

AI Governance and Assurance Global Trends 2022



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This paper represents the independent opinions of its authors. It has been prepared following independent scholarly research and consultation with the AI Assurance Club, a consultative group of companies, industry professionals, and scholars established by Global Digital Foundation to provide analysis and feedback on future and existing regulations affecting the development and use of Artificial Intelligence technologies.

Executive Summary

The field of AI governance is fast-moving and complex. We are witnessing a general shift from soft law declarations and principles on AI towards more concrete and rule based commitments including binding national and regional regulations. Yet, many key debates about how best to regulate AI remain unresolved. Fundamental issues, including definitions of AI and how to assess, manage and classify risk, continue to divide policy actors. Agreement about high-level values and ethical principles has not translated into agreement about how markets should be governed. Alternative regulatory models are now beginning to emerge, with potentially far-reaching implications for global trade. From an AI assurance perspective, countries are at very different levels of ecosystem maturity. Building knowledge and capacity for AI assurance will be vital in shifting AI governance from principles to practice.

1. Introduction

It has been a significant year for AI governance and assurance. Initiatives including legislation, standards, and other policy instruments continue to gain traction not just in the EU – which has <u>proposed specific legislation regulating the development and use of AI</u> – but across the globe. From regulating the use of AI in the public sector to establishing new strategic international partnerships, there are plenty of examples to suggest governments and many other actors are taking an active lead in shaping the development, supply and application of AI technologies.

If we were to cast our eyes back by just five years, the AI policy landscape was then only beginning to emerge. From around 2017, governments began adopting <u>national AI strategies</u> which primarily set out how they would seek to promote industrial competitiveness and investment in AI research in innovation. This was then followed by the publication of <u>sets of non-binding ethical principles on AI</u> by various public and private entities. These efforts culminated last year in the landmark adoption of the <u>UNESCO Recommendation on the Ethics of Artificial Intelligence.</u> One aim of this report is to track how far we have moved from such strategies and principles towards more concrete implementation and examples of best practice.

This report adds to existing AI policy resources, such as the <u>OECD AI Policy Observatory</u>, which gathers examples of policy instruments and initiatives within specific country contexts. Other AI governance resources, metrics and rankings include:

- <u>The Global AI Index</u>, produced by Tortoise, which scores and ranks countries based on their level of investment, innovation and implementation of artificial intelligence. Its <u>methodology</u> is publicly available.
- <u>The Government AI Readiness Index</u>, produced by Oxford Insights, which measures how ready governments are to implement AI in the delivery of public services to their citizens.
- <u>AI and Democratic Values Index</u>, produced by the Centre for AI and Digital Policy which ranks countries based on alignment with democratic values.

AI Governance and Assurance Global Trends has three main aims:

- To present a current snapshot of the most important global trends in AI policy and governance.
- To offer closer examination and comparison of developments in a selection of regions and countries across the globe.
- To move beyond analysis of formal instruments and documents towards an understanding of what they mean in practice, particularly from an AI assurance perspective.

As the adoption of AI technologies has become more widespread, major concerns about potentially harmful effects of their use have continued to arise. These include safety issues, misuses of public power, violations of people's rights, effects on the labour market, as well as unforeseen risks. While governments recognise the social and economic benefits that AI adoption can bring about, there is a growing consensus that realising the potential value of AI will require the people and businesses who develop, deploy and use these technologies to be able to trust that the systems they use are safe, effective and fair. To give effect to AI related instruments, including statements of principles and more formal regulations, there is a need to build greater capacity and expertise in AI assurance.

What is AI governance?

We use the term AI governance to refer not just to how organisations manage their own development, supply and use of AI, but to the broader legal and policy environments which shape AI in practice. AI governance encompasses legal and policy instruments, intergovernmental cooperation in addition to relevant institutional architecture.

Whilst this report establishes a clear account of trends in AI governance in 2022, there are three important considerations to bear in mind:

- 1. AI governance is multi-layered. New rules, norms and practices are being established at all levels of government, from the municipal level to the international and supranational levels, and in multistakeholder forums. AI governance spans both the public and private sectors, and civil society. Rather than seeing developments entirely in isolation, we must then also analyse their interaction.
- 2. AI policy and governance needs to be looked at in the round. AI is not a standalone domain but is made up of various intersecting policy arenas and domains. These include, for example, data governance, competition law, research and innovation policy, and security. AI is now a preoccupation of almost every area of policy action.
- 3. The current AI governance landscape is unfolding rapidly and is likely to continue to be in flux for several years to come as technologies develop and the first wave of governance models are put to the test.

What is AI assurance?

We use the term AI governance to refer not just to how organisations manage their own development, supply and use of AI, but to the broader legal and policy environments which shape AI in practice. AI governance encompasses legal and policy instruments, intergovernmental cooperation in addition to relevant institutional architecture.

