CFHE

Conseil Français des personnes Handicapées pour les affaires Européennes et internationales

DISABILITY AND ARTIFICIAL INTELLIGENCE

POTENTIAL, RISKS AND CHALLENGES

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INTRODUCTION

Artificial intelligence (AI) has become part and parcel of our lives. Technologies are proliferating in all sectors and already firmly established in our daily lives. The accelerated production of these new tools involves a very real risk: rules to govern artificial intelligence might be drawn up too slowly, given the questions raised due to its utilisation.

The current craze for artificial intelligence first crystallised around the famous GPT Chat content generator software[1] . This system enables to engage into conversations with human beings on a variety of subjects, to write essays and even organise professional seminars. What is remarkable is the quality and speed of its work, offering an experience that seems to spout straight out of a science fiction film.

Faced with this technological revolution, it is important to take an overview of what does and what should exist. A number of thinkers and legal experts did already tackle this issue from relatively specific angles, such as personal data, copyright and liability... This document will dwell on the issue of Artificial intelligence through the prism of disability, since developing accessible AI is of highest importance. According to UN Special Rapporteur Gerard Quinn[2]:

"Disabled people – so often the most left behind – simply won't have a chance to catch up unless the technology is properly harnessed."

Firstly, we will approach the current impact of AI on disability and identify the opportunities and points of concern to the risks raised by these technologies. Secondly, the legal framework for AI will be open for discussion. It is important to mention that some of these points will stay rather theoretical, as the available documentation is scarce up to now.

[1] Find out more about ChatGPT
[2] Artificial intelligence and the rights of persons with disabilities - Report of the Special Rapporteur on the rights of persons with disabilities

Artificial intelligence (AI) does not meet a universal definition. For the European Parliament, AI depicts any tool used by a machine to "reproduce human-related behaviours, such as reasoning, planning and creativity". In order to function, these technologies require a set of so-called acquaintance data, which they can then use to produce instructions or "algorithms". There are two types of AI: software, which includes virtual assistants, image analysis software, search engines, facial and voice recognition systems, and "embodied" AI, i.e. robots, autonomous cars or drones.

The opportunities offered by AI

It is undeniable that new technologies are benefiting key sectors such as health, mobility and communication. All these progress are helping to improve the lives of people with disabilities. The UN Special Rapporteur on the Rights of Persons with Disabilities recognised this, when he admitted: "Obstacles that we once thought insuperable are suddenly measurable".

Technology for everyday life

The best example of an everyday item is a smartphone. IPhones and Android smartphones have applications able to identify people and to describe surrounding objects. These features are particularly useful for finding the nearest door or the buttons on a household appliance, for example. In May 2023, Apple announced a new feature called "Live Speech", which will make it possible to write during telephone conversations or video conferences, while providing an audio transcription for the other person. Such progress will be of great help to people at risk of losing their ability to speak due to neurodegenerative diseases. In addition, Apple promises to reproduce a person's voice tone after 15 minutes training (currently in English only) for those affected by this kind of problem.

Apple was a pioneer in the design of accessible products, notably with the launch of a touch screen reader in 2009. Google is currently developing generative artificial intelligence. The aim is to find solutions to help dyslexic people read, such as automatic summaries of texts or suggested answers to emails. Thanks to Google Deepmind's AI, the Lookout assisted vision application will enable users to obtain information about the content of any image. Some applications, such as Microsoft's Seeing AI, allow users to explore a photograph using their fingers, again thanks to artificial intelligence.

In practice, artificial intelligence removes some of the barriers to accessibility through image recognition, facial recognition, lip-reading, text summarisation and subtitles, and translations. Means of communication and ways of staying connected were also considerably improved. For example, hard of hearing or deaf people may use a virtual assistant, an application transcribing conversations instantly, such as RogerVoice, AVA and many others[3]

[3] Examples of software and assistive technologies

With more than 15% of the world's population affected by disabilities, a good number of initiatives are emerging. For example, French start-up Sonar Vision is developing a guidance technology for visually impaired people in certain cities, while Equally AI plans to improve website accessibility using ChatGPT.

The transformation of the world of work

The transformation of the world of work is inevitable as artificial intelligence technologies are continuously developping. This revolution is not limited to the automation of routine tasks, but it is profoundly redefining the way we work.

Artificial intelligence simplifies processes and improves day-to-day efficiency. AI may integrate systems to assist employees with their tasks, relieving them from repetitive and time-consuming work. This spares time and resources to focus on more creative and strategic activities, encouraging the boost of innovation and productivity. AI is also transforming the very nature of jobs. Manual and repetitive tasks are increasingly performed by robots and automated systems, reducing the risk of accidents and injuries in the workplace. For example, robots may spread out in hazardous environments such as factories or construction sites to carry out high-risk tasks, leaving humans to concentrate on safer, higher added-value activities.

This transition to a more automated working environment is not necessarily synonymous with job losses, but rather with a transformation of the skills required. New jobs are emerging in a variety of areas, including the maintenance of automated systems, data management and the design of technological solutions. In addition, the expansion of companies using AI is leading to the creation of jobs in related areas such as software development, data analysis and technology project management.

Artificial intelligence may also be a factor in the inclusion of people with disabilities in the labour market. AI-based assistive technologies may get customization to meet the specific needs of disabled workers, enabling them to full and effective participation in work activities. For example, advanced speech recognition tools might help people with diction difficulties to communicate more easily, while powered exoskeletons might provide physical support to workers with mobility limitations.

The digital revolution in healthcare

New technologies will have and do already have a particular impact in the healthcare sector. The COVID-19 pandemic highlighted an urgent need for effective digital tools and an unprecedented rush to set up online health services, including telemedicine consultation and digital contact tracing. This is certainly useful, but it carries risks, for example in terms of the human aspects of care and infringements of fundamental rights.

