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# Croatia

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# Introduction

This collection of country reports is part of the research on Digital Skills, Accommodation and Technological Assistance for Employment, 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.

National experts from each EU Member State (with the exception of Luxembourg) and the UK analysed their respective national contexts. They outline policies and programmes to support reasonable accommodation as a Human Resources (HR) procedure, map trends in the use of accessible and assistive technologies in the workplace, and explain the main limitations experienced by employees with disabilities in acquiring accessible or assistive technology that meets their needs. They also analysed the barriers faced by persons with disabilities related to digital skills and highlight some good practices at national level.

The national reports cover the following countries: the UK, Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain and Sweden. Luxembourg is the only EU Member State that is not part of the study due to not finding a suitable national expert on the topic.

# 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.

**EU Statistics on Income and Living Conditions (EU-SILC):** a regular cross-sectional and longitudinal sample survey by Eurostat that provides data on income, poverty, social exclusion and living conditions in the European Union.

**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.

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**Number of observations (n):** indicates the number of employers each national expert managed to interview.

**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.

**Organisations of Persons with Disabilities (OPD):** represent the interests of their members with disabilities and have the mandate to advocate for the realisation of their human rights and lobby for the consideration of their interests.

**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.

**The Digital Economy and Society Index (DESI):** an index that the European Commission reports between 2014-2022, monitoring Europe’s overall digital performance and tracks the progress of EU countries in their digital competitiveness.

**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.

## National Overview

In Croatia, information on employment of persons with disabilities can be examined using data from the Croatian Employment Service, where, by the end of 2022, a total of 117,816 unemployed persons were registered, out of which 7,196 were disabled (6.1%)<sup>1</sup>. However, according to Eurostat, the disability employment gap in Croatia was 36% in 2022, which is significantly above the EU27 average of 21.4%<sup>2</sup>. According to data from the Institute for Expertise, Professional Rehabilitation and Employment of Persons with Disabilities<sup>3</sup> (hereinafter: IEPR), on 31 December 2022, 15,513 employed persons with disabilities were registered, which is 3,819 more than on 31 December 2021, when there were 11,694 persons registered<sup>4</sup>. Please note that this increase is not solely an indicator of the growth of employment of persons with disabilities but is also partly caused by alignment with the new Act on the Register of Employed Persons with Disabilities<sup>5</sup> and an update of the databases in the Register of Persons with Disabilities<sup>6</sup>. It is worth mentioning that there is a public co-financing support in Croatia available, for up to 24 months of gross salary when it comes to employing persons with disabilities<sup>7</sup>.

In the country analysis for Croatia, one aspect on which both company respondents and organisations of persons with disabilities (OPDs) agree is that the Croatian education system does not properly support the needs of persons with disabilities and therefore they lack many skills necessary for entering the labour market. Another element worth giving attention to is the belief of some persons with disabilities and their family carers, that they will not be able to obtain employment. Indeed, some persons with disabilities hold back from seeking employment due to their parents holding a parent-carer status and receiving state social benefits while they are unemployed or becoming recipients of disability pension themselves. On the other hand, the ease with which – and the understanding of how – employers can employ persons with disabilities needs more attention. Furthermore, there has been much debate about the use of funds gathered by the so-called quota system. The quota system subjects employers with a minimum of 20 employees to quotas to employ a certain number of persons with disabilities: 3% of the total number of employees<sup>8</sup>. Employers that do not meet this quota, neither by employing persons with disabilities nor in an alternative manner, are obliged to pay monetary compensation<sup>9</sup>. The monetary compensation amounts to 20 percent of the monthly minimum wage for each person with a disability that the employer is required to employ under this system<sup>10</sup>. Starting from 2018, funds collected by the quota system have, been used for the development of a professional

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rehabilitation system; incentives and rewards; and projects and programmes for the employment of persons with disabilities<sup>11</sup>. However, in special circumstances established by law, in order to preserve jobs and retain employment, the Minister of Labour is authorized to decide to use the funds for other purposes, as well as to temporarily suspend the obligation to pay compensation. In 2020 for example, during the COVID-19 crisis, the Government exempted some employers from paying compensation for not fulfilling the quota and reallocated the unspent funds to measures to help the economy, which had been affected by the pandemic's exceptional circumstances. While the decision has since been revoked, significant unspent funds from the quota system remain unused. The problem is that the amount of unspent funds grows from year to year<sup>12</sup>. The decision on the financial compensation due to non-fulfilment of the quota employment obligation entered into force on 29 July 2020<sup>13</sup>.