In the second part of the report, we take a more detailed look at developments in AI policy and governance and in select countries and regions. Rather than aiming to provide an extensive survey of practices, we will give illustrative examples of how different countries are responding to the promises and challenges posed by AI. Countries have been selected based on factors including the pace of AI governance and policy developments, the size and significance of markets in AI related products and services, and their strategic importance in shaping the global governance of AI.

The report will provide insight to policymakers, businesses, and other actors seeking to understand the key trends shaping the governance and assurance of AI in 2022.

2. Global Development at a Glance

Throughout the past year, we have seen significant action and collaboration on AI across several global forums. Although much attention has centred on developments in Europe and the negotiation of the EU AI Act, we should be paying close attention to what is happening in other global and intergovernmental forums. Whilst there has so far been no formal proposal for a binding global instrument to govern AI, current developments in the Council of Europe (see below) have the potential to bring about a binding legal framework on the design, development and application of AI to which countries outside of Europe would be able to accede.

The United Nations

We are now almost one year on from the landmark adoption of the <u>UNESCO</u> <u>Recommendation on the Ethics of Artificial Intelligence</u> signed by 193 member countries. The Recommendation is a non-binding standard setting instrument with a broad scope, covering 11 areas of policy action. These include suggestions about how states might conduct ethical impact assessments and factors they should consider when developing and amending relevant laws. Along with these recommendations to signatory states, UNESCO proposes to establish monitoring and evaluation tools to support implementation. Most commentators would agree that it is too soon to fully evaluate the implementation of the Recommendation and, at the time of writing, no robust studies tracking progress exist. UNESCO has not yet published its proposed Ethical Impact Assessment or Readiness Assessment Methodology. These will be important tools to move from agreements and principles towards effective implementation and oversight.

In the field of human rights protection, the work of the Office of the United Nations High Commissioner for Human Rights (OHCHR) is also relevant to AI. The impact of AI use and adoption on human rights has been addressed in OHCHR reports, including a report presented to the UN Human Rights Council in July 2022 on the application of the Guiding Principles on Business and Human Rights to the activities of technology companies.

Other UN initiatives include <u>AI for Good</u> – a year-round summit organised in partnership with 40 UN sister agencies, led by the International Telecommunications Union (ITU). The ITU also publishes <u>annual summary reports</u> which map out AI related activities across the UN system.

AI also looms large in the field of Peace and Security. The rapid proliferation of lethal autonomous weapons systems (LAWS) has led to calls for <u>new global rules</u> on the military development and deployment of AI.

The Organisation for Economic Cooperation and Development (OECD)

The OECD is a key intergovernmental organisation shaping the AI policy landscape. The OECD's Principles on Artificial Intelligence were the first intergovernmental standards on AI, and were adopted by 42 countries in 2019. Current OECD activities related to AI centre on measuring and analysing the economic and social impacts of AI technologies and applications and engaging with governments and other stakeholders to identify good practices for AI related public policy. The most significant deliverable from this year was the publication of the OECD Framework for the Classification of AI Systems. This is a tool intended to enable policy makers to classify different types of applied AI systems and to distinguish AI applications according to their potential impact on individuals, society and the planet. The extent to which this framework will influence subsequent developments or be taken up by interested actors is not yet clear.

Global Partnership on AI (GPAI)

Global Partnership on AI (GPAI) has in 2022 continued its work as a multistakeholder initiative for sharing research and identifying key issues among AI practitioners. This is in line with its objective of facilitating international collaboration and promoting the adoption of trustworthy AI. Launched in 2020 as a G7 initiative, GPAI now has 25 members and expert participants drawn from across science, industry, civil society, governments, international organisations and academia. The partnership is built around a shared commitment to the OECD Principles on Artificial Intelligence, and its secretariat is hosted by the OECD. Highlights from its work this year include the signing of an agreement with the Government of Singapore to support a project on Privacy Enhancing Technology (PET) undertaken by the experts of the Data Governance working group of GPAI. The work of the GPAI also includes the development of AI assurance resources. For example, by the end of 2022, the GPAI Working Group on Innovation and Commercialization aims to develop a readiness index for AI consumers and a quality assessment for AI solution providers.

Standardisation

In recent years, technical standards bodies have become a fundamental policy arena in the governance of AI. Standards development organisations (SDOs) such as the International Organization for Standardization (ISO) and the Institute of Electrical and Electronics Engineers (IEEE), and their regional counterparts, develop standards which cover test methods, codes of practice, guideline standards and management systems standards. A 2022 milestone in the AI standardisation

landscape was reached with the publication of the ISO/IEC 23053: 2022 Framework for Artificial Intelligence (AI) Systems Using Machine Learning (ML), a foundational standard which describes the system components and their functions in the AI ecosystem.

