 | ㉖ Slovakia 21 |
| ㉓ Spain 14.6 | ㉗ Finland 19 |

UK data: <https://www.gov.uk/government/statistics/the-employment-of-disabled-people-2022/employment-of-disabled-people-2022>

Considering that 75% of interviewed employers do not have codified internal HR policy on hiring persons with disabilities, it is straightforward to imagine that candidates with disabilities face severe challenges as early as the recruitment, where the lack of relevant HR guidelines makes the whole process less accessible and effective. Nevertheless, several countries where employers seem to have internal policies more commonly in place show significant disability employment gaps. In Ireland, for instance, half of the employers answering our survey have an internal HR policy on disability, yet Ireland still has the EU's highest employment gap at a staggering 37 percentage points.

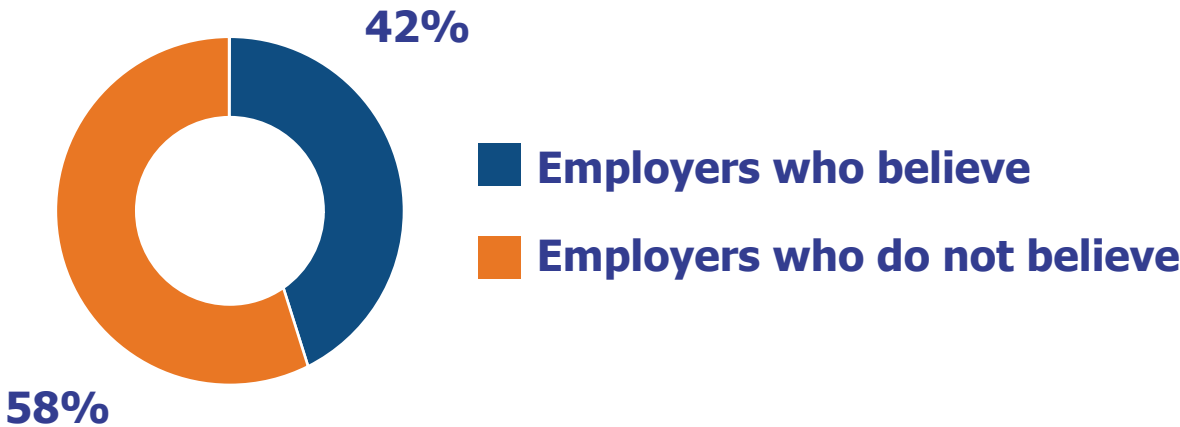
The hiring and training opportunities for prospective interns are even worse than those depicted for full-time positions. Even if approximately 75% of employers have considered hiring interns with disabilities, only half have actually ever done so. In practice, this not only hinders access to the labour market for persons with disabilities to begin with, but it also jeopardises future job retention and career perspectives.

Various bottlenecks still prevent persons with disabilities from landing internship opportunities. In most countries, internship contracts for persons with disabilities are not subsidised. The absence of financial compensation discourages many employers from hiring disabled applicants. The lack of financial support is a particular hurdle for employers whose premises are not accessible. In their eyes, investing in adjusting the workplace is a disproportionate burden, given the short duration of standard internships. Time is also a critical impediment. The fast-paced labour market, which means that vacancies arise and must be filled rapidly, limits the time available to accommodate candidates' needs during interviews and means that employers want solutions for reasonable accommodations that do not require time to implement. Lastly, several of the employers surveyed report they need to gain know-how and upskill staff, especially those working in HR, to break stereotypes and prejudice when it comes to hiring interns with disabilities.

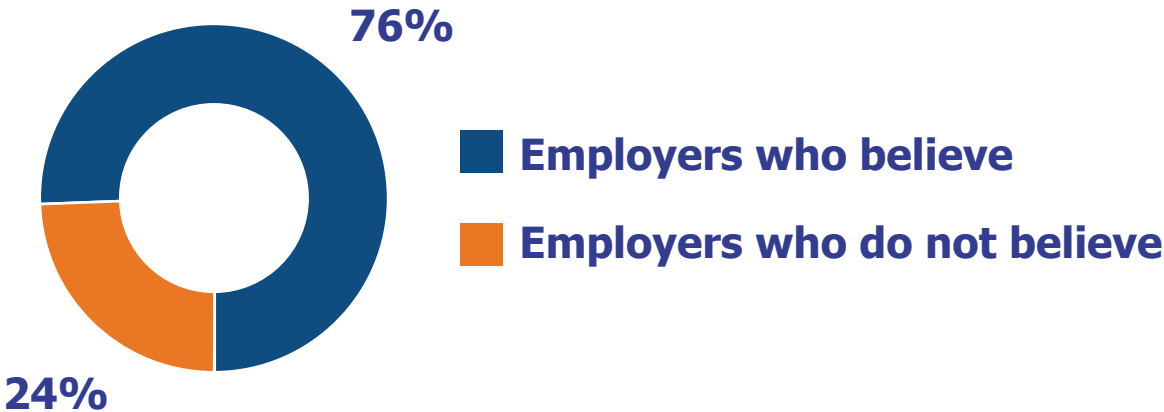
Employers' perceptions of interns with disabilities

(1)

