

Australia's obligations under the Antarctic Treaty System

The Antarctic Treaty System

- 4.1 The Antarctic Treaty System is 'the whole complex of arrangements made for the purpose of coordinating relations among states with respect to Antarctica'.¹ The Treaty System comprises the Antarctic Treaty itself, the suite of recommendations adopted at meetings by the Antarctic Treaty Parties, and the following international agreements developed to complement the Treaty:
- **Protocol on Environmental Protection to the Antarctic Treaty** (the Madrid Protocol, adopted October 1991, entered into force January 1998);
 - **Convention on the Conservation of Antarctic Seals** (CCAS, adopted December 1972 and entered into force March 1978); and
 - **Convention on the Conservation of Antarctic Marine Living Resources** (CCAMLR, adopted May 1980 and entered into force April 1982).²

1 United States. Department of State, 2002, *Handbook of the Antarctic Treaty System*, 9th ed., p 1, <<http://www.state.gov/g/oes/rls/rpts/ant/>>, viewed 26 February 2005.

2 The Convention for the Regulation of Antarctic Mineral Resource Activities (adopted in June 1988) is unlikely to enter into force as it was superseded by the Madrid Protocol.

The Antarctic Treaty

- 4.2 Australia was one of the original signatories to the Antarctic Treaty, which was signed in Washington on 1 December 1959, and entered into force on 23 June 1961. The original parties to the Treaty were the 12 nations active in the Antarctic during the International Geophysical Year (IGY) of 1957-58.³ As of January 2005, a further 16 nations attained consultative status and acceded to the Treaty.⁴ There are 17 additional nations which are non-consultative parties to the Treaty, bringing the total number of Antarctic Treaty nations to 45.⁵
- 4.3 The Treaty provides a framework and governing philosophy for the work of nations in the Antarctic and stipulates, among other things, that:
- the Antarctic shall be used exclusively for peaceful purposes;
 - there shall be complete freedom to undertake scientific investigations;
 - scientific data shall be shared among Treaty nations and made readily available; and
 - all territorial claims shall be put aside for the duration of the Treaty.⁶

Australia's role in the Antarctic Treaty System

- 4.4 Australia's claim to 42 per cent of the Antarctic Territory, by definition, makes it a major international player in Antarctic affairs. In acceding to the Antarctic Treaty, Australia agreed to administer the AAT and, more generally, the activities of Australians elsewhere in the Antarctic, in accordance with the political and regulatory

3 The 12 original signatories to the Antarctic Treaty are Argentina, Australia, Belgium, Chile, the French Republic, Japan, New Zealand, Norway, the Union of South Africa, the Union of Soviet Socialist Republics, the United Kingdom of Great Britain and Northern Ireland, and the United States of America.

4 The 16 additional consultative nations are Brazil, Bulgaria, China, Ecuador, Finland, Germany, India, Italy, Netherlands, Poland, Peru, Republic of Korea, Sweden, Spain, Ukraine and Uruguay.

5 The 17 non-consultative parties to the Antarctic Treaty are Austria, Canada, Colombia, Cuba, Czech Republic, Democratic People's Republic of Korea, Denmark, Estonia, Greece, Guatemala, Hungary, Papua New Guinea, Romania, Slovak Republic, Switzerland, Turkey and Venezuela.

6 The full text of the Antarctic Treaty is available from: Australian Antarctic Division, 2002, *The Antarctic Treaty 1961*, Australian Antarctic Division, Kingston, Tasmania, viewed 11 July 2004, <<http://www.aad.gov.au/default.asp?casid=1212>>.

framework established by that Treaty.⁷ Australia's contribution to exploration, science, and international management of the entire Antarctic continent has further consolidated its role as a leader in Antarctic affairs.

4.5 The Department of the Environment and Heritage reported that in order to further Australia's interest in the Antarctic Treaty System, it has maintained a strong presence at a number of Antarctic Treaty meetings and forums, including:

- **Antarctic Treaty Consultative Meetings** (where representatives of the nations of the Antarctic Treaty System gather at intervals to discuss matters relating to the management of the Antarctic Treaty area and to further develop the Antarctic Treaty system);
- the **Committee for Environmental Protection**⁸ (which advises the Antarctic Treaty nations about environmental protection under the Protocol on Environmental Protection to the Antarctic Treaty and normally meets once a year in conjunction with the Antarctic Treaty Consultative Meeting);
- the **Commission for the Conservation of Antarctic Marine Living Resources** (which manages Antarctic marine living resources, other than whales and seals, under the similarly named international convention);
- the **Council of Managers of National Antarctic Programmes** (which meets annually to discuss cooperative logistics and scientific programmes, develop standard operational procedures and, if requested, formulate advice for the Antarctic Treaty Consultative Meeting and Committee on Environmental Protection); and
- the **Scientific Committee on Antarctic Research** and its sub-groups (the Committee, which meets every two years, is an inter-disciplinary committee of the International Council for Science charged with the initiation, promotion and coordination of scientific research in Antarctica).⁹

