

Appendix 1

Defence Trade Controls Amendment Bill 2023 [Exposure Draft]

Background

Macquarie University is a research comprehensive institution that undertakes work across a range of critical technology disciplines. Macquarie is a Level 3 Defence Industry Security Program member. Macquarie University implements the 2021 University Foreign Interference Taskforce Guidelines on Countering Foreign Interference. Macquarie complies with the Australia's Foreign Relations Act 2020, the Foreign Influence and Transparency Scheme, Australian sanctions regimes, and the legislative body that makes up Australia's export controls regime.

Macquarie University notes that the Defence Trade Controls Act 2012 is only one piece of existing legislation that contributes to the body of trade controls in Australia.

Macquarie University notes that AUKUS is driving changes in Australia's export controls settings and how this contributes to the need to legislate new controls for "deemed exports" as a new category of export controls.

Macquarie University notes that the *Safeguarding Australia's Military Secrets Bill* currently before the Australian Parliament, as drafted, may have broad implications for academics undertaking business-as-usual work overseas in addition to the changes contemplated in the *Defence Trade Controls Amendment Bill 2023 Exposure Draft* (The Exposure Draft). Macquarie University refers the Department of Defence to its submission to the Parliamentary Joint Committee on Intelligence and Security on this matter.

Macquarie University has 2 full time equivalent staff that support the University in complying with national security and defence guidelines, funding criteria, security conditions, and legislation.

Macquarie University's national security and defence team regularly liaise with the Department of Defence; Home Affairs; the Department of Foreign Affairs and Trade; the Department of Education; and the Department of Industry, Science and Resources; as well as other government agencies.

The feedback contained in this document is provided within this context. It is intended to highlight the many different national security and defence regulatory mechanisms that now exist across the Australian Government and how these instruments can duplicate process, policy and procedure. The administration of a single research arrangement at Macquarie University can require communications with the Australian Government across export controls, sanctions, foreign arrangements and Defence Industry Security Program assurance.

Macquarie University notes the University Foreign Interference Taskforce (UFIT) Guidelines on Countering Foreign Interference state that "These *Guidelines* are intended to be applied **proportionate** [emphasis added] to the risk at each institution, and are not intended to introduce unnecessary burdens on universities. Universities are encouraged to consider the *Guidelines*, identify their own highest risks to help prioritise resourcing, and apply mitigations that are appropriate to their specific risks".¹

¹ Page 6, Guidelines to Counter Foreign Interference in the Australian University Sector, Australian Government, 2021.

Macquarie University suggests that the changes contemplated by the *Exposure Draft* conflict with this Australian Government policy principle. Early feedback received from academics involved in defence research at Macquarie University suggests the collaborative restrictions imposed by *Exposure Draft* could impact on Australia's ability to attract talent while simultaneously increasing administrative overheads.

Macquarie University notes previous communications from the Department of Defence indicating the intent to use legislative instruments to exempt employees and PhD candidates from the scope of the *Exposure Draft*. However, these draft instruments are not included in the documents and are unavailable for review.

Macquarie University notes that creating regulatory powers for exempting or including the provision of controlled technology and services provided to a class of foreigners in Australia within the scope of the Act creates uncertainty due to capacity for unexpected change without prior consultation or warning. This regulatory uncertainty will have a wide impact beyond just the Australian university sector. This uncertainty can be minimised by legislating long-running exemptions that operate within the performance of the Act.

The need for employers to have permits to supply employees with information necessary for the conduct of that employee's role

The *Exposure Draft* appears to create a need for employers to attain permits in order to transfer or supply information to foreign employees. Macquarie University makes the following observations about the workability of this provision:

- (1) the inclusion of all Defence and Strategic Goods List (DSGL) services, including Part 2 technologies, within this provision could capture a large volume of ordinary activity undertaken within the university sector;
- (2) the volume of permit applications likely to be required in support of this ordinary activity could overwhelm the Defence Export Controls Office (DECO) and will almost certainly overwhelm the administrative units responsible for export controls within the university sector;
- (3) the capacity of the Australian Government to monitor and police compliance with such a provision is likely to be limited due to resource constraints.

This provision is likely to produce a scenario where large volumes of activity that should require a permit are undertaken without a permit because neither the Australian Government nor the entities seeking to comply (universities, start-ups, small businesses, etc) have the capacity to administer the Act.