As part of the Digital Health Empowerment Initiative, several actions will be initiated, to improve the use of digital health solutions and to strengthen health systems in response to the COVID-19 crisis. Firstly, a comprehensive evaluation will determine the effectiveness and shortcomings of the digital health solutions displaid during the pandemic. Secondly, a European roadmap for the digitisation of healthcare systems will be finalised and will serve as a model for the design of national digital health architectures and social support systems. This document will guide investments, reforms and collaborations in the field of digital health.

At the same time, a European framework for health data governance will develop by means of a charter defining the values, guidelines and methods for accessing, managing and using health data. The aim of this framework is to guarantee the confidentiality of data while promoting effective decision-making, forecasting and research in the field of public health.

In addition, countries will get help to leverage digital technologies aiming to improve the interaction between people and health services, enhancing the performance of health systems and public health missions, such as disease surveillance, early warning systems and risk assessment. This flagship initiative is a concrete expression of the World Health Organization's (WHO) global digital health strategy. By filling existing gaps in digitisation, it facilitates the rapid display of innovative digital solutions in countries.

Artificial intelligence should truly transform the lives of people with disabilities. It even might enable them to recover part of lost faculties, such as speech or walking. In May 2023, a paraplegic person with an injury to the cervical vertebrae experienced for the first time the natural control of walking by thought. This became possible by means of a combination of two technologies enabling communication between the brain and the spinal cord. At the same time, Neuralin, a company founded by Elon Musk in 2016, aims to restore autonomy to paralysed people using brain implants and even to link the human brain to machines. It recently obtained authorisation to carry out its first tests on human beings in the United States.

In the light of this first part, it is undeniable that the benefits offered by artificial intelligence for people with disabilities are clear in terms of accessibility and empowerment, thanks to increasingly powerful technologies. However, while welcoming the improvements made possible thanks to technology, it is imperative to identify and assess the potential risks connected to it.

A "danger" to human rights?

Gerard Quinn[4] highlights two aspects of these developments: "New technologies may be of enormous benefit to disabled people and boost the quest for inclusive equality in diverse areas such as employment, education and independent living". In addition, he tells: "However, their discriminatory effects are numerous and notorious. What emerges from his speech is the need to examine the problems that these new technologies may pose from human rights point of view and, more specifically, their consequences for the rights of persons with disabilities. These rights, brought together in the Convention on the Rights of Persons with Disabilities, affect all areas of life in which new technologies are now central: the right to privacy, autonomy, education, employment, health, independent living and participation in public life.

Various players around the world share these concerns, as Gerard Quinn's report also mentions. For example, UNESCO identified the problems posed by artificial intelligence, taking into account the specific situation of people with disabilities. The World Bank published guidelines too for the inclusion of disability in national identification projects using artificial intelligence. Similarly, the UN Committee on Economic, Social and Cultural Rights highlighted the risk of discrimination faced by people with disabilities when "the products of scientific progress do not take into account their specificities and particular needs.[5] " The High Level Group on Digital Cooperation emphasised the need to put digital technologies at the service of sustainable development objectives. The European Disability Forum (EDF) also called on members of the European Parliament's Civil Liberties and Internal Market Committees to ensure accessibility requirements for AI systems and products, so that they are accessible to people with disabilities. This provision, which was not included in the European Commission's proposal, is essential to ensure that people with disabilities do not stay left behind during the process of digital transformation brought about by the fast development of artificial intelligence systems.

[4] The Special Rapporteur on the rights of persons with disabilities, at the occasion of the presentation of his report to the Human Rights Council in 2021.
[5] In its General Comment No. 25 on science and social, economic and cultural rights, 2020

Discrimination generated by AI

"The data underpinning artificial intelligence algorithms could be in a position to reflect and incorporate capabilist (and ageist) prejudices. Disability might be ‘perceived’ by technology as deviant and therefore undesirable", Quinn explained.

The experts at the sessions of the Conference on "Disability Rights, Accessibility and Artificial Intelligence" believe that the major risk is that these technologies will perpetuate discrimination and stereotypes. Disabled people might meet discrimination against in a variety of areas because of algorithms based on statistical averages, which they may not be able to adapt to. The complexity stems from the nature of the algorithms, known as the "black box". This means that there is a lack of transparency about how the machines work and how they make decisions, what creates a difficulty to identify and combat discrimination.

One example to illustrate the risk of discrimination is the employment sector and recruitment processes. More and more large companies, such as “La Poste” and “Generali Insurance”, are using software to filter the list of candidates. Some of these, such as intelligent chatbots, might come to interact with users and are sometimes in use to manage pre-employment interviews.

Under the Convention on the Rights of Persons with Disabilities, States have an obligation "to eliminate discrimination on the basis of disability by any person, organization or private enterprise". However, if there is widespread concern, it is due to considerable risks at several levels.

Consumers with disabilities

Artificial intelligence began to have an impact on disabled people as consumers. Access to health insurance or increase of monthly contribution amounts might now hang on the decision made by one single machine. These technologies might have an impact on disabled people, even if the risk assessed does not appear as directly linked to their disability.

The main problem here is the opacity of the decision-making process. The 'black box' system of machine learning and decision-making raises serious questions about human rights and most particularly the rights of people with disabilities. This trend results in potential further exclusion of people with disabilities already marginalised from health and life insurance markets.

Disabled people in high-risk situations

Some facial recognition algorithms consider people with disabilities to be "untrustworthy" because their face does not conform to the standard programmed into the artificial intelligence system. These face or emotional recognition technologies aim to determine whether a person is likely to represent a threat. They are not capable of correct assessment of the reactions of people with disabilities. More worryingly, fully autonomous weapon systems do raise concerns about their ability to differentiate between combatants and non-combatants and might treat disabled people as threats because of their assistive devices.

