

Committee Secretary
Senate Foreign Affairs, Defence and Trade References Committee
PO Box 6100
Parliament House
Canberra ACT 2600

6 May 2013

Dear Committee Secretary

Ongoing scrutiny into the implementation of the Defence Trade Controls Act 2012

Thank you for your invitation to make a written submission to the first six-monthly review of the implementation of the Defence Trade Controls Act 2012 by the Senate Foreign Affairs, Defence and Trade References Committee.

Information about actual progress against the work program adopted by the Strengthened Defence Export Controls Steering Group chaired by the Chief Scientist has been extremely difficult to find. I would like to know:

- Which universities have been selected to run the pilot programs and the basis on which they and not other universities were selected. I am not seeking to challenge or contest the selection that have been made, simply to understand the logic or the rationale.
- Whether the implementation timetable is running to schedule and, if not, why not?

Three further questions are:

- Have any universities actually submitted applications for export licenses since the Defence Trade Controls act came into effect in November 2012?
- What numbers of people have attended the information sessions that have been held in various capital cities about the Act and the Regulations?
- Is a publicity campaign around the conduct and outcomes of the pilot programs being contemplated?

In raising these questions I am reflecting an impression I am gaining that many researchers remain ignorant of the Act and its possible implications for them. The work of Professor Chubb's committee and the Senate Committee's oversight have become, in my view, doubly important in the light of what might be termed researcher indifference.

I seek to raise another concern which is about the implications of the Act for a number of highly specialised organisations such as the Advanced Instrumentation and Technology Centre (AITC) at Mt Stromlo near Canberra. The AITC has been built, in large measure, with Commonwealth funds for the purpose of designing and fabricating advanced astronomical instruments, including instruments that might be fitted to satellites.

The AITC is developing a world leading capability in a technology known as adaptive optics (AO). This technology essentially distorts the optical path in a telescope in real time to compensate for disturbances in the atmosphere that would otherwise affect the clarity of the image that the telescope can obtain. Basically the distortions in the optics compensate for or cancel out the distortions caused by the atmosphere.

AO has clear 'dual use' applications. Before the Defence Trade Controls Act came into force agreements were made between Mt Stromlo and observatories in a number of countries to share AO data and expertise in the context of the Giant Magellan Telescope (GMT) project in which Australia is investing.ⁱ I am concerned to ensure that these arrangements are not unduly affected and that the researchers involved are not disadvantaged for undertakings they gave in good faith long before the DTCA came into force but whose implications may not be apparent until well after the two year moratorium has ended.

To generalise, there are some particular areas of research, of which astronomy is one, where future science can only be done, because it can only be afforded, through large scale international collaborations. By definition these mega science projects will involve 'dual use' technologies because they push the boundaries of sensing systems to their limits.

I am keen to be sure that the conundrums raised by the example I have provided above are addressed, if not by the pilot programs themselves, then through a parallel mechanism.

Do not hesitate to contact me should you need further information.

Yours faithfully,

Brett Biddington

Principal
Biddington Research Pty Ltd
PO Box 165 MAWSON ACT 2607

ⁱ Declaration of interest: I am a member of the Giant Magellan Telescope (GMT) Project Oversight Committee (GMTPO). This committee advises the Vice Chancellor of ANU about the state of the project and that the expenditure of funds accords with the agreement signed between ANU and the Commonwealth to purchase Australia's share of the GMT.