AIIA Response to

the *Safe and Responsible AI in Australia* Discussion Paper

4 August 2023

About the AIIA

The Australian Information Industry Association (AIIA) is Australia's peak representative body and advocacy group for those in the digital ecosystem. We are a not-for-profit organisation to benefit members.

Since 1978, the AIIA has pursued activities to stimulate and grow the digital ecosystem, to create a favourable business environment for our members and to contribute to Australia's economic prosperity. We do this by delivering outstanding member value by:
• providing a strong voice of influence
• building a sense of community through events and education
• enabling a network for collaboration and inspiration; and
• developing compelling content and relevant and interesting information.

We are unique in that we represent the diversity of the tech ecosystem from small and medium businesses, start-ups, universities and digital incubators through to large Australian companies, multinational software and hardware companies, data centres, telecommunications companies and technology consulting companies.

Introduction

The AIIA is pleased to provide this response to the *Safe and Responsible AI in Australia* Discussion Paper authored by the Department of Industry, Science and Resources,[1] building on our response to the *Positioning Australia as a Leader in Digital Economy Regulation*[2] Discussion Paper and the *AI Action Plan* consultation.[3] The Discussion Paper has been authored in the same year that the AIIA has been delivering industry-facing thought leadership on Responsible AI in the form of the AIIA and KPMG-authored paper *Navigating AI*, which includes a practical checklist.

In the 21st century, Artificial Intelligence (**AI**) is constituted by a powerful range of machine-based or digital systems that use machine or human-provided inputs to perform advanced tasks for a human-defined objective, such as producing predictions, advice, inferences, decisions, or generating content.[4] Safe and responsible AI bears great promise for Australia and indeed the world. During the 2020s, we are entering an 'AI Spring' globally,[5] with strong growth in development and adoption and AI technologies squarely within the public consciousness. Notably, this recent period has witnessed a democratisation of AI through the accelerated uptake of generative AI and greater accessibility to productive AI applications by individuals and businesses alike.

[1] https://storage.googleapis.com/converlens-au-industry/industry/p/prj2452c8e24d7a400c72429/public_assets/Safe-and-responsible-AI-in-Australia-discussion-paper.pdf
[2] https://aiia.com.au/wp-content/uploads/2022/04/20_4_2022-AIIA-AI-Regulation-Issues-Paper-Submission.pdf
[3] https://aiia.com.au/wp-content/uploads/2021/03/27-11-20-AI-Action-Plan-Submission-v5-1.pdf
[4] OECD definition.
[5] https://www.mckinsey.com/mgi/overview/in-the-news/the-coming-of-ai-spring

As McKinsey noted in their recent special report on Generative AI:

> *"Deep learning has powered many of the recent advances in AI, but the foundation models powering generative AI applications are a step-change evolution within deep learning. Unlike previous deep learning models, they can process extremely large and varied sets of unstructured data and perform more than one task."*[6]

Recently, there have been a number of high-level initiatives involving development and deployment of AI technologies demonstrating their critical role to Australia's future prosperity:

- The successful deployment of AI across digital and non-digital industry pillars including search engines, social media, logistics, transport and road safety, medicine and biotech, smart cities, financial services, insurance, mining and agriculture are deepening and broadening;[7]
- Pillar 2 of the AUKUS trilateral agreement has formally identified AI as an advanced capability that will "provide critical enablers for future force capabilities"[8]
- The *AIIA iAwards* in 2023 are a case study for the extent to which AI is being embedded into problem-solving solutions on the national stage. The fact that Artificial Intelligence and automation are mentioned in the title of so many of the solutions that have been successful in the State and Territory iAwards as part of the AIIA's Innovation Program is testament to its role as a transformative and productivity-enhancing key in the bid to solve national problems.[9]

AI technologies point to the ever-growing role of new technology in driving the productivity improvements that underpin our economic growth, part of a broader trend of exponential advancement (see Figure 1 below). Increasingly, some commentators treat AI as akin to an economic factor of prodution in its own right.

[6] https://www.mckinsey.com/capabilities/mckinsey-digital/our-insights/the-economic-potential-of-generative-ai-the-next-productivity-frontier#introduction
[7] https://assets.kpmg.com/content/dam/kpmg/au/pdf/2023/modgov-navigating-ai.pdf p. 8
[8] *The World is Spending Big on AI: What is Australia Doing?* Professor Anton van den Hengel, Director Centre for Augmented Reasoning, University of Adelaide
[9] https://aiia.com.au/wp-content/uploads/2023/07/iAwards-2023-_AIIA-Winner-Announcement-_VIC.pdf

