Digital Cooperation Organization

Responsible AI Governance:

Global Lessons and International Best Practices for DCO Member States

Comparative Analysis

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01 Executive Summary

In just a few years, artificial intelligence (AI) has changed many aspects of daily life globally and across the Digital Cooperation Organization (DCO) Member States. Students now use generative AI tools to help with their studies. Content creators leverage AI-driven platforms to create digital art. Researchers are using AI to synthesise and review scientific literature. Innovators are developing machine learning (ML) models to address key issues in healthcare, education, and finance.

With the growing availability of AI tools like ChatGPT, Copilot, Claude, and Midjourney, policymakers are starting to see AI's potential for driving economic growth. Recent estimates suggest that generative AI alone could add trillions of dollars annually to the global economy across various sectors[1]. And this is just the beginning. As AI technologies like robotic intelligence and intelligent automation become more integrated into devices, services, and platforms, their potential impact will only increase.

Based on this increasing importance, the DCO General Secretariat has prepared this report to examine the current landscape of AI within the DCO Member States. It aims to assess the current state of AI adoption and governance and its potential benefits and challenges, particularly concerning human rights issues and ethical considerations. The report also explores global AI best practices and provides recommendations for policymakers, industry stakeholders, and international cooperation.

As AI technologies rapidly evolve and become more integrated into various aspects of society, it is crucial to understand their implications and ensure their responsible development, deployment, and use.

1.1 Key Findings

Approaches to AI governance vary greatly across nations. Two predominant schools of thought have emerged in the realm of AI policy and governance around the world, though a wide range of approaches can be found:

A **"Soft Governance Approach"**, where countries such as Singapore and the United States favour a softer, often voluntary, self-governance approach aiming to support AI investment and innovation. This approach is underpinned by principles such as transparency, explainability, and accountability.

A **"Prescriptive Regulatory Approach"**, which favours more stringent enforcement mechanisms to ensure compliance with ethical standards and principles (risk mitigation, consumer protection, copyright protection, online safety, etc.). This approach is broadly favoured by the European Union and China.

While they can be recognised as separate or completely different approaches, the evidence shows a degree of complementarity between them. Countries adopting prescriptive approaches build their regulations on the key principles identified in the soft-governance approaches, transforming them into the rationale of their legal decisions and laws.

The national AI frameworks generally focus on two main pillars: industrial policy, aimed at maximising economic benefits from AI; and end-user/consumer protection, which seeks to manage the risks associated with AI systems, services, and products. Countries have taken individual views on what aspect they are emphasising and how they approach this issue, based on their respective legal frameworks, political priorities, economic needs, and resources.

Due to the diversity among the DCO Member States, AI development and adoption remain uneven. While some countries are advancing their AI initiatives, others are still in the early stages of building digital infrastructure. This disparity presents both challenges and opportunities. On the one hand, uneven progress might slow AI adoption across nations, making it more difficult to remain relevant or competitive in a globalised digital economy. On the other hand, it creates room for targeted interventions that can address specific national needs and foster collaboration and knowledge-sharing between Member States.

The internationally recognised indexes that this report analyses[2] reveal significant diversity among the DCO Member States. Some countries, like Saudi Arabia, Qatar, and Cyprus, lead in AI readiness, showing strong foundations in both governance and infrastructure. Others, like Djibouti and The Gambia, have great opportunities for growth, as they are working on their infrastructure readiness. Similarly, countries like Morocco, Nigeria, and Saudi Arabia are at the forefront of integrating ethical practices and human rights into their AI policies compared to some other Member States, which have gaps in their respective governance approaches.

The state and scope of AI governance among the DCO Member States are fragmented. Countries like Bahrain, Cyprus, Ghana, Jordan, Nigeria, Oman, Qatar, Rwanda, and Saudi Arabia have articulated clear roadmaps for AI integration across the economy, focusing on capacity-building, research and development, and creating regulatory frameworks that ensure AI systems are transparent, accountable, and in line with international ethical standards.

Bangladesh, Greece, and Morocco are in the process of developing their own national policies or strategies on AI. Notably, Bangladesh, is working to integrate recommendations from the country's draft AI Readiness Assessment Methodology (RAM) draft report—a UNESCO framework for assessing national AI readiness—into its draft National AI Policy.

These initiatives, while at varying levels of progress, generally emphasise an industry-led approach based on guidelines and partnerships in specific sectors. Indeed, these countries focus on practical AI applications in areas like public services[3], banking[4], and energy[5], aligning efforts with international principles and leveraging the technical know-how of the private sector.

Nations like Djibouti and The Gambia, have yet to establish formal national AI strategies. For now, they are prioritising the development of essential ICT infrastructure and aligning with global AI principles, using multilateral frameworks such as the *OECD AI Principles*[6], the European Union (EU) *AI Act*[7] , or the *Continental Artificial Intelligence Strategy*[8] in Africa to inform their approach to AI governance.

1.2 Key Conclusions

AI holds great promise for fostering inclusive and responsible digital growth in the DCO Member States, but its development and deployment require a coordinated and intentional approach. Ensuring ethical and responsible AI development is crucial, especially concerning human rights issues such as privacy, fairness, and equality. Concerns about biased decision-making, privacy breaches, intellectual property, and job displacement must be addressed carefully.

The disparity in AI readiness among the DCO Member States presents both challenges and opportunities for targeted interventions and collaboration. This uneven progress necessitates tailored approaches to AI development and governance. Aligning with global standards and best practices will be key to advancing and operationalising ethical and responsible AI in a consistent, coherent, and interoperable manner across the DCO Member States.

Governments should recognise AI's potential to improve public services and advance national development while creating an environment where responsible AI can flourish. This involves establishing regulatory frameworks that encourage ethical AI use and ensuring AI-driven growth leads to equitable economic development. Businesses in DCO Member States must also assess their readiness to adopt AI, not just for efficiency and productivity gains but also to promote sustainable, inclusive growth that benefits all stakeholders.

Given that the DCO represents diverse economies with differing digital goals, it is essential to leverage AI's transformative potential while addressing gaps in digital infrastructure, readiness, and human capital. Policymakers must address emerging policy and regulatory challenges associated with AI and work to close the digital divide, ensuring that AI-driven progress is inclusive and benefits society as a whole.

Several international and multilateral organisations are at the forefront of establishing comprehensive AI governance frameworks. These developments are

collectively shaping the landscape of AI governance, emphasising the need for adaptive and robust policies to harness AI's potential while safeguarding against its risks. Specifically, the African Union, ASEAN, the European Commission, the European Union, the G7 (Hiroshima Process), the G20, UNESCO, the UN Human Rights Office, the UN Global Digital Compact, the UN high-level AI Advisory body, and the OECD have established principles and guidelines for AI use, emphasising safety, transparency, accountability, and human oversight.

These principles are widely acknowledged within DCO Member States' national frameworks, although the degree of implementation and enforcement varies. The DCO Member States often adapt these global models, seeking to balance innovation with effective risk management tailored to their specific contexts.

The DCO Member States have opportunities to advance their AI governance by further aligning with international best practices and frameworks. Indeed, having clear guidelines in place, adopting international standards, and enhancing international collaboration make it easier to develop and deploy

safe, secure, inclusive, and interoperable AI systems that can be adopted and scaled in other countries. Likewise, this also makes it easier to benefit from the AI advancements being made elsewhere, thereby fostering a favourable environment for AI investment and innovation to thrive. Cooperation within the DCO can help bridge gaps in AI policy design and implementation, promoting knowledge transfer, best practices, and the development of practical tools that leverage AI as a key driver of economic growth and diversification.

Additionally, depending on the governance approach adopted, enforceability remains a crucial factor, with some DCO Member States beginning to implement more coercive measures to address a wide range of AI-related risks, such as data privacy, bias, and algorithmic transparency. These measures could include:

- Setting up an independent authority to regulate, supervise, review, and take enforcement actions towards AI developers and deployers that do not abide by AI Guidelines and Standards for ethical use.
- Establishing technical standards and mechanisms within the organisations providing or using AI solutions.
- Creating a reporting procedure for these organisations, from the private and public sectors, to collect information on data breaches, cases of AI bias etc.

As DCO Member States continue to develop their AI governance strategies, alignment with global standards will remain key to advancing and operationalising ethical and responsible AI in a consistent, coherent, and interoperable manner. This will ensure that no country is 'left behind' in its attempt to address the emerging ethical, legal, and social implications of AI.

1.3 Key Recommendations

The ultimate goal of this report is to present a series of recommendations for three main audiences: DCO Member State policymakers, industry stakeholders, and international cooperation actors.

For DCO Member State policymakers, the report emphasises the importance of developing clear AI definitions, creating a common AI strategy aligned with international standards, articulating guidelines that integrate AI with other policies, defining enforceability measures for AI risks, and establishing dedicated national bodies to oversee AI governance and policy harmonisation.

Industry stakeholders are encouraged to engage in public-private partnerships, invest in AI education and training, prioritise ethical AI development, foster knowledge sharing, and participate in creating industry standards.

Regarding cooperation, the report recommends increasing DCO Member States' participation in international AI standard-setting, enhancing harmonisation of AI strategies, and developing quantitative measures to track AI policy implementation and impact. This cooperation could include establishing multi-stakeholder working groups led by the relevant authority from the country in charge of AI (either a specialised body or one working on adjacent topics, such as data protection authority). Multilateral initiatives where countries support each other in their framework development and capacity-building would also have a positive impact on the community.

These interconnected recommendations aim to create a cohesive, innovative, and responsible AI ecosystem across the DCO Member States, positioning them as leaders in ethical AI development and governance.

1.4 Implications

The successful integration of AI technologies could significantly boost economic growth and improve public services across the DCO Member States. However, failure to address the ethical implications and human rights concerns of AI could lead to societal issues and hinder its adoption and benefits. Collaborative efforts among the DCO Member States could help bridge the digital divide and ensure more equitable AI-driven progress across the DCO Member States.

As AI continues to evolve, it is crucial that policymakers, businesses, and civil society work together to maximise its potential while safeguarding human rights and promoting inclusive growth. The implementation of the recommended measures will require collaborative efforts from governments, industry leaders, academic institutions, and civil society to position the DCO Member States as leaders in AI development, adoption, and governance.To effectively address the ethical challenges and opportunities presented by AI, the DCO Member States must create a cohesive, innovative, and responsible AI ecosystem that drives economic growth, enhances public services, and improves the quality of life for citizens across the DCO membership.

02 Introduction

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2.1 Purpose and Scope of the Report

This report is a crucial stepping stone for achieving the goals and deliverables set out in the broader 'Building Ethical AI' initiative. It marks the first in a series of concurrent activities conducted as part of a broader project for the DCO. The objective of this ongoing project is to evaluate and enhance the governance structures around AI within the DCO Member States. The research presented here lays the foundation for the development of a comprehensive risk matrix and responsible AI policy framework, both of which will be addressed in the upcoming phases of this initiative.

The first part of this report provides a thorough overview of the international best practices that create enabling environments for responsible, ethical, and human-centred AI governance. It examines essential regulatory and institutional components, such as the establishment of a national AI body with a clear mandate, the presence of national AI strategies, and the implementation of foundational data governance policies that address privacy, cybersecurity, and cross-border data flows.

The first part of the report also highlights various other elements that create the foundation for a future-proof, ethical AI environment that is globally aligned and locally effective. These include the importance of fostering an innovation-driven ecosystem that supports start-ups and SME digitalisation; the incorporation of voices from diverse stakeholders, including Nongovernmental Organisations (NGOs), consumer groups, and Civil Society Organisations (CSOs) into policymaking; multi-stakeholder dialogue that ensures policymaking is inclusive and participatory; the preparation of the workforce for the future of AI through education, skilling, and training; and fostering active international cooperation on AI standard-setting.

The second part of the report examines the AI readiness and governance structures of DCO Member States, shedding light on how these nations are tackling the challenges of ethical AI development. This involves assessing national strategies, regulatory frameworks, and AI policies, as well as identifying the differences in AI adoption and governance across the DCO Member States. This comparative analysis is essential in pinpointing the strengths and weaknesses in current AI governance models, which will inform the creation of a responsible AI governance policy tool tailored for DCO Member States, known as a 'DCO AI Ethics Evaluator'.

The two parts of the report are used to formulate a set of recommendations that together aim to guide and support the development of responsible AI governance policies across the DCO Member States. These recommendations target policymakers, industry stakeholders, and international bodies, offering actionable steps to improve AI governance, build robust and ethical AI governance structures, facilitate cross-border cooperation, enable multilateral initiatives, and foster innovation.

The findings presented here will be used to shape the DCO AI Ethics Evaluator and propose multilateral initiatives among DCO Member States so that they can coordinate their advancement of human rights-driven AI governance. By building on insights gathered from international benchmarks, stakeholder interviews, and expert recommendations, the report ensures that the DCO AI Ethics Evaluator addresses both the technical and ethical challenges of AI governance.

The resulting framework will offer practical guidance to the DCO Member States, enabling them to align with global best practices while promoting innovation and safeguarding human rights in AI development, deployment, and use.

2.2 Overview of Digitalisation in DCO Member States

One of the core objectives of the DCO is to promote digital transformation across its Member States, with the goal of fostering inclusive digital economies. The digitalisation of these economies holds significant potential for improving the prosperity and sustainability of people's livelihoods by unlocking new opportunities for innovation, job creation, and access to essential services.

The relevance of the state of digitalisation in a country is directly linked to the development and maturity of its AI ecosystem. A nation's digital infrastructure, including widespread internet access, advanced mobile networks, and cloud computing capabilities, forms the foundation for AI development and deployment. Countries with more advanced digital landscapes typically have greater data availability, which is crucial for training and operating AI systems.

Likewise, computing capacity can impact countries' ability to advance AI governance. Limited access to high-performance computing (HPC) infrastructure and cloud resources constrains the ability to develop, test, and deploy sophisticated AI systems. These capacity gaps exacerbate the digital divide, as countries with insufficient resources struggle to implement robust AI systems or regulatory oversight mechanisms. Addressing these challenges requires targeted investments in local HPC capabilities, regional collaboration, and policies promoting equitable access to computing resources.

Moreover, digitally mature nations often possess a more digitally literate population and workforce that is better equipped to develop, implement, and interact with AI technologies. Digital literacy is foundational to a country's ability to harness digital transformation, enabling its workforce and citizens to effectively use technology for innovation and productivity. Without widespread digital skills, nations risk lagging in global competitiveness, missing opportunities to leverage technology for economic growth and inclusive development.

Defining 'Digital Transformation' and 'Digitalisation'

'Digital transformation' refers to the comprehensive integration of digital technologies into all facets of an organisation, fundamentally altering how it operates and delivers value to stakeholders. This process encompasses changes in business models, products, and organisational structures, necessitating both technological advancements and a shift in organisational culture and employee capabilities[9].

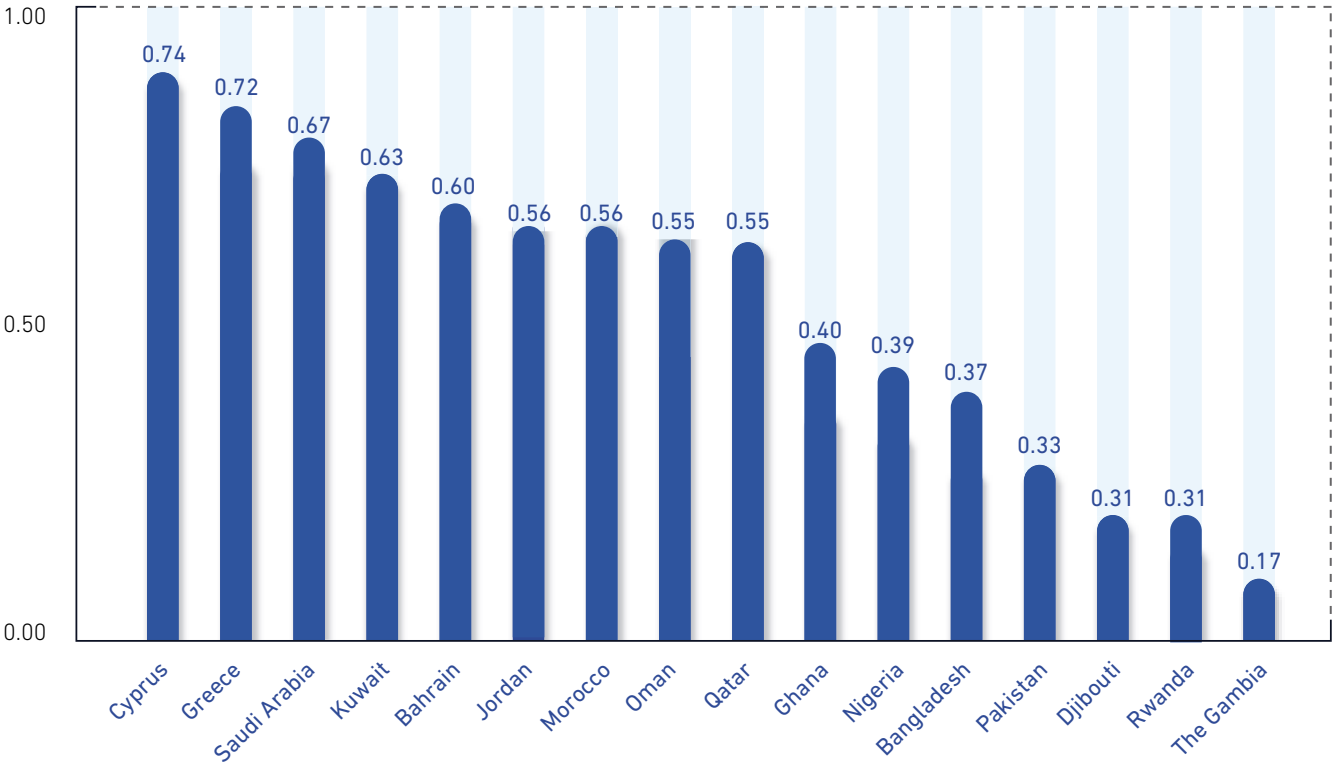
In the context of governments and economies, 'digital transformation' and 'digitalisation' both refer to the comprehensive adoption of digital technologies to enhance public service delivery, governance, and economic processes. This involves integrating technologies such as AI, cloud computing, and blockchain into policymaking, infrastructure, and citizen services while fostering innovation and efficiency. It requires a holistic approach that includes technological upgrades, capacity-building, and the development of regulatory frameworks to ensure inclusivity, security, and sustainability[10].

Overall, the level of digitalisation influences a country's readiness to address the complex policy and regulatory challenges that AI represents. It can be expected that nations with well-established and prospering digital economies are already advanced in navigating issues such as data privacy, cybersecurity, and digital rights, providing a solid foundation for AI governance. These countries are generally better positioned to engage in sophisticated discussions about AI ethics and to participate in international AI governance initiatives.

In the context of the DCO Member States, varying levels of digitalisation result in diverse AI ecosystems. Some members, with more advanced digital infrastructures, are at the forefront of AI development and policymaking, actively exploring AI applications across multiple sectors. Others, still building their digital foundations, are in the early stages of considering AI strategies. This diversity presents both challenges and opportunities for the DCO, complicating efforts to establish uniform AI policies while creating opportunities for knowledge sharing and collaborative development among the Member States.