Though standards are adopted on a mostly voluntary basis, a complex interplay between standardisation and regulation is emerging, most notably in the EU AI Act. The draft Act positions harmonised standards to be set by European Standardisation Organisations (ESOs) as a <u>critical feature of the Act's implementation</u>.

At the national and regional levels, many countries have sought to lay down standards strategies and to maintain or <u>pursue leadership in AI standards</u>. Evidence of increased cooperation in this arena can also be found in the work programme of the <u>EU-US Trade & Technology Council</u> which is working towards a transatlantic approach to AI risk management. China has continued to step up its efforts to participate in global technology standardisation.

From an assurance perspective, standardisation work will become increasingly important over the coming years. As a report published jointly by The Brookings Institution and the Centre for European Policy Studies (CEPS) put it, the "exchange of good practices and ultimately a common—or at least a compatible—framework for AI auditing would eliminate significant barriers to the development of a truly international market for AI solutions."

International trade

Along with the activities of international organisations, international trade is a critical though often overlooked arena for AI policy and governance. As highlighted in an OECD policy paper on AI and trade policy released in April 2022, provisions related to AI are increasingly appearing in regional trade agreements (RTAs). These include, for example, binding commitments on data flows, privacy, and local storage requirements. It is rare for trade treaties to include AI-specific disciplines but some now specifically recognise the importance of AI governance and policy frameworks. In one such example, the UK-Singapore Digital Economy Agreement, reference is made to "principles and guidelines of relevant international bodies" and to risk-based approaches based on industry-led standards. As these examples indicate, states are beginning to foster consensus on AI regulatory governance issues through trade law. It should be noted, however, that this form of policy and regulatory coordination on AI remains open-ended and flexible with no binding commitments or prescriptions regarding harmonisation of regulatory models being made. Over the coming years, the interface between trade policy and AI regulation is undoubtedly set to become a more prominent – and contested – feature of global AI governance.

3. Regional Developments



3.1 Africa



Across the African continent, several governments, including those of Mauritius, Rwanda and Egypt, have now adopted comprehensive national AI strategies. These strategies tend to follow global trends, with content and scope covering topics such as building talent and capacity, infrastructure, and research. As detailed in UNESCO's Artificial Intelligence Needs Assessment Survey In Africa, while there are promising signs of AI innovation and development, further legal and regulatory frameworks for AI governance need to be fostered. We should, however, be wary of any attempt to simply transpose AI policies, norms and regulatory frameworks principally developed in the Global North to African contexts. As Rachel Adams of Research ICT Africa put it in a report from May 2022: "the promotion of policy transfers or setting of standards developed elsewhere do not always fit and can fail to address the structural and infrastructural contexts of African countries."

Further progress has been made on AI capacity in 2022. In January, the African Union adopted its <u>Data Policy Framework which</u>, amongst other things, aims to promote digital policy harmonisation and improve intra-regional data flows. It recommends that member states: "cooperatively enable data to flow on the continent while safeguarding human rights, data protection, upholding security and ensuring equitable sharing of the benefits" in order to "take advantage of data-reliant technologies and services, including the capacity to govern data so that it benefits African countries and citizens and enables development." It is widely hoped that the adoption of this framework will mark a major step forward in progress towards greater data sharing and AI-related trade, foreign investment, and innovation. <u>Commentators have been quick to point out</u> that this must be accompanied by increased regulatory capacity. A bespoke <u>tool for measuring capacity</u> and checklist for evaluation and monitoring is due to be completed at the end of 2022, which will in turn support efforts to leverage the Data Policy Framework and build AI readiness across the continent. Parallel to this initiative, and as research conducted

by ODI and the African Trade Policy Centre has shown, there is much scope for the African Continental Free Trade Area (AfCFTA) negotiations – scheduled to include a protocol on e-commerce – to strengthen cooperation on regional data sharing to support the development and adoption of AI.

The African Union is also working on a continental strategy for AI, and the African Union High-Level Panel on Emerging Technologies (APET) hosted an <u>expert workshop in Senegal</u> in May 2022.

Nigeria

Signalling its willingness to invest in AI R&D, the Nigerian government launched the country's first AI and Robotics Centre in 2020. Recently, the government has sought to allay concerns that it is hostile towards its growing tech sector by approving a startup bill which aims to cultivate a new regulatory framework that allows emerging tech firms to thrive, with measures addressing issues such as infrastructure, access to capital and taxation. There have also been recent signs of Nigeria's growing international cooperation on AI, including a partnership with India established in 2022.

Nigeria is currently in the process of developing a national AI policy and the National Information Technology Development Agency (NITDA) has sought stakeholder input. Civil society groups have emphasised the need for the policy to respect human rights and to align with emerging international standards and norms on AI governance.

