Langsikt

The Ten AI Commandments

– for shared prosperity from AI and data

LANGSIKT'S EXPERT COMMITTEE ON ARTIFICIAL INTELLIGENCE
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> "The Ten AI Commandments contributes meaningfully to the global conversation on how we build AI for the common good."
> **Professor Yoshua Bengio, Co-President and Scientific Director of LawZero**

> "The Ten AI Commandments offer a clear and thoughtful compass for Norway's continued policy development on AI.
> **Karianne Tung, Minister of Digitalisation and Public Governance of Norway**
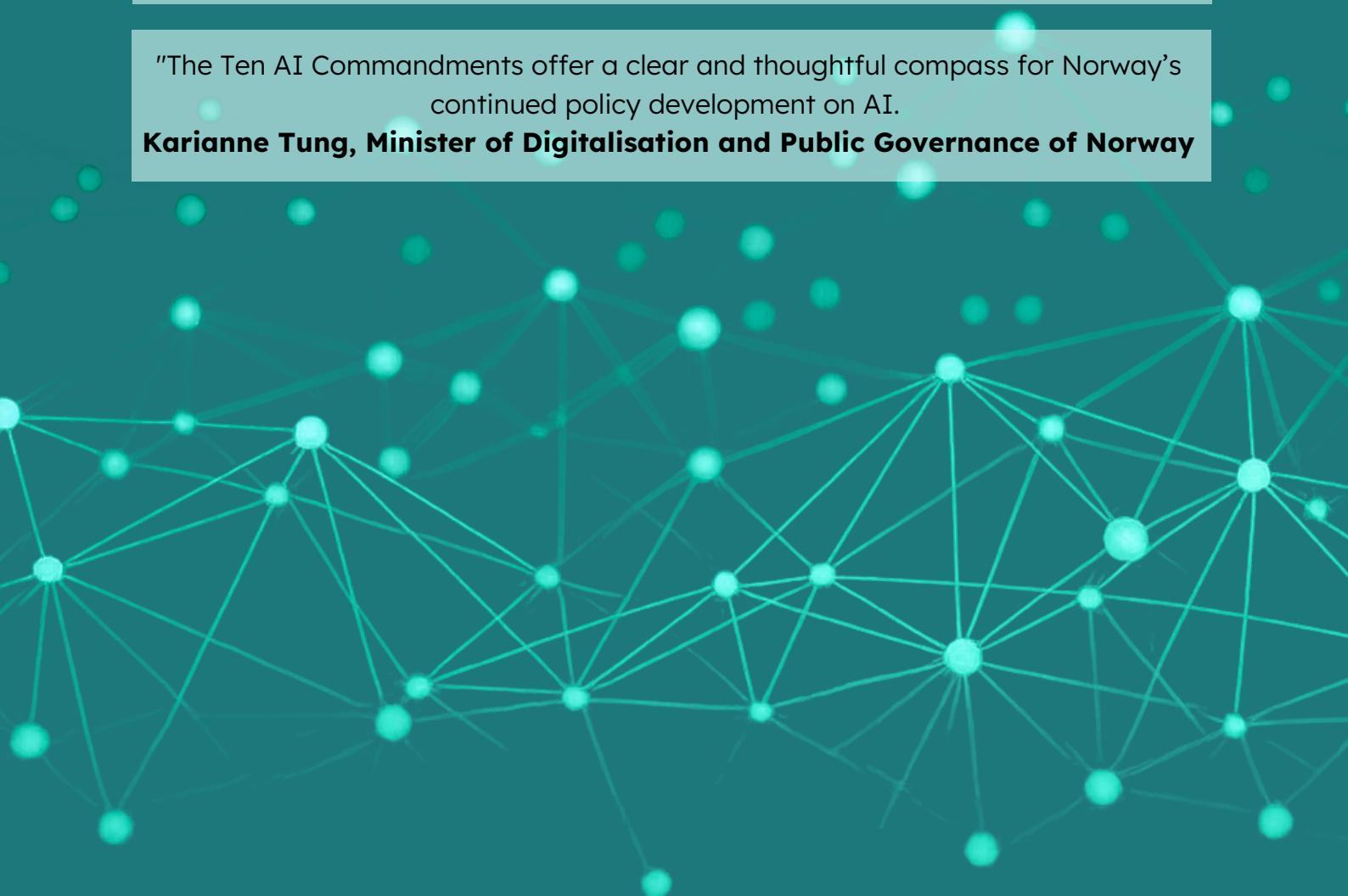
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Summary

"The Ten Oil Commandments" from 1971 became the guiding principles for how Norway should govern important natural resources so that they benefit the entire society. In this way, Norway managed to not only build an industry, but to increase prosperity for an entire nation. Norway's Government Pension Fund Global (GPFG), also known as the Oil Fund, is the world's largest sovereign wealth fund. Today, Norway is faced with a new resource and a new force of change: data and artificial intelligence (AI).

AI has enormous potential to increase human welfare, but also entails unprecedented dangers. Therefore, Norwegian politicians need principles – or commandments – that provide direction when technology develops faster than legislation, institutions, and political processes.

Langsikt's expert committee on AI has therefore developed ten commandments followed by a total of 45 policy proposals in ten separate chapters. This report was originally published in Norwegian, targeting Norwegian policymakers, but has been translated to English as it is relevant for and could be of inspiration to other countries as well.

1. VALUES: AI and data shall strengthen the Norwegian social model.
Norway must adapt welfare systems, taxes, and ownership structures so that the benefits from transformative AI are shared broadly.

