Submission No 46

INQUIRY INTO ARTIFICIAL INTELLIGENCE (AI) IN NEW SOUTH WALES

Organisation: ARC Centre of Excellence for Automated Decision-Making and Society

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Artificial intelligence (AI) in New South Wales

ADM+S Submission to NSW Parliament Inquiry

ARC Centre of Excellence for Automated Decision-Making and Society

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About ADM+S

The ARC Centre of Excellence for Automated Decision-Making and Society (ADM+S) is a cross-disciplinary national research centre which commenced operations in mid 2020. ADM+S has been established and supported by the Australian Research Council to create the knowledge and strategies necessary for responsible, ethical, and inclusive automated decision-making (ADM).[2] Focus areas for ADM+S research are news and media, social services, health and transport. ADM+S brings together nine of Australia's leading universities, and more than 90 researchers across the humanities, social and technological sciences, together with an international network of partners and collaborators across industry, research institutions and civil society. More information about the ADM+S, our researchers and research projects can be found on our website: www.admscentre.org.au.

Our interest in supporting Responsible AI

ADM+S welcomes the opportunity to contribute to the Inquiry of the NSW Parliament on Artificial intelligence (AI) in New South Wales. To better understand and address the regulatory, ethical, political and social challenges posed by artificial intelligence is one of the Centre's founding objectives. ADM+S is committed to a society where responsible, ethical, and inclusive AI and ADM is used for the benefit of the people of NSW and Australia.

This submission

This submission condenses the findings and insights derived from three lines of work of the Centre directly connected to the substance of the Inquiry.

- First and foremost, our broader work on responsible AI and its regulation as reflected in the recent submission to the Department of Industry, Science and Resource's consultation on Safe and Responsible AI in Australia Paper,[3] consolidated by Professor Kimberlee Weatherall (University of Sydney Law School).

[1] k / j

[2] The ARC Centre of Excellence on Automated Decision-Making and Society is funded by the Australian Research Council (CE200100005).

[3] That submission (listing all contributors) is available at ADM+S submission to the Safe and responsible AI in Australia discussion paper.

- Second, the publicly available data and non-confidential parts of our work in partnership with the NSW Ombudsman Office in the project Mapping ADM in NSW,[4] co-led by Prof. Weatherall and Prof. Paul Henman (UQ) as Chief Researchers and Dr. José-Miguel Bello y Villarino as Principal Researcher.
- Third, our work on digital inclusion and, concretely, the Australian Digital Inclusion Index, led by Prof. Julian Thomas (RMIT).[5]

ADM+S researchers come from many different institutions, disciplines and perspectives. It should not be assumed that every member of the Centre subscribes to every comment or recommendation made below. Yet, instead of a weakness this is reflection of the level of diverse and deep expertise held by the Centre and its researchers, in the same way that there could be a diversity of views among the members of this Inquiry and across the NSW Parliament.

Therefore, this submission, beyond its specific content, is an invitation to the Chair, Deputy Chair and Members in the Inquiry to contact the lead authors so we can contribute to work of the Committee, for example by facilitating the contacts with the relevant researchers for the different areas of the Inquiry.

Submission

The ADM+S is pleased to have this opportunity to introduce our work and engage with the Inquiry offering our expertise. Almost all points in the terms of reference have been explored by a project from the Centre. In this contribution we will mainly focus on three points:

- The social, economic and technical opportunities, risks and challenges presented by AI to the New South Wales community, government, economy and environment [point (b)]
- The effectiveness and enforcement of Commonwealth and New South Wales laws and regulations regarding AI and the effectiveness of the NSW Government's policy response to AI including the Artificial Intelligence Strategy, Ethics Policy and Assurance Framework [points (h) and (j)]
- Current community and industry use of AI and the potential implications for delivery of government services and the current and future extent, nature and impact of AI on customer service and frontline service delivery in New South Wales and recommendations to manage the risks, seize the opportunities, and guide the potential use of AI by government, [points (c) (f) and (m)]

For a broader analysis of the other questions listed in the terms of reference, we direct the Members of the Inquiry to the ADM+S submission to the Department of Industry, Science and Resource's consultation on the Safe and Responsible AI in Australia Paper. Concretely, for:

[4] Mapping automated decision-making tools in administrative decision-making in NSW.
[5] Digital Inclusion Index.

- (k) and (l) The measures other jurisdictions, both international and domestic, are adopting in regard to the adaption to and regulation of AI and the successes and positive precedents experienced by other jurisdictions, both international and domestic, to better understand best practice.

Parts of that submission provide an excellent overview of the recent evolution of regulatory practice in the leading jurisdictions.[6] We reproduce those sections at the end of this submission.