This will result in a risk-based approach to compliance with only the most serious risks resulting in permit applications, or referral to compliance proceedings by DECO (where permits are not in place). Such an approach will detract from the functionality of the Act and may make the Act difficult to apply in practice as the legislation will lack consistent application.

Macquarie University recommends the following changes for consideration by the Department of Defence:

- (1) that the "deemed export" provisions only apply to items listed on the DSGL Part 1 due to the intrinsic military utility of these items;

- (2) that instead of requiring a permit process for employers, the legislation provide for entities to undertake a risk-based approach to pre-employment screening in alignment with the Defence Industry Security Program requirements, and that this requirement only be mandatory where foreign employees may be provided access to DSGL Part 1 technologies by their employer;
- (3) that further clarification and detail be included in the legislation on how educational and research training services provided to foreign students would be treated.

Macquarie University notes that students are just one category of affiliations at universities where there is a relationship between the university and an individual akin to that of an employee and an employer. It is unclear how the *Exposure Draft* would treat these relationships and what kind of permits might be needed in support of enabling the core business of the university sector – that of providing educational and research training services.

Macquarie University notes that the exception provided for by Subsection 10A(7) in relation to the *Foreign Country List* is not sufficient for ensuring the scope of the Act is proportionate to the identified risks. This is due to the multi-national workforce in Australia and in universities coming from many more countries than those on the *Foreign Country List*.

The evidential burden and the impact on academic collaboration within Australia

Macquarie University notes that the *Exposure Draft* constructs an evidential burden on the part of individuals supplying or transferring information that would require a permit. The example provided on page 17 of the Explanatory Memorandum raises two key concerns:

- (1) what level of risk mitigation would provide evidence of the Australian Government's expected due diligence and reasonable precaution by the supplier of controlled information?
- (2) how does the Department of Defence propose to practically monitor compliance with this requirement in such a way where the legislation would be consistently applied?

Macquarie University also notes that the page 17 example proposes a scenario where an entity has an export permit to transfer information to an employee, and the employee has an export permit in order to present that information to another Australian entity. That second entity and its employees may then require an export permit to hold that information and share it among its employees. This scenario would require at least two export permits (potentially three or more depending on how the information is used by the participants and whether they come from more than one entity) for a situation where no information is being transferred outside Australia and could only be referring to Part 2 items of DSGL. By extension, where two individuals from two different entities propose to meet and share controlled information in Australia, a minimum of four permits may be required in support of this activity.

If the evidential burden is constructed as an absolute liability, this is likely to lead to a decrease in information transfer among Australian businesses, between industry and academia, and between universities. This could have a negative impact on Australian innovation, and would likely see Australia further decrease in its OECD ranking for commercialisation. Macquarie University notes that the potential impact of the *Exposure Draft* conflicts with many other Australian Government policy positions, including those on enabling advanced manufacturing, increasing commercialisation and driving increases in skilled employment.

Macquarie University recommends the following changes:

- (1) that the evidential burden and absolute liability only be applied to DSGL Part 1 items;
- (2) that the evidential burden and absolute liability not be applied to research intended to be openly published (more on general exemptions below);
- (3) that further clarity be provided in the legislation on how “permit families” would be managed for complex collaborations involving multiple institutions with foreign employees from multiple foreign countries that are not on the *Foreign Country List*;
- (4) that the potential impact of the *Exposure Draft* on collaboration, contracting and the undertaking of ordinary business solely in Australia be minimised to those technologies where there is a proportionate risk of use within a foreign military or weapons of mass destruction context.

Clarity required around DSGL Service Exemptions

Macquarie University notes existing exemptions to permit requirements that currently support international academic collaboration activities are enacted via regulation. For example, exemptions for basic research, for medical technology end-uses, pre-publication activities and patent applications.

It is, however, unclear in the *Exposure Draft* how these current exemptions would be applied or considered.

Macquarie University makes the following recommendations for exemptions that should be explicitly included within the Act:

- (1) a general exemption should apply to activities intended to result in the open publishing of results;
- (2) a general exemption should apply to medical research, services and technology;
- (3) a general exemption should apply to patent applications;
- (4) a general exemption should apply to the verbal supply of technology that is neither for military end-use or use in a weapons of mass destruction program.