Employers who believe the lack of digital skills is a barrier when hiring

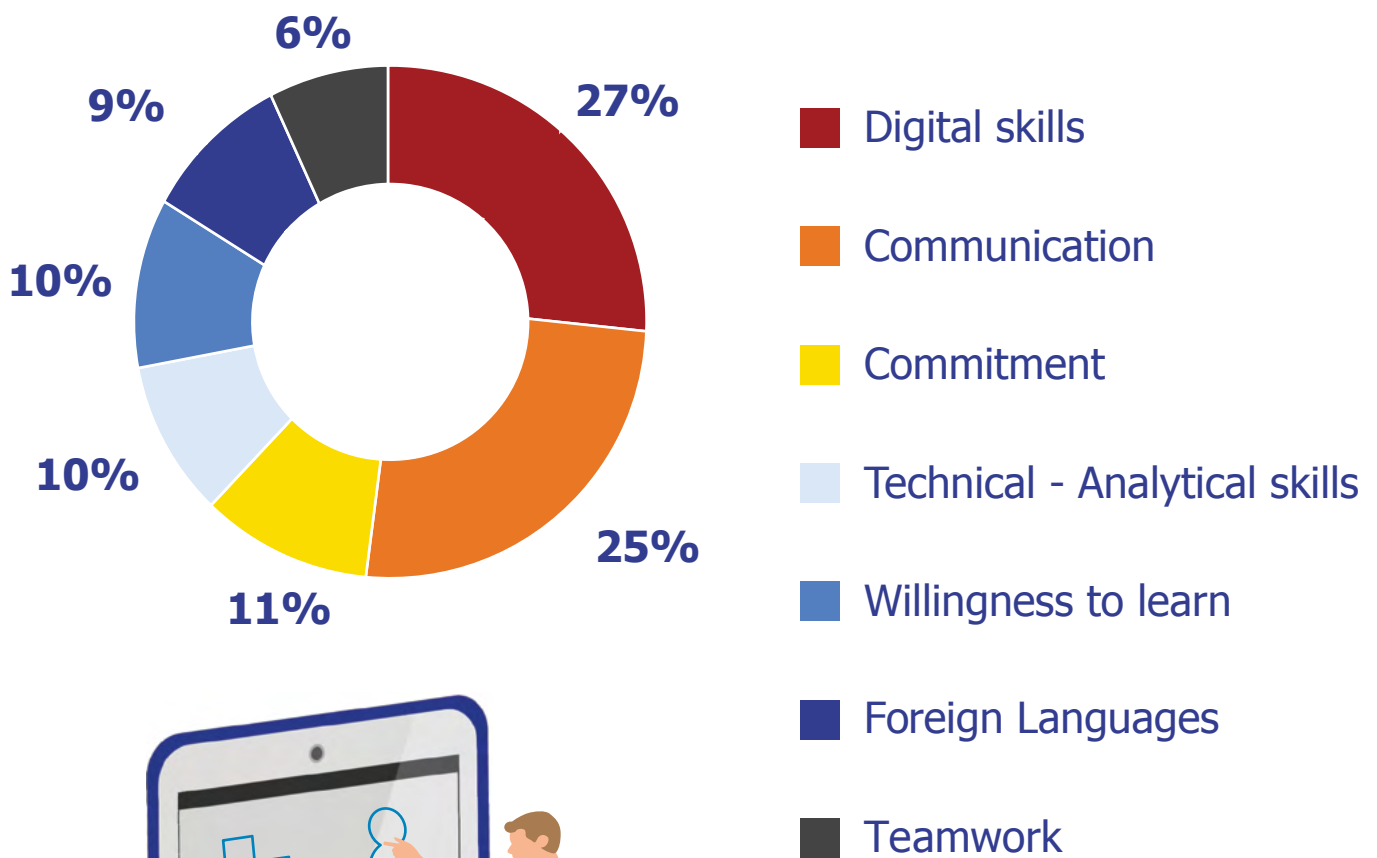


Percentage of employers who believe having interns with disabilities would help hiring employees with disabilities at a later stage



Employers' perceptions of interns with disabilities (2)

Skills that employers find most important in interns with disabilities



Despite this discouraging landscape, organisations and authorities in several countries have developed practices to boost quality employment for persons with disabilities. In the context of job-matching, Evenbreak³, an award-winning organisation based in the UK, manages an online job board where employers and candidates with disabilities can more easily find each other⁴. Similarly, in Malta, within the state-founded organisation JobPlus, the Access to Employment (A2E)⁵ programme, co-funded by the European Social Fund, offers subsidies to organisations for hiring persons from disadvantaged groups, with special consideration for persons with disabilities. Again in the UK, government programmes include the Disability Confident Employer Scheme⁶, a multi-level certificate assessing employers' inclusiveness, and Access to Work, a grant scheme that provides personalised support to persons with disabilities, covering things such as inclusiveness in the recruitment process as well as mental health support services⁷.

In the hiring process, skills and competencies are sometimes hard to assess. First piloted in Ireland in 2008 and currently established in several European countries, DuoDay is an initiative that helps facilitate this process through job-shadowing sessions that allow recruiters to gauge a candidate's abilities⁸. All-round initiatives are also carried out in Spain and France, led by ONCE (InsertaEmpleo)⁹ and Agefiph¹⁰, respectively. In these last two examples, candidates with disabilities are provided with tailored training and job guidance while employers are offered hiring procedure training and support in implementing relevant adjustments.

Specific programmes focusing on interns with disabilities are provided by way of synergies between universities, OPDs, private organisations and state assistance. In Spain, Fundación Universia¹¹ liaises with companies to offer persons with disabilities internship opportunities and mentoring programmes, and with universities to award scholarships. In Denmark, the IceBreaker programme assists new graduates with disabilities to enter the labour market by financially supporting them for up to 12 months. The UK-based DFN Project Search is a one-year supported internship programme for young people with learning disabilities and/or on the autism spectrum¹².



Digital Skills

The implementation of new technologies in employment, digital tools and ICT-led working methods has transformed labour markets around the world extremely rapidly over the past two decades.

Technological adaptations, an intrinsic part of human and social development, are growing at a pace never witnessed before. It is having a huge impact on the way we interact, work, and carry out daily tasks¹³.

The EU and its Member States alongside the UK have been intensifying efforts in recent years to increase digitalisation, in order to improve Europe's competitiveness on the world stage. These efforts must go hand in hand with actions to reduce the digital skills gap we currently see in Europe. The European Commission, as part of the EU's Strategy on the Rights of Persons with Disabilities launched in 2021, has thus called on Member States to "further support the cooperation between relevant stakeholders of the social economy, including identifying digital skills needs and applying assistive technology for better employability"¹⁴.

While technological developments may bring many advantages and open doors to inclusion for persons who have been excluded from the labour market, they also carry a number of risks and challenges, which can further isolate persons with disabilities. Ultimately, the possibilities brought about by these new solutions are open exclusively to employees and employers who are able to adapt to the new technologies that appear on the market, and who are willing or indeed able to purchase them. Those who are unable to do so get left behind. This situation is, unfortunately, most commonly the case for persons with disabilities, who struggle disproportionately to keep up with the latest technological developments when acquiring digital skills and accessing new technologies.

Up to 92% of the positions in the current job market require digital skills, according to recent research¹⁵. Those who lack the digital skills expected of modern-day employees are therefore only eligible for an increasingly small proportion of the jobs available. On average, persons with disabilities already start from a disadvantageous position when trying to enter the labour market, due to the comparatively low proportion of job-

seekers with higher education qualifications. Only 18% of persons with disabilities in the EU complete tertiary education, compared to 39% of the general population, according to Eurostat¹⁶. Persons with disabilities are also more likely to drop out of education before completing high school.

Despite the clear link between digital skills and employability, there is still little in the way of research at EU level on the digital skills of persons with disabilities. For instance, while there is data suggesting that 53.92% of people in the EU have basic or above basic overall digital skills¹⁷, there is no disaggregated data on the proportion of persons with disabilities possessing such skills. As such, no comparison is possible. However, as an indication of the extent to which persons with disabilities on average make less use of common technologies in their day-to-day lives, the EU Strategy on the Rights of Persons with Disabilities 2021-2030 shows that in the EU only 64.3% of persons with disabilities over the age of 16 have internet connection at home, compared to 87.9% of those without disabilities¹⁸. Furthermore, research from the UK indicates that 25% of persons with disabilities in the country had never used the internet¹⁹. While these statistics do not cover labour-related capacities, inevitably the availability and accessibility of technologies affects the likelihood of persons with disabilities acquiring digital skills needed for most jobs. The mismatch in digital skills between persons with disabilities and the rest of the population is, therefore, one extra barrier to employment that many still face, and one which is increasing as our job market becomes increasingly digitalised.

The results from the country reports and employers' questionnaires suggest that, even beyond the realm of employment, digital literacy is essential for people to be able to participate actively in society. This is especially true in countries where a lot of services and processes now take place online, such as in Denmark and Finland. In fact, in these countries, technology increasingly permeates everyday activities, from grocery shopping to public services access, which further exacerbates the exclusion of those who possess a lower level of digital skills.

The lack of digital skills only partially explains poor employment outcomes and job retention for persons with disabilities. When employers were asked, as part of our study, whether candidates' low digital literacy would put them off hiring candidates with disabilities, around half of the interviewed employers deemed it to be an obstacle. However, they stressed that this was an issue not limited to candidates with disabilities. Nevertheless, only 52% of employers said they provide employees with training to improve digital skills, and only a few of those surveyed actually tailor that training to the needs of employees with disabilities.

Despite being at the top of the list of requirements for many employers, digital skills are not the only competencies employers seek in candidates. According to most of the interviewed employers, motivation, willingness to learn and communication skills are also key attributes they look out for in candidates. Showcasing soft skills such as communication in an interview setting may be hard for persons with certain disabilities and thus further worsen their opportunities in the labour market. Many employers do not have consistent experience with candidates with disabilities, while others simply consider them as destined for low-skilled or low-tech roles before having even examined their credentials. This situation is often the result of poor awareness among employers on the public support available to them to invest in improving the digital skills of their employees with disabilities. In other cases, however, it is genuinely the case that in a particular country or region the funding available for training in such skills is insufficient.

