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State of the Digital Decade 2025: Keep building the EU's sovereignty and digital future

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European Commission

DIGITAL DECADE 2025
COUNTRY REPORTS

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Executive summary

Denmark benefits from a robust digital infrastructure, which provides the conditions for developing its high-quality public services and innovation. However, the country struggles with a shortage of skilled workers and widening gaps between small and large enterprises' adoption of key digital technologies. Denmark is emerging as a leader in digital inclusivity, trust and security.

The country shows a high level of ambition in its contribution to the Digital Decade, with 10 national targets, 90% of which are aligned with the EU 2030 targets. **It is following its trajectories moderately well**, with 67% of them being on track (based on 2024 trajectories established for 3 KPIs out of 8 analysed). **Overall, Denmark addressed 70% of the 10 recommendations issued by the Commission in 2024**, either by implementing significant policy changes (10%) or making some changes (60%) through new measures.

In 2024, Denmark maintained strong broadband and 5G coverage, advanced in quantum technology and saw growth in its semiconductor sector. However, challenges remain, including a digitalisation gap between small and large companies, especially in Artifical Intelligence (AI) adoption, and an ICT talent shortage. Digital public services improved further, with initiatives like the Social Media, Tech and Democracy Centre enhancing online safety, especially for children. The creation of a Ministry of Digitalisation marked a key step in unifying efforts across telecom, AI and emerging technologies, positioning Denmark to lead in the digital transformation.

Digital Decade KPI (1)	Denmark				EU		Digital Decade target by 2030	
	DESI 2024 (year 2023)	DESI 2025 (year 2024)	Annual progress	National trajectory 2024 (3)	DESI 2025	Annual progress	DK	EU
Fixed Very High-Capacity Network (VHCN) coverage	97.2%	96.8%	-0.4%	-	82.5%	4.9%	-	100%
Fibre-to-the-Premises (FTTP) coverage	84.0%	87.2%	3.7%	-	69.2%	8.4%	-	-
Overall 5G coverage	100.0%	100.0%	0.0%	100.0%	94.3%	5.9%	100.0%	100%
Edge Nodes (estimate)	24	46	91.7%	-	2 257	90.5%	-	10000
SMEs with at least a basic level of digital intensity (2)	-	90.5%	0.9%	-	72.9%	2.8%	95.0%	90%
Cloud	66.2%	-	-	-	-	-	77.2%	75%
Artificial Intelligence	15.2%	27.6%	81.8%	24.6%	13.5%	67.2%	76.6%	75%
Data analytics	49.5%	-	-	-	-	-	75.0%	75%
AI or Cloud or Data analytics	77.4%	-	-	-	-	-	-	75%
Unicorns	9	9	0.0%	-	286	4.4%	-	500
At least basic digital skills	69.6%	-	-	-	-	-	80.0%	80%
ICT specialists	5.9%	5.8%	-1.7%	6.4%	5.0%	4.2%	7.7%	~10%
eID scheme notification		Yes						
Digital public services for citizens	84.2	79.5	-5.6%	-	82.3	3.6%	100.0	100
Digital public services for businesses	88.7	87.5	-1.3%	-	86.2	0.9%	100.0	100
Access to e-health records	97.9	97.9	0.0%	-	82.7	4.5%	100.0	100

(1) See the methodological note for the description of the indicators and other metrics
(2) DESI 2025 reports the version 4 of the Digital Intensity Index, that is comparable with the DII value from DESI 2023 (referring to year 2022) for the calculation of the annual progress. It is not comparable to the national trajectory that is based on version 3 of the index.
(3) National trajectory value if present in the national roadmap and if the indicator was measured in DESI2025 (year 2024)

According to the special Eurobarometer on the Digital Decade 2025, 81% of Danish citizens consider that the digitalisation of daily public and private services is making their lives easier. Moreover, 94% consider it important that public authorities counter and mitigate the issue of fake news and disinformation online. Finally, regarding competitiveness, 88% deem it significant that European companies can grow and become 'European Champions' able to compete globally.

A competitive, sovereign, and resilient EU based on technological leadership

Denmark's infrastructure indicators are all above the EU average, although the extension of coverage to smaller towns and remote areas could still be improved. The country also excels in research and innovation, with some noteworthy initiatives aimed at advancing its semiconductor and quantum technology ecosystems. However, despite a strong R&D community, technological innovations and ideas tend to be concentrated within a limited number of universities and innovation hubs. Similarly, R&D activities and investments are predominantly focused on large companies, which risks restricting the widespread adoption of key technologies across the broader business landscape. This divide is particularly evident in the digitalisation gap between large companies and Small and Medium-sized Enterprises (SMEs), with many SMEs facing challenges in adopting cutting-edge digital technologies. The revised roadmap attempts to address this challenge with a new strategic initiative on AI. With regard to cybersecurity, the Danish government is applying new security measures to protect online public services. It also continues to raise awareness of online dangers and to provide tools to help businesses improve their cybersecurity practices.

Protecting and empowering EU people and society

There are generally high levels of digital skills across different categories of Denmark's population, enabling individuals to use and take advantage of the country's highly digitalised public services. The revised roadmap also includes measures to further improve the understanding of digital solutions and technology in primary and secondary education. With regard to digital public services, the government's 'digital-by-default' approach has been instrumental in delivering user-centric and efficient public services both to citizens and businesses. The focus now is on further strengthening inclusivity and public trust, ensuring that no one is left behind in the digital transformation.

Another key priority for Denmark is to protect and enhance online wellbeing, particularly for vulnerable groups like children. Despite being on a strong digital footing, Danish companies – especially smaller enterprises – continue to face significant challenges in finding and retaining qualified ICT specialists, while also struggling to keep pace with upskilling and reskilling practices. Moreover, there is still a gender disparity in employed ICT specialists. The revised roadmap focuses on improving ICT-related courses in higher education, improving teachers' competencies in the field, continuing training activities for people in IT jobs and retaining international students in the ICT labour market. Nonetheless, at present, the country is lagging behind its national trajectory point for 2024.

Leveraging digital transformation for a smart greening

Danish public and private sector organisations are increasingly leveraging digital solutions to monitor energy consumption, which drives greater efficiency and sustainability. The revised roadmap sets out several measures that demonstrate this. Awareness of the importance of sustainable digital technologies is also growing, but it remains a developing area that requires further attention.

Denmark

National digital decade strategic roadmap

Denmark submitted a revised national Digital Decade roadmap on 7 January 2025, containing 12 additional measures and four revised targets and trajectories. The revised roadmap addresses a substantial number of roadmap recommendations issued in 2024. The country has not presented any formal targets for FTTP coverage, edge nodes and unicorns, while the Very High-Capacity Networks (VHCN) trajectory and target ends at 2025 (98% coverage). Apart from ICT specialists, which remains slightly below the EU target (at 7.7% as the proportion of the total employed population working as ICT specialists instead of 10%), all the other national targets are aligned with the EU targets. Some targets (i.e. 95% of SMEs having a basic level of digitalisation, 77.2% of SMEs adopting cloud services and 76.6% adopting AI) are more ambitious than the EU's.

The revised roadmap continues to focus on AI and the digitalisation of SMEs, while also boosting basic digital skills in education and supporting ICT specialists. These efforts are clearly aligned with the new Commission's priorities for AI and digital skills. The revised roadmap has **67 measures with a budget of EUR 1.07 billion, of which EUR 832 million come from public budgets (equivalent to 0.21% of GDP).** The roadmap covers a diverse range of Digital Decade objectives, with strengthened digital and green commitments, as well as a renewed focus on promoting a human-centred digital space and protecting society online.

Funding & projects for digital

Denmark allocates 27% of its total Recovery and Resilience Plan to digital (EUR 382 million)[1]. In addition, under cohesion policy, EUR 63 million, representing 14% of the country's total cohesion policy funding, is dedicated to advancing Denmark's digital transformation[2].

Denmark is a member of the 'Alliance for Language Technologies' European Digital Infrastructure Consortium. It is also a participating state of the European High-Performance Computing Joint Undertaking (JU) and of the Chips JU.

The country contributed to the Digital Decade Best Practice Accelerator[3] by sharing one best practice in the 'Business Uptake' cluster (i.e. the 'SME:Digital' initiative).

Digital rights and principles

According to a support study, Denmark has been relatively active in implementing the **European Declaration on Digital Rights and Principles**, with 52 initiatives overall and two new initiatives launched in 2024. The country is mostly active in ensuring people remain at the centre of the digital transformation, while less activity was identified with regards to digital solidarity and inclusion. Nonetheless, measures in the latter area appear to have most impact on the ground, in contrast to efforts addressing freedom of choice.

[1] The share of financial allocations that contribute to digital objectives has been calculated using Annex VII to the Recovery and Resilience Facility Regulation. Last data update: 16 May 2025.
[2] This amount includes all investment specifically aimed at or substantially contributing to digital transformation in the 2021-2027 Cohesion policy programming period. The source funds are the European Regional Development Fund, the Cohesion Fund, the European Social Fund Plus, and the Just Transition Fund.
[3] The Best Practice Accelerator (BPA) is a platform that enables Member States to share successful measures and challenges encountered in their efforts to meet their Digital Decade targets and objectives. Best practices are made available to Member States via the BPA Repository and showcased in regular workshops, currently focused on three thematic clusters: Digital Skills, Green IT, and the Uptake of Digital Technologies.

Recommendations

- **SMEs' take-up of advanced digital technologies:** continue to raise SMEs' awareness of digital solutions to improve productivity and competitiveness. Help them to use and integrate key digital technologies into their business models.
- **ICT specialists and advanced skills:** monitor the new measures for improving advanced digital skills in higher education and for upskilling and reskilling ICT specialists already in the workforce. Find new ways of increasing young people's interest in ICT and STEM, including among women. Continue attracting foreign talent in ICT companies, while also retaining international students in ICT-related degree programmes.
- **Innovation ecosystems:** enhance collaboration between universities and businesses to improve the commercialisation of research. Consider targeted knowledge and financial support for SMEs, start-ups and scale-ups in key strategic sectors, so that more companies can contribute to the country's digital innovation.
- **Cybersecurity***:* support cybersecurity measures in view of evolving threats, building capacity in both enterprises and public administrations.
- **Green transition:** continue to use digital tools to monitor the green transition and focus more on actions to make digital solutions more energy efficient through public-private collaborations.

A competitive, sovereign and resilient EU based on technological leadership

Denmark is highly competitive in digital, thanks to its strong research community, in areas like quantum, semiconductor and nanotechnology, with a **good level of digitalisation and a solid digital infrastructure.** The country generally performs very well in digital research and development (R&D), with both public funds and private partnerships playing a role in supporting research with a high innovation potential. The establishment of Gefion, a High-Performance Computing (HPC) system, is just one recent example of an exciting development in the country's research and innovation landscape. Overall, the 2024 European Innovation Scoreboard defines Denmark as an innovation leader, with an index of 149.3 and performance at 135.7% of the EU average. This environment is fully supported by high broadband coverage and integral 5G connectivity, as well as a generally high level of digitalisation of both Danish businesses and their workforce.