2. FOREIGN POLICY: Norway shall have a proactive foreign policy on AI.
We must cooperate more closely with neighboring countries, the EU, international organizations, and global alliances to ensure that Norwegian interests, values, and obligations are taken into account.

3. PUBLIC MANAGEMENT: An effective public administration shall foster security and trust in AI.
The state must move from being merely a regulator to actively helping citizens and businesses use AI within safe frameworks.

4. PHYSICAL INFRASTRUCTURE: The state shall ensure a safe, effective, and sustainable physical foundation for AI and data.
The state must prioritize development of AI infrastructure and ensure that the entire value chain from electricity production to end users is protected in line with its importance for society and national security. Climate and environmental considerations must be taken into account.

5. DATA: Data shall be used for knowledge development and value creation.
The government must invest more in collecting, managing, and sharing prioritized datasets from both public and private enterprises. We must develop an economic model for data that provides value to Norwegian society.

6. DIGITAL INFRASTRUCTURE: Public agencies shall ensure access to secure and reliable AI models.
The state must ensure that models trained on Norwegian data are available to all Norwegians. The models must be protected according to how important they are to society and national security.

7. RESEARCH: Norway shall have leading international AI research communities.
Norway must build AI expertise and attract talent. This requires increased investments in research and higher education.

8. INDUSTRY: The government shall facilitate a competitive AI-driven private sector.
The private sector needs a constructive regulatory framework and access to capital. Foreign investments should contribute to the transfer of expertise, local value, and job creation.

9. PUBLIC SECTOR: AI shall make public services better and more efficient.
Innovative and responsible use of AI and data is necessary to ensure the welfare state's ability to continue to deliver good services in the future.

10. CITIZENS: AI must give citizens a sense of purpose at work and in their free time.
AI literacy must be developed from early education and throughout working life, ensuring that everyone can benefit from the technology. AI should support – not replace – human judgement, autonomy, and wellbeing.

Introduction

In 1971, The Norwegian Parliament's committee on Industry formulated the ten oil commandments "with the aim of ensuring that the natural resources on the Norwegian continental shelf are exploited in a way that benefits society as a whole".[1] These principles gave Norway a political direction for a highly profitable resource grounded in wisdom, foresight and long-term vision. The result was that oil not only built a valuable industry, but increased the wealth and welfare of an entire nation. Norway's Government Pension Fund Global (GPFG), also known as the Oil Fund, is the world's largest sovereign wealth fund.[2]

Norway today faces a new resource and a new force of change: data and artificial intelligence (AI). Data is the commodity; AI is the machinery. Neither data nor AI are localised natural resources, but they're similar to oil in that they are capital intensive and can create enormous value. Furthermore, AI will probably create greater value than oil has provided.[3]

If we succeed in applying AI responsibly, it can dramatically boost productivity, allowing people to work less and spend more time on relationships, creativity, and leisure.[4] At the same time, the quality of public services can improve. AI can help detect diseases earlier and reduce medical errors, accelerate the development of new treatments, and give teachers tools that tailor learning to each student while freeing up time for genuine human interaction, relationship-building, and joy in everyday life.

Our interactions with complex bureaucratic systems can be simplified using a personal AI-agent. In business, open source AI models and data sharing will be a booster for innovation: Small businesses can test new services in a few days; the marine and energy industries can optimize operations with predictive maintenance. Everything will be built on Norwegian and European premises of openness, interoperability, and fair value distribution. This way, we will have a society where technology works with us – not against us – and provides more fair, accessible, and efficient services.

Such a positive future should not be unthinkable. The development of AI is explosive and self-reinforcing.[5] The most advanced models double their capacity and performance approximately every seven months, driven by more computing power, data, and better algorithms.[6] If the development continues as it has done in recent years, we may have AI systems that are smarter than us and perform most tasks better and faster.[7] This can be a huge source of shared wealth if we play our cards right.[8] It can also create problems we have never had to deal with before. Therefore, Norway must act now.

The committee believes, similar to a statement signed by over 300 leading scientists and politicians – including 15 Turing and Nobel Prize winners – that "AI holds immense potential to advance human wellbeing, yet its current trajectory presents unprecedented dangers."[9] The opportunities are many, but the risks are comprehensive.[10] AI can lead to structural problems such as systematic discrimination against vulnerable groups, mass unemployment, challenges to democracy and trust, and destabilizing race-to-the-bottom dynamics between states and corporations. AI can also be abused by malicious actors to carry out advanced attacks including hacking and chemical or biological weapons. In addition, AI can lead to serious accidents, especially in the use of AI in critical infrastructure, autonomous weapons, and nuclear weapons systems.

The strongest win. Today, there are a few global players driving the development, primarily in the US and China.[11] Companies are investing at levels previously reserved for space exploration and development of nuclear power, i.e. tens of billions of dollars in individual projects.[12] Corporations control not only the technology, but also the infrastructure, data, and standards that the rest of the world must adhere to. A handful of companies and countries set the pace, direction, and rules of the game, while most others are forced to choose between being consumers, regulators, or strategic partners.

Norway must find its role. We cannot compete in terms of volume or capital, but we can find strength in our distinctive features: high digital maturity, reliable data management, high public trust, and access to affordable, renewable energy. If we do not actively position ourselves in the value chain – as developers of safe and responsible AI, as a data nation, and as a provider of quality infrastructure – other countries will be responsible for the value creation and control over the technology.

Norway can become a pioneer country for this type of controllable, trust-based AI, as we have previously done for energy and digital governance. Such a role requires that we develop technology on Norwegian and European terms, where value creation and the ethical guidelines are kept in balance. AI can become a new engine for growth and welfare, but only if we dare to act while the industry is still being shaped.

