



Submission to: Responsible AI in Australia: have your say

The Association of Consulting Architects: who we are

The Association of Consulting Architects (ACA) represents architectural practices in business and employment matters. As the national peak body representing the interests of employers in industrial matters, the ACA also advocates on behalf of the “business of architecture” more broadly.

Through this leadership, support and advocacy, the ACA helps to ensure the long-term health and viability of the profession, and thereby supports the important contribution that architecture makes to our cities, environments, communities and cultures. The ACA’s primary concerns have been issues of building quality, procurement, certification, equity in practice, wellbeing of the profession, and ensuring that a pipeline of talented architectural graduates exists to support this agenda.

Why we have made a Submission to this Paper

As the association representing architectural practices in Australia, we foresee many changes, positive and negative, in the nature of our work as a result of the implementation of Artificial Intelligence (AI) in our industry. As a profession dedicated to the creation and renewal of built form in a safe, ethical and sustainable way, there are many existing challenges we are already confronting such as cost imperatives, procurement practices, ethical considerations and getting the right talent and skills for the job. There appears to be a real problem in implementing new technologies in an ordered, coordinated fashion. For example, the [Building Confidence Report](#) (Shergold and Weir, 2018) outlines many of the challenges the construction industry faces, including building quality, compliance, liability, contracting arrangements and training.

As a fragmented industry with many small contractors, the adoption of new technologies has been uneven and uncoordinated, and the adoption of AI in the industry could result in fundamental restructuring of the industry. It could no doubt solve some of the issues of compliance and quality but could equally lead to issues of uncertain liability and risk shifting, where the architect’s current professional responsibilities for their work are blurred by the use of AI in their practices.

The architectural profession in Australia is regulated under state and territory consumer legislation in order to ensure the consumer is protected against unprofessional conduct. Any use of AI by architects should ensure the rights and protections of consumers is not reduced, particularly where health and life safety are concerned.

The ACA wishes to continue to engage with the Federal Government as its AI policies are developed and implemented.

Definitions

1. Do you agree with the definitions in this discussion paper? If not, what definitions do you prefer and why?

Yes, the definitions are satisfactory.

Potential gaps in approaches

2. What potential risks from AI are not covered by Australia’s existing regulatory approaches? Do you have suggestions for possible regulatory action to mitigate these risks?

Current competition laws may inadvertently benefit large foreign businesses that may have the resources to train large AI models, to the detriment of Australian businesses.

Moreover, AI models may replace architects as a cost saving strategy that already exists in other industries, which may endanger many aspects of work that AI is currently incapable of producing. For example, integrity and creativity or the concern for humanity, as well as moral and aesthetic values and norms – machine learning is currently capable of emulating these, but it lacks the capacity to understand and apply them appropriately. This is, in fact, one of the biggest obstacles to the advancement of machine learning – the development of the capacity to understand and be a genuine participant in the normative domain.

3. Are there any further non-regulatory initiatives the Australian Government could implement to support responsible AI practices in Australia? Please describe these and their benefits or impacts.

- Grants to University research
- Support for education programs, particularly targeting smaller businesses
- AI certification micro credentials through the higher education and vocational sectors
- Encourage migration of skilled professionals

4. Do you have suggestions on coordination of AI governance across government? Please outline the goals that any coordination mechanisms could achieve and how they could influence the development and uptake of AI in Australia.

Architects are often at the intersection of many government sectors responsible for construction, regulation, compliance, planning, finance, procurement, social capital and sustainability. As such, and as part of the broader construction industry, we need to see coordination of policy and regulation relating to AI in design, production and procurement of buildings at Federal, State and Local Government levels. Because government is a large client, well-crafted, risk-based ethical procurement rules have a significant impact on general market behaviours and standards.

Responses suitable for Australia

5. Are there any governance measures being taken or considered by other countries (including any not discussed in this paper) that are relevant, adaptable and desirable for Australia?

The Algorithmic Transparency Standard, from the UK, is relevant because it promotes transparency on the use of algorithmic tools in government decision making.

Target areas

6. Should different approaches apply to public and private sector use of AI technologies? If so, how should the approaches differ?

There should be full transparency around the use of AI technologies in both the public and private sector.

7. How can the Australian Government further support responsible AI practices in its own agencies?

By being fully transparent in the use of AI. All information about AI use by the government should be publicly available.

8. In what circumstances are generic solutions to the risks of AI most valuable? And in what circumstances are technology-specific solutions better? Please provide some examples.

Much of the regulations and legislation that already exists, such as the Online Safety Act 2021, are applicable to AI. Technology-specific solutions may not be required.

9. Given the importance of transparency across the AI lifecycle, please share your thoughts on:

a. where and when transparency will be most critical and valuable to mitigate potential AI risks and to improve public trust and confidence in AI?

In the public sector, government should be fully transparent about the use of AI to ensure that AI is used safely and ethically and in the public interest.

The private sector should be equally transparent to protect consumer interests and improve public trust and confidence.

b. mandating transparency requirements across the private and public sectors, including how these requirements could be implemented.

Transparency can be assisted by the use of open-source software that can be checked and even improved by members of the public.

10. Do you have suggestions for:

a. Whether any high-risk AI applications or technologies should be banned completely?

Many aspects of the architects' work have a direct effect on health and life safety, and as such their work is subject to federal and state legislation for Safety in Design. Any AI systems impacting on those issues should be considered "High Risk" and the risk evaluation processes outlined in the discussion paper should be mandatory.

