

Antarctic leadership and governance

- 3.1 As discussed in chapter 2, the Antarctic Treaty System (ATS) is the overarching framework for international governance of both the land and waters south of 60° South latitude.¹ The ATS includes the Antarctic Treaty, the *Protocol on Environmental Protection to the Antarctic Treaty (the Madrid Protocol)*, the *Convention on the Conservation of Antarctic Marine Living Resources (CAMLR Convention)* and a range of other instruments. This ensures that international engagement in Antarctica is underpinned by the principles of non-militarisation, environmental protection, and freedom of scientific engagement.²
- 3.2 This chapter reviews Australia's contribution to Antarctic governance and role in ensuring that the principles of the ATS are maintained into the future. This includes assessing Australia's role as a policy leader in a range of areas including site inspections and environmental protection.
- 3.3 The chapter also considers more broadly Australia's collaboration with international partners in Antarctica. This includes Australia's search and rescue efforts.
- 3.4 Many inquiry participants stressed that the ATS provides a strong foundation for international engagement in Antarctica. Witnesses argued that the ATS remains relevant in addressing a broad number of issues including sovereign claims, environmental protection, demilitarisation,

1 Department of Foreign Affairs and Trade (DFAT), *Submission 17*, pp. [1-2].

2 DFAT, *Submission 17*, p. [1].

and freedom of scientific investigation.³ In particular, participants noted that the ATS provides Australia with security to its southern borders.⁴ Appearing in a private capacity, the former Director of the Australian Antarctic Division (AAD), Dr Tony Press, stated that the Antarctic Treaty:

... is a peace treaty. It is a nuclear disarmament treaty and it's a demilitarisation treaty. In that sense, it means that Australia doesn't have to be armed to fight battles to our south, so it provides an area of important national security interest for us, in the fact that it is demilitarised and we don't have to fight wars there. This is really important for our standing in the world.⁵

- 3.5 Similarly, the Department of Defence reiterated the assessment made in Australia's most recent Defence White Paper, that the Australian Antarctic Territory (AAT) '... faces no credible risk of being challenged in such a way that requires a substantial military response for the at least the next few decades.'⁶ However, Defence did note that '... international interest in Antarctica is increasing ...'⁷ and that Australia is committed to collaborating with other Antarctic nations to prevent future strategic competition and to uphold the principles of the ATS.⁸

Changing dynamics in Antarctica

- 3.6 Whilst evidence to the Committee suggested that military conflict was unlikely in the near future, some inquiry participants noted that international activity and interest in the region was increasing and that this could affect the dynamic in Antarctica.⁹ The Department of the Environment and Energy highlighted increased investment in Antarctic infrastructure by a number of countries, including France, the United Kingdom, New Zealand, and China.¹⁰ Some inquiry participants

3 For example: Mr James Larsen, Senior Legal Adviser, DFAT, *Committee Hansard*, Canberra, 14 September 2017, p. 1; Dr Anthony (Tony) Press, private capacity, *Committee Hansard*, Hobart, 10 November 2017, p. 41.

4 Dr Press, private capacity, *Committee Hansard*, Hobart, 10 November, 2017, p. 41.

5 Dr Press, private capacity, *Committee Hansard*, Hobart, 10 November 2017, p. 41.

6 Department of Defence, *Submission 14*, p. 1.

7 Dr Peter Sawczak, Assistant Secretary, Strategic Policy, Department of Defence, *Committee Hansard*, Canberra, 19 October 2017, p. 1.

8 Department of Defence, *Submission 14*, p. 1.

9 Professor Anne-Marie Brady, private capacity, *Committee Hansard*, Canberra, 15 February 2018, p. 1.

10 Department of the Environment and Energy, *Submission 13*, pp. 14-5.

suggested that this increased activity could lead to future conflict between those nations that promote environmental protection and those that may be interested in extracting the regions natural resources.¹¹ Matters relating to natural resources are discussed in further detail later in this chapter.