South Africa

South Africa is yet to adopt an AI strategy but the Presidential Commission on the Fourth Industrial Revolution (PC4IR) report and recommendations, released in 2020, provide guidance on the fourth industrial revolution, including AI. Despite its lack of an AI strategy or any AI-specific regulations, South Africa tends to rank highly amongst African states in <u>assessments of AI readiness</u>, and according to Accenture, <u>AI startups in South Africa are beginning to show signs of progress</u>.

In a 2021 speech, Minister of Communications and Digital Technologies, Khumbudzo Ntshavheni, set out the government's aspirations for AI across the continent, particularly in the Southern African Development Community. She argued that national policies and regulations should consider the following factors:

- Data-centric approach linked to developmental agenda
- Human-centred Technology development
- AI for economic and growth prospects
- Multistakeholder Approach centred
- Institutional Mechanisms located within Localised Agencies

South Africa was instrumental in the AI for Africa Blueprint report, produced by Smart Africa – an alliance of African states committed to providing leadership in accelerating socio-economic development through ICT. Its other members are Rwanda, Kenya, Uganda, Mali, Gabon, and Burkina Faso. The Blueprint is a comprehensive framework and one of its aims is to help decision-makers to find a balance between creating an AI-enabling environment and meeting the ethical and legal governance challenges. It also calls for increased participation of African delegates in international and regional technical committees for AI-related standards.

3.2 Asia and Asia Pacific



China

Examples of Chinese AI-related public policy measures go back several years. The 2017 publication of A New Generation Artificial Intelligence Development Plan (AIDP) was a landmark in policymaking which set out a blueprint for the country's approach to AI adoption for the period to 2030. As well as setting out plans for development and commercialisation of AI, the AIDP also outlines China's desire for its public authorities, companies and academic institutions to be involved in actively formulating ethical norms and standards in the emerging global AI order. However, despite Chinese efforts to become an AI norm-shaper on the global stage, its influence is constrained by several factors. One limitation results from the tendency of what Lewin Schmitt describes as the "polycentric" global AI regime to gravitate towards the OECD - which China is not a member of. China is not included in many of the other multilateral settings such as the G7 and the Council of Europe. As Jing Cheng and Jinghan Zeng wrote recently in an article in the Journal of Contemporary China, the "liberal value based global governance architecture has restricted China's potential in leading global AI governance in many aspects." Its decidedly state-centric governance approach stands in contrast with the more civil society and private sector driven approaches seen in the West.

At the domestic level, the pace of progress towards a more rules-based approach to AI governance has accelerated significantly. Key initiatives include:

- The release of the Beijing Academy of Artificial Intelligence (BAAI) <u>Beijing AI Principles in 2019</u>.
- The publication of China's Ministry of Science and Technology (MOST)

document outlining eight principles for <u>AI governance and responsible AI</u> in 2019.

- The publication of the Internet Information Service Algorithmic Recommendation Management Provisions (2021).
- The joint publication in 2021 of a three-year plan by ministry-level regulators to establish a comprehensive governance framework for algorithms.
- Regional and local developments including <u>Shenzhen's AI regulation</u>.
- The release of draft rules for internet recommendation algorithms by the Cyberspace Administration of China (CAC). According to <u>Matt Sheehan of</u> <u>the Carnegie Endowment</u>, compared to other bureaucratic actors active in AI governance, the CAC's approach to AI governance is the most mature and rule-based.

In the R&D space, China has continued to take a lead, with <u>AI research outputs and citations</u> now outnumbering US outputs.

Singapore

Singapore boasts an ambitious national AI strategy which aims to make the country a global hub for the development, testing and deployment of AI. These ambitions are largely being realised. Google recently launched its third data centre in Singapore and entered into a Public-Private Partnership with the Smart Nation and Digital Government Group (SNDGG) which will enable cooperation on AI in sectors including finance, sustainability and healthcare.

Earlier this year, the Personal Data Protection Commission (PDPC) launched <u>AI Verify</u> as a Minimum Viable Product. AI Verify is a testing framework and toolkit for AI governance which allows developers and owners to verify the claimed performance of their AI systems against a set of principles through standardised tests. This is a significant AI assurance mechanism which has already been tested by ten companies including AWS, Google and Microsoft. Current sector-specific guidelines include the Monetary Authority of Singapore's (MAS) <u>Methodologies for Responsible Use of AI by Financial Institutions</u>.

Al governance in Singapore is also being shaped by its trade partnerships, including the <u>Australia-Singapore Digital Economy Agreement</u> which includes provisions to promote cross-border data flows and <u>cooperation on standardisation</u>. The country is of particular strategic importance for its trading partners – particularly the US. This White House has this year affirmed its commitment to expanding its economic cooperation with Singapore, including through the US-Singapore Partnership for Growth and Innovation (PGI), which will include the development of <u>"interoperable ethical Artificial Intelligence governance frameworks"</u> and cooperation on advanced manufacturing. These moves can also be understood as part of a broader US strategy aimed at China.