Despite a robust R&D community, there is room to enhance the **cooperation between universities and businesses**, as technology innovations and ideas mostly revolve around a selected number of universities and innovation hubs. Moreover, **R&D activities and investments tend to concentrate in large companies**, which can create a digitalisation gap and limit the diffusion of key technologies to all companies. Although the Danish ICT sector has shown promise, there is still room for growth and improvement. Notably, in 2022, the sector accounted for 3.81% of the country's gross value added, marking a decline from 4.60% in 2018[4]. This percentage falls short of the EU average, which stood at 5.46% in 2022, indicating an opportunity for Denmark to strengthen its ICT sector. The recent agreement reached on the Entrepreneurship Package represents a positive turning point in this regard. The government's main focus areas include:

- improving access to risk capital;
- improving cooperation between businesses and universities to deliver relevant skills to the market;
- expanding entrepreneurial opportunities to areas around universities and innovation hubs, and improving technology transfer between universities and businesses;
- streamlining administrative processes and introducing measures such as regulatory sandboxes and a 'red carpet' initiative to reduce burdens on companies;
- encouraging more women to start businesses, with initiatives such as mobilising risk capital for diverse entrepreneurs.

On key digital technologies, Denmark aims to establish itself as a world leader in Artificial Intelligence (AI) within the public sector, while also strengthening the foundations for responsible development and use of AI by people and businesses. Over the past year, the country has made significant strides by launching a new Strategic Approach to Artificial Intelligence (2024-2027). Key objectives include establishing the Digital Taskforce on AI, aiming to expand the use of AI solutions within the public sector; establishing the Centre for AI in Society, which will provide interdisciplinary

[4] Most of the indicators mentioned in the country report are explained in the DESI 2025 Methodological Note accompanying the State of the Digital Decade report 2025.

research and advice on how authorities and companies best use the technology, as well as conduct independent research and practice-oriented evaluations and monitoring of generative AI; introducing a secure platform for developing transparent Danish-language models; and making Danish text data freely accessible and open-source, to foster the creation of innovative AI solutions.

Finally, Denmark has a thriving start-up culture, with access to venture and growth capital showing signs of improvement over the last 10 years. However, some companies still face some **difficulties in scaling up because of limited access to venture capital.**

Building technological leadership: digital infrastructure and technologies

Denmark's digital infrastructure remains robust, with high coverage rates across multiple metrics. The rollout of Very High-Capacity Networks (VHCN) continued in 2024, with strengthened efforts in smaller towns and rural areas. Although the country is nearing the 100% target, achieving complete coverage of remote areas, including small islands, will be more difficult and costly. By 2023, 100% of households already had 5G coverage. Overall, the country's strong connectivity serves as the backbone for its cutting-edge digitalisation and seamless integration of technology into everyday life. Notably, as the Special Eurobarometer report on the Digital Decade 202[5]5 reveals, a staggering 91% of Danish citizens consider the development of efficient and secure digital infrastructures to be a crucial priority for public authorities, underscoring the significance of investing in a reliable and resilient digital foundation.

Connectivity infrastructure

Denmark's digital infrastructure continues to outperform the EU average in several key areas. In 2023, Denmark's total VHCN coverage stood at 97.19% (the 2025 national target is 98%), significantly higher than the EU's 78.64%. This figure slightly decreased to 96.82% in 2024. For households in sparsely populated areas, VHCN coverage has had a growth rate of 1.3% since 2023, covering 91.98% of households in 2024. Despite providing an intermediate national target for 2025, **the country did not provide a national trajectory point for 2024.**

Denmark's Fibre-To-The-Premises (FTTP) coverage also exceeded EU averages, with 84.04% in 2023 and 87.19% (+3.7% growth) in 2024, compared to the EU's 63.87% and 69.24% respectively. For households in sparsely populated areas, Denmark's FTTP coverage also improved, covering 91.52% of households in 2024 (up from 90.33% in 2023). **The country did not provide a national trajectory point for 2024, nor a 2030 national target.**

The country has already achieved 100% overall 5G coverage (the 2030 national target is 100%) and is therefore on track according to its national trajectory. 5G in the 3.4 – 3.8 GHz band was estimated to cover 87.50% of households in 2024, largely above the EU's 67.72%. For households in sparsely populated areas, Denmark's 5G coverage in that band was estimated to be at 27.84% in 2024, comparable to the EU's 26.19%. Denmark's 5G spectrum assignment in pioneer bands was 99.17% in both 2024 and 2025, significantly higher than the EU's 73.4% and 74.63% respectively.

VHCN and FTTP

Denmark does not have a specific VHCN target for 2030. However, as outlined in the initial roadmap submitted in 2023, it aims to make sure that 98% of household and businesses achieve 1 Gbps coverage by the end of 2025. The country has not yet established a national target for FTTP coverage.

[5] Special Eurobarometer 566 on 'the Digital Decade' 2025: https://digital-strategy.ec.europa.eu/en/news-redirect/883227

The Danish authorities explain that they have adopted a more comprehensive approach to broadband mapping, which goes beyond mere household coverage. Their national broadband mapping initiative assesses coverage at individual addresses, using data from internet service providers, as well as public buildings, using publicly available registries. Specifically, they are monitoring coverage for both households and businesses with access to speeds of at least 100 Mbps download and 30 Mbps upload, as well as those with access to networks offering 1 Gbps download speeds. This broader focus demonstrates Denmark's commitment to a more extensive and inclusive digital infrastructure. The question of updating the national broadband targets is currently under debate, in connection with the preparation of a new telecommunications strategy. This will be integrated into the Digital Decade roadmap and will potentially pave the way for further improvements to Denmark's digital landscape.

With both VHCN and FTTP deployment being well advanced, Denmark is currently focusing on covering the remaining addresses, strengthening connectivity with its outermost regions, improving penetration and take-up and maintaining good competition. The expansion of fast broadband access continues to rely mainly on a market-based roll-out. The National Broadband Fund also remains a key initiative. In 2024, the Fund received approximately EUR 6.7 million, on top of the EUR 5.3 million from unspent funds in previous years. These funds were mainly used to connect 473 individual addresses in remote areas to broadband and support 93 small rollout projects covering 1 135 addresses. Looking ahead, the National Broadband Fund will receive another EUR 6.7 million in 2025. Additionally, a new Municipal State Aid scheme was introduced in July 2024, allowing municipalities to provide financial support for deploying fixed broadband networks in market failure areas. So far, no municipalities have provided aid under this scheme. The Danish Government is also working on a new telecommunications strategy, which is expected to be finalised around the summer of 2025. The strategy aims to enhance broadband coverage, address the resilience and security of Denmark's digital infrastructure and maintain a regulatory framework that encourages investment in high-speed broadband networks. Meanwhile, the Agency for Digital Government is exploring the potential of satellite technology to connect the most remote areas to broadband.

Denmark's broadband take-up indicators also show strong performances. The demand for high-speed internet remains stable in Denmark, with a general trend showing an increase of high-speed subscriptions, in particular fibre subscriptions, and a decrease of xDSL (Digital Subscriber Line) and cable subscriptions. In 2024, 86.36% of fixed broadband subscriptions in Denmark were at speeds of 100 Mbps or higher, slightly up from 81.83% in the previous year and higher than the EU's 71.88%. 33.69% of broadband subscriptions had speeds of 1 Gbps or higher in 2024, also showing a slight increase since 2023, when there were 28.72% of subscriptions. Telecom operators are now focusing on simplifying the fibre customer journey to ensure that networks are being used to their full potential.

Through the deployment of submarine cables, Denmark is contributing to strengthening international connectivity also beyond its borders. The most prominent project currently being funded under the Connecting Europe Facility programme is the TUSASS Connect. Denmark has received three grants (Tussas Connect 1, Tussas Connect 2 and Tussas Connect 3), which are part of a larger vision to establish an open-ended submarine cable system from the towns of Qaqortoq to Aasiaat (Greenland), ready to connect to any third-party submarine cable systems to the North (to Alaska), West (Canada), South (St. Pierre et Miquelon) and East (Europe). The goal is to establish a backbone for modern high-speed connectivity between Europe, its international partners and remote Arctic communities.

Overall, the Danish telecom market is competitive, with several active key players. Nonetheless, the problem of scale may sometimes hamper smaller operators in terms of infrastructure costs, customer

acquisition and innovation, particularly given the relatively small market. In this regard, the Danish Open Fibre Network Platform (Open-Net) represents a model of telecom network infrastructure where network providers open up their infrastructure for access by a pool of service providers. Ultimately, this facilitates connection to networks for newer and smaller operators, increases service availability and quality for customers, incentivises service providers to offer more innovative solutions and encourages competition.

Recently, there has been a notable trend toward market consolidation. In 2024, for instance, Telia Denmark sold its operations to Norlys, a provider of fibre broadband and electricity. This move highlights how even major players are adapting their strategies to enhance scale and refocus on services where they can remain more competitive.

5G

With 5G coverage at 100%, Denmark has already reached the 2030 EU target. 5G networks are gaining traction, with mobile operators advertising '5G internet to the home' as a competitive product to fixed broadband, leveraging its easy installation and convenient prices. In 2024, Denmark's 5G SIM card penetration rate reached 103.95%[6] of the population, well above the EU's 35.56%, and increasing since 2023 (when the penetration rate was 81.73%).

As reported in the 2024 Digital Decade report, a telecom equipment provider and a major operator launched Denmark's first 5G standalone (SA) network in the summer of 2023. In June 2024, they broadcasted a football match using the 5G SA network with mmWave technology. This was the first trial of its kind in Denmark, showcasing how 5G SA can support live sports broadcasts with low latency, high-speed data transfer and reduced production costs using 5G and drone cameras.

2024 recommendation on connectivity infrastructure: ensure sufficient access of new players to spectrum for innovative business-to-business (B2B) and business-to-consumer (B2C) applications and encourage operators to speed up the deployment of 5G stand-alone core networks.
In 2024, Denmark continued the implementation of existing measures but did not take any new measures. In line with the country's strategy for high-speed broadband, the Agency for Digital Government supervises the mobile operators' fulfilment of coverage obligations on the 3.5 GHz spectrum band to meet coverage goals. By the end of 2025, operators must cover 75% of the population with this band, following the 60% target set for 2023. This is part of the country's efforts to accelerate the national rollout of 5G and 5G standalone networks.

Semiconductors

Denmark's semiconductor ecosystem continues to grow, with selected actors focusing on chip design and research, production and quantum chip development. Despite Denmark's strong R&D community, the country does not foresee to develop a broader, long-term national strategy on semiconductors.