Finally, we would like to direct the members of the Inquiry to the report Parliament will receive in the coming months (first half of 2024) highlighting the results of the Mapping ADM tools in administrative decision-making in NSW project. As far as we understand, the NSW Ombudsman's Office is also contributing with a submission to this Inquiry. The final report will offer Parliament a map of where and how NSW state and local government agencies are using automated systems in administrative decision processes and an analysis of the different systems planned and in use by NSW public authorities together with the key risks and issues that emerge. The report is supported by several datasets developed within the project that would be extremely valuable for the Inquiry.

The social, economic and technical opportunities, risks and challenges presented by AI to the New South Wales community, government, economy and environment

When discussing AI, and/or assessing the opportunities it provides, or risks and challenges it poses for NSW, we must consider the sociotechnical context in which AI systems will be designed, developed, deployed, used and decommissioned. This, at the very least, entails taking into account issues of diversity, inclusion and the impacts of supply chains. This especially includes those who gather and refine data. A diagram summarising these aspects is offered in the appendix to this submission.

Effects on the NSW community: Digital Inclusion

An approach to opportunities, risks and challenges for NSW should be defined by the social and technical conditions of this State. These conditions may be shared with other Australian States and other jurisdictions, but could also be unique in some respects. Concretely, in the NSW context we should be aware of the urban-rural-remote divide and its implications for digital inclusion and exclusion.

Digital Inclusion means ensuring that every NSW resident is able to access and use digital technologies, and at an affordable price. As we rapidly shift towards a more digital society, it is essential that everyone has the chance to benefit from these technologies in various aspects of life, such as health, education, and social activities.

[6] We also invite the Inquiry to peruse the report Standardisation, Trust and Democratic Principles: The Global Race to Regulate Artificial Intelligence updated to July 2023.

This is especially crucial for Australia's First Nations people, including those in remote communities, who currently face a significant digital gap compared to other Australians. Studies by ADM+S show that 23.6% of Australians face digital exclusion. First Nations Australians are more affected with a 7.5 point disparity in digital inclusion compared to non-First Nations Australians.

The maps below (Figures 1 and 2) show the results of this research across NSW and in the Sydney region. As can be seen there, more rural and remote communities are more likely to face restrictions in their access to and use of digital technologies, including AI-driven technologies. Similarly, digital exclusion causes challenges in AI training data representation, AI development involvement, and accessing AI's advantages. Table 1 shows the councils with the highest levels of digital exclusion in NSW.

Table 1: Australian Digital Exclusion Index – Councils with lowest scores in NSW - Source Australian Digital Inclusion Index

Local Government Area	Score	Gap
Brewarrina	59.1	-14.1
Central Darling	60.4	-12.8
Coonamble	62.0	-11.2
Walgett	62.4	-10.8
Tenterfield	63.3	-9.9
Warrumbungle Shire	63.4	-9.8
Gwydir	63.9	-9.3
Warren	64.0	-9.2

Figure 1: Map of digital inclusion in NSW - Source Australian Digital Inclusion Index

