

Artificial intelligence as a game changer

New perspectives for social insurance

Dear readers,

In today's world, artificial intelligence (AI) is playing an increasingly central role both in our private and professional everyday lives. It opens up new opportunities in almost all sectors, including social security. AI systems have the potential to make the provision of services and benefits more targeted, faster and more efficient. However, these opportunities are also accompanied by considerable risks. How much trust can we place in an AI whose decision-making processes we cannot always understand? Weighing up the opportunities and risks is therefore crucial.

This issue is particularly relevant in the area of social insurance, where access to basic services and benefits is managed. People who are dependent on state support are often in a precarious position when dealing with the administrative bodies. The AI Act – the world's first framework created by the European Union (EU) for regulating AI – argues in this way and emphasises the need to use these technologies with caution. Given the potential impact on people's livelihoods, the EU categorises AI systems used in making decisions on benefits as high-risk.

This means that the AI systems used by social insurance institutions must fulfil the applicable legal requirements. At the same time, social insurance is also indirectly affected: AI applications in the areas of employment and health can, among other things, improve occupational safety and health through innovative assistance functions, or improve healthcare and reduce the burden on health insurance funds through early disease diagnosis. Nevertheless, improper applications can also lead to physical and mental stress, for example in the workplace. These aspects also need to be kept in mind as AI in social insurance is here to stay.

An open dialogue about what we expect from AI and its use is essential. We need to set social and political priorities and be clear about the objectives and criteria for the use of public funds. With the use of AI, we must ensure that we achieve trustworthy results and develop a clear understanding of values and their prioritisation in the provision of public services – and make these priorities transparent.

In this issue, we look at how the EU is trying to regulate the use of AI without overly restricting the new opportunities it offers. We also look at the first use cases with a special focus on how social insurance is affected and emphasise the importance of data quality and transparency.

We hope you find it an exciting and interesting read!

Yours faithfully,



Ilka Wölfe
Director

The AI Act: Europe's path to the digital future

The EU has set itself the task of tapping the full potential of AI and promoting innovations in this area, while ensuring its safe and reliable application. The EU's need for regulation arises from the risks that certain AI systems pose for the safety and protection of the fundamental rights of their users, not least due to a lack of transparency. This can lead to a lack of trust, legal uncertainty and the slower use of AI in many areas. Above all, the unregulated use of AI runs the risk of exacerbating discrimination in the analogue world. Such potentially unlawful disadvantages are a particularly great challenge when using AI in the administration of public services, and therefore also in the area of social insurance.

When regulating AI, the EU pursues a value-based approach that goes back to the European Declaration on Digital Rights and Principles for the Digital Decade.¹ The Declaration, signed by the President of the European Commission, the President of the European Parliament and the President of the Council of the EU in 2022, contains guidelines for human-centric, trustworthy and ethical AI. According to the Declaration, AI systems should not be used to anticipate human decisions regarding health and employment, among other things. Even before the signing of the Declaration, the

European Commission had already begun an extensive and comprehensive consultation process for an AI Act, for which it finally presented a proposal in 2021.

World's first regulation of AI

The Regulation laying down harmonised rules on artificial intelligence² – the so-called AI Act – is a central component of a broader package of EU measures to support trustworthy AI. It is intended to strike a balance between ensuring the safety and fundamental rights of people and companies, and promoting investment and innovation in the field of AI. The AI Act came into force on 1 August 2024, following difficult and lengthy negotiations between the European Parliament and the Council of the EU. It applies across all sectors in order to prevent competing legislation in certain areas. Under the AI Act, AI systems are defined as machine-based systems that work autonomously to a certain extent and derive from received input predictions, recommendations or decisions, depending on the area of application.

The AI Act aims to strike a balance between a high level of protection and the promotion of innovation through a risk-based approach. This stipulates that AI systems are first assessed and

Regulation of AI – an international discussion

For quite some time now, the regulation of AI has been under discussion not just in the EU but worldwide. In 2019, the Organisation for Economic Co-operation and Development (OECD) laid down the first intergovernmental standards in this area with a recommendation on AI. The recommendation contains principles including respect for human rights and democratic values as well as transparency and traceability and the guarantee of legal responsibility by the users, developers and administrators of AI systems. The principles of the G20 states on AI formulated in Osaka in the same year were derived from this recommendation. The OECD AI recommendation was revised and adapted in 2023 and 2024.