The use of AI tools in the construction industry should be regulated to ensure safe and ethical use, with appropriate compliance, enforcement and sanction for dangerous or hazard use. The health and life safety of end users should continue to be a paramount consideration.

AI applications or technologies for the purposes of mass monitoring, warfare, and other gross invasion of privacy should be banned. However, this would require careful consideration to determine when the AI application/technology would be harmful and/or detrimental to society.

b. Criteria or requirements to identify AI applications or technologies that should be banned, and in which contexts?

Our view is that comprehensive regulation around the use of AI tools should be implemented, resulting in legal recourse when high-risk work is undertaken without suitable risk assessment and mitigation.

Whilst we generally believe that misuse, negligence and harmful AI practices should be banned, we would advocate for heightened data security to minimise any potential threat and ban the free and unrestricted interaction between AI applications, even in limited domains such as architecture.

In architecture, the ban of AI having full control of individual buildings or having the ability to create a network (individual buildings connected/controlled by a single AI). For example, AI installed in City of Sydney to control sustainability but actually controlling other aspects.

11. What initiatives or government action can increase public trust in AI deployment to encourage more people to use AI?

Government could play an important role in working with tertiary educators and industry to offer advice and public education around ethical and efficient use of AI. And to legislate where necessary to ensure the best interests of the Australian public are being served. Government needs to be proactive in the forefront of change and not be reactive.

Implications and infrastructure

12. How would banning high-risk activities (like social scoring or facial recognition technology in certain circumstances) impact Australia's tech sector and our trade and exports with other countries?

Banning any technology or high-risk activities presents a risk that Australian industry falls behind other countries' sectors. However, this should be balanced with upholding Australia's ethical standards, and may ultimately benefit Australian tech industries (and architectural practices) if they are seen as holding higher ethical standards than other countries. We need to be careful in designing policies that can successfully navigate what seem to be opposing social goals (e.g., freedom and privacy of individuals on the one hand; and data collection and use for the purposes of maintaining Australia's competitiveness on the other).

13. What changes (if any) to Australian conformity infrastructure might be required to support assurance processes to mitigate against potential AI risks?

It is unclear at this stage what "conformity infrastructure" is. Is that "trade measurement, standards and accrediting bodies involved with certification and inspection"? If it is, then it will require policies that would need to be created – i.e., architectural practices fully disclosing the use of AI tools (in detail) for each of the projects (and the percentage of AI's contribution as well).

14. Do you support a risk-based approach for addressing potential AI risks? If not, is there a better approach?

Yes, in principle we support a risk-based approach.

15. What do you see as the main benefits or limitations of a risk-based approach? How can any limitations be overcome?

The main limitation is the speed that humans can learn and operate systems. For example, human in the loop or training approaches may soon become problematic if new AI systems are developed to enhance safety and process information more accurately and efficiently than humans could.

AI may be quicker at learning in terms of data management and storage but learning is a complex activity. It requires complex cognitive skills and capacities that AI does not yet have.

16. Is a risk-based approach better suited to some sectors, AI applications or organisations than others based on organisation size, AI maturity and resources?

It is more suitable for regulated professions because it may act as a protection for local businesses and professionals against unfair competition from large companies from overseas with much bigger access to resources.

17. What elements should be in a risk-based approach for addressing potential AI risks? Do you support the elements presented in Attachment C?

Yes, notwithstanding the limitations mentioned in item 15 above

18. How can an AI risk-based approach be incorporated into existing assessment frameworks (like privacy) or risk management processes to streamline and reduce potential duplication?

Ideally this should be implemented as amendments to existing legislation rather than new layers of legislation. It should also be introduced into government processes such as procurement in a clear and coordinated manner.

19. How might a risk-based approach apply to general purpose AI systems, such as large language models (LLMs) or multimodal foundation models (MFMs)?

This should apply through clarity and transparency of any legislation and any risk-based procedures adopted by government. Whilst IP is outside of the scope of this paper, it should be noted that improper use of IP, particularly in creative design work undertaken by architects, is a major concern and risk that needs to be addressed.

20. Should a risk-based approach for responsible AI be a voluntary or self-regulation tool or be mandated through regulation? And should it apply to:

a. public or private organisations or both?

- Public organisations – mandated regulation
- Private organisations – for further discussion – see below:

It is important that the government be transparent about the use of AI. The private sector should be equally transparent.

Australia should establish an AI Code of Conduct/Ethics that is mandated in public organisations. [The AI ethics principles](#) are a good basis for this, but we do not believe its 'voluntary' nature goes far enough to mitigate risk. Consumer protection, risk mitigation, and health and life safety issues, all key concerns for the architectural profession, would suggest a level of ethics and transparency at odds with total self-regulation.

b. developers or deployers or both?

The principles of ethics, transparency and risk mitigation apply to both. This requires further discussion.

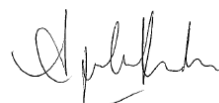
The ACA is committed to the long-term health and viability of the architecture profession in Australia and the important role architects play in the happiness, safety, health and wellbeing of Australia's citizens. We are very interested in remaining engaged with this discussion around Responsible AI in Australia, and sharing our insights and contributions as and when they are needed.

The ACA looks forward to your consideration on this feedback.



John Held

ACA National President



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