4.6 The Australian Academy of Science stressed the importance of Australia continuing its strong involvement in the Antarctic Treaty System:

As one of the 12 founding members of the historic Antarctic Treaty, an unprecedented demonstration that science can

7 Department of the Environment and Heritage, Submission no. 24, p 5.

8 The Committee for Environmental Protection is currently chaired by AAD Director, Dr Tony Press.

9 Department of the Environment and Heritage, *Annual Report 2003-04*, p 141.

bind nations while also enlarging minds, Australia has much at stake in ensuring that the Treaty continues to support the primacy of science and cooperative endeavour in the Antarctic. Concomitant to this is the need to ensure maximum leverage and coverage this unique situation affords.¹⁰

- 4.7 The AAD stated that Australia's role as a leading nation in the Antarctic Treaty System adds to the pressure on the Division's resources, given its responsibilities as the lead agency for Australia's Antarctic program, which include:
- the requirement to participate in a range of international forums in order to manage the AAT;
 - the need to respond to developments within the Australian Treaty System – for example a recent call for funding to establish an Antarctic Treaty Secretariat; and
 - the need to promote new activities within the Treaty System aimed at managing the AAT – for example, to monitor and regulate tourism activities.¹¹

International collaboration

...The sum of the results of the individual parts of international collaboration is always much greater than the individual parts themselves.¹²

- 4.8 Australia has typically embraced the spirit of international collaboration promoted by the Antarctic Treaty. Many Antarctic science research projects are undertaken as joint ventures, with scientists and logistical support personnel from several nations working together. The Antarctic Climate and Ecosystems CRC research program, for example, involves collaborations and partnerships with individuals and institutions in 13 countries, including Belgium, France, Germany, Italy, Japan, New Zealand, Norway, United Kingdom, China and the United States.¹³

10 Australian Academy of Science, Submission no. 22, p 1.

11 See Department of the Environment and Heritage, Submission no. 24, pp 23-24.

12 National Committee on Antarctic Research (Allison I), *Transcript*, 16 June 2004, p 49.

13 Australian Antarctic Division, 'The Antarctic Climate and Ecosystems CRC: A truly collaborative partnership', *Australian Antarctic Magazine*, no. 6, Autumn, 2004, p 12.

4.9 Under the Antarctic Treaty, a Council of Managers of National Antarctic Programs (COMNAP) meets annually to discuss cooperative logistics and scientific programs, develop standard operational procedures, and formulate technical advice to Antarctic Treaty meetings when requested.¹⁴ The Australian Academy of Science stated that there is an international goodwill and cooperation displayed in Antarctica that is rarely seen in other areas:

...At present Australia is involved in collaborative research and monitoring efforts with some 16 nations from institutions based in over 100 cities around the world. It is doubtful that many other environmentally based scientific endeavours could boast such a record.¹⁵

4.10 Australia, for example, regularly provides and receives support at a logistical level, owing to the cooperative environment facilitated through COMNAP. This was highlighted during the 2003-04 summer season where many operational tasks were achieved through a shared approach.¹⁶ Some examples included:

- the AAD provided transport and personnel to assist US scientists with the retrieval of a National Aeronautics and Space Administration stratospheric balloon experiment which had made a forced landing near Mawson Station;
- Australia sought assistance for support with flights between Davis and Casey Stations and received an immediate and positive response from the Russian Antarctic Program; and
- the US Antarctic Program provided advice and assistance to the AAD with its runway project near Casey Station.¹⁷

4.11 One of the concerns which arose during the inquiry was the need to ensure that, through its research efforts, Australia is able to continue to make a valuable contribution to the international community.¹⁸ As

14 See Council of Managers of National Antarctic Programs website <<http://www.comnap.aq/>>, viewed 21 July 2004.

15 Australian Academy of Science, Submission no. 22, p 1.

16 Australian Antarctic Division, 'You scratch my back and I'll scratch yours', *Australian Antarctic Magazine*, no. 6, Autumn, 2004, pp 51-52.

17 See Australian Antarctic Division, 'Managing Antarctic Tourism', *Australian Antarctic Magazine*, no. 5, Autumn, 2004, pp 51-52.