The identification of these exemptions in the Act (instead of in associated regulations) for the provision of DSGL services would better align the *Exposure Draft* with its intended objectives and the capacity of the Australian Government to administer and monitor the Act.

Macquarie University notes that these general exemptions would not necessarily be required in the legislation if the legislative scope of DSGL Services was constrained to only those items on Part 1 of the DSGL.

Additional Comments

Macquarie University understands and is strongly supportive of the necessary changes to Australia’s export control framework that would enable access to permit exemptions from the United States and the United Kingdom. Macquarie University understands the potential value of trade, collaboration and innovation enabled by such exemptions. Macquarie University’s assessment is that if Australia can find the right balance for necessary changes to the current export controls legislative framework, it will encourage European, Japanese and other like-minded defence industry partners to open subsidiaries in Australia in order to access the AUKUS defence

export bubble. This will increase trade and investment and lead to a strong and resilient Australian defence industrial base.

However, there is a risk that the *Exposure Draft* could negatively impact trade (both domestic and international) and produce a scenario where the negative economic and social impacts outweigh the potential benefits. Macquarie University recommends that the introduction of “deemed export” permit requirements in Australian law be contained to those items that have intrinsic military utility – that is, items on Part 1 of the DSGL. This would better align the *Exposure Draft* with the existing Australian framework for managing technology transfer and supply as regulated by both Australian sanctions regimes and the Australian export controls architecture.

Additionally, the *Exposure Bill* does not provide detail on how a transitional period of implementation would be expected to work. Macquarie University recommends consultation on the mechanisms of a transitional period be undertaken early and in parallel with refinement of the legislative amendments. A co-design process will ensure functional and workable transitional arrangements for the Department of Defence, the university sector and industry.

Macquarie University further notes that the short consultation period associated with this *Exposure Draft* is unreasonable given the scope of the changes, the complexity of the legislation, and the potential impact on the Australian economy and society. Macquarie University has received feedback from members of academic staff involved in its Defence Industry Security Program projects that indicate the current *Exposure Draft* would negatively affect the ability of the university sector to work with the Department of Defence. However, without adequate time to collate feedback it is difficult to synthesise this information into one document. Macquarie University has instead asked its academics to provide feedback individually to the *Exposure Draft* consultation.

Macquarie University looks forward to constructively and cooperatively engaging with the Department of Defence on the refinement of this *Exposure Draft* to ensure it proportionately meets the stated objective of implementing a “deemed exports” permit framework in Australia.



Appendix 2

Defence Amendment Bill 2023

Parliamentary Joint Committee on Intelligence and Security

14 November 2023

Dear Parliamentary Joint Committee on Intelligence and Security,

RE: Review of the Defence Amendment (Safeguarding Australia's Military Secrets) Bill 2023

Macquarie University makes this submission to the Review of the Defence Amendment (Safeguarding Australia's Military Secrets) Bill 2023 (the Bill).

We note that the Bill amends the Defence Act 1903, through the insertion of a new Part IXAA, including s115B which regulates the training that Australian citizens and permanent residents may provide to relevant foreign militaries or governments without a foreign work authorisation.

While we understand that the legislative intent of this section is primarily “to prevent individuals with knowledge of sensitive Defence information from training or working for certain foreign militaries or governments where that activity would put Australia’s national security at risk” (sourced from: second reading speech), we are concerned that the scope of s115B(1) may be broad enough to be held to apply to educational services (as training can have an educational element or meaning) of an academic nature provided by university academics operating at an international level (e.g. delivering international lectures, participating in international conferences) even where the academics may have no knowledge of sensitive Defence information (the **Academic Scope**).

Macquarie University notes that a number of key terms in the legislation remain undefined including “training” and “military-related” as it applies to military tactics, military techniques and military procedures. The university sector engages in the research and teaching of dual-use research disciplines and critical technologies, much of which could be construed within the ambit of “military-related training” if these terms are interpreted broadly. Macquarie University recommends that the Bill be amended so that the scope of S115B(1) only applies to “training ~~related to~~ **concerning the** military tactics, military operations and military procedures **of the Australian Defence Force**”. This amendment would more closely align the provisions of S115B(1) with the intention of the Bill as outlined in the second reading speech, and help to avoid irrelevancies in the Academic Scope from being captured by the legislation. As currently drafted the Bill could lead to an overwhelming number of permit applications from academics planning to deliver a presentation at an overseas conference or a foreign university. It would likely further strain the resources of the Defence Export Controls Office and may lead to delays in the timely assessment of permit applications.