According to the United Nations' *Frontier Technology Readiness Index*[11], the state of digitalisation across the DCO Member States reflects a wide spectrum of development stages, driven by each nation's unique economic, social, and governmental priorities. The Index is designed to evaluate countries' capacity to leverage, adopt, and adapt emerging technologies, such as AI, big data, and blockchain. It focuses on five key building blocks: ICT deployment, skills, research and development (R&D) activity, industry activity, and access to finance. These areas are critical to determining a nation's ability to integrate frontier technologies into its economy and society.

Figure 1. Frontier Technology Readiness Index, Overall Index Score (2024)



Note: The overall Index score is out of 1.00, with 0 being the lowest and 1.00 being the highest.
Source: UNCTAD (2025) Technology and Innovation Report 2025. https://unctad.org/publication/technology-and-innovation-report-2025

According to the 2024 findings (the latest available year), countries like Cyprus and Greece led the *Frontier Technology Readiness Index*, excelling in areas such as ICT deployment, workforce skills, and access to finance. Cyprus, with an overall score of 0.74, shows particular strength in ICT infrastructure and industry activity, positioning it as a high performer ready to adopt and adapt frontier technologies. Greece, also a high scorer, benefits from a well-equipped labour force but has room to improve its R&D activity, which remains a bottleneck for fostering innovation in frontier technologies. These countries are well-positioned to take advantage of emerging technologies due to their balanced development across key components.

Bahrain, Kuwait, and Saudi Arabia are also emerging as leaders in technology adoption, although their performance in the Frontier Technology Readiness Index is more varied. Bahrain (0.60) shows strong ICT deployment and excellent access to finance but faces challenges in workforce skills and R&D activity. Saudi Arabia (0.67) and Kuwait (0.63) demonstrate robust R&D activity and solid ICT deployment, reflecting their strong commitment to digital transformation through initiatives like *Vision 2030*[12] and *New Kuwait 2035*[13]. These countries have implemented comprehensive national strategies that emphasise leveraging digitalisation for economic diversification and global competitiveness.

Overall, the Index shows that high scorers tend to have comprehensive national approaches to digitalisation, while lower-scoring countries tend to be more focused on building the necessary infrastructure, skills, and frameworks to support piecemeal digitalisation efforts. As this report will show, this general trend is very much reflected in DCO Member States' varying approaches to AI operationalisation.

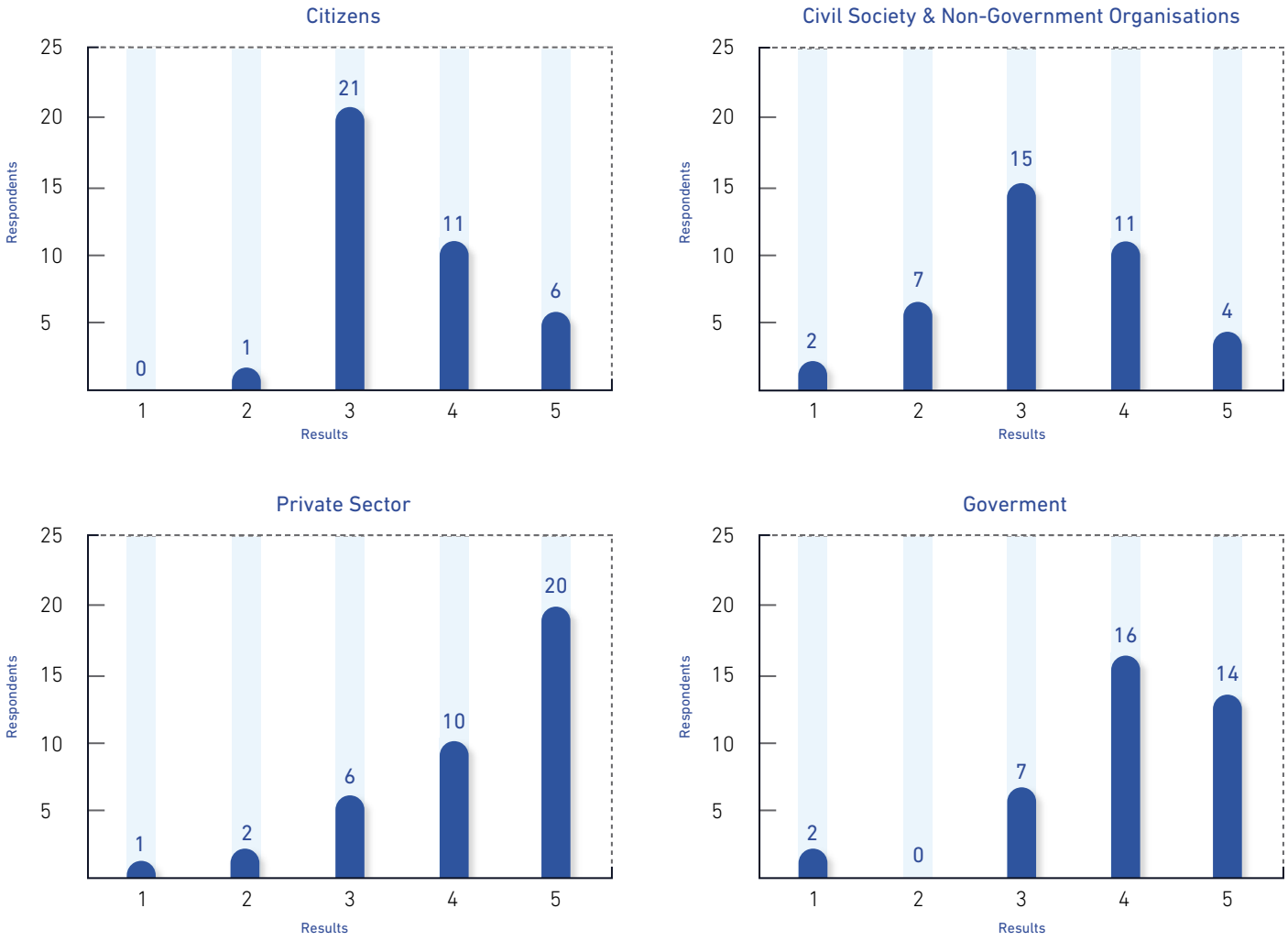
2.3 AI Governance Challenges

As AI becomes more pervasive and powerful, the issues related to machine-made decisions, data security, bias, accountability, and the potential misuse of algorithms become more complex and urgent. AI's heightened complexity and urgency capture policymakers' attention and underscore the need to address old and new challenges regarding machine-made decisions, services, and products. It is crucial to ensure that AI is aligned with human values and interests.

To better understand the interplay between ethical AI and AI governance, we have conducted interviews with 39 respondents representing a wide range of stakeholders involved in developing, deploying, and using AI across a multitude of use cases: citizens, non-government/civil society organisations, private-sector players, and government officials.[14] Although this is a small sample, it serves as an illustrative example to show the perception towards AI. However, it does not aim to be a scientific representation.
The interviews provide a comprehensive view of stakeholders' priorities and concerns on AI governance, offering valuable insights into the complexities and challenges that AI stakeholders wish to see addressed. When analysed against the backdrop of current global AI governance debates, these findings reveal key themes that must be carefully navigated to ensure the responsible development and deployment of AI technologies and systems.

Figure 2. Interview results on citizen, civil society, government, and private-sector perceptions of AI

("In your opinion, how is AI perceived by ____ in your country?"; 1 – strongly negative, 5 – strongly positive)



Source: In-person interviews conducted by the DCO on 11 September 2024 (Riyadh) and 30 October 2024 (Singapore), covering 39 respondents who attended the DCO Ethical AI Roundtables. Respondents include AI stakeholders such as policymakers, regulators, industry players, and non-government/civil society organisations.

The interview findings show that AI is perceived rather neutrally by civil society and non-governmental organisations, as evidenced by the majority of respondents rating AI perception as 3 out of 5. This suggests that any excitement around the transformative applications of AI is tempered by concerns around transparency, ethical issues, or other potential negative externalities. Likewise, citizens have a moderately positive view of AI, pointing to a recognition of AI's potential benefits that is counter-balanced by some apprehension around job displacements, privacy violations, or the opacity of AI-driven decisions.

The middling perceptions from both civil society and citizens indicate that trust in AI systems is not necessarily fully established, signalling a clear need for governance frameworks that address these concerns head-on through increased public engagement, transparency, and ethical oversight.

In contrast, both government officials and the private sector demonstrate much more positive attitudes towards AI, with the majority of the respondents in this category giving AI a perception rating of 4 or 5 out of 5. This can likely be attributed to both stakeholders' recognition of AI as a tool for enhancing innovation, driving efficiencies, and improving service delivery. While this optimism reflects AI's potential economic benefits, it also raises important questions about whether businesses are fully accounting for the ethical and social implications of AI use.

As the private sector plays a significant role in AI's development and deployment, governance frameworks will need to ensure that this enthusiasm for AI is balanced with strong regulatory oversight to prevent unethical practices, such as bias in decision-making systems or misuse of personal data.

Overall, the interview results show that stakeholders are keenly aware that the challenges posed by AI require more than just enthusiasm for technological progress. The need for collaboration between national and international stakeholders, alongside strong cooperation across government, industry, and civil society, is evident. AI governance is not only a technical challenge but a deeply societal one, as it touches on fundamental questions of fairness, accountability, and human rights.

As AI and its associated governance challenges continue to evolve, a multi-stakeholder approach that involves an ongoing dialogue between policymakers, technologists, and the public will be essential to ensure that AI serves the common good without exacerbating existing inequalities or creating new ones.

03 Responsible AI: An International Perspective

03 Responsible AI: An International Perspective

This section outlines the global landscape of AI governance, highlighting key principles and frameworks adopted by international organisations and leading nations. While AI offers transformative benefits across industries, it also presents significant risks, prompting efforts to develop regulatory frameworks focused on transparency, fairness, and accountability. Countries vary in their approaches, with some adopting prescriptive regulations while others implement principles-based guidelines. DCO Member States are working to align with global standards, prioritising ethical AI use, industrial development, and international coordination to address both opportunities and challenges.

3.1 Defining AI

AI definitions vary significantly when examined at the international and multilateral level. The table below shows that some organisations define it according to the set of tasks or functions it can undertake (ABAC, ISO, OECD, UNESCO), while others define it more by the ideological or humanistic ideals to ensure they contribute to the betterment of society (EC, ITU).

Table 1. AI Definitions in International and Multilateral Organisations

Organisation	AI Definition
Asia-Pacific Economic Cooperation (APEC) Business Advisory Council (ABAC)	Systems and models that can perform tasks requiring human intelligence. What distinguishes AI is its capacity for autonomous learning. It could take in the data fed to it and teach itself to, for example, solve mathematical conjectures or to understand native human speech.[15]
European Commission (EC)	Systems that display intelligent behaviour by analysing their environment and taking actions, with some degree of autonomy, to achieve specific goals.[16]
International Organization for Standardization (ISO)	Engineered system that generates outputs such as content, forecasts, recommendations, or decisions for a given set of human-defined objectives.[17]

Organisation	AI Definition
International Telecommunication Union (ITU)	The ability of a computer or a computer-enabled robotic system to process information and produce outcomes in a manner similar to the thought process of humans in learning, decision-making, and problem-solving. In a way, the goal of AI systems is to develop systems capable of tackling complex problems in ways similar to human logic and reasoning.[18]
Organization for Economic Cooperation and Development (OECD)	A machine-based system that can, for a given set of human-defined objectives, make predictions, recommendations, or decisions influencing real or virtual environments.[19]
United Nations Educational, Scientific, and Cultural Organization (UNESCO)	Systems that have the capacity to process data and information in a way that resembles intelligent behaviour and typically include aspects of reasoning, learning, perception, prediction, planning, or control.[20]

| *Source: DCO research*

It is worth noting that despite their differences, the AI definitions used by international and multilateral organisations commonly delve into how AI systems interact with their environments, make decisions, and contribute to societal goals, offering a multidimensional perspective. On the other hand, the AI definitions used by some of the DCO Member States[21] tend to focus more on isolated aspects, such as data processing or cognitive functions, with little focus on the broader implications or the operational intricacies of AI systems.

While not an insurmountable obstacle, it is important to highlight that vague or imprecise definitions can hinder the design and implementation of governance frameworks, especially when these are meant to govern multi-faceted, rapidly evolving, and emerging digital technologies.[22]

In this context, it seems that the more thorough definitions used by international organisations may be better suited to shaping governance frameworks that are not only detailed but also actionable, avoiding the ambiguities that can arise from more simplistic or vague descriptions.[23] This level of precision is crucial for the development of effective AI policies as it helps reduce the risk of implementation challenges and compliance issues for all stakeholders, fostering a more coherent approach to regulating AI technologies across jurisdictions.

A possible solution to the disparity in national AI definitions, especially among the DCO Member States, is to align and converge their national AI definitions with a common, standardised definition. This would ensure that, despite differences in broader governance frameworks and national priorities, their AI policies remain compatible and interoperable across borders. Adopting a shared definition, either by borrowing from an existing international/multilateral organisation or by collectively creating a new one, would foster greater collaboration, simplify regulatory compliance, and enhance the consistency of AI governance.

3.2 Overview of Global Responsible AI Practices

All international and multilateral bodies with a public policy or regulatory instrument regarding AI acknowledge that this technology has a significant potential impact on increasing economic and social well-being,[24] transforming industries and increasing productivity. However, risks are also apparent. Some of these are already known, such as those related to privacy, data protection, cybersecurity, and algorithmic biases. However, there is potential for unintended consequences not yet conceptualised or assessed.

3.2.1 Regional and National AI Governance Initiatives

African Union

The African Union's (AU) *Continental Artificial Intelligence Strategy*,[25] launched in July 2024, aims to provide a harmonised framework for AI development across the continent. It promotes an inclusive, ethical, and people-centred approach to AI that aligns with Africa's broader developmental aspirations under *Agenda 2063*.[26] The strategy focuses on leveraging AI to accelerate socioeconomic development, addressing key areas such as healthcare, education, agriculture, and governance. By prioritising African realities, including cultural diversity, local languages, and historical contexts, the strategy seeks to foster innovation while protecting vulnerable populations from potential risks associated with AI technologies.

The strategy is built around five key focus areas, including governance, regulation, and capacity-building, with 15 action points designed to enhance AI infrastructure, talent development, data systems, and public-private partnerships. It also emphasises regional cooperation and aims to position Africa as an active participant in global AI governance, ensuring that AI technologies are adapted to local contexts and contribute to sustainable development. The strategy supports African nations in developing their own AI frameworks while promoting homegrown solutions to address pressing societal challenges.

Association of Southeast Asian Nations

Recent AI governance efforts in the Association of Southeast Asian Nations (ASEAN), particularly from 2023 to 2024, have seen significant strides in fostering a regional approach to AI ethics and regulation. The *ASEAN Guide on AI Ethics and Governance*,[27] updated in 2023, serves as a cornerstone for the region's AI policy framework. This voluntary guide adopts a risk-based approach to ensure the responsible use of AI systems across their lifecycle, emphasising transparency, accountability, and human oversight in high-risk AI applications. The guide also encourages public-private collaboration, fostering a supportive environment for AI innovation while addressing data governance and privacy concerns. Building on these efforts, the soon-to-be-published *ASEAN Responsible AI Roadmap* (2025-2030)[28] provides a longer-term vision for AI governance in the region. The roadmap focuses on regulatory alignment, capacity building, and addressing the challenges posed by emerging technologies like generative AI.

Within the region, Singapore stands out as a regional leader. Its AI governance initiatives tend to serve as a blueprint for many of the activities undertaken at the regional level. For example, *AI Verify*[29] is an internationally recognised toolkit developed to test AI models for transparency, fairness, and accountability, allowing developers to assess their AI systems' compliance with governance standards. Launched alongside the AI Verify Foundation in 2023, it aims to foster global collaboration on AI governance and provide a technical framework for mitigating risks associated with AI deployment. In

2024, *AI Verify* was extended to include tools for evaluating the risks and biases associated with generative AI, part of Singapore's broader efforts to ensure responsible innovation while safeguarding against potential harms.

Council of Europe

The Council of Europe (COE)[30] is one of the leading intergovernmental organisations in Europe, with a strong focus on human rights, democracy, and the rule of law. It comprises 47 member states, including 27 EU members, and its legal frameworks have shaped global policies on privacy and human rights. Notably, the COE's *Convention 108*, adopted in 1981, is the first binding international treaty to protect individuals against abuses related to the collection and processing of personal data. The modernisation of *Convention 108* [31], known as *Convention 108+*, extends its protections by incorporating regulations related to AI decision-making and profiling, making it highly relevant in today's digital age.

In 2019, the COE established the Ad Hoc Committee on Artificial Intelligence (CAHAI),[32] which explores the feasibility of developing a legal framework for AI regulation across Europe. This committee has played a pivotal role in ensuring that AI systems respect human rights, democracy, and the rule of law. The COE has also focused on the risks of facial recognition technology, calling for stringent rules on its use to protect privacy and prevent human rights violations.

More recently, in September 2024, the COE launched its Framework Convention on AI and human rights, democracy, and the rule of law (CETS No. 225).[33] This framework could be considered the first-ever international legally binding treaty aimed at ensuring that the use of AI is fully consistent with human rights, democracy, and the rule of law. With a technological-neutral approach, the treaty provides a legal framework covering the entire lifecycle of AI systems. It promotes AI progress and innovation while managing the risks it may pose, especially to human rights. The Framework Convention was signed by nine countries on a national level and by the European Union on a regional level.[34]

European Commission

The European Commission's *Ethical Guidelines for Trustworthy AI*,[35] published in 2019, further highlight the EU's approach to regulating AI. The Guidelines are based on three key principles: AI systems should be lawful, ethical, and robust. They also identify seven core requirements for trustworthy AI: human agency and oversight; technical robustness and safety; privacy and data governance; transparency; diversity, non-discrimination and fairness; societal and environmental well-being; and accountability.

These guidelines aim to ensure that AI technologies are developed in a way that upholds fundamental rights, fosters trust, and prevents harm to individuals and society. Much like the *EU AI Act*,[36] the Guidelines have influenced both national and international AI policies and are foundational to the ongoing development of AI legislation in the EU.

European Union

The European Union (EU) is a global leader in developing comprehensive AI policy frameworks, with its efforts anchored in a human-centric approach. The EU's flagship initiative is the *AI Act*,[37] which creates a comprehensive regulatory framework for AI, focusing on ensuring safety, transparency, and accountability in AI systems.

Entered into force in August 2024, the Act adopts a risk-based approach, categorising AI applications into four levels of risk: unacceptable, high, limited,

and minimal. The Act prioritises stricter oversight for high-risk AI systems, such as those used in critical sectors like healthcare and law enforcement, while fostering innovation by promoting the development of trustworthy AI through robust compliance requirements and safeguards, particularly around data protection, discrimination, and ethical considerations.