The following section briefly introduces the background of the EDF employer survey respondents whose results will be used in the following chapters. In total, the EDF employer survey received 21 responses. Regarding the size of the companies, 14% of respondents represent companies with 10-49 employees, 38% each represent companies with 50-199 and 200-999 employees, and 10% companies with more than 1,000 employees. 33% conduct business in manufacturing, 29% in wholesale and retail trade, 9.5% in agriculture, forestry and fishing, while 4.8% come from the areas of accommodation, broadcasting, finances, telecommunication, support and administrative services. Regarding the percentage of persons with disabilities employed at respondents' companies, 24% of respondents have persons with disabilities as 1% of their workforce, 62% have 2-4%, 10% have 5-9%, and 5% more than 30%<sup>14</sup>.

## Digital Skills

Croatia shows results above the EU average in terms of digital skills – in 2021, 63.37% of individuals had basic or greater overall digital skills, compared to the EU average of 53.92%<sup>15</sup>. The same results can be found when looking at greater than basic overall digital skills (31.18% for Croatia compared to the EU27 average of 26.46%). Unfortunately, no official data could be found about the level of digital skills of persons with disabilities in Croatia. However, there has recently been a study on digital inclusion of vulnerable groups<sup>16</sup>. This included persons with disabilities (32.2%), together with elderly people, residents of rural areas and people living on islands<sup>17</sup>. For 65% of the respondents, the costs of purchasing electronic devices and equipment are too high. Worryingly, less than 10% acquired skills at organized workshops, and 19% do not want to develop new skills. Furthermore, 42% of respondents believe that they do not need to have skills in online shopping, online payment or mobile banking, nor are they interested in acquiring them. Although the context that the study gives is not focusing on the experiences of persons with disabilities, since other groups are also included in the results, it does give an indication that more can be done to demonstrate the benefits of digital skills and encourage learning processes.

OPDs believe the use of digital skills mainly comes from individual efforts and is often aided by the support and distribution of resources of OPDs. They believe the Croatian education system lacks an adequate approach towards inclusive education. To their knowledge, about 40% of school buildings do not fulfil the construction requirements for accessibility for persons with disabilities and the teachers lack adequate training. However, there are many support programmes, often funded by the European Social Fund Plus, which put attention to development of digital skills and lifelong learning. In the national context 'Vouchers in Education' are used through the Croatian Employment Service, through which both employed and unemployed persons can benefit from co-financing or even full coverage of costs for training courses in diverse areas, as part of lifelong learning initiatives. These courses include digital marketing, programming, administration and EU programme management<sup>18</sup>.

An example of good practice can be found at the Croatian Union of Associations of Persons with Disabilities (SOIH), a Croatian OPD which organised a pilot project for establishing 15 IT centres across Croatia, with working units (including computer equipment and accessories). 88 persons were included in the programme and they are now all employed<sup>19</sup>.

