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The Parliament of the Commonwealth of Australia

# **Maintaining Australia's national interests in Antarctica**

**Inquiry into Australia's Antarctic Territory**

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

May 2018

Canberra

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## Foreword

As Chair of the Joint Standing Committee on the National Capital and External Territories, I am pleased to present the Committee's report which examines Australia's Antarctic Territory.

Australian expeditioners were some of the earliest explorers on the Antarctic continent, with our nation's involvement beginning in the late 1800s and continuing into the present day. Some of Australia's earliest Antarctic scientists, including Douglas Mawson, would become synonymous with Australia's exploration of the continent. Mawson station was opened in 1954 and became Australia's first permanent scientific research presence in Antarctica.

The Australian Antarctic Program positions our nation amongst the world's most significant contributors on the continent. In supporting Australia's national interests in Antarctica, the Australian Government has announced investments in infrastructure that will significantly enhance Australia's scientific capabilities and capacity.

Just recently, after this report was finalised, the Australian Government announced that it would go ahead with a paved runway to provide year-round access to Davis research station. This is consistent with this report's recommendations and demonstrates Australia's commitment to protect its long-term interests in Antarctica. Australia is also investing in a new Antarctic icebreaker, *RSV Nuyina*, which is due to arrive in Hobart in 2020.

These initiatives will provide a more modern and efficient basis upon which Australia's international reputation in Antarctic science can grow. In particular, these investments will provide improved capacity for international engagement and opportunities for Australia's Antarctic scientists to collaborate with their colleagues from other nations.

Hobart is well situated to capitalise on Australia's renewed Antarctic focus. A number of initiatives, such as enhancements to aviation capability at Hobart Airport, a proposed Antarctic science hub, and the potential development of Antarctic tourism, give rise to valuable opportunities. The lure of the city's

burgeoning Antarctic potential may also see increased engagement with international Antarctic programs.

The Committee's inquiry, launched in June 2017, received well-informed contributions from key stakeholders in Australia's Antarctic sector including from various agencies of the Commonwealth and Tasmanian Governments, the Antarctic science community, academics, and those developing infrastructure and other support services in Tasmania to meet the needs of the growing Antarctic sector.

Members of the Committee spent time in both Hobart and Antarctica inspecting some of the key facilities comprising Australia's Antarctic operations. The visits provided the opportunity to see firsthand the infrastructure and science investment that has led to Australia's internationally renowned Antarctic capacity.

The Committee's report considers four key themes: Australia's leadership and governance with respect to Antarctica; the infrastructure and logistical support required for the success of the Australian Antarctic Program; Australia's world class research in Antarctic science; and the economic benefits, particularly for Tasmania, that can be derived from Australia's engagement with the continent.

The report's 22 recommendations provide the Australian Government with an opportunity to strengthen its work with respect to Antarctica and build on already impressive foundations. In particular, the Committee has recommended that the Australian Government consider the appointment of an Antarctic Ambassador, that Australia's formal inspections under the Antarctic Treaty System be increased, and that the Australian Government capitalise on developments in the city of Hobart through the co-location of relevant Antarctic institutions at a proposed Antarctic science hub.

I would like to thank the many contributors to the Committee's inquiry including those who made submissions and gave evidence at public hearings. This report is a reflection of those views and of the collective support that Australia's presence in Antarctica enjoys. In particular, I would like to thank the staff of the Australian Antarctic Division in Hobart for their dedication and commitment to the Australian Antarctic Program and express the Committee's appreciation for their warm, open and professional manner in engaging with this inquiry. I would also like to thank the committee secretariat for their hard work and advice through each stage of this inquiry. Finally, I would like to thank my Committee colleagues for their enthusiastic engagement with this inquiry.

**Mr Ben Morton MP**  
**Chair**





## **Membership of the Committee**

**Chair** Mr Ben Morton MP

**Deputy Chair** Ms Gai Brodtmann MP

**Members** Mr Mark Coulton MP (to 5 March 2018)

Senator Jonathon Duniam

Senator Katy Gallagher (to 9 May 2018)

Mr Kevin Hogan MP (from 26 March 2018)

Mr Julian Leeser MP

The Hon. Sussan Ley MP

Senator Sue Lines

Senator Malarndirri McCarthy

Senator James Paterson

Senator Lee Rhiannon

The Hon. Warren Snowdon MP

## **Committee Secretariat**

<b>Secretary</b>	Ms Peggy Danaee
<b>Inquiry Secretary</b>	Mr Muzammil Ali
<b>Research Officer</b>	Ms Stephanie Lee (from 3 July 2017)
<b>Office Manager</b>	Ms Kathleen Blunden (from 13 July 2017) Ms Sarah Brassler (to 11 August 2017)



## **Terms of reference**

The Joint Standing Committee on the National Capital and External Territories will inquire and report into the adequacy of Australia's infrastructure assets and capability in Antarctica with regard to:

- maintaining national interests;
- serving the scientific program into the future;
- international engagement, including collaboration and resource sharing with other countries;
- fostering economic opportunities consistent with the Antarctic Treaty system obligations; and
- environmental considerations.





