

The Academy of the Social Sciences in Australia

Submission on the

List of Critical Technologies in the National Interest:

2022 Update

Summary

The Academy of the Social Sciences in Australia (the Academy) recognises the value of Australia's Critical Technologies program and its constituting elements: action plan, technology list, and individual profiles.

Having reviewed the existing critical technology list (the List) and engaged in the stakeholder consultation workshops, the Academy recommends:

1. Adoption of a clear and consistent definition of 'national interest' that includes health, environmental and cultural benefits alongside economic and national security outcomes
2. Inclusion of social technologies as a critical technology requiring investment in sovereign capability
3. Explicit recognition of the central role of social science knowledge and expertise in enabling the development, acceptance and adoption of critical technologies.

Recommendation 1: Clear and consistent definition of 'national interest'.

Critical Technologies for the purposes of the List were defined by former Minister Payne in 2021 as: "technology that can significantly enhance or pose risks to Australia's national interests, including our prosperity, social cohesion and national security."¹ The Academy suggests this definition could be further developed to explicitly describe the full range of important benefits that technologies can deliver to the Australian people. These would include not only the economic, social and national security benefits as stated, but also the health, environmental and cultural benefits that can be realised by strategic investment in sovereign technology capability. In addition, the Academy recommends that an explicit and broader definition of national interest should include reference to the celebration and preservation of Aboriginal and Torres Strait Islander history and culture.

¹ [Launch of the International Cyber and Critical Technology Engagement Strategy | Australian Minister for Foreign Affairs \(foreignminister.gov.au\)](#)

The Academy further recommends that the national interest, once defined, should be applied across all related materials, including the Critical Technology Profiles which currently only assess each technology against economic benefit and national security in the 'Estimated Impact on National Interest' section. At the very least, the Academy recommends that the assessment against national interest should include a rating against social benefit or social cohesion as stated in the current definition.

Recommendation 2: Social Technologies as a Critical Technology.

Social Technologies are those that facilitate social interaction through digital means, whether social media, video conferencing, online events or augmented reality environments. Social Technologies have rapidly become pervasive and influential throughout society – particularly over the COVID-19 period. They are evolving rapidly, with new platforms, engagement technologies and even new virtual economies being introduced. While much of this activity lies in the private sector and with global technology organisations, it is vital that Australia maintain a high-level capability to benefit from economic and social opportunities, to innovate in the delivery of public and private services, and to ensure capacity to appropriately govern and regulate their use.

Recommendation 3: Explicit recognition of Social Sciences in Critical Technologies.

Social science knowledge and expertise plays a critical central role in the development, socialisation and uptake of all technologies that impact on society. This includes expertise on technology ethics and social license, technology governance, statistical methods, IP and related legal frameworks, cultural applicability, economic viability, education, psychological health and other similar domains.

While some of this expertise is implicitly recognised in the existing Critical Technology Profiles (for example, 'economics' or 'sociology' listed in the 'Underpinning Science' columns), the Academy considers that the text could and should more explicitly recognise the importance of these knowledge domains. Further, the Academy suggests that revising the 'Underpinning Science' heading on the Technology Profiles to 'Underpinning Expertise', or similar, would provide greater relevance and accessibility of Australia's Critical Technology Policy framework to academic and private sector social scientists working in these domains.

About the Academy

The Academy of the Social Sciences in Australia is an independent, not-for-profit organisation that draws on the expertise of its 700+ elected Fellows to provide practical, evidence-based advice to governments, businesses, and the community on important social policy issues.

Further information

Should you have any queries please contact Andrea Verdich (Policy Manager) on 0438 218 352 or andrea.verdich@socialsciences.org.au.