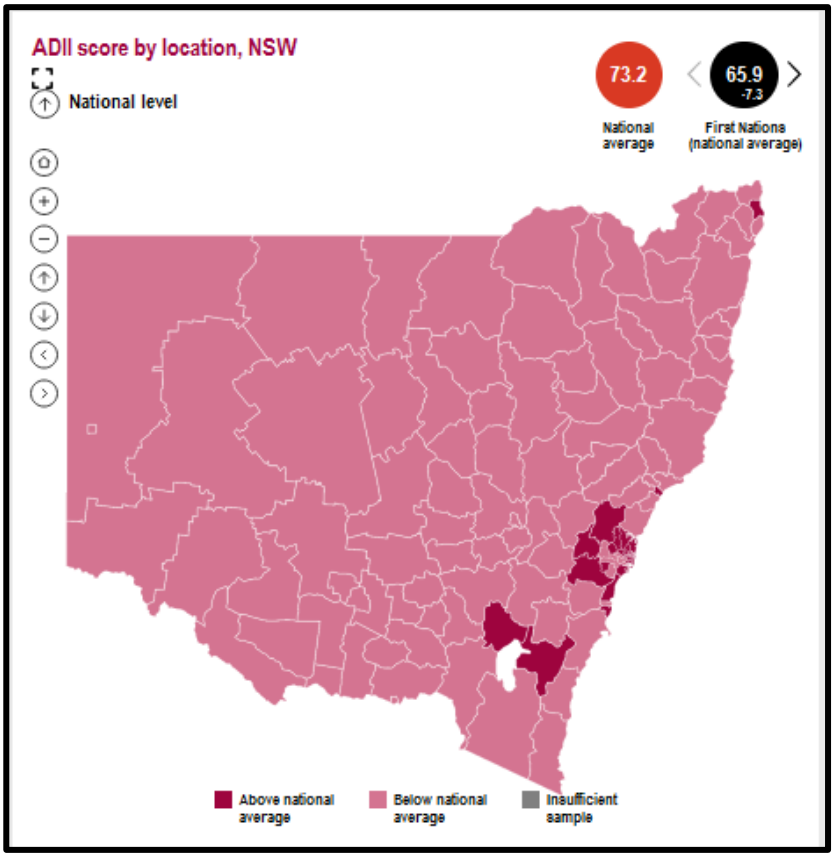
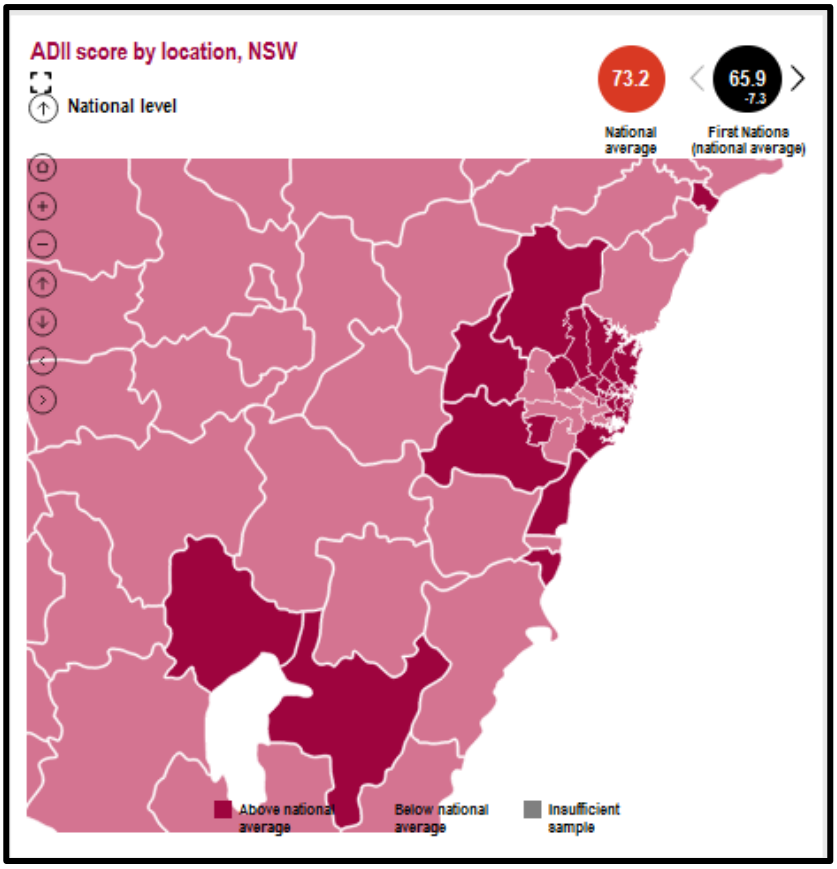


Figure 2: Map of digital inclusion in Sydney – Source Australian Digital Inclusion Index



Effects on the economy

We will not discuss here in detail the effects of AI on the economy, but we can refer the members to our Automated Decision-Making Empirical Mapping Project.[7] This project explores the complex interplay between automated decision-making (ADM) and generative artificial intelligence (GAI) technologies and the Australian labour market, utilising key variables such as geography, industry, sector, and occupation among others. The project maps the influences of AI technologies across the economy, taking into consideration machine exposure (i.e., via efficiency, competency, or autonomy), human insulation (i.e., ability advantages), and institutional barriers (i.e., regulatory risks).

The project uses statistical data (e.g., ABS labour and business surveys) to develop a scoring system for evaluating the interplay between machine and human tasks, and a database monitoring potential AI adoption and impact across various sectors. These are used for granular analysis of the potential risks and advantages associated with AI integration, identifying areas of high complementarity between technology tools and workers and areas of high susceptibility to machine substitution.

This work can provide a nuanced understanding of AI's impact on the NSW labour market, establishing a predictive framework for future work dynamics. The findings can contribute to

[7] Automated Decision-Making Empirical Mapping Project.

policy development by generating a detailed impact map of AI across industries. These insights could inform strategic actions, optimising AI benefits and mitigating risks, and shaping workforce development initiatives. We are happy to put the Inquiry in touch with the relevant researchers.

The Inquiry may also take note that the deployment and use of AI in NSW is part of a complex supply chain for AI, with multiple actors across many jurisdictions. For example, in the case of an AI system used to assess credit worthiness for a mortgage in NSW, we can see at least:

1. The developer of the general or foundation models, such as the big AI firms.
2. The developer of the concrete AI system, such as a company adapting the foundation model to the specific needs of the bank.
3. The professional user or deployer of the AI system, that is, the bank, which needs to integrate it in its systems.
4. The concrete user, such as the bank branch or bank employee, which, in this case, may be the only entity or person in NSW.

The intricacy of AI supply chains is a major challenge, for example, for risk assessments. For AI and ADM systems to be effectively regulated, the entire supply chain must be considered. Focusing solely on the last entity, which may be the (only) one in NSW, could be ineffective in achieving policy goals, unless done with consideration for the actions of other (non-NSW) actors in the supply chain impacted.

