



Queensland University of Technology
submission to the
Senate Foreign Affairs, Defence and Trade Legislation Committee
inquiry into the provisions of the
Defence Trade Controls Amendment Bill 2023

QUT is grateful for the opportunity to provide advice to the Committee on likely foreseeable effects of the proposed amendments to the *Defence Trade Controls Act 2012* on universities and Australian research.

QUT understands and welcomes the policy objective of the Bill, namely the facilitation of sensitive and potentially sensitive trade and collaboration with US and UK nationals and entities – both abroad and within Australia. We acknowledge that the creation of a ‘licence-free export environment’ afforded by the proposed reforms would reduce impediments to closer research collaboration within the AUKUS domain.

An inevitable corollary of the creation of this ‘safe-room’, however, is an increase in barriers to collaboration with researchers outside that domain, be they located in Australia or abroad. The raft of exceptions and permits entertained by the Bill go some way to alleviating the unintended incidental restraint of free and open research collaboration with foreign nationals, both domestically and internationally. They require further improvement, however, to ensure that unnecessary harm is not done to Australia’s research effort by unnecessarily or unreasonably hindering routine civil research.

As the Bill stands, QUT holds that the proposed exceptions are still too restrictive, which will place an inordinate and probably unsustainable burden on the envisaged permit system. Consultations with the Department of Defence have produced the clear impression that the very substantial prospective demand for permits under the proposed regime is radically underestimated by the Government. Combined with the severity of the penalties, an overburdened individual permit system will have a chilling effect on Australian research. This outcome can be averted through targeted reform of the suite of exceptions, without which the proposed amendments to the DCTA risk producing:

- A significant regulatory burden on the research and higher education sectors for technology transfers with foreign nationals, both locally and internationally;
- A substantial negative impact on the core research business of open sharing of technology and information, in the course of routine collaboration with foreign partners across a broad range of research areas;
- A sharp reduction in Australia’s attractiveness as a global research collaboration partner;

- A crippling effect on Australia’s ability to recruit talented local and international researchers and research students;
- A flight of talent as previously unhindered foreign national researchers return to their home countries or move to other jurisdictions where their routine civil research activities are not subject to regulation or the requirement for a permit solely on the basis of their citizenship; and
- An immediate, unwarranted and unfair constraint on the research careers of many foreign national researchers already working legitimately in Australian universities.

Taken together, these negative effects will damage Australia’s competitive advantage, to the serious detriment of Australia’s research interests, with far-reaching negative consequences for the prosperity, health, cohesion and, ironically, security of the nation.

Foreign Country List

Under subsection 15(4A) of the DTCA, the Minister has the power to nominate countries that are subject to certain exceptions. The current version of the relevant instrument, the Foreign Country List, is approaching nine years old, and does not reflect all of the countries that are considered safe and trusted research partners. We propose that consideration be given to updating the Foreign Country List to include the following additional countries:

Taiwan	India
South Korea	Sri Lanka
Singapore	Chile
Iceland	Argentina

Australian technology research benefits from the contribution of talented researchers from other countries such as Vietnam, Peru and Columbia. A system of expedited permit assessment could be instituted for a further list of countries like these, where the benefits may be judged to warrant priority processing. Without taking these additional measures to mitigate the impact of the proposed regime, there is a risk that Australia’s national security may in fact be harmed by hampering the participation of talent, based solely on country of citizenship rather than individual character – noting that beyond a certain degree of impediment, additional barriers will effectively rule researchers out, as they choose to work instead in countries that place fewer hurdles in their paths.

Fundamental research exceptions

The Department of Defence has advised the Universities Foreign Interference Taskforce (UFIT) that the Australian Government intends to replace the definition of *basic scientific research* in the DSGI with a new definition of *fundamental research* (aligned to that of the USA) as ‘basic and applied research in science and engineering where the resulting information is ordinarily published and shared broadly within the scientific community, as distinguished from research whose results are restricted for proprietary reasons or national security reasons.’ This definition varies somewhat from common usage, since fundamental research is generally understood to embrace all disciplines, and to exclude applied research. With respect to the latter variation of meaning, we are content that the special definition

serves the required purpose; however, we are concerned that the narrow disciplinary scope of the definition has the potential to expose researchers who are not within ‘science and engineering’. While Artificial Intelligence (AI) is not currently on the DSG, the rise of large language models of AI – dependent to a significant extent on the research of linguists and other scholars from the humanities, arts and social sciences (HASS) – provides a topical example of an emerging technology that utilises fundamental research from outside science and engineering. Since the main thrust of the exception is to exclude research that would ordinarily be shared and published widely (i.e. not ‘restricted for proprietary reasons or national security reasons’) the unnecessary disciplinary qualification should be removed, rendering all recognised research fields subject to the exception. Additionally, QUT would prefer to see that definition made out in the Act itself rather than in the DSG.