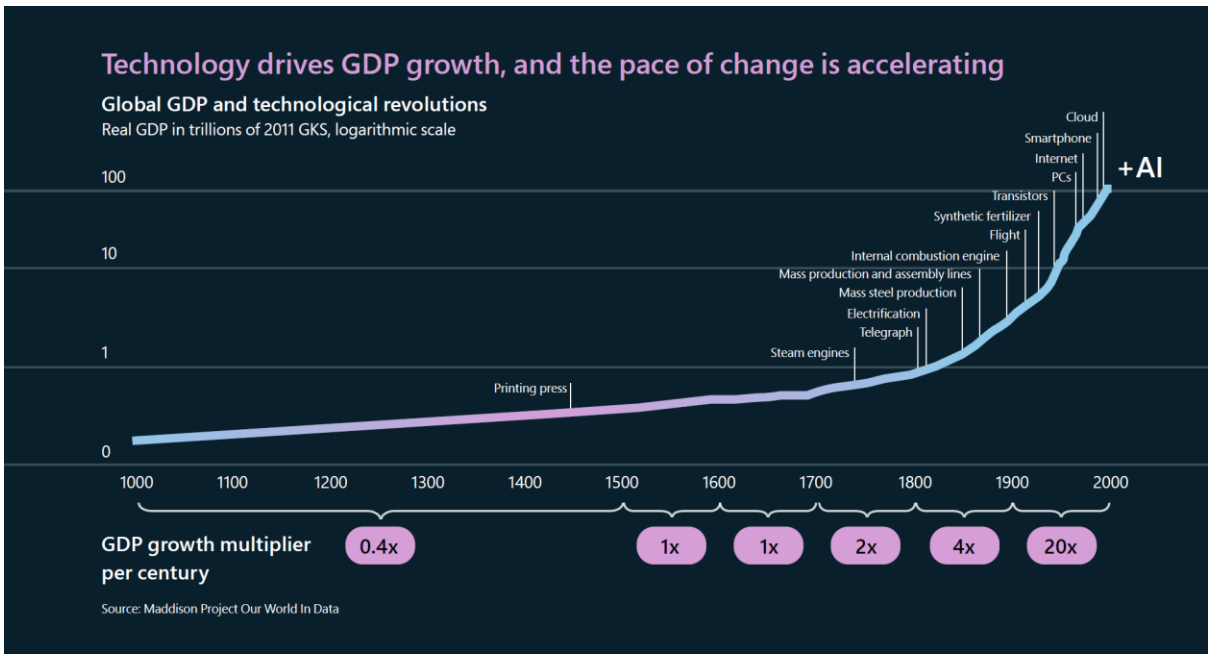


Figure 1: supplied via Microsoft, Governing AI: A Blueprint for the Future (May 2023)

The AIIA is proud that it represents leaders and pioneers in the development and deployment of responsible AI. Technology organisations care about maintaining responsible stewardship of the developments that they have overseen in AI by taking a principles-based and socially aware approach to AI governance.

The AIIA also acknowledges that confidence and societal trust is critical to supporting the adoption of AI. A 2023 Salesforce Generative AI Research Series, an ongoing research study of over 4000 full-time employees, found that 68% believed AI would help them to better serve their customers, 67% believed generative AI would help them to get more out of their other technology investments, and on average employees estimated saving 5 hours per week due to their use of generative AI. However, 60% of those employees using, or planning to use, generative AI at work said they do not know how to do so using trusted data sources or while ensuring sensitive data is kept secure.[10]

In order to approach the legislative and regulatory framework applying to AI use-cases in a way that both harnesses the benefits and builds societal confidence, government should take a multi-stakeholder, principles-based, risk-based approach to the task of reviewing or designing regulatory architecture.

While the government mulls the appropriate regulation of AI, it must also ensure that Australia keeps pace proportionally with the AI investments of comparable economies on the world stage, building the AI ecosystem across research, procurement and commercialisation. Realising the economic benefits of AI and developing capability in AI should be a *sine qua non* of the government's regulatory approach to AI.

The AIIA notes that the federal government's AI Strategy pre-dates the explosion of public generative AI since the launch of ChatGPT on 30 November 2022 and the rapid rise of so-

[10] https://www.salesforce.com/news/stories/generative-ai-ethics-survey/

called generative AI co-pilots. Supporting AI adoption for SMEs and regional adoption and use of AI must take place alongside the growth and investment in research and commercialisation of AI in Australia. As *Navigating AI* found:

> *… the reality as a digital and technology enabled nation is that we are underfunded and consequently underutilising our great academic and research resources. Our challenge is to sustain directional intensity, embrace global and national innovation and advancement in AI solutions and offerings, foster collaborative opportunities for joint industry and government creativity and de-risk the application of AI solutions in an Australian government setting.*

As Australia works towards its ambition to become the most cyber-secure country in the world by 2030,[11] Automation and AI capability will be a crucial part of this picture. As outlined in the AIIA's Response to the Cyber Security Strategy 2023-2030 Discussion Paper:

> *Today, cyber-attacks as well as cyber security defences leverage machine learning and automation. If organisations try manual defence against automated attacks, the fight becomes human-versus-machine, with highly unfavourable odds for the human-driven organisation. Successfully protecting against automated attacks necessitates incorporating automation into cyber defences- including security operations centres (SOCs). This levels the playing field, reduces the volume of threats, and allows for faster prevention of new and previously unknown threats. Automation also supports real-time incident response at scale to triage and respond to attacks faster. Automating SOC functions can also significantly benefit staffing – low-level threats are addressed by automation, freeing up highly-skilled (and finite) staff resources to address more sophisticated attacks.*

Feedback on definitions in discussion paper

Our members have highlighted a number of issues relating to definitions presented in the consultation paper. We note the importance of precision in definitions so as to avoid unintended consequences for other technologies or software applications. The government should consider the OECD definition, which the EU have adopted:

> "An AI system is a machine-based system that is capable of influencing the environment by producing an output (predictions, recommendations or decisions) for a given set of objectives. It uses machine and/or human-based data and inputs to (i) perceive real and/or virtual environments; (ii) abstract these perceptions into models through analysis in an automated manner (e.g., with machine learning), or manually; and (iii) use model inference to formulate options for outcomes. AI systems are designed to operate with varying levels of autonomy."[12]

[11] https://www.homeaffairs.gov.au/about-us/our-portfolios/cyber-security/strategy/2023-2030-australian-cyber-security-strategy#:~:text=The%20Strategy%20will%20help%20us,Australia's%20cyber%20security%20and%20resilience .

[12] https://oecd.ai/en/ai-principles

The breadth of AI use-cases and applications should be connected to the definition, given it currently makes reference to AI's role in "generating predictive outputs" but not its other functions.

Furthermore, the definition of 'machine learning' should focus on the models and algorithmic techniques that enable machines to improve with experience, not just patterns or outputs.

The definition of 'generative AI' should have regard to the fact that generative AI can respond to inputs other than conventional user prompts.

The definition of Large Language Models (**LLMs**) should encompass the wide variety of outputs beyond text such as images and code that LLMs can produce. A prescriptive and inflexible description of outputs would be unhelpful.