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In line with the data on the levels of digital skills people have acquired in Croatia, 86% of company responses stated that they do not believe lack of digital skills are a burden when their company/organization plans to hire persons with disabilities. However, less than a third (29%) have specific guidelines about hiring persons with disabilities and 43% have developed employee training programmes related to digital skills, but not specifically for employees with disabilities. There is a wide share of 81% company respondents stating they are familiar with the public support systems for the promotion of employment of persons with disabilities. However, almost 1 in 3 (29%) the company respondents are not familiar with the support from the state or universities for companies/organisations when hiring interns with disabilities. Nonetheless, 86% believe having interns with disabilities would help with hiring employees with disabilities at later stages. When examining the most relevant skills for interns with disabilities, company respondents mention MS Office and computer skills, level of education, socialization, becoming familiar with the work culture, willingness to perform work and communication skills. Among the main bottlenecks for hiring interns with disabilities, responses include adaptation of work environment and accessibility of workplaces. Unfortunately, there is still a significant number of companies, organisations and public institutions in Croatia whose premises are not conforming to universal design requirements for construction for persons with disabilities. However, after the COVID-19 pandemic led to an increased prevalence of remote working and other forms of flexibility when it comes to working conditions, some employers are open to a greater diversity of solutions for work arrangements in individual cases.

## Assistive Technologies

In Croatia, when it comes to workplace adaptability, assistive technologies are commonly seen as part of reasonable accommodation.

An employer that employs a person with a disability can obtain the following incentives from the state<sup>20</sup>:

- co-financing for the costs of education of persons with disabilities (50-70%);
- co-financing for the costs of adapting the workplace to the needs of persons with disabilities (up to 40 times the gross minimum wage<sup>21</sup>);
- co-financing for the costs of adapting working conditions for persons with disabilities (up to times the 40 gross minimum wage<sup>22</sup>);
- financing for the costs of professional support;
- special funds for the development of new technologies and business processes in order to employ and maintain the employment of persons with disabilities (up to 100% of the costs of financing)<sup>23</sup>.

The incentives are funded by the IEPR and have been assessed by the IEPR expert bodies, including rehabilitation centres (in Croatian: Centar za rehabilitaciju). However, as the OPDs highlight, the employer does not have the right to co-finance education costs for education programmes that have been completed or are in progress at the time of submitting the application. Due to this, co-financing for this time is lost and it can also interfere with the possibilities of available programme applications from private companies. Furthermore, an employer that has exercised the right to co-finance the costs of education cannot terminate the employment contract of a person with a disability whom he has referred to an educational programme before 12 months have passed from the date of completion of the programme, except in the case of termination due to misbehaviour by the employee.

In the EDF employer survey, 29% of the respondents were aware of the use of assistive technologies by employees with disabilities. Furthermore, according to the survey respondents, the number of employees with disabilities using assistive technology ranges between 0 to 6. The devices used include ones to facilitate communication, adjustment of working chairs, tables, keyboards,

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monitors, and pillows, together with more specific tools used in manufacturing jobs such as manipulators, replacements for lifting loads and stretch films for wrapping. Only 10% of the company respondents have policies for implementing support for the acquisition and use of assistive devices and technologies by employees with disabilities, whereas 1 in 2 companies finance it themselves and 1 in 2 companies finance from the state incentives. Importantly, 86% of the respondents stated that they were not familiar with the public framework and programmes, whereas only 3 respondents (14%) had detailed and correct information about obtaining public (co-)financing.

OPDs show high levels of dissatisfaction when it comes to general access to assistive technologies. There is a lack of information about which technologies are available on the market and for what use. Most depend on personal research to understand this. However, when it comes to assistive technologies in the workplace, they express more positive views and believe there are often valuable results with the use of incentives. Nevertheless, they would prefer a more comprehensive approach that includes all the elements instead of system separation and diversity. As mentioned by the OPDs, the assistive technologies IEPR recognises are old-fashioned and perceived as costly. For example, when it comes to deaf-blind persons, applications used as default by the 'Apple' personal computer and iPhone mobile devices are accessible for visually impaired persons, but this equipment is not acknowledged by IEPR standards and procedure and they are seen as overly costly. On the other hand, an OPD argues that acquiring separate applications, which the employer will need to purchase for other brands of PCs in usage, will eventually be more time consuming, more costly and they will be obsolete more quickly than the obtaining the assistive technology by co-financing a single Apple computer, with a long period of utilization that is proven.