We need principles – or commandments – that provide direction as technology develops faster than legislation, institutions, and political processes. These commandments are an invitation to action – to create value, prioritize wisely and build competence and capacity.

In June 2025, Langsikt therefore established an interdisciplinary expert committee. It consists of fifteen of Norway's leading experts in technology, research, digital governance, business, and politics (see page 4 for the full list of committee members). The committee was given the following assignment:

- **Develop ten commandments for Norwegian AI policy.**
- **Develop concrete policy recommendations based on these ten commandments.**

From June to October 2025 the expert committee has prepared a report through five committee meetings and continuous writing work. The committee has been supported by a secretariat from Langsikt: Tellef Solbakk Raabe, Eirin Evjen, Frida Walle Thornes and Anders Eidesvik. The secretariat has assisted with research-based background material, written drafts based on the committee's discussions, and coordinated meetings and communication. The whole committee agrees on the ten AI commandments, though not necessarily all the policy recommendations. It is the Committee Chair and the secretariat who are responsible for this report.

The committee believes that artificial intelligence cannot be reduced to business and digitalization policy alone. AI is also important for foreign policy, security and emergency preparedness policy, and welfare and distribution policy. The commandments therefore cover a wide range, from principles of economic distribution and national sovereignty, via foreign policy and institution-building, to physical and digital infrastructure, data management, research, business, welfare and the position of the individual in work and everyday life. The sum is a coherent framework that sets goals and priorities, and which can be operationalized in the state budget, sectoral policy and public procurement – regardless of changing governments.

The committee's overall position is simple: AI should be developed and used to create the most value for as many as possible. To achieve this, we must both accelerate and govern AI's development. Accelerate, because technological development is happening very quickly and Norway is affected by the global race dynamics whether we like it or not. Therefore, we must experiment, learn quickly, and build capacity now. Govern, because we cannot trust the leading technology companies themselves to prioritize transparency, fairness, security, and accountability. A technology-driven economy that does not empower many will undermine trust, democracy, and the legitimacy of the welfare state.

Norwegian society has succeeded in managing both hydropower and oil for the good of the society. We did it by combining realism and ambition, building expertise and institutions, and thinking long-term. The ten AI commandments are an attempt to do the same in our time: To provide direction, create common understanding, and point to possible solutions. This way, Norway can, once again, manage a large resource and new power with wisdom – and ensure that AI and data create value for all.

1. VALUES: AI and data shall strengthen the Norwegian social model.

Norway must adapt welfare systems, taxes, and ownership structures so that the benefits from transformative AI are shared broadly.

Artificial intelligence will transform society. The greatest consequences will be the effects on working life. As with previous technological shifts, some jobs will disappear, others will be reshaped, and entirely new ones will emerge.[13] The Norwegian economic model, with a generous safety net, strong unions, active labor market measures, high trust in institutions, and a dynamic private sector, is well suited to making rapid adjustments in the face of new technology.

At the same time, there is a risk that AI will challenge the Norwegian model in ways it is not equipped for. If AI systems become better and cheaper than human employees in a relatively short time, we must take action to ensure that most people have an income to live on even in an era of transformative AI.

AI represents a new form of economic power concentration. Data and computing power are concentrated in a few global companies that in practice manage key societal functions. This challenges national control, tax revenues, and a levelled playing field. Without a policy for ownership and value distribution, the benefits of AI can lead to social and economic imbalance. At the same time, AI opens up enormous opportunities for value creation.

In a possible scenario, AI systems will become so good that there will be little room for human employees. We must take action to ensure people's well-being even in such a transformative future.

POSSIBLE SOLUTIONS:

a) **Pursue an active transition policy for the age of AI.** We must build on the core values of the Norwegian model: worker participation, collective agreements for fair distribution of profits, generous social insurance, state support for restructuring measures, and sufficient freedom for businesses to adopt new technology, even if it means getting rid of workers. In the age of AI, it will require new ways of increasing people's skills and perhaps more wage subsidies to ensure that people are competitive with machines.

b) **Fair compensation for data as an input factor.** AI will only be able to replace the workforce because it is trained on vast amounts of human-generated data. In a future with extremely capable AI systems, we need ways to provide people with a secure income. Establish mechanisms where individuals and businesses share in the value creation they contribute through their data. This could be done through national licensing schemes, a Norwegian "data dividend" model, or data unions, which negotiate on behalf of their members' data interests.[14]

c) **Customize the tax system.** The payroll tax is an additional tax on labor. Reducing it will make labor more competitive. More of the tax burden should, over time, be placed on capital owners, rather than workers. This restructuring will also make people more competitive in the face of AI.

d) **Give the population a basic income.** When AI creates lasting excess returns, a share should be channeled back to the population. One possibility is to implement a technology dividend which is distributed to the population in the form of a cash transfer (what Kalle Moene calls a "universal basic share").[15] Through tax on activity in Norway, distributed to the population in the form of a basic income, we will be able to distribute the benefits of AI more widely. Such a model will strengthen the legitimacy of AI initiatives, contribute to social stability, ensure that the wealth generated by AI also benefits future generations, and reinforce the social contract between the state and citizens.

2. FOREIGN POLICY:
Norway shall have a proactive foreign policy on AI.

We must cooperate more closely with neighboring countries, the EU, international organizations, and global alliances to ensure that Norwegian interests, values and obligations are taken into account.