We request that the Bill be amended to exclude (or reduce) the Academic Scope from the operation of s115B(1).

Professor Sakkie Pretorius
Deputy Vice-Chancellor (Research)
Macquarie University

Appendix 3

Macquarie University Exemption Feedback

Question 1: Should Australia amend its definition of basic scientific research to capture fundamental research? If yes – please document why you consider this is recommended, including examples and whether you consider the ITAR definition or EAR definition to be preferred. If no – please document the challenges you foresee with this, including examples.

Yes, Australia should amend this definition. However, any amendment should be based on the definitions for research in the Frascati Manual as this is the international standard set by the OECD and used by the Australian Government agencies such as the ABS, the Department of Education, the ARC and the NHMRC. This change in definitions should apply to all aspects of export controls, not just new provisions required by this change.

Question 2: If you answered yes to Question 1: What would be the benefits of exempting basic scientific research from Australian export control licencing requirements?

The benefits of this change would include providing more clarity to academics on when exemptions apply, ensuring that research intended for publication was exempt from export control requirements. It would confine export control considerations to work that was not intended for publication due to AUKUS government information restrictions or commercialisation intentions.

Question 3: If you answered no to Question 1: Are there other definitions (beyond the current Australian or US definitions in the ITAR/EAR) that you consider would better capture this intent? If yes, please provide these and any context we should be aware of?

Not applicable.

Question 4: What is preferred: Defining fundamental/basic research as that which is ordinarily published and shared broadly within the scientific community or defining it as research that does not involve the use of proprietary information or the technology is in the process of being commercialised? We wish to make the thresholds as clear as possible for the higher education and research sector so welcome any initial feedback on this.

The preferred definition would be linked to “activities that ordinarily result in publishing”. This is critical as patented research is ordinarily published after the patent has been filed and intellectual property protections are in place. The definition should only capture work that would not be ordinarily published due to information restrictions, dual-use concerns, or other material matters that result in academic decisions not to pursue publication of research outcomes.

Question 5: Please provide any other thoughts or considerations you have on these definitions.

The simplest approach to this definitional policy problem is to define the output/outcome rather than the research level which is necessarily subjective and based on discipline-level expert assessments that are subject to change as discipline-norms evolve over time.

If instead the definition focuses on an outcome/output/activity, rather than the level of research it is much easier for academics to understand and for universities to implement.

For example, research that is published in scientific journals is by definition basic or applied, because commercial research is not published in open scientific journals as that can compromise the intellectual property associated with the relevant research and development activities.

Therefore, by defining the exemption as “research that would ordinarily result in publication in an openly accessible format according to discipline-norms”, basic and applied research is captured, low technology readiness level research is captured, and the unique publication signature of any given academic discipline is given due acknowledgement. Such a definition can then be relied upon by the Defence Export Controls Office by seeking information from the ARC on publication practices for a given academic discipline when export assessments require borderline decisions.

Question 6: Would an exemption similar to those in the ITAR/EAR facilitate the legal transfer of controlled technical data to a foreign national (someone who is not an Australian citizen or permanent resident) PhD student or post-doctoral fellow within a higher education or research context in Australia? If no, why not?

This definition would capture staff employed by the university, but is unlikely to be robust enough to capture PhD candidates that are not employed by the university, or other identity categories affiliated with universities such as emeriti, honoraries, adjuncts, clinicians, visiting scholars and associates. These identify categories are often affiliated to a university, may involve a contractual relationship, but may not reach the threshold for consideration as a “regular employee” under the ITAR and EAR definitions, yet in substance the relationship should be exempted. Universities have thousands of affiliated individuals with varying degrees of relationship strength and research contribution. It is recommended that Excellence in Research for Australia definitions for “eligible researchers” be consulted (please discuss with the ARC) as these are robust and well understood definitions in the sector that can be tailored to meet the exact thresholds Defence is looking for in relation to US controls.