¹ European Parliament, European Council, European Commission: [European Declaration on Digital Rights and Principles for the Digital Decade](#) (2023/C 23/01).

² European Union: [Regulation laying down harmonised rules on artificial intelligence](#) (2024/1689).

categorised into four classes, depending on their risk potential: unacceptable risk, high risk, limited risk and minimal risk. The higher the risk assessed in the application, the stricter the regulations imposed that providers and operators of the AI systems concerned must comply with. Authorities or other public organisations that use an AI system under their own responsibility must also comply with this. The EU regulations range from labelling and compliance with documentation and due diligence obligations to a complete ban on unauthorised applications. The intensity of regulation therefore depends on the risk associated with the use of the respective AI system.

Focus on AI systems with high risk

Accordingly, the AI Regulation focuses on the two highest risk classes. Only limited transparency and information obligations apply to low-risk applications. In contrast,

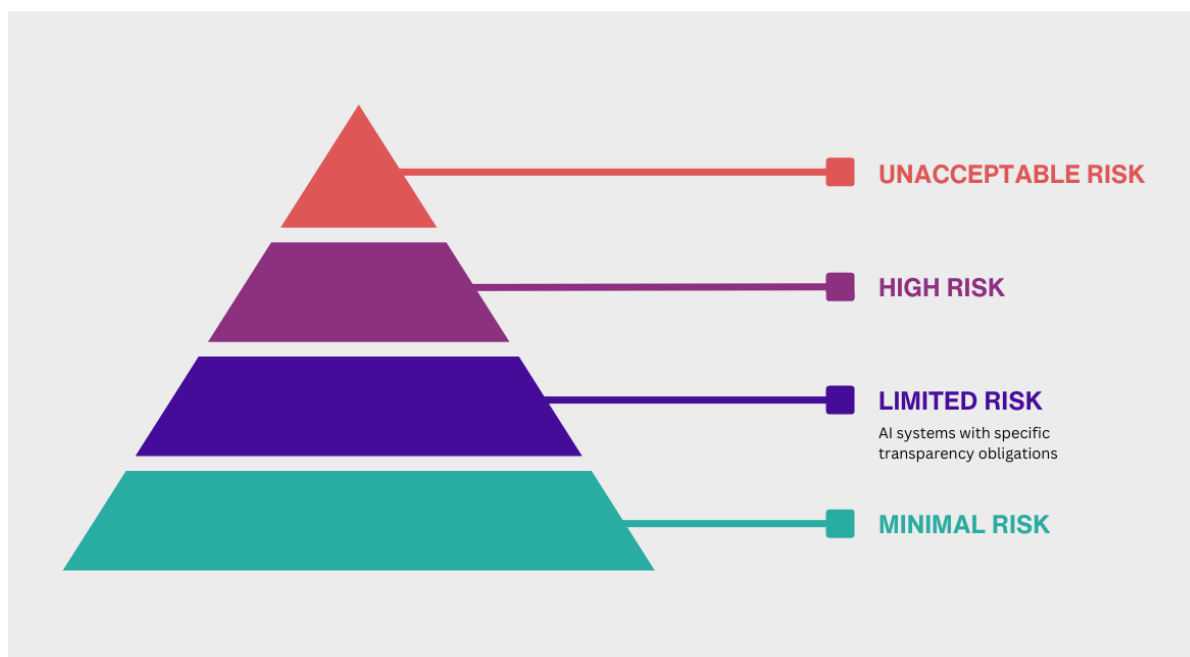
AI systems that pose an unacceptable risk will be banned. These include, for instance, emotion recognition systems in the workplace and in schools, social classifications of people based on behaviour, socio-economic status and personal characteristics (social scoring) and the biometric identification and categorisation of natural persons.