Digital technology and infrastructure have become a matter of geopolitics, and foreign policy must be updated accordingly. AI and the development of artificial general intelligence (AGI) is central to the rivalry between the great powers.[16] Moreover, private technology giants have a power that surpasses most states: they set standards, exert geopolitical influence and manage basic infrastructure. It is impossible for Norway to influence the course of technology development alone. We must stand together with other countries, but for now we are on the sidelines. Norway needs a clear foreign policy strategy in the technology field to avoid ending up in a situation where we are subject to rules of the game that we have not helped to shape.

Other small states show that this is possible: Denmark has invested heavily in technology and, among other things, established a technological diplomacy position based in Silicon Valley and is active in international forums.[17] Small states can use digital expertise and innovative partnerships to gain significant influence on issues related to digital governance. Norway can learn from these experiences and find its own position based on our unique comparative advantages and resources.

POSSIBLE SOLUTIONS:

a) **Position Norway as a standard setter in technology and AI.** Norway should actively promote values and principles of equality and autonomy in international technology discussions, and take a leading role in setting standards for the responsible and ethical use of AI and other critical technologies. This could involve initiating or participating in international forums such as the OECD, the UN and the G7, collaborating with small and medium-sized countries with common interests, and contributing to the development of norms, guidelines and frameworks that strengthen transparency, human rights and democratic accountability globally. Here, we can use our role as a bridge builder and "digital middle power" to highlight democratic concerns and include voices from countries that are otherwise excluded. Such a position would strengthen our legitimacy and give us greater international influence. A concrete proposal is to work to establish a permanent secretariat for the AI summit series.[18]

b) **Strengthen cooperation with the EU.** An important pillar of a forward-looking foreign policy on technology is a closer and more strategic relationship with the EU. The EU will be an essential hub for regulation, expertise, research, and physical and digital infrastructure. Norway must actively participate in initiatives, projects, and research programs that give us access to knowledge, capital, and digital infrastructure. We must find niches where Norway can offer the EU something in specific areas that we are particularly good at, such as the ocean data. A first step is to contribute more Seconded National Experts (SNEs) to the EU's AI office and participate in working groups that shape standards and regulations.[19]

c) **Establish strategic, value-based technology partnerships.** Norway should develop and promote new international technology partnerships that are based on shared values. The Ministry of Foreign Affairs should actively promote international partnerships between Norwegian research communities, technology companies, and foreign innovation communities, with the aim of bringing technology home and building national expertise. Norway should particularly cooperate with countries and regions that share our goals for responsible technology development, such as the Nordic countries, the Baltics, the EU, Canada, Japan, the US, and South Korea. By building such value-based partnerships, Norway can strengthen its strategic position and help shape global technology development so that it safeguards transparency, accountability, and human rights.

d) **Promote Nordic partnerships for technology and expertise.** Norway should facilitate Nordic collaborative projects in AI and digital infrastructure, both as host and funding partner. Such partnerships can build expertise, ensure access to new technology, and strengthen Norway's role as a responsible and strategic player in the region's technological development. The goal is not to duplicate the work of neighboring countries, but to fill gaps, share experiences, and develop niches.

e) **Establish a national academic community for AI with a foreign policy perspective.** The Ministry of Foreign Affairs should establish specialized units that work closely with academia and business to promote innovation and Norwegian values. Norway should initiate the establishment of a national expert community for AI that brings together expertise from industry, academia and civil society, with a clear foreign policy perspective. This national AI council can provide updated strategic analysis that supports policymaking across sectors, while also enabling Norway to contribute actively internationally. The council will be able to coordinate knowledge and experience, identify strategic technology communities, and act as a bridge between national decision-makers and global actors, so that Norway strengthens both national capacity and international influence in the AI field.

f) **Empower countries in the Global South through technology aid.** Norway should use development aid to build technological capacity and knowledge in countries in the global South. This can strengthen partner countries' positions in international decision-making processes and promote common interests with other small and medium-sized countries, while strengthening Norway's strategic influence in global technology discussions.

g) **Further develop and operationalize Norway's technology strategy.** The strategy should set out national positions, constitute a clear roadmap for the business community, and provide the Ministry of Foreign Affairs and all embassies with clear priorities and mandates for partnerships in key hubs (e.g. Silicon Valley, Bengaluru, Nairobi, Beijing and Shanghai).[20]

3. PUBLIC MANAGEMENT: An effective public administration shall foster security and trust in AI.

The state must move from being merely a regulator to actively helping citizens and businesses use AI within safe frameworks.

Artificial intelligence is challenging the way we govern, regulate, and distribute responsibility for technology. AI can solve tasks with a speed and precision that was previously unimaginable.[21] This raises new questions about transparency, accountability, and control. As decisions are increasingly made by systems that are complex and difficult to verify, the Norwegian Government must develop new mechanisms for governance and supervision. Our ability to organize and coordinate the management of AI – not just use the technology – will be crucial to maintaining trust and societal stability.

Norway needs an administration that reflects its time. The digital dimension of public governance has become so extensive that it must be given the same weight as energy, transportation, and finance. Norway already has a comprehensive regulatory framework and a number of directorates and supervisors, but AI challenges the limits of current administrative structures. It is positive that the forthcoming initiative "AI Norway" has been given the role of being a driving force for innovative and responsible use of AI, including through guidance and a regulatory sandbox. The AI Act is a good starting point for their work.

In addition to the current supervisory structure, Norway needs institutions that can test, evaluate, and explain how AI models are used in the public and private sectors. Several countries have already established mechanisms for the responsible use of AI, including through the creation of AI Safety/Security Institutes.[22] France has established an interdepartmental council for artificial intelligence under the Prime Minister's office (2024). Norway should draw inspiration from these experiences, but develop its own model adapted to our administrative tradition, high trust, and strong ability for cross-sector collaboration.