18 See Antarctic Climate and Ecosystems Cooperative Research Centre, Submission no. 12, p 6; Antarctic Science Advisory Committee, 2003, *Evaluation of Australia's Antarctic Science Program*, pp 12-13; Commonwealth Scientific and Industrial Research

the University of Tasmania's submission stated, 'to play on the international scene we need to bring benefits with us'.¹⁹ CSIRO, for example, pointed out that Australian scientists utilise international satellite systems in which Australia invests very little, in return for data obtained from its Southern Ocean investigations:

...We get basically free satellite data from other countries and the informal quid pro quo for that is that we give our Southern Ocean data to the international community, and that has been a very successful model of international cooperation.²⁰

4.12 When queried on whether CSIRO's information sharing and its relationship with Australia's international partners was an equitable one, Chief of Marine Research, Professor Tony Haymet, reported that the organisation gained much more from the relationship with international partners than it contributed.²¹

4.13 Dr John Church from the Antarctic Climate and Ecosystems CRC added that for some research, a global approach is required and international collaboration is essential for acquiring the necessary data:

...In (the) area of sea level rise, or in the areas of global and Australian climate, or the oceans' role in taking up carbon dioxide, you can only address these things through taking a global perspective, through international collaboration. That international linkage is essential for ensuring not only that there is minimal overlap between groups but also that there are no gaps.²²

4.14 The Committee questioned what mechanisms were in place for ensuring that research carried out around Antarctica is not being duplicated by other institutions and other countries. The Institute of Antarctic and Southern Ocean Studies (IASOS) advised that duplication of research is minimised by Australia's strong

Organisation (Haymet T), *Transcript*, 16 March 2004, p 39; and Institute of Antarctic and Southern Ocean Studies (Bindoff N), *Transcript*, 16 March 2004, p 19.

19 University of Tasmania, Submission no. 23, p 2.

20 Commonwealth Scientific and Industrial Research Organisation (Haymet T), *Transcript*, 16 March 2004, p 39.

21 Commonwealth Scientific and Industrial Research Organisation (Haymet T), *Transcript*, 16 March 2004, p 39.

22 *Transcript*, 16 March 2004, p 26.

participation in a range of international committees.²³ These include the Scientific Committee on Antarctic Research, the CCAMLR Commission, COMNAP and the Scientific Committee on Antarctic Logistics and Operations (SCALOP). On the national front, IASOS drew attention to further committees within the AAD which assess proposals and ensure that there is synergy rather than duplication.²⁴

Opportunities for further collaboration

4.15 In evidence received during the inquiry, it was suggested that Australia's Antarctic Program could benefit further from its relationships with other nation's Antarctic programs. In particular, it was suggested that Australia's program could be enhanced by collaborating with other nations on large-scale projects requiring high-level infrastructure. Such opportunities were recognised by the ASAC, which, in its Foresight Report, stated that:

The globalisation of research suggests that there will be increasing demands and needs for international cooperation on research projects. Such cooperation could lead to more sharing and trade-offs in the use of transport and communications infrastructure among nations in Antarctica. In this way, large-scale projects can be mounted efficiently.²⁵

4.16 The Antarctic Climate and Ecosystems CRC noted that Antarctic nations are considering their investments in Antarctic and Southern Ocean research over the next decade.²⁶ The CRC recommended that the Australian Government capitalise on this opportunity to build more collaborative partnerships with these nations as they review their strategic directions and 'become more of a leader than we have been in the past'.²⁷ In its submission, the CRC stated:

...There would be considerable merit in Australia engaging with New Zealand in forward planning Southern Ocean activities and building a stronger research partnership

23 Institute of Antarctic and Southern Ocean Studies (Bindoff N), *Transcript*, 16 March 2004, p 19.

24 Institute of Antarctic and Southern Ocean Studies (Bindoff N), *Transcript*, 16 March 2004, p 19.

25 Antarctic Science Advisory Committee, 1997, *Australia's Antarctic Program Beyond 2000: A Framework for the Future, A Report to the Parliamentary Secretary for the Antarctic*, Department of the Environment, Canberra, p 40.