So-called high-risk AI systems, which pose a high risk to the health and safety or fundamental rights of natural persons under the AI Act, are also heavily regulated. This includes AI systems that are used in the areas of accessibility and provision of essential private and public services. This includes, among others, health services and social services that provide protection in cases such as maternity, illness, accidents at work, the need for care or old age. Systems that are used for risk assessment and pricing in relation to life and health insurances are also categorised as high-risk AI systems.

Although this does not apply to statutory health insurance, it certainly applies to private health insurance.

Any AI system used to determine whether, for example, health services, social security benefits and social services should be granted or denied can have a significant impact on people's livelihoods and might violate their fundamental rights such as the right to social protection, non-discrimination and human dignity. The regulations for these systems are comprehensive in line with the high risk they pose. For example, providers and operators of these systems must set up a risk management system, meet quality management and information obligations, ensure the accuracy, reliability and security of the system and continually monitor and, if necessary, correct the system. Failure to comply with the requirements of the AI Regulation will result in significant penalties.

Risk pyramid



Source: Illustration of the DSV based on data of the European Commission.

Application of AI in social insurance

Overall, the rapid development of AI is impacting social insurance in two ways. On one side of the coin are AI-based applications used by the social insurance institutions themselves. In this context, applications such as those to facilitate internal processes, communication with insured persons or fraud detection are still rather simple. On the one hand, these open up new opportunities for insured persons; on the other, AI systems can also reduce stress of employees in the workplace, thus contributing to better health in the workplace. This use of AI systems results in direct obligations under the AI Act: as operators of AI systems under their own responsibility, social insurance institutions must classify the AI applications they use and implement the provisions of the AI Act that apply to them.

On the other side of the coin is the use of AI in the workplace or in the healthcare sector. In this case, the social insurance institutions are not operators of the AI systems, which is why the AI Act does not specify any direct instruction. Nevertheless, AI systems used in these areas have implications for social insurance, as they affect, for example, occupational safety and health or the quality of medical care for insured persons, which in turn is reflected in any claims for benefits. Hence, AI applications in these areas relevant to social security must be carefully examined and should only be supported if they can lead to better occupational safety and health and better services for the insured persons.

AI in statutory health insurance

So far, only a few AI projects have been implemented in statutory health insurance. Of course, there is potential, for example in the area of utilising health data that is available to health

insurance funds through the provision or financing of services. Provided that data protection and data security are guaranteed, this data could be used to determine future care needs, individualise healthcare services and improve care structures, among other things.

The “KI-THRUST” research project sponsored by the Innovation Fund (*Innovationsfonds*), for example, is moving in this direction. Based on routine data from statutory health insurance, it aims to individually predict the course of illnesses and therapies, thus recognising the care requirements of patients earlier and better.³ While health and healthcare research has so far mostly relied on traditional analysis techniques, KI-THRUST is investigating the potential of AI-enabled prediction methods and comparing the results with those of conventional methods. In the course of the project, for example, the extent to which AI processes can predict certain requirements and difficulties following hospital discharges will be tested. This is based on data records from more than two million hospital discharges.

In contrast to the still rather few AI applications by social insurance institutions, the use of AI in the healthcare sector, which has an indirect impact on health insurance funds, is diverse. Earlier detection of illnesses, better care and a reduction in the workload of medical professionals can significantly reduce healthcare

expenditure and thus the burden on health insurance funds. The use of AI ranges from medical diagnostics and drug development to data and process management in hospitals and medical practices, to name just a few fields of application. Medical professionals and patients are increasingly being supported by AI systems, the latter through individualised therapy and follow-up care at home. In contrast, optimised healthcare services are based on the digital networking of patient data, public health data and data from health apps and smart wearables (for example fitness watches). AI is particularly well developed in the area of analysing medical images in combination with data analyses of medical histories, for example to individually predict the course of illnesses and therapies. Other than that, in the field of rehabilitation, AI systems can support people with limited mobility in movement therapy according to their needs, meaning tailored to their individual abilities and requirements.