- 3.7 Some evidence to the inquiry also noted concern that some equipment and technology used in Antarctica, such as satellite communication, have multiple applications.¹² In particular, appearing in a private capacity Professor Anne-Marie Brady, a specialist in Chinese and polar politics at the University of Canterbury in New Zealand, expressed concern that a number of nations have conducted activities in the region that have not always been in line with the principles of the ATS.¹³ However, Dr Peter Sawczak, appearing on behalf of the Department of Defence, noted that dual use technologies such as satellite communication, geospatial devices and remotely sensed data are essential for operating in Antarctica.¹⁴ Furthermore, he emphasised that compliance is monitored through the ATS inspection regime and that no breaches have been brought to the attention of the Department of Defence.¹⁵ The inspection regime is discussed in further detail in this chapter.

Australian leadership in the Antarctic Treaty System

- 3.8 As activity in the region increases, Australia's position as a policy leader in Antarctic affairs remains critical to ensure that the principles of the ATS are maintained into the future.¹⁶ The Department of Foreign Affairs and Trade (DFAT) noted that Australian leadership can be demonstrated through '... high-level expert engagement in key treaty system forums, pursuing strong relationships with other Antarctic nations ...' and promoting and engaging in regular use of the Antarctic Treaty's inspections regime.¹⁷ Moreover, Dr Press noted that Australia must continue to reach out to like-minded nations in order to ensure that Australia remains '... vigilant about [any] changes in norms and modes of

11 Professor Brady, private capacity, *Committee Hansard*, Canberra, 15 February 2018, p. 1.

12 Professor Brady, private capacity, *Committee Hansard*, Canberra, 15 February 2018, p. 2.

13 Professor Brady, private capacity, *Committee Hansard*, Canberra, 15 February 2018, p. 2.

14 Dr Peter Sawczak, Assistant Secretary, Strategic Policy, Department of Defence, *Committee Hansard*, Canberra, 15 February 2018, p. 7.

15 Dr Sawczak, Department of Defence, *Committee Hansard*, Canberra, 15 February 2018, p. 7.

16 Mr Larsen, DFAT, *Committee Hansard*, Canberra, 14 September 2017, p. 2.

17 Mr Larsen, DFAT, *Committee Hansard*, Canberra, 14 September 2017, p. 2.

operation' in Antarctica.¹⁸ Further to this, he stressed that Australia needs to maintain 'the courage and capacity' to challenge parties that are believed to be doing something that is 'contrary to the spirit' of the Antarctic Treaty.¹⁹

- 3.9 The following section considers how Australia maintains its ability to demonstrate policy leadership in Antarctica. This includes reviewing Australia's contribution to Antarctic governance, and considering how it collaborates with its international partners to ensure that the principles of the ATS are maintained.

Science and logistics

- 3.10 As discussed throughout this report, Australia's continued presence on the ground through science and infrastructure is crucial in maintaining Australia's ability to demonstrate policy leadership. Moreover, the remote location of the continent makes arrangements that '... leverage and share resources, including ships, aircraft, personnel and scientific equipment' crucial.²⁰ Evidence to the Committee noted that Australia is supportive of international collaboration as promoted by the ATS and that Australia often engages in science and logistical projects with both traditional and non-traditional partners.²¹ This is discussed in further detail in chapters 4 and 5.

Collaboration

- 3.11 Collaboration is an integral aspect of the ATS. The Committee witnessed Australia's engagement with other Antarctic nations firsthand while visiting Antarctica. Nationals of other countries used the Australian aircraft to access the continent, while Australian researchers utilised the aviation assets of other nations for intracontinental travel.
- 3.12 A number of these relationships have been formalised through memorandums of understanding and other bilateral agreements on Antarctic cooperation. These countries include China, France, Italy, Japan, the Republic of Korea, New Zealand, Russia, the United Kingdom and the United States of America.²² Moreover, government agencies such as the