The Act has garnered significant attention for its potential extraterritorial impact and the possibility of triggering a 'Brussels Effect', where its regulations could become global standards.[38] While the Act is expected to influence AI development and deployment worldwide, its reach may be more limited than initially anticipated.[39] This effect highlights the complex interplay between EU regulations, international markets, and foreign governments in shaping global AI standards.

Numerous challenges regarding the Act's implementation and enforcement have emerged. Critics argue that the Act's product safety-oriented approach may provide limited protection for some of the values the EU intends to safeguard, such as fundamental rights.[40] Additionally, the Act's risk-based categorisation of AI systems and the associated requirements for each category pose implementation challenges.[41] Enforcing these regulations across diverse AI applications and ensuring compliance from both EU and non-EU entities will be a significant step. These challenges underscore the complexity of regulating a rapidly evolving technology on a global scale and highlight the need for ongoing refinement and adaptation of the AI Act's implementation strategies.

The Group of Seven

The Group of Seven (G7) has been at the forefront of discussions on the ethical and responsible development of AI. In 2018, the Canadian and French presidencies of the G7 launched the Global Partnership on AI (GPAI),[42] which fosters international collaboration on AI-related priorities, including research, development, and policy. GPAI focuses on ensuring that AI technologies are developed in alignment with human rights.

More recently, the 2023 G7 summit in Hiroshima marked a significant development in AI policy. The G7 leaders endorsed the *Hiroshima AI Process*,[43] which includes guiding principles applicable to AI actors across the entire AI lifecycle. This framework emphasises generative AI governance and human-centric AI development, reflecting the G7's commitment to managing AI risks while promoting innovation.

The Group of Twenty

The Group of Twenty (G20), representing the world's major economies, has also played a significant role in shaping global AI policy. The *G20 AI Principles*,[44] endorsed in 2019, draw heavily from the *OECD AI Principles*[45] to emphasise human-centric AI. These principles encourage countries to foster innovation while ensuring ethical standards are met. The G20 has particularly focused on promoting international cooperation and fostering an open, fair, and non-discriminatory digital economy.

At the 2023 G20 summit in New Delhi, leaders reaffirmed their commitment to these principles, calling for AI governance that prioritises transparency, accountability, and human rights protection. The G20 also recognised the importance of leveraging AI to solve global challenges in a responsible and inclusive manner.

Global Privacy Assembly

The Global Privacy Assembly (GPA)[46] is a global forum that brings together privacy regulators and experts to discuss emerging privacy issues, including

the use of AI. In 2018, the GPA adopted a *Declaration on Ethics and Data Protection in AI*,[47] emphasising fairness, transparency, and accountability in AI deployment. Since then, it has adopted various resolutions focused on AI governance, including a 2020 resolution on AI accountability that calls for clear accountability measures for AI systems. The GPA's recent 2023 R*esolution on Generative AI*[48] highlights the growing concerns around the deployment of these systems without adequate pre-deployment assessments. This resolution underscores the need for stronger governance to mitigate risks to privacy and fundamental rights.

The Organisation for Economic Co-operation and Development

The Organisation for Economic Co-operation and Development (OECD) has been a key player in shaping international AI governance through its influential *AI Principles*,[49] adopted in 2019. These principles are widely regarded as the most comprehensive global framework for AI policy and have informed regulations in the EU, G20, and Council of Europe. The OECD AI Policy Observatory,[50] launched in 2020, further supports policymakers by providing multidisciplinary analysis and data on AI across various policy areas.

In 2023, the OECD focused on updating the definition of AI systems to reflect advancements in generative AI. This updated definition has been incorporated into major regulatory frameworks, fostering global convergence on AI governance. In May 2024, the OECD updated its *AI Principles* to address advancements in general-purpose and generative AI, focusing on challenges related to safety, privacy, intellectual property rights, and information integrity.[51]

United Nations

The United Nations (UN) has taken an active role in AI governance, particularly through its focus on ensuring that AI technologies align with international human rights standards. The UN Secretary-General's 2020 *Roadmap for Digital Cooperation*[52] highlights the dual nature of AI as both a potential force for good and a significant risk to human rights if not properly regulated. This roadmap outlines the need for global cooperation in AI governance and emphasises transparency, accountability, and the protection of human rights.

In 2024, the UN High-Level AI Advisory Body released a significant report, *Governing AI for Humanity*,[53] outlining several initiatives aimed at global AI governance. Among its key recommendations were the creation of two AI governance mechanisms: an International Scientific Panel on AI to provide independent expertise, and a Global Dialogue on AI Governance to embed AI within international norms while supporting capacity development in developing countries. In August 2025, the UN General Assembly has adopted a resolution that sets out the terms of reference and modalities for both mechanisms.[54]

The UN has also announced a partnership with OECD to enhance their collaboration in order to bolster AI governance. This partnership will draw on the OECD's technical expertise, including the AI Policy Observatory, the Global Partnership on AI, and the UN's global influence. Their joint work will focus on regular, science-based assessments of AI's impact, supporting governments in creating timely, inclusive, and evidence-based AI policies to ensure AI is human-centred, safe, and trustworthy.

National Institute of Standards and Technology AI Risk Management Framework

As part of the actions outlined in the US AI Executive Order,[55] the National Institute of Standards and Technology (NIST) issued the NIST AI Risk Management Framework (AI RMF) to provide organisations with a framework to manage AI risks. The tool defines a cycle with four stages, as follows:

- **Govern:** Establish organisational policies, procedures, and governance structures for AI risk management.
- **Map:** Identify and assess AI-related risks, including those associated with data quality, model bias, and security.
- **Measure:** Monitor and measure AI performance and risk, using metrics to track AI system performance and identify potential issues.
- **Manage:** Take action to mitigate AI risks, develop strategies to address identified risks, and improve AI system performance.

The AI RMF was published in January 2023 after consultation with relevant stakeholders. The framework is voluntary and includes several elements to facilitate risk management, such as the definition of the taxonomy of AI risks and a set of risk management principles, practices, tools, and techniques. To increase its usability and effectiveness, it is meant to be a living document that evolves to reflect the latest developments in AI.

Frontier AI Safety Commitments

The Frontier AI Safety Commitments[56] are voluntary commitments regarding the safe and responsible development and deployment of frontier AI[57] models and systems, ratified by 16 private companies developing AI technologies. In May 2024, it was announced that the agreed principles that organisations would follow are identifying and managing risks, accountability, transparency, safety research, collaboration, and public benefit. The UK and the Republic of Korea led the adoption of the Commitments.

Organisations have defined and published their responsible AI frameworks and shared the best practices and research findings related to AI safety as part of their commitments.

3.2.2 Best Practice AI Governance Principles by Multilateral Organizations

At the multilateral level, discussions and awareness of the need to define standard ground rules for the use of AI, looking to mitigate risks, are already being adopted. Shared principles have also been defined, as summarised below.

Table 2. Multilateral AI Frameworks

Organisation	Principles	Approach
African Union (AU) Continental AI Strategy *(2024)*[58]	Human-centricity, transparency, accountability, fairness, human rights, privacy, equitable access, and minimisation of bias, discrimination, and societal harms	Focuses on AI's potential to boost Africa's socio-economic development and Agenda 2063, promoting ethical AI adoption, local capacity-building, and African-centric solutions. It emphasises regional cooperation and positions Africa as a key player in global AI governance.
ASEAN Guide on AI Governance and Ethics *(2023)*[59]	Transparency and explainability; fairness and equity; security and safety; human-centricity; privacy and data governance; accountability and integrity; robustness and reliability	Practical advice for organisations in the region interested in designing, developing, and deploying traditional AI technologies for commercial, non-military, or dual-use purposes.
Council of Europe (COE) Convention 108+ *(2019)*[60]	Human rights, democracy, rule of law, transparency, data privacy	The COE promotes AI frameworks that protect human rights and privacy. Convention 108+ extends data protection to AI, and the Ad Hoc Committee on AI (CAHAI) explores legal frameworks for ethical AI use, particularly regarding facial recognition.
Council of Europe (COE) Framework Convention on artificial intelligence and human rights *(2024)*[61]	Human rights, democracy, rule of law, transparency	Global legally binding instrument focused on the protection of human rights, democracy and rule of law. Designed on a risk-based approach.
European Commission Ethical Guidelines for Trustworthy AI *(2019)*[62]	Human agency, technical robustness, transparency, non-discrimination	Emphasis on lawful, ethical AI development, providing a foundation for ongoing regulations such as the AI Act. The Guidelines guide both private and public sectors in aligning with fundamental rights
European Union (EU) AI Act *(2024)*[63]	Safety, transparency, accountability, non-discrimination	A risk-based approach to categorise AI systems, ensuring safety and transparency for high-risk sectors like healthcare. The Act provides robust compliance standards while fostering innovation.

Organisation	Principles	Approach
G7 Hiroshima AI Process ***(2023)***[64]	Human-centric AI, transparency, accountability, security	Focuses on generative AI governance, emphasising transparency and accountability in AI systems.
G20 AI Principles ***(2019)***[65]	Human rights protection, transparency, explainability, fairness, accountability, regulation, safety, appropriate human oversight, ethics, biases, privacy, and data protection	Encourage international cooperation on human-centric AI, reaffirmed in 2023. The G20 aims to use AI to solve global challenges responsibly while ensuring transparency and innovation
Global Privacy Assembly (GPA) Declaration on Ethics and Data Protection in AI ***(2018)***[66]	Privacy, fairness, accountability, transparency, human rights	Promotes fairness and accountability, calling for stricter governance to mitigate risks to privacy and fundamental rights.
OECD AI Principles ***(2019, amended in 2024)***[67]	Inclusive growth, sustainable development and well-being; Human rights and democratic values, including fairness and privacy; Transparency and explainability; Robustness, security and safety; Accountability	A global standard for AI policy, updated in 2023 to include generative AI. The OECD AI Policy Observatory supports analysis and alignment of global AI governance efforts
United Nations Principles for the Ethical Use of Artificial Intelligence ***(2022)***[68]	Do no harm; defined purpose, necessity, and proportionality; safety and security; fairness and non-discrimination; sustainability; the right to privacy, data protection, and data governance; human autonomy and oversight; transparency and explainability; responsibility and accountability; and inclusion and participation	Guide the use of artificial intelligence (AI) throughout its lifecycle within United Nations system entities. It should be considered alongside other relevant policies and international laws.
United Nations (UN) Roadmap for Digital Cooperation ***(2020)***[69]	Human rights, do no harm, transparency, safety, accountability, inclusion	Calls for global AI governance based on building capacity, especially in developing nations.
UNESCO Recommendation on the Ethics of Artificial Intelligence ***(2021)***[70]	Human dignity, inclusion, environmental sustainability, transparency	Promotes ethical AI use aligned with human rights and sustainability goals, aiming for inclusive, transparent, and accountable AI development.

Organisation	Principles	Approach
United Nations Global Digital Compact ***(2024)***[71]	Digital inclusion, security, transparency, equity, human-centricity	Focuses on leveraging AI to support the Sustainable Development Goals (SDGs), promoting inclusive, human-centric AI governance at a global scale.
NIST AI Risk Management Framework (AI RMF) (2023) ***(2023)***[72]	Valid and Reliable, Safe, Secure and Resilient, Accountable and Transparent, Explainable and Interpretable, Privacy-Enhanced, Fair with Harmful Bias Managed	Definition of a set of tools for AI risk management and mitigation while promoting innovation.
Frontier AI Safety Commitments ***(2024)***[73]	Identifying and managing risks, accountability, transparency, safety research, collaboration, and public benefit	Companies developing AI voluntarily commit to implementing current best practices related to frontier AI safety.

| *Source: DCO research*

Principles such as human-centricity, transparency, accountability, fairness, and respect for human rights are recurring across multilateral AI frameworks. These principles guide AI governance across organisations like the AU, ASEAN, COE, and UN, reinforcing a shared commitment to ensuring AI is developed and deployed in ways that respect human dignity and societal equity.

What stands out is the focus on transparency and accountability, with many frameworks offering practical tools, such as best practices, guidelines, and toolboxes, to aid policymakers, AI developers, and users in aligning with these ethical goals. This alignment demonstrates a global consensus on the need for actionable governance mechanisms to mitigate AI risks while promoting innovation.

However, some principles appear less frequently or are unique to specific regions or organisations. For instance, ASEAN and the AU emphasise the importance of AI skilling and training to prepare Southeast Asian and African citizens for an AI-driven future, while UNESCO uniquely highlights environmental sustainability in its recommendations. These regionally or context-specific principles underline how different socioeconomic realities shape AI governance according to regional needs and priorities.

It is worth noting that several of these frameworks advocate for sector-specific regulations, reflecting a growing recognition that AI's role as an enabler across industries will require tailored frameworks that adapt to diverse use cases, rather than relying solely on overarching global principles.

Looking ahead, discussions within the UN and other forums point to emerging priorities in global AI governance. Increasing attention is being paid to ensuring that developing nations are not left behind in the AI revolution. Practical tools, such as toolkits and best practices, are becoming essential for guiding countries and industries through AI's complex ethical landscape. Additionally, the focus on harmonising global standards, particularly for generative AI, signals that the future of AI governance will likely include a more structured, inclusive approach that supports both regulatory innovation and international cooperation.

3.2.3 National and Regional AI Governance Frameworks

At the multilateral level, discussions and awareness of the need to define standard ground rules for the use of AI, looking to mitigate risks, are already being adopted. Shared principles have also been defined, as summarised below.

Table 3. Country/ Regional Initiatives of AI Frameworks

Country/ Region	Framework	Description	Key Features	Focus	Implementation
European Union	AI Act *(2024)*[74]	AI Regulation	Risk-based approach, classification process, compliance standards	Encourages innovation, protects fundamental rights	Risk categories, compliance requirements, transparency
United States	Executive Order on AI* *(2023)*[75]	Establishes disclosure requirements for developers to minimise risks for critical infrastructure	Risk assessment, Red Team[76] testing standards, AI Safety and Security Board	Safe AI development, protection against harmful uses	Disclosure requirements, risk assessments, safety board
	Blueprint for an AI Bill of Rights *(2023)*[77]	Five principles to guide AI system design, use, and deployment	Safe and effective systems, algorithmic discrimination protections	Promotes safe AI development, protects public rights	Principles-based approach, voluntary guidelines
	NIST AI Risk Management Framework *(2024)*[78]	Voluntary framework to assist in managing AI risks	Risk categories, trustworthiness criteria, adaptable nature	Promotes trustworthy AI, flexible integration	Risk management profile, trustworthy criteria
	**To be noticed that on January 20, 2025, President Donald Trump revoked Executive Order 14110, and issued a new executive order on January 23, 2025, titled "Removing Barriers to American Leadership in Artificial Intelligence." This new directive emphasizes enhancing America's global AI dominance by eliminating what it describes as "harmful" regulations imposed by the Biden administration. The Trump order directs federal agencies to review and potentially rescind policies inconsistent with its goals of fostering innovation and reducing government control over AI development. Since these documents were published after the date of finalization of this report, this information is added as complementary information.*				

Country/ Region	Framework	Description	Key Features	Focus	Implementation
China	AI Development Plan (AIDP) *(2017)*[79]	Strategic multi-year approach to AI governance	Technology lead, systems layout, market dominance	Enhances scientific and technological innovation, promotes national security	Research and development, legal framework, innovation ecosystem
	Deep Synthesis Provisions *(2022)*[80]	Regulations for generative sequencing algorithms in internet-based information systems	Responsibilities for providers, competition requirements	Ensures safe use of AI, prevents misuse	Provisions for deep synthesis technologies, competition requirements
Japan	Japan AI Bill *(yet to be promulgated into law)*[81]	Comprehensive legislative framework governing artificial intelligence in Japan	Provides basic principles for AI development and use, defines responsibilities for stakeholders. national AI strategy, AI body etc.	Emphasizes voluntary compliance and innovation enablement.	Planned to act as a soft-law framework
	AI Strategy-Social Principles of Humancentric AI *(2019)* [82]	A comprehensive strategy for AI development and governance	Innovation promotion, ethical AI use	Enhances scientific and technological innovation and promotes national security	Research and development, legal framework, innovation ecosystem
Singapore	National AI Strategy *(2020, updated 2023)*[83]	Seeks to promote best practices and standards for AI	Transparency, explainability, accountability	Encourages innovation, protects public rights	Voluntary guidelines, principles-based approach
United Arab Emirates	AI Strategy *(2017)*[84]	A comprehensive strategy for AI development and governance	Innovation promotion, ethical AI use	Enhances scientific and technological innovation and promotes national security	Research and development, legal framework, innovation ecosystem

| *Source: DCO research*

As shown in the above table, only the EU and China have defined prescriptive frameworks. The US has an intermediate tool, even though an Executive Order has a lesser legal hierarchy. The remaining countries have adopted general principles-based policy frameworks with recommendations on their identified areas of priority and implementation.

There are two main AI governance pillars based on the purpose of the intervention:

Industrial: The policies that focus on maximising the economic benefits that a nation can obtain from AI massification and use.

End-user/consumer protection: The policies that focus on managing the risks that may derive from AI services and products.

A responsible AI policy or governance framework is thus a combination of the two pillars at the convergence of the dual objective of industrial promotion and protection of consumers, which is required to maximise the benefits that AI offers to every industry and virtually all human activities and to protect individuals and nations from the identified risks. In other words, the benefits of AI and its enormous potential shall be used to increase economic well-being while also promoting human well-being.

Furthermore, this might also entail the decision not to tolerate specific risks if they outweigh the expected benefits or if the potential damage contradicts higher policy goals and principles (for instance, the integrity of children or human dignity). In said cases, many nations have decided that instead of being managed, the risk shall be eliminated. This is the case of the EU, which, by means of the EU AI Act, has introduced the category of "unacceptable risks"[85] and forbidden activities posing said risks.

3.3 Alignment of the DCO Member States with Global Standards

This section discusses how DCO Member States can align with the best practice Responsible AI Governance Practices found in the international frameworks, and what role can the DCO General Secretariat play to support them in this endeavour.

The current state of development of the multilateral AI frameworks, as well as the elements defined by various nations that have progressed in the adoption at the domestic level of governance instruments for AI, described in previous sections, demonstrates that, to date, defining standardised guiding principles is still outstanding.

This reflects the current stage of AI development, where public policy interventions are primarily aimed at orienting best practices and policies towards mitigating risks and maximising benefits while reserving prescriptive regulations for future stages of technological advancement.

The following table presents the alignment assessment with global standards by identifying the principles adopted by various DCO Member States.