One of the tools mentioned as useful is the voice keyboard. In addition, when it comes to examples of good practice and latest developments, especially when considering the possibility of using Croatian language, EVA (Ericsson Nikola Tesla Voice Assistant) has proven useful as a voice-controlled interface for visually impaired persons with additional motor difficulties or difficulties in using modern technologies with a touch screen that enable voice use. The application has been updated with new improvements in 2022 to follow the specificities of Croatian language<sup>24</sup>. Furthermore, the platform Slavica Web VRI developed translation to Croatian sign language with remote translators/interpreters, although the same possibility exists with many other applications if the connection with the translator/interpreter has already been established<sup>25</sup>.

## Reasonable Accommodation

'If, for example, when hiring, instead of the best candidate (whom he would have hired if he had applied the criteria of abilities, knowledge and skills), he [employer, remark by the author] hires the one who remained, applying discriminatory grounds as criteria for establishing an employment relationship, then he harms himself. Therefore, it is necessary to make employers aware that when implementing decisions related to work and employment, they do not harm themselves, but that they apply exclusively criteria related to productivity (Eng. merit-based criteria; criteria related to productivity). However, making a reasonable adjustment often comes at a cost. If the financial burden of implementing reasonable accommodation is the burden of the employer, failure to implement reasonable accommodation appears to be a reasonable decision of the employer (considered purely from an economic point of view). That is why the regulations governing this area must include subsidies to be an incentive for the implementation of a reasonable adjustment'.

IEPR has published and made available online four Handbooks with recommendations for reasonable workplace accommodations: volume I (2018), volume II (2019), volume III (2020) and volume IV (2023). They cover a variety of causes including learning disabilities; amputation of body parts; speaking, language and voice disorders; phobias; epilepsy; and transplantation – with specific and concrete guidelines on how to proceed in case an employee has certain medical conditions.

As mentioned in the previous section under 'Assistive technologies', the Ordinance on incentives for employment of persons with disabilities defines the possibilities to co-financing the costs of adapting the workplace of persons with disabilities. The condition required is that the employer that has obtained the right to co-finance the costs of adjusting the workplace cannot terminate the employment contract of a person with a disability for whom he has obtained this incentive for a period of 24 months from the day when the approved funds were paid, except in cases of termination due to misbehaviour by the employee. Furthermore, the employer cannot exercise the right to co-finance for adjustments that were made before or are in progress at the time of submitting the request. Changes in circumstances, such as moving the company premises or change of workplace department of the persons with disabilities, can cause difficulties and reduce the employer's future willingness to take part in these co-financing schemes, which are mostly time consuming and sometimes complicated procedures.

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Examining the survey results, we come across a slightly wider familiarity with the reasonable accommodation in comparison to assistive technologies (29%), where 38% of company responses indicate having human resource policies including reasonable accommodation of employees with disabilities as a standardized procedure. The most mentioned examples of reasonable accommodation are office equipment and job monitoring. 33% have policies on the accessibility of recruitment processes. Examples of reasonable accommodation include adjustments of work chairs, tables, keyboards, monitors, access to the workplace, toilet, adapted handling machines, more flexible working schedules, fewer working hours per week, ramps, education, work assistants and adjustment of working clothes. When it comes to limitations, it is mentioned that procedures for planning and implementing the adaptation of workplaces in the architectural and technical sense should be faster and simpler. One respondent expressed the view that "It does not work, as long as it is the employer's free choice, and he can judge for himself from situation to situation whether it is profitable for him or not". Other limitations mentioned include devoting time and costs to education, and lack of time, patience and collegiality. Only 19% (4 respondents) were aware of public frameworks and programmes supporting the provision of reasonable accommodation in the workplace for employees with disabilities and had information about obtaining public (co-) financing resources.

OPDs have expressed their concern that many company premises do not fulfil architectural and technical requirements, therefore reasonable accommodation can require substantive changes. On the one hand, it can be useful. However, this is the responsibility of the employers and it cannot be an excuse for the common view employers share on reasonable accommodation needed by employees with disabilities.