Finally, the emphasis on improving digital skills does not just fall on the shoulders of persons with disabilities. In order for assistive technology to function properly and to give full access to persons with disabilities, all employees, regardless of their disability status, need to be trained in creating accessible content. This can range from making sure all digital materials are compatible with screen readers and that they can be navigated using a keyboard rather than a mouse, to ensuring better contrast on websites for people with low vision etc.



Personal testimony 1 – Pietro – Italy

Being a blind person, the production of accessible documents is essential, but often they are not produced according to the law, preventing their readability or at least complicating it. The implementation of inaccessible training courses is a major obstacle, and alternative strategies are not always implemented. The digital platforms used to implement work activities have a low degree of accessibility, slowing down and complicating my work. Reasonable accommodations are limited to providing speech synthesis and eliminating some procedures. My request for additional teleworking days was not accepted. In general, the presence of barriers that complicate or limit productivity leads to indirect career discrimination and marginalisation within the working environment.



Personal testimony 2 – Lukas – Czech Republic

I was employed at a ministry department for almost a year, being born totally blind (i.e. a daily screen reader user). I was supposed to be one of the programmers working on the infrastructure and backend of the intranet used across the organisation. I was provided the open source NVDA screen reader that the IT department installed on my computer, and those were all the digital accommodations necessary in my case. Obviously, working as a programmer, a computer in the office with all the needed software preinstalled was already standard equipment.

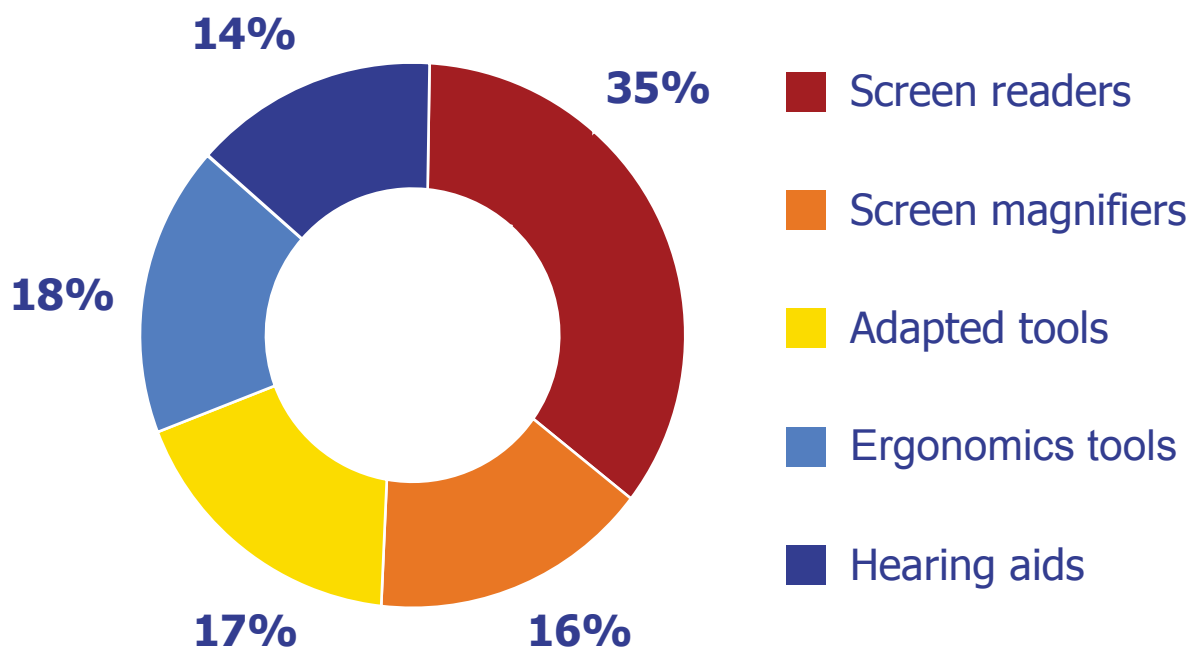
The problem was that the frontend (user-facing environment) of the intranet was literally not accessible to screen readers at all, so much so that large crucial areas of the functionality that employees were expected to use were not even announced at all, so that if I were to only use the frontend in the browser, without looking at its source code, I'd have no idea they were even there in the first place.

Therefore, my first and only project in that job, which took me about a month, was to become familiar with the source code and technologies with which the whole structure was created, so that I could then implement technical changes that would improve its accessibility. I spent the whole time learning from scarce and insufficient documentation and then trying to come up with a solution pretty much only by trial and error. When I did that, reaching a stage where I could at least perform all the routine everyday employee tasks in the intranet as expected, my work was over.

Literally no one knew what work to give me, and no one was able to think of anything for the remaining 10 or so months. I did genuinely feel I was not welcome, and I was not even expected to do any actual work. Over time, I've come to the conclusion that the only motivation for them employing me in the first place was for the institution to just be able to tick off a checkmark on employing people with disabilities.

Most common types of assistive technology used by employees with disabilities

Types of assistive technology most commonly used



Assistive technologies for employment

“Assistive technologies” refers to products and goods that can support persons with disabilities by removing obstacles or limitations they might experience when carrying out certain tasks. Given this wide interpretation, the definition and understanding tends to differ between people, providers, organisations, companies and even Member States.

According to Article 3 of the Directive (EU) 2019/882 on accessibility requirements for products and services, assistive technology means “any item, piece of equipment, service or product system including software that is used to increase, maintain, substitute or improve functional capabilities of persons with disabilities or for, alleviation and compensation of impairments, activity limitations or participation restrictions”²⁰. Hence, technologies included are those designed specifically for this purpose, but also any others that can fulfil this role.

Some examples of assistive technologies and devices are:

- Mobility Aids, such as wheelchairs and power scooters for individuals with mobility impairments, walkers and canes for those who need support while walking, as well as prosthetic limbs and orthotic devices to aid in movement;
- Communication Aids, such as Augmentative and Alternative Communication (AAC) devices for individuals with speech or communication difficulties;
- Hearing Aids and Cochlear Implants, to enhance auditory perception for individuals with hearing impairments;
- Vision Aids, such as screen magnifiers and text-to-speech software for people with low vision, or Braille embossers for creating tactile documents;
- Environmental Control Systems, meaning devices that allow individuals with limited mobility to control their environment, such as lights, appliances, and doors;

- Assistive Listening Devices, mainly devices to amplify sound in various environments for people with hearing impairments;
- Computer Accessibility Tools, such as screen readers, speech recognition software, and specialised keyboards for persons with disabilities;
- Adaptive Software and Apps for mobile devices, to assist persons with cognitive, learning or motor disabilities in tasks such as communication, navigation and organisation;
- Sensory stimulation devices for individuals with sensory processing disorders;
- Modifications of the built environment, such as ramps, grab bars and accessible bathroom fixtures, to enhance mobility and safety;
- Proximity and Object Detection Devices that alert individuals with visual impairments about nearby objects or obstacles;
- Smart Home Technology, integrating voice commands and automation to control various devices and tasks within the home²¹.

With the exception of some of these technologies and devices that are very specifically designed for persons with disabilities (e.g. hearing aids, braille, prosthetic limbs), many are developed using the principle of universal design. This refers to the development of technologies that support persons with and without disabilities and respond to the needs related to a wider range of disabilities rather than just one specific impairment. The universal design approach is becoming more and more common. This is due to the general trend of developing assistive technologies that substitute human tasks, rather than support them²².