To avoid these (possible) catastrophic situations, disabled people need utterly to be involved into the development, acquisition and display processes of artificial intelligence-based technologies in high-risk situations.

The risk of inaccessibility

In addition to the potential discrimination AI might cause, there are also inherent risks of inequality in accessing to these technologies.

One of the biggest challenges is limited access to information. AI-powered devices and software often rely on visual and auditory input, making them difficult or impossible to use for people with visual or hearing impairments. For example, a blind person may meet difficulty using an AI-powered virtual assistant relying on voice commands, or a deaf person may meet difficulty using an AI-powered customer service chatbot relying on auditory inputs. This might limit their ability to have access to important information or to communicate with others.

Similarly, many technologies require the use of equipment potentially inaccessible to some disabled people. For example, virtual reality technology often requires parts of the body to be mobilised and precise gestures to perform. For many people with disabilities, actions such as holding, lifting or clicking small buttons may be a problem. The alternative of eye-tracking technology, for example, needs to be on board to combat these initial barriers to AI accessibility for all.

It is important that accessibility features do integrate such technologies. E.g., how will subtitles or audio description be included into a 360-degree video? Concerns do also raise about the interference these technologies could cause to hearing aids and cochlear implants, as the spectrum they all share becomes especially crowded, so that the operation of these hearing aids might face undesirable disruptions. There are also concerns about AI solutions "over-simplifying"

assistive support, such as in case of sign language gloves, supposed to enable direct communication between signers and non-signers, while just forgetting that sign language involves the whole body. As a result, innovations do not always fully meet the reality of the person's needs.

Recommendations

To identify risks

It is essential to remain extremely vigilant when facing highest-level risks. Artificial intelligence is able to offer powerful new tools for manipulation, exploitation and social control. Such practices infringe the fundamental values of the European Union. Supplying, putting into service or use certain AI systems designed to distort human behaviour, thus causing physical or psychological harm, is strongly held do be prohibited. These AI systems give off subliminal components potentially unperceivable to individuals or might take advantage of the children's and the persons' vulnerabilities due to age or physical / mental disabilities. The intention is deliberately to materialistically distort anybody's behaviour, and to cause direct or potential harm to this one or that other one person.

Similarly, AI systems providing social evaluation of individuals for general purposes by or on behalf of public authorities might lead to discriminatory results and exclusion from certain groups. They might violate the right to dignity, to non-discrimination, to equality according to justice values. The social score obtained from these AI systems might lead to detrimental or unfavourable treatment of individuals or groups, which could be disproportionate or unjustified in relation to the severity-level of their social behaviour. These artificial intelligence systems are therefore due to banishment all the way.

To develop accessible AI

To address these risks and challenges, it is important to prioritise accessibility in the development and display of artificial intelligence technologies. This means involving people with disabilities into the development process, designing products and services meeting their needs and ensuring that AI systems do not perpetuate prejudice or discrimination. It also means to invest in research and development of AI-powered tools and technologies specifically designed to improve people with disabilities' lives.

More generally, the whole way in which disability comes for consideration in law making needs to enter into a full review process. The UN Rapporteur on the Rights of Persons with Disabilities,

Gerard Quinn, shows that traditional service models often keep people with disabilities in a dependency situation and a consequent lack of autonomy. It keeps an approach centred on their impairments, confining them to the passive role of care recipients. It is contradictory to the Convention on the Rights of Persons with Disabilities, which advocates recognition of personhood, autonomy and social inclusion. It is therefore imperative to review this approach and to find concrete ways of support towards the effective implementation of people's rights.

"It all depends on what we want to do with them (AI)". Asma Mallah, a professor specialist in strategic digital issues at “Sciences Po” (Political Science College) and “Ecole Polytechnique", is categorical on this point: "AIs are human tools, designed by humans for humans". So, it's first and foremost a political issue. We need to fight against the fear generated by these technologies. *"It's still narrow AI, in other words, specific to certain tasks, however mind-boggling they may be*". Asma Mallah believes that the AI-anthropomorphic language is built-up by humans in the only purpose to fascinate, what ultimately might generate fear too. In fact, we should not be afraid and should not think that we are under subjection to technologies, but we should be particularly active in taking a full grasp of the issue and of the political stakes involved.

Similarly, the United Nations High Commissioner for Human Rights, Volker Türk, warned against the rapid and uncontrolled progress of generative AI tells: "human action, human dignity and all human rights are under serious threat". He called on governments and companies to include human rights considerations in the development of technologies.

The examples quoted above illustrate the dangers associated with artificial intelligence; this is why it is essential for its use to get regulations by state and supra-state legal frameworks, while respecting human rights. We need to encourage political action now, when most of the relevant legal texts are still at the drafting stage. This is a historic moment when it becomes crucial to push for AI governance and thus ensure its inclusive, safe and responsible development.

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Legislation in France

As far as the legal framework is concerned, there is a pre-existing stockpile of regulations, but, as a whole, it is poorly adapted to the specific AI characteristics; it needs therefore to be perfected. The general principle of non-discrimination shall be the legal reference.

French Constitution Article 1 affirms: "France is an indivisible, secular, democratic and social Republic. It ensures the equality of all citizens before the law, regardless of origin, race or religion. It respects all beliefs". It thus enshrines the general principle of non-discrimination. The Criminal Code punishes all forms of discrimination as an offence, whenever there is a distinction between people based on certain criteria such as origin, gender, physical appearance, surname, and state of health or disability.