Korea

Announced in 2019, <u>Korea's current National Strategy for AI</u> consists of 100 government-wide action tasks under nine strategies spanning three areas:

- · AI ecosystem
- AI utilisation
- · People-centred AI

Since then, a raft of AI policy initiatives have followed and Korea is now recognised as <u>a leader in the field of trustworthy promotion and adoption of AI</u>. Notably, in 2020, the Ministry of Science and ICT published National AI Ethical Standards. This was followed by the development of an Ethical Artificial Intelligence Self-Assessment Tool <u>which stakeholders were consulted on earlier this year</u>.

The Korean state has long supported its ICT sector and has the advantage of strong digital infrastructure and industrial capabilities. Korea is investing heavily in Research and Development and AI education. Under its <u>Digital New Deal</u>, the government has launched a so-called <u>Data Dam</u>, which will enable the collection of data generated through public and private networks to be standardised, processed and used to build AI.

Australia

The government of Australia published its <u>Roadmap for AI</u> back in November 2019, with the aim of helping to "develop a national AI capability to boost the productivity of Australian industry, create jobs and economic growth, and improve the quality of life for current and future generations." The roadmap identified three potential areas of specialisation:

- Natural Resources and Environment
- Health, Ageing and Disability
- · Cities, Towns and Infrastructure

This was accompanied by an Ethics Framework, and followed in March 2020 by the launch of <u>Australia's AI Standards Roadmap</u>. Up until this year, the Australian government had not signalled a willingness to enact any AI-specific regulations. However, earlier in 2022, the Digital Technology Taskforce launched a consultation to feed into the creation of a Digital Age Policy Framework, which will provide principles, guidance and best practice to inform the development of future digital regulation. In its accompanying paper <u>Positioning Australia as a leader in digital economy regulation</u>, the taskforce stated that the "digital economy regulation will enhance public trust and confidence and ultimately facilitate the greater uptake of these technologies in the long-term." Measures that have been proposed already include the creation of an <u>AI Safety Commissioner</u> which is strongly supported by the Australian Human Rights Commission.

This year also saw important AI assurance developments in the Australian public sector with the New South Wales AI Assurance Framework coming into effect back in March. Similar in purpose and operation to Canada's Directive on Automated Decision Making (see below), the NSW framework is designed to help agencies identify risks that may be associated with projects using AI.

3.3 Europe and Central Asia



The European Union

Over the past year, much discussion about how the development and use of AI should be governed has tended to foreground the <u>EU AI Act</u>. This is perhaps unsurprising given that the Act is the first ever attempt to create a legal framework to regulate AI spanning all sectors, and has the potential to influence global AI governance for years to come.

The legislative process for this instrument is complex, and a final text is unlikely to be agreed until later next year (2023). Significant disagreements persist, ranging from definitional issues about what constitutes AI, to the factors determining classifications of risk, to the governance arrangements and enforcement mechanisms. Though the Act purports to be risk-based, the legal scholar Lilian Edwards has argued in an expert analysis for the Ada Lovelace Institute that this is illusory and arbitrary. At present, the Act primarily covers AI systems which are designated as "high risk" but debates about the meaning and boundaries of that category are yet to be resolved.

The AI Act will interact with the rest of what is known as the EU *acquis communautaire* – the accumulated body of legislation, legal acts and court rulings that constitute EU law. This includes, for example, the Digital Markets Act and the Digital Services Act, which were both agreed earlier this year. In September 2022, the European Commission announced its planned revision of the product liability regime, including a proposal for targeted harmonisation of <u>national liability rules for AI</u> with the aim of making it easier for victims of AI-related damage to get compensation.

The extent to which the EU AI Act could determine the future of the global governance of AI is contested. Whilst the so-called Brussels effect can be observed in some areas of law, some commentators, including Alex Engler of Brookings, have argued that this should not be overstated and that the law alone will not set a new comprehensive international standard for AI. However, analysis of Canada's proposed AI legislation suggests policymakers elsewhere are drawing inspiration from Europe and wish to align their approaches.

Although it employs different language, AI assurance is central to the AI Act. The two primary enforcement mechanisms it proposes are: conformity assessments (that providers of high-risk AI systems are expected to conduct) and post-market monitoring plans (that document the performance of high-risk AI systems throughout their lifecycles). Mökander et al. have described the Act as a "proposal to establish a Europe-wide ecosystem for conducting AI auditing, albeit in other words."