Table 4. Principles in the DCO Member Sates AI Frameworks

Country	Instrument	Focus	Approach	Principles
Bahrain	National Policy for the Use of AI *(2025)*[86]	Responsible and secure use of AI to drive economic and social growth, while improving government efficiency across key sectors	Establishes a comprehensive framework for AI adoption based on four pillars: legal compliance, AI use and adoption, public education and awareness, and enhancing local and international cooperation	Fairness, equity and non-discrimination, transparency and explainability, integrity and non-fabrication, reliability and Safety, etc
	Sixth National Telecommunications Plan (2023) [87]	Implementing controls and penalties	Prescriptive. Mandates conduct and defines penalties	Privacy, personal freedoms, social values and traditions, non-discrimination
Bangladesh	Draft National AI Policy *(2024)*[88]	Maximise the use of AI for development and provide an ethical framework	Comprehensive approach with sector-specific use cases[89]	Social equity, equality, and fairness; transparency and accountability; safety, security, and robustness; sustainability; partnership and collaboration; human-centred AI
Cyprus	National AI Strategy *(2020)*[90]	Increase competitiveness and provide an ethical framework	Comprehensive approach with sector-specific use cases	Not listed. However, it should be noted that the EU AI Act is directly applicable in Cyprus as a Member State
Djibouti	**None**	None	None	None
The Gambia	**None**	None	None	None
Ghana	National Artificial Intelligence Strategy 2023-2033 *(2022)*[91]	Accelerate AI Adoption and provide an ethical framework	Build capacities across the nation and in specific sectors[92]	Follows OECD and UNESCO principles, such as Inclusive growth, sustainable development, and well-being; human rights and democratic values, including fairness and privacy; transparency and explainability; robustness, security and safety; accountability
Greece	Draft National Strategy for AI *(in progress)*[93]	Foster adoption of AI for national and industry development	Identify and build skills for productive use, provide safe development and use	It should be noted that the EU AI Act is directly applicable in Greece as a member State

Country	Instrument	Focus	Approach	Principles
Jordan	**AI Strategy and Implementation Plan** *(2022)*[94]	Industrial development with AI	Increase AI use in the nation for investment and development	The deployment of AI will be done by "finding a common ethical base" based on "human and religious values and the customs and traditions of society"
Kuwait*	**Draft National AI Strategy (2025-2026)**[95] **AI Ethics** [96]	Position Kuwait as a leader in AI innovation and adoption by 2028, promote responsible and ethical AI deployment	World-class AI research facilities, AI-driven sectoral transformation, implementation of AI safety regulations, venture capital support	The strategy proposes the establishment of AI safety regulation, legal and regulatory frameworks, and transparency and responsible data management.
Morocco*	**No official AI-specific instrument yet**	-	-	-
Nigeria	**National Artificial Intelligence Strategy** *(2024)*[97]	Industrial development with AI	Increase AI use in the nation for investment and development	The strategy proposes the development of national AI ethical principles that reflect fairness, transparency, accountability, privacy, and human well-being
Oman	**National Program for AI and Advanced Technologies** *(2024)*[98]	Economic and development sectors engagement with AI	Capabilities building and applications	Ethical, fair, and safe use of AI applications
Pakistan	**National AI Policy** *(2023)*[99]	Building an ethical, inclusive, and innovation-driven AI ecosystem that enhances skills, supports startups, and strengthens public services	Building AI infrastructure, enabling sector-wide adoption, and ensuring ethical, inclusive use	Fairness, transparency, accountability, privacy. Alignment with the UN SDGs, and UNESCO's Recommendations on the Ethics of AI
Qatar	**National AI Strategy for Qatar** *(2019)*[100]	Ethics and governance framework	Guidelines and solutions for ethical use	Qatari social, cultural, and religious norms, as well as international guidelines, including, explainability and interpretability

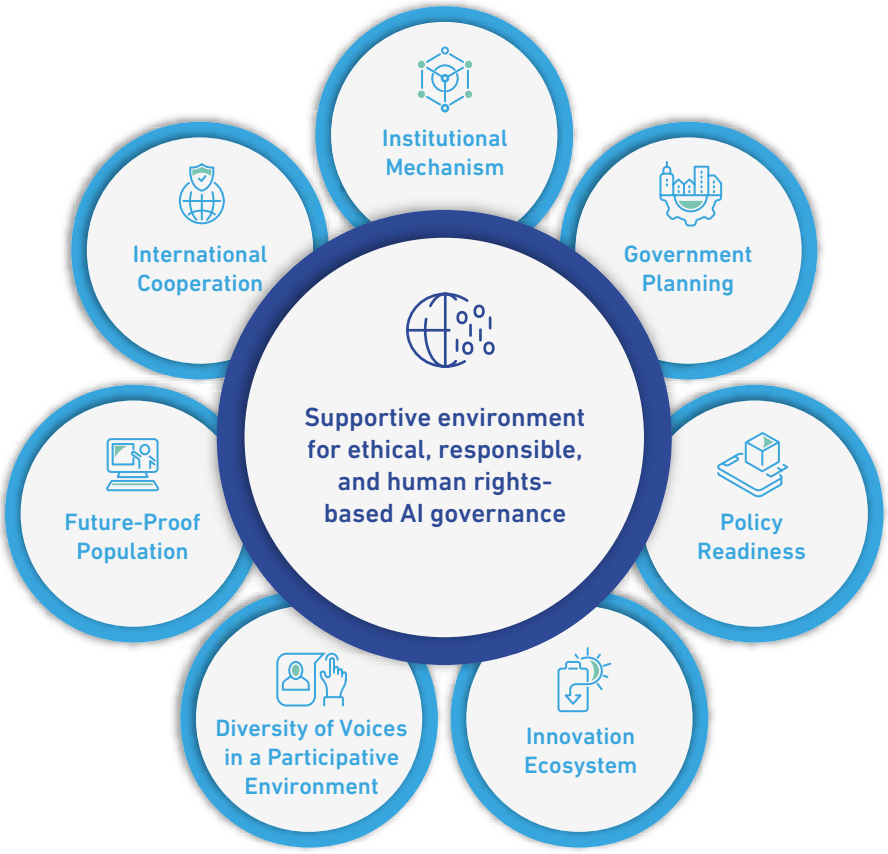
Country	Instrument	Focus	Approach	Principles
Rwanda	National Artificial Intelligence Policy for Rwanda *(2023)*[101]	Accelerating AI adoption across sectors for sustainable economic growth	Capabilities building and applications	The strategy emphasises the importance of ethical principles and precautions to mitigate the risks associated with AI, ensuring that the technology benefits citizens and does not cause harm
Saudi Arabia	National Strategy for Data & AI *(2020)*[102] Generative AI Guideline for Government *(2024)*[103] Generative AI Guideline for Public *(2024)*[104] AI Adoption Framework *(2024)*[105] AI Ethics Principles *(2023)*[106]	Industrial development with AI	Comprehensive approach. Capabilities building and applications- increase competitiveness	Fairness, Reliability and Safety, Transparency and Interpretability, Accountability and Responsibility; Privacy and Security
*** Discussion on AI national strategy is ongoing.**				

I *Source: DCO research*

3.4 Building Blocks of Responsible AI Governance

The research and analysis conducted throughout this section offer some valuable insights into the core building blocks that create a supportive environment for ethical, responsible, and human rights-based AI governance. We find that across the board, despite countries or multilateral organisations' divergent needs, priorities, or objectives, there are seven main areas where global best practices can be leveraged to advance responsible AI governance and use.

Figure 3. Seven Building Blocks that together create an enabling environment that makes it easier and likelier for ethical AI to effectively take shape



| *Source: DCO research*

These seven main areas or building blocks, based on the global best practices are presented as follows:

Institutional Mechanism: A national AI body or authority with a clear mandate and sufficient resources to undertake the coordination of AI-related efforts and resources at the national level.

A national AI authority with a clear mandate is essential for coordinating AI efforts across sectors. Countries leading in responsible AI governance have established national bodies that not only guide AI initiatives but also allocate sufficient resources to foster innovation and manage risk.

For instance, the European Union's AI Act and the US Executive Order on AI demonstrate strong governmental oversight, creating frameworks that encourage innovation while safeguarding against risks. The establishment of a centralised AI governance body helps to streamline AI governance across sectors, providing a coordinated approach to both opportunities and challenges. Countries like China have also put forward strategic multi-year AI development plans with dedicated resources to enhance their technological leadership while safeguarding societal values.

Government Planning: A national AI plan, roadmap, or strategy with a common vision, definitions, and objectives for AI prioritisation and operationalisation.

Countries with a well-defined national AI strategy exemplify the importance of having a coherent vision for AI advancements. National strategies include shared definitions and objectives that align with both national interests and international best practices.

For instance, Singapore's National AI Strategy and Japan's AI Strategy, *Social Principles of Human-centric AI*, both demonstrate comprehensive national planning for AI, embedding ethical and human-centred principles in their approach. These strategies provide a blueprint for industries, policymakers, and other stakeholders to work towards common goals, ensuring AI's development remains inclusive, transparent, and fair. This alignment of vision is essential to bridge national and international policy frameworks, such as those developed by OECD and UNESCO, which focus on inclusive growth, fairness, and transparency in AI.

Policy Readiness: Foundational data governance laws/policies/regulations (privacy, cybersecurity, copyright, cross-border data flows, etc.) to enable the expansion of data-driven technologies.

Data governance and AI governance are deeply interconnected, as effective AI governance frameworks rely on foundational policies governing data privacy, cybersecurity, and intellectual property to ensure fairness, accountability, and transparency in AI systems. Data governance establishes the principles and practices for managing data quality, privacy, and security, which are critical for training and deploying ethical and reliable AI. Without clear rules on data ownership, usage, and sharing, AI systems risk perpetuating biases and violating privacy laws, thereby limiting countries' ability to foster trust, enable cross-border collaboration, and ensure the responsible development and deployment of AI technologies.

For instance, the *US NIST AI Risk Management Framework* and China's *AI Development Plan* set strong foundations by addressing issues like privacy, cybersecurity, and algorithmic fairness. Additionally, the regulations on deep synthesis technologies in China provide specific guidance for emerging AI tools, ensuring that generative and synthetic media are governed in a manner that prevents misuse. Robust data governance frameworks help ensure that AI systems are built on secure and transparent data usage, reducing risks and enhancing trust in AI systems.

Innovation Ecosystem: A thriving innovation ecosystem that supports emerging technologies, including AI, is crucial for fostering a competitive and dynamic market. Countries that promote investment in AI start-ups and the digitalisation of SMEs create environments conducive to AI advancements.

Innovation-driven tech ecosystems are dynamic networks of interconnected stakeholders, including start-ups, corporations, research institutions, and governments, that collaboratively foster technological advancements and entrepreneurship. These ecosystems thrive on innovation as a core driver of growth, leveraging talent, investment, and infrastructure to create transformative solutions and competitive advantages in the digital economy.[104]

Japan and Singapore have developed innovation-driven ecosystems that not only promote AI research and development but also incentivise the formation of AI start-ups. In these countries, government policies actively support the digitalisation of SMEs, promoting an ecosystem where new businesses and established enterprises alike can harness the benefits of AI. The creation of regulatory sandboxes in these countries also allows for experimentation, ensuring that AI innovations align with societal values while remaining at the cutting edge of technological advancements.

Diversity of Voices in a Participative Environment: An active NGO/CSO ecosystem that provides a broader view on AI-related ethical issues, including more human-centred policymaking. This includes considerations that touch on the need to ensure AI does not harm the environment and is used in a sustainable manner.

Active participation from non-governmental organisations (NGOs) and civil society organisations (CSOs) ensures that a broader range of perspectives is considered in AI governance. This inclusivity helps to create human-centred policies that reflect societal needs and concerns.

For instance, the European Commission's AI framework actively involves stakeholders from diverse sectors, including industry, civil society, and academia, ensuring that AI policies are informed by a wide range of viewpoints. This approach helps address potential biases and ethical concerns that can arise in AI development, such as algorithmic discrimination and data misuse. Countries that prioritise the inclusion of diverse voices in their policymaking processes are better equipped to develop AI systems that are fair, accountable, and aligned with public expectations.

To effectively include a diversity of voices, a participatory environment that is conducive to multi-stakeholder dialogue is required, ensuring the right conditions are in place for more participative, inclusive, and representative policymaking.

A participative environment, where multi-stakeholder dialogue is encouraged, leads to more inclusive and representative AI policies. Countries that institutionalise stakeholder consultations ensure that policies are informed by various perspectives, from industry experts to consumer rights advocates.

For example, the G20 AI Principles underline the importance of multi-stakeholder dialogue in developing AI governance frameworks. These principles highlight human rights protection, transparency, explainability, and fairness as essential elements in building trust in AI. Countries like Singapore and the UAE have integrated such participative environments into their AI governance frameworks, ensuring that both public and private stakeholders contribute to shaping AI policies that are aligned with societal needs and global standards.

Future-Proof Population: Programmes and partnerships to support the education/skilling/training ecosystem to prepare the workforce for an AI-driven future, especially when it comes to working with AI-enabled tools and platforms.

Workforce preparation is essential for ensuring that populations are equipped to thrive in an AI-driven future. Countries with strong educational and skilling frameworks are better positioned to navigate the challenges and opportunities of AI.

The US Blueprint for an AI Bill of Rights outlines the need for safe and effective AI systems that protect against algorithmic discrimination while simultaneously investing in workforce training and upskilling. This approach ensures that the workforce is prepared for new roles created by AI technologies. Singapore's national AI strategy also emphasises the importance of equipping its population with the necessary skills to adapt to AI-driven industries, focusing on continuous education and vocational training to keep the workforce competitive and resilient.

International Cooperation: Processes, mechanisms, and relationships for active participation in international agenda-setting discussions and engagements on AI, including AI standard-setting.

International cooperation is key to establishing a globally harmonised approach to AI governance. Countries that actively participate in multilateral AI

discussions contribute to global standard-setting and benefit from shared knowledge and best practices.

Multilateral frameworks such as the OECD's *AI Principles* and UNESCO's *AI Ethics Guidelines* provide a foundation for international collaboration on AI governance. Countries that align their AI policies with these global frameworks can reduce regulatory fragmentation and enhance interoperability. For example, the alignment of national strategies with the G20 AI Principles enables countries to engage in global AI governance discussions, ensuring that their policies are both compatible with international norms and capable of addressing cross-border challenges like cybersecurity and privacy.

The global best practices for responsible AI governance outlined in this section provide a valuable framework for understanding the foundational principles guiding AI policy worldwide. These principles, centred on transparency, accountability, and inclusivity, are the building blocks for effective AI governance, balancing innovation with ethical considerations.

In the next section, we will examine how DCO Member States are responding to the challenges and opportunities of AI governance. Assessing the degree of alignment between DCO Member States and international/multilateral organisations allows us to better understand the specific approaches being taken, as well as how the lessons learnt from the global AI governance landscape can inform the development of responsible AI practices within DCO Member States.

04

Responsible AI in DCO Member States

04 Responsible AI in DCO Member States

This section provides a comprehensive overview of AI governance in the DCO Member States, focusing on their readiness, regulatory frameworks, key AI concepts, and strategies. It begins by assessing AI readiness through international indices, highlighting the varying stages of AI adoption across DCO Member States. The section then explores the primary AI legislation and definitions within these countries, providing insight into how each Member State is shaping its approach to AI governance.

A comparative analysis follows, identifying common trends and key differences in national strategies, with an emphasis on ethical AI practices and international alignment. Finally, the section maps out the key stakeholders driving AI innovation and concludes with a look at the research, development, and educational initiatives that are vital for fostering a sustainable AI ecosystem in DCO Member States.

4.1. AI Governance in DCO Member States

4.1.1. AI Readiness of Member States

International composite indexes provide a valuable starting point for comparative analysis of policies and approaches to AI governance. While these measures cannot fully capture the complexities of AI strategies, they are currently the only available proxy to quantify and assess a country's potential to foster ethical AI development. To this end, two indices are presented here, drawing from data available for a select number of DCO Member States.

- **Oxford Insights – Government AI Readiness Index**

The Oxford Insights' Government AI Readiness Index is an annual assessment designed to evaluate how prepared governments around the world are to adopt and effectively utilise AI in public services.[107] The index covers multiple dimensions of AI readiness, focusing on factors such as government leadership, data infrastructure, technology skills, and policy frameworks. It also assesses the broader environment, including the availability of digital infrastructure, governance standards, and the socioeconomic context that supports AI development and deployment.

The Government AI Readiness Index involves a composite scoring system (scored out of 100) that aggregates various indicators across seven key pillars: government vision, digital infrastructure, data availability, AI talent, innovation capacity, regulatory frameworks, and ethics. Data sources include publicly available information from global organisations, government reports, and expert interviews.

Countries are ranked based on their performance across these pillars, which are designed to measure both current capabilities and potential to scale AI initiatives. Specifically, the Governance and Ethics pillar measures the presence of appropriate regulations and ethical frameworks to implement AI in a way that builds trust and legitimacy. It assesses factors such as data protection and privacy legislation, cybersecurity, regulatory quality, and the existence of a national ethics framework.

Table 5. Government AI Readiness Index, Overall Scores and Ranks for 2024

DCO Member State	Government AI Readiness Index (Overall Score /100 - Global Rank /188)	Governance and Ethics (Dimension Score /100)
Bahrain	54.33	57.07
Bangladesh	47.12	41.75
Cyprus	61.50	68.66
Djibouti	35.19	25.44
The Gambia	26.95	49.62
Ghana	43.30	61.73
Greece	57.70	87.84
Jordan	61.57	76.82
Kuwait	51.26	50.5
Morocco	41.78	56.95
Nigeria	43.33	69.8
Oman	62.91	56.17
Pakistan	40.47	40.63
Qatar	68.22	79.29
Rwanda	51.25	75.62
Saudi Arabia	72.36	74.88

Source: Oxford Insights (2024) Government AI Readiness Index, https://oxfordinsights.com/ai-readiness/ai-readiness-index/

Disclaimer: The overall index score does not necessarily reflect all strategic efforts—whether ongoing or planned—by a country to advance AI governance and adoption.

According to the 2024 edition of the index, there is a noticeable range in government AI readiness scores, reflecting differences in resources, governance priorities, and levels of digital infrastructure.

High-scoring countries, such as Saudi Arabia (72.36) and Qatar (68.22), benefit from well-developed AI strategies[108], as well as substantial investment in digital infrastructure[109]. These elements enable them to achieve rapid AI advancement, driven by a combination of strategic focus, economic resources, and strong political commitment. For example, Saudi Arabia's high score may be due to the government's robust political commitment to AI. Indeed, both the **Vision 2030** programme[110] and the **AI Adoption Framework**[111] are supported and driven by the highest authority in the Kingdom.

Box 2. Saudi Arabia's AI Initiatives

At the recently concluded Saudi-U.S. Investment Forum, His Royal Highness Prince Mohammed bin Salman bin Abdulaziz Al Saud, Crown Prince, Prime Minister, and Chairman of the Public Investment Fund (PIF), announced the launch of **HUMAIN,** a PIF-owned company that will operate and invest across the entire AI value chain. HUMAIN will provide a comprehensive suite of AI services, including next-generation data centers, AI infrastructure, cloud capabilities, and advanced AI models and solutions. Additionally as part of its strategy, HUMAIN has entered a **strategic partnership** with **NVIDIA** to power its AI data centers with several hundred thousand of the company's most advanced GPUs over the next five years.