Effects on the environment

The development of safe and responsible artificial intelligence (AI) demands robust governmental engagement with various stakeholders including advocacy groups, industry bodies, and those affected by or engaged in AI technology. The environmental ramifications of AI, both in its development and application, have gained significant attention from the public and tech professionals alike.

A recent shift in AI governance has seen the inclusion of environmental impacts in regulatory and governance frameworks. For instance, the OECD's principles now account for AI's environmental consequences. The current proposal for the European Union AI Act emphasizes environmental conservation and necessitates environmental impact assessments and reporting for high-risk AI applications.

Much like traditional computing and data centres, AI can impact the NSW environment in multiple ways. Table 2 below illustrates some of these impacts.

Table 2: Environmental implications of AI development and deployment

Energy Consumption:	Machine learning (ML) models, which are core to AI, can be energy-intensive. Only a fraction rely on low-carbon sources. Key factors affecting emission levels include the energy source's carbon intensity and the training duration.
Water Use:	Water is primarily used for cooling the vast computing facilities engaged in AI activities.

Raw Material Use:	The production, maintenance, and operation of computational devices (like GPUs) demand various rare metals, adding to the environmental load.
Land Use:	From hosting computing facilities to establishing renewable energy structures like solar panels, land use is significant.
Undersea Cables:	The installation and upkeep of undersea cables also contribute to the ecological footprint.

Considering the ecological impacts of the whole life cycle of AI products has become a priority. Organizations are advocating for complete life cycle analyses spanning from raw material extraction to the end of the product's life. Australia's and NSW current legal landscape has limited provisions obligating AI developers to consider the environmental consequences of their activities. But the expanding environmental footprint of AI may necessitate:

- **Horizontal Measures**: Updates and reviews to current Australian and NSW legal frameworks related to infrastructure siting (like data centres and undersea cables), product stewardship, energy grids, and more.
- **Domain-specific Measures**: NSW could look to the EU's draft AI Act for guidance, which emphasizes environmental preservation, mandates risk assessments, and expects AI developers to monitor and report on environmental impacts.

The rapid development and adoption of AI technologies come with significant environmental implications. Addressing these challenges requires proactive governance, thorough research, and active collaboration between stakeholders. ADM+S researchers are delving deep into the ecological repercussions of AI and exploring governance options.[8]

Effects on education

Although this point was not included in the request for inputs, one of the key areas where AI may have significant in NSW is in the education sector. From primary and secondary schooling where the State is the main regulator and main provider of education services, to university training, a key for the prosperity of NSW and one of the main sources of foreign revenue, AI deployment in the education will be essential for the future of the State.

A good understanding of the risks and opportunities offered by AI in the education sector is essential to properly contextualise the impact of AI in the State. Concretely, we can refer to our work with the NSW Ombudsman in this domain and the related work of some or our researchers,[9] to provide the Inquiry with a better understanding of the existing and expected effects of AI in education.

[8] Environmental Claims and "Greenwashing" and Mapping the environmental costs of AI.
[9] Governing AI, education, and equity together.

The effectiveness and enforcement of Commonwealth and New South Wales laws and regulations regarding AI and the effectiveness of the NSW Government's policy response to AI including the Artificial Intelligence Strategy, Ethics Policy and Assurance Framework [points (h) and (j)]

The effectiveness and enforcement of Commonwealth and NSW existing laws and regulations is challenged by the nature of AI technologies. Nonetheless, in our view, it is often problematic to target regulation at a particular technology. In general terms, regulatory efforts are better directed at categories of activities, behaviours, decisions or outcomes. This is consistent with recognising that the impacts of AI/ADM are multiple and broad, and will demand a range of responses across the federal and state governments.

We believe the Commonwealth and NSW will need to reassess - and often revise - existing legal regimes. Table 3 distils the essence of the challenges for a selected (incomplete) set of domains. There is also a need to have a collective conversation about how to regulate - and whether to ban - certain new capacities. In terms of enforcement in NSW, in contrast to other States where Human Rights Acts are in place, some AI-generated harms may lack any legal remedy.

Table 3: Indicative table illustrating some challenges for existing legal regimes.

Domain	Challenges	Jurisdiction
Harmful Online Content Regulation	Challenges with current content flagging due to increased AI capacity.	Cth
	Issues determining intent or awareness with Generative AI. E.g., Can AI harass or defame?	Cth/NSW
Consumer Protection	Defining 'misleading' or 'deceptive' in the context of AI content generation.	Cth
	Need for ensuring fair dealings with AI-generated content.	Cth/NSW
	Difficulties in comparing AI-generated products or prices.	Cth
	Maintenance and regulation of databases for online ads.	Cth/NSW
Administrative Law	Determining if AI can make 'decisions'.	Cth/NSW
	Identifying the 'decision-maker' in AI-driven decisions.	Cth/NSW
	Mechanisms to challenge AI-made administrative decisions.	Cth/NSW
Discrimination	Applying anti-discrimination laws to AI-induced harms.	Cth/NSW
	Detecting AI discrimination in ephemeral content.	Cth/NSW
	Addressing potential AI bias beyond existing laws.	Cth/NSW
Copyright	Ownership of AI-generated outputs.	Cth
	Liability issues for AI breaches.	Cth
Data Protection Law	Implications of AI in conversations and prompts.	Cth/NSW
	Privacy risks with AI's synthetic voice and image generation.	Cth/NSW
	Privacy laws in relation to AI's data practices.	Cth/NSW