Question 7: If an exemption similar to those in the ITAR/EAR was introduced, what changes would need to be made to the above to facilitate research collaborations in Australian universities? For example, would this change how contracts are provided to foreign PhD students or post-doctoral fellows to ensure they meet a definition similar to ‘regular employee’?

It is very likely that any change to export controls would see flow on changes to contractual clauses in the university sector, including in research degree enrolments. It is important to note that PhD degrees and post-doctoral fellows are not the only higher research degree or early career researcher pathways that exist at universities. Australian universities have research honours degrees, masters by research and research capstone units in undergraduate degrees. Any exemption should be

cognisant of the Australian and UK research training pathway which is substantially different to the US pathway. A US PhD involves a five year program, which equates to a 2+3 program in Australia and the UK. With the 2+3 programs either being a research honours degree and a PhD, or a masters by research coupled with articulation into a PhD as per the Bologna Process. It is recommended that any consideration of treatment of Australian higher degree research candidates understands the nuances and differences between research training in Australia and the US.

Question 8: Do you think that a regular employee exemption should cover both DSGL Part 1 and Part 2 goods and technologies? If yes – why? If no – why not?

Macquarie University only undertakes work involving Part 2 of the DSGL so it is difficult to answer this question. We would suggest that it makes sense for the exemption to cover Part 2 due to the dual-use nature of the item.

Question 9: Please provide any other thoughts or considerations you have on the regular employee exemption, including if you have a preference between the wording used in the ITAR/EAR?

As above, Macquarie University recommends additional consideration be given to how US and Australian higher degree research training pathways are substantially different and how this may flow through to translating US export control exemptions.

Question 10: What benefit would any of the exemptions under ITAR § 125.4 ‘Exemptions of general applicability’ be to the higher education and research sector?

It is unclear from the consultation document what a General Exemption refers to. Without additional information Macquarie University finds it difficult to comment.

Question 11: Are there particular exemptions that you do not think are appropriate for the Australian context/audience? If yes – why? If no – do you have any feedback more broadly on these exemptions?

As above, Macquarie University finds it difficult to comment on this question.

Question 12: Please provide any other general comments, suggestions, or feedback on these exemptions as well as any other exemptions you consider may be appropriate for the Australian context/audience.

Macquarie University notes that any schedule or instrument of exemptions should be designed to be easy to interpret and to minimise unintended disruption/disincentives to existing collaborations. The sector will benefit from transitional exemptions being built into any new legislation to ensure there is adequate time to transition to new arrangements without penalising existing collaborations that were entered into under the current legislative regime.

Appendix 4

DTCA 2012 s74B Review 2023

Background

Macquarie University is a research comprehensive institution that undertakes work across a range of critical technology disciplines. Macquarie is a Level 3 Defence Industry Security Program member. Macquarie University implements the 2021 University Foreign Interference Taskforce Guidelines on Countering Foreign Interference. Macquarie complies with the Australia's Foreign Relations Act 2020, the Foreign Influence and Transparency Scheme, the Security of Critical Infrastructure Act 2018, Australian sanctions regimes, and the legislative body that makes up Australia's export controls regime.

Macquarie University notes that the Defence Trade Controls Act 2012 is only one piece of existing legislation that contributes to the body of trade controls in Australia.

Macquarie University notes that AUKUS is driving changes in Australia's export controls settings beyond the scope of this review, such as ongoing discussions regarding the introduction of "deemed exports" as a new category of export controls.

Macquarie University notes that the *Safeguarding Australia's Military Secrets Bill* currently before the Australian Parliament, as drafted, may have broad implications for academics undertaking business-as-usual work overseas.

Macquarie University has 2 full time equivalent staff that support the institution in complying with national security and defence guidelines, funding criteria, security conditions, and legislation.

Macquarie University's national security and defence team regularly liaise with the Department of Defence; Home Affairs; the Department of Foreign Affairs and Trade; the Department of Education; and the Department of Industry, Science and Resources; as well as other government agencies.

The feedback contained in this document is provided within this context. It is intended to highlight the many different national security and defence regulatory mechanisms that now exist across the Australian Government and how these instruments can duplicate process, policy and procedure. The administration of a single research arrangement at Macquarie University can require communications with the Australian Government across export controls, sanctions, foreign arrangements and defence industry security program assurance.