34 The European Disability Forum

In the EU, these technologies are regulated. The legal basis for how this is done differs depending on their characteristics and use. The European Accessibility Act²³ from 2019, for instance, covers the following products and services, with the aim of setting minimum and harmonised accessibility requirements throughout the EU:

- 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.

The European Accessibility Act therefore pushes for mainstream technologies to fulfil certain assistive roles. Other assistive technologies might be understood as medical devices, and therefore covered by the Medical Devices Regulation from 2017²⁴. While this is good in terms of the quality assurance of medical devices and their use, it often covers devices that are expensive and difficult to access for most persons with disabilities for private use, particularly if the Member State does not cover the cost of purchase²⁵.

Many assistive devices and technologies are acquired specifically for work-related activities of persons with disabilities. As such, it is most commonly the employer who makes the purchase. One of the key reasons that the device or technologies an employee require might not be acquired, is the employers' general lack of awareness around assistive technologies. Many employers lack knowledge regarding the diverse range of options available or how these devices and technologies can actually benefit employees with disabilities. This is supported by the findings of our research, which showed that around 3 in 4 employers in the EU and the UK do not know whether or not assistive technology is being used by their employees. Interestingly, other employers surveyed in our study noted that assistive tools are being used not only by their employees with disabilities but also by those without disabilities. This is a clear sign of how beneficial assistive technology can be for everyone.

Overall, 81% of the employers surveyed said they do not have policies in place for acquiring assistive technology or devices. This, combined with employers' lack of familiarity with reasonable accommodation and assistive technology, goes some way towards explaining why so many workers with disabilities miss out on the support they require. In addition, 77% of the interviewed employers are not aware of the public legal framework supporting the acquisition of assistive technologies for persons with disabilities. Austria is the only country in the sample where the majority of employers, 58%, seems to be conscious of this opportunity.

Employers also typically miss opportunities to become familiar with the latest market developments and, therefore, to understand what new technologies could serve as a solution for their employees with disabilities. Employers that have developed policies to facilitate reasonable accommodation and the use of assistive technologies in the workplace, however, appear to liaise more regularly with experts and partake in workshops where new technologies are presented. This also allows employers and employees to test out new assistive technologies and devices before purchase.

There is also a common complaint about the lack of training for employees with disabilities on how to use the assistive technologies available to them. Our research indicated that employers might not provide the necessary training, which in turn undermines the potential for improved performance that the technology has to offer. In addition to training, several employers also list incompatibility and synchronisation issues between their internal systems and the assistive software as a limiting factor for the end users' productivity.

Another common obstacle comes from the inconsistent or inadequate policies related to workplace accessibility and the provision of assistive devices throughout Europe. Although reasonable accommodation is a right for all employees under the EU Employment Equality Directive from 2000, understandings of reasonable accommodation vary²⁶. In practical terms, what often varies between Member States is the type of reasonable accommodation that the State will subsidise, what proportion of the cost they will cover and how long employers must wait to receive financial support.

Last, but not least, our research suggested that the availability of technologies depends on the region and country. People might struggle to find the devices they need locally. This is more common in developing countries outside the EU, but it may also happen within the EU's internal market whenever support for assistive technologies is not well developed²⁷.



Personal testimony 3 – Florian – Austria

I am blind and still without employment. My previous experience with employers has typically resulted in the following:

- They use one or more software which is not usable with assistive technology. Assistive technology is wonderful, but if a software is designed in a way that a screen-reader doesn't recognise anything, it's all useless.
- Still lots of paper-based work. Digital and assistive stuff is wonderful, but if an employer (for whatever reason) still works a lot with paper, a blind person has no chance.
- Generally, often everything too visual.
- Multitasking is usually required. As a blind person you can use tons of assistive stuff, but you'll never be able to do any kind of multitasking!
- Speed: Qualification and assistive stuff will never bring a 100% compensation of blindness. So, therefore I face situations when I have to confess that I am slower than others.

I'll give you one example of a conversation I had with a potential employer during an interview. Employer: "How do you handle e-mails? We get approximately 100-200 mails a day."

Me: "First in, first out, isn't that a normal way of dealing with them? I scroll down to the first mails that came in and deal with them."

Employer: "But how will you recognise if something is urgent and needs to be preferred?"

But then we both realised, OK, that's a problem. Even going through the list of mails and reading all subjects first would take too much time. Somebody with two working eyes can skim over the list and will find urgent stuff much faster. Just one example of problems potential employers have with blind people.



Personal testimony 4 – Ibrahim – Belgium

For the different jobs I've had, I usually just made it simple and proposed to work with my own computer. That way I didn't need to learn to use a new keyboard and ask for a licence to install the assistive technology I use. Even when this was not accepted, I would start by using my computer until they had installed the tools I need on the new computer provided by the company.

I think that the more you master the tools, the more you can convince employers that you are able to do stuff very fast. The first time you use a tool, you will take more time than a sighted person to use it, that is a fact (like the first time you use Zoom). Then, when you learn the shortcuts, you can be as fast and even faster at using it. But if the company is using a tool that is not accessible, that can really be a problem. Fortunately, for a lot of tools, alternatives exist. But the company has to be open to letting you use the alternative tools to be able to do the things in your own way, to keep your autonomy, and for you not to have to ask for assistance all the time.

With Diversicom (an association in Brussels who helps people with a disability to find a job) we do sensitising when I sign a contact with a company. We show them how I work, what I can do with it, what are the limitations and the importance of having access to the tools I use in my daily life.

Assistive technologies and Artificial Intelligence

The use of Artificial Intelligence (AI) is becoming increasingly predominant in the context of assistive technology. Sophisticated and evolved algorithms, the software's internal step-by-step procedures, can digest an enormous quantity of data to help automate several tasks. The underlying assumption is that these systems are designed to generate responses that are looped back into the model to continue its refinement and improvement, enhancing the overall performance, and helping users work in a faster, more effective and efficient manner.

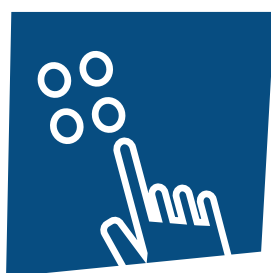
The use of such systems might have an immediate and positive impact on the working conditions and productivity of persons with disabilities, in particular for persons with motor disabilities who, thanks to this technology, would likely need less assistance and fewer tools to perform their work activities. In fact, despite still relying – at least partially – on some devices that already exist, such as speech-to-text applications or visual object detection and recognition tools, what makes these systems differ from those used until now is the unique capability of gathering data from different sources and in different formats all at once and produce a consistent output. It is also worth noting that several of these systems are readily and freely available online, which, in some cases, solves the issue of limited access to assistive technology due to budget restrictions. Despite these positive sides, the lower average digital literacy persons with disabilities possess may pose further difficulties in their approach to this new technology.

Overall, AI algorithms offer a great opportunity for improving the employment outcomes of persons with disabilities. However, they are not yet designed and fully accessible to persons with intellectual disabilities. Researchers and developers are still working on rendering data and input sets easily usable, as they are still heavily reliant on end users' strong cognitive capabilities. There are also growing concerns about how persons with disabilities will fare as AI systems are increasingly used as a tool for recruitment, and the additional barriers to employment that this could create.