Cybersecurity	Risks related to chatbot conversations and prompt manipulations.	Cth
Professional Regulation (eg., Law, Medicine)	Determining if AI chatbot outputs count as professional advice.	Cth/NSW
	Applying duties of professional advisors in AI contexts.	Cth/NSW
Political Advertising & Campaign Laws	Laws to combat the ease of producing AI deepfakes.	Cth/NSW
	New requirements for (at least) transparency in digital political advertising and targeting.	Cth/NSW
Negligence & Liability	Assigning fault when AI errors involve multiple actors.	Cth/NSW
	Recognising duties for foundational AI providers.	Cth/NSW
	Expanding the 'manufacturer' concept for AI product liability.	Cth/NSW
Residential tenancy and other housing-related laws	Addressing the legitimacy of data acquisition and analysis for fair, transparent and ethical allocation of leases and housing	NSW

The risk-based approach in NSW for the public sector

ADM+S offered **qualified support for a risk-based approach to AI** in our submission to the Department of Industry, Science and Resources**.** The main potential benefits of a risk-based approach are (a) the ability to avoid or mitigate harms before they happen, at the design and development stage rather than waiting for *ex post* litigation; (b) promoting better (safer, more responsible) design; as well as incorporating (c) ongoing obligations on developers of systems to engage in monitoring and addressing risks.

NSW has so far opted for a model akin to - albeit less prescriptive than - the model adopted in Canada. That is, NSW distinguishes between the use of AI in and by the public sector and the use of AI systems in private sector domains. This is also in line with current evolving practice at the international level, including the Council of Europe process to develop an AI Treaty with global effect. In the case of NSW there is no AI-specific regulation for the private sector, meaning that the points noted in Table 3 are particularly relevant to consider the effectiveness of regulations.

In considering AI regulation, it is essential to recognize the distinct roles of the public and private sectors. The public sector wields unique, unilateral decision-making power, unlike the private sector. Because of the democratic principles at play, decisions made by governments are held to a higher, more transparent standard. This scrutiny ensures that the public sector promotes societal well-being, upholds rights, and addresses inequality and justice.

For the public sector, the NSW approach currently relies on a risk-based approach. The NSW Government should be praised for developing in the first place the NSW AI Assurance Framework and, particularly, for making its use compulsory, at least for certain AI systems developed for public use. However, the success of the NSW AI Assurance Framework depends on the extent to which we address current gaps in both our *rules* (ie laws/legal frameworks) and our *enforcement capacities*.

Emphasizing the public sector's role is vital. Its inherent high standards and influence as a significant AI service procurer position it as a trailblazer in setting responsible AI guidelines. By doing so, the public sector can help shape broader market standards. This leadership also aligns with Australia's international obligations, such as promoting human rights. In some areas, the public sector could also establish specific regulatory frameworks, paving the way for innovative experimentation.

Focusing on the public sector does not mean that the private sector in NSW should be exempt from scrutiny. For instance, while private entities might not always be required to provide detailed explanations for their decisions, they still need to adhere to laws relating to consumer protection, privacy, and anti-discrimination. For the private sector too, specific attention to AI creates enforcement challenges, particularly where enforcement is funnelled through under-resourced and over-worked regulators and mediation. We need more enforcement pathways and access for interest groups and collective actors (such as unions and advocacy groups), transparency and access to information and evidence, and consideration of how burdens of proof and responsibility should be allocated across complex AI supply chains stemming from data collection through to deployment.

Moreover, there's a grey area: private entities that hold monopolies, provide essential services, or operate on behalf of the government. They too might be subject to elevated standards similar to the public sector.

On a separate note, solely using the term "AI" for regulation may be problematic. Instead of narrowing down on technology definitions, regulations could focus on the activities, behaviours, and outcomes. This approach ensures that all automated systems, whether AI-based or not, are addressed. Adopting a more comprehensive view, like focusing on automated decision-making (ADM), might be more effective. For instance, Canada's risk assessment regulation for government decisions uses this “ADM” approach.[10] Automated systems without AI can also cause significant harm. This is in line with the observations offered by the NSW Ombudsman on his 2021 report to Parliament on the use of automation in the NSW public sector.[11]

Addressing Gaps in Public Sector AI Deployment

There is a pressing need for more stringent oversight and mechanisms to ensure responsible AI use within governmental agencies. The existing principles and guidelines in NSW, while providing a roadmap, lack rigorous accountability measures. The self-assessment and AI Review Committee checks are a good starting point, but there are obvious gaps that need to be addressed:

- **Legal and Regulatory Clarity:** The complex landscape of automated decision-making needs clear legislative guidance. At the Commonwealth level there is legislation that recognises the possibility of computer-aided decisions, such as the Social Security Act, even if recent cases have muddied these waters. Yet, we were not able to identify in

[10] Directive on Automated Decision-Making.
[11] The new machinery of government: using machine technology in administrative decision-making.

