

AI Policy and Regulations of Denmark







Comprehensive Report



AI Policy and Regulations of Denmark

Comprehensive Report

Content

Introduction	3
 Recent Legal Regulations (2020–2025)	4
 Government AI Action Plan	6
 Intellectual Property & Data Usage	7
 AI Outputs & IP Protections	9
 AI Investments & Computing Power	11
 Judicial Decisions on AI	12
Conclusion	13

Introduction

Denmark stands as one of the most digitalized societies in the European Union, providing excellent opportunities for developing, testing, and applying artificial intelligence technologies across numerous sectors. The country offers access to world-class applied AI research and an attractive talent pool known for user-driven innovation approaches and ability to integrate complex software systems. As a digital frontrunner, Denmark has positioned itself at the forefront of responsible AI development with a clear focus on ethical considerations. The Danish government launched a national AI strategy to create a framework enabling businesses, researchers, and public authorities to better exploit AI's potential with a high level of responsibility. By 2025, Denmark envisions becoming a world leader in the responsible and ethical use of AI where privacy, security, and transparency take precedence. With its long-standing focus on digital technology and solutions in both public and private sectors, Denmark has established a strong foundation for implementing new technologies, including high-quality structured public datasets, a flexible labor market, and a population that is adaptable and open to technological innovation.



1. Recent Legal Regulations (2020-2025)

Denmark has not implemented any specific regulation governing artificial intelligence as of early 2024. However, where applicable, AI is naturally subject to Danish law, meaning that AI systems must be construed and used in accordance with Danish legal principles and enacted legislation across various legal areas. In addition to the General Data Protection Regulation (GDPR), the Danish Data Protection Act (Lovbekendtgørelse 2024-03-08 nr. 289) supplements this regulation, providing a foundation for handling personal data throughout AI system lifecycles. The use of AI is also subject to Danish intellectual property rights regulation, including but not limited to the Danish Copyright Act (Lovbekendtgørelse 2023-08-20 nr. 1093) and Danish Trade Secrets Act (Lov 2018-04-25 nr. 309 om forretningshemmeligheder).

In the employment context, employers must ensure that any AI use complies with Danish employment legislation and applicable collective bargaining agreements, which is particularly relevant when implementing AI tools in recruitment processes. The Danish Employment Non-discrimination Act (Lovbekendtgørelse 2011-06-08 nr. 645) requires that AI tools used in recruiting must not discriminate based on unlawful criteria. Despite not having adopted specific AI regulation yet, Denmark has initiated various non-binding initiatives concerning the regulation and use of AI, focusing on ensuring responsible and ethical development.



In February 2024, all political parties in the Danish Parliament agreed on a new national digitalization strategy for 2024-2027, which consists of 29 initiatives, several focusing specifically on AI. These include ensuring a "responsible and strong foundation for utilising artificial intelligence" and potentially investing in and training a Danish language model. Additionally, funds have been allocated to establish a regulatory sandbox aimed at providing companies and public authorities with guidance on GDPR compliance when developing or using AI solutions. This sandbox, a collaboration between the Danish Data Protection Agency and the Agency for Digital Government, supports innovation and aims to ensure a swifter process from development to operation of AI systems.

As Denmark awaits the EU Artificial Intelligence Act to come into effect, it remains unclear how the Danish opt-out on EU justice and home affairs will affect the AI Act's implementation. The Danish Agency for Digitisation has been appointed as the national co-ordinating supervisory authority for the EU's AI Regulation as of April 11, 2024. The pending EU AI Liability Directive and the EU Product Liability Directive will require Danish implementation, which will likely influence the Danish legal landscape, particularly concerning fault-based liabilities.



2. Government AI Action Plan

In March 2019, the Danish Government published its National Strategy for Artificial Intelligence, setting out a roadmap for how Denmark can be a front-runner in the responsible development and use of AI. The strategy outlines four key objectives: develop a common ethical and human-centered basis for AI; prioritize and support research in AI; encourage the growth of Danish businesses by developing and using AI; and ensure that the public sector uses AI to offer world-class services benefiting citizens and society. Initially, the strategy contained 24 initiatives with EUR 9.2 million reserved by the Danish Government for the period 2019-2027, though this budget has since been reprioritized and lowered to EUR 5 million.

The government's vision is explicitly stated as "Denmark is to be a front-runner in the responsible development and use of artificial intelligence". The strategy emphasizes that this development must be built on a human-centric, ethical approach that upholds core Danish values: equality, security, liberty, and freedom. In addition to the four main objectives, the strategy identifies four priority areas where AI can be particularly beneficial: energy and utilities, healthcare, transport, and agriculture. These areas have been prioritized because authorities and businesses have access to quality data—a prerequisite for advancing AI implementation—and the EU has identified these sectors as having notable potential for AI integration.