Any changes to current policy setting that increase efficiency and effectiveness of the national security and defence regulatory portfolio will benefit both the Australian Government and the University Sector.

This feedback document provides a series of case studies based on Macquarie University's experience in complying with the Defence Trade Controls Act over the past twelve months. Observations are then made on the case studies in relation to the Review's Terms of Reference.

Case Study 1: Tender Applications

Macquarie University's *Australian Astronomical Optics* (AAO) builds telescopic instrumentation for ground-based and space-based astronomical observations in support of basic astronomical research undertaken by research consortiums and foreign governments that own and operate observatories around the world. When a foreign government opens a tender for a new astronomical installation, there are typically four weeks given for entities from across the world to submit tender documentation. This documentation may range to hundreds of pages. These tenders are rarely in countries named on the Foreign Country List as many observatories are located in the global south in locations relatively free from optical or telecommunication pollution.

It is not possible for AAO to receive any formal advice from the Defence Export Controls Office (DECO) prior to choosing to submit to one of these tenders. DECO requires at least six weeks to undertake an assessment and AAO must make a decision on whether to commence producing tender documentation within 24-48 hours from an announcement. It is not possible for AAO to secure AUSGELs for the locations that these tenders may originate from, even if the astronomical instrumentation is operated by research consortiums that are controlled by European or United States entities.

AAO must make a calculated assessment of risk when applying to these tenders and take on significant financial liability in the form of tender fees and contract cancellation fees (if the bid is successful). If a bid is awarded to AAO, the financial liability continues until an export permit is granted. Additionally, with the Australia's Foreign Relations Act 2020 now providing the Foreign Minister the power to cancel these arrangements at any time, AAO must work with the uninsurable liability of the contract cancellation fees. This is due to the risk that the project can be cancelled via an Australian Government declaration even if an export permit is obtained.

Observations:

- Export controls and the Australia's Foreign Relations Act could be better integrated, thereby minimising notifications and/or permit applications to the Australian Government. Macquarie University has been asked and advised by DECO about Foreign Arrangements notifications, and Macquarie has had to provide identification numbers to DECO.
- The inability of the DTCA to provide timely support to tender applications for AAO indicates that other industry sectors are likely to face similar issues, this may be a gap that requires consideration.
- This case study indicates that the DTCA may not strike the right balance between supporting trade and international collaboration while also achieving the objectives of export controls.
- Macquarie University suggests this case study may be an unintended consequence of the DTCA as currently designed.

Case Study 2: Two Systems Approach

Macquarie University has a research laboratory undertaking a defence industry security program (DISP) contract. This project needed to export intangible information to meet a Defence deadline and needed to obtain a permit within a week to meet this deadline.

Macquarie University submitted a permit application, the Defence sponsor called DECO, and the permit was granted before the Defence contract deadline lapsed. This was completed in a significantly shorter time than the review period of six weeks associated with typical applications to DECO.

Macquarie University was able to meet the project requirements as set by the sponsor.

Observations:

- While it is not unexpected that permits in support of Defence needs should be prioritised, this process may have disrupted the review of other permit applications within DECO at the time.
- Macquarie University queries the utility and efficiency of requiring entities to apply for export permits when the work is already sanctioned by the Department of Defence.
- Macquarie University suggests that the process for obtaining permits for exports and transfers fulfilling the instructions of a Defence sponsor for a Defence project could be handled in a less disruptive way for DECO.

Case Study 3: In-Principle Assessment Requests

Macquarie University has an outstanding In-Principle Assessment (IPA) with DECO that has been under review since November 2022. Macquarie University was requested to submit this application by DECO and has subsequently paused work in the area covered by the IPA while awaiting an outcome. Macquarie University understands that this request arose due to the relevant research being considered by the Australia Group for additional export controls. The research is not currently covered by the Defence and Strategic Goods List and Macquarie University could not have known that the research was of concern prior to receiving verbal advice from DECO.

The IPA request from DECO was made to Macquarie University via written correspondence subsequent to concerns regarding the research being verbally expressed to Macquarie University by DECO.

The research team impacted by this ongoing pause in research has noted that their international collaborators at Harvard University have not received the same request from the United States Government.

Each time Macquarie University has sought an update on the application, DECO's advice has been that it is with an external partner(s) for review or advice.