18 Dr Press, private capacity, *Committee Hansard*, Hobart, 10 November, 2017, p. 43.

19 Dr Press, private capacity, *Committee Hansard*, Hobart, 10 November, 2017, p. 43.

20 Antarctic Climate and Ecosystems Cooperative Research Centre (ACE CRC), *Submission 11*, p. [3].

21 Institute for Marine and Antarctic Studies (IMAS) University of Tasmania, *Submission 8*, p. [2].

22 DFAT, *Submission 17.3*, p. [1].

Bureau of Meteorology and Geoscience Australia have formal arrangements that relate to Antarctica with other nations.²³

- 3.13 Cooperation in Antarctica allows Australia to enhance its diplomatic engagement with a wide range of nations. In its submission to the inquiry, the Embassy of the Russian Federation noted that collaboration between Australia and Russia had been a 'positive experience' and the Embassy welcomed future cooperation '... on the basis of pragmatic and mutually beneficial approaches.'²⁴
- 3.14 Some evidence to the Committee suggested that additional opportunities currently exist for Australia to collaborate with other countries. In particular, the Embassy of Uruguay noted opportunities to learn from nations operating in West Antarctica, where conditions differ significantly from the East.²⁵

Comprehensive Test Ban Treaty

- 3.15 The Australian Radiation Protection and Nuclear Agency highlighted that Australia's presence in Antarctica also provides the opportunity to support international nuclear non-proliferation efforts through the Comprehensive Test Ban Treaty (CTBT) Preparatory Commission.²⁶ Whilst the CTBT, which aims to ban all nuclear explosion tests, has not yet entered into force, its Preparatory Commission is mandated to coordinate the interim operation of the International Monitoring System (IMS) which is able to identify the time, location and nature of potential nuclear events.²⁷
- 3.16 As a signatory to the CTBT, Australia is required to carry out a verification regime for the IMS.²⁸ This includes the operation of radionuclide stations, a number of which are located in territory overseen by the AAD.²⁹
- 3.17 DFAT emphasised the importance of the IMS in providing:

23 Dr Sue Barrell, Group Executive Science and Innovation, Bureau of Meteorology, *Committee Hansard*, Canberra, 19 October 2017, p. 21; and Dr James Johnson, Chief Executive Officer, Geoscience Australia, *Committee Hansard*, Canberra, 19 October 2017, p. 18.

24 Embassy of the Russian Federation, *Submission 21*, p. 7.

25 Embassy of Uruguay, *Submission 18*, p. 2.

26 Australian Radiation Protection and Nuclear Safety Agency (ARPANSA), *Submission 12*, p. 1; DFAT, *Submission 17*, p. 4.

27 ARPANSA 'Comprehensive Nuclear-Test-Ban Treaty', <<https://www.arpansa.gov.au/about-us/what-we-do/international-collaboration/ctbt>>, viewed 21 March 2010.

28 ARPANSA, *Submission 12*, p. 1.

29 ARPANSA, *Submission 12*, p. 1.

... significant assurance that, with the sole exception of the Democratic People's Republic of Korea, states are observing a moratorium on nuclear testing.³⁰

- 3.18 The Department also noted that the IMS provides additional civil and scientific benefits, including accurate and timely data on earthquakes, tsunamis and nuclear accidents.³¹ Evidence to the Committee suggested that continued funding of Australia's Antarctic infrastructure is fundamental to Australia's ongoing ability to contribute to the IMS.³²

Search and rescue

- 3.19 The Committee heard that there are substantial challenges in coordinating and responding to search and rescue incidents in Antarctica, which include:

- a challenging environment with freezing temperatures, permanent and shifting ice, extreme wind and sea conditions, which impact survival time and can seriously delay rescue operations;
- long distances from search vessels or aircraft, which extends the time it takes to respond to an incident and reduces the number of resources available for the incident; and
- the remoteness of Antarctica limits the assets of opportunity that can be used in a search and rescue incident.³³

- 3.20 These factors limit the search and rescue capabilities in the region, and highlight the importance of proper planning and incident prevention. Often, they require international collaboration and logistical support to respond to an incident in a timely and appropriate manner.³⁴ Subsequently protocols have been developed to address how countries communicate and coordinate in response to incidents that require international collaboration.³⁵ Moreover, to prepare for incidents, Australia also maintains a number of formal bilateral arrangements for search and rescue cooperation with countries such as South Africa and New Zealand.³⁶