AI in statutory accident insurance

Accident insurance institutions have also been using AI, for example for the automated, needs and risk-based selection of companies that should be visited and assisted in view of their accident history. The aim of this is to develop preventive measures to avoid accidents and occupational illnesses. This method was used, for example, by the German employers' liability insurance association for the construction industry (*Berufsgenossenschaft der Bauwirtschaft – BG BAU*) as part of a lighthouse project on AI-based support for targeted accident prevention, which ran from February 2023 to May 2024. The employers' liability insurance association for energy, textiles, electrical and media products (*Berufsgenossenschaft Energie Textil Elektro Medien-erzeugnisse – BG ETEM*) also uses AI to select the companies to which inspectors are sent. Being one of the ten prevention services provided by BG

³ The Innovation Committee (*Innovationsausschuss*) was set up at the Federal Joint Committee in order to continuously develop the range of care offered by statutory health insurance. To this end, projects are being funded that test innovative approaches for statutory health insurance and aim to gain new insights into everyday healthcare. The financial resources of the Innovation Fund are available to the Innovation Committee for this purpose. Half of the resources for the fund are provided by the statutory health insurance funds and half by the Health Fund (*Gesundheitsfonds*).

Regulation of algorithmic management

With the Directive on improving working conditions in platform work, the EU has for the first time laid down binding rules for algorithmic management and the use of AI in the workplace. Algorithmic management refers to the use of algorithms to monitor, control and manage the workforce in companies. The Directive prohibits digital labour platforms from making certain decisions, such as dismissals or account suspensions, without human supervision. Digital labour platforms will also be required to assess the impact of decisions based on automated monitoring and decision-making systems on working conditions, safety and health as well as fundamental rights.

ETEM, company inspections should be carried out primarily when the risk of a company is considered to be high – also in order to conserve human resources. An algorithm for predicting loss events helps with risk assessment and thus the selection of companies by correlating individual key figures based on accident and occupational disease incidents and other prevention data. However, the algorithm does not derive any specific company-related preventive measures; these must still be recognised or developed by the inspectors.

However, it is not only AI systems used by the accident insurance institutions themselves that are relevant for the area of statutory accident insurance. The use of AI in the workplace also plays a major role from an occupational safety and health perspective. AI expands the possibilities of technical accident prevention in the form of innovative assistance and protection functions. At the same time, AI systems can influence the physical and mental stress of employees. One prominent example is algorithmic management in the workplace, which was regulated at EU level for the first time and in a pioneering way by the Platform Work Directive. On the one hand, algorithmic management allows tasks and processes to be better controlled, which can help to improve working conditions by preventing accidents and reducing stress, among other things. On the other hand, constant monitoring and assessment by algorithmic management can lead to considerable psychological stress. Against this backdrop, the “Competence Centre for Artificial Intelligence and Big Data” (*Kompetenzzentrum Künstliche Intelligenz und Big Data – KKI*) at the Institute for Occupational Safety and Health (*Institut für Arbeitsschutz – IFA*) of the German Social Accident Insurance is involved in research, consulting and standardisation of trustworthy AI and provides support in the development, testing and certification of AI systems.

AI in the statutory pension insurance

Algorithmic management methods and bots are also being used in the area of pension insurance to speed up the processing of procedures, make decisions more reliable and make it easier for insured persons to access pension insurance. One example is the first AI project of the German Federal Pension Insurance (DRV Bund) concerning risk-oriented employer audits (*Künstliche Intelligenz für risiko-orientierte Arbeitgeberprüfungen – KIRA*). KIRA supports company audits, during which employees from the DRV Bund’s company audit service check the correct payment of social security contributions every four years. In view of the approximately 400,000 audits that need to be carried out each year, employees hardly have time for a full inspection; instead, they set priorities and limit themselves to spot checks. In future, KIRA will provide support by reading all the companies’ digital data, searching for patterns and flagging anomalies such as unusually high or low contributions or missing evidence in the documents. Based on this information, audit staff decide which cases deserve more detailed consideration and which can be closed quickly. It is important to note that the experience of the employees and the human decision are also essential in this example of use of AI. The AI system simply provides support, thereby contributing to greater efficiency and mitigation of the shortage of skilled labour.