NSW a single piece of legislation that includes a proper delegation to an automated process. There is a need for clearer statutory guidelines.

- **Systemic Oversight:** Automated processes can lead to widespread systemic errors, as seen with the Commonwealth government's Robodebt scheme. Therefore, a system-wide oversight mechanism is essential to prevent broad-reaching harmful consequences. This mechanism cannot depend on an expert group (the AI Review Committee), regardless of its stellar qualifications.
- **Invisibility of Upstream AI:** AI tools that operate behind the scenes, performing risk assessments rather than overt decisions, remain under the radar of the existing oversight mechanisms in NSW. Despite the work that ADM+S has conducted with the NSW Ombudsman, there is still very limited visibility of upstream technologies and systems. A more comprehensive review mechanism is needed.
- **Public Automation Registers:** Public accountability can be enhanced by developing transparent registers of AI or ADM deployments within the government. This transparency can offer insights into the extent of automation and promote inter-agency knowledge sharing. A register will not be easy to implement, but it is a necessary first step to better understand how the technology is used.
- **Enforcement limitations:** When we adopt a risk-based approach in the public sector, we are requiring private providers of systems and the government to identify, and mitigate, certain risks of harm. For this to work, **there must be some kind of 'or what',** that is**,** consequences that apply**:**
    - **if the systems is still deployed despite the risks and harm is caused, or**
    - **if the assessment was not properly done.**

  Pre-deployment risk assessment alone cannot ensure genuine improvement in the technologies applied: there must be a risk of consequences - *liability for harms caused if organisations fail to take mitigating action.* That means laws prescribing the act that creates the risk of harm, and a credible threat that that law can be enforced and meaningful remedies provided.
- The NSW system should be clearer about **who has the final word** whether a system is low, medium, high (or very high) risk? Risk is multi-dimensional (it varies by type of impact/harm, severity and probability, and can shift over time) meaning that fixed categories may not work well, but the party best placed to assess the risk of a system (who could be the developer, or the deployer) may have incentives to underestimate risk.
- **Three 'categories' of risk may be insufficient: The descriptors in the Framework** can give rise to some anomalous results. Examples include situations where risk is brief *and* severe, or where it is brief and 'reversible' (for example, as a loss of social benefits is 'reversible' as payments can be restored) but has lasting impacts (say because a person has become homeless in the meantime when they could not pay their rent).
- In terms of the requirements, we draw attention to the absence of a relevant level of detail in the NSW principles.

Current community and industry use of AI and the potential implications for delivery of government services and the current and future extent, nature and impact of AI on customer service and frontline service delivery in New South Wales and recommendations to manage the risks, seize the opportunities, and guide the potential use of AI by government, [points (c) (f) and (m)]

The discourse around the future and implications of AI has predominantly been among experts from the government, academia, and industry. This makes sense given AI's technical complexity and the nuanced policy considerations surrounding its use. However, for the average person, AI can appear as a rapidly evolving force that seems to know everything about them, possibly influencing their behaviour and making crucial decisions that affect their lives.

The challenge arises when individuals feel excluded from discussions about a technology that has profound implications for their lives. For genuine trust to develop, involving the people of NSW in AI discussions is essential. Engaging with communities, especially those most vulnerable to AI's potentially harmful impacts, aligns with the principle of “nothing about us without us”. This engagement does not just foster trust, it can help mitigate risks associated with AI deployment.

Engagement does not need to be exclusively public either and it is possible to develop participatory processes with private entities developing products and services with AI. Participatory processes allow the people more affected to ask the questions at the right time, when systems are put in place. In turn, this requires the resources to maintain this participation after deployment. This is paramount when we refer to customer service and frontline service delivery. There's no shortage of models for public consultations on science. Australia boasts expertise both within and beyond the ADM+S. There are untapped avenues for collaboration and co-creation that can chart the course for AI's ethical and responsible use. The NSW perspective that sees the user of the public services as a customer can benefit significantly from incorporating those very same customers in the development process.

Education can also play a linchpin role in shaping AI's trajectory in Australia. Comprehensive educational programs, spanning formal higher education to community initiatives, are needed. This goes beyond merely increasing the number of students in computer science. Solely focusing on building domestic AI expertise can inadvertently heighten ethical risks while also creating a knowledge chasm among AI creators, end-users, and those affected by AI. Bridging this divide means imparting knowledge on the ethical implications of AI, enlightening end-users about AI's potential pitfalls like biases, and spotlighting automation opportunities that cater to diverse communities.