Finally, an umbrella definition of 'Foundation Models' under which Multimodal Foundation Models and LLMs sit, and which can encompass a variety of downstream uses and outputs, may be useful.

The risk of Australia lagging in AI adoption and investment; harnessing AI opportunities and benefits while identifying and mitigating risks

The risks posed by AI applications must be viewed alongside the risks posed by the stymying effect that unpredictable, unclear, or onerous regulations would have on AI adopters and developers in Australia, with a corollary of Australia falling further behind in the adoption and growth of AI, which has huge potential to drive productivity and growth but is currently proportionally below the level of comparable economies (see further below).

The CSIRO and Data61 have forecast that, by 2030, AI benefits could be worth $22.17 trillion to the global economy.[13] However, these benefits must be realised within each nation across AI research, public sector investments, private sector investments, and AI adoption by private organisations.

Meanwhile, Australia currently lacks the productivity drivers it needs to power our economic growth. According to CSIRO's Artificial Intelligence Roadmap:

> "*The average annual productivity growth rate in Australia over the last 10 years has been roughly half the long-term 30 year average. According to economic studies by the Australian Government, productivity growth must increase in order to maintain our trajectory of continued improvements in living standards.*"[14]

AI could hold the key to improving this growth rate. Indeed, PwC has summarised the productivity drivers associated with AI as follows:

[13] Hajkowicz SA1+, Karimi S1 , Wark T1 , Chen C1 , Evans M1 , Rens N3 , Dawson D1 , Charlton A2 , Brennan T2 , Moffatt C2 , Srikumar S2 , Tong KJ2 (2019) Artificial intelligence: Solving problems, growing the economy and improving our quality of life. CSIRO Data61, Australia. https://www.csiro.au/en/research/technology-space/ai/artificial-intelligence-roadmap

[14] https://www.csiro.au/-/media/D61/AI-Roadmap-assets/19-00346_DATA61_REPORT_AI-Roadmap.html

1. Productivity gains from businesses automating processes (including use of robots and autonomous vehicles).
2. Productivity gains from businesses augmenting their existing labour force with AI technologies (assisted and augmented intelligence).
3. Increased consumer demand resulting from the availability of personalised and/or higher-quality AI-enhanced products and services.[15]

Smart cities are a notable example of the optimising effects of AI on a large, socially significant scale. The Productivity Commission recently highlighted artificial intelligence systems and their role when linked to IoT sensors to enable smart cities, allowing real-time optimisation of infrastructure, energy and services.[16]

The AIIA believes that government intervention in the use of artificial intelligence should weigh the risks posed by the general scope of the AI application before imposing a regulatory requirement.

In considering these risks, government should also consider the risk or outcomes of applying certain styles of regulation. We want government to consider how regulatory approaches will build societal trust and understanding, affect uplift in adoption, the development of AI at scale, the deeper deployment of AI projects and the realisation of productivity benefits for Australian industry.

The government must be alive to the possibility that an onerous risk framework could function as a tax on Australian industry and Australian developers of AI products and systems. Given the limited and embryonic stage at which AI development is in Australia, a tax, handbrake or chilling effect on what innovation there is in our Australian landscape could be prohibitive to the prospect of a burgeoning Australian AI industry.

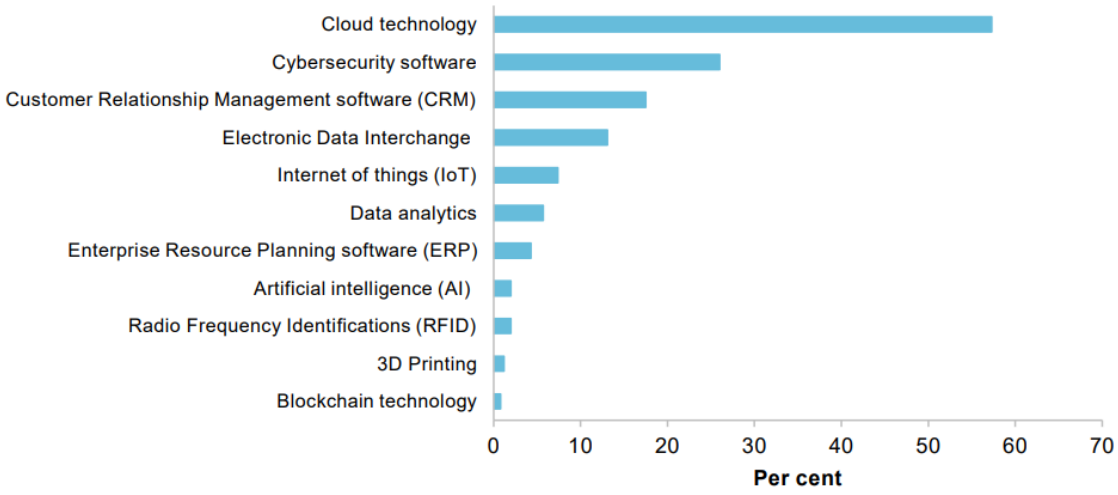
AI development and uptake in Australia within the international context

The Productivity Commission has found that tools that either generate or require large volumes of data to be used effectively, including AI, analytics and IoT, have relatively low uptake in Australia (see Figure 2 below).[17]

[15] https://www.pwc.com/gx/en/issues/analytics/assets/pwc-ai-analysis-sizing-the-prize-report.pdf
[16] https://www.pc.gov.au/media-speeches/articles/australias-data-and-digital-dividend
[17] https://www.pc.gov.au/inquiries/completed/productivity/interim2-data-digital/productivity-interim2-data-digital.pdf p.10

Figure 1.4 – Technology uptake is higher for foundational tools

Share of businesses using different ICTs, 2019-20[a]



a. This chart uses weighted estimates as published by the ABS in its Characteristics of Australian Business 2019-20 publication.