The Council of Europe

In April 2022, member states of the Council of Europe began negotiations on the world's first international binding legal instrument in the field of AI. This followed several <u>years of preparatory work</u> by a specially convened Ad hoc Committee on Artificial Intelligence (CAHAI) tasked with establishing the potential elements of a legal framework for the development, design and application of AI, based on the Council of Europe's standards on human rights, democracy and the rule of law. Though finalised in 2021, the document setting out the <u>possible elements of a framework on AI</u> was published in February 2022. The newly established Committee on Artificial Intelligence (CAI) will continue this work, and in its second plenary meeting in September 2022 began its reading of the initial draft.

This draft framework is significant for three main reasons.

Firstly, it sets minimum standards and would be what is known as an open treaty, meaning it would be open for ratification to states which are not members of the Council of Europe. This reflects similar processes for previous Council of Europe instruments, including the <u>Convention 108</u> which, in 1981, was the world's first international treaty on data protection and strongly influenced the development of EU data protection law. Similarly, the <u>Convention on Cybercrime</u>, also known as the Budapest Convention, has been ratified by non-Council of Europe states including the United States, Mauritius, Israel, Canada and Australia.

Secondly, although there are many similarities between the EU AI Act and the Council of Europe framework for an AI Convention in terms of their objectives, scope, nature and content, some major differences can be identified. Whereas the Council of Europe proposal is more oriented towards public sector AI systems and applications, the primary object of the EU AI Act is to shape and regulate a market in AI-enabled products and services.

Thirdly, the Convention would not stand alone but would interact with the EU legal order, including the AI Act once it is adopted and comes into force. The EU will now enter the Council of Europe negotiations with the aim of ensuring that there is consistency and uniformity of the rules for AI, and that the future Council of Europe convention is "fully consistent with existing and future EU law."

Developments in the Council of Europe are also worth watching from an AI assurance perspective. Along with the framework, the Ad hoc committee proposed the introduction of an additional non-binding mechanism – the Human Rights, Democracy and Rule of Law Impact Assessment ('HUDERIA'). Its main elements relate to identification of risks for human rights, democracy and the rule of law, and assessments of impact, governance, and mitigation and ongoing evaluation. The aim of this assurance mechanism would be to "provide a coherent and integrated approach for assessing adverse impact on human rights, democracy and the rule of law generated by AI systems, addressing simultaneously the risks arising from the specific and inherent characteristics of AI systems and the impact of such systems on human rights, rule of law and democracy." Whilst other assurance tools with a human rights focus have been developed elsewhere, no comprehensive and integrated approach to human rights-based AI assurance has yet been agreed upon.

Sweden

When Sweden takes the helm as president of the Council of the European Union in the first half of 2023, the Swedish government will be responsible for driving forward progress on the EU AI Act negotiations. Completing the Council presidency trio of France (January – June 2022) and Czech Republic (July – December 2022), Sweden is likely to continue to pursue many of the same priorities, and to promote a similar balance between innovation and respect for fundamental rights and values. AI Sweden – a national centre for applied artificial intelligence, jointly funded by the Swedish government – recently published an updated position paper on the EU AI Act in which it expressed serious concerns, including that it risks undermining Europe's digital ambitions and global competitiveness. This echoes concerns raised by the Confederation of Swedish Enterprise earlier in the legislative process.

Sweden first adopted its own <u>national AI strategy</u> in 2018. As in many other strategies, Sweden's sought to identify an overall direction for AI-related work and to lay the foundations for future priorities for innovation and growth, rather than to outline concrete regulatory or accountability arrangements. Sweden was also a signatory to a <u>2020 position paper</u> which argued that promoting trustworthy AI is an important lever for competitive advantage. The other signatory states were: Denmark, Belgium, the Czech Republic, Finland, France, Estonia, Ireland, Latvia, Luxembourg, the Netherlands, Poland, Portugal and Spain.

Notwithstanding some AI related controversies, including the rollout of the automation of some social benefits through the <u>so-called Trelleborg Model</u>, Sweden has followed the path of other Nordic countries in promoting AI as a strategic priority. Examples of R&D collaboration include the <u>Nordic AI Network</u>, an alliance aimed at accelerated AI adoption in the Nordic countries.

The United Kingdom

It has been a busy year for AI policymaking in the UK with the launch of several initiatives.

- At the end of 2021, the Centre for Data Ethics and Innovation published its <u>roadmap for an effective AI assurance ecosystem</u> which aims to enable all actors involved in the development and deployment of AI to assess the trustworthiness of systems and to communicate this information to other parties.
- At the start of 2022, the UK government launched a new <u>pilot AI standards</u> <u>hub</u> which aims to promote UK engagement in global AI standards.
- More recently, the Department for Digital, Culture, Media and Sport (DCMS) published its <u>Policy Paper</u> outlining its proposed regulatory approach.