Ideally, AI education should permeate various levels:

1. **Workplaces**: Employees using AI should receive adequate training.
2. **Professional Organizations**: Continuing development for professionals, including AI auditors.
3. **General Public**: Elevating public understanding of AI and ADM, especially among marginalized groups, ensuring they're well-informed and supported.

Impact on customer service and frontline service: Advantages and Risks

Government organisations make decisions to computerise and automate their activities for a wide range of reasons. In our work with the NSW Ombusman's Office we asked agencies and departments to indicate from a list of 13 possible institutional objectives the reasons for deciding to implement some degree of automation. The relevant data from that survey will be available when the report is released to Parliament, but we can share now that it confirms what the public entities described as their objectives in their publicly available documents, such as reports and media releases, that is, an interest in reducing administrative error and enhancing productivity. Effectiveness and efficiency are both key arguments in favour of automation. However, this cannot be at the expense of lower legal standards.

The general argument is that these systems are only decision support systems, lacking the capacity to make decisions by themselves and only support the decision-making of public officials, preserving their discretionary role. By the same token, human mediation should not disrupt existing mechanisms for administrative review and appeals.

However, even though this approach to use of AI might avoid some challenges, it is not devoid of legal hazards. In fact, these systems can influence and mould decision-making process in ways that might result in inappropriate or unlawful decisions and negative consequences. Therefore, it is essential that agencies remain vigilant and not underestimate the potential harm even from systems that seem "low risk". These AI systems may still:

- Lead to unauthorized administrative decisions: Even though these systems do not directly make decisions, they can still be part of the process that results in unlawful choices. For instance, if a system offers faulty information and the decision-maker acts based on that, the outcome could be illegal. Issues like neglecting pertinent details or introducing irrelevant ones can also prompt unlawful decisions. Such problems might stem from improper coding of legal regulations, system glitches, or faulty input data.
- Introduce potential biases: AI-based Decision Support Systems might be less prone to establishing systematic biases than other more automated systems, but they can still harbor and manifest bias. Biases might be present in the data used or could emerge from the inherent biases of the system developers. The systems' methods of gathering, showcasing, and arranging data, especially by highlighting or obscuring certain details, can inadvertently guide the decision-maker toward biased results. Such biases might be subtle, yet they can perpetuate unfairness and prejudice.
- Reduce administrative openness and clarity: As these systems function behind the scenes of the decision-making process, there might be less inclination to share details about their use with the general public, making the process less transparent.
- Entail privacy concerns: Using automated systems in the decision-making process usually means collecting, employing, and/or preserving personal data. Therefore, implementing AI in governmental operations can raise concerns about safeguarding citizens' privacy and data security. It is essential that these systems adhere to pertinent privacy regulations, like the Privacy and Personal Information Protection Act 1998 (NSW). It is also important

to appreciate that privacy is not 'dealt with' by means of privacy-enhancing technologies that more tightly control how data is stored and moves. Privacy is also concerned with *how*, and *how much* data is used, and whether those uses are within people's reasonable expectations.

AI to support citizen-driven frontline responses

Finally, we would like to refer to the opportunities that data driven solutions can offer to front-line responses in NSW. The work of the ADM+S Centre, together with the Australian Red Cross on "Data mapping and ADM to advance humanitarian action and preparedness" offers the chance to consider tools for improving data-driven decision-making as a process of community-oriented disaster preparedness. It enables local community disaster preparedness and community resilience by improving the quality of data about community strengths, resources and assets.

Disaster preparedness can be enhanced through improved data practices targeting community resources and rural and remote communities at risk of natural disasters such as bushfires, floods, heatwaves and severe storms, all hazards very familiar to the NSW context.[12]

The measures other jurisdictions, both international and domestic, are adopting in regard to the adaption to and regulation of AI and the successes and positive precedents experienced by other jurisdictions, both international and domestic, to better understand best practice.

This section reproduces the text of our Submission to Safe and Responsible AI paper - The Centre has broad expertise on the regulation in other jurisdictions should the Inquiry want more information.

In considering whether and how other countries' approaches are relevant, adaptable and desirable for Australia, it is important to consider:

1. What might be similar or different about Australia that might make initiatives overseas more or less relevant to Australia, or raise different issues
2. Whether there are ways that Australia can and should benefit from or integrate with systems overseas.

On the first point, developing EU or Canada-style risk-based approaches require developers and deployers of AI to identify risks of negative outcomes, and avoid or mitigate them. One **difference** between Australia and other jurisdictions developing risk-based approaches that inform the Discussion Paper is the lack or potential lack (in most Australian jurisdictions) of legal mechanisms to challenge harms caused by AI outlined above.[13] As we note further

[12] Members can access the project's interim report, Mapping Community Resources for Disaster Preparedness: Humanitarian Data Capability and Automated Futures.
[13] See *Enforcement.*

below, adopting only the risk-based approach from overseas without addressing these broader differences will undermine the effectiveness of the system in Australia.