Saudi Arabia has also made other substantial investments in digital infrastructure to develop AI, as evidenced by several key initiatives. The country has announced a $100 billion plan to establish an AI technology hub, known as "Project Transcendence," which aims to invest heavily in AI infrastructure such as data centres and startups.[112]

This initiative is part of Saudi Arabia's broader Vision 2030 strategy, which seeks to diversify the economy and reduce dependency on oil by fostering innovation and digital transformation.[113]

Additionally, Saudi Arabia has partnered with Google Cloud to establish an AI hub featuring advanced infrastructure like tensor processing units (TPUs) and graphics processing units (GPUs), further solidifying its position as a global leader in AI.[114]

Middle-ranking countries, such as Bahrain, Greece, and Jordan, demonstrate moderate AI readiness. These nations are making steady progress in AI development but continue to face challenges in scaling adoption and improving global competitiveness. In the context of Greece, this may be explained by the difficulty of aligning a draft national strategy with a wide range of activities and requirements created by the **EU AI Act** – all while attempting to overcome low levels of adoption due to a lack of trust or understanding.[115]

In contrast, countries such as Djibouti and The Gambia are still in the early stages of their AI development journeys. Their current scores indicate areas where further progress is needed, particularly in strengthening infrastructure, building human capital, and enhancing governance mechanisms. At this stage, the absence of a national AI policy, strategy, or dedicated agency suggests that these countries may benefit from additional time and support to establish the foundational frameworks required to advance AI adoption effectively.

It is worth noting that having a high overall readiness score does not necessarily lead to a high score on the governance and ethics dimension. For example, Bangladesh with a moderate overall score of 47.12, has a lower score of 41.75 in governance and ethics. This indicates potential challenges in ethical AI implementation despite growing AI capabilities. Nonetheless, it is worth noting that Bangladesh is making efforts to reduce gaps in AI governance and ethical AI use, as highlighted in the country's draft AI Readiness Assessment Methodology (AI-RAM) report.

Conversely, countries like The Gambia and Ghana, though having relatively low overall scores at 168th and 95th respectively, demonstrate stronger governance and ethics scores (49.62 for The Gambia and 61.73 for Ghana). This suggests that while their approach to AI governance may be maturing, there are strong policy foundations that will allow ethical AI practices to emerge. Indeed, the Governance & Ethics pillar of the Index is a composite score that is built from five main indicators: Data protection and privacy laws (from the **UN Data Protection and Privacy Legislation Worldwide database**),[116] Cybersecurity **(ITU Global Cybersecurity Index)**,[117] Regulatory quality (World Bank **WGI Indicators database**),[118] Ethical principles (Oxford Insights desk research), and Accountability (World Bank **WGI Indicators database**)[119]. As such, a country with data protection, privacy, and/or cybersecurity laws and regulations in place may score high in that regard, all while not having measures or mechanisms specific to ethical AI.

- **Center for AI and Digital Policy – AI and Democratic Values Index**

The Center for AI and Digital Policy's (CAIDP) **AI and Democratic Values Index** is an annual report that evaluates countries' commitment to democratic principles in their AI adoption and governance.[120]

The index focuses on how governments are incorporating human rights, the rule of law, and public accountability into their AI policies and

practices. It assesses a range of factors, such as transparency, privacy protection, the inclusivity of AI development, and the implementation of ethical guidelines. The index aims to provide a global snapshot of how countries align their AI strategies with democratic values, identifying leaders and laggards in this area.

Unlike the **Oxford Government AI Readiness Index**, the **AI and Democratic Values Index** does not measure technical or infrastructural AI readiness. Instead, it assesses the institutional, democratic, and representative apparatus that allows a country to make AI laws/policies inclusive, fair, and participative. The index includes key indicators that reflect democratic principles in AI governance, including the presence of AI regulations that safeguard civil liberties, adherence to international human rights frameworks, and mechanisms for public participation in AI policymaking.
Scored out of a total of 12, the index draws on data from government reports, legal frameworks, and expert analysis to assess countries based on their efforts to integrate democratic values into AI governance. Overall, the index provides critical insights into how governments can promote responsible AI development while protecting fundamental rights and freedoms.

The table below presents the overall scores obtained by DCO Member States for which results are available.[121]

Table 6. AI and Democratic Values Index, Overall Scores for 2025

Country	AI and Democratic Values Index (Overall Score /12)
Bahrain	3
Bangladesh	4
Ghana	4.5
Kuwait	2.5
Morocco	5.5
Nigeria	6
Pakistan	3.5
Qatar	5
Rwanda	6
Saudi Arabia	7

Source: CAIDP (2025) Artificial Intelligence and Democratic Values Index 2025, https://www.caidp.org/reports/aidv-2025/?utm_source=chatgpt.com

According to the 2025 edition of the index, there are wide discrepancies among DCO Member States, indicating a wide range of priorities and approaches when it comes to governing AI, but also data gaps.

Nigeria (6), Rwanda (8), and Saudi Arabia (7) achieve the highest scores, demonstrating that they have established or are in the process of establishing comprehensive AI governance frameworks that emphasise ethical AI practices and democratic values. These countries have well defined national AI strategies, and demonstrate a strong commitment to integrate representative and/or participative principles into their AI governance, emphasising the protection of human rights, data privacy, and inclusive growth.

In the middle range, we find countries like Ghana (4.5) and Qatar (5). These countries have made notable progress in AI governance, balancing the need for technological advancement with ethical considerations. Ghana has introduced a comprehensive national AI strategy that focuses on responsible AI development and the inclusion of representative/ participative principles in its AI governance. Qatar also shows a commitment to integrating representative and/or participative principles in its AI practices, particularly through international collaboration and global initiatives.

At the other end of the spectrum, countries like Bahrain (3) and Pakistan (3.5) exhibit lower scores on the AI and Democratic Values
Index. In this regard, the absence of a national body/ agency focused on AI may be a major barrier, as such an institution may be well positioned to ensure ethical principles and human-centred values are imbued in AI policies and strategies.

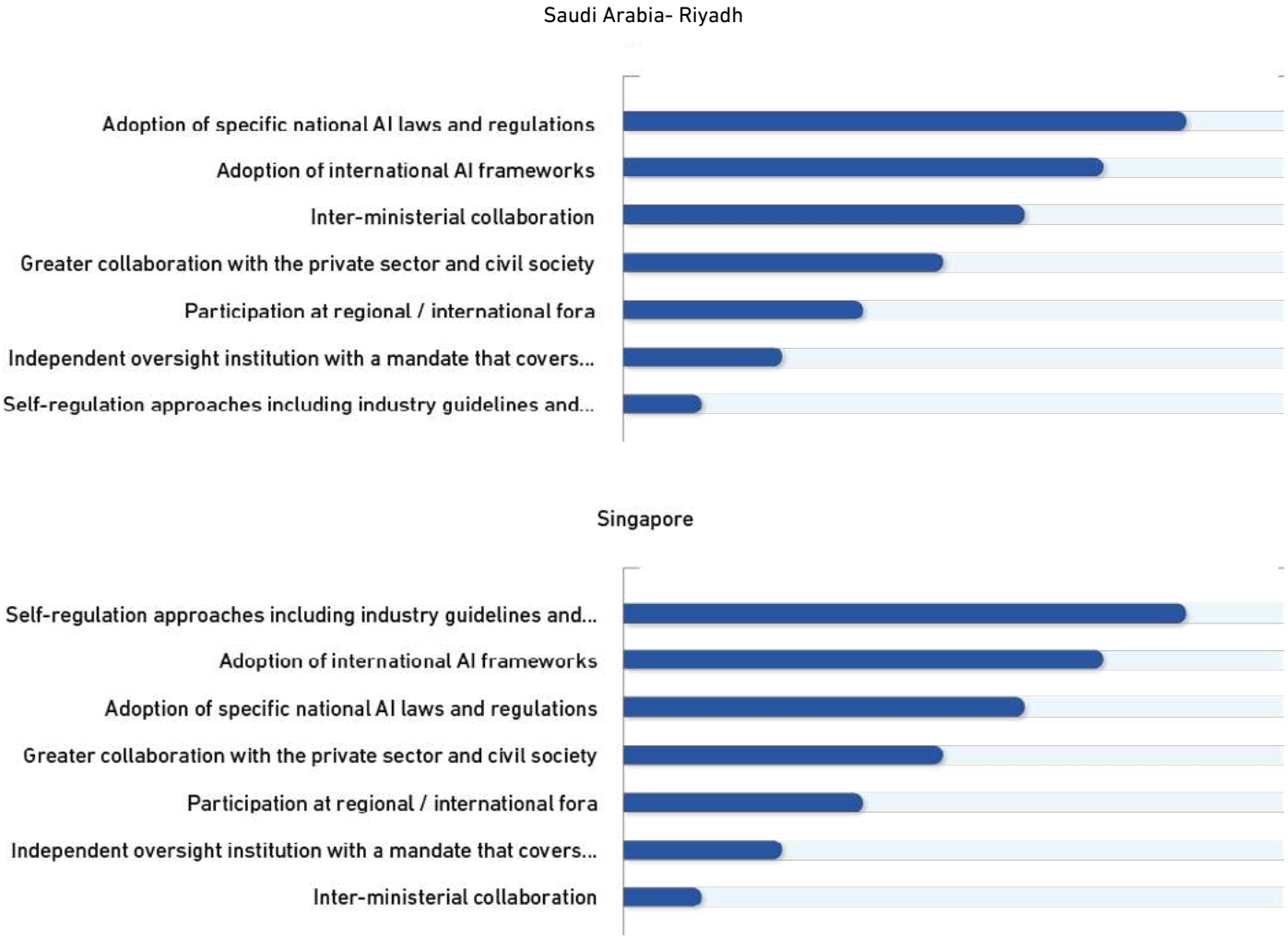
The diverse AI readiness and governance scores reflect a wide range of policy and regulatory approaches to AI, influenced by each nation's unique political, economic, and social context. High-scoring countries are likelier to have established or be developing comprehensive frameworks that integrate ethical AI practices and representative and/ or participative principles, while others are likelier to be in the early stages of formalising both their AI strategies and the principles, values, or standards they will be prioritising.

4.1.2. AI Laws, Policies, and Regulations Across DCO Member States

The two indexes above show that DCO Member States currently have different AI priorities and capabilities. While these quantitative assessments cannot paint a complete picture of countries' readiness to foster ethical and responsible AI environments, they do suggest that AI readiness can be supported or hindered by the existence, or absence, of specific legal and regulatory frameworks governing AI. To this end, this sub-section examines the laws, policies, and regulations that DCO Member States have in place, identifying areas that may need to be strengthened to effectively operationalise ethical and responsible AI deployment.

According to our interviews with AI stakeholders (citizens, non-government/civil society organisations, private-sector players, and government officials), the majority believe that the adoption of national frameworks specific to AI is the most effective way to address potential risks. This denotes that having dedicated AI strategies, rather than incorporating AI into broader technology policies, is seen as critical for effectively managing the unique challenges posed by AI. It also suggests that as more DCO Member States develop and formalise such frameworks, there will be increasing momentum for coordinated, inter-jurisdictional efforts in AI governance.

Figure 4. Interview results on the approaches that AI stakeholders believe best address AI risks.



Source: In-person interviews conducted by the DCO on 11 September 2024 (Riyadh) and 30 October 2024 (Singapore), covering 39 respondents who attended the DCO Ethical AI Roundtables. Respondents include AI stakeholders such as policymakers, regulators, industry players, and non-government/civil society organisations.

Across respondents in Riyadh and Singapore, the most highly ranked approaches are the adoption of specific national AI laws and regulations, self-regulation approaches, such as industry guidelines or codes of practices, and international AI frameworks. This underscores the recognition that AI governance should be tackled based on coordination at the local, national, and international levels. Indeed, the global nature of AI development and its cross-border implications mean that international collaboration and harmonisation of policies are critical for addressing its risks.

The interviews further reveal that stakeholders value inter-ministerial collaboration and greater cooperation with the private sector, highlighting the importance of a multi-stakeholder approach to AI governance.

The interview findings are reflective of a growing global trend among countries to establish formal AI policies and strategies tailored to their unique socioeconomic and technological contexts. The table below highlights which DCO Member States have already implemented or are in the process of drafting national AI strategies. These frameworks, ranging from standalone AI laws to broader national programmes, illustrate the varying approaches to AI governance across DCO Member States.

Table 7. National AI Plans and Strategies in DCO Member States (Where Available)

Country	National AI Strategy / Plan	Date of Publication	Link to Document
Bahrain	National Policy for the Use of AI	2025	pdf[122]
Bangladesh	Draft National AI Policy	2024 (expected)	pdf[123]
Cyprus	National AI Strategy	2020	pdf[124]
Ghana	National Artificial Intelligence Strategy 2023-2033	2023	pdf[125]
Greece	Draft National Strategy for AI	2024/2025 (expected)	Website[126]
Jordan	AI Strategy and Implementation Plan (2023-2027)	2022	pdf[127]
Nigeria	National Artificial Intelligence Strategy	2024	pdf[128]
Oman	National Program for AI and Advanced Technologies	2024	pdf[129]
Pakistan	National AI Policy	2025	pdf[130]
Qatar	Qatar's National AI Strategy	2020	pdf[131]
Rwanda	National Artificial Intelligence Policy for Rwanda	2023	pdf[132]
Saudi Arabia	National Strategy for Data & AI	2020	Website[133]
	Generative guidelines for government	2024	pdf[134]
	Generative AI Guidelines for the Public	2024	pdf[135]
	AI Adoption Framework	2024	pdf[136]
	AI Ethics Principles	2023	pdf[137]

Source: DCO research

Center for AI and Digital Policy – AI and Democratic Values Index

Overall, the 16 DCO Member States can be categorised into three broad groups:

1

Countries with a Defined/Structured National Approach:
Bahrain, Cyprus, Ghana, Jordan, Nigeria, Oman, Qatar, Rwanda, and Saudi Arabia are countries with established comprehensive frameworks for AI adoption and governance. These countries are investing in AI education, research, and infrastructure, often working to attract significant investments in AI-related industries. They also emphasise the importance of ethical AI development, data protection, and human rights considerations in their national policies.

- Bahrain (prescriptive approach): The proposed **Artificial Intelligence Law (AI Law)**[138] if adopted, will serve as one of the first standalone AI regulations among DCO Member States. The law will address AI governance, ethical AI practices, and the responsible deployment of AI technologies across various sectors.

- Cyprus (prescriptive approach): The **National AI Strategy**[139] focuses on practical AI applications in specific sectors like public services and education. Cyprus is bound by EU legislative tools and the **EU AI Act**,[140] enforced since August 2024, and several actions will be implemented from then on.

- Ghana (principles-based approach): **The 2022 National Artificial Intelligence Strategy (2023–2033)**[141] emphasises expanding AI education, ethical AI, and alignment with international guidelines, such as the OECD AI Principles.

- Jordan (principles-based approach): [142] The National AI Code of Ethics [143] provides guidance for ethical AI development and use, grounded in human and religious values, societal customs, and traditions, emphasizing key principles such as accountability, transparency, and respect for individual privacy.

- Nigeria (principles-based approach): **The National AI Strategy**[144] focuses on human-centric design, AI ethics, and protecting human rights.

- Oman (principles-based approach): The **National Program for AI and Advanced Technologies**[145]serves as a comprehensive national strategy aligned with **Vision 2040**.[146] The strategy emphasises responsible AI development, including ethical guidelines that address fairness, transparency, and data privacy. The country emphasises responsible AI development through ethical guidelines and robust data protection laws.

- Qatar (prescriptive approach): The **National AI Strategy**[147] is part of Qatar's **Digital Agenda 2030**.[148] The strategy focuses on integrating AI into various sectors, supported by collaborations with international institutions like Google Cloud and initiatives such as the AI ICT Academy.

- Rwanda (principles-based approach): The **National AI Policy**[149] aims to position the country as Africa's AI hub, with a strong emphasis on ethical AI and transparency.

- Saudi Arabia (principles-based approach): The **AI Adoption Framework**[150] serves as a strategic guide for implementing AI across diverse economic sectors. This framework advances the nation's vision of building an innovation-driven, knowledge-based society by providing detailed guidance, defining key implementation steps, and incorporating global best practices.

  This framework is complemented by the **AI Ethics Principles**,[151] which establish ethical principles, guidelines, and regulations for AI system development, focusing on responsible and fair use across sectors. Key actions include promoting fairness, privacy, safety, accountability, and transparency in AI systems while ensuring alignment with cultural values and protecting human rights.

2

Countries with Draft National Policies/Strategies in the Making:
Bangladesh, Greece, and Morocco are currently developing draft national policies and/or strategies. Though these are at different stages of advancement, they tend to take a more industry-driven approach, focusing on guidelines that build towards broader governance frameworks, as well as public-private partnerships that drive AI innovation and investment.

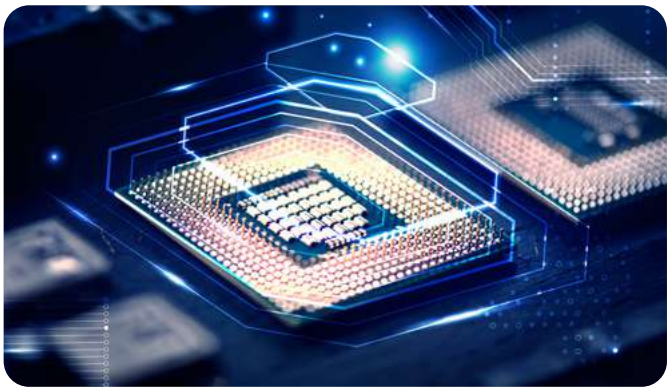
- Bangladesh: Aligned with Bangladesh's vision for progress and development in the coming decades, and guided by the[152] **National Strategy for AI (2019-2024)**,[153] the draft **National AI Policy**[154] emphasises principles like transparency, fairness, and human-centred AI, with efforts to establish an institutional framework for responsible AI. Bangladesh has adopted the **UNESCO Recommendations on Ethics in AI**[155] and is working with UNESCO to assess its AI landscape.

- Greece: Aligned with the **Hellenic Digital Transformation Strategy**,[156] the draft **National AI Strategy**[157] aims to democratise the use and impact of AI while safeguarding against its potential risks. Expected to focus on digital governance and sector-specific AI developments, the strategy will align with **EU guidelines (EU AI Act)**[158] and international standards, like the **OECD AI Principles**.[159]

- Morocco: The bill presented by the parliamentary group of the Moroccan Labor Union on the regulation of AI still has a long way to go before becoming official policy.[160]

In the meantime, sectoral initiatives like the **Al-Khawarizmi**[161] programme are advancing AI research in fields such as health and agriculture.

- Pakistan: Pakistan's National AI Policy recognises the importance of ethics and human-centricity. It is thus largely aligned with the **UNESCO Recommendations on Ethics in AI**.[162] Moreover, Pakistan's National AI Policy 2025 focuses on awareness and readiness, ecosystem building, adoption, and international collaboration in the field of artificial intelligence.[163]



3

Countries that are Considering Developing AI Policies and Strategies:
Djibouti and The Gambia have the opportunity to start working on formalised or structured national AI strategies. Nevertheless, these countries may also focus on developing foundational ICT infrastructure and/or aligning with international AI principles. Most of these countries align their AI governance with international principles and agreements, emphasising global cooperation on AI governance.

