



Australian Government

Defence

Select Committee on Adopting Artificial Intelligence
Inquiry into opportunities and impacts for Australia arising
out of the uptake of AI technologies in Australia

Department of Defence
Submission

May 2024

Defence Response

1. The National Defence Strategy (NDS) will see a Strategy of Denial become the cornerstone of Defence planning. This approach aims to deter any conflict before it begins, prevent any potential adversary from succeeding in coercing Australia through force, support regional security and uphold a favourable regional strategic balance. The NDS also underscored that Australia's middle power status means military advantage must be sought in innovative ways.

Harnessing AI is key to Defence capability priorities

2. Artificial Intelligence (AI) and autonomy present opportunities to enhance Defence capability and deterrence. These technologies, when applied appropriately in concert with human direction or operators, offer potential asymmetric advantage in areas such as logistics, intelligence, surveillance and reconnaissance, targeting, and tracking and strike applications. In particular, AI has the potential to provide decision advantage in high-tempo military operations. Defence is working to harness these benefits and is committed to using AI-enabled technologies responsibly and consistent with Australia's international legal obligations, particularly international humanitarian law.
3. AI and autonomy is an immediate priority of AUKUS Pillar II: Advanced Capabilities, which is focused on harnessing joint research and development of technologies with the UK and US to rapidly deliver asymmetric capabilities for the three partners. Under AUKUS Pillar II, AI techniques for autonomous guidance of networked uncrewed platforms have been successfully field tested for proof of autonomous intelligence, surveillance and reconnaissance, and targeting in controlled environments.
4. Defence science and technology efforts increasingly focus on the potential of AI technologies for future capability development.
 - In April 2021, Defence Science and Technology Group established the Defence AI Research Network as an entity to assist coordinating Defence's AI partnerships with the national Science and Technology enterprise.
 - Exploring the utility of Large Language Models and other Generative AI methods to understand the challenges, benefits and risks of adopting such technology in applications relevant to Defence.

Defence is committed to using AI responsibly

5. Defence is committed to the responsible development, research, deployment and use of AI and autonomy, in collaboration with other Australian government agencies and international partners.
6. Defence is developing an internal 'Responsible use of AI' policy, which will adopt a risk-based approach to governance in line with international best practice, Australian law and international obligations.
7. Defence's development of the Responsible AI Policy is informed by:
 - the Department of Industry, Science and Resources' AI Ethics Framework;
 - the Australian Signals Directorate (ASD) Ethical AI in ASD policy;
 - policy development by other agencies, including the AI in Government taskforce;
 - Australia's participation in multilateral discussions on responsible AI in the military domain; and
 - the policies of allies and likeminded partners, including the US and UK.

8. Australia is an active participant in international discussions on the responsible use of AI in a military context, and will continue to support development of shared international norms and standards. Australia supported the 2023 first-of-type Responsible AI in the Military Domain Summit and associated Call to Action, and endorsed the 2023 US-led Political Declaration on Responsible Military Use of AI and Autonomy.

AI adoption includes its use within Autonomous Weapons Systems

9. Defence closely monitors all aspects of emerging technology that can improve the safety of the ADF and/or minimise risk to civilians, including autonomous weapons systems (AWS). AWS, which may involve the use of AI, have the potential to reduce harm to civilians and civilian objects, and strengthen compliance with international humanitarian law.
10. Existing international law regulates the development, acquisition, deployment and use of new and emerging technologies, including AWS. All ADF weapons, means and methods of warfare must comply with Australia's international and domestic legal obligations, and are subject to legal review under Article 36 of the Additional Protocol I of the Geneva Conventions.
11. Australia upholds its Article 36 obligations by conducting legal reviews of new and materially modified weapons, means and methods of warfare prior to acquisition and/or operational use. If a weapons system cannot be used in accordance with Australia's legal obligations, Defence will not deploy it.
12. Australia actively participates in the United Nations Convention on Certain Conventional Weapons discussions on lethal autonomous weapons systems, which may involve AI technologies. Australia supports practical and tangible outcomes in this forum. This includes the paper, which Australia co-sponsored in 2022, on "Principles and Good Practices on Emerging Technologies in the Area of Lethal Autonomous Weapons Systems" to clarify and enhance compliance with international humanitarian law.
13. In addition, Defence applies a control measures approach called "Systems of control" to effectively manage risks in developing, acquiring and using capability at the operational and technical levels. "Systems of control" describes the layers of governance architecture, policies and procedures applied to all current and emerging technologies, including autonomous weapons and AI.