While pension insurance institutions are increasingly using AI-based applications, the indirect impact of the use of AI in the world of work on pension insurance is rather limited. However, it can be argued that appropriately regulated, supportive AI can generally be expected to simplify work processes and simplify everyday working life, thus reducing stress among employees. This can have a positive effect on

their health, reducing the number of absences due to illness or even retirement. This would also reduce the burden on pension insurance by reducing the need for medical rehabilitation or reduced earning capacity pensions, for example.

What are the implications of the AI Act for social insurance?

With regard to the use of AI systems by social insurance institutions, it can be summarised that this has so far been limited to rather simple systems that support and relieve employees in their day-to-day work. The ultimate decision is always made by humans. The AI Act may also require action with regard to such lower-risk AI systems. For example, AI systems already in use must be made transparent to the user, especially for applications that involve human interaction. These include AI chatbots, for example.

In contrast, the category of high-risk AI systems does not yet include any applications used by individual social insurance institutions. Nevertheless, this could change in the future if machine learning procedures are used to review a benefit claim, for instance. In the Netherlands, an AI project is in the development phase to make predictions about changes in the living conditions of insured persons. Automated notifications are intended as a reminder to check for any changes so that benefits can be adapted to living conditions and personalised more precisely. This would also reduce the administrative burden on insurance institutions.⁴

⁴ This project of the Sociale Verzekeringsbank is in the development phase and is currently suspended pending an internal legal review. No further information is officially available as a pilot project has not yet been launched.

So far, only low-risk AI systems that support employees in their work routine have been used in the German Social Insurance.



In Belgium and Estonia, automated decision-making in the area of unemployment insurance is already partially permitted.

Estonia and Belgium have gone even further, as shown by examples from the area of unemployment insurance. In Estonia, the law allows automated decision-making to grant or reject unemployment benefits. An AI system is used to check the accuracy of information in applications and to issue both negative and positive notices. In Belgium, the verification of unemployment benefit applications is also partially automated. Nonetheless, only positive notices are issued on the basis of AI. Rejection notices are checked by a human employee prior to delivery.

The selected examples clearly show: AI is developing rapidly and its range of applications in the field of social security is expanding just as quickly. Against this background, social insurance institutions, as operators of AI systems, will have to continuously deal with the provisions of the AI Act from now on.

Challenges of AI in social insurance

In principle, the use of AI in the administration of public services – from simple AI bots to systems that assist with benefit decisions – requires the employment of AI experts. This is because the maintenance of AI systems is more complex than that of conventional software; it must be continuously maintained and updated. On the one hand, this results from the need to comply with legal regulations such as those arising from the AI Act. On the other, it is essential to keep an eye on AI and counteract any discrimination, especially when it comes to sensitive data relevant to social insurance.

A second key challenge in the use of AI in social insurance relates to moral considerations regarding values, standards and principles. Not without good reason does the AI Act classify information and decisions of AI systems that assist, for example, in the evaluation of benefit or reimbursement

claims as high-risk systems, as they have a direct impact on people's access to essential services. This must be taken into account by ensuring ethical decision-making, which requires risk assessment in advance, transparency about the use and operation of the AI system and a guarantee of its safety for the people concerned. Any bias in the AI system must be ruled out when it comes to the decision-making process itself. Training the underlying AI model using suitable data is crucial for this.

Data is not objective

Probably the greatest challenge for ensuring safe AI systems lies in the provision of large, representative databases which are relevant to the respective issue and are used to train the underlying AI models. The quality and quantity of data are crucial for the performance and accuracy of AI models. There is a general consensus that neither AI applications nor the data used to train them should contain discriminatory elements or biases. But this is often difficult to avoid in reality. There is a possibility that unequal treatment that occurs in the real world is reflected in the data records without the operators of AI systems even knowing about it. Certain social groups or rare diseases, for example, are not adequately represented in existing data records. Such inaccurate or biased representations of reality harbour the risk that AI systems will not only reproduce but reinforce existing prejudiced decisions from the analogue world. This is particularly problematic when AI systems make decisions that have a direct impact on people's lives, as is the case in the area of social insurance.