Key research institutions, like Aarhus University, the Technical University of Denmark (DTU) and the University of Southern Denmark (SDU). **are driving innovation in chip design and playing a crucial role in shaping the next generation of engineers in the field.** As highlighted in the 2024 Digital Decade

[6] Note that the percentage of the population with 5G SIM cards can exceed 100% because people can have more than one SIM card.

report, **Denmark also continues to expand its chip production capabilities**, notably through the DTU Nanolab (the National Centre for Nano Fabrication and Characterisation), which is expected to become the largest cleanroom facility for micro- and nanofabrication in Northern Europe by 2026/2027. **Additionally, the country is strong in developing quantum chips, with a focus on technology nodes such as photonics, superconducting and semiconducting.** Quantum Foundry Copenhagen, a major initiative launched in 2023 and progressing in 2024, involves the Niels Bohr Institute and the Novo Nordisk Foundation in developing tools and processes for quantum chip manufacturing.

To strengthen collaboration between the different actors in the semiconductor ecosystem, Denmark established a national microchip competence centre in 2024. This centre focuses on reinforcing the entire community of chip production, from research to design, fabrication, development and small-scale prototyping. The national centre will support start-ups, small and medium-size enterprises (SMEs) and educational initiatives, aiming to attract and inspire the next generation of chip designers and fabricators, ultimately strengthening Denmark's position in the global semiconductor industry.

Another key development in the Danish semiconductor industry in 2025 was the Danish Government's allocation of an additional EUR 18.7 million to support the country's participation in the European Chips Joint Undertaking (the European initiative focusing on R&D in semiconductors, microchips and nanochips).

Edge nodes

According to the Edge Node Observatory, Denmark is estimated to have deployed a total of 46 edge nodes by 2024, almost double from the 24 in 2023.

2024 recommendation on Edge nodes: (i) strengthen the measures contributing to targets where Denmark has the potential to do more, including on edge nodes; (ii) consider integrating the deployment of more edge nodes at national level, as well as investment programmes, factoring in the innovation that edge nodes will bring in the areas of AI, the Internet of Things (IoT) and networks rollout.
In 2024, no measures were taken to address the recommendation. The country did not include any national target or additional measures in the roadmap adjustment, underlining that the topic of edge nodes is still very much unexplored and that it will consider evaluating a realistic target for the next roadmap update.

Quantum technologies

Denmark continues to hold an international strength position in the field of quantum technology, particularly because of its developed research community and clear national strategy driving activities across different sectors.

The first part of the National Quantum Strategy focuses on research. The Danish quantum research community is spread out across the country, including the University of Copenhagen (KU), the Technical University of Denmark (DTU), Aarhus University (AU), the University of Southern Denmark (SDU) and Aalborg University (AAU). As part of a coordinated national effort to strengthen talent development, the institutions have jointly established a national quantum summer school. Through the Danish e-Infrastructure Consortium (DeiC), universities have access to powerful supercomputing resources and participate in national strategic decisions and investments both in the field of quantum and high-performance computing. As part of the national quantum strategy, DeiC has been allocated

approximately EUR 6.7 million from the research reserve in 2023, EUR 5.4 million in 2024 and in 2025 respectively. In this context, **one of the most prominent developments in 2024 was the inauguration of Gefion, Denmark's first AI supercomputer**. Providing researchers with unprecedented access to computational power, this infrastructure will support advancements in quantum computing, but also large-scale projects in AI research, biotechnology, sustainable energy and others. The supercomputer is housed in an AI-ready facility powered entirely by renewable energy.

The second part of the National Quantum Strategy focuses on the commercialisation of quantum technologies, security and international cooperation. In November 2024, Denmark inaugurated its international quantum centre (Quantum Denmark), which aims to create an ecosystem for collaboration among various stakeholders involved in the quantum landscape. The centre is a physical environment with access to offices, test and measurement equipment, as well as support for business development. The first companies will move into the offices by June 2025. The test centre will be a dedicated facility providing the infrastructure and resources for testing and validating quantum technologies. The advanced equipment in the test centre will be made available to researchers and businesses, including start-ups and spinouts from universities. Finally, the government has established an inter-ministerial quantum hub to strengthen national, regional and European strategic quantum cooperation. In November 2025, Denmark will be hosting the European Quantum Technology Conference (EQTC).

Different actors from science, industry and government in Denmark, together with counterparts in other Nordic and Baltic Member States, **are raising awareness of quantum research and application across sectors ranging from life science to logistics, defence and telecommunications** as part of the 'Mapping of Nordic Quantum Ecosystem' initiative. In December 2024, the Danish Quantum Community and the Danish Business Authority published a catalogue of 16 Danish quantum use cases to illustrate the potential applications and commercial opportunities of three key quantum technologies: quantum sensing (to measure, for instance, gravity, pressure and magnetic fields with a high degree of precision); quantum communications (to enable encryption that cannot be hacked); and quantum computing (which represents a new computational approach that can solve problems beyond the reach of traditional computers).

Beyond the more classic uses of quantum, the Danish Government sees the technology as having great potential to improve security and satellite services. In this regard, it released its first strategy for space research and innovation in November 2024. The strategy includes a new national programme under the Innovation Fund Denmark to strengthen Danish research and innovation in quantum technologies and space-based communication, support partnerships between the public and private sectors, invest in talent and real-world applications. At EU level, the Danish Government committed funding for its participation in the EuroQCI initiative with the Danish Quantum Communication Infrastructure project. As part of the Danish quantum strategy, Innovation Fund Denmark is also facilitating a strategic programme that supports collaborative quantum research between national and internation research institutions and companies. This dedicated pool of funds contributes to maintaining and further developing Denmark's position of strength in quantum technologies, paving the way for enhanced cooperation with strategically important international partners.

Supporting EU-wide digital ecosystems and scaling up innovative enterprises

Enterprises in Denmark have a high overall digital maturity, with most companies focusing on data-driven decision-making and cloud adoption. However, **SMEs still lack the resources, expertise and budget to invest in digital technologies**, with the risk of being left behind. The gap between the pace

of adoption of larger companies and SMEs is particularly visible with AI. Supporting SMEs' digitalisation is key to Denmark's growth and competitiveness, given they account for a significant portion of the country's economy (97.2% of enterprises in 2022) and are crucial for both innovation and job creation.

SMEs with at least basic digital intensity

Denmark continues to be one of the EU countries with the largest share of SMEs having at least a basic level of digital intensity. **Positioning itself significantly above the EU average (72.91%), the vast majority (90.47%) of SMEs (the 2030 national target is 95%) in Denmark had at least a basic level of digital intensity in 2024 (+0.9% annually from 2022).** This share increased from 88.80% in 2022 (2022 is the last comparable year that used a similar methodology for measuring the digital intensity of enterprises). Moreover, zooming in on more digitally engaged SMEs, 57.93% had a high or very high degree of digital intensity, surpassing the EU average of 32.66% by a wide margin.

Denmark's target for SMEs' digital intensity remains at 95%, above the EU target by 2030, as initially reported in the 2023 roadmap. The country slightly adjusted the national trajectory to reflect the correct recent DESI values.

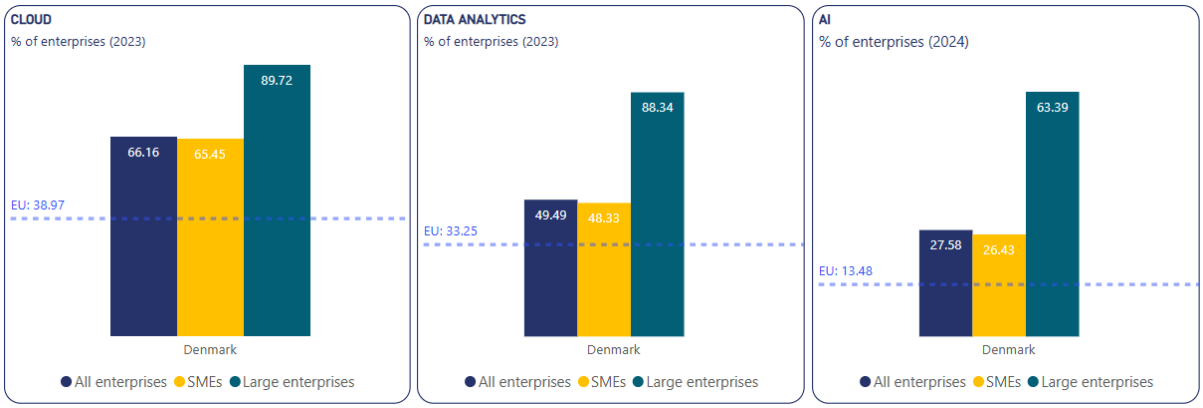
2024 recommendation on digitalisation of SMEs: focus on supporting and raising smaller enterprises' awareness of digital solutions to improve their businesses and learn how to better use them.
Denmark made some efforts to address the recommendation through new policy actions in 2024. Specifically, the country added a new measure in its national roadmap: the SME:Robot initiative (2024-2026), a scheme that very closely resembles the existing SME:Digital initiative (which features in the 'Business Uptake' cluster of the Digital Decade Best Practice Accelerator). With EUR 2.4 million from the Digitalisation Strategy and EUR 6.7 million from the Danish Board of Business Development, the goal is to support around 500 SMEs by 2026 with the opportunity to borrow a robot for a limited period and to access a collective outlet of knowledge, resources and advice on how to integrate robots in their businesses. The most common uses include automatising processes and reducing physical strain. The expected outcome is to have around 80% of these SMEs adopting robotics permanently to increase their production capacity and efficiency.

On top of the above measure, the country introduced a Danish Business Development Strategy (2024-2027) to foster the growth of Danish companies and SMEs and reduce administrative burden. This will be achieved by supporting the adoption of digital technologies and sustainable practices, enhancing innovation and improving the regulatory landscape. Launched in 2024 and running until 2026, the 'MyBusiness' initiative also aims to reduce the reporting burden for companies by mapping and streamlining the data they submit to public authorities, with a focus on automation and integration.

A number of European Digital Innovation Hubs (EDIHs), including the AI-Boost, EDOcobot, TechCircle and AddSmart, **are also actively supporting SMEs to become more digitalised and competitive.** Specifically, the hubs provide SMEs with technical expertise and training, the possibility to test digital solutions before investing in them, as well as networking opportunities. Overall, Denmark is involved in the network of EDIHs with five hubs funded under the Digital Europe Programme.

Denmark

Take up of cloud/AI/data analytics



Denmark demonstrated a strong overall performance in the adoption of cloud computing, data analytics and AI technologies, consistently surpassing EU averages across all three domains. Taking the three technologies together, 77.36% of enterprises in Denmark engaged with either AI, cloud computing services or data analytics in 2023, far surpassing the EU average of 54.7%.

However, significant disparities in technology adoption continue to be observed between SMEs and large enterprises, with large enterprises consistently showing higher levels of uptake. Uptake of the three technologies among SMEs was slightly lower at 76.75%, while almost all large enterprises (97.63%) adopted AI technologies, cloud services or data analytics. These disparities reflect a broader EU level trend. Adoption of cloud, data analytics and the three technologies together were not measured in 2024.