- Djibouti: Djibouti does not yet have a formal AI strategy or regulations in place.
- The Gambia: The Gambia is focusing its efforts on foundational ICT infrastructure, while there is also an opportunity to develop a holistic AI strategy.
- Kuwait: Kuwait is actively involved in AI initiatives in education and research through institutions like the Kuwait Institute for Scientific Research (KISR) and Kuwait University, and is currently working to finalize its AI strategy.

4.1.3. Key AI Concepts and Definitions Within DCO Member States

Institutional and infrastructural readiness provide the backbone for AI governance. However, the effectiveness of these frameworks often depends on how key AI concepts and definitions are understood within national contexts. It is thus important to explore how DCO Member States define critical AI concepts, as definitions not only reflect the nuances of their respective strategies but can also influence the impact of AI governance frameworks.

Despite a majority of them having laws, policies, regulations, and strategies specifically devoted to AI, not all DCO Member States have clear definitions of key AI concepts and notions. The DCO Member States Bangladesh, Ghana, Greece, Jordan, Oman, and Saudi Arabia define the term 'artificial intelligence' as follows:

Table 7. National AI Plans and Strategies in DCO Member States (Where Available)

Country	Key AI Definitions	Definition Details	Source
Bangladesh	Artificial Intelligence (AI)	The capacity of machines to perform psychological errands like reasoning, seeing, learning, critical thinking, and basic leadership	National Strategy for AI (2019-2024)[164]
Ghana	Artificial Intelligence (AI)	An array of technologies relying on algorithms at their core to 'think' or 'act' towards solving a problem	National Artificial Intelligence Strategy 2023-2033[165]
Greece	Artificial Intelligence (AI)	A collection of technologies that combine data, algorithms, and computing power	Democratising AI: A National Strategy for Greece[166]
Jordan	Artificial Intelligence (AI)	Simulation of human intelligence by machines	AI Strategy and Implementation Plan (2023-2027)[167]
	Machine Learning (ML)	Algorithms enabling computers to learn	
	Ethical AI	AI aligned with fairness, transparency, and accountability	
Oman	Artificial Intelligence (AI)	Software programs and applications that mimic the cognitive abilities of humans, and whose work stems from the ability to analyse external data and develop new knowledge rules. This results in solutions to problems and self-learning and its conditioning and use achieves new targets and goals	National Program for AI and Advanced Technologies[168]
Saudi Arabia	Artificial Intelligence (AI)	A field of computer science focused on building systems capable of performing tasks that typically require human intelligence, such as learning, reasoning, and self-development. It is also referred to as "machine intelligence"	AI Adoption Framework[169]
	AI Ethics	A set of values, principles, and techniques to guide moral conduct in developing and using AI technologies	AI Ethics Principles[170]

Source: DCO research

The scope and detail of AI definitions vary significantly across DCO Member States, reflecting different approaches to how AI is understood and articulated. For example, Oman stands out with a particularly comprehensive and detailed definition that not only captures the essence of AI but also elaborates on the operational aspects, such as the ability of AI systems to analyse data, learn, and autonomously achieve goals. In contrast, Greece offers a broader definition that focuses more on the foundational components of AI, such as data, algorithms, and computing power, without delving into the specifics of how these elements function together.

Bangladesh and Ghana provide definitions that are more centred on the cognitive abilities of AI, emphasising tasks like reasoning, learning, and problem-solving. However, they refrain from engaging with the technical specifics of AI technologies.

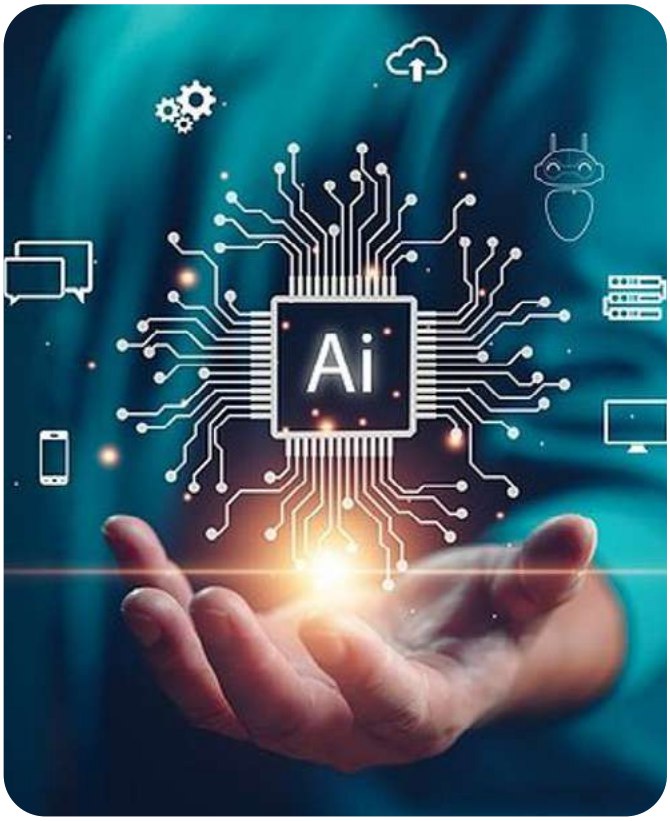
Moreover, the inclusion of ethical AI in national strategies is not uniform, with only Jordan and Saudi Arabia explicitly defining 'ethical AI'. These countries emphasise the importance of principles such as fairness, transparency, and accountability in the deployment of AI systems, reflecting a growing awareness of the ethical implications of AI and the necessity of guiding frameworks to ensure its responsible use.

The differences in AI definitions among DCO Member States have several important implications for the development and implementation of AI governance frameworks. One of the primary concerns is the potential for policy inconsistency, which can arise when definitions are either too broad or too vague. Such an imprecision can lead to varying interpretations by different stakeholders, creating confusion and hindering the effective governance of AI across sectors. This inconsistency in understanding what constitutes AI could make it difficult to uniformly enforce regulations, leading to significant challenges in implementation.

Furthermore, the absence of a shared understanding of AI could result in the development of divergent AI governance frameworks across DCO Member States. Without common definitions, each country may pursue different objectives and approaches, which could impede collaboration and alignment on key issues, such as AI ethics, bias mitigation, and data protection. This divergence might weaken the Member States' collective ability to address the ethical and social implications of AI, as different countries may prioritise different aspects of AI regulation based on their unique definitions.

The lack of uniform definitions can also hinder the deployment of ethical and responsible AI practices. When stakeholders across government, industry, and civil society do not have a common understanding of AI, it becomes challenging to align on best practices for responsible AI use. This misalignment could slow the adoption of ethical AI standards, making it more difficult to address the societal impacts of AI technologies effectively.

At a broader level, the disparities in AI definitions could complicate efforts to achieve interoperability of AI platforms and systems across jurisdictions. This lack of harmonisation could limit the ability of DCO Member States to collaborate on AI initiatives or integrate AI technologies seamlessly across borders. As a result, these countries may face significant barriers in attempting to realise the full potential of AI in driving innovation and economic growth while ensuring ethical and responsible use.



4.1.4. Comparative Analysis of AI Strategies and Policies

As we have seen, the diversity in how DCO Member States define AI concepts contributes to variations in their governance strategies. To provide a clearer picture, we will now conduct a comparative analysis of these strategies, identifying points of convergence and divergence in their approaches to ethical AI governance, international alignment, and sectoral focus.

The 16 DCO Member States are at different stages in developing their respective approaches to responsible AI. The biggest difference lies in the type of instrument developed to frame and govern AI (law, policy, regulation, strategy, roadmap, etc.), as well as the degree to which ethical and responsible AI guide the various frameworks.

Despite these differences, some points of convergence can be found. These include a recognition of the importance of operationalising AI in a responsible and ethical manner, as well as the need to align with internationally recognised principles and standards.

4.1.5. Points of Convergence

As we have seen, the diversity in how DCO Member States define AI concepts contributes to variations in their governance strategies. To provide a clearer picture, we will now conduct a comparative analysis of these strategies, identifying points of convergence and divergence in their approaches to ethical AI governance, international alignment, and sectoral focus.

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Despite these differences, some points of convergence can be found. These include a recognition of the importance of operationalising AI in a responsible and ethical manner, as well as the need to align with internationally recognised principles and standards.

International Alignment:
Many DCO Member States demonstrate a strong commitment to aligning their AI governance frameworks with international standards. This includes adherence to widely recognised principles, like the **OECD AI Principles**[171] and **UNESCO Recommendations on Ethics in AI.**[172]

For example, Bahrain has made concerted efforts to integrate these global standards into its national policies, reflecting its broader goal of being a hub for ethical AI innovation. Similarly, Cyprus and Greece emphasise harmonising their AI regulations with international norms, recognising that this alignment not only promotes ethical AI but also ensures that their AI ecosystems are compatible with global markets and innovation standards. These countries see such alignment as critical to fostering trust in AI systems both domestically and internationally.

This convergence towards global principles illustrates a broader trend among DCO Member States to ensure responsible AI deployment. While still developing its AI strategy, Bangladesh has also been prioritising alignment with international frameworks as it seeks to advance AI capabilities across various sectors. The international alignment is not just about ethics but also about remaining competitive in the global AI landscape. The DCO Member States view these global frameworks as essential guideposts for navigating the complexities of AI governance and ensuring that AI development benefits all stakeholders, from governments to citizens.

Emphasis on Ethical AI:
Ethical AI is at the forefront of the strategies developed by many DCO Member States, especially those with more structured national AI policies. These countries prioritise guidelines that promote fairness, transparency, and the protection of human rights.

For instance, Bahrain and Saudi Arabia have embedded ethical considerations deeply within their AI frameworks. These nations recognise the importance of building AI systems that do not just advance technology but do so in a way that is socially responsible. Ethical AI governance ensures that issues like bias, discrimination, and privacy violations are proactively addressed in AI deployment.

Ethical AI is also seen as a competitive advantage for nations looking to attract investment and foster innovation in AI. Countries like Cyprus have developed specific ethical AI guidelines to ensure that their AI systems are not only effective but also equitable. This emphasis reflects a growing understanding that AI cannot achieve its full potential without a firm ethical foundation, which includes considerations of social impact, accountability, and inclusivity.

Sectoral Focus:
A key trend across DCO Member States is the focus on industry-led guidelines and partnerships, even when overarching national AI strategies may still be in development. Many of these nations prioritise AI in sectors that are critical to their economies, such as healthcare, agriculture, and public services.

Morocco, for instance, has launched the **Al-Khawarizmi** programme, which aims to integrate AI into sectors including agriculture and education.[173] This focus on sectoral applications allows countries to demonstrate the immediate value of AI, helping to build momentum for broader adoption and regulation.

Cyprus, meanwhile, has concentrated on applying AI to improve public services, showcasing how it can enhance government efficiency and transparency.

Even without fully developed national AI strategies, these sectoral initiatives highlight the importance of industry-driven AI adoption. The emphasis on industry-led guidelines and partnerships reflects a pragmatic approach to AI adoption, prioritising areas where the technology can have the most immediate and significant impact.

4.1.6. Points of Divergence

Level of Formalisation:
The level of formalisation of AI strategies among DCO Member States varies significantly. Some countries, such as Ghana, Nigeria, and Rwanda, have developed comprehensive national AI strategies that lay out clear plans for the development, governance, and implementation of AI across various sectors.

These strategies typically include ethical guidelines, sectoral applications, and a roadmap for the future of AI within their borders. For example, Rwanda has been a leader in AI adoption in Africa, integrating it into healthcare, agriculture, and education as part of a broader strategy to position itself as a regional tech hub. Since 2022, the African Development Bank has supported companies like Viebeg Technologies, a venture capital-backed HealthTech company that helps Rwandan healthcare facilities manage supply chain processes (from shipping to warehousing, distribution, and inventory management) to ensure they have the precise medical supplies in stock.[174] In the agricultural sector, farmers receive decision support through an IVR chatbot, and in education, schools are experimenting with various AI-powered platforms for personalized learning.

Similarly, Nigeria's national AI strategy emphasises the role of AI in boosting the economy and addressing social challenges, highlighting the importance of a structured approach. According to a recent study, AI may not be the only solution, or a perfect one, to longstanding social issues. However, it can help alleviate important challenges. In parts of Nigeria, AI can be harnessed to enhance the efficiency, transparency, and inclusivity of education financing systems, with a particular focus on promoting gender equality in educational access (more specifically, on overcoming the problem of underfunding, mismanagement, and the gender disparities that hinder the Nigerian education system).[175]

On the other hand, several countries within the DCO either lack a structured AI strategy or are still

in the process of developing one. For instance, Djibouti and The Gambia have yet to formalise any national AI strategies, which may hinder their ability to leverage AI effectively across their economies.

Morocco, meanwhile, is in the process of developing a more formal approach to AI, focusing on industry-led guidelines and partnerships as a stepping stone towards a national strategy.

Regulatory Focus:
Among DCO Member States, the focus on AI regulation varies significantly, with some nations taking proactive steps to introduce AI-specific legislation while others have yet to establish any governance frameworks.

Bahrain has proposed AI-specific legislation aimed at ensuring AI development within the country aligns with ethical standards and promotes responsible innovation.[176] This approach includes not only regulatory measures but also the creation of an enabling environment for AI innovation, balancing governance with growth. Jordan, meanwhile, has embedded AI considerations into its broader regulatory landscape, including laws like the **Data Protection Law**, which supports responsible AI by ensuring that data privacy is a central concern in AI applications.[177]

On the other hand, countries like Djibouti and The Gambia are still in the early stages of AI adoption and have yet to introduce specific AI governance frameworks. In the absence of national strategies, these countries often rely on broader international agreements or principles to guide their approach to AI. However, without dedicated regulatory measures, there is a risk that AI development may proceed without adequate oversight, potentially leading to issues related to ethics, bias, and data privacy.

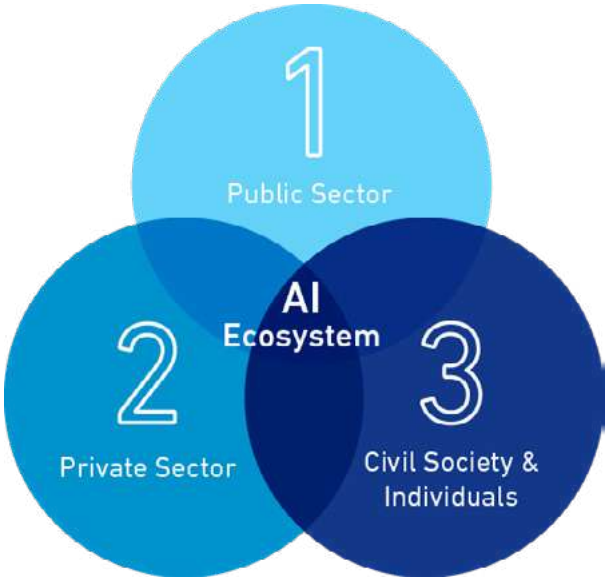
The contrast between countries with robust AI regulations and those without highlights the importance of developing tailored governance frameworks that can adapt to each country's unique needs and challenges.

4.2. AI Stakeholder Mapping

While national strategies and policies set the framework for AI governance, their success relies heavily on the collaboration of various stakeholders, including the public sector, private companies, and civil society. In the following section, we will map out the key stakeholders driving AI initiatives in the DCO Member States, examining their roles in shaping national AI ecosystems.

The AI landscape across the DCO Member States varies significantly. The research shows that three main types of AI stakeholders are actively guiding and shaping the AI ecosystem. While they are not necessarily present in every country, these stakeholders tend to have a direct impact on the way AI talent, innovation, and investment grow and thrive.

Figure 5. AI Ecosystem in DCO Member States



1 Public Sector

Public authorities play a pivotal role in shaping the AI landscape in DCO Member States by developing policies, regulations, and national strategies to promote AI adoption and ensure responsible development. Governments create regulatory frameworks that balance innovation with ethical considerations, foster public-private partnerships (AI accelerators, incubators, hubs), and invest in AI infrastructure and education to advance digital transformation. Additionally, they are responsible for ensuring that AI technologies are aligned with national development goals, public welfare, and global standards.

Some countries, like Jordan, Nigeria, Qatar, and Saudi Arabia, have dedicated ministries and government bodies overseeing AI development and implementation. These authorities are responsible for creating policies, providing funding, and setting regulatory frameworks that support AI innovation.

Table 9. Public Sector Bodies and Agencies Steering AI in DCO Member States (Where Available)

Country	National AI Body/Agency	Ministry
Bahrain	None	Ministry of Digital Economy and Entrepreneurship
Bangladesh	AI Task Force within the Ministry (proposed)	Ministry of Posts, Telecommunications and Information Technology (ICT Division)
Cyprus	None	Deputy Ministry of Research, Innovation and Digital Policy
Djibouti	None	Ministry of Communication and Information Technology
The Gambia	None	Ministry of Communication and Digital Economy
Ghana	None	Ministry of Communications and Digitalisation (MoCD)
Greece	High-Level Advisory Committee on Artificial Intelligence	Ministry of Digital Governance
Jordan	**Artificial Intelligence and Advanced Technologies Department – within MoDEE**	Ministry of Digital Economy and Entrepreneurship (MoDEE)
Kuwait	Public Authority for Artificial Intelligence (PAAI) (proposed)	Central Agency for Information Technology (CAIT)
Morocco	National Agency for AI Governance (proposed bill)	Ministry of Industry and Commerce
Nigeria	None	Federal Ministry of Communications, Innovation, and Digital Economy (FMCIDE), National Information Technology Development Agency (NITDA), National Data Protection Commission

Country	National AI Body/Agency	Ministry
Oman	None	Ministry of Transport, Communications and Information Technology (MTCIT)
Pakistan	None	Ministry of Information Technology and Telecommunication
Qatar	Artificial Intelligence Committee within MCIT	Ministry of Transport and Communications
Rwanda	Responsible AI Office within MINICT	Ministry of ICT and Innovation (MINICT), Rwanda Information Society Authority (RISA), National Council for Science and Technology (NCST)
Saudi Arabia	Saudi Data and Artificial Intelligence Authority (SDAIA)	Ministry of Communications and Information Technology (MCIT)

Source: DCO research

There are no studies examining the potential correlation between having a dedicated national AI body or agency and having the ability to efficiently and effectively foster an environment in which ethical and responsible AI can emerge. There is, however, an observable pattern in the way highly AI-enabled digital economies tend to (i) have a national body, agency, committee, or working group specifically dedicated to managing AI matters; and (ii) give this body a clear mandate and appropriate level of resources to turn national ambitions into action.

While there is no tangible evidence of such a causal relationship in the field of AI, there is a body of research that has proven the efficacy of having a dedicated national body to address national priorities, especially when it comes to the digital transformation of key economic sectors.[178] The idea is that it tends to be relatively easier to foster change when there is an agency to centralise efforts, ensure resources are utilised optimally across different sectors, and identify and address gaps in policy, regulation, and infrastructure. Extrapolated to the

advancement of responsible AI, this may mean that a centralised approach is likelier to allow for more informed decision-making and timely responses to the challenges posed by AI, in addition to ensuring that AI initiatives are aligned with national priorities and values.