Against this backdrop, it is important to ensure that data is handled responsibly, as required by the General Data Protection Regulation⁵ also for the use of

⁵ European Union: [General Data Protection Regulation](#) (2016/679).

personal data for AI training. In addition, there must be transparency about how the AI systems work as well as their use, which is why transparency also plays a key role in the AI Act. However, it remains to be seen whether the provisions laid down therein are sufficient. This is because transparency regulations yield nothing as long as it is unclear how AI-based applications come to certain conclusions. Modern AI models with deep neural networks are often so complex that even developers sometimes find it difficult to explain the exact decision-making processes. There is also the question of the extent to which companies are prepared to disclose their AI models, as this could be seen as a loss of competitive advantage.

Data as the basis for transparency and trust

Nevertheless, only on the basis of transparency can people develop trust in AI systems, which increases the acceptance of AI applications, thus ultimately contributing to their successful and wider use. In order to maintain this trust, it is important to continuously scrutinise the further development of AI and correct it as and when required. In the best-case scenario, a balance between human judgement and AI systems can be achieved, ensuring ethical decision-making and accountability on the one hand, and greater efficiency, better resource management and more tailored provision of services on the other.

The General Data Protection Regulation stipulates responsible handling of personal data for AI training.



Facilitation of data exchange by the EHDS

The European Health Data Space (EHDS) is a cornerstone of the European Health Union and the first common EU data space under the European Data Strategy. The EHDS aims to facilitate data exchange for the purpose of providing healthcare services across the EU (primary data use) and to create a coherent, trustworthy and efficient environment for research, innovation, policy-making and regulatory activities (secondary data use). In spring 2024, the European Parliament and the Council of the EU reached a political agreement on the European Commission's proposal on the EHDS.

The value of personal data is constantly increasing as more and more high-quality data is required for ever more powerful and accurate AI models and applications. Since the start of the legislative process to establish a European Health Data Space (EHDS) – one of nine future cross-sector data spaces – health data has been at the centre of general interest at EU level. The EHDS is to enable better utilisation of health data for scientific research in the health and care sector – also explicitly for training, testing and evaluation of algorithms. In the case of sensitive health data in particular, it is crucial that insured persons have the opportunity to object to the disclosure of their personal electronic health data for secondary data use. For this reason, an objection regulation, the so-called opt-out, was introduced. The aim is to strike a balance between the needs of data users for comprehensive and representative data records – for example for AI-based research – and the preservation of people's autonomy over their own health data.

Promotion of trustworthy AI in social insurance

While transparency, trust and acceptance are the basis for greater use of AI systems overall, the social insurance sector, in particular, faces the difficult task of wanting to benefit from the possibilities of AI systems for the sake of the insured on the one hand. On the other, ethical issues must not be lost sight of and decisions that directly affect people must not be handed over to potentially prejudiced AI systems. This challenge can be met by taking certain precautions.

For example, to prevent people in decision-making positions from developing excessive trust in automated tools, outputs from AI systems could be alternated with random outputs to ensure that decision-makers maintain a critical mindset and do not

adopt AI decisions without reflection. Another idea are AI assistants that are developed in such a way that they ask questions based on an extensive database instead of giving answers. In this way, employees could be assisted in making appropriate decisions themselves.

These two examples show that humans can be supported by AI systems on their path to decision-making. Ultimately, they do have to make the decisions themselves in order to ensure human control over the AI, responsibility and accountability. This can also contribute to greater public acceptance of AI applications.

How can the EU support?

Despite a lack of competence in the field of social security, the EU can help with promoting the use of AI in the area of social security. The challenge of using trustworthy and tailored AI systems profitably for both insured persons and social insurance institutions is being faced throughout Europe. Against this background, the EU can, above all, provide a platform to promote cross-border cooperation, collect use cases and strengthen the exchange of good practices. In this way, challenges and solutions can be brought together to pool resources and avoid duplication of work. At the same time, the EU can offer technical support in a coordinating role, without prescribing requirements for the implementation of AI solutions. A harmonised approach to the use of AI systems in social security can also be useful in terms of interoperability, particularly in view of the increasing need for cross-border data exchange and coordination of social security systems.