The implementation strategies include establishing an ethical framework based on six principles: self-determination, equality and justice, responsibility, explainability, development, and dignity. These principles inform the practices of researchers, developers, and organizations implementing the strategy, highlighting the importance the Danish government places on building citizen trust, especially when navigating AI's associated risks.

Other implementation mechanisms include the creation of a Data Ethics Council to make recommendations on ethical issues related to data and new technologies, and the launch of a Data Ethics Toolbox to support companies in adopting and implementing data ethics into their business models.

More recently, in December 2024, the government presented a new AI strategy focusing on four key initiatives: establishing a Digital Taskforce for Artificial Intelligence to roll out AI solutions on a large scale in the public sector; creating a new Center for Artificial Intelligence in Society to provide guidance on responsible AI use; establishing a platform to accelerate the development of secure and transparent Danish language models; and making Danish text data available as open source to support high-quality AI solutions functioning in Danish. Additionally, the AI Competence Pact was launched, aiming to upskill 1 million Danes in AI through strong public-private collaboration and make technological understanding a central part of the education system.

3. Intellectual Property & Data Usage

Denmark has no specific AI-related intellectual property legislation but applies existing IP frameworks to AI technologies. The use of AI is subject to Danish intellectual property rights regulations, and these may influence AI systems in several ways. For example, AI systems may potentially generate data constituting a trade secret under the Danish Trade Secrets Act, requiring the AI system to have reasonable protective measures in place to secure the necessary level of confidentiality. Intellectual property law in Denmark grants exclusive rights to the owner to use their protected rights, such as inventions, allowing the owner to determine how those rights are used.

With respect to data usage and AI, Denmark recently amended its copyright law to accommodate developments in AI technology, particularly in data mining. One notable development is the implementation of Article 4 of the DSM Directive on exceptions and limitations on text and data mining into Section 11 of the Danish Copyright Act. Previously, data mining could potentially infringe on copyright as it involved reproducing and analyzing copyrighted material without permission. However, with the introduction of Sections 11b and 11c, Denmark has recognized data mining's importance and now enables such activities through copyright law exceptions.

Generally, authors cannot oppose the use of their works for text and data mining. While text and data mining can be used for research and AI development purposes without prior permission, right holders have the option to prohibit commercial text and data mining by stating so in a machine-readable manner, including in metadata and terms and conditions for website or service use. In such cases, text and data mining can only be legally conducted after an agreement with—and possibly payment to—the right holders.



Furthermore, with effect for financial years beginning on or after January 1, 2021, certain types of companies must supplement their management report with a statement on data ethics in accordance with the Financial Statements Act. This requirement applies to large companies in accounting Class C exceeding specific financial thresholds, companies in accounting class D (listed companies and public limited companies), and certain financial institutions. To fulfill the reporting requirements, management must apply the 'comply or explain' principle—either reporting on the company's data ethics policy or justifying why the company opted out of adopting such a policy.

Denmark has also prioritized facilitating access to data for citizens, businesses, public authorities, and researchers, recognizing data as an essential prerequisite for AI use. Policy initiatives include developing a common Danish language resource to foster language technology solutions and preparing a strategy for data in the public sector to encourage the use and dissemination of public-sector data. Additionally, Denmark is fostering an Open Science Policy focused on open access to scientific publications, research integrity, and open research data.



4. AI Outputs & IP Protections

The legal protection of AI-generated outputs presents several challenges under Danish intellectual property law. Currently, AI in Denmark falls under the Danish Copyright Act, the Danish Data Protection Law, and the Danish Marketing Practices Act. In terms of copyright protection for AI-generated content, it is unlikely that images or other works generated by AI can benefit from copyright protection under Danish law. Generally, only original creations by natural persons can be copyright-protected, and the Danish courts have not yet ruled on this matter.

The originality requirement in Danish copyright law means that works must be attributable to one or more persons who have made creative choices. According to the Court of Justice of the European Union (CJEU) in case C-683/17-Cofemel, a copyright-protected work requires an "intellectual creation reflecting the freedom of choice and personality of its author". Works created using computer technology can be protected if the author has made creative choices and the technology has only been used as an auxiliary tool. However, there is ongoing debate about how much of the creative process can be left to computers, including in relation to works generated using AI. It is also being debated whether any such copyright belongs to the AI developer or the user of the program.