POSSIBLE SOLUTIONS:

a) **Strengthen coordination and common frameworks for the development and use of AI.** Norway must ensure more holistic management of AI. The Ministry of Digitalization and Public Governance should be given a clearer mandate and greater resources to coordinate guidelines, standards, and the sharing of data and solutions across sectors.

b) **Establish a national AI security institute at an independent research institution.** This will stimulate research on AI safety and security, develop standards, and act as an advisor to both government and business. Such an institute should collaborate with similar environments in other countries to ensure that Norway keeps pace with international best practices.[23] Such an institute should also advise public entities on managing risks in the face of increasingly autonomous systems.

4. PHYSICAL INFRASTRUCTURE: The state shall ensure a safe, effective, and sustainable physical foundation for AI and data.

The state must prioritize development of AI infrastructure and ensure that the entire value chain from electricity production to end users is protected in line with its importance for society and national security. Climate and environmental considerations must be taken into account.

A digital economy rests on physical prerequisites: Stable energy supply, capacity in data centers and networks, and robust value chains. As more and more services are driven by data and AI, the consequences of outages, manipulation, sabotage, or changes at external suppliers increase.[24] Large data centers and AI systems place a heavy burden on the power grid and the environment. Therefore, we must apply them with the same requirements for security, preparedness, and sustainability as other critical infrastructure. This way we preserve freedom of action, trust, and continuity – even in times of crisis and war.

Today, the development of digital infrastructure is a question of national sovereignty, not just technology.[25] The same considerations that previously applied to power supply, transport, and emergency preparedness must now apply to data, energy, and storage capacity. When data centres and digital platforms become as critical as roads and power grids, they must be planned, regulated, and protected with the same seriousness. This requires a clearer state role – not as the owner of everything, but as a guarantor that investments, standards, and security levels safeguard Norwegian interests in the long term.

Private actors must continue to play an important role in the development and operation of physical installations, but the government must require that the investments also have ripple effects in Norway – such as local competence building, data storage on Norwegian soil, and capacity reserved for Norwegian research institutions and start-ups. In this way, national control can be combined with innovation and business development.

POSSIBLE SOLUTIONS:

a) **Develop a national strategy for infrastructure and emergency preparedness.** Power, data centers, networks, and data storage must be planned in conjunction with each other. Such a strategy should coordinate the Norwegian Water Resources and Energy Directorate, Communications Authority, the Armed Forces, and Digitalisation Agency, and be anchored in a comprehensive responsibility for digital societal security. Infrastructure for services critical to society or of importance to national security must be under national or European control and jurisdiction.

b) **Build green and smart.** To meet the environmental challenges, requirements must also be applied for energy efficiency, the use of renewable energy, and the location of data centers where they can utilize excess heat or help strengthen the power grid.

c) **Establish public-private partnerships for data center capacity.** Build shared data center solutions on Norwegian soil that can be used by the government, research institutes, and private sector. Public ownership of key infrastructure will ensure national control and priority for socially critical purposes.

d) **Introduce societal benefit requirements in data center policy.** Concessions and support schemes should be linked to ripple effects in the form of local value creation, use of renewable energy, utilization of surplus heat, and contributions to Norwegian data and AI expertise.

5. DATA: Data shall be used for knowledge development and value creation.

The government must invest more in collecting, managing, and sharing prioritized datasets from both public and private enterprises. We must develop an economic model for data that provides value to Norwegian society.

Data is a new input factor in the economy, in line with energy and capital. Therefore, we must treat data as a strategic resource, not a by-product. Good data sets provide the basis for research, innovation, and improved operation and management of society. Norway is a leading data nation, with comprehensive and reliable public registers, a high level of digitalization, and high trust in the population that enables the collection of large amounts of data. This provides a strong starting point for success with new European data policy and management. At the same time, we risk losing great value if the data either remains inaccessible or controlled by actors outside Norwegian and European jurisdiction.

Although privacy and national security set legitimate limits on data sharing, both public and private organizations often become risk-averse, putting unnecessary brakes on data-driven innovation. For public agencies, data collection and sharing involves legal risks and ongoing costs, while the benefits rarely accrue to those doing the work. Private actors, in turn, have incentives to withhold data to protect their own market position. The result is that the potential of data is poorly utilized – and the benefits that could strengthen both the public sector and business are lost.

EU regulations such as the Data Governance Act (DGA), the Open Data Directive (ODD) and the General Data Protection Regulation (GDPR) provide new frameworks for data sharing, data portability, and interoperability.[26] Norway must follow this up actively to ensure that the values actually accrue to our society. Norway should also build on existing structures such as "data.norge.no", national master data, the Norwegian Data Priorities Council, and the EU's data spaces, but at the same time develop a clear Norwegian model for how data creates value for society.[27] This is not about collecting data in one government agency, but about ensuring that Norwegian data – used under Norwegian conditions – has ripple effects when it comes to the economy and welfare.

POSSIBLE SOLUTIONS:

a) **Society should make money from prioritized Norwegian data.** The state should establish a comprehensive model for data management, sharing, and value creation that builds on existing initiatives in Norway and the EU. Instead of collecting everything in one governing body, the model should facilitate coordinated access to prioritized datasets in areas such as health, ocean, transport, energy, and climate. Public and private actors should be encouraged to share data on standardized terms, where non-commercial research is given open access, and commercial use follows clear and fair guidelines in line with national and European regulations. The goal is to ensure that value created on Norwegian data benefits the community – without hindering innovation or international cooperation.

b) **Reward those who produce data.** Public agencies should be rewarded for producing and sharing data, so that investing in high data quality does not become a cost without a benefit. We also need to explore a model that ensures that individuals are paid for the data they produce, which is currently harvested by international technology giants without compensation. Data unions or other collective solutions can strengthen people's control over their own data, ensure fairness in the use of AI, and contribute to standards for a good digital work environment.

c) **Companies must be required to share data.** In strategically important areas – such as transport, energy, and health – we must have the ability to impose private businesses to share data through licensing schemes or concession requirements, inspired by how the oil industry shares data via the data repository Diskos.[28]

d) **We need a better balance between privacy and data sharing.** Privacy should not be weakened, but practiced more uniformly. Today, GDPR is interpreted differently within municipalities and agencies, which creates uncertainty and inhibits data sharing. Norway should coordinate privacy practices nationally so that data can be used safely and effectively.