Source: ABS (*Characteristics of Australian Business*, Cat. no. 8167.0).

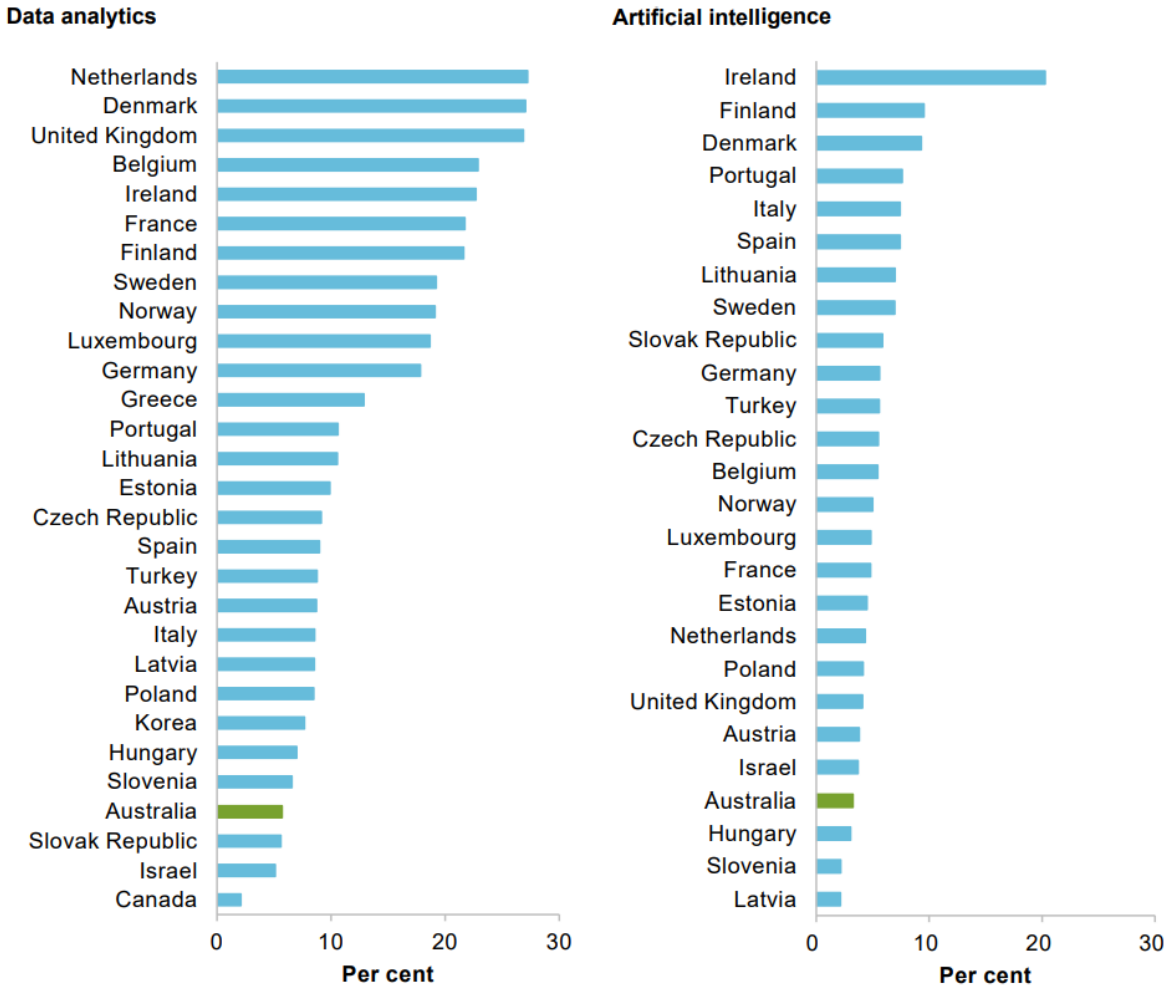
Figure 2: Productivity Commission, ABS Source.

As Figure 3 below demonstrates, Australia lags on the world stage in terms of the use of data-driven technologies such as AI:[18]

[18] https://www.pc.gov.au/inquiries/completed/productivity/interim2-data-digital/productivity-interim2-data-digital.pdf p.19

Figure 1.12 – Australian businesses are trailing in use of data-driven technologies

Share of businesses who use data analytics, 2019[a], and artificial intelligence, 2020



a. While international data on data analytics use in 2019 has been sourced from the OECD, the share of Australian businesses using data analytics is from the ABS for 2019-20 (see figure 1.4). The OECD's statistics do not include Australia in the cross-country comparison on use of data analytics.

Source: ABS (*Characteristics of Australian Business*, cat. No. 8167.0), OECD (2022a, 2022b).

Figure 3: Productivity Commission, ABS Source.

Other leading economies around the world are playing a key role to invest in nascent AI technologies to support safe and responsible AI practices. These examples also highlight the greater share of investment relative to GDP expended by these countries.

Regulatory interventions and global frameworks should be viewed in the context of the size of governmental and private investments in Australia and the maturity of the AI ecosystem in each jurisdiction. In the 2021 federal budget, $124 million was attached to the AI Action Plan[19] as well as some sector-specific AI funding such as $19m for AI health research

[19] https://www.globalaustralia.gov.au/industries/digitech/artificial-intelligence

projects[20]. Most of this funding for AI commercialisation never reached industry and the Albanese Government announced in the May 2023 budget a reduced funding amount of $101.2m over five years from 2022-23[21] covering both quantum technology and AI.