Taken together, these policy initiatives and publications indicate the desire of the UK government to diverge from the direction set by the EU. Rather than opting for a so-called horizontal (or cross-sectoral) regulation like the EU AI Act, the proposed UK model takes a more sector-specific approach which would task individual regulators with determining the exact scope and content of regulation based on a set of overarching principles, such as fairness. The UK government has identified the promotion of innovation as its primary policy objective and is engaged in a parallel process of revising the UK's data protection regime which will likely make it less aligned with the EU's General Data Protection Regulation (GDPR). A White Paper setting out the government's agreed approach to AI regulation is expected by the end of the year.

3.4 Latin America and the Caribbean



Brazil

Following a multistakeholder public consultation, Brazil launched its <u>AI strategy</u> in 2021. One of its main pillars deals with legal and ethical issues, and includes a commitment to building ethical requirements into public procurement. It also sets out Brazil's goal of promoting innovative approaches to regulatory oversight, including regulatory sandboxes. Whilst these elements accord with many other countries' AI strategies and policies, a recent report by Brazil's Federal Court of Accounts (TCU), published in May 2022, found several shortcomings, primarily related to monitoring and evaluation. The TCU found that Brazil's AI strategy lacks clear indicators and targets, timeframes for achieving them, and a clear theory of change. This serves to illustrate that, although strategies are an important step in effective digital transformation, they need to be backed up by appropriate governance mechanisms, including robust monitoring and evaluation.

As well as the AI Strategy, a new <u>AI Bill</u> is currently going through the Brazilian legislature. One of its main purposes is to promote transparency regarding the use of AI in the public sector. This will also complement adjacent legislation including the Brazilian Data Protection Law and the Brazilian Consumer Protection Code.

Brazil continues to attract talent and investment around AI. IBM, for example, recently opened a new <u>Center for Artificial Intelligence at the University of São Paulo</u> which will be dedicated to developing cutting-edge studies and research on AI. As highlighted in the OECD study, <u>Going Digital in Brazil</u>, however, there are

many measures that could be taken to accelerate Brazil's digital transformation and promote inclusive growth. These include: enhancing connectivity through better cooperation on broadband deployment; upgrading digital skills; and developing clear roadmaps for advancement in key digital technologies, including AI, in cooperation with all stakeholders.

Examining Brazil's international trade and investment agenda, a recent <u>Digital Trade Review of Brazil</u>, published by the OECD in September 2022, argued ICT goods and services are subject to high import tariffs and regulatory hurdles. As a result, according to this analysis, Brazil lags in the use of ICT inputs in the production of its exports. This poses a significant constraint on the adoption of AI across sectors, including agriculture and manufacturing.

Mexico

Mexico's AI strategy was first announced in 2018, following the completion of a report Towards an AI Strategy in Mexico: Harnessing the AI Revolution which laid the groundwork for its strategy. The report made the case for Mexico to invest in AI and to pursue an AI strategy covering government and public services; data and digital infrastructure; research and development; capacity, skills and education; and ethics. Following this, the government published its AI strategy, which included many of the recommendations. In line with the preliminary report, the government also convened a multistakeholder national coalition, IA2030.mx, made up of representatives from civil society, academia and industry. The coalition formed working groups and published its AI Agenda for Mexico, which was produced following a dialogue with more than 400 people. This approach could serve as a model for strengthening multistakeholder and civil society engagement in AI policymaking.

More recently, in June 2022, the Mexican National Institute for Transparency, Access to Information and Personal Data Protection released its <u>Recommendations for the Processing of Personal Data</u>. Its stated purpose is to share knowledge about the relationship between data protection and AI.

3.5 The Middle East and North Africa



The United Arab Emirates (UAE)

It is clear that the government of the UAE is striving to embrace many of the opportunities AI makes available. Through its many policy actions – including fostering partnerships, investing in computing, and offering incentives to build the sector – it is signalling its capacity for innovation and attractiveness as a trade partner. According to PwC, in relative terms, out of all the countries in the Middle East, the UAE is likely to see the largest impact of AI on GDP in relative terms – 14% by 2030. An early adopter, the UAE released its AI strategy in October 2017. This was accompanied by the creation of an AI Council, and the world's first ministerial post specifically to oversee AI policy.

These measures to boost UAE's innovation and competitiveness in relation to AI have not yet been accompanied by many AI-specific ethical or binding legal initiatives. Some sector-specific regulation, such as the <u>Federal Data Protection Law</u>, launched in January 2022, encompass aspects of AI decision making and, at the local level, Dubai has implemented its <u>AI Ethics Principles and Guidelines</u>. Dubai has also announced plans to <u>regulate the commercial use of autonomous vehicles</u> with the goal of allowing driverless taxis to operate widely.