Personal testimony 5 – Sarah – UK

The UK has a good programme to fund assistive tech in the workplace (Access to Work) but does not promote it and the majority of companies and even disabled people are unaware of it. The rise of online and AI-assisted recruitment is building in new barriers to employment for disabled people. Lack of digital skills can make it impossible to apply in the first place and AI models built with disabling attitudes can mean that disabled candidates are filtered out before human beings are involved.



Reasonable Accommodation

In the European Union, the right of persons with disabilities to work is protected by the CRPD and the Employment Equality Directive²⁸. These legal frameworks emphasise the importance of ensuring equal treatment, access and participation of people with disabilities in employment, including the provision of reasonable accommodation in the workplace.

According to Article 2 on “Definitions” in the CRPD, reasonable accommodation is “necessary and appropriate modification and adjustments not imposing a disproportionate or undue burden, where needed in a particular case, to ensure to persons with disabilities the enjoyment or exercise on an equal basis with others of all human rights and fundamental freedoms”²⁹.

Reasonable accommodation encompasses several different devices, tools and equipment. As well as those reported in the “Assistive technologies for employment” section of this report, reasonable accommodations might also include adjustments such as:

- modification of buildings
- evacuation plans
- tactile paving
- allocated quiet rooms
- reduced worktime, flexible working hours and additional breaks during workday, etc.

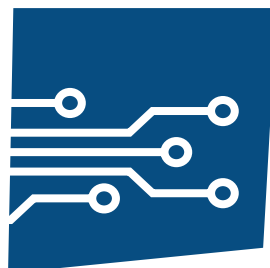
As well as this, the EU Employment Equality Directive requires the provision of reasonable accommodation “to enable a person with a disability to have access to, participate in, or advance in employment, or to undergo training”. This directive establishes reasonable accommodation as a right in all EU Member States, which means that employers are obliged to take appropriate measures to accommodate the needs of employees or job applicants with disabilities, unless doing so would impose a disproportionate burden on the employer. Since this is an EU Directive, it means that all EU Member States were obliged

42 The European Disability Forum

to transpose this principle into EU law, including the UK which was a Member State at the time of the Directive's adoption and throughout the transposition period.

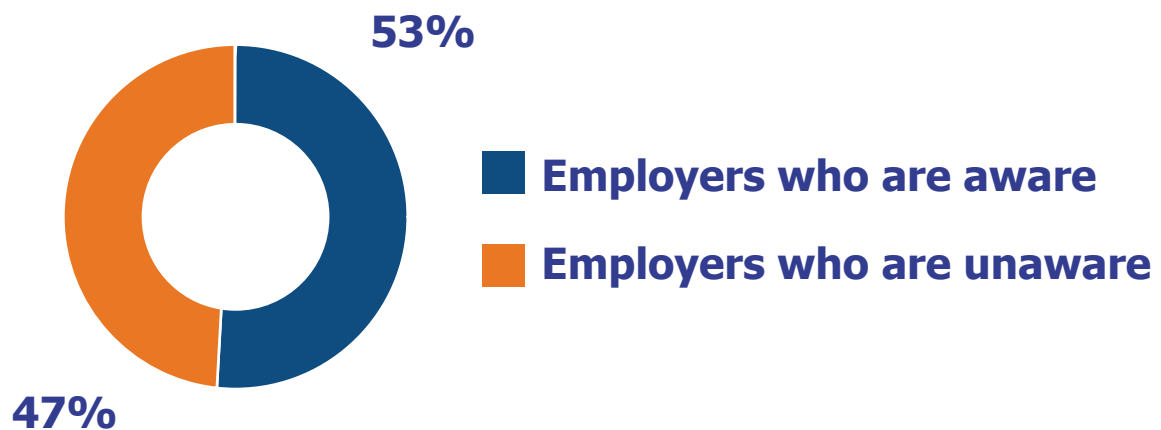
The results from the country reports show that there is a low level of information among employers regarding the legislation in force at national and European level. 76% of employers are not aware of the public legal frameworks that may support them. Despite the EU Employment Equality Directive having been in place since 2000, reasonable accommodation guidelines do not exist, and even simple requests such as moving to part-time work are often denied. Employers cited lack of know-how as a key limitation in the provision of reasonable accommodation.

Many employers are also not aware of the financial incentives for hiring individuals with disabilities. Only 1 in 4 makes use of state support, but responses outline that accessing public funds is hard and dependent on meeting tight criteria. Most of the time, state subsidies are financially inadequate and coupled with long bureaucratic procedures which, in practice, then force persons with disabilities to secure solutions for reasonable accommodations by themselves.

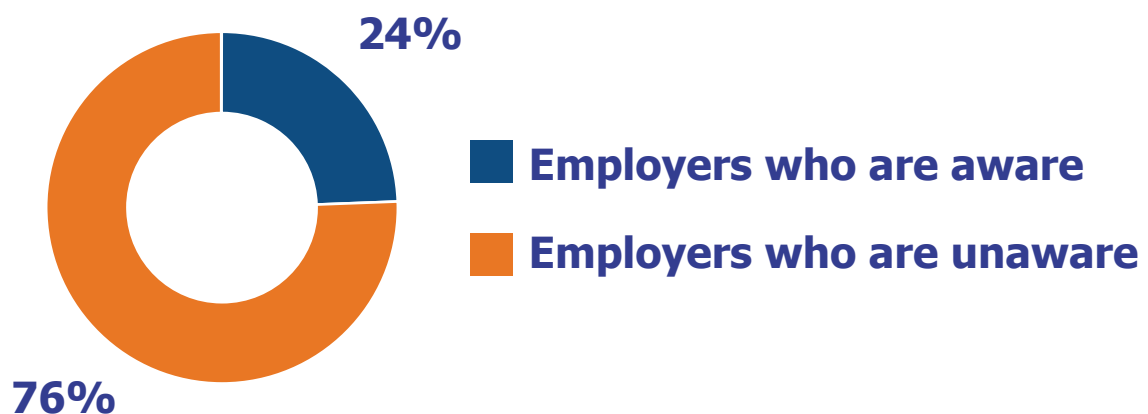


Public Funding for Inclusion of Persons with Disabilities in the Labour Market

Employer awareness of support systems for the employment of persons with disabilities



Employer awareness of policies or programmes to support reasonable accommodation in the workplace



The main limitations in providing reasonable accommodations, according to those we surveyed in our study, are:

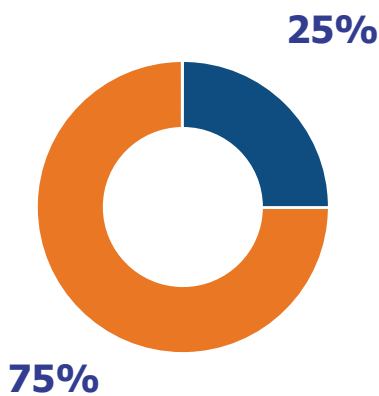
- limited funding and support
- the excessive bureaucracy to access reasonable accommodation (a burden both to employers and employees)
- limited availability of information regarding state support.

As far as HR policies for reasonable accommodations are concerned, our research indicated that around 7 out of 10 of them fall short of standardised procedures for the acquisition of reasonable accommodation. Only five countries – Austria, Estonia, Ireland, Spain and the UK – show a positive balance. Considering only these countries, around 60% of the interviewed employers do have formal HR policies on reasonable accommodation, with the UK leading at 77%. Instead of written and codified guidelines, employers tend to just commit orally when agreeing on reasonable accommodation for their employees. An even higher percentage of employers, 3 out of 4 from the questionnaires, do not have an internal policy regarding the accessibility of the recruitment process. Some companies do not have a specific written policy but express a willingness to make adjustments on a case-by-case basis. On the whole, however, the survey replies received in the framework of our research indicate that the implementation of reasonable accommodation measures is insufficient.