6. DIGITAL INFRASTRUCTURE: Public agencies shall ensure access to secure and reliable AI models.

The state must ensure that models trained on Norwegian data are available to all Norwegians. The models must be protected according to how important they are to society and national security.

AI will eventually become as fundamental to society as electricity, language, and the legal system. What we have previously called digital services are becoming independent decision-making systems that require both technical and democratic anchoring. Norway must therefore treat frontier AI systems as part of society's knowledge infrastructure – in line with universities, archives, and energy. They must be developed, maintained, and protected as common goods.

Access to leading, interpretable, and controllable models is the very engine of a Norwegian AI ecosystem. When critical services become dependent on models we do not control or understand, this weakens quality, transparency, room for action, and security. International players dominate the field, and their models are often trained on English-language datasets. This can lead to errors and biases in the Norwegian and Sámi context – from linguistic precision in the legal system to cultural understanding in the health sector. Building and managing models nationally ensures that the technology reflects Norwegian language, values, and reality – and gives society better control over how AI affects services, administration, and decisions.

The goal is for the public administration, researchers, businesses, and citizens to have secure, predictable access to models that are adapted to Norwegian conditions, and that the models are protected according to how important or sensitive they are. The models should be open where possible and appropriate, treated as critical infrastructure, and form the core of a national ecosystem that everyone can build on. It is unrealistic for Norway alone to build large foundational models from scratch, but we must support Nordic and European initiatives that advance the frontier of AI. Moreover, we can further develop and adapt open models to a Norwegian context. This is not just a question of innovation, but of democratic sustainability and national sovereignty.

POSSIBLE SOLUTIONS:

a) **Establish a world-leading, non-profit frontier AI lab in the Nordic region.**[29] Norway should take a leading role in creating an ambitious and internationally competitive frontier AI lab with our Nordic and Baltic neighbours – inspired by the LawZero initiative in Canada.[30] The lab should combine a focused mission and startup-like culture with public-interest governance, enabling it to compete with global frontier labs on safety-critical capabilities, alignment, and democratic control of advanced AI. Research and model development should follow a principle of responsible openness: knowledge that benefits society can be shared publicly, while powerful capabilities are safeguarded with strong security measures to protect safety, sovereignty, and a sustainable funding model. Long-term investment, European regulatory alignment, and close collaboration with universities, industry, and civil society will be essential.

b) **Govern open language and foundation models as national infrastructure.** Open models for Norwegian and Sámi should be organised as a permanent public good — akin to shared national infrastructure for language, statistics, and energy. The National Library has demonstrated that this is feasible, but the effort now requires greater resources, broader partnerships, and clear responsibility for quality assurance, regular updates, and transparency. Governance should ensure that the models benefit the whole of society, while protecting security, privacy, and responsible use.

c) **Ensure fair and differentiated access to the models.** Administration, research communities, and businesses must have predictable and fair conditions for the use of open models. The public sector and academia should have free or subsidized access, while commercial use must take place on market terms. Access should be regulated through transparent licensing schemes and technical interfaces that promote innovation and safe use. The principle should be sharing with responsibility: openness where possible; control where necessary. This ensures both broad use and fair distribution of the values created.

d) **Treat the models as critical infrastructure where the risk dictates this.** When AI models are used in critical services – such as health, energy, emergency preparedness, or public administration – they must be handled with the same seriousness as power grids, data centres, or communication lines. This means that the models should have known ownership, defined responsibilities, and clear requirements for availability, security, and continuity. They must be tested for robustness against errors, manipulation, and disinformation, and have procedures for notification and recovery if something goes wrong. Critical models should be operated under Norwegian or European jurisdiction, so that the state has visibility and can set requirements for security, auditing, and emergency preparedness.

e) **Build a national ecosystem for developing, sharing, and managing models.** Norwegian research, businesses, and the public sector should come together in a coordinated partnership that develops common standards, platforms, and arenas for learning. The ecosystem must contribute to the rapid sharing of experiences and solutions, so that we get higher quality, lower costs, and less fragmentation. It should also be linked to European initiatives for open models to strengthen Norwegian influence internationally.

f) **Use public procurements as a strategic tool.** Public entities should demand transparency, interoperability, and ethical responsibility in their AI procurement. Through common guidelines and templates, the state can drive the market towards solutions built on open models, Norwegian language data, and European principles. Such a practice will strengthen the domestic market, reduce dependence on global platforms, and promote innovation on Norwegian terms.

7. RESEARCH: Norway shall have leading international AI research communities.

Norway must build AI expertise and attract talent. This requires increased investments in research and higher education.

Succeeding with artificial intelligence is as much about people as it is about access to data and technology. Without experts, we will have to live off American off-the-shelf products. Low levels of knowledge will also lead to less use of AI, AI being used incorrectly, or poor decisions being made during the procurement of AI systems.

