

## Joint Standing Committee on the National Capital and External Territories

### Adequacy of Australia's Infrastructure Assets and Capability in Antarctica

The following submission is made by the Institute for Marine and Antarctic Studies, University of Tasmania, in response to the terms of reference of the committee:

#### Maintaining Australia's National Interests in Antarctica

Australia's more than century long record of Antarctic engagement has significantly shaped key national interests. Heroic era exploration and science, most notably Douglas Mawson's Australian Antarctic Expedition (AAE) (1911-14) and the British, New Zealand and Antarctic Research Expeditions (BANZARE) (1929-31), helped stake Australian national interests in Antarctica. This was reinforced through Mawson's Antarctic territory claim for Britain and King George V, which the United Kingdom transferred to Australia in 1933 and became in 1936, the Australian Antarctic Territory (AAT). The AAT means that Australia claims 42 per cent of the Antarctic continent as well as sovereignty over the Territory of Heard Island and McDonald Islands, and Macquarie Island (part of Tasmania).

Australia has direct interests in Antarctica and the Southern Ocean reflecting our geographical proximity to the continent and the regional connections through climate and Southern Ocean ecosystems. As a state with a territorial claim, Australia is an original signatory to the 1959 Antarctic Treaty. Australia played a major role in negotiating the 1982 Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR), is the depository state for this treaty and hosts the secretariat and annual meeting of the Commission (in Hobart). Australia also played a major role in development and negotiation of the 1991 Protocol on Environmental Protection to the Antarctic Treaty (Madrid Protocol). Australia has actively lead the Committee on Environment Protection, twice serving as its Chair. Australia has strongly participated in the annual Antarctic Treaty Consultative Meeting (ATCM) of the parties to the Antarctic Treaty.

Australia also has a longstanding commitment to the Antarctic Treaty System (ATS) – the instrument and institutions centred on the Antarctic Treaty and providing the framework for governance of the Antarctic and Southern Ocean. Australia, as a territorial 'claimant state', balances its national interests with commitments to the ATS values and principles of consensus, peaceful use, scientific inquiry and international collaboration. Australia's Antarctic interests, which are based on strong bipartisan domestic political support, and is most publically presented in the *Australia's Antarctic Strategy and Twenty Year Action Plan* (Commonwealth of Australia 2016), are:

- to preserve our sovereignty over the Australian Antarctic Territory, including our sovereign rights over the adjacent offshore areas
- to maintain Antarctica free from strategic and/or political confrontation
- to protect the Antarctic environment, having regard to its special qualities and effects on our region
- to take advantage of the special opportunities Antarctica offers for scientific research
- to be informed about and able to influence developments in a region geographically proximate to Australia
- to foster economic opportunities arising from Antarctica and the Southern Ocean, consistent with our Antarctic Treaty system obligations, including the ban on mining and oil drilling (see also Haward and Jackson 2011).

Australia's Antarctic Strategy recognises that these interests are maintained by key actions, including to:

- Strengthen the Antarctic Treaty system and our influence in it, by building and maintaining strong and effective relationships with other Antarctic Treaty nations through our international engagement.

***The Federal Government must allocate sufficient resourcing to ensure that Australia can maintain and extend its leadership in the ATS, such that its interests are balanced by conscious efforts to maintain the system's stability.***

## Serving the Scientific Program into the Future

Scientific research is a key to international engagement of the states in the ATS and one of the twin pillars of 'peaceful use' and 'science' which underpin the Antarctic Treaty. Australian scientific research by the Australian Antarctic Division, CSIRO and the university sector is central to the Australian presence on the Antarctic continent.

The Australian Antarctic Science Strategic Plan 2011–12 to 2020–21 (AAD 2011) identifies the following key policy priorities:

- Maintaining and increasing Australia's physical presence in the Australian Antarctic Territory (AAT), including through scientific research, facilities and transport capabilities, and the ability to conduct activities in all parts of the AAT, the Heard Island and McDonald Islands (HIMI) external territory and their adjacent waters.
- Maintaining Australia's diplomatic presence and increasing Australia's influence in Antarctica through actively engaging internationally in matters affecting Antarctic governance arrangements, including under the Antarctic Treaty and other international instruments.
- Continually improving the environmental management of Australia's activities and encouraging other states active in Antarctica and the Southern Ocean to do likewise, including through a revitalised Australian inspection program.
- Delivering scientific outputs that meet the defined policy needs of government.
- Pursuing collaborative science and logistics relationships with states active in eastern Antarctica, focusing on Australia's key bilateral partners.
- Pursuing possible economic opportunities arising from Antarctic-related activities, including from:
  - well managed Antarctic tourism
  - sustainable, well-regulated Southern Ocean fisheries
  - Australia's Antarctic gateway cities (Hobart, Perth and Sydney).