3.6 North America



Canada

As the first country in the world to adopt a <u>national AI strategy</u> back in 2017, Canada stands out as an early mover in AI policy. Since then, it has enacted policies including issuing its <u>Directive on Automated Decision-Making</u> and its accompanying Algorithmic Impact Assessment (AIA) tool which cover federal decision-making. As a relatively rare example of a public sector assurance mechanism, <u>evaluation of the AIA</u> offers potentially important lessons for public sector applications of AI elsewhere.

More recently, Canada has introduced comprehensive legislation to regulate AI, Bill C-27 which includes provision for an Artificial Intelligence and Data Act (AIDA). Analysis of the draft Act reveals there to be far more affinity with the European Union's regulatory approach than with the regimes being developed in the UK and United States. Like the proposed EU AI Act, it sets requirements for the design, development and use of AI systems whilst prohibiting some high-risk applications. Similarly, it also embeds AI assurance processes within regulation, by requiring regulated entities to conduct audits, and share audit results.

The United States

Compared to other jurisdictions, including Canada, the US approach to AI governance is more dispersed and has been relatively light-touch until recently. Under the Biden administration, however, there have been a number of key developments that indicate growing appetite for stronger regulation of AI:

- <u>The Federal Trade Commission</u> (FTC) began an AI rule-making process.
- <u>The Equal Employment Opportunity Commission</u> (EEOC) launched an initiative on AI and Algorithmic Fairness.
- The National Institute for Standards and Technology began a process of developing a <u>Risk Management Framework</u>.

In addition to these shifts in federal policymaking, initiatives at the state level are shaping the development and adoption of AI. California's privacy and data protection regime, governed by the California Consumer Privacy Act (CCPA), will be further strengthened when the California Privacy Rights Act enters into force in 2023. This brings the state closer in alignment with the EU's GDPR model and has the potential to influence other US states as well as federal policymaking. Despite these developments, and the ongoing work of the EU-US Trade and Technology Council, transatlantic regulatory interoperability remains relatively far off.

At the local level, <u>a new law</u> will come into effect in 2023 in New York City which creates obligations for companies using automated hiring software in their recruitment process, including that they conduct audits for bias. This reflects a broader trend of AI assurance mechanisms being used to give effect to regulation.

4. Conclusion

A holistic assessment of the state of AI governance and assurance around the globe suggests an ongoing shift from soft law declarations and principles on AI towards a hardening of these principles into rules and more concrete and binding commitments is underway. These principles, including the OECD Principles, helped lay many of the normative foundations for the current wave of legislative and standardisation initiatives.

Yet, as we are witnessing, particularly through the highly complex legislative process currently underway in the EU, many of the key debates about how best to regulate AI remain unresolved. Fundamental issues, including definitions of AI, and how to assess, manage and classify risk, continue to divide policy actors. Crucially, agreement about values and ethical principles has not translated into agreement about how we should aim to shape the political economies in which AI technologies are produced, commercialised and deployed.

Though the EU received much of the focus of attention in 2022, **different regulatory models are beginning to emerge which do not align closely with the EU AI Act.** With the exception of Canada, there is little evidence yet of a so-called Brussels effect. Although many would agree that innovation and regulation are certainly not in direct opposition, this tension continues to animate political discussions. Some governments, such as the UK, are currently aiming for a lighter touch and more deregulatory approach. **Regulatory divergence will become more significant as AI continues to emerge as an issue in trade policy,** including in trade agreements. Whilst harmonised standards are unlikely, the US-EU Trade and Technology Council may emerge as an important venue for reaching some common ground.

When we look at the main actors involved in AI policymaking and governance, there is a relative absence of public and multi-stakeholder participation in processes. **There is an opportunity for far more engagement, including by SMEs, to shape the legal and policy architecture at all levels.** AI assurance is one aspect of policy where insights could be most valuable as businesses, end users and other stakeholders can contribute collective knowledge about how to operationalise applicable rules and standards.

Globally, there is a widening AI economic and social divide, with most research and development, investment and adoption of AI concentrated in Europe, North America and China. Decision making power is also relatively concentrated with many countries, particularly those in Africa, excluded from key policy processes and forums such as the GPAI.

From an AI assurance perspective, countries are at very different levels of ecosystem maturity. Even where governments have begun to identify the need for actors in the AI supply chain to manage risks using assurance services, there is still a long way to go. For businesses to adequately fulfil public expectations, regulatory requirements and emerging industry standards, a professionalised AI assurance industry with cross-border expertise will need to develop along with coherent standards to be applied in assurance. There is much scope for industry, policymakers, academia, civil society and other stakeholders to step up their collaboration efforts. Building this knowledge and capacity for AI assurance will be a vital intermediate step in shifting AI governance from principles to practice.