In this context, it seems that countries with a specific AI governance body, such as Greece, Jordan, and Saudi Arabia, or those proposing such agencies, like Kuwait, may be better positioned to track and evaluate the progress of AI adoption and regulation. This centralised oversight may also facilitate continuous improvement, ensuring that AI strategies remain relevant in the face of rapid technological advancements. Conversely, countries without a dedicated AI body may be likelier to struggle with fragmented efforts, misalignment of priorities, and slower progress in realising the full potential of AI, though this is neither a proven nor a systematic outcome.

2 Private Sector

The private sector drives AI innovation and implementation through investments in research, development, and the deployment of AI technologies across various industries. Tech companies, start-ups, and industry leaders contribute to the rapid growth of the AI ecosystem by creating cutting-edge solutions, forming strategic alliances, and influencing market trends. These stakeholders are instrumental in scaling AI applications, building economic growth, and setting industry standards while also navigating the challenges of ethical AI use and data privacy.

The presence of private companies working on AI also varies widely among DCO Member States. Countries like Nigeria, Rwanda, and Jordan have a thriving start-up ecosystem, with numerous companies developing AI solutions across various sectors. These start-ups benefit from supportive government policies, access to funding, and a growing pool of tech-savvy talent.

Figure 6 Nigeria's Example

Public Advocacy and Regulators

- Goverment (E.g. NITDA, Nigeria Data Protection Commision)
- Non-profits (E.g. Paradigm Initiative, Citizens Gavel)

Learning / Practice Communities

- Professional Groups (E.g. AAIMLON)
- Professional Services (E.g. Deloitte Generative AI practice)
- Learners network (DS, IndabaX Coven Works)
- Strategy (AlinNigeria)
- Gender-specific (E.g. ArewaLadies4Tech, WomeninAI)
- Post-secondary Education

Platform Enablers

- Public Clouds (E.g. NCAIR)
- Hyperscalers / Data Centers

Application Ecosystem

- Data Collection (E.g. LangEasy / Awarri, DSNai, HausaNLP, LanFrica)
- Development agencies / Philanthrophy (E.g. GatesAIGrand Challenge)
- Support Systems (E.g. Intel / Afrilab)
- Platform access (E.g. Nvidia inception)
- Enablement Organizations (GIZ, UK Nigeria, TechHub)
- Domain promotion (E.g. Microsoft Responsible AI)

Start-Ups

- Investors
- Incubators / Accelerators
- Domain-specific (E.g. Intron-Health, FundusA)
- General AI start-ups (E.g. ZeroComplex, Autogon AI)

Source: National Center for Artificial Intelligence and Robotics (2024) National Artificial Intelligence Strategy (NAIS), https://ncair.nitda.gov.ng/wp-content/uploads/2024/08/National-AI-Strategy_01082024-copy.pdf

In Qatar, institutions like the Qatar Computing Research Institute (QCRI) collaborate with private companies to advance AI research and development. In 2022, QCRI signed an agreement with ADGS Computer Systems, a Qatar-based technology company, to be the sole distributor of an AI-based social media analytics platform.[179] Similarly, since 2019, QCRI has been working with the United Nations Development Programme (UNDP) to launch and advance the UNDP Accelerator Labs initiative, a collaborative platform that aims to explore the ways data science and AI can be used for social/developmental applications.[180]

On the other hand, countries like Djibouti and Oman have fewer private companies engaged in AI, which can be attributed to factors such as limited access to venture capital, inadequate infrastructure, and a smaller talent pool.

3 Civil Society & Individuals

Civil society organisations, non-government organisations, advocacy groups, and individual stakeholders ensure that AI development is inclusive, ethical, and centred on human rights. These groups advocate for transparency, accountability, and the responsible use of AI technologies, raising awareness of potential risks and pushing for equitable access. Through public discourse, activism, and policy influence, civil society and individuals play a key role in shaping the societal impact of AI, ensuring that AI benefits are widely distributed and protecting communities from potential harms.

In Bahrain, organisations like the Bahrain Center for Human Rights (BCHR) and the Gulf Centre for Human Rights (GCHR) are active in the AI space, focusing on issues such as digital rights and AI's impact on society.[181] In Bangladesh, the proposed national AI policy envisions active civil society participation through a multi-stakeholder advisory council, guided by the principles of citizen feedback loops, participatory design, and inclusive public engagement.

In countries with less active civil society organisations, there is potential to increase advocacy and public awareness regarding AI, leading to a more informed public discourse on the implications of AI technologies.

Academic institutions play a significant role in AI research and development. In Qatar, the Qatar Computing Research Institute (QCRI) is a leading institution conducting cutting-edge AI research and collaborating with both the public and private sectors. Similarly, Sultan Qaboos University in Oman has departments dedicated to AI research, contributing to the country's AI ecosystem. In contrast, countries with fewer resources and less developed higher education systems may have limited academic involvement in AI, resulting in a shortage of skilled professionals and a slower pace of innovation. Enhancing academic involvement in these countries could foster a more robust AI ecosystem.

Individual stakeholders, including researchers, developers, and tech enthusiasts, are vital to the growth of the AI ecosystem. Notable individuals, such as Dr. Maria Karyda in Greece and Dr. Ali Al-Bimani in Oman, have made significant contributions to AI research and advocacy. These individuals often drive innovation, mentor the next generation of AI professionals, and influence policy and regulatory frameworks. In countries with fewer individual stakeholders actively engaged in AI, the ecosystem may benefit from increased support and recognition of these key players, encouraging more individuals to participate in AI development and leading to greater innovation and knowledge sharing.

A more detailed breakdown of relevant stakeholders operating in DCO Member States' AI ecosystems can be found in the Appendix section of this report.

4.3. AI R&D and Educational Initiatives

The collaboration among different stakeholders is essential for advancing AI research, development, and education, which are crucial components of any national AI ecosystem. This final sub-section examines the various R&D and educational initiatives that are laying the groundwork for innovation and talent development across the DCO Member States, ensuring that AI benefits are harnessed responsibly and equitably.

A cornerstone of developing robust AI ecosystems in DCO Member States is the emphasis placed on research and development (R&D) programmes that foster innovation and advance AI applications across various sectors. For instance, Saudi Arabia's **SDAIA-KFUPM Joint Research Center for AI and the GenAI for All Initiative** demonstrate the nation's commitment to advancing AI research, particularly in energy, healthcare, and industry.[182] Similarly, **Jordan's Innovation Hub**,[183] a collaboration between Orange Jordan and the EU, as well as Bahrain's MoU between the Information & eGovernment Authority and the Nasser Center for Research and Development in AI,[184] underscore the importance of collaborative R&D efforts in creating a sustainable AI ecosystem. These initiatives are vital in driving innovation, addressing local challenges, and contributing to global AI advancements.

Education initiatives tailored to AI and digital skills are equally important for building a workforce that can harness the power of AI responsibly and ethically. Saudi Arabia's **Academic Framework for AI Qualifications**, which aims to equip 100,000 youths with digital skills by 2030, highlights the nation's proactive approach to preparing its workforce for the demands of the AI-driven future.[185] Likewise, Bahrain's Artificial Intelligence Academy, the first of its kind in the Middle East, is a prime example of how targeted education initiatives can boost creativity and innovation, providing a model for other DCO Member States to follow.[186]

The role of government in these efforts cannot be overstated. Governments in the DCO Member States play a critical role in setting the policy framework, funding R&D initiatives, and fostering an environment conducive to innovation and ethical AI development. In Kuwait, the government's support for AI research at institutions like the Kuwait Institute for Scientific Research (KISR) reflects a commitment to advancing AI knowledge and applications.[187] Moreover, the integration of AI into the education system by Kuwait's Ministry of

Education demonstrates the government's long-term vision for AI workforce development.[188] These efforts are essential for ensuring that AI is developed and used in a way that aligns with societal values and ethical standards.

NGOs and international collaborations also play a crucial role in supporting AI R&D and education initiatives. NGOs can bring together diverse stakeholders, including academia, industry, and government, to ensure that AI research and education initiatives are inclusive and aligned with ethical standards. In Greece, the KOIOS Centre of Excellence and the SOLAR-ERA.NET project, which focus on critical infrastructure and renewable energy, respectively, highlight how multidisciplinary research can address global challenges, such as climate change.[189]

Public-private partnerships are another key component in the growth of AI ecosystems in the DCO Member States. These collaborations bring together the resources and expertise of both sectors to drive AI innovation and ensure its responsible use. In Saudi Arabia, partnerships between Nvidia and SDAIA,[190] as well as Deloitte's **AI Institute**, focus on advancing generative AI research, showcasing the potential of such collaborations.[191] Bahrain's **AI Academy**, a joint effort with Microsoft and Tamkeen, further illustrates how public-private partnerships can accelerate AI education and innovation.[192]

Overall, while these programmes lay a strong foundation for AI development, diversifying their focus, ensuring inclusivity, and expanding access could further amplify their societal benefits. Indeed, many of the initiatives highlighted above focus on similar sectors, such as R&D and digital skills, which may lead to an overlap in objectives and resources. Expanding the scope to underexplored areas like AI in environmental sustainability or creative industries could offer new opportunities for innovation.

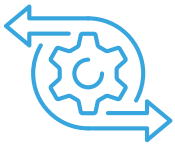
The initiatives discussed above predominantly target specific segments of society, potentially overlooking other critical demographics, like older adults or underserved communities. Ensuring inclusivity in AI education and access is crucial for broader societal impact. Additionally, while some initiatives are publicly funded, the cost of participation in others, particularly those involving private partnerships, may limit access. Offering free or subsidised programmes could enhance the reach and effectiveness of these schemes.

05 Conclusion & Recommendations

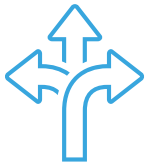
05 Conclusion & Recommendations

5.1. Challenges and Opportunities

Based on the analysis conducted in this report, there are a series of challenges that DCO Member States are facing at both national and international levels.



Lack of formal AI strategies and regulations:
Many countries globally, including several DCO Member States, lack formalised national AI strategies. This can hinder their ability to effectively leverage AI technologies, particularly when these strategies highlight government support for its development or deployment. Furthermore, many countries are still in the early stages of developing AI-specific regulations, which could lead to challenges in ensuring responsible AI deployment within the market.



Inconsistent definitions:
There is an absence of uniform definitions for key AI concepts across DCO Member States, which could impede collaboration and alignment on issues like ethics and data protection.

Limited engagement with stakeholders:
Some countries have limited private sector, civil society, and academic engagement in AI, which can slow innovation and economic growth in this area. Further linkages and partnership opportunities are needed to ensure national priorities are understood, championed, and prioritised in a coordinated manner across all stakeholders.

Skills gap:
AI education and training initiatives are key to building a skilled workforce capable of developing and implementing AI technologies. Although many universities provide courses or are partnering with big tech companies to conduct courses and programmes, these are not being tailored for each country based on their unique characteristics and areas of need. Generic courses on AI implications, ethical standards, and innovation potential are good for introductory purposes, but education should be consistent over time and built for purpose based on the audience. Public sector employees should receive one specific training, while women in disadvantaged contexts or minorities should get a different course tailored to their needs and potential uses. Furthermore, there does not seem to be a continuity in AI educational activities, which sometimes are sporadic courses without a progression relation.

Ethical considerations:
Ensuring AI development aligns with ethical standards and societal values remains a challenge for many countries. This challenge relates to the difficulties of identifying what ethical standards should be implemented and how.

While these challenges might seem daunting, clear identification helps to better address them. At the same time, the current landscape of DCO Member States presents certain opportunities for countries, such as:

Cross-border collaboration and knowledge sharing:
The varying levels of AI readiness among DCO Member States present an opportunity for collaborative learning and resource sharing, both across DCO Member States and between DCO Member States and other countries. Whether they are DCO Member States or countries from another multilateral organisation, more advanced countries can share best practices, technologies, and expertise with those in earlier stages of AI adoption, fostering a more unified approach to AI development.

Tailored AI solutions for common challenges:
The diverse economic and regulatory landscapes across DCO Member States offer an opportunity to develop AI solutions that address their specific needs. This could lead to innovative applications in areas such as resource management, healthcare, or education that are uniquely suited to the challenges faced by these countries.

Leapfrogging for AI competitiveness:
Countries without a national AI strategy have a unique opportunity to leapfrog and advance rapidly by learning from the experiences and best practices of those that have already established AI frameworks. By studying successful AI policies, ethical guidelines, and governance models, these nations can avoid common pitfalls, adopt proven approaches, and tailor strategies to their local needs more efficiently. Leveraging established international standards and collaborations can accelerate AI adoption, fostering innovation, economic growth, and responsible AI deployment without having to start from scratch. This can position them competitively on the global stage while benefiting from the foundational work done by early adopters.

The recommendations under the next sub-section provide a roadmap for overcoming these obstacles and building on current opportunities to foster a more inclusive and effective AI ecosystem.

5.2. Recommendations

The recommendations described in this section are closely tied to the concept of 'Building Blocks' for responsible AI governance proposed under section 3.4 of this report, addressing challenges such as inconsistent definitions, limited engagement, the skills gap, and ethical considerations. By following and applying these concepts, the recommendations aim to create a unified framework that not only mitigates these challenges but also leverages the opportunities for cross-border collaboration and tailored AI solutions.

5.2.1. For the DCO policymakers

1

Encourage DCO Member States to develop clear and precise definitions of key AI concepts within the AI laws, policies, or strategies they are enacting

Building Block: Government Planning

To ensure consistency and coherence in AI governance, DCO Member States need to develop clear and precise definitions of key AI concepts in the laws, policies, and strategies they enact. Ambiguity in AI-related terms can lead to varying interpretations, making it difficult for businesses, governments, and international stakeholders to align their practices. Defining terms such as 'artificial intelligence', 'algorithmic transparency', 'machine learning', and 'data privacy' in a standardised manner helps create a robust legal framework that can be effectively implemented and enforced. This will also enhance legal certainty, giving various stakeholders within the AI ecosystem a clearer understanding of their rights and obligations in the AI ecosystem.

Furthermore, precise definitions will facilitate cross-border cooperation and policy harmonisation among the DCO Member States. By establishing a common understanding of AI-related terms, these countries can more easily collaborate on joint initiatives and develop aligned regulations. This is particularly important, as AI technologies often operate across national borders, where the absence of clear definitions can hinder regulatory enforcement and cross-jurisdictional cooperation. Clarity in AI concepts will lay a strong foundation for coherent and integrated AI governance across DCO Member States.

2

Work towards making national AI governance frameworks compatible between DCO Member States, leveraging international principles and standards

Building Block: Government Planning, Institutional Mechanism and International Cooperation

While a complete harmonisation of national AI approaches and strategies may be difficult to achieve, working towards governance approaches that are compatible and interoperable with each other may be beneficial. For DCO Member States that are building the institutional and infrastructural foundations of their AI strategies, such an approach may provide guidance and support. For DCO Member States with more advanced AI governance frameworks, such an approach may strengthen their ability to navigate the implementational challenges of operationalising ethical and responsible AI.

To ensure lasting visibility and impact on a global stage, this strategy should be built on internationally recognised principles and standards, ensuring that DCO Member States not only keep pace with global AI developments but also play an active role in shaping them. Ultimately, this will enable DCO Member States to align their AI policies and regulations, making it easier for businesses and governments to collaborate across borders while minimising the risk of regulatory fragmentation.

3

Articulate transversal policies and guidelines

Building Block: Policy Readiness

Foundational data governance laws, policies, and regulations governing privacy, cybersecurity, copyright, and cross-border data flows are critical for enabling the responsible expansion of data-driven AI technologies. Countries with robust governance frameworks are better positioned to mitigate risks associated with AI and foster innovation.

While nations have largely implemented guiding principles for the responsible development, deployment, and use of AI, there is still a need to articulate further transversal policy enablers to maximise AI adoption and harness its potential.

These policies should be aligned with and complement existing ICT, data, and industrial policies to provide a comprehensive and cohesive framework for AI ecosystem growth.

By establishing foundational data governance policies, countries can create an environment that supports the responsible and innovative use of AI. This policy readiness lays the groundwork for AI systems to be developed and deployed in a manner that prioritises safety, fairness, and accountability – key factors in building public trust and fostering the widespread adoption of transformative AI technologies.

4

Define enforceability measures for intolerable risks by creating specific tools

Building Block: Policy Readiness

As public policy interventions, AI strategies consist of instruments to identify the actions to be implemented per nation to increase the use of AI and promote adherence to practical guidelines to protect humans. However, based on international experiences and the fact that AI poses significant risks that need proper addressing, the appropriateness of mere policy guidelines or goals is tested. Nations are considering the need, or have already adopted, mandates and legal prescriptions to address the unacceptable risk. In other words, coercive measures for specific actions and forbidden specific conducts give enforcement to the principles.

To support the ethical and effective deployment of AI, DCO Member States could prioritise the development and implementation of robust tools and frameworks that can guide AI development from pre-launch assessment to regulatory experimentation.

These practical resources will be instrumental in ensuring that AI systems are not only innovative but also aligned with the highest standards of safety, fairness, and accountability.

Firstly, the DCO Member States should establish a 'Comprehensive Pre-Launch Assessment Framework for AI Models'. This would involve developing rigorous testing protocols that evaluate the potential impacts of AI systems on society, human rights, and ethical considerations before deployment. Incorporating stress testing of AI models in simulated environments can help identify vulnerabilities and unintended consequences, empowering developers to mitigate risks early in the development process and ensuring that AI systems are robust and reliable when introduced to the market.

Secondly, the DCO Member States should Create AI Tools and Toolboxes. These resources can include guidelines, checklists, and best practices for responsible AI development and implementation. Interactive tools that assess risks, highlight ethical issues, and provide solutions can empower stakeholders to navigate the complex landscape of AI governance. Such toolboxes can foster a culture of continuous improvement and innovation, encouraging the adoption of best practices across different sectors and industries. Aligned with this recommendation, the DCO has already taken steps to develop such a tool to support its member states in assessing different AI risks. The 'DCO AI Ethics Evaluator' tool will be launched as a continuation of the analysis conducted under this report.

Thirdly, DCO Member States should promote regulatory experimentation through initiatives like the AI sandboxes. These controlled environments would allow developers to experiment with new AI technologies under regulatory supervision, enabling real-world testing of AI systems in a manner that balances innovation with public safety and trust. By learning from these controlled experiments, regulators can develop more informed and adaptive policies that keep pace with the rapid advancements in AI technology.

Investing in these practical tools and frameworks can help DCO Member States strengthen their ability to lead in the responsible development and deployment of AI systems. Pre-launch assessments, AI toolboxes, and regulatory experimentation will enhance the governance of AI and help mitigate the risks associated with this transformative technology.