In 2019, Singapore – a nation with a population of 5.4 million and GDP of $USD397bn in 2021[22] to Australia's 25.69 million[23] and $USD1.553tn,[24] respectively – announced its national AI strategy supported by S$680 million (~A$740 million) for fundamental AI research, translational research and industry-research collaboration. Meanwhile, the United Kingdom has invested £1 billion (~A$1.925 billion) in a public-private investment deal[25] and a further £250 million for technology missions in AI, quantum and engineering biology. The UK's population of 67.33 million[26] is 2.62 times that of Australia's and its GDP of USD$3.131tn[27] is double that of Australia's. However, its investments are 19 times[28] that of Australia's 5-year pledge in 2023 covering both AI and quantum technology.

France and Germany will have invested €2.2 billion and €5 billion in AI by 2025, respectively.[29] [30] France's population is 2.6 times[31] that of Australia's while its GDP is almost double (1.9 times)[32] that of Australia's, but its governmental AI investment is 36 times[33] that of Australia's 2023 pledge. Germany's population is 3.23 times that of Australia's,[34] while its GDP is almost triple (2.74 times) of Australia's,[35] but its governmental AI investment is more than 82 times that of Australia's.[36]

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[20] http://www.health.gov.au/ministers/the-hon-greg-hunt-mp/media/19-million-for-artificial-intelligence-health-research-projects

[21] https://aiia.com.au/wp-content/uploads/2023/05/AIIA-2023-24-Budget-Summary.pdf

[22] https://datacommons.org/place/country/SGP/?utm_medium=explore&mprop=amount&popt=EconomicActivity&cpv=activitySource,GrossDomesticProduction&hl=en

[23] https://datacommons.org/place/country/AUS/?utm_medium=explore&mprop=count&popt=Person&hl=en

[24] https://datacommons.org/place/country/AUS/?utm_medium=explore&mprop=amount&popt=EconomicActivity&cpv=activitySource,GrossDomesticProduction&hl=en

[25] https://www.computerworld.com/article/3427683/uk-government-announces--1-billion-investment-in-ai.html

[26] As of 2021.
https://datacommons.org/place/country/GBR/?utm_medium=explore&mprop=count&popt=Person&hl=en

[27] https://www.macrotrends.net/countries/GBR/united-kingdom/gdp-gross-domestic-product

[28] A$1.925bn is 19 times A$101.2m

[29] https://www.eetimes.eu/france-to-invest-e2-2b-in-ai-by-2025/

[30] (2020) Artificial Intelligence Strategy of the German Federal Government – 2020 Update, German Federal Government

[31] 67.39m is 2.62 times 25.69m
https://datacommons.org/place/country/FRA/?utm_medium=explore&mprop=count&popt=Person&hl=en

[32] USD$2.958tn is 1.9 times USD$1.553tn
https://datacommons.org/place/country/FRA/?utm_medium=explore&mprop=amount&popt=EconomicActivity&cpv=activitySource,GrossDomesticProduction&hl=en

[33] A$3.667bn is 36 times A$101.2m

[34] Germany's population of 83.2 million is 3.24 times Australia's population of 25.69 million

[35] Germany's GDP of USD$4.26tn is 2.74 times Australia's GDP of USD$1.553tn
https://datacommons.org/place/country/DEU/?utm_medium=explore&mprop=amount&popt=EconomicActivity&cpv=activitySource,GrossDomesticProduction&hl=en

[36] A$8.33bn is 82 times A$101.2m

Canada has invested C$125 million in phase 1 and C$443 million for phase 2 of its Pan-Canadian AI Strategy for a total of C$568m or approximately A$644m.[37] This investment is more than 6 times[38] that of Australia's 2023-24 funding announcement despite the fact that Canada's population is only 48% larger than Australia's and GDP only 28% greater than Australia's.

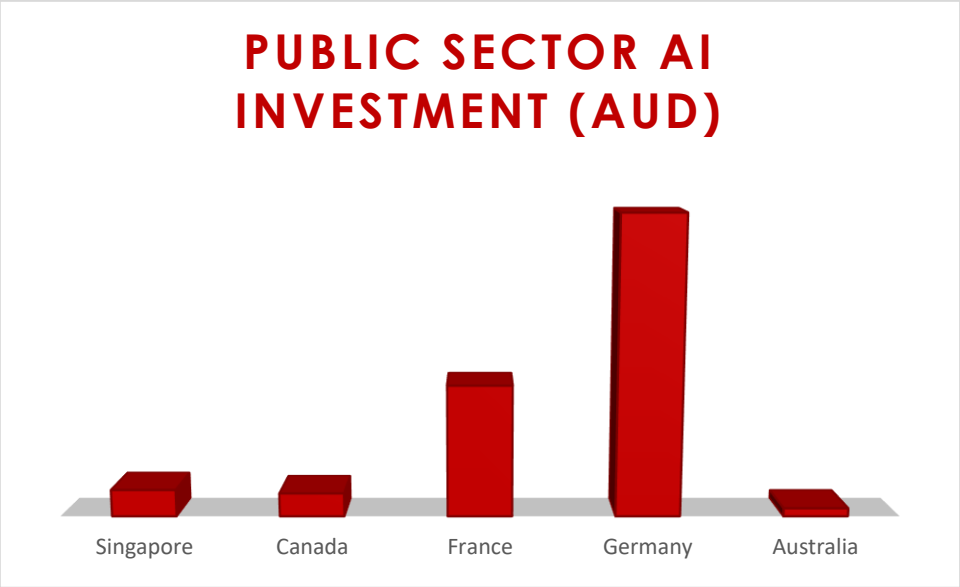

Figure 4: Country-by-country public sector investment in AI in the 2018-2025 period (AUD) Source: AIIA

Our members have noted that the European Union has devoted at least €5 billion into forming an AI industry, therefore the EU have moved to a regulation state in a sequential fashion. Europe has an innovation industry with flourishing startups having determined an ambitious intention to build that capability within the EU. With this muscle, the EU have already offset the disadvantage of having their own regulation. The EU notably invested heavily first before applying stricter guardrails. Given our lack of a comparable investment, Australia should not be applying the handbrake without first starting the engine.