Recommendations:

That the Bill be amended to include the definition of *fundamental research*; and

That the definition of *fundamental research* be amended to expand its disciplinary scope to all fields, such as by removing the words ‘in science and engineering’.

Research students

Australia is highly dependent on international research students both for their immediate contribution to our scientific output and for their progress through the research career pipeline. They not only make up the shortfall in key areas unmet by Australian graduates, but they also add a form of intellectual and cultural ‘genetic diversity’ which helps our research sector thrive through renewal and novel perspectives, and extends and strengthens our international links in the global research ecosystem. The DCTA would benefit from a targeted exemption for bona fide enrolled research students to mitigate the otherwise unworkable burden on research and research training with implications right down to the level of routine supervisory discussions. The Department of Defence has argued that research students would be exempt by virtue of the fundamental research exception: we respectfully refute the understanding that research students do not, by definition, participate in research ‘whose results are restricted for proprietary reasons or national security reasons.’

Recommendation:

That the Bill be amended to provide exceptions for bona fide research students.

Bona fide employees

Similarly, targeted exceptions for bona fide employees would mitigate the otherwise profoundly unworkable burden of the proposed ‘deemed exports’ control on the normal conduct of everyday research. A well-designed exception would avert a flood of permit applications that will overwhelm the bureaucracy and halt research while the inevitable backlogs are worked through. The Act this amended could also capture enrolled research students by specifying that they are considered to be ‘employees’ for the purposes of DTCA exceptions.

Recommendation:

The Bill should be amended to provide exceptions for bona fide employees, and could specify that enrolled research students are considered to be employees for the purposes of the DTCA.

Dual Use

Most of our concerns relate to research relating to goods and technologies that are classified on the DSGL as dual use. The problem for researchers on the ground is that almost any technology has potential military or security application: a box of matches can light a candle, or light a fuse. This is not only true for the advanced sensors and instruments that cutting-edge science often deploys, but also for more generic equipment such as drones. There is a need to assess whether the DTCA provides sufficiently precise regulation for controlled technologies, given the increasing prevalence of dual-use technologies in research that spans across a broad range of technologies, and the potential ease of repurposing dual-use technologies (from civilian to military, typically, but even vice-versa, when high-tech military gear is taken up for civil application, e.g. personal protective equipment (PPE) and decontamination equipment for biological and chemical labs). A pragmatic abridgment of the Dual Use List that removes the many items already freely available anywhere would reduce the touch points of civil research with the DSGL regime. Similarly, the provision of targeted exceptions for research use of certain technologies on the Munitions List, such as PPE, would also give relief to the permit system.

Recommendation:

That the Dual Use List be revised to exclude widely available goods and technologies; and exceptions should be considered for bona fide civil research use of certain military-designed or -adapted goods and technologies on the Munitions List.

Genuine emergencies

There are types of safety equipment on the DSGL that could be critical in an emergency – certain chemical, biological or nuclear protective or containment equipment, for example, such as those covered by ML7.f – but that would be an offence to share with a foreign person (for both the Munitions and Dual Use Lists – supply), or provide instruction on their operation or use to a foreign person (for the Munitions List – DSGL services). The Bill would therefore benefit from the inclusion of an exception when DSGL supply and/or DSGL services are undertaken in specific emergency situations in order to prevent loss of life, serious injury or serious environmental contamination. As it stands, handing a civil gas mask (DSGL Part 2) during an emergency to a foreign person without a permit who is not covered by an exception would be a breach of the restrictions on supply; and instruction of such a person in the use of military-designed or adapted protective or containment equipment (DSGL Part 1) during an emergency would be a breach of the restrictions on DSGL services.

Recommendation:

That the Bill be amended to provide an exception for genuine emergencies, when certain chemical, biological or nuclear protective or containment equipment on the DSGL – such as

those covered by ML7.f of the Munitions List, for example – may need to be supplied, or instruction on its operation or use provided, to a foreign person to prevent loss of life, serious injury or serious environmental contamination, which would otherwise constitute restricted DSGL supply or provision of DSGL services.

University-specific guidelines

Ancillary to the DCTA and the Amendment Bill, there would be value in Government collaborating with the university sector to develop university-specific guidelines for export controls. These guidelines would be mutually beneficial, since they would help the higher education sector successfully navigate potentially complex export control measures, and support Australia's export security architecture through increased awareness of and compliance with export trade control legislation. Their development would also provide Government with a more nuanced appreciation of the reality of the effect on research of the controls regime. The higher education sector has engaged closely with the Department of Defence on numerous previous legislative amendments and reviews, and UFIT continues to work productively to aid mutual understanding and promote regulatory effectiveness and efficiency.

Recommendation:

That the Government collaborates with the university sector to develop university-specific guidelines for export controls, to foster mutual understanding of the challenges so as to maximise compliance while minimising collateral harm.