It is therefore an old, important and fully recognised principle, but a very comprehensive one. The specific features of AI accentuate the need for specific legislation. Bearing this in mind, the French legislator aimed to combat the digital discrimination, as due to the algorithms used by online platform operators[6]. The operators of these platforms are also required to provide "fair, clear and transparent" information[7]. Decrees unavoidably came to specify the conditions under which to apply these principles.

In the future, texts on AI will have an obligation to take specific account of people with disabilities, in particular by incorporating the concept of reasonable accommodations and involving them into the technological development process.

European regulations

The European Union

A well as France, the European Union (EU) also exhibits a legal regulatory stockpile on some of the issues in relation to AI. The Fundamental Rights European Charter overall obliges its signatories to respect and defend the rights of individuals, particularly those who are at most

[6] Definition of online platform operator by law no 2016-1321 in C. consom., art. L. 111-7- I.
[7] This reference is included in the Consumer Code: C. consom., art. L. 111-7 -II.

vulnerable. This is an admittedly general principle, but a fundamental one in the sight of the EU, who is due to apply such regulations comprehensively in all its actions.

The European Union also has a number of measures in place in the digital field. To quote the best-known ones, the General Data Protection Regulation[8] (GDPR) is a European regulatory text governing data processes equally throughout the Union. There are also provisions, which are more specific to AI. E.g., the European Websites accessibility Directive including applications of public sector bodies and the recently adopted EU Accessibility Act[9] : both directives relate not only to AIs but also to their equal accessibility. The challenge is to introduce a standard in line with the claims of the European Union and the guidelines set out at international level.

"To be first": the EU's ambition

Artificial intelligence will play a central role in competitiveness between countries. Given the European Union endeavours to be at the forefront of this technology, it will not fail to legislate about it. The European Commission wants the EU to "champion an approach to AI that benefits people and society as a whole". The Commission makes shift to do so, since it has been multiplying communications on this issue since 2018[10] . The European Union published seven ethical principles due to be respected in order to provide a framework for the development and display of artificial intelligence[11]: respect for human rights, secure and reliable algorithms, transparency and traceability of artificial intelligence systems, data retention, accessibility to all, respect for the environment, direct responsibility of artificial intelligence systems designers.

It is important to look at artificial intelligence in terms of its promotion and development in order to stimulate innovation, growth and competitiveness in the European economy. This is realised in particular through funding programmes supporting research and innovation in the field of AI, as well as initiatives to encourage collaboration between universities, industry and governments. Given Europe is lagging behind the United States and China in artificial intelligence, one of the priorities of the European authorities is to create a data single market. This is essential, since AIs use data to learn how to discern images, sounds and behaviours. The European Commission published a dedicated strategy on 19 February 2020, where it states: "the objective is to create a single European data space, a true single data market".

[8] European Data Protection Regulation: EU Regulation 2016/679
[9] French translation: l'Acte Européen d'Accessibilité
[10] The European Commission's Communications on Artificial Intelligence
[11] Ethical guidelines for trustworthy AI

The European Union is seeking to raise trust in artificial intelligence by ensuring that it is developed and used in a transparent and responsible way, which respects fundamental rights. This relates to issues such as human surveillance, data confidentiality and governance, transparency, diversity, non-discrimination as well as societal and environmental well-being.

The EU also appointed a network of regulatory authorities to oversee the implementation of these regulations. The European legislator intends to designate the European Committee for Standardisation (CEN) and the European Committee for Electro-technical Standardisation (CENELEC) to develop the technical frameworks, requirements and specifications for high-risk AI technologies. These bodies are composed of engineers almost exclusively, so there is no representation of human rights experts or civil society organisations, what causes a real risk to human rights[12].

The opinion of the European Economic and Social Committee (EESC)

The European Economic and Social Committee (EESC) is an EU consultative body made up of representatives coming from organisations of workers and employers and other interest groups. It conveys opinions on European issues to the Commission, to the EU Council and to the European Parliament, thus serving as a link between the decision-making bodies and the EU citizens.

On artificial intelligence, the Committee advocates an approach where "humans remain in the driving seat." The EESC welcomed the European strategy on artificial intelligence published in 2018 and the Commission's communication on ethical guidelines for trustworthy AI. In addition, it drew attention to several issues: the impact of artificial intelligence on employment; the importance of striking the right balance between regulation, self-regulation and ethical guidance; and the impact of artificial intelligence on consumers[13].

With regard to the issue of discrimination, and more specifically the issue of people with disabilities, it is essential to define the scope of the responsibility of artificial intelligence. The European Union has a duty to strike this necessary balance. The regulatory framework for AI is still under discussion and is constantly evolving within the European Union, and the Parliament states: "Europe's growth and wealth are closely linked to the way it uses data and connected technologies".

[12] Euractiv article: AI standards to be developed jointly by European standards bodies 30 May 2022.
[13] EESC position on the European Strategy on Artificial Intelligence

April 2021

The artificial intelligence Regulation within the European Union has seen a notable development since April 2021, when the European Commission published a proposal for a Regulation to establish harmonised rules on AI, also known as the Artificial Intelligence Act[14]. This legislation is originally a proposal for a law formulated by the European Commission aiming to promote a responsible use of artificial intelligence by identifying and regulating high-risk systems. The proposed legislation is on basis of the European Commission's White Paper on AI[15] , which adopts a risk-based approach and proposes labels to certain types of AI. Under this proposal, AI systems enter into four risk categories: unacceptable, high, low and minimal[16]. Each category include specific measures to ensure the transparency, robustness and safety of the systems.

Measures may range from compliance assessment to prohibition and vary according to the degree of risk attributed to AI systems. For risks deemed unacceptable, the associated practices should not meet acceptance, with limited exceptions linked to public safety. For high risks, rules on traceability, transparency and robustness are mandatory to guarantee the safety and rights of individuals. In low risks case, a transparency rate is required from the supplier. Finally, for minimal risks, no specific regulation is required, as these utilisations present an insignificant risk to citizens' rights.