There are other important differences. For example, the EU AI Act and its risk-based approach depends on that region's conformity and assessment infrastructure. It has been designed with the European single market in mind, and promotes the evolution of private risk-assessment certification and assurance in line with the comprehensive network of standards that exists in that jurisdiction. In other words, the EU risk-based approach is effectively a product safety regime certified through networks of private actors ('notified bodies').[14] Australia does not have the same conformity ecosystem nor does it orient its product safety regime around trade and market harmonisation. The EU Risk-Based approach is intended to comprehensively guide the formation of a certification and conformity market and ecosystem. It is unclear whether Australia's approach is intended to have the same effect.[15]

We note also that both **Japan** and **India** are not much discussed in the Discussion Paper despite their economic importance to Australia.[16]

Can Australia benefit from integration with legal, regulatory and governance developments overseas?

As to the second question: while Australia is a small market, it still plays a key role in the development of large, international models. Australian firms are already building on or deploying technology built on foundation models developed elsewhere; Australian consumers and residents are already subject to AI-driven products. ADM+S project *Testbed Australia* (led by Dr Thao Phan) demonstrates too that Australia is seen as a location for global firms to test and refine new technologies, including AI and automation.[17] Australia's population size, its diversity, and relative wealth make it an ideal proxy for larger Western markets.

Its position as a middle-power has also seen it play a role in global processes such as standards setting and regulatory modernisation. For instance, in the case of commercial drone delivery, Australia's Civil Aviation Safety Authority (CASA) were proactive in creating new risk assessment benchmarks for beyond visual line of sight (BVLOS) operations. The successful meeting of these benchmarks by firms such as Alphabet's Wing in their local trials in Canberra and Logan effectively created a proof of concept for their autonomous drone delivery system, a move that opened the doors for operations in their intended primary markets in Europe and North America.

Australian moves to regulate AI will need to coordinate, or be aware of, and even take advantage or join in regulatory moves overseas. We recommend:

1. **Strong participation in international cooperative mechanisms to manage risks arising from the largest models and actors**, whether at a treaty level or technical

[14] Proposed EU AI Act (n 67), art 33.

[15] For more commentary on standards and assurance, see submission in response to the Discussion Paper by Fraser et al.

[16] Added to the appendix to the submission.

[17] See 'Tested Australia', *ADM+S, Research Projects* (Web Page).

standard setting, to address issues regarding larger models at a global level. Australia already participates in technical standard-setting efforts and global discussions regarding the development of common principles and cooperation in their implementation. There is an opportunity to work with governments in a similar position - across countries like Canada, New Zealand, Singapore, Japan - with a strong interest in ensuring an open digital economy but coupled with genuine protection for competition and individuals. Australia's access to a sophisticated workforce and expertise, and large trade relationship with China, values aligned with the EU and Canada, good relationships with the US and UK and regional relationships in the Pacific means it is well placed to play an important role in such discussions.

2. **Not leaving Australians behind in rights and remedies**: Australians are entitled to expect that they will receive similar levels of protection for their fundamental rights, health and opportunities as are enjoyed by people in countries with a similar high-level commitment to democracy and human rights. That that expectation is not being met, whether across consumer protection law, or privacy, or human rights.[18]

3. Consideration of domains/issues where there is a role for Australian governments in protecting and promoting **uniquely Australian voices and interests**. **Education**-related AI systems trained on US data may not be appropriate for Australian schools: the makeup of our student body is different, as is the socio-technical context. Australian voices and perspectives in **news and entertainment media** would be another area for priority consideration, as would the question of how Australia's **First Nations people** will exercise their culture and sovereignties in this environment. Existing Indigenous 'protocols' for AI governance developed globally,[19] and in Australia,[82] can serve as a starting point for a 'productive conversation with Indigenous communities about how to enter into collaborative technology development efforts' which, inter alia, respect context, cultural knowledge and Indigenous data sovereignty. Additional support for entities working in these spaces, and/or additional regulations or procurement requirements to require Australian content or training on Australian data for systems in these contexts may be needed.

4. Continue to **develop/invest in Australia's domestic capacity to develop and innovate** in AI research and technologies, responsible AI practices and the regulatory frameworks. Especially in light of point (3), it will be critically important that Australia does not simply import AI technologies and systems unmodified.

[18] See *Consultation Question 2: current regulatory settings and gaps.*

[19] Jason Edward Lewis et al, 'Indigenous Protocol and Artificial Intelligence Position Paper' (Honolulu, Hawai'i: The Initiative for Indigenous Futures and the Canadian Institute for Advanced Research (CIFAR), 2020). [82] Angie Abdilla et al, 'Out of the Black Box: Indigenous protocols for AI', (Web Page).

Appendix: Diagram of AI Impacts