## List of abbreviations

AAD	Australian Antarctic Division
AAP	Australian Antarctic program
AAT	Australian Antarctic Territory
ACE CRC	Antarctic Climate and Ecosystems Cooperative Research Centre
AMSA	Australian Maritime Safety Authority
ANSTO	Australian Nuclear Science and Technology Organisation
ATS	Antarctic Treaty system
CCAMLR	Commission for the Conservation of the Antarctic Marine Living Resources
COMNAP	Council of Managers of National Antarctic Programs
CSIRO	Commonwealth Scientific and Industrial Research Organisation
CSHOR	Commonwealth Scientific and Industrial Research Organisation
CTBT	Comprehensive Test Ban Treaty
DFAT	Department of Foreign Affairs and Trade
HIMI	Heard Island and McDonald Islands
IGY	International Geophysical Year
IMAS	Institute for Marine and Antarctic Studies

IMS	International Monitoring System
MARPOL	International Convention of the Prevention of Pollution from Ships
MPA	Marine protected areas
TPN	Tasmanian Polar Network



## List of recommendations

### 3 Antarctic leadership and governance

#### Recommendation 1

The Committee recommends that the Australian Government, through the Department of Foreign Affairs and Trade, appoint an Antarctic Ambassador to oversee diplomatic activities and to provide leadership in promoting Australia's interests in Antarctica internationally.

#### Recommendation 2

The Committee recommends that the Australian Government consider ways in which it can further strengthen its search and rescue planning processes so that it can better respond to increased activity in the future.

#### Recommendation 3

The Committee recommends that the Australian Antarctic Division conduct a formal site inspection in East Antarctica within the next year (2019–20 season). Once inland traverse capabilities have been restored, the Committee recommends that the Australian Antarctic Division set a target to conduct formal inspections annually, with an emphasis on inspections in East Antarctica. To meet these requirements, the Committee recommends that work to restore Australia's inland traverse capabilities be expedited and completed by the end of the 2019–20 season.

## **4 Infrastructure and logistical support**

### **Recommendation 4**

The Committee recommends that the Department of the Environment and Energy, consistent with its commitments in the *Australian Antarctic Strategy and 20 Year Action Plan*, prepare a detailed plan and a timeline for the upgrade and modernisation of Australia's Antarctic research stations.

### **Recommendation 5**

The Committee recommends that the Department of the Environment and Energy prioritise waste remediation once the new icebreaker is operational, given the increased capacity to carry material including waste.

### **Recommendation 6**

The Committee recommends that the Australian Government provide the Department of Environment and Energy with an enhanced capacity to develop a business and strategic case for year-round aviation in Antarctic. The Committee further recommends that the investment decision be made by December 2019 at the latest.

### **Recommendation 7**

The Committee recommends that CSIRO explore further opportunities to ensure that the *RV Investigator* is able to operate at its full capacity. Consideration should be given to whether incentives can be developed to encourage non-government marine research activities using the vessel.

### **Recommendation 8**

The Committee recommends that the Australian Government examine options for the co-location of relevant institutions in the proposed Macquarie Point Antarctic Precinct, including the relocation of CSIRO, CCAMLR, the Tasmanian Polar Network, part of the Bureau of Meteorology, and components of the Australian Antarctic Division.

### **Recommendation 9**

The Committee recommends that the Australian Government consider how the strategic value of the Australian Antarctic Division to the Commonwealth is captured, and develop mechanisms to provide the Australian Antarctic Division with enhanced budget certainty and funding, in light of its work and capital requirements.



**Recommendation 10**

The Committee recommends that the Department of the Environment and Energy work to complete its assessment of Australia's ageing Antarctic asset base, separate from Australia's Antarctic stations, as soon as practicable. Where appropriate, relevant business cases should be developed, particularly where a new spending proposal is required to be managed through the Australian Government's budget processes.

**5 Serving the scientific program into the future****Recommendation 11**

The Committee recommends that the Australian Government release the review into Antarctic science governance as soon as practicable and provide a public response to its findings and recommendations in a timely manner.

**Recommendation 12**

The Committee recommends that the Australian Government provide clarity on how different sources of Australian Government Antarctic science funding can be utilised by funding recipients including whether such sources can be used for project or ancillary research support purposes.

**Recommendation 13**

The Committee recommends that the Australian Government consider the establishment of a body to determine both Antarctic science project priorities consistent with the *Australian Science Strategic Plan 2011–12 to 2020–21* and to provide a forum for overseeing the coordination of projects.

**Recommendation 14**

The Committee recommends that the Australian Government consider mechanisms by which the Antarctic Climate and Ecosystems Cooperative Research Centre can continue its operations in collaborative Antarctic science beyond June 2019. The Australian Government may consider opportunities to work with the Tasmanian Government to consider how the work of the Antarctic Climate and Ecosystems Cooperative Research Centre can continue.

**Recommendation 15**

The Committee recommends that the Australian Government assess how Australia can retain and further develop its Antarctic science workforce to ensure long term objectives under the *Australian Antarctic Science Strategic Plan 2011–12 to 2020–21* can be met. Such an assessment should consider opportunities to leverage cooperation from commercial and philanthropic entities, as well as jointly funded international ventures. The results of this assessment should be incorporated into future iterations of the *Australian Antarctic Science Strategic Plan*.