The proposed legislation defines criteria for identifying these so-called "high-risk" systems and lists sensitive areas, such as biometric identification of individuals, management of critical infrastructures, education and justice. The aim of the legislation is to open access to the high-risk systems market under conditional compliance with a number of requirements, monitored via an assessment procedure placed under the responsibility of suppliers. Compliance with the legislation includes certification mechanisms, with a 'CE' label potentially awarded

[14] Consult the text of the Artificial Intelligence Act
[15] Access the White Paper on Artificial Intelligence
[16] Read the draft regulation

to compliant systems. This proposal for risk-based regulation and the requirement for assessment measures are in line with the vision of other intergovernmental authorities, such as the Council of Europe, which expressed its views along these lines in its draft Convention published in June 2022.

In this draft, the Commission is introducing a legal framework for "regulatory sandboxes" on artificial intelligence. These are supposed to allow companies to test their technologies on an ad hoc basis without having to comply with the whole of the legislation on personal data. These initiatives would then take place under the supervision of appointed authorities to ensure that personal data are not at the disposal of or transmitted by third parties. Article 55 of the text also provides a privileged access to these exceptions for SMEs and start-ups.

May 2023

In May 2023, the European Parliament voted on the landmark Artificial Intelligence Act. To this regard, it is regrettable that the focus concentrated on the sole approach for adoption and not on how the requirements will achieve implementation. Yet this is where the key to accessibility and non-discrimination lies. AI systems that may "adversely affect the health, safety and fundamental rights of individuals or the environment" fall into the category of high-risk AI. According to the European Parliament, "Systems used to evaluate and prioritise emergency calls made by physical persons or to dispatch or prioritise the dispatch of emergency response services should also be classified as high risk, as they make decisions in situations which are most critical for people's lives, health and material assets. Similarly, the classification of AI technologies in “high-risk” category requires all suppliers wishing to introduce this technology on the European market to demonstrate compliance with the law's "essential requirements". However, the law is vague on the contents of these requirements.

June 2023

The European Parliament adopted a draft regulation on artificial intelligence[17] on 14 June 2023. The text sets out the high-risk AI systems, including those that could harm health. It also mentions the importance of reliable data. The document firstly formulates this law's aim: "To promote the adoption of human-centred and trustworthy artificial intelligence, and to ensure a high level of protection of health, safety, fundamental rights, democracy and rule of law, as well as environmental compliance, against the harmful effects of artificial intelligence systems in the Union, while supporting innovation and improving how the internal market operates."

July 2023

The Council of the European Union wishes to encourage companies to develop in this area at EU level. Thus, in July 2023, it adopted the possibility of granting AI developers a space for experimentation permitted by the presumption of compliance of their systems. However, this approach could lead to a loss of control over the compliance process for non-involved regulatory bodies. The Member States held diverse positions: nine argued in favour of retaining the Council's text, while only one asked to accept the European Parliament's text. Eventually, five governments suggested to accept the Parliament's text, but to make it compulsory in order to include high-risk AI systems in this experimentation area, with a prior compliance declaration to submit to examination by the competent bodies.

Health data part of the text is particularly sensitive. The legislation is supposed to "facilitate non-discriminatory access to health data and the training of artificial intelligence algorithms using these datasets, in a privacy-friendly, secure, fast, transparent and trustworthy manner, and with appropriate institutional governance". Indeed, in the context of high-risk AI systems, providers, digital innovation hubs, experimentation and testing facilities and research centres will need to "obtain and use high-quality datasets". This should become easier by the use of common European data spaces. Exceptions are available for these situations

[17] Draft regulation on artificial intelligence European Parliament

"crucial" to health. For example, when "the rapid availability of innovative technologies may be crucial for the health and safety of individuals, for the environment and climate change, and for society as a whole", according to the approved text. Strengthening "the right of citizens to lodge complaints against AI systems and to receive explanations about decisions based on high-risk AI systems having a significant impact on their fundamental rights". A European Artificial Intelligence Office will be responsible for monitoring the implementation of this regulation.

August 2023

In the European context, Spain distinguished itself by announcing the creation of the Spanish AI Supervisory Agency (AESIA), setting a milestone and becoming the first nation in the European Union to set up a regulatory body dedicated to artificial intelligence. The agency was entrusted a broad mission to closely monitor the impact of AI on Spanish society.

December 2023

In December 2023, the joint position of the three institutions met adoption. European Union legislators reached a political agreement on the regulation of artificial intelligence aimed at fostering innovation while limiting the risks. European Commissioner Thierry Breton welcomed the EU becoming the first continent to establish clear rules for AI, following discussions that began in April 2021. Unsurprisingly, the agreement includes two-tier rules for generative AI, applying stronger constraints to the most powerful systems. The rules require developers to guarantee data quality, to identify artificial content and to apply specific restrictions towards high-risk systems, such as those used in sensitive areas. Human interaction with AI systems will enter regulations, requiring user notification. There will be bans on applications running against European values, such as citizen rating and mass surveillance.

Compliance with the legislation will be submitted to monitoring by a European AI Office, empowered to impose financial penalties of up to 7% of turnover, with a floor of €35 million, for the most serious infringements. In addition, three other

monitoring and enforcement bodies will be appointed: the European Artificial Intelligence Council, an advisory forum and a scientific group.