26 Antarctic Climate and Ecosystems Cooperative Research Centre, Submission no. 12, p 6.

27 Professor Bruce Mapstone, *Transcript*, 16 March 2004, p 24.

focused on the Antarctic regions under Australia's and New Zealand's stewardship...A strengthened Australian Antarctic Program with significantly improved infrastructure and capacity for international collaboration, particularly in the marine sphere, has the potential to attract that investment on an Australian home-port and unequivocally establish Australia as the primary base for Antarctic and Southern Ocean research.²⁸

Antarctica as a platform for conducting Astronomy

- 4.17 The Antarctic Astronomy Group from the University of NSW explained how the Joint Australian Centre for Astrophysical Research in Antarctica (JACARA) had received logistical support by forming partnerships with US and French bases.²⁹ JACARA's programs are based at the US Amundsen-Scott South Pole Station and the French-Italian Concordia Station and Dome C in the AAT. There is currently no mechanism within the AAD's budget through which JACARA's program can secure funding, and it is reliant on support from the Australian Research Council and university grants. Through collaboration with US, French and Italian scientists, however, JACARA has received logistical support by way of accommodation, transport to, from and within Antarctica, and equipment for conducting science.³⁰
- 4.18 In its submission, the Antarctic Astronomy Group called for the Australian Government to become a partner in the new Concordia Station at Dome C on Antarctica's high plateau. The group argued that existing Australian research funding is not sufficient to cover the infrastructure needs required to undertake astronomy research in Antarctica, which needs to be conducted on the high Antarctic plateau (away from current Australian bases). According to the Antarctic Astronomy Group, an Australian investment in the international Concordia Station would allow Australian-funded astronomical research to be conducted at the Antarctic plateau:

...Australia does not have any formal presence there...It clearly seems to be in Australia's interest to have a formal part of this new station [Concordia] which is being built at Dome C. This would provide a base for Australian

28 Antarctic Climate and Ecosystems Cooperative Research Centre, Submission no. 12, p 6.

29 University of New South Wales Antarctic Astronomy Group, Submission no. 11, p 2.

30 University of New South Wales Antarctic Astronomy Group, Submission no. 11, pp 3-4.

astronomical and other scientific research to occur at that station.³¹

International Polar Year 2007-2008

- 4.19 The National Committee on Antarctic Research (NCAR) and the Antarctic Climate and Ecosystems CRC highlighted the occasion of the forthcoming International Polar Year (2007-2008) as providing a unique opportunity for Australia to strengthen its international relationships.³²
- 4.20 The International Council for Science (ICSU) has formally agreed to establish an International Polar Year in 2007-2008, for the 50th Anniversary of the International Geophysical Year (IGY). The IGY of 1957-58 was the last major international science initiative in Polar Regions and involved 80,000 scientists from 67 countries.³³ The IGY was modelled on the previous International Polar Years (IPYs) of 1882-1883 and 1932-1933. Antarctica and its adjacent oceans are expected to figure prominently in IPY 2007-2008 activities.³⁴ Participants in Australia's Antarctic program have therefore called for sufficient funding to ensure that Australia plays a prominent role in international research and other events.
- 4.21 The Antarctic Climate and Ecosystems CRC emphasised the importance of Australia playing an active role in IPY 2007-2008:
- ...Activities developed as a result of the IPY will have long-lasting consequences, precipitating ongoing collaborative research and monitoring ventures around Antarctica and the Southern Ocean. Australia should be seen as a lead agent in those activities if it is to retain its international standing in Antarctic affairs.³⁵

31 University of New South Wales Antarctic Astronomy Group (Walsh W), *Transcript*, 23 June 2004, p 32.

32 Antarctic Climate and Ecosystem Cooperative Research Centre (Mapstone B), *Transcript*, 16 June 2004, p 24; and National Committee on Antarctic Science (Allison I), *Transcript*, 16 June 2004, p 49.

33 See International Polar Year website <http://www.ipy.org/what_is_IPY.html>, viewed 4 August 2004.

34 Antarctic Climate and Ecosystems Cooperative Research Centre, Submission no. 12, p 6.

35 Antarctic Climate and Ecosystems Cooperative Research Centre, Submission no. 12, p 6.

Committee comment

- 4.22 Australia's Antarctic program has profited from the spirit of international collaboration fostered by the Antarctic Treaty. However, it is clear from the weight of evidence that Australia could – and should – be doing more to capitalise on its relationships with other Antarctic nations.
- 4.23 The Committee considers that IPY 2007-2008 represents an ideal opportunity, not only for Australia to build on its collaborative partnerships with other Antarctic nations, but also to significantly enhance the public profile of Australia's Antarctic science program.
- 4.24 In addition, as previously discussed, to ensure that Australia plays a pivotal role in the internationally collaborative projects, the Australian Government must ensure that relevant Australian projects receive adequate funding and logistical support.

Recommendation 2

- 4.25 **The Committee recommends that the Australian Government makes an appreciable investment commensurate with Australia's significant involvement in polar activities to support Australian programs planned for the International Polar Year 2007-2008 and ensures that Australia plays a leading role in International Polar Year activities. In addition, the Committee notes the need for additional funds to be made available immediately for this purpose.**