**Recommendation 16**

The Committee recommends that the Australian Government, through the Department of the Environment and Energy, consider a whole of government data management strategy to manage its store of Antarctic data as a matter of priority. In the short term, the Committee recommends that Geoscience Australia and the Australian Antarctic Division put forward a business case for an ‘Antarctic Geoscience Data Cube’ that could be included in an expanded version of the Digital Earth Australia program, and any other necessary data management infrastructure – including the tools Australia requires to access, read, and use data from other countries’ Antarctic research.

**Recommendation 17**

The Committee recommends that the Australian Government, through the Department of the Environment and Energy develop a centrally coordinated repository of Antarctic science agreements which also capture the registration of any relevant intellectual property rights.

**6 Economic opportunities****Recommendation 18**

The Committee recommends that the Australian Antarctic Division in conjunction with the Department of Infrastructure, Regional Development and Cities, work with the Tasmanian Government and local government to outline the key Antarctic priorities under the Hobart City Deal including a broad funding agreement and project timeline, particularly with reference to the Macquarie Point Antarctic Precinct.

**Recommendation 19**

The Committee recommends that the Department of Foreign Affairs and Trade identify or establish an appropriate federal mechanism to create an Office of Antarctic Services. Such an office would oversee the promotion of Australia, and in particular Hobart, as an Antarctic gateway and hub to international Antarctic programs.

**Recommendation 20**

The Committee recommends that the Australian and Tasmanian Governments work with other nations' Antarctic programs that have or seek to have a presence in Hobart to ensure that their requirements are met through the provision of relevant infrastructure and services.

**Recommendation 21**

The Committee recommends that the Australian Government, through the Department of Infrastructure, Regional Development and Cities, consider providing assistance to TasPorts to improve the viability of the proposal to use a fuel barge to bring fuel from Self's Port to the port of Hobart.

**Recommendation 22**

The Committee recommends that the Australian Government, through the Department of the Environment and Energy, consider ways in which the work of the Australian Antarctic Program can be given further prominence. In doing so, consideration should be given to the needs of visitors, the educational objectives to be communicated, and how Australia's national interests can best be served.





## Executive summary

Australia has a long and proud history of involvement in Antarctica, having significantly contributed to shaping the region, both through the Antarctic Treaty System (ATS) and on the ground. Australia's continued presence on the continent through science and infrastructure has enabled Australia to contribute to world-class research, shape Antarctic governance, and to protect its sovereignty and national interests in the region.

Maintaining Australia's position in the Antarctic is critical, particularly at a time when international activity in the region is increasing. In order to ensure that Australia continues to maintain its leading role in the region, the Australian Government has recently committed to increase investment in infrastructure and science on the continent. This report provides a range of recommendations to ensure that this commitment is implemented successfully to enable Australia to continue its strong leadership in Antarctica.

Evidence to the Committee emphasised the unique challenges that infrastructure development presents in Antarctica. The Committee acknowledges that modernisation of existing infrastructure and the management of logistics in such a remote and hostile location would come at a significant cost. However, the benefit of maintaining Australia's national interests in the region and supporting Antarctic science is important. The Committee has made some recommendations to expedite the modernisation process, with particular emphasis on year-round aviation access, and upgrades to Australia's Antarctic research stations. Moreover, this will further enhance Australia's ability to collaborate with other nations through shared logistics arrangements.

The Committee's inquiry considered the potential affect that new infrastructure will have on the broader Australian Antarctic Program. This includes a greater number of assets that require trained staff to be fully utilised, increased collection of data, and opportunities to expand existing programs such as waste remediation and site inspections in accordance with the ATS. The Committee has made

recommendations to ensure that these matters are taken into consideration in future planning of the Australian Antarctic Program.

Antarctic science is a focus of many other countries' Antarctic programs. For Australia to remain at the forefront of science and engagement on the continent, a renewed focus on its own program is required. Evidence to the Committee highlighted that the Australian Antarctic science framework is undergoing a period of renewal and that a review into the governance of Antarctic science is forthcoming. While the Committee does not wish to pre-empt the review's findings, there is a need to consider improved funding and coordination of Antarctic science, in line with established governance structures.

One of the key concerns brought to the attention of the Committee is that the funding to the Antarctic Climate and Ecosystems Cooperative Research Centre (ACE CRC) is due to end in June 2019. The Committee received significant evidence that highlighted the important ongoing contribution that the ACE CRC has made to Antarctic science. The Committee has therefore recommended that the Australian Government consider mechanisms to ensure that the ACE CRC can continue its operations beyond June 2019.

Beyond science, the Australian Antarctic program also provides significant economic opportunities consistent with the ATS. In particular, this includes promoting Australian-based Antarctic businesses and Antarctic tourism. The Committee is also supportive of initiatives to strengthen Hobart's role as an Antarctic gateway and science hub. To this end, a number of recommendations are made to streamline promoting Antarctic businesses, and tourism opportunities in both Hobart and Antarctica.