***Australia needs to maintain and extend its unique Antarctic scientific research program linking core science within the Australian Antarctic Division, major research collaboration through the Antarctic Climate and Ecosystems Cooperative Research Centre and the Australian Research Council's Special Research Initiative for Antarctic Gateway Partnership. These linkages set it apart from those of other long-established Antarctic nations and are materially responsible for the significant scientific contribution Australia has made to the ATS. Fundamentally Australia will lose its scientific capability for Antarctic science if it cannot maintain critical mass of scientific expertise and an ability to provide the necessary logistical support to undertake Antarctic science programs, especially deep-field science, ice shelf and ice sheet observations, and a maintained presence for Southern Ocean observations (physical, chemical and biological).***

## International Engagement including Collaboration and Resource Sharing with Other Countries

Australia has provided significant support to countries with developing Antarctic programs, for example, China and Malaysia. It also has a longstanding Antarctic collaboration with France. The informal, but influential, grouping of East Antarctic states also provides a basis for collaboration, both formal and informal.

The Antarctic air-link from Hobart to Wilkins aerodrome near Casey Station, and development of increased Infrastructure at Hobart Airport, provide important opportunities to enhance collaboration with traditional partners such as France, but also open up potential logistic arrangements with other Antarctic programs active in East Antarctica (including China and India). The proposed development of a hard pack runway linked to Australia's Antarctic operations will further enhance our national air logistic capability.

Australia has shown unequivocal commitment to the values and principles of the Antarctic Treaty. This includes 'de-militarisation' of the region as stated in Article I (i) of the Antarctic Treaty. At the same time, Australia should continue to support and utilise the provision of Article I (ii) of the Antarctic Treaty; "the present treaty shall not prevent the use of military personnel or equipment for scientific research or for any other peaceful purpose" to support logistics and science. Use of RAAF C-17 aircraft in Antarctic logistics, for example, provides significant opportunities for improving science capability.

***Australia should enhance its capacity to support the peaceful use and scientific research of Antarctica, including by providing enhanced logistical support for Australian bases and bases of other states within the ATS.***

### **Fostering Economic Opportunities Consistent with the Antarctic Treaty System**

#### *Balancing Economic Opportunities and Environmental Considerations*

Management of human impacts will continue to be a challenge for all Treaty Parties, including Australia. Antarctic tourism is expanding, with increased visitor numbers impacting on a small number of sites (mostly in the Antarctic Peninsula, south of South America). Antarctic tourism is regulated under the ATS, but also relies heavily on national controls by Antarctic Treaty Parties and self-management by tour operators through an industry body, the International Association of Antarctica Tour Operators (IAATO). Antarctic tourism operations are segmented; ship-borne visits are the major component, with smaller numbers of airborne tourists landing on the continent. While there are limited ship-borne tourism operations that are landing tourists within the Australian Antarctic Territory, the sub-Antarctic Macquarie Island is a stopping-off point for such cruises, with limits on landings and numbers of people (see, for example, Jabour 2014).

***Australia must continue to promote the effective implementation, management and enforcement of the Antarctic environmental protection regime. In many respects, the environmental focus of the ATS has become the prime international justification for the Antarctic regime and is regularly held up as a model for the international community to emulate in other issue areas. However, that regime is increasingly under threat from a number of sources.***

Hobart is a key Antarctic Gateway City with potential to enhance this role through engagement with Antarctic Treaty parties. Areas for future work include complementing and extending current infrastructure to support both for ships and resupply at the Port of Hobart, and air services from Hobart Airport. The work of the Tasmanian Polar Network is a good example here.

Education, research and training are further areas of significant economic opportunity. The University of Tasmania and the Institute for Marine and Antarctic Studies, with its innovative “2+2” undergraduate degree partnership with the Ocean University of China, provides an example of the specific economic opportunities and benefits through Antarctic and Southern Ocean teaching, research and research training. Outreach education by IMAS staff in countries such as Iceland and Iran – the latter of which is contemplating accession to the Antarctic Treaty – is further evidence of the value of Tasmanian expertise in Antarctic studies. The introduction of the International Maritime Organization’s International Code for Ships Operating in Polar Waters in January 2017 has provided the Australian Maritime College with a unique training opportunity. The AMC’s Polar Code Basic and Advanced Courses have been approved by the Australian Maritime Safety Authority as meeting the requirements of the IMO, under the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW) Code. AMC Search will project manage the training courses, using ships’ Masters experienced in polar navigation, and the AMC bridge simulator, which now includes simulated models of Antarctica and sea ice.

### **References**

Commonwealth of Australia. 2011. *Australian Antarctic Science Strategic Plan 2011–12 to 2020–21*.

Commonwealth of Australia. 2016. *Australian Antarctic Strategy and 20 Year Action Plan*.

Haward, M. and Jackson, A. 2011. ‘Australia’s Antarctic Future’. (In) Haward, M and Griffiths, T. (eds.) *Australia and the Antarctic Treaty System: Fifty Years of Influence* Sydney: UNSW Press, 334-345.

Jabour, J. 2014. ‘Strategic Management and Regulation of Antarctic Tourism’. (In) Tin T, Liggett D, Maher P. and Lamers M. (eds.) *Antarctic Futures: Human engagement with the Antarctic Environment*, Dordrecht: Springer, 273–286.