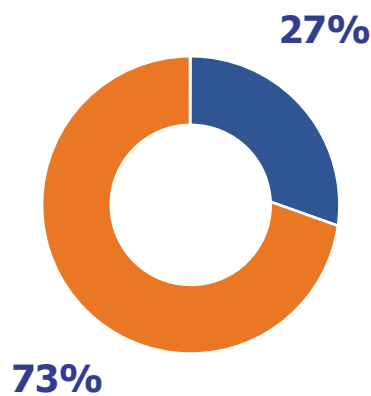
Human Resources Disability Practices of Employers in Europe

■ With policies ■ No policies

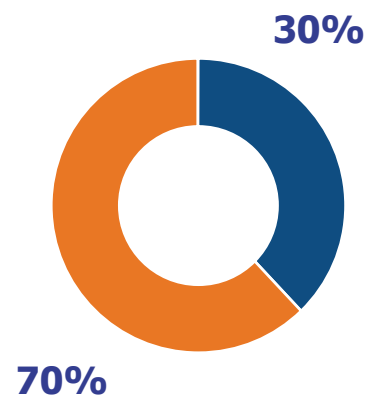
Employers with
HR guidelines
on hiring
persons with
disabilities



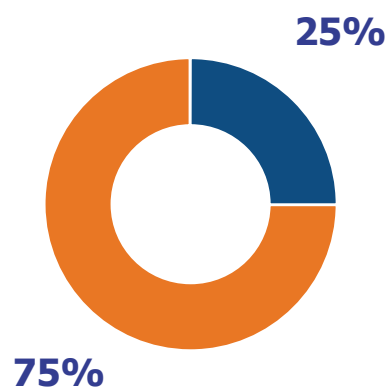
Employers
participating in
programmes to
employ persons
with disabilities



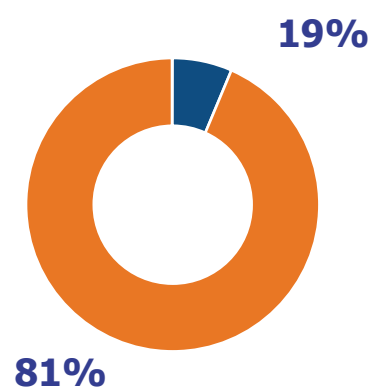
Employers with
HR guidelines on
reasonable
accommodation



Employers with
policies on accessible
recruitment processes



Employers with policies
on acquiring assistive
devices and technology



46 The European Disability Forum

However, more structured examples exist. Some employers we queried explained that they liaise with external consultants to set up an accessible recruiting process or are working towards doing so, others have already adjusted their recruitment system³⁰. Organisations' websites have been made accessible and job descriptions are adapted using the "job carving" approach – which identifies tasks that the employee cannot or does not feel able to perform and replace with suitable ones – and include questions on whether accommodation is needed at any stage of the recruitment. Job Interviews are generally adapted with longer pauses and with live captions when taking place online. Interestingly, one employer reported training staff working at the internal cafeteria to communicate using Sign Language, to better include workers who are Sign Language users.

Lack of accommodation can also be found during recruitment processes, where employers often fail to ensure the accessibility of the interview, whether it be physical or otherwise. Speech-to-text services or Sign Language interpretation for Deaf persons, for example, are not commonly provided for, even in legislation.

The cost of reasonable accommodation is reported by employers as a concern and a burden. There is shown to be a lack of adequate funding for workplace adaptations, and what state support is available is often not well known by employers. Providing certain accommodations, especially those involving structural changes or specialised equipment,



can be costly for employers and organisations, particularly smaller ones with limited resources. Procuring assistive technologies can be difficult not only due to the costs involved, but also to the lack of availability of certain technologies, or lack of awareness around how to get state subsidies for these purchases. However, despite employers' concerns around costs, identifying the actual costs of reasonable accommodation appears to be a challenge for employers answering our questionnaire. Other than the investments in adjusting premises, employers are generally not able to recall what the main costs they incurred are, which makes tracking their overall impact difficult at best. A Danish employer notes that beyond the initial financial investment, the acquisition of reasonable accommodations has proven to be beneficial not only for the employees asking for them, but also for the whole organisation, as it nurtured a new attitude and more inclusive work environment.

However, interviewees highlighted that it is ambiguous what is "reasonable", and employers do not have a clear understanding of what it means for them.

Employers and service providers also lack training in disability awareness and how to effectively provide accommodations, leading to misunderstandings and ineffective support. Furthermore, employees may be hesitant to disclose their disabilities due to concerns about privacy or potential discrimination, which can impact the accommodation process.





Personal testimony 6 – Steven – Netherlands

I am permanently in a wheelchair and have a chronic illness, so the main things I need are accessibility and a bit of flexibility. Barriers at my workplace, which is an educational institute, are of two kinds.

1. Physical barriers, such as inaccessible rooms / lecture halls, or spaces that can only be entered via a door at the back of a building, or lecture rooms where you can only sit alone, in front of the rows of tables/chairs where everybody else sits, so you feel separated. Sometimes I choose not to go to a presentation because I hate this feeling.
2. Lack of understanding of disability and what it means to be disabled or chronically ill. What's disturbing and hurtful is the feeling of being separated from your peers. This can occur through the way the environment is built but also due to the fact that you have to put a lot of effort into getting the accommodation or flexibility that you need.

It happens a lot that, although the first thing you want is to be able to join activities just like everybody else, you are nevertheless treated like a special case, because you have to ask for things and this is regarded as requesting a special treatment offered to you based on their most generous nature. I have been told by my employer that I should be more grateful for the accommodations that I got, and for the fact that I am allowed to work there. They even said that, without their help, I would be sitting at home, unemployed and incapacitated for work. This makes me feel excluded, after having worked and given my all at that place for 25 years.



Personal testimony 7 – Jennifer – Ireland

It's difficult for colleagues and peers in the workplace to understand the needs of an autistic colleague. Apparently, simple things like explicit communication, clear instructions and expectations and unambiguous language are huge barriers. Making adjustment or accommodations for a worker seems to be very challenging for managers and colleagues. Workplaces are not ready. People generally do not have the capacity to do things differently and accept this as necessary for inclusion and not special treatment. At best, people in general easily infantilise the autistic person, being sympathetic and charitable, which is also a barrier. I have not observed good practice in the workplace, with the exception of one, where a colleague acted as a mentor and was empowered and supported by management to do this.



Personal testimony 8 – Antonia – Greece

I work in the public sector, in the Municipality, and I had to leave my job position for these [last] 5 years, because I was needed in another position of the public sector. Everyone knew that I have to return to my official position after these five years, but the municipality has changed the working place: new building, new furniture and new hardware. The outcome is that I am not able to reach the height of the new furniture. I can't reach the keyboards or mouses, of course I can't reach the printers and scanners. The funniest thing is that my wheelchair cannot fit in a narrow place where three desks are. Maybe I am not welcomed anymore. So technically I cannot return to work. My only choice is to retire at the age of 43.

Conclusions

The results of this research bring home just how much further the countries of the European Union and the UK have to go to better include persons with disabilities in the open labour market. Only 25% of employers in the countries studied have an HR policy on hiring persons with disabilities, or even participate in programmes to improve inclusion in the workplace. The findings point out that the least structural support is available for persons with intellectual disabilities.