Under the Danish Copyright Act, for a work to be eligible for protection, it must be original, meaning that it must express the author's creative effort.



Works resulting from purely routine activities, such as automatic translations or simple text messages, are not considered original and are not eligible for protection. The question of whether AI-generated works meet the required level of originality has been a topic of discussion. It has been debated whether a machine can constitute a "creative effort" when it relies mainly on human input.

Another obstacle to granting intellectual property protection to AI-generated works is the authorship requirement under the Danish Copyright Act. The law currently stipulates that the author must be a physical person, excluding the possibility of an AI system being considered the author of its works. This means that AI-generated works cannot be protected, leaving them without a designated copyright holder and no exclusive right to dispose of or produce copies of the work.

For AI-generated inventions, it is unlikely that AI can be named as an inventor in a patent application under Danish law, although the Danish courts have not yet ruled on this issue. It is generally recognized that at least one natural person must always be named as the inventor, consistent with EU practice. In December 2021, the Legal Board of Appeal of the European Patent Office ruled in combined cases J 8/20 and J 9/20 that AI cannot be named as the inventor on patent applications.





5. AI Investments & Computing Power

Denmark has made significant investments in AI and computing infrastructure, recognizing their importance for technological advancement and economic growth. The Independent Research Fund Denmark has funded 28 research projects in AI to a value of 90 million Danish kroner through open calls and one thematic call. In March 2024, Denmark announced a collaboration with NVIDIA to establish a national center for AI innovation housing one of the world's most powerful AI supercomputers. This initiative aims to accelerate research and innovation in fields ranging from healthcare and life sciences to green transition, supporting the development of innovative solutions to major global challenges.

The collaboration is led by the Novo Nordisk Foundation and the Export and Investment Fund of Denmark (EIFO), allowing researchers from Denmark's public and private sectors to access a state-of-the-art NVIDIA AI supercomputer optimized for large-scale AI projects. The Novo Nordisk Foundation has committed approximately DKK 600 million toward the initial costs of the center, with EIFO contributing DKK 100 million. Eviden, an Atos Group company and European leader in advanced computing, will deliver, install, and configure the supercomputer, named Gefion, and provide support during the startup phase.

The Danish supercomputer is a large-scale NVIDIA DGX SuperPOD powered by NVIDIA H100 Tensor Core GPUs and interconnected using NVIDIA Quantum-2 InfiniBand networking. The system comprises 191 NVIDIA DGX H100 systems with a total of 1,528 NVIDIA H100 Tensor Core GPUs and 382 Intel Xeon Platinum CPUs. This significant investment addresses a critical gap in Denmark's AI infrastructure, as the country currently has no GPU-accelerated supercomputers—identified as the main roadblock to progress in Denmark's otherwise thriving AI-based research ecosystem.

In October 2024, Gefion was officially launched with the attendance of King Frederik X of Denmark and Jensen Huang, founder and CEO of NVIDIA. The supercomputer has since been ranked as 21 on the prestigious TOP500 list of the world's most powerful supercomputers, confirming its status as one of Europe's most advanced AI computing machines. This ranking showcases Denmark's technological advancements and places the nation at the forefront of computational power and innovation.

The Danish supercomputer will be hosted by global data center provider Digital Realty in one of its AI-ready facilities in Denmark. The data center is designed and built to be sustainable, running on 100% renewable energy. Gefion will have the highest level of security and support Danish data sovereignty, allowing it to handle projects involving sensitive data once fully operational. No data will be permanently stored in the center, and users will maintain full control of their data at all times.

Beyond the supercomputer investment, Denmark has allocated funds to various AI initiatives. The 2019 national budget earmarked EUR 39.5 million for research in new digital technologies, and an additional EUR 26.8 million was allocated to an Investment Fund (2019-2022) to help municipal and regional government authorities develop and adopt digital welfare solutions and new technologies. The Danish National Uptake Fund for New Technologies has funded 40 projects providing experience with AI use in the public sector. More recently, the Ministry of Digital Affairs granted 30.7 million kroner to an ambitious Danish language model project, with 20.7 million allocated to the platform from 2024 to 2027 and an additional 10 million allocated to related initiatives.



6. Judicial Decisions on AI

Currently, no relevant judicial decisions have been issued in Denmark regarding generative AI and intellectual property rights. The Danish courts have not yet ruled on cases involving AI. This absence of case law may be attributed to several factors, although no definitive answer can be provided. It is difficult to determine precisely why there is a lack of judicial rulings on AI-related matters in Denmark. The Danish approach to judicial matters generally aligns closely with EU legislative texts, with the Danish legislative stance often described as agnostic.