- **Cloud**

Despite achieving a strong level of cloud uptake compared to the rest of the EU, a significant gap persists between the cloud adoption rates of SMEs and large enterprises. As already reported in the 2024 Digital Decade country report**, the level of cloud uptake in Denmark in 2023 stood at 66.16% (the 2030 national target is 77.2%), which shows a strong lead compared to the EU average of 38.97%.** However, while a big majority (89.72%) of large enterprises adopted cloud services, this was the case for more than half (65.45%) of SMEs. Still, this difference of 24.27 percentage points (pp) between SMEs and large enterprises is lower than the EU level gap of 31.68 pp.

With the 2024 adjustment, Denmark changed its national target for cloud uptake by enterprises slightly from 78% to 77.2%, explaining that this reflects a more realistic target according to an adjusted trajectory. With no new measures in the roadmap to support the adoption of cloud services by SMEs, it is unclear how the country will achieve a national target that is higher than the EU one by 2030.

2024 recommendation on cloud: stimulate the adoption of next generation cloud infrastructure and services by companies of all sizes.
In 2024, Denmark continued the implementation of existing measures but did not take any new measures. The country continues to participate in the Distributed Open Marketplace for Europe (DOME) project, which launched the first version of its cloud and edge services marketplace in July 2024. The government also reported that the Danish Competition and Consumer Authority has begun an investigation regarding competition problems with cloud services.

- **Data Analytics**

Denmark's enterprises are ahead of the curve when it comes to data analytics. However, a closer look at the data again reveals a substantial gap between SMEs and large enterprises. With 49.49% of businesses performing data analytics in 2023 (the 2030 national target is 75%), Denmark leads at EU level, compared to the EU average of 33.25%. The difference between SMEs and large enterprises is nonetheless substantial, with 88.34% of large companies using data analytics and less than half of SMEs (48.33%) adopting this practice, resulting in a disparity of 40.01 pp.

With the 2024 adjustment, Denmark aligned its national target for the take-up of data analytics by enterprises with the EU target of 75%. The national trajectory for this KPI was also adjusted according to the latest DESI figures.

- **Artificial Intelligence**

Danish enterprises generally perform well on AI adoption. However, like other EU countries, Danish SMEs are slower to adopt the technology compared to large enterprises. The country leads the EU in terms of AI adoption with 27.58% of Danish enterprises employing AI technology in 2024 (the 2030 target is 76.6%), after a progression of +81.8%, approximately double of the EU average of 13.48%. Again, when looking closely at the size of enterprises, SMEs had an uptake rate of 26.43% in 2024, whereas large enterprises demonstrated a much higher rate of 63.39% (which is more than double that of SMEs). Differently from the case of cloud adoption and the use of data analytics, the gap of 36.96 pp is higher than the EU gap of 28.53 pp. Overall, **the country is on track according to its national trajectory.**

Looking closer at how companies used AI, the 2025 Report on the State of Digital by the Danish Ministry of Digitalisation highlights that the most common uses in 2024 were the production of written or spoken language and textual analysis.

2024 recommendation on AI: review the mix of measures to support the adoption of advanced digital technologies by businesses, particularly those targeting the adoption of AI by enterprises.

Denmark made efforts to address the recommendation by putting new policy actions into place in 2024. Specifically, the country introduced the Strategic Approach to Artificial Intelligence (2024-2027) with the overall ambition to strengthen the foundations for the responsible development and use of AI in Denmark, and to spread the adoption of AI in the private and public sectors. The approach includes a Danish vision for AI with three guiding principles for using and developing AI in the country:

- developing and using AI must be centred on citizens' fundamental rights and in accordance with Danish values;
- ensuring that Danish companies remain globally competitive and have strong opportunities—including within the EU—to develop, implement and sell solutions and business models that are based on the responsible use of AI.

Moreover, the strategic approach introduces four specific initiatives to help pave the way for responsible AI:

1. **The Digital Taskforce on Artificial Intelligence (2025-2027):** made up by representatives from the government, municipalities and regions, the AI Taskforce will help roll out AI solutions (both existing and new) on a large scale in the public sector. As some of these AI solutions will be developed with the help of the private sector, public-private partnerships

are also expected to arise. The government, Local Government Denmark and Danish Regions will provide the necessary funding for the Taskforce's work and the implementation of specific solutions in the state, municipalities and regions.

2. **Centre for Artificial Intelligence in Society (2024-2027):** the centre for AI in Society is a physical centre established at the University of Copenhagen. Its task will be two-fold: on the one hand, it will provide advice and guidance to both authorities and companies on how to make responsible use of AI in society, based both on technical knowledge and social, political, cultural and ethical considerations. On the other hand, the centre will also be responsible for conducting independent research, practice-oriented evaluation and monitoring of generative AI. The allocated budget for this initiative is EUR 2.77 million (until 2027) and a EUR 4 million research reserve for 2025.
3. **Secure Platform for developing transparent Danish-language models (2024-2027):** with a budget of EUR 2.77 million until 2027 and a EUR 1.34 million research reserve for 2025, this measure focuses on developing a secure platform for developing and training Danish language models (i.e. chatbots). These models can be accessed and used free-of-charge by both the public sector and the business community to improve citizen-centred services, free up labour or address gaps in the workforce.
4. **Danish text must be freely accessible (2024-2027):** with a budget of EUR 2.8 million until 2027 and EUR 4 million spent annually to purchase public data, the aim of this initiative is to make Danish text data freely available to support the development of AI solutions.

Denmark's AI strategy is comprehensive and demonstrates clear, well-defined goals and principles to be respected when using and developing AI. This aligns very well with what was revealed in the Eurobarometer on the Digital Decade 2025, which shows that a vast majority of Danish citizens (87%) believe it important for public authorities to take an active role in shaping the development of AI and new digital technologies, ensuring they respect EU rights and values.

Beyond companies' adoption, AI solutions are also gaining traction among local government representations and the general public. The association of Danish municipalities (Local Government Denmark, KL) developed a map of how different municipalities across the country are using AI to improve public services, with the goal of inspiring other municipalities to adopt similar solutions. Among the 188 municipal AI projects, the most frequently reported solutions are public chatbots and digital assistance to improve services and interface with citizens. In 2024, KL also introduced the Municipalities' Technology Radar: a digital tool where municipalities can get an overview of the digital maturity of certain digital technologies and how these are being used by municipalities in specific sectors (i.e. employment, day care and schools, business and tourism, climate mitigation and more). The goal of the technology radar is to help local representatives make investment and prioritisation decisions, with the extra support of the Knowledge Centre Meetup. On the use of generative AI tools by Danish citizens, a 2024 report by the Agency for Digitalisation highlights that 37% of the population used generative AI, with more than half (69%) of those aged 16-24 having used it the last three months of 2024.

Although the above data shows that the pace of AI adoption is positive, the potential for AI to drive broader economic growth and innovation in Denmark still remains largely untapped. The four measures launched under the Strategic Approach to Artificial Intelligence (2024-2027) focus on strengthening the foundation of a responsible AI, within a safe operating environment. The measures also aim to expand some of the uses that can be made of the technology. However, AI as it is being used now is still in its early phases, with still more to be done both in terms of investments to support

specialised AI applications and to enhance AI skills. Although the technology is being used more and more, integrating it in a longer-term public strategy or in a company's business model is more difficult. This is particularly true for smaller companies, who often lack the knowledge, skills and time to understand and test AI for the purpose of their business activities. A 2024 research study shows that, among 265 surveyed companies, a majority experienced positive effects in their work when using generative AI (58% said AI helped them to complete tasks faster; 32% said there is more creativity in task-solving when using generative AI; 30% of companies also experienced an increase in the quality of task-solving; while 29% of companies found their work easier or less extensive thanks to AI's help). However, one in four companies say employees need to spend a lot of time in learning and experimenting with the technology. The same study shows that 49% of leaders in businesses lack insight into the real potential of generative AI, with 17% of leaders not having the time to drive it forward. Only 8% of surveyed companies reported having ongoing evaluations of the impact of generative AI on productivity. Also important are the regulatory uncertainty and compliance costs that SMEs often struggle with when faced with the choice of adopting the technology.

Unicorns, scale-ups and start-ups

At the beginning of 2025, Denmark had nine unicorns. The number has been stable since 2021. The country does not provide a formal target for unicorns by 2030, explaining that, although generally agreeing with the EU target's ambition, having a target that follows only the number of unicorns can create a one-sided focus on the valuation and current headquarter of certain types of high-growth companies.

Denmark is committed to creating a supportive environment for entrepreneurs, including those in the digital technology sector. The recent agreement on the Entrepreneurship Package (in June 2024), for example, aims to improve access risk to capital, which is essential for companies to grow. The access to venture and growth capital in Denmark has improved significantly over the last decade and the government is making further progress in increasing access to risk capital, with the Entrepreneurship Package expected to further enhance this through tax incentives, public co-financing and special funding for early-stage innovators. Private companies like Novo Nordisk, with its venture arm Novo Holdings, are also actively investing in start-ups and early-stage companies. Novo Nordisk's digital investments have mostly focused on health start-ups using digital technologies to improve patient outcomes and streamline operations.

While the Entrepreneurship Package was received as a positive milestone by many stakeholders, **some worry that the removal of the possibility for immediate deduction of investments in IT, know-how and patent rights might discourage start-ups in their early stages.** Despite the improvements in Danish venture and growth capital market, and the creation of Denmark's Export and Investment Fund in 2022, stakeholders also report that accessing coherent venture capital remains a key barrier for small companies and start-ups, along with recruiting skilled staff. By promising to improve business framework conditions, the recently Entrepreneurs Package will also make it easier for entrepreneurs to start a business in the country, with the capital deposit requirement for establishing a private company being halved to approximately EUR 2 500. Moreover, the strategy aims to make it more attractive for people to invest, having increased the tax threshold.

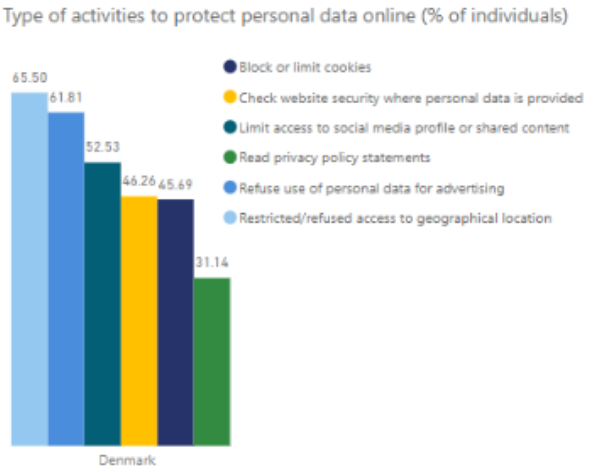
Aside from the funding and tax element, **Denmark shows some difficulties in translating good research into new business ideas, partly due to structural and cultural reasons**. Denmark's 13 national clusters, which are networks of companies, research institutions and organisations spread across the country, are playing a key role in promoting innovation and competitiveness in specific

industries. In particular, the DigitalLead cluster, co-financed by the Danish Agency of Higher Education and Science, the Danish Board of Business Development and the European Regional Development Fund, aims to develop and implement digital solutions with a focus on areas like AI, blockchain and cybersecurity. The national accelerator programme Beyond Beta, for instance, is still open for applications from start-ups who need help to grow and scale their business through additional resources and expertise. In early 2025, with the appointment of a new acting CEO, DigitalLead announced its three new areas of focus: green, efficient and secure software development and data management.