Another possibility for support can be to provide shared databases for the training of AI models. Small countries in particular may only have a limited volume of non-representative data,

which can easily lead to biases. However, linking and sharing large volumes of routine data from different areas of social insurance across national borders can also significantly improve the quality of, for example, predictions about potential future insurance claims.

Furthermore, the EU can define common basic principles and objectives based on cooperation between the responsible stakeholders of different Member States. This may include ensuring human oversight and accountability when using AI, as set out in the Platform Work Directive for the use of algorithmic management. Thus, the EU can play an important role in ensuring that ethical AI systems are used in the Member States.

Outlook

Human-centred and trustworthy AI can make the lives of many easier – this applies to its use in the world of work, healthcare and social insurance. Nonetheless, the potential of AI applications can only be realised if progress is made in terms of the availability and scope of data. A limited database is associated with the risk of bias and thus potentially incorrect decisions by AI applications, which is a risk that should not be assumed, particularly in the area of managing public services and benefits. There is therefore a broad consensus that responsibility within the scope of AI use must be traceable to human decisions and actions, which means that a human bears the ultimate responsibility, and AI is therefore merely a decision-making aid.⁶

AI should respect European values and protect people's fundamental rights. To achieve this goal, data protection and



Margrethe Vestager, Executive Vice-President
for a Europe Fit for the Digital Age

non-discrimination must be guaranteed, transparency must be pursued, AI risks must be identified, and AI must be regulated accordingly. The AI Act is the starting point of such regulation. In line with the major task it is intended to fulfil, the AI Act is a very extensive project. By August 2026, more than 70 implementing and delegated acts will have to be drafted to lay down the general rules and provisions of the Act. The implementation deadlines are also very tight. Prohibited systems must be phased out as early as mid-February 2025. At the same time, the standardisation organisations are working on deepening trust and describing technical requirements with the help of norms and standards for AI. Standards should be used as a specifying instrument to recognise and reduce risks. With the AI Act coming into force, the work really gets started.

Closely monitoring the social impact is crucial when implementing the AI Act. Moreover, the social partners and civil society should be involved in the discussion about expectations

“AI has the potential to change the way we work and live and promises enormous benefits for citizens, our society and the European economy. The European approach to technology puts people first and ensures that everyone's rights are preserved.”

⁶ This was also emphasised as a basic principle by the DSV in a [Statement on the White Paper “On Artificial Intelligence – A European Concept for Excellence and Trust”](#) (2020).

and the use of AI in order to achieve the broadest possible participation and support. This also applies to the most efficient and effective organisation of governance structures. With this in mind, the DRV Bund has contributed to the development of a charter of values for human-friendly automation, according to which people must be at the centre of the use of AI.⁷

The European Commission is not standing still either. In her Mission Letter to Commissioner-designate Roxana Mînzatu, the European Commission President Ursula von der Leyen focused on the impact of digitalisation in the world of work and called on the Commissioner-designate to present an initiative on algorithmic management.⁸ Following initial sector-specific regulation with the Platform Work Directive, the planned initiative aims to improve transparency, fairness and accountability of algorithms in the world of work as a whole. The aim here will also be to use the new opportunities to optimise work processes without compromising the health and safety of employees.

Contact

German Social Insurance European
Representation
50 Rue d'Arlon
1000 Brussels
Tel.: +32 (2) 282 05 50
E-mail: info@dsv-europa.de
www.dsv-europa.de

Imprint

Responsible for the content:
German Social Insurance
European Representation on behalf
of the umbrella organisations of the
German Social Insurance

Director: Ilka Wölfle, LL.M.

Editor:
Ilka Wölfle, LL.M.
Ulrich Mohr
Hanna Schlegel
Carla Cramer
Stephanie Kohl
Volker Schmitt
Lara-Sophia Claussen

Production: mails and more –
Service für Dialogmarketing GmbH

Graphics/layout: Naumilkat – Agency
for Communication and Design

Editorial deadline: October 2024

Photo credits:
P. 1: Adobe Stock – sdecoret
P. 7: Getty Images – Ipopba
P. 9: Getty Images – anyaberkut
P. 11: European Union, 2019

⁷ For further information, please visit [Human Friendly Automation](#).

⁸ Roxana Mînzatu – [Mission Letter](#).