February 2024

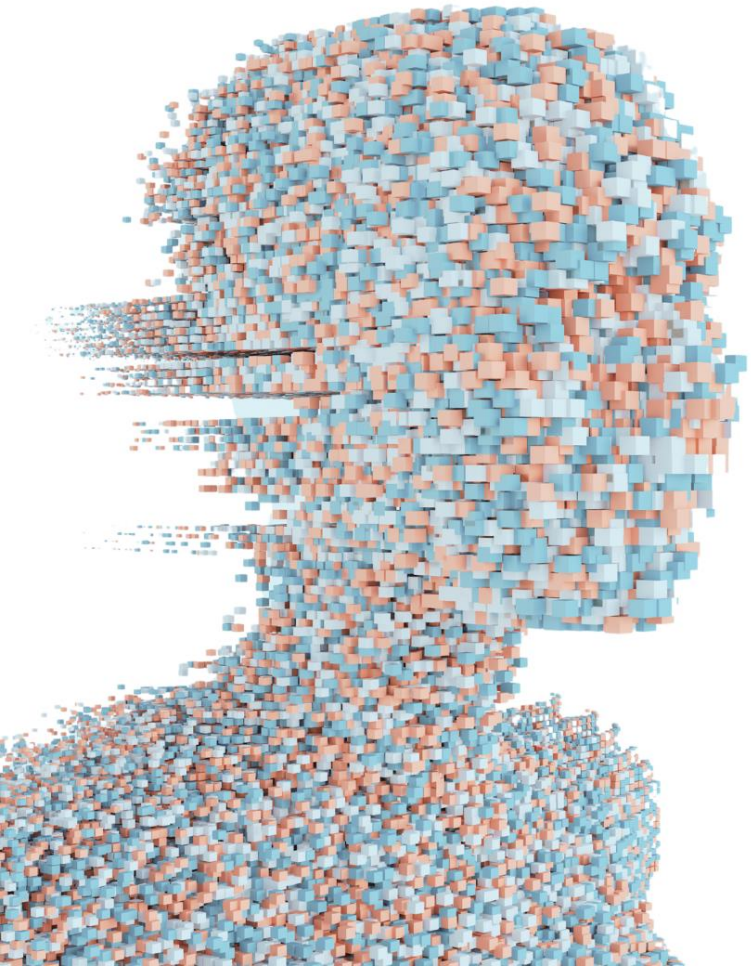
On 2 February 2024, the 27 Member States of the European Union unanimously approved the Artificial Intelligence Act, after a few technical adjustments. The decision follows complex deliberations, including how to regulate powerful AI models such as Open AI's GPT-4. Countries such as France, Germany and Italy argued for a more flexible approach to support European start-ups, while the European Parliament insisted on strict rules to avoid weakening smaller market players. This law on artificial intelligence introduces a compromise involving a graduated approach, with general transparency requirements for all AI models, but also additional obligations for those presenting systemic risks.

The final text of the law prohibits various problematic practices linked to the use of artificial intelligence, such as manipulation or deception, unfair profiling and abusive facial recognition. High-risk systems in sensitive areas will be subject to a series of obligations, such as providing for human control over the machine, drawing up technical documentation and setting up a risk management system. Moderate-risk uses are subject to fewer obligations. No other applications are subject to any specific obligations.

Although the Member States of the European Union approved the law, certain points still require clarification and adjustments, particularly with regard to the funding of the European AI Office, who is responsible for overseeing the regulations.

In brief:

- AI is banned regarding biometric surveillance, emotional recognition and predictive police
- Generative AI systems such as ChatGPT shall mention that an AI generated the content.
- AI systems used to influence voters during elections are considered as high risk
- Compliance with legislation will be monitored by a European AI Office
- Although the law was passed, the legislation surrounding its application is still under elaboration.



This law on artificial intelligence is considered by some stakeholders – including the European Disability Forum (EDF) – as a "missed opportunity" to ensure accessibility.

In an article published on the same day as the Parliament's bill[18] , EDF said its "disappointment" that the European Parliament's political group had not proposed amendments to ensure binding accessibility requirements for all artificial intelligence systems. The Parliament's position only considers accessibility to AI systems in high-risk situations. However, some systems might become high-risk for people with disabilities in case their accessibility would not coming into consideration. CFHE[19] joins the position of the European Disability Forum (EDF) regarding their request to the negotiators of the European Parliament to defend human rights and accessibility as catalysts for disability rights in the upcoming discussions and to ensure that strong provisions on accessibility for all systems are fully considered in the implementing texts.

Some Academics severely criticised the EU's AI Act draft, showing the lack of clarity in the definition of "subliminal techniques", i.e. methods that subtly influence user behaviours. To remedy this shortcoming, they advocate a broader definition to capture the problematic aspects of manipulation more easily. At the same time, Meta researchers undertook an in-depth assessment of the impact of the transparency obligations imposed on AI systems on users' trust. Their findings highlight the imperative need for clarification and technical guidance for companies to comply fully with the AI Act. In response to these developments, civil society organisations expressed concern about a possible fault in the AI Act, which would allow developers to decide subjectively whether their system is "high risk", thereby undermining regulation. They utterly stress the need to re-establish an objective process for classifying high-risk systems in order to ensure consistent regulation. In addition, the funding of the European AI Office is raising concerns among EU Member States.

The Council of Europe

The Council of Europe shares the European Union's risk-based regulatory approach. It reflects in the draft framework convention[20] of the Council of Europe Committee on Artificial Intelligence (CAI), published on 8 January 2024. This document lists the assessment principles concerning the risks and impact on human rights, the functioning of democracy and respect for the rule of

[18] EDF article "Artificial intelligence law: the European Parliament misses an opportunity to guarantee accessibility".
[19] Conseil Français des personnes Handicapées pour les affaires Européennes et internationales
[20] Work of the Council of Europe's Artificial Intelligence Committee

law. It also imposes more restrictive appropriate measures for AI generating "significant risks", and it authorises the prohibition of systems presenting unacceptable levels of risk.