Strengthening Cybersecurity & Resilience

Danish citizens generally seem to have a high level of awareness of digital threats and how to act upon them. According to EUROSTAT data, 83.95% of individuals took at least one action (see the six types of digital safety actions in the graph's legend below) to protect their personal data online in 2023, considerably surpassing the EU average of 69.55%. More than half of the population (61.16%) can be considered as having above basic digital safety skills (i.e. engaging in three different digital safety actions). The most common action taken was restricting or denying access to geographical location, with 65.5% of individuals doing so, while reading privacy policy statements was the least frequent action, reported by only 31.14% of individuals. According to the Eurobarometer on the Digital Decade 2025, Danish citizens overwhelmingly recognise the importance of enhancing cybersecurity, with 89% believing that protecting online data and ensuring the safety of digital technologies is significant to facilitate their daily digital interactions. Despite awareness and public perceptions, the 2024 Information Security report shows that 76% of Danes have been exposed to digital fraud attempts during the past year, which is an increase of almost 20 pp since 2022. Phishing attempts are still the most common digital threat to citizens, experienced by 68% of the population.

In 2024, the number of Danish enterprises experiencing ICT security incidents due to outside attacks (e.g. ransomware, denial-of-service attacks) **slightly decreased** from 4.78% in 2022 to 3.85% in 2024. Nonetheless, this number remains slightly above the EU average (3.43%). Moreover, 19.02% of enterprises experienced ICT-related incidents leading to the unavailability of ICT services, the destruction or corruption of data or the disclosure of confidential data, while 15.74% of them experienced ICT incidents leading to the unavailability of ICT services due to hardware or software failure.



When it comes to cybersecurity measures, Danish enterprises are taking significant steps, but there is still room for improvement in terms of employee awareness and perception of cybersecurity as a strategic added value rather than just technical necessity. In terms of preventive measures taken, 97.53% of enterprises deployed some ICT security measures (above the EU average of 92.76%), but a smaller percentage of enterprises (70.07%) made their employees aware of their obligations in ICT security-related issues (still above the EU average of 59.97%). The Danish Industry Foundation *(Industriens Fond),* who also recently published a 2024 Cyberbarometer report, highlights that most of

the surveyed SMEs implemented special technical solutions to protect against malware, network security and automatic backups. **The report also examines how investments in cybersecurity actions among SMEs can lead to competitive advantages.** Results show that, in 2024, 69% of companies experienced at least one competitive advantage after investing in cybersecurity, brought about by increased efficiency (through the implementation and use of new technologies) and enhanced trust (i.e. increasing the confidence of customers and investors). Although there is a general positive trend of SMEs implementing more cybersecurity actions in 2024, around one in three of surveyed SMEs still see cybersecurity merely as a necessary protection against threats rather than a competitive parameter. This may be explained by their lack of knowledge or limited resources, with the conviction that cybersecurity measures are just another expense.

Recently, Denmark has made significant strides in its public cybersecurity measures. The Danish National Coordination Centre for Cybersecurity (NCC-DK) launched the Cybersecurity Community in January 2024, which has recruited more than 100 members and held several webinars and meetings to raise awareness of cybersecurity. The NCC-DK also allocated EUR 2.3 million in 2024 and 2025 for grants to support cybersecurity development projects, with 19 large projects currently in progress. In 2024 and 2025, a total of EUR 2.3 million was allocated to the grants. In November 2024, the Ministry of Digital Affairs and the Ministry of Industry, Business and Financial Affairs, in collaboration with the Telecommunications Industry Association in Denmark, Finance Denmark, DaneAge Association and the Danish Consumer Council, launched a package to counter digital fraud in telecom networks. The package includes: SMS filtering (i.e. a firewall to block SMS messages with signs of fraud); enhanced spoofing protection (i.e. stronger safeguards against scam calls on fixed and mobile phones; and extra phishing protection in the MitID, the country's digital identification system (i.e. an extra layer that will, for instance, warn users if they try to log in to a fake version of MitID on a phishing website).

Additionally, the Danish Government has put in place a new tool, *Systemoverblikket* (System Overview), on the *Sikkerdigital.dk* website to help SMEs improve their cybersecurity practices. The tool, which is free of charge, helps companies build an overview of their systems and data, and supplies them with tailored recommendations on how to better protect their IT systems. The Danish government has introduced several other tools to support SMEs and inspire their continuous interest in cyber security, including tabletop cyber games and services (e.g. the notification services and cyber hot line).

In terms of cybersecurity in healthcare, Denmark has a well-established approach, in line with the new European Action Plan on the Cybersecurity of Hospitals and Healthcare Providers. The Danish Health Data Authority is responsible for the healthcare sector's cybersecurity unit, which focuses on improving cybersecurity capabilities and collaboration within the healthcare sector. The sector has a long history of collaboration, with a strategy to address shared cybersecurity challenges soon coming to an end. The Danish Health Data Authority is also working with international organisations, such as the European Union Agency for Cybersecurity (ENISA) and the European Health Information Sharing and Analysis Centre (EH-ISAC), to share knowledge and best practices and collaborate at operational and technical level.

Concerning the deployment of secure internet standards, Denmark leads in the roll-out of the Internet Protocol version 6 (IPv6) on the server side (with an adoption rate of 44%, above an EU average of 17% in Q3 of 2024). IPv6 is the newest version of the Internet's main communication system, helping the Internet to remain scalable, stable and secure. It is deployed by Internet providers to address capacity, route data and connect networks. While the server-side rollout (including upgrading servers and routers) of the IPv6 is advancing well, the deployment of this new version by

end-users still needs to improve (with an 11% adoption rate against an EU average of 36% in Q3 of 2024). Adopting the Domain Name System Security Extensions (DNSSEC) is also an important standard, as it introduces security features for the Domain Name System. In Denmark, the DNSSEC validation rate (i.e. verification of the authenticity of responses sent by name servers to clients, using a digital signature technology) was 94% in Q3 of 2024, much above the EU average of 47%.

Overall, **with the recent governmental reshuffle, the topic of cyber and information security** is no longer scattered among several different ministries, including the former Ministry of Digital Affairs and Equality and the Ministry of Defence. Rather, as of August 2024, **the topics have been transferred to the newly established Ministry of Resilience and Preparedness.** This change is expected to positively affect the country's commitment to improving its cybersecurity measures.

Protecting and empowering EU people and society

Empowering people and bringing the digital transformation closer to their needs

Digital inclusion and digital trust are key to Denmark's digital transformation. The country excels in fostering basic digital skills, which are crucial for accessing and using its highly digitalised public services, widely regarded as some of the best globally in both quality and availability. Even with this high level of digital proficiency, Denmark places significant emphasis on ensuring that online public services remain inclusive. The government actively monitors which groups face the greatest challenges when navigating online services. Denmark is also taking firm steps to address digital risks and hold harmful content accountable to increase public trust. A prime example of this commitment is the recent creation of the Centre for Social Media, Tech and Democracy. A particular area of focus is the protection of children online.

Despite the high level of basic digital skills and robust digital public services, gaps remain in the ICT labour market. Companies face challenges in finding and recruiting ICT specialists, ultimately affecting their growth and productivity. To address this shortage, Denmark is working to increase the number of skilled professionals in the workforce through targeted labour market reforms.

Equipping people with digital skills

Basic Digital Skills

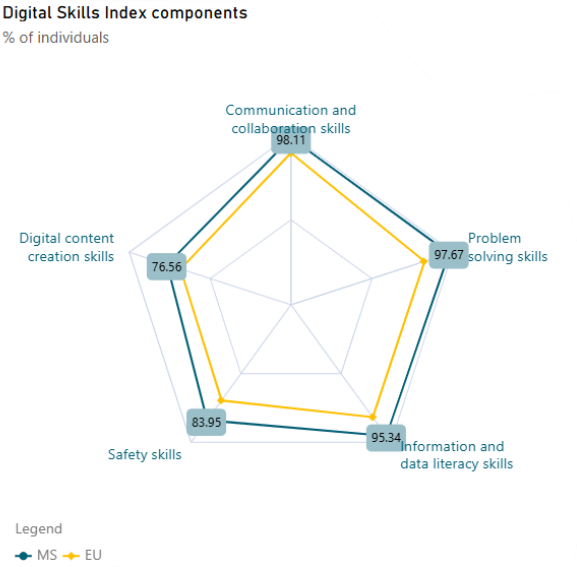
In 2023, a solid 69.62% of Denmark's population were equipped with at least basic digital skills (the 2030 national target is 80%), which is impressive compared to the EU average of 55.56%. Although no new data is available for 2024, a detailed breakdown by different demographic factors can help examine the country's strengths and challenges:

- **Gender gap:** the digital skills gap between genders is average, with 71.16% of men and 68.07% of women proficient in basic digital skills. The gap stands at 3.09 pp, slightly above the EU average of 2.23 pp.
- **Education level:** 83.47% of those with higher education levels have basic digital skills, which is better than the EU average of 79.83%. For people with lower levels of formal education, the proficiency rate is 58.07%, and the gap between this group and the national average is 11.55 pp, much smaller than the EU average gap of 21.95 pp.
- **Living Areas:** in Denmark's rural areas, 64.14% of residents had basic digital skills in 2023, which is quite high when compared to the EU average of 47.50%. The difference between rural and national averages in Denmark is a slim 5.48 pp, showing a small digital divide (8.06pp for the EU).
- **Age Groups:** young Danes aged 25 to 34 are the most digitally advanced, with a high proficiency rate of 81.51%, outdoing the EU average of 70.18%. The older generation, 65 to 74-year-olds, have a lower rate at 47.22%, but they are still doing better than the EU average of 28.19%.

- **Digital Skills Index Components:** looking at the Digital Skills Index components, Denmark shines across the board, scoring above the EU average in all five skill areas (see graph below). They are especially good at communication and collaboration, with a whopping 98.11% proficiency. Their lowest score is in digital content creation at 76.56%, which still surpasses the EU average of 68.28%.

Denmark is therefore on a strong digital footing, with high skill levels across the board. While there is a slight gender gap and some differences in basic digital skills between the younger and older generations, the overall picture is one of a country that is well ahead of the curve in basic digital skills.