Observations:

- The inability of the DTCA to effectively cater to emerging technology results in long delays that can significantly disrupt work at universities.
- The inability of DECO to place concerns about emerging technology in writing makes it difficult for institutions such as universities to activate appropriate governance mechanisms after concerns are verbally expressed to them.
- The ongoing delay in receiving advice from DECO on this IPA is influencing the perception of export controls within the academic community at Macquarie University and this may have a long-term negative impact on the University's ability to advocate for proactive compliance among its academic community.
- The Australian Government and counterpart foreign governments may need to collaborate more effectively when raising emerging technology concerns within university communities as the international academic community in any given area is small and international disparities in regulatory approaches will be shared between collaborators. If research is disrupted for a prolonged period of time in Australia, this may result in researchers leaving Australia and joining research teams in locations where the work does not experience the same level of regulatory uncertainty. This would ultimately reduce Australia's ability to exert control over the export and proliferation of that technology, while also decreasing Australia's ability to profit from the sovereign development of that technology.
- There may be issues with the timeliness of external partners responding to DECO on consultation requests regarding permit applications.

Case Study 4: The Defence and Strategic Goods List

Macquarie University undertook a full internal review of the DSGL in relation to AAO's research activities at the beginning of 2023. A team of AAO subject matter experts were brought together for a half-day workshop, and each page of the DSGL was reviewed for relevance to the unit's activities. During this process 32 separate categories in the DSGL were identified that could have relevance to AAO depending on a project's requirements.

Each item developed by AAO is bespoke with end-use destinations determined by the location of major observatories or space launch sites. It is therefore difficult to develop an export permit strategy for AAO when each item is unique to a contract, and contracts may have an end-use location not on the Foreign Country List.

The subject matter experts involved in this workshop were engineers who had collectively worked on developing astronomical instrumentation for decades. A common observation arising from the workshop was that the DSGL was difficult to interpret.

Observations:

- The DSGL is difficult to interpret, even by subject matter experts specialised in a given technology category with decades of collective experience.
- A principles-based approach to export controls could enrich the DSGL and assist subject matter experts in interpreting the technology thresholds. For example, a resource that lists anonymised permits previously granted across categories of the DSGL for end-use and consignee location and/or industry. Such a resource would complement and enhance the ability of users to interpret the technology thresholds in the DSGL in relation to prospective projects or markets.

Final Remarks and Recommendations

Macquarie University's recent experience with the Defence Trade Controls Act and the broader export controls legislative framework has evidenced a high degree of professionalism, expertise and commitment of staff within DECO.

However, Macquarie University has had inconsistent experiences, and has had to develop approaches for managing risks that emerge from gaps or delays in the current regulatory framework.

Macquarie University understands that an "ATO style" approach to publishing anonymised rulings is being considered by the current review. Macquarie University endorses this principles-based approach to enriching the information contained in the DSGL.

As noted above, the DSGL is difficult to understand and interpret by subject matter experts with decades of collective experience in a given technology category. This suggests that the DSGL could benefit from information enrichment to make it easier to interpret. Ideally such a change would decrease advice requests to DECO as users would be able to interrogate previous decisions made by DECO. A principles-based register only accessible to registered users that sign a deed of confidentiality would help maintain the confidentiality provisions to important to Australia's export controls system.

Macquarie University also recommends a review of the concept of "basic research" aimed at making the intended use of the exemption easier to understand and less likely to misinterpreted. Macquarie University recommends that the output of research should be controlled, rather than the level of research, in a similar manner to patents. Macquarie University suggests that research intended for open publication should be exempt from permit requirements unless it is listed on Part 1 of the DSGL, or explicit advice is provided in writing to the sector from DECO. Applied research is not likely to be openly published due to its commercial sensitivity and its correspondingly higher technological readiness level.

Similarly, Macquarie University recommends that DECO develop a mechanism for providing written advice to individual universities and the sector as-a-whole about emerging technologies it has concerns about, and technologies that are currently on the agenda of an international export control body for consideration, such as the Australia Group or the Wassenaar Arrangement. This would help the university sector activate appropriate governance mechanisms early via risk management frameworks implemented in support of the University Foreign Interference Taskforce Guidelines on Countering Foreign Interference.