## References

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6. Croatian Pension Insurance Institute. Očevidnik zaposlenih osoba s invaliditetom (Register of Employed Persons with Disabilities). <https://lana.mirovinsko.hr/upute/html/osi/>
7. Croatian Employment Service. <https://mjere.hr/mjere/potpora-za-zaposljavanje-2023/>
8. Government of the Republic of Croatia, e-Citizens, Information & Services. <https://gov.hr/en/incentives-for-employment-of-persons-with-disabilities/1390>
9. Employers can meet the quota requirement in an alternative manner by:
  - admitting developmentally challenged students or students with disabilities for traineeship;
  - admitting rehabilitants for traineeship within the framework of their professional rehabilitation;

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- concluding a student employment contract with students with disabilities;
- admitting persons with disabilities to vocational work-related training without establishing an employment relationship;
- concluding business cooperation agreements with self-employed persons with disabilities;
- concluding business cooperation agreements with sheltered and integrative workshops, as well as companies, cooperatives and associations where over half of the personnel are people with disabilities;
- providing full-time education scholarships to persons with disabilities.

**10.** Government of the Republic of Croatia, e-Citizens, Information & Services, op. cit., endnote 8.

**11.** Vukojičić Tomić, T. & Palaić, I. (2022). Kvotno zapošljavanje osoba s invaliditetom u hrvatskoj javnoj upravi: osvrt i preporuke za unapređenje stanja (System of quotas in employment of persons with disabilities in the public administration). Zagrebačka Pravna Revija, 11(1), 66–85. <https://hrcak.srce.hr/281819>

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**14.** Percentages are mostly rounded for easy reading.

**15.** Eurostat (2023b). Individuals' level of digital skills (from 2021 onwards). Eurostat – Data Browser. [https://ec.europa.eu/eurostat/databrowser/view/ISOC\\_SK\\_DSKL\\_I21/default/table?lang=en](https://ec.europa.eu/eurostat/databrowser/view/ISOC_SK_DSKL_I21/default/table?lang=en)

**16.** Croatian Digital Literacy Network, Šimić, D., Begičević Ređep, N., Kirinić, V., Žajdela Hrustek, N. & Čižmešija, A. (2022). Izvještaj znanstvenog istraživanja ispitivanja potreba digitalne uključenosti ranjivih skupina (Report of the scientific

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**17.** Croatia has 52 islands with permanent residents.

**18.** <https://vauceri.hzz.hr/>

**19.** [https://www.soih.hr/pdf/soih\\_editions/godijanje\\_izvjeae\\_letak\\_30.4.hrv\\_000.pdf](https://www.soih.hr/pdf/soih_editions/godijanje_izvjeae_letak_30.4.hrv_000.pdf)

**20.** Selection by the author. There are quite a variety of additional incentives in Croatia, such as wage subsidies (up to 70% of the gross minimum wage) and compensation for the amount of the paid compulsory health insurance contributions (up to 75% of the amount to be paid for contributions).

**21.** The basis for calculating the (co-)financing of the costs is the gross minimum wage, for 2023 set to €700 by Government decision. Therefore, financing can be up to €28,000.

**22.** The same rules apply as in endnote 20.

**23.** Pravilnik o poticajima pri zapošljavanju osoba s invaliditetom (Ordinance on incentives for employment of persons with disabilities) (2020). [https://narodne-novine.nn.hr/clanci/sluzbeni/2020\\_12\\_145\\_2804.html](https://narodne-novine.nn.hr/clanci/sluzbeni/2020_12_145_2804.html)

**24.** EVA is an application created by the company Ericsson Nikola Tesla. One of its creators is a company employee and a person with a disability, Hrvoje Katić. <https://www.ericsson.hr/-/20221129-eva-aplikacija>

**25.** <https://slavica.com.hr/o-platформи/>