On this last point, attention will need to be paid to the articulation difficulties between the various instruments, both in terms of compliance procedures and AI systems classification.

The ultimate aim is for artificial intelligence to be inclusive, non-discriminatory and accessible. We should therefore ensure that the texts written by the European Union and the Council of Europe, in line with the demands of groups defending the rights of people with disabilities, are effectively applied

AI and the international framework

At international level, there is no unified governance framework specifically regulating artificial intelligence. Nevertheless, various international organisations, such as the United Nations (UN) and the Organisation for Economic Co-operation and Development (OECD), have taken steps to provide guidance and to establish ethical standards for the development and spread out of AI.

The United Nations (UN)

As far as the United Nations are concerned, the preamble to the Convention on the Rights of Persons with Disabilities reaffirms the universality, indivisibility, interdependence and interrelatedness of all human rights and fundamental freedoms and the need to ensure their full enjoyment by persons with disabilities. With a view to meet such a requirement, the United Nations has eventually set up the High-Level Panel on Digital Cooperation, aiming to develop principles and guidelines for the ethical use of artificial intelligence. In addition, the Special Rapporteur on the rights of persons with disabilities focused on the impact of AI on the rights of persons with disabilities.

This research into artificial intelligence led to the drafting of a UNESCO report on recommendations on the ethics of artificial intelligence[21] , referring to the risks that AIs represent for people with disabilities. UNESCO advocates to ensure diversity and inclusion, in particular by encouraging the active participation of all individuals or groups "irrespective of race, colour, descent, gender, age, language, religion, political opinion, national, ethnic or social origin, economic or social birth-condition, disability or any other status". UNESCO also advocates equity

[21] Unesco Recommendation on the Ethics of Artificial Intelligence, 2022.

and non-discrimination, in accordance with international law. This means that governments should ensure that the benefits of AI technologies are available and accessible to all, taking into account the specific needs of different groups.

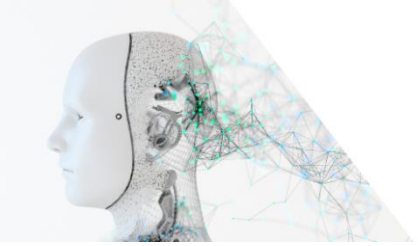
The Organisation for Economic Co-operation and Development (OECD)

OECD developed a set of principles for AIs to ensure that their development and deployment are founded on an ethical values basis, that they respect human rights and contribute to sustainable development. To this end, OECD drew up a number of documents[22] on various subjects such as health, finance and employment.

On 24 November 2023, OECD published its report[23] "Using artificial intelligence (AI) to support people with disabilities in the labour market". The researchers highlight the need for governments to update their policies in order to maximise the potential of artificial intelligence while protecting the rights of people with disabilities. The text highlights key points, including the potential for AI to exacerbate inequalities, its inadequacy alone in closing the jobs gap, the funding challenges for research and development, and the lack of involvement of disabled people in developing solutions. The report's recommendations include anti-discrimination measures, revisions to procurement policies, improved quality control, support to research, simplification of reimbursement mechanisms, introduction of certification standards for artificial intelligence solutions, and the inclusion of accessibility training in computing education.

[22] OECD documentation on artificial intelligence
[23] OECD report "Using artificial intelligence (AI) to support people with disabilities in the labour market".

Overall, international standards for the regulation of artificial intelligence are still in their infancy. Nevertheless, there is a growing consensus that AI should be developed and open out in a transparent, responsible and respectful of human rights way.



The need for reasonable accommodation

The concept of reasonable accommodation, introduced into the French legal system through European Directive 2000/78, is defined as all appropriate measures aimed at eliminating "the various barriers that hinder the full and effective participation of people with disabilities in working life on an equal basis with other workers".[24] The principle of reasonable accommodation, hitherto reserved in France solely for the field of employment, is now called to apply transversally to all the rights covered by the Convention on the Rights of Persons with Disabilities.

According to the Defender of Rights report[25] in this respect, the Convention on the Rights of Persons with Disabilities defines reasonable accommodation as "necessary and appropriate modifications 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". The text recommends that governments include disability in their strategies on artificial intelligence and continue to emphasise the obligation to provide "reasonable accommodation", as well as to consider disability explicitly when purchasing features and services based on artificial intelligence.

Given the concept of reasonable accommodation refers to the idea of adapting the environment when necessary, to enable an activity to be carried-out normally, it has its place in AI legislation for inclusion and equal opportunities. Designers should consider the inclusion of reasonable accommodation. In practical terms, this obligation will weigh on the State parties to the Convention and the European Union, which will have to ensure that such accommodations are possible.

In his report, Gerard Quinn tells: "the duty to make reasonable adjustments may be anticipatory. (...) In particular, this would be self-evident in the case of goods and services involving artificial intelligence (for example, tools used in selection or interview procedures) whose consequences for disabled people are reasonably foreseeable". It also refers to the interpretation of the European

[24] In Art. 5 of Council Directive 2000/78/EC of 27 November 2000 establishing a general framework for equal treatment in employment and occupation
[25] Guide to the employment of people with disabilities and reasonable accommodation.

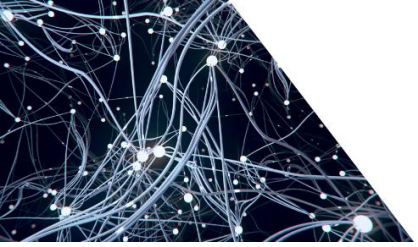
Court of Justice when adding "It is not possible or even desirable to draw up an exhaustive list of the reasonable accommodations that may be put in place."