The country's target for the basic digital skills of the population remains at 80%, as reported in the 2023 roadmap and fully in line with the EU target by 2030. The country slightly adjusted the national trajectory to reflect the recent DESI values.



2024 recommendation on basic digital skills: (i) strengthen the measures contributing to targets where Denmark has the potential to do more, including on digital skills; (ii) focus on integrating basic digital skills in primary and lower-secondary education at national level, to ensure there is an equal level of basic digital skills among the Danish population, paying particular attention to the existing urban-rural divide and gender gap.

In 2024, Denmark addressed the recommendations by introducing new measures. In line with the plans outlined in the 2023 national roadmap, Denmark officialised two new initiatives in the roadmap adjustment, with the goal of making technology comprehension a more integral part of the Danish education system, both for students and for teachers. One of the initiatives is part of a larger reform of the country's primary and lower secondary school launched in March 2024 (i.e. the Quality Programme for Primary and Lower Secondary School). The other initiative originates from the Digitalisation Strategy. The two agreed initiatives, under the umbrella of 'Equipping Danes for a Digital Future' are:

1. **Technology Comprehension in Primary and Lower Secondary School:** with EUR 21.5 million, the goal is to integrate (digital) technology comprehension into primary and lower secondary school education as of the school year 2027/2028. A committee has been established to prepare a subject plan for technology comprehension as an elective subject, which will focus on creative and practical dimensions of working with digital technologies contributing to students' digital empowerment, as well as supporting its full integration in some existing subjects (i.e. Danish 1st – 9th grade; mathematics 1st – 9th grade; nature and technology 4th – 6th grade). This process is expected to be finalised by August 2027.
2. **Technology Comprehension as a new competence for Teachers (2024-2025):** with EUR 1.34 million, the goal is to develop this new competence in teacher education, including professional development for teacher training instructors.

With regards to implementation, Denmark underlined that, as a result of a decentralised education system, each municipality is responsible for primary and lower secondary schools within their area

of remit. This means that introducing a new subject is the responsibility of local authorities. It thus remains to be seen how this reform will be implemented in practice in the next few years.

In its 2023 roadmap, Denmark had also mentioned the intention to improve the skills of people who generally have a low level of digital skills. According to the data, the target group would most likely be the older generations. However, the 2024 adjustment did not introduce any specific measures focusing on this particular section of the population.

ICT specialists

Denmark's total percentage of ICT specialists as a share of total employment was 5.8% in 2024 (the 2030 national target is 7.7%), higher than the EU's 5.0%. However, the country is lagging behind compared to its national trajectory, showing a growth rate of -1.7% since the 2023 value (5.9%).

In terms of employed female ICT specialists, Denmark showed a higher percentage compared to the EU, nonetheless experiencing a negative trend. In 2023, 22.6% of ICT specialists in Denmark were female, compared to the EU's 19.4%. This figure slightly decreased to 21.2% in 2024, while the EU's share increased to 19.5%. Gender differences also remain, with 78.80% employed male ICT specialists in 2024 (much higher than the 21.20% reported for females).

Despite having ICT employment rates that are generally above EU averages, the shortage of ICT specialists remains a pressing concern for companies in Denmark. In 2022, a significant 10% of companies reported struggling to fill ICT vacancies, far exceeding the EU average of 6%. The most in-demand professionals were software and applications developers and analysts, who accounted for nearly half (47.5%) of all online job postings for ICT specialists in 2024.

Denmark's still aims at reaching around 7.7% of ICT specialists in employment by 2030, below the 10% EU target. The country does not expect to change its national target before seeing the potential effects of current initiatives. Moreover, Denmark emphasises that the lack of ICT specialists is just one out of many other skills lacking in the labour market, with sectors like healthcare showing worrying shortages. According to the government, this calls for a balancing of different demands.

2024 recommendation on ICT specialists: follow up on the plans set out in the new digitalisation strategy to upskill and reskill ICT specialists. Design schemes to improve young people's interest in ICT, including among women, and retain international students in ICT-related degree programmes to increase enrolment rates.

In 2024, Denmark partly addressed the recommendation by taking new measures. Specifically, it put forth two new measures to stimulate the increase of IT specialists in the future and offer continuous education and training to those already in the workforce.

1. **Digital Advancement in Higher Education:** with EUR 4.7 million allocated for 2024, this initiative focuses on competence development for educators and curriculum development in higher education (including AI, IT simulation in healthcare, cybersecurity). This aims to strengthen digital knowledge and skills among graduates and the general workforce. The initiative was executed in 2024. Eight projects were selected and will run from 2025 to 2027.
2. **Continuing Education and Retention of IT Specialists (2024-2026):** with a total of EUR 4 million allocated for the three years. One part of the initiative focuses on continuing education and training activities for people in IT who are already in the workforce. An annual call took place in 2024 (with five projects funded) and more will come in 2025 and 2026. While some project activities will be one-off (for instance pilot voluntary courses to better identify demand and specific needs among employers, employees, teachers and students),

other projects and pilot courses might become mandatory parts of study programmes. The second part of the initiative focuses on retaining international computer science students in Denmark through part-time master programmes for working professionals.

On top of the measures outlined above, Denmark is in the process of implementing a major reform of university education. One of the changes involves introducing a new kind of Master programme, focused on combining theory and practical skills through relevant employment during studies. The aim is to better prepare students for the evolving job market. Another important part of the reform is to introduce a limit on the number of study places in university Bachelor programmes to strengthen the number of students in education outside universities, e.g. such as in education programmes for teachers, nurses or pedagogues. However, this has been met with some criticism from employers, who are worried that introducing a cap for universities offering only STEM courses will be detrimental to the number of students applying to these disciplines.

To attract international talent, the government has recently introduced a strategy featuring 41 new initiatives aimed at enhancing the framework conditions for businesses and talent acquisition. Among these initiatives, one key focus is reducing salary requirements for hiring foreign talent in companies that are less than five years old. This measure is designed to help young businesses tap into global talent, addressing labour market shortages and supporting growth.

To support upskilling and reskilling, **Denmark primarily relies on EU funding** through the European Social Fund Plus (ESF+) and the Recovery and Resilience Facility (RRF). However, some companies express concerns that these resources may not be sufficient, highlighting the need for additional investments in training to address ICT skills gaps. In 2024, 85.13% of large enterprises (with 250 persons employed or more) and 35.23% of enterprises with 10 or more employees (compared to the EU's 22.29%), reported providing training opportunities for their employees. However, only 29.06% of SMEs (with 10-49 persons employed) had the resources and capacity to offer similar support, suggesting differences in resources between companies of different sizes.

Key digital public services and solutions – trusted, user-friendly, and accessible to all

Denmark's digital public services, including access to e-health records, are robust and designed with a digital-by-default approach, with a notable 92% of citizens considering digital technologies as important to access public services (according to the Eurobarometer on the Digital Decade 2025). **In 2024, Denmark's score for citizens' digital public services dropped by -5.6% to 79.49 (the 2030 national target is 100), falling below the EU's 82.32. In the realm of digital public services for businesses (the 2030 national target is 100), Denmark's total score was 88.69 in 2023 and 87.5 in 2024 (-1.3%), above the EU's 86.23.** The Danish National Statistical Institute explains that the decline was due to false positives in the Cross-border Online Availability being corrected this year. Some websites, that were previously considered compliant last year, were found to not have a Cross-border e-ID system in place.

Regarding access to e-health records, Denmark's total score was 97.92 in both 2023 and 2024 (the 2030 national target is 100), higher than the EU's scores of 79.12 and 82.70 respectively. Denmark saw no growth between 2023 and 2024, which does not necessarily indicate stagnation. Rather, it may suggest that some measures have not yet been fully implemented or launched, meaning their impact has not yet had its effects on the ground or is reflected in the score. Of the 13 data categories investigated in this study, only data about medical images is not yet available to citizens. Denmark has reached full maturity on the other aspects of the e-health framework.

e-ID

MitID still remains the main digital identification system in Denmark. As of January 2025, the number of active MitID users was approximately 5.5 million. A recent user survey conducted in 2024 shows that 83% of users were overall satisfied when using MitID and that 87% of respondents used MitID at least once a week. Users' confidence levels remain high, at 89%. Despite a high overall use of MitID, recent data from the Agency for Digital Government also highlights that still 3.4% of the Danish population (15+ years-old) did not have an active MitID in January 2025, with most of this group belonging to the senior population (75+ years-old). This means that digital challenges persist, and individuals without access to digital identity in Denmark still require support.

Based on the existing MitID system, the country recently announced the upcoming launch, expected in early 2026, of a new mobile app that will allow users to digitally verify their identity for various services, such as online shopping, logging in to public services and more. Denmark highlights that users should be able to share only necessary personal information (i.e. declaring they are 18+ years old without disclosing their full date of birth). The app should be usable across the EU.

Denmark remains committed to implementing the EU Digital Identity Wallet. Their priority lies in ensuring that the tool can contribute to easier and safer daily life for Danish citizens and enterprises. The country sees a positive potential in the use of the wallet, particularly for the purposes of age verification.

Digitalisation of public services for citizens and businesses

Denmark still aims at reaching a score of 100 for the digitalisation of public services for citizens and businesses. The country did not lay out national trajectory points for 2024 and no adjustments of the national roadmap were provided in 2024. Although Denmark set out a significant number of measures to digitalise key public services in the original 2023 roadmap and it is participating in several EU projects to improve their interoperability and accessibility, it appears to have reached a point of stagnation. This means some more efforts and a close monitoring may be needed to ensure the targets are met.

The share of people using government internet websites or apps has remained very high and stable throughout the years, at 98.50% in 2024, which is very similar to the 98.86% reported in 2022 and much higher than the 2024 EU average of 74.71%. In this context, **Denmark's digital public sector was reported to be the best worldwide by the United Nations E-Government knowledgebase.** The country ranked first in terms of digital government among the 193 UN Member States, with an e-government development index of 0.98 (out of 1) and an e-participation index of 0.98 (which had grown from 0.88 since 2022). The former index reflects the government's ability to leverage technology for providing services to citizens, businesses and other stakeholders, based on the availability and quality of online government services, the level of infrastructure available to citizens (such as internet connectivity) and the overall level of education, skills and knowledge of the population. The e-participation index focuses on how the government engages citizens in decision-making processes using ICT through online consultations, online voting and e-participation platforms.