The issue extends to people looking for internships, which are commonly a prerequisite to finding one's place in the job market. While employers were shown to be keen to hire interns with disabilities, only half have ever taken the step of actually doing so. The prospects for interns with disabilities are made all the bleaker, given how little state funding is on offer to support employers with any expenses linked to their interns' needs.

There is an ongoing issue of the qualifications held by candidates with disabilities, particularly when it comes to digital skills. This is particularly problematic as the European labour market becomes increasingly digitalised. However, while around half of the employers participating in the study deemed the lack of digital skills to be a problem, they claimed this issue is not limited to candidates with disabilities alone. Furthermore, only half of the employers actually provide training on digital skills to address this problem, and very few do so with a particular focus on employees with disabilities.

Persons with disabilities are all too often being turned down for jobs because of employers' fears about the difficulties involved in providing reasonable accommodations. Even people who manage to secure a job are commonly left without the

accommodations they require. When it comes to acquiring assistive technology or devices to enable a person to do their job, 81% of employers have no policy in place to determine how this is done, and around 3 in 4 have no idea of how assistive technology is being used by their current employees. Most employers are unaware that the State can help them in purchasing these and in setting up other forms of reasonable accommodation, which goes some way to explaining why only a quarter of employers make use of the state subsidies available to them. Even when employers do know about the financial support they are entitled to, some choose not to make use of it because the process for getting expenses reimbursed is so bureaucratic and burdensome.

New EU legislation on minimum wages and on reporting obligations for companies on their actions towards inclusion, as well as planned EU guidelines on reasonable accommodation, should all pave the way for better quality employment in general across the EU, particularly for persons with disabilities. This will be crucial as the disabled community adapts to an ever-changing and increasingly digitalised labour market, which can bring about both opportunities and additional challenges for persons with disabilities.

Looking to the future, Artificial Intelligence offers us some hope that digital solutions to support persons with disabilities at work will improve. The fact that certain AI-based assistive technologies are free to use or relatively inexpensive also holds some promise for how easy it will be for employers and individuals alike to get hold of them. On the other hand, many AI tools are still not fully accessible, or able to adapt the way they learn and develop to users with disabilities.

Recommendations

Digital Skills

1. **To policy makers:** Increase the focus on digital skills taught in schools. Education systems need to prepare young people better for the labour market that awaits them. There should be increased focus on digital skills that meet employers' needs. Particular focus should be on supporting learners with disabilities to improve their digital literacy.
2. **To employers and technology companies:** Integrate digital skills trainings into apprenticeship and internship programmes. The experience that apprentices and interns gain during work placements should focus on improving their use of digital tools used in the workplace. For interns and apprentices with disabilities, there should also be support in understanding how the assistive technology and devices available to them function and getting accustomed to using them in a professional setting. Companies producing these technologies should be on hand to support such training, which will assist end users in understanding how to benefit from the technologies they produce.

- 3. To public authorities and employers:** Invest in accessible ICT systems and training on digital skills and accessibility for all employees, not only those with disabilities. In order for assistive devices and technologies to be able to assist those using them, all people need to understand how to create accessible digital content that is compatible with assistive technologies. Employers should see this as an investment that will, in the long-term, make it much simpler to integrate workers requiring assistive technology into the workplace. It is important that state-funded programmes be on offer to help small or medium enterprises with fewer resources to offer such trainings.



Assistive Technologies

1. **To technology companies and employers:**

Facilitate connections between providers of assistive technologies and people responsible for HR. The general lack of know-how and the rapid transformation of products on offer pose difficulties for employers. It is optimal to bring people working in human resources and companies producing assistive technology and devices together so that new solutions can be showcased and explained clearly to employers. Gatherings such as trade fairs for assistive technology can clarify what solutions are on offer, the range of different costs and how, concretely, assistive technologies will support employees.

2. **To technology companies:** Involve persons with disabilities and the organisations representing them in the development, design and implementation of assistive tools. Special attention should be paid to ensuring the usability of technologies by those whose disabilities are the most neglected and stigmatised within society and the labour market. It is also crucial that persons with disabilities are able to give their input on the design of all mainstream technologies, which are not designed with the specific purpose of assisting persons with disabilities, so that these too are accessible for end users with disabilities, including users of assistive technologies.

3. **To employers:** invest in accessible technology, regardless of your employees' disability status. Accessible technology is not only bound to persons with disabilities. It can support other people too. It can boost overall productivity; help carry out tasks more efficiently and contribute to a shift in mentality towards a more inclusive working environment.
4. **To companies developing AI tools:** Ensure that the development of assistive technologies based on Artificial Intelligence is adaptable to persons with disabilities. The way AI tools work are often based on the functioning of persons without disabilities, which can make them less effective for those with disabilities. It is particularly the case for persons with intellectual disabilities.
5. **To technology companies:** Focus on bringing down the cost of assistive technologies. Focus should not only be on developing new technologies, but also improving the affordability of existing ones. This will open up the possibility of acquiring assistive technologies and devices to many more persons with disabilities and improve their inclusion not only in the workplace, but in society as a whole. For technology companies it will open up a bigger market of prospective clients for whom it will now be more feasible to purchase such technologies and devices.

Reasonable Accommodation

1. **To public authorities:** Increase the amount of state aid available to employers to cover any costs incurred. Make sure any costs incurred by employers when providing reasonable accommodation are reasonable and not excessive. No employer should be discouraged from recruiting persons with disabilities purely because of fear of the impact on their budget.
2. **To public authorities:** publicise the assistance available to employers and employees alike. Make sure that employers are aware of the state support that is there to help them when they need to provide reasonable accommodation. Raise awareness on the rights that workers with disabilities have and the support that they, too, can benefit from when entering the labour market.
3. **To public authorities:** Reduce the administrative burden linked to requests for subsidies for reasonable accommodation. Do not put off employers applying for state subsidies because of how lengthy and bureaucratic the process is. Make it simple and accessible to all who are eligible for it.
4. **To public authorities:** Provide grants for employers who take on interns and apprentices with disabilities, to cover any reasonable accommodation costs not supported by state subsidies. As internships and apprenticeships are a common prerequisite to enter the labour market, it is crucial that persons with disabilities are not excluded. Since it is rare that public

authorities subsidise purchases linked to reasonable accommodation, it is important that this gap in funding be filled. Public authorities should consider providing grants to employers who take on interns or apprentices with disabilities to act as a buffer to absorb any extra costs that might come their way.

5. **To employers:** adopt a “design for all” approach in the workplace to facilitate the provision of reasonable accommodation when requested. Making your workplace and your working practices as accessible as possible from the get-go will save you time and money in the long run. Creating spaces and procedures using a “design for all” approach means that any reasonable accommodation requests are likely to be much easier, cheaper and quicker to implement, and it will avoid disrupting the way that other colleagues are accustomed to doing things.
6. **To employers:** promote and invest in training for managers and those working in HR. This should include training on how to accommodate the needs of persons with different disabilities and make the recruitment processes accessible. Organisations of persons with disabilities can be consulted to provide expertise in such topics. Ultimately, it is crucial to understand the importance of providing reasonable accommodations at the recruitment stage, to ensure candidates with disabilities are not missing out on jobs they are qualified and suitable for.