The great 'wealth generators' from AI at present are 'AI-first' companies – examples include Tesla (automobiles), Amazon (retail), Nvidia (hardware) and Facebook (advertising), among others. These AI-first companies are driving wealth creation, with trillions of dollars of new value created over the last decade, substantially outperforming many other listed companies and the rest of the stock market.

Given the significant potential for AI to boost growth in so many different sectors from financial services to mining to retail, an Australia strategy to support AI technologies rather than impede them has the potential to increase productivity economy-wide. Such a strategy can support Australia to diversify its sources of economic power in a context in which

[37] Government of Canada launches second phase of the Pan-Canadian Artificial Intelligence Strategy. Press release 22 June 2022; Barker, P. (2022) Ottawa to pump $443 million into second phase of Pan-Canadian AI Strategy. IT World Canada

[38] A$644m is 6.36 times A$101.2m

resources and minerals have been our major prosperity driver, in order to create wealth and build resilience for Australians in other sectors.

The vast majority of the AI used in Australia comes from abroad, so a bespoke Australian regulatory or legislative framework that targets AI development would necessarily apply to a minuscule proportion of the AI used onshore. Government should consider that the net impact may be to functionally decrease the amount of responsible AI in Australia because it would operate as a push factor encouraging Australian startups to go offshore or relocate their formal place of business elsewhere. Small Australian AI companies before they receive government investment would potentially need to employ a compliance officer or lawyer in order to receive support.

Compliance with a potential AI regulatory approach should focus on high-risk sectors and applications to minimise the compliance cost on uncontentious uses of AI so that the Australian AI industry remains internationally competitive, particularly in light of the level of AI innovation onshore.

AI is often described as an emerging technology in Australia, however in many other leading economies it has already created significant value and been subject to vast investments from both the public and private sectors. It is realising significant productivity gains globally.

Australia is however known as leading in AI research and product safety and standards. It could leverage this reputation to develop a greater capability in AI as well as importing advanced commoditised AI from global leaders.

Not every AI product used in Australia needs to be Australian AI, and for Australian businesses to make the survival-critical productivity gains they need to make there will be a mix of imported and Australian-developed AI that is used. Creating global markets for Australian businesses and ensuring Retained Economic Benefit (**REB**)[39] to take advantage of Australia's global reputation for liberal, democratic institutions and rigorous safety nets will ensure Australia can find a role of agency on the global stage. The AIIA welcomes the fact that AI is included as a key capability on the List of Critical Technologies in the National Interest.[40]

Regulatory responses suitable for Australia vs overseas; global frameworks

When considering the regulatory and cost-related impacts of implementing an AI regulatory scheme, the relevant differences between overseas models and the Australian context should be accounted for.

The apparatus that undergirds the European Union's proposed *AI Act* is not feasible in Australia considering our relative regulatory resources. The EU's Impact Assessment, supported by studies from the Centre for European Policy Studies (**CEPS**)[41], refers to compliance costs projected to €726 million by 2025.[42] The CEPS also estimated the requirement for '1 to 25' Full-Time Equivalent employees per member state. A policy paper

[39] https://aiia.com.au/wp-content/uploads/2021/06/AIIA-DC-Framework-Policy-2021-1.pdf
[40] https://www.industry.gov.au/publications/list-critical-technologies-national-interest
[41] https://www.ceps.eu/clarifying-the-costs-for-the-eus-ai-act/
[42] https://digital-strategy.ec.europa.eu/en/library/impact-assessment-regulation-artificial-intelligence

by the Center for Data Innovation in 2021 meanwhile estimated that the projected costs to member-states could be as much as €31 billion over the forthcoming 5 years, noting that the methodology behind these findings was questioned by the Centre for European Policy Studies.

Australia should invest in its collaboration on international efforts to work towards internationally coherent AI governance, including participating in the development of international standards and contributing to a voluntary international AI Code of Conduct, as discussed at the G7 Summit in Hiroshima.[43]

The United Kingdom have proposed a 'pro-innovation approach to AI regulation'[44] that views AI through the lens of its ability to deliver and enable government goals to become a science and technology superpower by 2030, while addressing risks posed by AI through a 'proportionate and pro-innovation regulatory framework' based in the contexts associated with AI use-cases. The AIIA supports this approach.

Internationally agreed standards are also an important tool to enable globally interoperable regulation that is also flexible enough to adapt to the pace of change in AI technologies. There are key international standards governing AI already being developed by the International Organization for Standardization (ISO) and International Electrotechnical Committee (IEC), including the ISO/IEC 42001 and ISO/IEC 42006. Australia should continue to actively participate in the international standard-setting process and leverage the international consensus achieved in these standards.

Sector-specific regulation and focus on high-risk settings

As outlined in the Law Council of Australia's submission in response to the *Positioning Australia as a Leader in Digital Economy Regulation* consultation, sector-led approaches may be preferable to umbrella-style legislative frameworks for the following reasons:

- *"the boundaries of AI risks and harms are grey (the harms are often non-AI issues, and the boundaries of what constitutes an AI system are evolving);*
- *use cases and impacts can be highly complex (the detail will always need to be dealt with at the level of individual harms and use cases);*
- *regulators and industry are already starting to respond to the risks (working together in sectors to interpret existing regulations and consider further regulatory responses; and*
- *AI is not the only ongoing technology change, and its impacts are often interlinked with other innovations and behaviour changes (increased connectivity, mobile workforce, dominance of major platforms, etc.)."*[45]

Governments should have in their sights outcomes or high-risk applications of technology,

[43] https://www.techuk.org/resource/us-and-eu-to-draft-an-ai-code-of-conduct.html
[44] https://www.gov.uk/government/publications/ai-regulation-a-pro-innovation-approach/white-paper
[45] https://lawcouncil.au/publicassets/06c499e1-5be5-ec11-9452-005056be13b5/2022%2006%2003%20-%20S%20-%20Automated%20Decision%20Making%20and%20AI%20Regulaiton%20Issues%20with%20attachments.pdf p.12

not the technology itself. Government must create a regulatory architecture that reflects the level of control deployers and developers have at different stages of the AI technology architecture by tailoring the right regulations for each level of the AI stack.

