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Senator Ursula Stephens  
Chair  
Senate Foreign Affairs, Defence and Trade Committee  
Parliament House ACT 2600  
By email: [fadt.sen@aph.gov.au](mailto:fadt.sen@aph.gov.au)

Dear Senator Stephens

**Defence Trade Controls Bill 2011 (Cth)**

I write with reference to the Committee's continuing consideration of the *Defence Trade Controls Bill 2011*. I write on behalf of the University of Sydney in my capacity as Deputy Vice-Chancellor (Research), and for my colleagues in Australian universities who have to date recognised and supported my role in representing, together with Universities Australia, the sector's views on these matters to Defence, the Government and the Parliament.

This letter is intended to complement the more detailed advice that has been provided by Universities Australia. It follows:

- our submission to the Committee of 31 January 2012;
- our evidence at the hearing of 21 March 2012;
- meetings held in-confidence with Defence, Universities Australia and the University of Sydney on 29 March and 24 April 2012;
- versions of Defence's *'Principles and Options Papers'* of 13 April, 27 April and 1 June 2012;
- Universities Australia and University of Sydney feedback on the 13 April and 1 June versions of the Defence Options Paper, provided to Defence on 9 May 2012 and 22 June 2012 respectively (**included with Universities Australia's update**);
- Defence's answers to the Committee's Questions on Notice received by the Committee on 20 June 2012, specifically paragraphs 11 and 28-30.

At the hearing on 21 March 2012, the Committee asked Defence, the University of Sydney and Universities Australia to enter into discussions to find solutions to the various problems with the Bill that had been raised by the university sector. I was specifically asked to report back to the Committee if the negotiations failed to deliver an outcome considered reasonable by the university sector.

It is with considerable regret that I must inform the Committee that at present the university sector is unable to support what we understand to be Defence's preferred position relating to this Bill and its implementation.



I wish to reaffirm that the Australian academic research sector recognizes the need for effective risk assessment and a control regime for intangible supplies of technologies that pose a legitimate security risk. We remain committed to working constructively with the Government to develop an effective solution that is appropriately targeted and practical, and as such will achieve maximum compliance.

In our view the current **Option 4**, which we understand to be Defence's preferred position, is inconsistent with the regulatory principles that we understood had been agreed by Defence early in the consultations. These included:

- Avoid unintended misapplication of the permit regime to routine, low-risk education and research activities.
- Recognise the fundamental role of foreign persons and foreign communications in the context of Australian research.
- Recognise the breadth and depth of the DSGL and the strong overlap of so-called *dual use* DSGL goods with cutting-edge research activities.
- Minimise compliance burdens by applying high-level "filters" to exclude low risk activities, extending pre-existing exemptions for basic research to include applied research.
- Place the responsibility for assessing risk with local experts, and imbue a culture of compliance that is needed to provide maximum benefit.

These principles informed the development of **Option 3**, which was included in the Defence's *Principles and Options Paper* following collaborative discussions held in Canberra on 24 April 2012.

**Option 4** attempts to distinguish between the intangible supply of technologies on a jurisdictional basis (inside and outside Australia), which in the modern global research enterprise is impractical. Further, it fails to provide filters for low-risk research activities and hence target resources on areas of legitimate national security concern. As such, it falls into the same traps as the export control regimes of the UK and US where reviews have recently documented evidence of low net compliance and high impacts on non-defence research. We draw the Committee's attention to the following documents, which we believe support our position that neither the US nor UK legislative approaches are functioning effectively to both protect national security and allow low risk dual use research to prosper.

- The US National Academies' 2009 Report: **Beyond 'Fortress America': National Security Controls on Science and Technology in a Globalised World**, and in particular Findings 1 and 2 on pages 17 and 28 respectively.<sup>1</sup> The Report concluded, among other things, that the current US system of export controls on the international flow of science, technology, and commerce is fundamentally broken and cannot be fixed by incremental changes.
- The testimony of Brent Scowcroft (Co-Chair, Committee on Science, Security and Prosperity Policy and Global Affairs, National Research Council, The National Academies) before the US House of Representatives Committee on Science and Technology discussing the findings and recommendations of the Fortress America Report.<sup>2</sup>
- The **US Government Policy for Oversight of Life Sciences Dual Use Research of Concern** of March 2012. The fundamental aim of this government-wide policy is to preserve the benefits of life sciences research involving dual use technology, while minimizing the risk of misuse of the knowledge, information, products, or technologies provided by such research.<sup>3</sup> Implementation is overseen by the National Science Advisory Board for Biosecurity (NSABB), supported by the National Institute of Health.

<sup>1</sup> [http://www.nap.edu/catalog.php?record\\_id=12567#description](http://www.nap.edu/catalog.php?record_id=12567#description)

<sup>2</sup> [http://www7.nationalacademies.org/ocga/testimony/Impacts\\_of\\_Export\\_Control\\_Policy\\_on\\_S\\_andT.asp](http://www7.nationalacademies.org/ocga/testimony/Impacts_of_Export_Control_Policy_on_S_andT.asp)

<sup>3</sup> [http://oba.od.nih.gov/biosecurity/bio\\_usg\\_activities.html](http://oba.od.nih.gov/biosecurity/bio_usg_activities.html)



The NSABB provides extensive guidance for research organisations and researchers about how to manage risk arising from life sciences research involving certain pathogens and toxins. This includes detailed guidance for the development, utilization and promotion of codes of conduct for the conduct of research involving dual use technology.<sup>4</sup>