5

Create a body or committee within the DCO framework to oversee the harmonisation and advancement of AI policies across DCO Member States

Building Block: Institutional Mechanism and International Cooperation

A multilateral initiative based on the establishment of a dedicated body or working group within the DCO framework to oversee the harmonisation and advancement of AI policies is crucial for ensuring a cohesive approach to AI governance across the DCO membership, as well as globally. This body could serve as a central coordinating entity, tasked with facilitating the exchange of knowledge and best practices among the DCO Member States. Through the promotion of principles, standards, and best practices, this body can help ensure that AI governance across the DCO Member States is both consistent and coherent.

For example, the European Union's High-Level Expert Group on AI has been instrumental in shaping the EU's **AI Act**, focusing on trust and transparency. The OECD's AI Policy Observatory provides global data and insights to guide AI policies. Similarly, the Global Partnership on AI (GPAI) brings together governments and experts to promote AI that benefits society while addressing global challenges. In ASEAN, the Working Group on AI Governance is tasked with driving and coordinating all AI-related efforts, ensuring coherence and consistency in all undertaken activities.

Moreover, the working group would play a vital role in monitoring and responding to emerging AI trends and challenges, enabling the DCO Member States to adapt their policies to keep pace with technological developments. This proactive approach to AI governance would position DCO Member States as leaders in responsible AI development, ensuring that they are well-prepared to address issues such as AI bias, security risks, and the ethical implications of advanced AI technologies.

5.2.2. For industry stakeholders

1

Actively engage in public-private partnerships to drive AI innovation and adoption

Building Block: Innovation Ecosystem

Industry leaders should collaborate with government bodies and academic institutions to create AI pilot projects and research initiatives. These partnerships can accelerate AI development while ensuring that industry needs and regulatory concerns are addressed in tandem. The DCO can play an active role in fostering this kind of PPP between its Member States, as it can act as an objective intermediary to connect parts and develop cooperation.

2

Invest in AI education and training programmes to build a skilled workforce

Building Block: Future-Proof Population

Develop and support educational initiatives, internships, and vocational training programmes focused on AI and related technologies. This will help create a talent pipeline that can sustain the growth of the AI industry within DCO Member States.

To invest in AI education and build a skilled workforce, DCO Member States could encourage the formation of coordinated industry coalitions. These country-level industry groups should engage directly with educational institutions to shape curricula meeting industry needs. A DCO-wide taskforce of industry leaders, academics, and government officials could develop a core AI curriculum adaptable to each Member State's context. Global digital platforms operating in the DCO Member States could conduct regular AI workshops and bootcamps with local universities, bridging the gap between academic learning and industry requirements. Annual DCO-wide AI challenges, sponsored by industry leaders, could foster innovation and cross-border collaboration while identifying top talent. This approach will ensure a workforce well-prepared for the evolving AI industry across DCO Member States.

3

Prioritise ethical AI development and implementation

Building Block: Diversity of Voices in a Participative Environment

Incorporating a diversity of voices is essential for creating inclusive, participative, and representative AI products and systems, as it ensures that a wide range of perspectives and experiences are embedded into their design and functionality. This diversity helps mitigate biases in algorithms, broadens the applicability of AI solutions, and fosters trust among users by demonstrating a commitment to fairness, equity, and inclusivity in AI development and deployment. This involves implementing robust fact-checking tools that use advanced cross-referencing algorithms and developing AI systems capable of detecting contextual biases. Risk assessment strategies should include predictive impact modelling that simulates potential social consequences and creates nuanced ethical risk-scoring mechanisms.

Risk assessments and privacy-enhancing technologies (PETs) play a pivotal role in fostering ethical AI development by enabling the inclusion of diverse voices while safeguarding individual rights. Risk assessments identify potential biases and ethical concerns in AI systems, ensuring that diverse perspectives are considered during design and implementation. PETs, such as differential privacy and federated learning, allow the safe integration of data from underrepresented groups without compromising privacy, thereby ensuring more inclusive datasets that lead to fairer AI outcomes. These technologies must be accompanied by transparent consent mechanisms and user-controlled data-sharing options. The framework should mandate diverse dataset curation, implement bias detection protocols, and create culturally sensitive AI models. Continuous adaptation is key, with regular ethical review processes, open feedback channels, and iterative improvement strategies.

4

Foster knowledge-sharing and collaboration within the industry

Building Block: : Diversity of Voices in a participative environment

Create industry-led forums, conferences, and working groups to share best practices, discuss challenges, and collaborate on solutions. Furthermore, industry bodies and business councils should take the lead in developing ethical standards. This will help create a vibrant AI ecosystem within DCO Member States and promote innovation. Companies could participate in the development of industry standards and self-regulation initiatives. This refers to contributing to the creation of industry-wide standards for AI development, deployment, and governance. Self-regulation efforts can complement government policies and demonstrate the industry's commitment to responsible AI practices.

For example, the Partnership on AI (PAI) exemplifies industry-led collaboration in establishing ethical standards for AI. Founded in 2016 by companies including Amazon, Google, Facebook, IBM, and Microsoft, PAI brings together stakeholders from industry, academia, and civil society to develop best practices, address challenges, and promote responsible AI development.[193] PAI effectively fosters dialogue and creates guidelines, complementing governmental policies and showcasing the industry's dedication to ethical AI practices.

5.2.3. For international cooperation

1

Increase DCO Member States' participation in the formulation, adoption, and dissemination of international AI standards

Building Block: Policy Readiness, Government Planning and International Cooperation

For DCO Member States to remain competitive and relevant in the global AI landscape, increased participation in the formulation, adoption, and dissemination of international AI standards is crucial. Engaging in international standard-setting bodies, such as the International Organization for Standardization (ISO) and the Institute of Electrical and Electronics Engineers (IEEE), allows DCO Member States to offer their perspectives and ensure that global standards reflect their specific needs and priorities. By actively participating in the creation of these standards, DCO Member States can influence key aspects, such as AI ethics, safety, and interoperability, which are critical for ensuring that AI technologies are beneficial and fair to all.

Moreover, adopting and disseminating international AI standards within DCO Member States will help create a level playing field for businesses operating across various markets. International standards provide a framework for ensuring the quality, safety, and interoperability of AI systems, which are essential for building trust in AI technologies. For local companies, aligning with these standards can open access to global markets, as adherence to internationally recognised standards is often a prerequisite for participating in cross-border trade. This approach will enhance the competitiveness of DCO Member States' AI sectors while ensuring that AI deployment adheres to globally accepted ethical and technical benchmarks.

2

Increase cooperation and harmonisation

Building Block: International Cooperation (foster collaboration)

The design and implementation levels of the AI instruments vary across nations, with significant gaps between countries. Therefore, while some consensus regarding the principles that should guide AI use seems to have emerged based on the existing initiatives, there is still a lack of harmonisation in the priorities, actions, and tools to implement the AI strategies. Thus, an opportunity for knowledge transfer, best practices, and the building of toolboxes or practical guidance is evidenced. This will contribute to leveraging AI as an industrial development tool for economic sophistication and diversification.

3

Develop a quantitative measure to track and assess the implementation status and impact of AI policies and strategies

Building Block: Government Planning

To effectively monitor and evaluate the progress of AI initiatives across the DCO Member States, it is crucial to develop a comprehensive, quantitative measurement system. This system should:

Create a standardised AI Policy Implementation Index (APII):

- Develop a set of key performance indicators (KPIs) that reflect various aspects of AI policy implementation, such as regulatory framework development, AI adoption rates, workforce skills, and ethical compliance.
- Assign weightings to these KPIs based on their relative importance and impact.
- Calculate a composite score for each country, allowing for easy comparison and tracking of progress over time.

Establish regular data collection and reporting mechanisms:

- Implement a systematic approach to gathering data from government agencies, industry partners, and academic institutions across DCO Member States.
- Conduct annual surveys to capture qualitative insights and supplement quantitative data.

Analyse economic and social impact:

- Measure the contribution of AI to GDP growth, job creation, and productivity improvements.
- Assess the impact of AI on key social indicators, such as healthcare outcomes, education accessibility, and quality of life.

Benchmark against global AI leaders:

- Compare DCO Member States' progress against leading AI nations to identify areas for improvement and learning opportunities.

Publish annual AI progress reports:

- Release comprehensive reports detailing the status of AI implementation, highlighting successes, challenges, and areas for improvement across DCO Member States.
- Use these reports to inform policy adjustments and resource allocation decisions.

Overall, this quantitative measure can help DCO Member States objectively assess their AI strategies' effectiveness, identify best practices, and make data-driven decisions to enhance their AI capabilities and governance frameworks.

06 Appendices

06 Appendices

6.1. Glossary of Key Terms

Abbreviations and Acronyms

Abbreviation	Full Form
AI	Artificial Intelligence
ML	Machine Learning
DCO	Digital Cooperation Organization
R&D	Research and Development
OECD	Organisation for Economic Co-operation and Development
UNESCO	United Nations Educational, Scientific and Cultural Organization
ICT	Information and Communication Technology
SDAIA	Saudi Data and Artificial Intelligence Authority
KFUPM	King Fahd University of Petroleum and Minerals
KAUST	King Abdullah University of Science and Technology
MoU	Memorandum of Understanding
KISR	Kuwait Institute for Scientific Research
EU	European Union
MoE	Ministry of Education

Abbreviation	Full Form
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
MoCD	Ministry of Communications and Digitalisation
NITA	National Information Technology Agency
RAI	Responsible AI Office
FMCIDE	Federal Ministry of Communications Innovation and Digital Economy
NITDA	National Information Technology Development Agency
NDPR	Nigeria Data Protection Regulation
CcHub	Co-Creation Hub
UNDP	United Nations Development Programme
ITU	International Telecommunications Union
KNUST	Kwame Nkrumah University of Science and Technology
HHRR	Human Rights and Humanitarian Response
CHRAJ	Commission on Human Rights and Administrative Justice

Source: DCO research

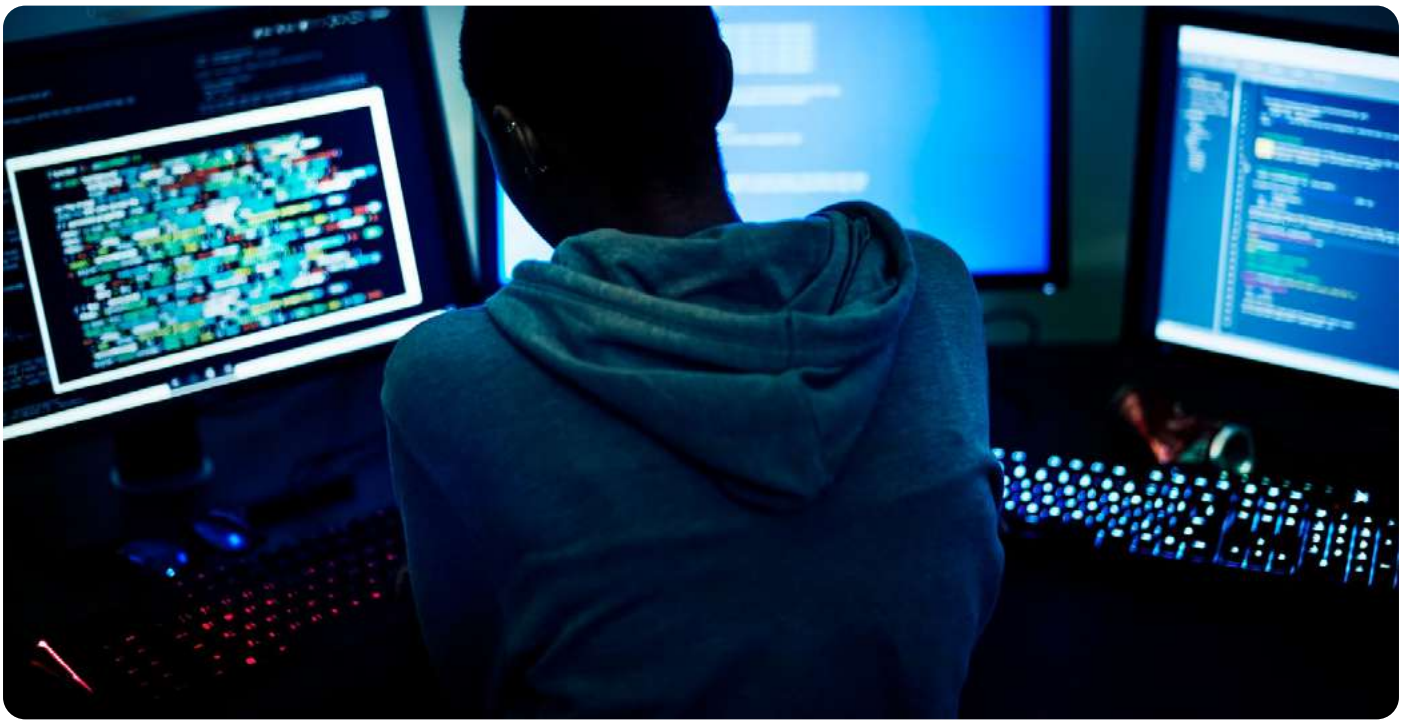
Key Terms

Term	Definition
Artificial Intelligence	The simulation of human intelligence by machines, enabling them to perform tasks that typically require human intelligence, such as visual perception, speech recognition, decision-making, and language translation.
Machine Learning	A subset of AI that involves the use of algorithms and statistical models that enable computers to perform tasks without explicit instructions, relying instead on patterns and inference.
Ethical AI	AI that is designed, developed, and deployed in a manner that is fair, transparent, and accountable, ensuring that the technology aligns with human rights and ethical standards.
Data Protection	Legal and technical measures taken to safeguard personal data from unauthorised access, disclosure, alteration, and destruction.
National AI Strategy	A comprehensive framework or roadmap adopted by a nation to guide the development, regulation, and implementation of AI technologies within its jurisdiction.
Public-Private Partnerships	Collaborative agreements between government entities and private sector companies to work together on AI initiatives, often involving research, development, and deployment of AI technologies.
AI Governance	The frameworks, regulations, and policies established by governments and organisations to oversee the development and use of AI technologies, ensuring that they are safe, ethical, and beneficial to society.
Digital Infrastructure	The physical and digital structures necessary for the functioning of AI systems, including data centres, cloud services, and communication networks.

Term	Definition
Sectoral Initiatives	AI-driven projects or strategies focused on specific industries or sectors, such as healthcare, agriculture, or finance.
International AI Principles	Guidelines or standards set by international bodies, like the OECD and UNESCO, that aim to ensure the ethical and responsible use of AI technologies globally.
Deep Learning	A subset of machine learning involving neural networks with many layers that can learn from large amounts of data, used in applications like image and speech recognition.
Natural Language Processing (NLP)	A branch of AI focused on the interaction between computers and humans through natural language, enabling machines to understand, interpret, and generate human language.
Big Data	Extremely large datasets that can be analysed computationally to reveal patterns, trends, and associations, especially relating to human behaviour and interactions. AI systems often rely on big data for training and decision-making.
Robotics	The branch of technology that deals with the design, construction, operation, and application of robots, often powered by AI to perform complex tasks autonomously.
Autonomous Systems	Systems that can perform tasks or make decisions without human intervention, often powered by AI technologies such as machine learning, computer vision, and robotics.
Explainable AI (XAI)	A subfield of AI that focuses on making AI decisions understandable to humans, ensuring that the processes and outcomes of AI systems are transparent and interpretable.

Term	Definition
Bias in AI	The presence of systematic errors in AI systems that lead to unfair outcomes, often resulting from biased data or algorithms. Addressing bias is critical for ensuring fair and equitable AI applications.
Cybersecurity	Measures taken to protect AI systems and data from cyber threats, including hacking, data breaches, and other malicious activities, which are essential for maintaining trust in AI technologies.
Sustainable AI	The practice of developing and deploying AI in a manner that is environmentally friendly and socially responsible, ensuring that AI contributes to sustainable development goals (SDGs).
AI Ethics	A set of moral principles and practices that guide the development and use of AI, ensuring that AI technologies are aligned with human values and do not cause harm.

Source: DCO research



6.2. Methodology

Research Approach and Design
This report employed a qualitative and comparative research approach to examine AI governance frameworks across the DCO Member States. The primary objective was to assess how these countries address the ethical implications of AI. The research design was structured as follows:

1

Qualitative Research:
The study was grounded in qualitative methodologies, enabling an in-depth exploration of the complex relationships between AI technologies, ethical considerations, and human rights. By focusing on the policies, legal frameworks, and AI strategies of the DCO Member States, the study provided a nuanced understanding of how these elements intersect.

2

Comparative Analysis:
A key aspect of the research design was the comparative analysis across the Member States. This approach allowed the identification of best practices, as well as the gaps and challenges that different countries face in AI governance. The comparative analysis facilitated a detailed understanding of how different national contexts influence AI policymaking and implementation.

3

Expert Consultation:
The research was enriched by consultations with experts in AI ethics and policymakers. These consultations provided critical insights that validated the findings and ensured that the analysis was aligned with the latest developments in AI governance.

4

Global, Regional, and National Benchmarking:
The study incorporated benchmarking against global standards (e.g., OECD AI Principles), regional frameworks (e.g., AU Continental AI Strategy), and national initiatives. This benchmarking process was essential for assessing the alignment of the DCO Member States with international norms and identifying areas for improvement.

Data Collection Methods
Data for the study was collected through multiple methods, ensuring a comprehensive and robust analysis of AI governance frameworks.

1

Desk Research:

- Literature Review: A systematic literature review was conducted, focusing on academic publications, AI ethics guidelines, and reports from international organisations. This review provided the foundational knowledge required to understand the state of AI governance globally and within the DCO Member States.

- Policy and Legal Document Analysis: National AI strategies, legal texts, and policy documents from each member state were thoroughly analysed. This analysis focused on identifying the legal and regulatory mechanisms in place to govern AI, particularly in relation to human rights and ethical considerations.

2

Expert Interviews:

- Design and Distribution: Where applicable, questions were distributed to key stakeholders, including government officials, the private sector, and representatives from civil society organisations. The questions were designed to capture perceptions of AI governance, challenges in implementation, and potential solutions for enhancing AI ethics frameworks.

- Data Analysis: The responses were analysed using qualitative methods, such as thematic analysis, to identify recurring themes and insights that could inform the overall research findings.

3

Case Studies:

- Selection and Analysis: Specific AI-related incidents or policy implementations were selected as case studies. These were chosen based on their relevance to AI and human rights issues in the DCO Member States. This analysis provided practical examples of how AI governance is being implemented and the challenges that arise.

Criteria for Selecting Information
To ensure the relevance and accuracy of the data used in this study, a selection process was employed based on the following criteria:

1

Relevance:
Information was selected based on its direct relevance to AI governance, ethical considerations, and human rights within the DCO Member States. The focus was on data that could provide meaningful insights into the current state of AI governance in these countries.

2

Credibility:
Only information from credible sources was used. This included official government publications, peer-reviewed academic articles, and reports from internationally recognised organisations. This approach ensured the reliability and validity of the findings.

3

Timeliness:
The study prioritised the most recent data, typically from the last five years. This focus on current information was crucial for reflecting the latest trends and developments in AI governance and for making relevant and up-to-date recommendations.

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