References

1 Hammersley, H. & Buchanan, J. (2023). The Right to Work: The Employment Situation of Persons with Disabilities in Europe. European Disability Forum. Pp 35. https://www.edf-feph.org/content/uploads/2023/05/hr7_2023_press-accessible.pdf

2 Council Directive 2000/78/EC establishing a general framework for equal treatment in employment and occupation. <https://eur-lex.europa.eu/eli/dir/2000/78/oj>

3 <https://www.evenbreak.co.uk/>

4 In France and Belgium, HelloHandicap and DiversiCom, respectively, offer a similar service.

5 <https://jobsplus.gov.mt/funding-employer/access-to-employment-a2e-scheme-2021-2027>

6 <https://www.gov.uk/government/collections/disability-confident-campaign>

7 <https://www.gov.uk/access-to-work>

8 <https://www.duoday.fr/>

9 <https://www.insertaempleo.es/>

10 <https://www.agefiph.fr/>

11 <https://www.fundacionuniversia.net/es/index.html>

12 <https://www.dfnprojectsearch.org/>

13 OECD. (2019). Vectors of digital transformation. OECD Digital Economy Papers, 273. <https://doi.org/10.1787/5ade2bba-en>

14 European Commission & Directorate-General for Employment, Social Affairs & Inclusion. (2021). Union of equality – Strategy for the rights of persons with disabilities 2021-2030. Publications Office. <https://ec.europa.eu/social/main.jsp?catId=1484&langId=en>

15 Bergson-Shilcock, A., Taylor, R. & Hodge, N. (2023). Closing the Digital Skill Divide – The Payoff for Workers, Business, and the Economy. National Skills Coalition, Federal Reserve Bank of Atlanta. https://nationalskillscoalition.org/wp-content/uploads/2023/02/NSC-DigitalDivide_report_Feb2023.pdf

16 Eurostat. (2019). European Union Statistics on Income and Living Conditions. <https://ec.europa.eu/eurostat/web/microdata/european-union-statistics-on-income-and-living-conditions>

17 Eurostat. (2022). How many citizens had basic digital skills in 2021? <https://ec.europa.eu/eurostat/web/products-eurostat-news/-/ddn-20220330-1>

18 OECD (2019), op. cit., [endnote 13](#).

19 Good Things Foundation. (2016). Doing Digital Inclusion: Disability handbook. <https://www.goodthingsfoundation.org/insights/doing-digital-inclusion-disability-handbook/>

20 Directive (EU) 2019/882 on the accessibility requirements for products and services. <https://eur-lex.europa.eu/eli/dir/2019/882/oj>

21 Assistive Technology Industry Association. (2015). What is AT? <https://www.atia.org/home/at-resources/what-is-at/>

22 Boucher, P. & Directorate-General for Parliamentary Research Services. (2018). Assistive technologies for people with disabilities. [https://www.europarl.europa.eu/RegData/etudes/IDAN/2018/603218/EPRS_IDA\(2018\)603218_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/IDAN/2018/603218/EPRS_IDA(2018)603218_EN.pdf)

23 Directive (EU) 2019/882, op. cit., [endnote 20](#).

24 Regulation (EU) 2017/746 on in vitro diagnostic medical devices and repealing Directive 98/79/EC and Commission Decision 2010/227/EU, <https://eur-lex.europa.eu/eli/reg/2017/746/oj>

25 Ibid.

26 Council Directive 2000/78/EC, op. cit., [endnote 2](#).

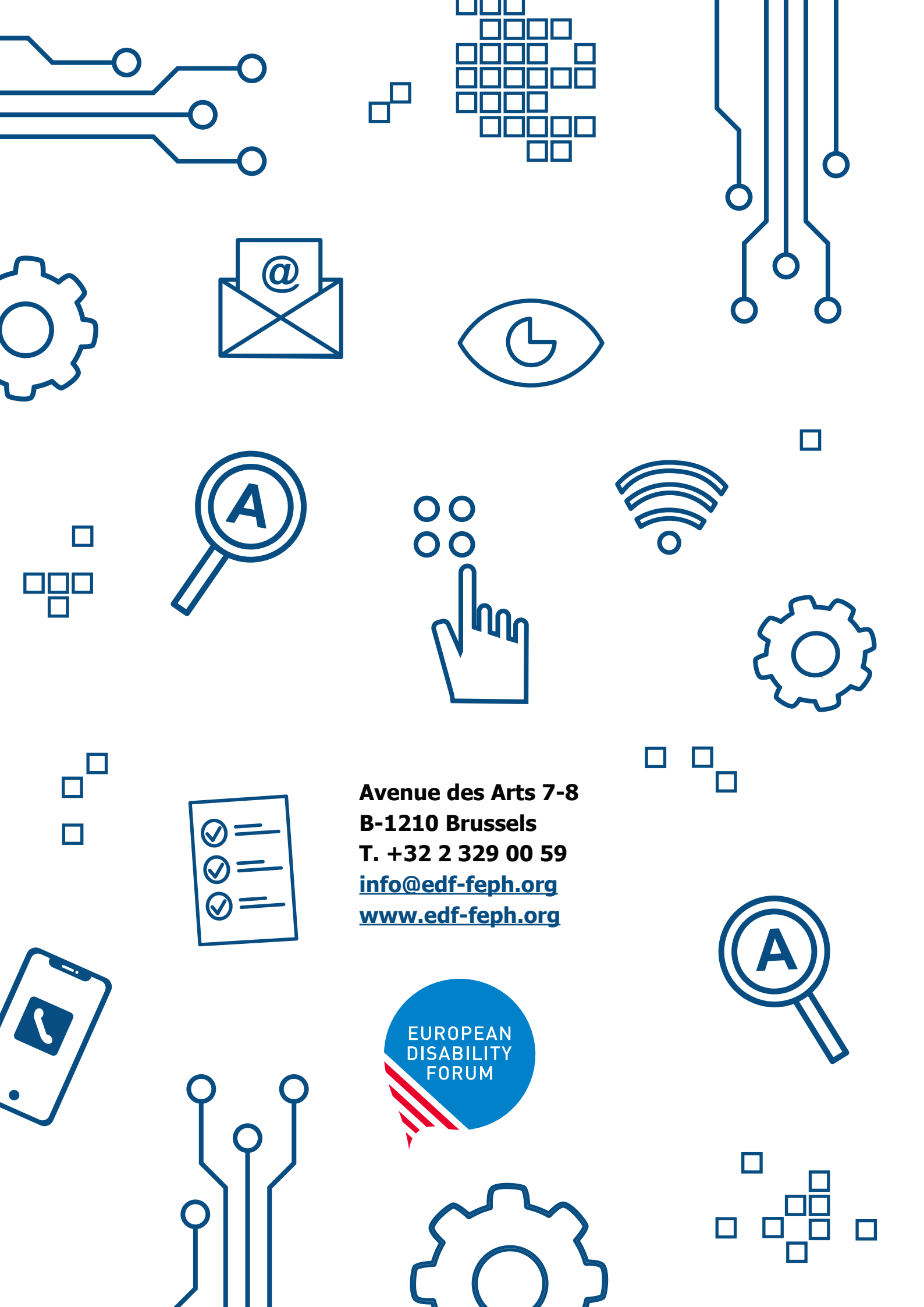
27 Copley, J. & Ziviani, J. (2004). Barriers to the use of assistive technology for children with multiple disabilities. *Occupational Therapy International*, 11(4), 229–243. <https://doi.org/10.1002/oti.213>

28 Council Directive 2000/78/EC, op. cit., [endnote 2](#).

29 United Nations. (2006). Convention on the Rights of Persons with Disabilities. <https://www.ohchr.org/en/instruments-mechanisms/instruments/convention-rights-persons-disabilities>

30 These include NEBA, an Austrian umbrella organisation that offers support on both sides. It provides job seekers with training while giving companies job assistance during the recruitment process.





Avenue des Arts 7-8
B-1210 Brussels
T. +32 2 329 00 59
info@edf-fehp.org
www.edf-fehp.org