In order to match the accommodation to the needs approached as closely as possible, it will be essential to call on the services of disabled people's associations and specialist operators. For example, in the field of disabled people’s employment, organisations such as AGEFIPH, FIPHFP or CAP-EMPLOI. The advantage is that these players are particularly well informed about technological developments and measures to promote the professional integration of disabled people.

Demands and points to watch

The texts on AI must take specific account of people with disabilities, intending:

- To ensure accessibility: AI developers and companies must prioritise accessibility in the development of their products and services, for example by ensuring compatibility with assistive technologies, designing interfaces with high contrast and legible fonts, and providing alternative input methods.
- To have inclusive training data: to avoid biased or exclusive AI models, training data must include people with disabilities. This means collecting data from a wide range of sources and using representative data to train AI models.
- To develop user-centred design: user-centred design practices should be integrated into the development of AI products and services. This means involving people with disabilities in the design process to ensure that their needs are met.
- To focus on ethical considerations: developers need to take into account the potential ethical implications of AI technologies on people with disabilities, such as the potential for discrimination or privacy issues.
- To organise regular audits and evaluations: this includes monitoring the performance of the AI system, and to ensure that any negative impact is identified and positively dealt with.
- To work with disability advocacy groups: to get a better approach and understanding of the needs and perspectives of people with disabilities and to ensure that their features and services are inclusive and accessible.
- To comply with regulations: AI developers and companies must ensure compliance with applicable accessibility laws and regulations.



CONCLUSION

The next stages in the regulation of Artificial intelligence are likely to involve the development and implementation of ethical frameworks and guidelines, as well as increased oversight and regulations of AI development and spreading. Sustained and ongoing efforts are necessary to address issues related to bias, discrimination, privacy and security in AI systems.

To conclude, let us stick with the advice given as such by an AI, ChatGPT, when the question asked is "what do you think of AIs?"

"Ultimately, AI is a tool liable for both good and evil, depending on how it is developed, spread out and regulated, and it is up to humans to ensure that its potential is harnessed responsibly and ethically."

Innovative projects in artificial intelligence

Inclusive AI

The European Disability Forum (EDF) recognises both the potential and the risks of artificial intelligence and commits to ensure the development of artificial intelligence with a focus on accessibility and inclusion. To help achieve this objective, The European Union installed a funding programme: the European Fund for Artificial Intelligence and Society[26]. This Fund may provide financial support to projects that correspond to its objectives, such as promoting the responsible and inclusive development of artificial intelligence, addressing ethical concerns and ensuring that the benefits of AI are accessible to all members of society, including people with disabilities.

This fund financed the "Inclusive AI" Forum project, which aims to defend the rights of disabled people with regard to artificial intelligence, to raise awareness on the European disability rights movement and promote capacity building.

European research project focusing on digital skills, housing and employment assistive technologies (DATA).

In partnership with Google.org, EDF is launching a European research project focusing on digital skills, housing and assistive technologies for employment (DATA).

The aim of this research is to understand the link between employment, digital skills, accessible technologies and assistive solutions. The results will serve to advocate policy changes to decision-makers and then shared with relevant stakeholders, including employers, disability advocacy groups throughout Europe and technology companies developing accessibility and assistive solutions. This collaborative effort with Google.org underlines the importance of addressing the intersection of digital skills, assistive technologies and employment for people with disabilities and thus being able to drive positive change at a European level.

[26] Website of the European Fund for Artificial Intelligence and Society.

Through such a research and awareness-raising campaign, EDF and its member organisations aim to have a greater influence on policy and to improve the implementation of practical solutions directly in the Member States of the European Union.

ATHENA project

The ATHENA project, also implemented by the European Forum, aims to incorporate accessibility and design for all into higher education programmes. It realises this through recommendations and evaluating guidelines developments to encourage innovative teaching and learning methods to promote the social inclusion of people with disabilities.

FINDHR or Fairness and Intersectional Non-Discrimination in Human Recommendation

This is a project funded by the European Union's Horizon Europe framework programme, bringing together 13 organisations working to develop methods, algorithms and anti-discrimination training for algorithmic recruitment. FINDHR[27] is looking for experts and individual researchers for short-term assignments on the topic of discrimination in algorithmic recruitment from an intersectional perspective. Given the urgent need to include people with disabilities in this field, it would be wise to have people with this perspective in this project.

Continuing to explore artificial intelligence

AI technical news

There have been a number of recent developments in the field. Some of the most notable include:

- The emergence of GPT-3, a powerful language model developed by OpenAI that demonstrated remarkable capabilities in language processing and generation.
- The ongoing debate surrounding the use of facial recognition technology, particularly in law enforcement and surveillance contexts.
- The increased use of AI in healthcare, particularly for diagnosis and treatment recommendations.
- The development of autonomous vehicles and drones, which have the potential to revolutionise transport and logistics.

[27] More information on the FINDHR project

- Growing interest in chatbots and AI-powered virtual assistants used by businesses to improve customer service and support.

Resources

Official resources of the European Union

- The list of European Union acts concerning AI (until 2022)
- The Commission's work on robotics
- Work in progress at the Council of Europe on AI
- The "Artificial Intelligence: opportunities and risks" web page by the European Parliament

Disability related resources

- TechLab: APF France handicap's technology research laboratory
- European Disability Forum resource on the effects of Artificial intelligence
- European Disability Forum resource on the inclusiveness of artificial intelligence
- Euronet white paper on AI for NGOs, foundations and charities

Other ressource

- The bi-monthly[28] newsletter on Artificial Intelligence from Risto Uuk, a policy researcher at the Future of Life Institute focusing on research into the development of European AI policies.

[28] Find out more and subscribe to the newsletter

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