Norway has many relevant research environments and the "AI billion" for research means that six national research centers within AI will be established in the fall of 2025. Some Norwegian environments are already doing high-quality research, but the work is too fragmented. Small, scattered environments are competing for funds and attention instead of building overall capacity. If we are to raise the level of ambition, we must think more as a knowledge ecosystem than as individual projects. It is about concentrating resources, connecting environments more closely together, and giving research a clear national mandate. A more unified research landscape will enable Norway to develop technology that can actually be scaled.

POSSIBLE SOLUTIONS:

a) **Step up the educational offerings of AI.** Not only must the number of university admissions in the fields of AI and computer science be increased significantly, Norway must also educate more people to work on the societal consequences of AI. Technology education must be strengthened by other subjects, so that future technologists will understand how AI intervenes in society as a whole.

b) **Build well-coordinated research environments.** This can be done by supporting good collaboration mechanisms for Norwegian AI research, such as NORA.ai.[31]

c) **Strengthen Norway's six research centers for AI and/or develop even more centers.** Norway has good conditions for research within medical AI, language technology, generative AI in general, and security. Fixed funding for national centers and shared infrastructure will allow for risk-taking research, recruitment of top researchers, and development of academic environments that can compete internationally.

d) **Connect Norway more closely to top international environments**, especially in the EU, to ensure access to resources, networks, and knowledge. Attracting top researchers from the US and other countries are crucial for developing a strong and sustainable academic environment. Incentives can include access to the Norwegian welfare state and a stable political system, but also good access to data and computing power, as well as facilitation for top researchers to be able to carry out projects of national importance within existing or new centers.

8. INDUSTRY: The government shall facilitate a competitive AI-driven private sector.

The private sector needs a constructive regulatory framework and access to capital. Foreign investments should contribute to the transfer of expertise, local value, and job creation.

Artificial intelligence creates new business opportunities throughout the value chain – from data and model development to applications in the public sector and business. Norway has previously built strong industries, not least in oil and gas. However, when it comes to AI we are starting without such clear natural resource advantages. Competition is international and fierce. In addition, there are a number of barriers that stand in the way of growth.

Norway risks becoming a pure technology user country, while the commercial value creation takes place elsewhere. With smarter use of instruments and clear requirements for ripple effects, we can strengthen the entire AI value chain and ensure that value creation and expertise remain in Norway. A model that has already proven to work is the triangular cooperation between government, research, and industry, as we know it from the defense sector. Here, the government takes the risk in the early phase, the Norwegian Defense Research Establishment (FFI) develops and tests technology in close collaboration with users, and industry takes over when the solutions approach market maturity.

A similar structure for AI could give Norwegian industry a better framework for developing technology in national hands. The state could provide data, computing power, and capital; research institutions could provide development expertise; and business could provide scaling and export. In this way, Norway can build an industrial value chain around AI – with investments, jobs, and technology that remain in the country. This is one example, but it shows the importance of cooperation in order to assert itself internationally

POSSIBLE SOLUTIONS:

a) **Focus on strategic partnerships and consortia** which enables Norwegian companies to compete internationally, in the same way that the financial industry was able to with Vipps and BankID. Such joint ventures can give Norwegian companies the opportunity to scale and build market positions in the face of global competition. Trust and data are among Norway's foremost competitive advantages and should be actively used in the development of an AI-driven business sector.

b) **Help Norwegian businesses attract relevant international expertise.** The government can do this through targeted incentives, faster processing times for work permits, and better conditions for people with key competencies. Better arrangements must be made for an increased number of international students in prioritized fields and for them to be able to stay in Norway after completing their education.

c) **Facilitate the construction of AI industrial clusters**, similar to what was done in the oil age. A national scheme for access to computing power should ensure that new and relatively small companies and research environments are given priority, and are connected to open and secure language models in the Norwegian context, as described in commandment 6 on digital infrastructure. When granting licenses to large data centers, such as Stargate, one should consider including requirements for competence transfer, including through trainee schemes in companies facilitated by educational institutions.

d) **Use public procurement more strategically.** Public management, as customers, should encourage piloting and scaling in collaboration with small players. Requirements should be set for open interfaces that give Norwegian suppliers the opportunity to build on public solutions.

e) **Make framework conditions more predictable and entrepreneur-friendly.** It must become easier to establish and develop new technology companies in Norway. Reporting and supervision should be simplified, and there should be safe regulatory sandboxes that make it possible to test AI services in practice. Adjustments to the option tax scheme and wealth tax for start-ups should also be considered, so that it becomes more attractive to invest in Norwegian technological value creation.

f) **Strengthen the commercialization of research. Norway must make it easier to translate research results into products, services, and new businesses.** This requires stronger support for Technology Transfer Offices, which assist researchers with patenting, partnerships, and start-ups. Proof-of-concept schemes should be expanded so that more people can test whether an idea has commercial value before establishment. Standardised licensing models can make it easier for businesses to use research results without lengthy negotiations. This will reduce the distance between research and the market and ensure that more of the value creation from Norwegian knowledge takes place in Norway.

9. PUBLIC SECTOR: AI shall make public services better and more efficient.

Innovative and responsible use of AI and data is necessary to ensure the welfare state's ability to continue to deliver good services in the future.

Artificial intelligence can become a driving force for a fairer public sector. Used correctly, AI can free up resources, speed up case processing, strengthen the basis for decision-making, and make the encounter between citizens and administration more personal and efficient. At the same time, the risks are significant. AI can, among other things, have discriminatory effects, weaken legal certainty, and challenge privacy. To succeed, the public sector must combine innovation with responsible development. The technology must be used on Norwegian terms – with Norwegian language, culture, and values as a basis.

