

Submission to the Joint Standing Committee on Foreign Affairs and Trade Regarding the 2023-24 Defence Annual Report

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Chair and Members of the Committee,

I appreciate the opportunity to provide this submission on behalf of Security & Defence PLoS concerning the 2023-24 Defence Annual Report. Our organisation fosters collaboration between universities, industry, and government to address pressing security and defence challenges in Australia, particularly across the Indo-Pacific region. This submission will focus on AUKUS, advancements in artificial intelligence (AI), robotics and automation, and the critical role of universities in bolstering the nation's security posture.


AUKUS and the Strategic Landscape

The AUKUS partnership between Australia, the United Kingdom, and the United States is both timely and essential, reflecting the growing complexity of security challenges in the Indo-Pacific. Heightened geopolitical competition, combined with rapid technological progress, demands that Australia develop cutting-edge capabilities in coordination with close allies. The move to acquire nuclear-powered submarines under AUKUS Pillar One underscores the importance of technological superiority, interoperability, and a shared commitment to maintaining stability in the region.

Our perspective at Security & Defence PLoS is that AUKUS extends beyond the procurement of advanced naval platforms. AUKUS Pillar Two represents a broader architecture for information sharing, joint research and development, and the cultivation of skilled workforces. From AI-enabled surveillance to unmanned systems, the partnership will greatly enhance Australia's capacity to defend its maritime interests, deter aggression, and protect the principles of a free and open Indo-Pacific. As such, ongoing transparency and communication between government stakeholders, industry partners, and the broader public is critical to maintaining domestic support for AUKUS and ensuring strategic alignment.

AI, Robotics, and Automation

AI, robotics, and automation are redefining the character of modern warfare and defence operations. These technologies offer far-reaching potential, including



improved situational awareness, predictive analytics for maintenance and logistics, and more efficient resource management. Nevertheless, their adoption presents complex ethical, legal, and practical challenges.


Security & Defence PLS supports the responsible integration of AI-driven systems across defence and security platforms. We recommend continued investment in research focused on trustworthy AI—systems whose decision-making processes are interpretable, robust, and ethically compliant. For instance, autonomous or semi-autonomous drones, ground vehicles, and maritime vessels can enhance operational effectiveness when deployed with appropriate safeguards. This includes ensuring compliance with international humanitarian law and adopting strict procedures to prevent unintended escalation.

Robotics and automation similarly have significant roles in enhancing situational awareness, supply chain efficiency, and personnel protection. Autonomous reconnaissance vehicles can collect critical data in hazardous environments, while automated logistics systems can transport supplies in contested or remote areas, minimising risk to human operators. Alongside these benefits, Australia must keep pace with adversaries who may be leveraging similar or more advanced technologies. Investment in AI, robotics, and automation is therefore not optional but vital to maintaining a technological edge.

The Role of Universities in Defence Innovation

Australian universities are engines of innovation and key partners in advanced research and development for the defence sector. From quantum computing to cybersecurity, universities possess both the intellectual capital and the advanced facilities necessary to drive technological breakthroughs. Collaboration between academia, government, and industry is essential to realising the full potential of cutting-edge defence solutions in the following areas:

1. **Workforce Development:** Universities play a pivotal role in educating and training the next generation of defence professionals. Multidisciplinary programs—encompassing engineering, data science, policy, and ethics—ensure that graduates possess the expertise to tackle complex 21st-century security challenges.
2. **Research & Commercialisation:** Through targeted research grants and industry partnerships, universities can accelerate the development of emerging technologies. Translating academic discoveries into real-world applications requires an ecosystem that values collaboration, knowledge exchange, and streamlined pathways from lab to field.
3. **Ethical Frameworks & Governance:** Universities are also well placed to explore the ethical and regulatory frameworks that guide responsible technology deployment. By engaging with international partners and participating in global forums, Australian universities help shape the norms and standards that underpin AI, robotics, and automation for defence.



Security & Defence PLoS seeks to bridge the gap between academic research and actionable defence outcomes in this context. We encourage sustained government funding for university-led initiatives that align with national security priorities, including AUKUS-related technology programs. Closer cooperation will produce innovations that not only secure Australia's strategic interests but also bolster our ability to shape the regional security environment.

Addressing Security and Defence Challenges in the Indo-Pacific

The Indo-Pacific is a region of both strategic opportunity and heightened competition. Regional tensions, territorial disputes, and cross-border challenges such as cyberattacks underscore the need for proactive and collaborative defence policies. Australia's security depends on our ability to partner effectively with regional allies and neighbours, building trust through defence dialogues, joint exercises, and comprehensive capacity-building measures.

Australia's strategic posture, as outlined in the 2023-24 Defence Annual Report, clearly acknowledges these evolving threats and opportunities. Yet, continued progress will demand a holistic approach that integrates defence diplomacy, technology transfer, and development assistance. Universities can support these aims through research and training programs that foster cross-cultural understanding, language proficiency, and people-to-people ties. This includes encouraging international student engagement in STEM fields vital to national security.

Conclusion

By aligning our academic strengths, research capabilities, and diplomatic efforts, Australia can more effectively respond to the dynamic security landscape of the Indo-Pacific. Security & Defence PLoS stands ready to facilitate and support these initiatives, contributing to the national objective of a secure, stable, and prosperous region for all.

Thank you for considering this submission. I look forward to further discussion and the opportunity to provide any additional information that may assist the Committee in its important work.