Government should take a sector-specific approach with an immediate focus on near-term, realisable harms in high-risk settings, whether they be:

- Contexts that apply to people in right of their status as citizens, including government service delivery;
- Medical contexts (diagnostic and surgical applications of AI in healthcare will naturally attract a distinct regulatory response)
- Transport, self-driving vehicles or other heavy machinery.

The AIIA appreciates the government's desire to institute safety brakes or circuit breakers at points along the AI lifecycle, especially for critical infrastructure and its use of AI applications.

Principles-based AI guardrails and frameworks

AI guardrails should be principles-based, and government policy on AI should be outcomes-based.

Principles such as transparency, explainability, inclusiveness, privacy, security, observability, safety, responsibility and accountability are relevant for AI. The AIIA supports the AI Ethics Principles[46] that have been implemented across significant industry pillars. The government should fully leverage and invest in the further rollout of these road-tested principles and encourage companies to work them into their assurance mechanisms and governance frameworks in line with checklists and best-practice guidelines such as *Navigating AI*.[47]

Having made considerable investments in the National AI Centre established by the government and convened by CSIRO, of which the AIIA is a member of the Responsible AI Network (RAIN) and the RAIN Advisory Council, the government should see through the work of the Centre as it bridges the gap between business practices and adherence to the AI Ethics Principles.[48]

Building on the work of industry, AI regulation both in government and private organisations should centre on accountability, meaningful observability and explainability of AI processes with human oversight, grounded always in the particularities of the given use case and sectoral context.

AI regulatory approaches should look to flexible guidance and principles, not prescription; for companies attempting to work AI applications into their existing enterprise risk frameworks, this task will be distinct in every case.

[46] https://www.industry.gov.au/publications/australias-artificial-intelligence-ethics-framework/australias-ai-ethics-principles
[47] https://kpmg.com/au/en/home/insights/2023/03/ai-development-use-adoption-guidelines.html
[48] https://www.csiro.au/en/work-with-us/industries/technology/national-ai-centre/implementing-australias-ai-ethics-principles-report

As we discussed in our 2022 submission, we believe that AI frameworks should be user-friendly and proportionate, with low-risk applications largely left alone rather than having strict regulatory requirements for training or explanatory statements.

These risk-based frameworks should be approachable, understandable and financially affordable, particularly for SMEs.

Building on Australia's existing regulatory toolbox

Broadly, the AIIA would not support the introduction of 'bespoke' AI laws unless it's demonstrated that there are some attributes of specific tools and use cases that are so unique they are not covered by any existing legislative frameworks – noting the interwoven tapestry in which AI is already regulated, including in areas of the under-review Privacy Act, the Australian Consumer Law, the Online Safety Act, and existing sector-specific regulation by the Therapeutic Goods Administration (TGA).[49] The efforts to establish the Regulatory Framework for Automated Vehicles in Australia[50] through a consortia of government and industry convened by the National Transport Commission, aimed for an efficient, risk-based and scalable approach that used existing regulatory frameworks where possibly and developed regulatory approaches in close conjunction with industry experts.

AI is an enabling technology and often an element in other systems and used across various industries. Therefore, AI is already regulated under multiple legislative frameworks, making it more likely that regulatory systems would be duplicative or conflicting with what already exists.

As mapped in the AIIA and KPMG *Navigating AI* report, Australia's regulatory landscape regulates some aspects of the way in which personal information can be collected, used and disclosed by AI systems (the *Privacy Act 1988*), prohibits users from misleading consumers, including about how their personal information is collected, used or shared by an AI System (Australian Consumer Law), require transparency if the way in which an AI system delivers outputs or services is influenced by commercial relationships[51]. Manufacturer's liability also relates to the supply of AI systems if loss or damage is caused to a consumer. Given the reformed *Privacy Act* is yet to be instituted, government should tread carefully in its forays into the regulation of AI applications prior to this point.

We believe government should use the legislative and regulatory toolbox we've got and design a regulatory response that is flexible and adaptable, rather than adding a novel, static legislative layer. Government should look to what is already there and build on it, making it easier for private entities to adapt. Government should also communicate straightforward guidance articulating the relationship between existing laws and AI use-cases.

The AIIA asks that regulatory intervention builds on, and aligns to, industry and academic frameworks and bodies of work – for instance the AI Ethics Framework, AIIA and KPMG's

[49] https://www.tga.gov.au/how-we-regulate/manufacturing/medical-devices/manufacturer-guidance-specific-types-medical-devices/regulation-software-based-medical-devices
[50] https://www.ntc.gov.au/transport-reform/ntc-projects/in-service-safety-AVs
[51] https://www.accc.gov.au/media-release/iselect-to-pay-85-million-for-misleading-consumers-comparing-energy-plans

Navigating AI Paper, the Human Technology Institute's Model Law for Facial Recognition,[52] and the work of the National AI Centre and Responsible AI Network. The AIIA asks government to be mindful, given the largely international development of AI, of existing global frameworks and both shaping and harmonising with the work of trusted and innovative partners globally in trusted AI design and standards development.

The AIIA and KPMG's *Navigating AI* provided a strong industry-friendly structure and framework for the application of AI to de-risk AI adoption, including an Industry Checklist for Responsible AI.[53] The AIIA and KPMG identified what organisations need to do to ensure AI is developed, used and procured in a way that meets future regulatory and ethical expectations.

As outlined by the World Innovation, Technology and Services Alliance (WITSA), trust in new technologies, such as AI, and innovation around these technologies, is best supported when policy objectives and regulatory requirements make use of voluntary industry-driven standardisation to support implementation.