The public sector is one of the most important innovation arenas for the responsible use of AI and is absolutely crucial for the technology to benefit the whole of society. When the state applies AI, it must be done with a greater degree of openness and learning than is expected of private actors. This requires us to develop a new management competence in the government: the ability to understand, explain, and test algorithms, and to use them as tools for better decision making. If AI is to strengthen the welfare state, we must build solutions that increase the quality of services and trust between citizens and administration – not just efficiency.

Norway has a good starting point. The national digitalization strategy sets clear goals for AI and data-driven innovation.[32] The AI Act establishes a legal framework, and the forthcoming institution AI Norway will guide, be a driving force, link across sectors, gather expertise, and create a regulatory sandbox for safe testing.[33] The challenge is to move from strategy to action, and strengthen the public sector's ability to use AI in a way that is safe, efficient, and fair.

POSSIBLE SOLUTIONS:

a) **Create an AI-ready public management culture.** The public sector must develop the ability and culture to use AI as a natural part of service development and management.[34] This requires that managers and employees gain a basic understanding of technology, and that interdisciplinary teams become the norm. Sharing experiences, experimentation in a safe framework, and clear leadership anchoring are key. This is how the administration can use AI responsibly – with higher pace, lower risk, and stronger trust.

b) **Develop an AI-first policy.** The EU encourages member states to develop an "AI-first policy», where AI is considered as part of the solution to key societal challenges.[35] Public agencies must consider how AI can contribute to achieving national goals across sectors.

c) **Develop national flagship projects for public AI.** Norway should concentrate its resources in a few main areas which other parts of the public sector can learn from. The goal is to show how AI can actually solve important societal tasks – in line with the EU's Apply AI Strategy.[36] The flagship projects should be selected where the potential for learning and scalability is greatest – for example in health, energy, municipal services, and education – and financed through a joint governmental program with requirements for sharing results and reusing solutions. Such a program could be coordinated by AI Norway and make it possible to develop comprehensive, safe, and measurable solutions for better public services.

d) **Consider strategic balance in the procurement of AI solutions.** The public sector should consider origin, transparency, and control in its AI procurement, not just price and performance. The US is now promoting an "AI technology stack"-strategy to export US solutions to allies, while the EU is encouraging increased use of European and open technology to strengthen digital sovereignty.[37] Norway should develop its own strategy that ensures access to the best solutions internationally, while supporting Norwegian and European communities that build technology on values we share.

e) **Establish a national competence program for AI in the public sector.** Norwegian municipalities, agencies, and directorates need practical knowledge on how AI can be used safely and effectively. A national program – led by AI Norway in collaboration with academia and knowledge providers – should offer training, sharing arenas and common tools for assessing risk, ethics, and benefits. The goal is to make AI a natural part of professional development, not an external initiative.

110. CITIZENS: AI must give citizens a sense of purpose and achievement at work and in their free time

Competence in and knowledge of AI must be built from primary school and throughout working life, so that everyone has the opportunity to utilize the technology. AI must be used in a way that preserves human judgment, independence, and health.

AI doesn't just challenge what we do, but also who we are in our work. In the face of increasingly autonomous systems, we must ensure that technology enhances human judgment rather than replacing it. A society that succeeds with AI will be one that uses technology to augment human creativity, care, and decision-making – not reduce them to a simple routine. This requires us to see the development of skills and competency as part of the social contract, not just as a labor market measure.

AI is an "infrastructure technology". It will become a necessary element in almost all jobs. All professional groups – from teachers and nurses to lawyers and police officers – therefore need a minimum of AI competence. The national curriculum for AI competency must therefore start in primary school.

AI will not only create new jobs, but change existing tasks on a large scale. Without a systematic focus on lifelong learning and continuing and further education, we risk entire groups falling outside the labor market and social participation.

When algorithms take over more tasks, it is also important to ensure that employees retain control, have real participation and experience mastery in their everyday lives. The goal must be a working life where AI contributes to security, a sense of purpose, and quality of life – not uncertainty and alienation.

Generative AI particularly affects knowledge work, which is widespread in Norway. At the same time, we know little about the psychological and social effects of handing over more decision-making power to algorithms: does it weaken critical thinking, the ability to learn from experience, or the quality of collaboration? If these problems are not addressed, we risk that AI will reduce the value of work for both the individual and society.

POSSIBLE SOLUTIONS:

a) **Establish a national scheme for lifelong learning.** Lifelong learning must become a right, in close cooperation between Nav (Norwegian Labour and Welfare Administration), educational institutions, businesses, and the partners in the workforce. The state should support companies' own initiatives for retraining and skills development, as Amazon and several international companies are now doing on a large scale. One possibility is to establish an incentive program modeled on Singapore, where individuals receive financial compensation for completing approved courses.[38]

b) **Introduce AI training in schools.** Teachers and students must understand the technology that is shaping the future from elementary school onwards. Taiwan has launched a national program called "AI Literacy for All", which will provide 300,000 students and 4,400 teachers with basic training in AI.[39] Estonia is rolling out their "AI Leap"-scheme nationally.[40] Here, students and teachers are given access to modern AI tools and training in how to use them responsibly. The goal is to strengthen critical thinking, creativity, and digital judgment – and ensure that people understand and control technology, not the other way around.

c) **Give employees the right to continuous skills development.** Lifelong learning must become a real part of the structure of working life. The partners in the workforce should commit to providing employees with regular opportunities for AI-relevant training, financed through a combination of employer contributions and government incentives. This will help reduce the digital divide, increase productivity, and ensure that people continue to play an active role in a working life where technology learns faster than we do.

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ABOUT LANGSIKT

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