- The House of Commons Defence, Foreign Affairs, International Development and Trade and Industry Committee's 2007 Report: **Strategic Export Controls: 2007 Review**, which documents evidence of likely high levels of non-compliance with the UK system of controls over intangible supplies of DSSL technology due to the complexity of the regime, problems with definitions, a lack of awareness about the requirements among the British research community and limited enforcement activity. In particular we draw the Committee's attention to paragraphs 90-91, 172-4 and the evidence about compliance and impact on academic research: evidence p. 121 and 135 respectively.<sup>5</sup>

These developments in the two countries Defence has looked to for guidance in designing its approach suggest that they are far from representing effective regulatory regimes. Moreover, they suggest that a model based on legislation, regulations and a Defence administered permit and control regime is unlikely to be sufficient. Collaborative non-legislative approaches will also be required and we are committed to working with Defence and other relevant government agencies to develop appropriate policies and processes.

Of the legislative options proposed thus far, we feel that **Option 3** best balances the competing demands of providing controls for high-risk activities and ensuring protection for innovative research, education, and freedom of inquiry. It accomplishes this by targeting enforcement to a relatively small class of high-risk activities which have limited overlap with typical academic research (e.g. advanced "experimental development" activities pertaining to Very Sensitive controlled goods). Exemptions for basic, strategic basic and applied scientific research ensure that it is possible to create a culture of compliance among the limited pool of researchers engaged in activities that potentially carry security risks.

We believe that with further refinement **Option 3** has the potential to form a workable foundation for implementation of an effective, and appropriately targeted, permit control regime covering intangible supplies of DSSL technology.

It is essential for this legislation to achieve a balance between protecting national security and enabling Australia to be an effective contributor to the global research enterprise. In considering this balance, one has to fully understand the scope of the DSSL and the fact that it encompasses a broad range of technologies that are critical to non-defence applications: such as in computing and communication technology; astronomy; medicine and public health; sustainable agriculture, food and energy and our ability to anticipate and adapt to changes in climate.

In its response to our submissions, Defence has indicated that it sees a need to take responsibility for risk assessment concerning intangible supplies across the full breadth of the highly diverse set of technologies on the 380 page DSSL. In the absence of any assessment of the existing risk profile of Australian university research; the amount of research activity likely to be covered by the control regime; and an articulated methodology with forecasting and cost estimates, this position carries with it significant risk for Australian research. There are also significant budget risks for Defence, especially in the current climate of severe financial constraints.

Significantly, on 10 July 2012 Defence advised Universities Australia in writing that it intended to recommend amendments to the Bill to introduce permit requirements for academic publications involving DSSL technologies. Coming so late in the consultation process, Defence's reversal of its previous verbal advice (made during the consultations) that it did not intend to control publication of university research, raises profound questions of principle, policy and process.

<sup>4</sup> [http://oba.od.nih.gov/biosecurity/biosecurity\\_documents.html](http://oba.od.nih.gov/biosecurity/biosecurity_documents.html)

<sup>5</sup> <http://www.publications.parliament.uk/pa/cm/cmtrdind.htm>

Universities Australia requested written advice from Defence about its proposal to control publications as part of **Option 4**. To date, no such advice has been forthcoming. This means that we have had no detailed information on which to make an assessment of the practicalities of Defence's plans.

The implementation of an inadequately considered permit regime, without sufficient consultation or consideration of non-defence impacts, carries significant peril for our national research enterprise. The exclusion of applied research from the definition of basic scientific research and the lack of understanding of the nature of communication and collaboration in the modern global research enterprise were initially of greatest concern to the university research community. This concern was made all the greater because there was relatively little awareness of the Bill, or its potential implications, until we became aware of it through the Senate Committee's Inquiry in January 2012. As awareness about the Bill has spread through the Australian research community, it has become clear that the concerns we have expressed are shared by diverse research peak bodies and other stakeholders including the AAS, STA, ATSE, AAMRI, ARMS, the CRC Association, ARC, NHMRC and state governments. Some of these organisations have now provided the Committee with submissions expressing support for **Option 3**.

An alternative approach to the permit regimes proposed to date might be to consider the work undertaken by the US Government in developing its ***Policy for Oversight of Life Sciences Dual Use Research of Concern***. This approach recognises the importance of engaging expert technical knowledge in risk assessment and controls in the context of a dynamic research landscape. Given the breadth of technologies that the DSSL encompasses, and the potentially far-reaching impacts on non-Defence applications that are Australian Government priorities, establishment of an independent oversight body that can recruit or draw upon the appropriate expertise from Defence, and the research and innovation sectors might be an option that offers the needed balance in the national interest. We would be very keen to help to develop such an **Option 5** for consideration and evaluation.

In summary, the current situation reflects a lack of adequate consultation and is a real threat to Australia's ability to translate the outcomes of its research to public benefit. We therefore request that Part 2 of the Bill is not passed in its current form. Further consultation is needed in a transparent process that can effectively engage Defence and non-Defence stakeholders and the Australian public research community in considering the appropriate design and operation of legislative and non-legislative mechanisms to achieve the goals of protecting national security without undermining Australia's competitiveness in research and education. This outcome will require methodology that is clearly articulated and tested, prior to implementation, and detailed forecasting and analysis of the impacts on economic, scientific, and educational competitiveness.

We look forward to realizing a satisfactory modification to this legislation with the aim of improving outcomes for both Australian security and scientific competitiveness.

Yours sincerely

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