While courts have not yet addressed AI matters, the Danish Data Protection Agency (DDPA) has issued opinions and decisions regarding public authorities' use of AI systems. For instance, the DDPA issued an opinion regarding municipalities' legal basis to use an AI profiling tool (ASTA) designed to predict citizens' likelihood of becoming long-term unemployed. The tool was not developed to issue automated decisions but merely to support decision-making by providing recommendations for relevant initiatives to social officers.

In its opinion, the DDPA outlined that requirements for the clarity of the necessary legal basis for processing personal data depend on how intrusive the processing activity is for the data subject. If processing activities are deemed intrusive, requirements for the clarity of the legal basis are correspondingly stricter. In this specific case, ASTA's use was assessed as constituting an intrusive processing activity, necessitating a high level of clarity regarding the legal basis.

The DDPA has also found that an AI system does not itself constitute personal data but is only the result of personal data processing. Additionally, the agency determined that a data protection impact assessment (DPIA) should be prepared when developing and using AI solutions. In another case, the DDPA ruled that Danish authorities have a legal basis in the Danish Public Records Act to use AI solutions to respond to requests for access to documents, and that processing personal data with an AI solution did not have direct consequences for citizens when developing such a solution.

The result of current DDPA practice suggests that using AI with personal data is somewhat complicated. It may be possible to train a solution on personal data but not use it afterward for the purpose for which it was trained. This practice is expected to develop further as more cases arise and as the regulatory framework evolves.

The use of AI in law is currently subject to regulation by local organizations such as the Danish Bar and Law Society, which ensure that AI and its use in the legal field adhere to ethical and professional standards. In 2023, the Association of Danish Law established a working group to identify and describe AI use in the legal profession, aiming to highlight potential challenges and propose strategies to address them. Danish legal practitioners are increasingly relying on AI-driven tools for tasks such as document review and legal searches, which offer automated support services, facilitating more efficient and cost-effective case preparation.

Conclusion

Denmark's approach to AI regulation and development demonstrates a balanced strategy focusing on responsible innovation while preparing for upcoming EU regulations. The country has positioned itself at the intersection of technological advancement and ethical governance, prioritizing a human-centered approach to AI development. Rather than implementing specific AI legislation ahead of EU frameworks, Denmark has focused on providing guidance, establishing ethical principles, and investing in infrastructure and research capacity. This strategy allows flexibility while ensuring alignment with broader European regulatory developments.

Denmark's national AI strategy, with its four key objectives focusing on ethics, research, business growth, and public sector application, provides a comprehensive framework for AI advancement. Recent updates to this strategy, including the Digital Taskforce for AI and the Center for Artificial Intelligence in Society, along with investments in Danish language models, demonstrate continued commitment to establishing Denmark as an AI leader. The AI Competence Pact, aiming to upskill one million Danes, addresses the crucial need for digital literacy in an increasingly AI-driven economy.



In terms of intellectual property and data protection, Denmark has made strategic amendments to its copyright law to accommodate AI development, particularly regarding text and data mining. However, significant questions remain about the protection of AI-generated works, as Danish copyright law currently requires human authorship and creativity. These legal challenges will likely require further legislative attention as AI capabilities continue to evolve.

The establishment of the Gefion supercomputer represents a landmark achievement in Denmark's AI infrastructure development. Ranking 21st among the world's most powerful supercomputers, Gefion significantly enhances Denmark's capacity for advanced AI research and application across sectors from healthcare to climate science. This investment, led by the Novo Nordisk Foundation and EIFO, demonstrates the strong public-private collaboration that characterizes Denmark's approach to technological advancement.

Despite the absence of judicial decisions specifically addressing AI, Denmark's regulatory approach through agencies like the Danish Data Protection Agency provides practical guidance for AI implementation, particularly regarding personal data processing. As AI integration accelerates across Danish society, the regulatory framework will likely evolve through administrative decisions before significant case law develops.

In summary, Denmark stands well-positioned as a frontrunner in responsible AI development, balancing innovation with ethical considerations. Its strategic investments in infrastructure, research, education, and regulatory frameworks create a solid foundation for AI advancement that maintains alignment with Danish values of equality, security, and transparency. As the EU AI Act and related directives come into effect, Denmark's proactive approach to AI governance will likely facilitate smooth integration with these broader regulatory frameworks while maintaining its distinct emphasis on responsible innovation.



Country AI Policies, Regulations and Strategies Report