The government's efforts to increase the use of digital public services go hand-in-hand with ensuring digital inclusion and building citizens' trust in these services. In mid-2024, the Agency for Digital Government, Local Government Denmark and Danish Regions established six principles for digital inclusion in the public sector, which include supporting citizens' rights, designing accessible solutions for all and offering both digital and non-digital alternatives. To help implement these principles, a

website was set up with tools, use cases and resources. The Nordic Digital Government project (Nordic DigiGovLab, 2024-2026) also aims to foster a more human-centric and inclusive digital government across the Nordic-Baltic region. This project seeks to ensure that citizens can easily navigate life events digitally by exploring governance strategies, initiating automatic data exchange in life events like death and inheritance, and developing AI trust concepts. In support of digital inclusion efforts, the Danish government ran a campaign in 2024 to encourage digitally skilled citizens to volunteer and assist others with digital public services, with grants available for related projects. A report published in 2024 reveal that approximately 279 000 people (mostly aged 74+) were exempt from Digital Post in Q2 of 2024, and many refrain from using MitID (Denmark's digital identity) because of skills gaps or security concerns.

Developing citizens' trust in digital public services is pivotal for digital inclusion. A 2024 survey reveals that 82% of the population feels confident in digital public services, reflecting a 4-percentage-point increase from 2023. However, trust varies by age, education and socio-economic status. For instance, only 71% of those aged 75 and older trust digital public services, and citizens with lower educational levels or in retired/pre-retirement categories tend to have less confidence. PostNord's recent announcement (March 2025) to end all letter deliveries by the end of the year raises concerns about exacerbating the digital divide, particularly for those who are digitally illiterate, lack internet access or rely on physical mail, potentially leaving vulnerable groups more excluded. As revealed by the Eurobarometer on the Digital Decade 2025, 94% of Danish citizens consider ensuring proper human support to be significant for accessing and using digital technologies and services.

With regards to public data, the new Entrepreneurship Strategy includes a component to improve access to public data for businesses with a total allocated budget of EUR 24 million from 2025-2030. Although there is still limited knowledge regarding what datasets are the most valuable to make accessible, the government wants to ensure that citizens' rights and privacy are always protected.

e-Health

Denmark still aims at a score of 100 for the access to medical records, in line with the 2030 EU target. The country did not provide a national trajectory point for 2024, but recent progress (see State of the Digital Decade report 2024) hint that this target is realistic.

Like for many other public services, health-related services are commonly accessed online. According to data from the Danish National Statistical Institute, more than two out of three citizens (aged 15-89) have been in digital contact with their general practitioner in the past year, with citizens aged over 75 having the lowest share of digital contact with their general practitioner. Four out of five citizens said they felt safe in this digital contact, with still 2% of citizens in the same age range reporting they felt either less or not safe at all in using e-Health services. 62% of the population saw great advantages in using online tools for health purposes, while only 5% perceived the use of digital tools for health purposes as a disadvantage, highlighting the importance of direct, physical contact.

2024 recommendation on e-health: make the data type of medical images available to citizens through the online access service.
In 2024, Denmark continued the implementation of existing measures but did not take any new measure. As mentioned above, the country's composite maturity score remained the same as last year and data about medical images is not yet available to citizens (although medical imaging reports – including descriptions of X-rays and scans done at public hospitals – are available through the Danish health platform *Sundhedsportalen*). The country is still committed to ensuring patients

have access to a comprehensive overview of their medical pathway and access to health data. As reported in the 2023 roadmap, solutions, pilots and tests are being carried out to share more information with citizens about their course of action with regards to, for example, treatment plans and diagnoses. Moreover, Denmark highlights its intention to further develop the health record with new health data until end of this year. It is still to be seen how these measures will influence the e-health indicator in the future.

In 2024, the Danish Government presented a healthcare reform, including initiatives to expand digital health services and more possibilities for citizens to access their health data online. Several measures in the Danish Recovery and Resilience Plan (RRP) also support the digitalisation of the Danish healthcare system by promoting the adoption of digital solutions in patient treatment and enhancing data management practices to improve monitoring of shortages and supply issues related to critical medical products.

Building a safe and human centric digital environment and preserving our democracy

For Danish people, digital technologies are not only used to access public services but also to participate in political and civic life. In 2024, 28.31% of people used the internet to participate to consultations, for voting or communicating opinions online. This share is above the EU average (20.45%) and trending upwards (25.79% in 2022). Like in most EU countries, however, the online space in Denmark is not free from harmful activities like disinformation. In 2023, 64.64% of individuals indicated having seen untrue or doubtful content online, notably higher than the EU average of 49.25%. This high percentage may also reflect a generally strong awareness among citizens about online disinformation. Indeed, there appears to be a commendable effort to verify potentially misleading content, with 28.8% of individuals having checked the accuracy of such material. A majority of the younger respondents (74.98%) of the survey (16-24 years old) were more likely than adults (25-64 years old) (66.89%) to report encountering such misleading content. Their verification rates also differed to a notable extent, with 38.92% of youth verifying content compared to 29.27% of adults.

Recent data on online interactions in Denmark reveals another concerning picture, with a high prevalence of perceived degrading online content, particularly affecting young people. Almost half of the population (47.9%) reported encountering hostile or degrading messages online in 2023. Young people (16-24 years old) were particularly affected, with 67.20% reporting such experiences compared to 48.53% of adults (25-64), showing a clear age-related disparity. The share of young people encountering these kinds of messages is one of the highest in the EU. This aligns with the strong public sentiment among Danish citizens revealed in the Eurobarometer on the Digital Decade 2025, where a striking 93% believe that urgent action by public authorities is needed to address the negative consequences of social media on children's mental health, as well as to combat cyberbullying and online harassment.

A new centre for Social Media, Tech and Democracy was established in 2023, under the Ministry of Digital Affairs. The centre's task is to explore tech regulation, support policy development and strengthen oversight of social media. The centre will monitor the impact of tech giants on democracy, social cohesion and well-being, promote data access for researchers and collaborate with independent experts. With a special eye on children and the younger population, in June 2024 Denmark established an alliance of prominent organisations – including Save the Children Denmark, Børns Vilkår (Children's rights and helpline organisation), Local Government Denmark and the Danish Youth Council – with the aim of enhancing online safety for children and teenagers. Moreover, following its establishment in

2023, the Commission for the Well-being of Children and Young People recently published 35 recommendations for the government, including six recommendations on the need to achieve a balanced digital life. The digital recommendations focus on ensuring stronger digital regulations for children and young people, including prohibiting addictive design features, implementing age verification (with 88% of Danish citizens viewing this as an urgent action to be taken to restrict age-inappropriate content) and banning advertising to minors. They also emphasise adults as role models, the need for smartphone-free schools, firewalls in educational institutions and the protection of children's privacy by halting the live streaming of sports activities with children and young people. Additionally, the 2024 agreement to integrate technology literacy into primary and lower secondary schools also represents a good measure to make students more aware of the risks of the online space.

Alongside the measures implemented by the government, there are numerous other initiatives that are helping to enhance mental health and well-being online. One of the most prominent examples is Mindhelper.dk, which attracts approximately 1 million visitors annually. As a free and open digital platform, it offers a wide range of tools and support to individuals, making mental health resources more accessible to everyone.

Leveraging digital transformation for a smart greening

The synergy between the green and digital transition is becoming an important part of Denmark's strategy for sustainable development. Both public and private entities are increasingly making use of digital solutions to save and optimise energy consumption, while also becoming more aware of the importance of having more sustainable digital technologies. Similarly, the Eurobarometer on the Digital Decade 2025 highlights the strong support among Danish citizens for leveraging digital technologies to combat climate change, with 77% recognising their potential to make a positive impact through tools such as emission-tracking apps, car-sharing platforms and virtual meetings. Moreover, a significant majority (87%) believe that public authorities have a crucial role to play in promoting and facilitating the use of digital solutions to address environmental challenges.

Recycling old ICT equipment is more of a common practice in Denmark than in other EU countries, with 24.57% of people recycling their old desktop computers, 17.39% recycling their mobile phones and 19.44% recycling their laptops or tablets in 2024. This is much more than the EU average of 14.66%, 10.93% and 11.31% respectively. When purchasing ICT devices, 22.47% of people considered energy efficiency to be important (compared to an EU average of 19.35%). These kinds of considerations are most common among young people aged 16-24. Nonetheless, the criterion of energy efficiency still takes on less importance for buyers than the price (58.62% of buyers considered it as important), brand and design of the ICT device (49.43%).

2024 recommendation on green ICT: continue developing a coherent approach to twinning the digital and green transitions, including by supporting relevant pilots.

- First, continue to promote energy and material efficiency of digital infrastructures, particularly data centres.
- Second, support the development and deployment of digital solutions that reduce the carbon footprint in other sectors.

Build on existing measures to monitor and quantify the emission reductions of the deployed digital solutions, as well as attracting relevant financing.

In 2024, Denmark partly addressed the recommendations by introducing new policy actions. In its adjusted roadmap, Denmark presents three additional measures contributing to improving data and data sharing practices to green other sectors:

1. **Establishment and Operation of a Supply Digitalisation Programme:** the programme aims to create frameworks and regulations for how data in the utilities sector is collected, structured and made accessible through a public-private partnership between authorities, the utilities sector and data users. Initially, the programme will focus on data within the electricity, heating and water sectors. A total of EUR 9.58 million will be allocated to the initiative for 2024-2027.
2. **Monitoring groundwater and ensuring clean drinking water:** the initiative aims to enhance knowledge about groundwater and drinking water resources based on validated data. This is crucial for maintaining a future supply of drinking water and for planning climate adaptation efforts. A total of EUR 3.2 million will be allocated to the initiative for 2024-2027, focusing on modernising the national database for groundwater and drinking water data.

3. **Improved transition to electric vehicles and alternative fuels through open and standardised data:** the initiative aims to develop an IT solution to store and distribute data from public vehicle charging points and fuelling stations in Denmark. A total of EUR 1.62 million will be allocated to the initiative for 2024-2027.

On top of the three measures mentioned above, digital tools and data are being used in many ways to support the green agenda. 'Climate and resources' is the title of one of the subsections of the Municipalities' Digitalisation Programme (2021-2025), which focuses on making data on climate, buildings, infrastructure and geography more readily available to support the work of municipalities and local representatives in climate change mitigation. The subprogramme focuses on three projects: data-supported climate change adaptation, strengthening efforts on digital waste data and data-based energy management.

While most government measures focus on the use of digital tools to support the green transition, **awareness of the need to make digital technologies and infrastructure greener is also starting to take centre-stage in a range of initiatives.** The Agency of Digital Government has recently published a report about calculating the climate impact of its solutions, presenting a model for calculating the annual climate footprint of IT solutions for companies and public organisations. The report showcases the use of the model, calculating the annual climate footprint of two large public IT solutions.

Another recent report from the DigitalLead cluster and the Danish Technological Institute explores **ways in which companies can make software solutions and data processing more energy efficient.** Among the concrete steps to take, the report mentions:

- choosing energy-efficient software solutions by design;
- using techniques like eliminating dead code and open-source libraries to reduce energy consumption;
- developing algorithms that run processes in parallel to optimise energy consumption;
- avoiding unnecessary data transfers and processing;
- postponing data loading until necessary and choosing energy-intensive times wisely;
- moving tasks to the cloud.