Further, as expressed by the AIIA and KPMG's *Navigating AI* report, "the sharing of ideation and lessons learned alongside coordinated activity to enable reuse and cross-industry collaboration are key to unlocking greater value and de-risking AI development and adoption."[54]

Government tech policy co-ordination

As it approaches the question of regulating AI applications, government should consider how it coordinates technology regulation internally, looking to the AIIA proposal for a Council of Tech Regulators[55] and the work done by the ANU Tech Policy Design Centre in its Report, *Cultivating Coordination*.[56]

For an industry that is grappling with the cumulative regulatory effects of critical infrastructure legislation, privacy reforms, social media and online safety regulation, anti-scam efforts and cybersecurity developments, a new regulatory system bespoke for AI would have the high potential of conflicting with some of these other areas and being cost-additive to tech businesses, particularly in respect of Australian SMEs. The government must coordinate and deconflict regulatory approaches as much as possible to guard against unintended consequences. Government should consider potential cabinet endorsement of a formal central approach convened by a Council of Tech Regulators to technology coordination that will require government agencies to conform to.

The AIIA believes the federal government and all Australian governments be exemplars of AI principles and governance around transparency, adoption and use, especially for citizen facing AI. The government should not be considering regulation of AI that does not apply to

[52] https://www.uts.edu.au/sites/default/files/2022-09/Facial%20recognition%20model%20law%20report.pdf
[53] https://aiia.com.au/wp-content/uploads/2023/03/KPMG-and-AIIA-_Navigating-AI-REPORT.pdf
[54] https://assets.kpmg.com/content/dam/kpmg/au/pdf/2023/modgov-navigating-ai.pdf p.9
[55] https://aiia.com.au/wp-content/uploads/2022/04/20_4_2022-AIIA-AI-Regulation-Issues-Paper-Submission.pdf
[56] https://techpolicydesign.au/wp-content/uploads/2023/02/TPDC_Cultivating_Coordination_2_20230221.pdf

itself. Government agencies have shown with the Robodebt example that government agencies themselves require adherence to appropriate principles and governance frameworks around AI adoption.

The AIIA welcomed the Interim Guidance on Generative AI for Government Agencies[57] but stressed that the Federal Government needs to develop a detailed and transparent framework that is compulsory for agencies in citizen facing use of AI that involves assessment of eligibility for services and other high-risk areas of AI usage. The interim guidance on generative AI released, whilst a welcome first step, leaves agencies to make their own decisions and the arbiter of what is acceptable. By contrast, the NSW Government's AI Assurance Framework[58] has a detailed checklist. Currently, it is unclear whether individual agencies have their own adoption frameworks and governance models as referred to in the interim guidance. More work needs to be done to ensure that mature AI frameworks are not an optional consideration but rather a compulsory checkpoint for safe and principled adoption of AI by government organisations.

Content labelling and provenance

One regulatory option for greater social confidence around AI, especially considering the advent of 'deepfakes', is to implement content labelling and provenance strategies. AIIA members have voluntarily invested in the development of Content Credentials: open-sourced technology enabling creators to attach digital provenance information to digital content so that consumers can see the origins and edit content history online.

The 1,500+ member Content Authenticity Initiative,[59] and its underlying standards body, the Coalition for Content Provenance and Authenticity,[60] are working to drive adoption and implementation of this free, open-source technology across industries, tools, and platforms. This initiative intends to support greater transparency and trust in the online ecosystem by ensuring creator attribution for digital content and helping users understand the origins and edits of the content they are consuming:

- indicate that generative AI was used in the creation of the content;
- encourage industry adoption of a Do Not Train standard for AI systems; and
- endorse this industry-developed standard for use by other organisations and governments.

Government sensitivity to AI lifecycle and AI stack

Risk-based AI regulation will differentiate between the distinct contexts and uses of the technology (e.g. B2C v. B2B) and assign responsibilities and allocates risk based on the different roles that various entities play in the AI ecosystem. Government may do this by meaningfully differentiating between context, control and use along the AI Stack.

At present, regulatory efforts often centre around existing legislative frameworks or addressing specific problems, and these approaches do not always capture the different

[57] https://www.dta.gov.au/blogs/interim-guidance-generative-ai-government-agencies
[58] https://www.digital.nsw.gov.au/policy/artificial-intelligence/nsw-artificial-intelligence-assurance-framework
[59] https://contentauthenticity.org/
[60] https://c2pa.org/

risks and regulatory concerns from the perspective of industry, with its various production and deployment processes.

We therefore ask that government be alive to the differences between development, data considerations, deployment, and end-use along the stack and make its approach sensitive to the particularities of AI being developed and their applications and implications, tethered to use-cases. The AIIA supports government using the formal Deployer-Developer distinction, wherein developers design, code or produce AI systems and deployers use AI systems, as explained by the BSA in a policy paper.[61]

Conclusion

Building societal confidence and trust in AI will be key to accelerating uptake in AI adoption in Australia. Government can do this by leveraging industry-tested principles and guardrails for AI governance and designing targeted, thoughtful regulatory architecture in a collaborative community of interest with government, academia and existing regulators of AI. Applying handbrakes to Australia's AI ecosystem, which is in embryonic stages despite pockets of excellence (particularly in AI research), ought only to be done in tandem with the significant investment and commercialisation efforts in AI that will make Australia competitive on the global stage. The AIIA looks forward to working with government in the task of strengthening and building a thriving AI ecosystem for Australia, including through the proud work of its members to champion the principles of responsible AI.

The AIIA appreciates the opportunity to engage in the Department's consultation on this important issue. If you have any questions about the content of this submission, please contact Rachel Bailes, Head of Policy, via rachel@aiia.com.au.

Yours sincerely

Simon Bush
CEO
AIIA

[61] https://www.bsa.org/files/policy-filings/03162023aidevdep.pdf