By following these measures and principles, the report highlights that companies can not only reduce the energy consumption of their digital practices, but also gain important competitive advantages.

Another important instrument in speeding up the green and digital transition is public procurement of IT services and products. In 2023, updated central government procurement rules introduced new requirements for government entities to actively support this transition. One key measure is the mandated use of green procurement criteria embedded in existing government framework agreements covering a wide range of digital products and services, including those related to data centres. Many of these criteria are based on recent national testing and evaluation of the EU's Green Public Procurement standards for data centres, server rooms and cloud services.

Annex I – National roadmap analysis

Denmark's national Digital Decade strategic roadmap

Denmark submitted an adjustment of its national Digital Decade roadmap on 7 January 2025. As part of the adjustment, Denmark introduced 12 new measures and revised four targets and trajectories, clearly aligning with the new Commission's priorities on AI and digital skills. None of the existing measures from the 2023 roadmap saw a budget change or additional qualification.

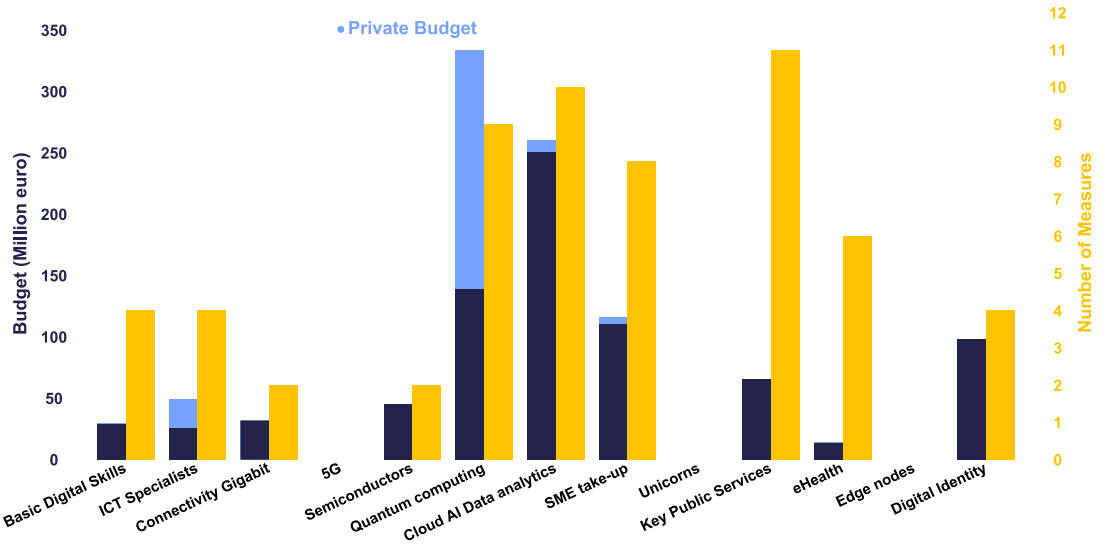
Overall, Denmark addressed a substantial number of roadmap recommendations issued in 2024.

With regards to targets, Denmark raised the ambition of its national target for the take-up of data analytics by enterprises (75%) and slightly revised downward its national target on the take-up of cloud by enterprises (77.2%), arguing it is a more realistic target. It nonetheless remains above the EU ambition of 75% adoption. It did not provide a target and trajectory for FTTP and edge nodes, mentioning potential plans to evaluate them in Spring 2025. The country also refrains from including a target for unicorns, despite underlining its broad agreement with the EU-level target. The VHCN trajectory was not revised to provide a path until 2030. Denmark's national target for ICT specialists remains the same as the one proposed in the 2023 roadmap (7.7% of the employed population versus a 10% at EU level), with the country emphasising high demands for labour in many other sectors. Denmark notes that they plan to keep the target as it is until more is known on the effects of current measures under implementation.

With regards to the additional measures introduced, two new measures were added to support basic digital skills and ICT specialists respectively, totalling four measures for digital skills. On basic digital skills, the focus is to integrate technology comprehension into primary and lower secondary school curricula. On ICT specialists, the focus is to offer continuous education and training in ICT and attract more international students in the field. One measure was added to support the digitalisation of SMEs and four new measures focus on different aspects of AI and data analytics (i.e. adoption of AI solutions by the public sector, developing advice and knowledge on responsible AI, developing transparent and secure Danish language models and making Danish text data freely available to support AI solutions).

Measures included in the roadmap were linked to the relevant parts of the declaration on **digital rights and principles** and the **Digital Decade general objectives**. The adjustment also includes some more details on the **consultation with stakeholders** with respect to the original roadmap**.**

Measures and budget in national roadmap[7]



In total, the national roadmap includes **67 measures with a budget of EUR 1.07 billion, with EUR 832 million coming from public budgets** (equivalent to 0.21% of Denmark's GDP). Digital public services and the adoption of key digital technologies like cloud, AI and data analytics are the targets with the highest number of measures. In terms of budget, the highest share is allocated to the uptake of key digital technologies like AI and quantum technologies.

[7] When referring to national roadmaps, data used in this report are those declared by the Member States in their national roadmaps, on the basis of the Commission's guidance (C(2023) 4025 final). Data might reflect possible variations in reporting practices and methodological choices across Member States. No systematic assessment of the extent to which Member States followed the guidance was carried out.

Annex II – Multi-country projects (MCPs) and funding

Multi-Country Projects and Best Practices

Denmark is a member of the Alliance for Language Technologies EDIC and is also working towards setting up an EDIC in the area of genomics. Denmark is a participating state of the EuroHPC Joint Undertaking (JU) and of the Chips JU.

The country contributed to the Digital Decade Best Practice Accelerator by sharing one best practice in the frame of the 'Business Uptake' cluster (in the framework of the SME:Digital initiative).

EU funding for digital policies in Denmark

Denmark allocates 27% of its total Recovery and Resilience Plan to digital (EUR 382 million)[8]. In addition, 14% of the country's total Cohesion policy funds (EUR 63 million) is dedicated to advancing its digital transformation[9]. According to JRC estimates, EUR 329 million directly contribute to achieving Digital Decade targets (of which EUR 292 million come from the RRF and EUR 37 million from cohesion policy funds)[10].

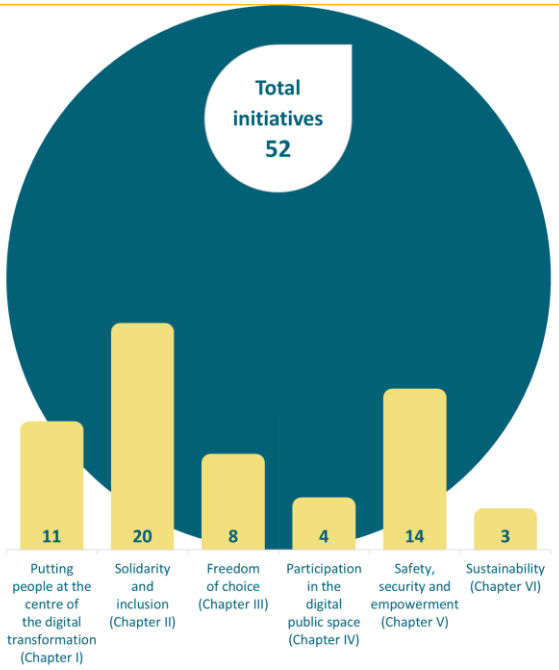
Key digital measures in the Danish Recovery and Resilience Plan (RRP) include supporting the digitalisation of public services through the continuous modernisation of the public digital infrastructures and equipping the country to face future challenges in areas such as cybersecurity and AI. The Danish RRP also includes important reforms and investments incentivising companies to increase their overall R&D spending, extending very high-speed broadband coverage to rural areas through the National Broadband Fund, and promoting the digital transformation of SMEs through the SME:Digital initiative.

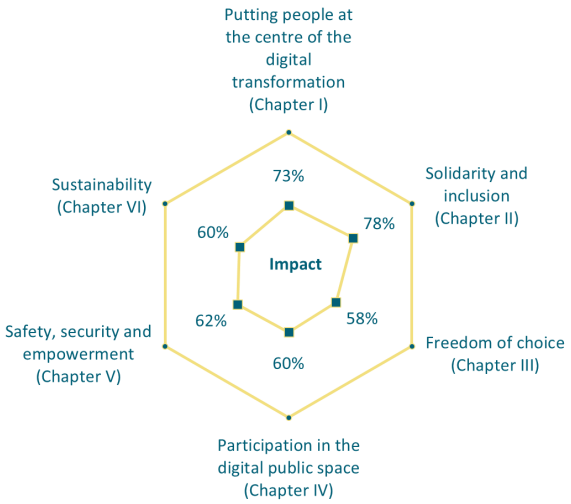
[8] The share of financial allocations that contribute to digital objectives has been calculated using Annex VII to the Recovery and Resilience Facility Regulation. Last data update: 16 May 2025.

[9] This amount includes all investment specifically aimed at or substantially contributing to digital transformation in the 2021-2027 Cohesion policy programming period. The source funds are the European Regional Development Fund, the Cohesion Fund, the European Social Fund Plus, and the Just Transition Fund.

[10] Joint Research Centre, Nepelski, D. and Torrecillas, J. Mapping EU level funding instruments 2021-2027 to Digital Decade targets – 2025 update, Publications Office of the European Union, Luxembourg, 2025, JRC141966. Last data update: 10 March 2025.

Annex III – Digital Rights and Principles[11]





Activity on Digital Rights and Principles (Figure 1)

According to a support study, Denmark has been **relatively active in implementing digital rights and principles**, with 52 initiatives overall and two new initiatives launched in 2024, **showing limited progress towards its commitments**. The same study shows that Denmark is most active in ensuring that people remain at the centre of the digital transformation. There is room for improvement, especially with regards to digital solidarity and inclusion, where less activity was identified.

Impact of Digital Rights Initiatives (Figure 2)

Quantitative impact indicators, developed by the support study, illustrate the level of implementation of digital rights initiatives on the ground. Based on available data, they estimate the impact of measures implemented by key stakeholders in Denmark (mainly national government) and how these are perceived by citizens.

The indicators suggest that **Denmark is mostly successful in implementing commitments related to digital solidarity and inclusion**, while efforts to ensure freedom of choice of in the online space seem to have a more limited impact.

According to the Special Eurobarometer on the Digital Decade 2025, **55% of Danish citizens think that the EU protects their digital rights** well (a 5% decrease since 2024). This is above the EU average of 44%. Citizens are particularly confident about getting freedom of assembly and of association in the digital environment (72%, above the EU average of 59%). They are most worried that their right to a safe digital environment and content for children and young people is not well protected (57%, above the EU average of 48%).

[11] Based on a study to support the Monitoring of the Implementation of the Declaration on Digital Rights and Principles, available here. For a more detailed country factsheet accompanying the study, click here.