30 DFAT, *Submission 17*, pp. [4–5].

31 DFAT, *Submission 17*, p. [5].

32 DFAT, *Submission 17*, pp. [5].

33 Australian Maritime Safety Authority (AMSA), *Submission 19*, p. 4.

34 AMSA, *Submission 19*, p. 4.

35 AMSA, *Submission 19.1*, p. 4.

36 AMSA, *Submission 19*, p. 4.

- 3.21 The Australian Maritime Safety Authority (AMSA) oversees a national search and rescue service that is conducted in a manner that is consistent with these international obligations.³⁷ Moreover, AMSA noted that Australia maintains a number of arrangements with international partners that enhance data sharing, capacity building activities, and patrols that contribute to search and rescue efforts.³⁸
- 3.22 When queried on the financial impact of Australia's international search and rescue arrangements Mr Jamie Storrie, Manager Crisis Preparedness and Response at AMSA, noted that:
- Our obligation is to assist. We don't seek compensation. But, in a similar manner, for Australian citizens and ships in similar situations in other jurisdictions compensation would generally not be sought by those jurisdictions either. So it is a complimentary arrangement.³⁹
- 3.23 Similarly, the Department of the Environment and Energy emphasised that Australia has both contributed to and benefited from search and rescue arrangements.⁴⁰ For example, in 2016 the Japanese icebreaker, *Shirase*, provided support in transferring expeditioners from the *Aurora Australis* to Casey research station after the *Australis* ran aground at Mawson research station during a blizzard.⁴¹ Similarly, the *Aurora Australis* rescued 52 passengers from the Russian ship *MV Akademik Shokalskiy* after it became trapped in sea ice in 2014.⁴²
- 3.24 In order to limit the impact that search and rescue operations have on the AAP, the Australian government has made efforts to reduce the likelihood of incidents occurring.⁴³ Mr Simon Moore, Manager International Engagement at AMSA, noted that this has included contributing, through the International Maritime Authority, to work:

37 AMSA, *Submission 19*, p. 3.

38 AMSA, *Submission 19.1*, p. 4.

39 Mr Jamie Storrie, Manager, Crisis Preparedness and Response, AMSA, *Committee Hansard*, Canberra, 19 October 2017, p. 2.

40 Department of the Environment and Energy, *Submission 13*, p. 14.

41 Department of the Environment and Energy, *Submission 13*, p. 14.

42 Department of the Environment and Energy, *Submission 13*, p. 14; Embassy of the Russian Federation, *Submission 21*, p.6.

43 Mr Simon Moore, Manager, International Engagement, AMSA, *Committee Hansard*, Canberra, 19 October 2017, p. 3.

... on international standards that regulate the quality of vessels that are travelling the high seas that don't call in to Australian ports.⁴⁴

- 3.25 Evidence to the Committee was supportive of the current search and rescue systems and coordination arrangements in Antarctica. AMSA suggested that these arrangements have proven effective for managing incidents in the region, and that while Australia continues to look for opportunities to improve these arrangements, 'the system is fundamentally sound.'⁴⁵ However, AMSA did note that projected increases in activity in the region highlight the importance of continuing to strengthen '... collaboration, exchange of information and cooperation between both national and international organisations ...'⁴⁶
- 3.26 Collaboration on search and rescue arrangements has been demonstrated by Australia's recent work with the Council of Managers of National Antarctic Programs (COMNAP), in which further development of COMNAP web-based tools were discussed. AMSA noted that these tools provide Antarctic nations with an:

... overall view of asset location, communication and equipment on a near time basis and is fundamental to ensuring a more effective search and rescue response.⁴⁷

Site inspections

- 3.27 In order to verify compliance with the various ATS principles, such as the prohibition on military activity and the ban on mining, Article VII of the Treaty provides Contracting Parties with the ability to conduct inspections in all areas of Antarctica.⁴⁸ As outlined by DFAT, this includes '... all stations, installations and equipment, aircraft, cargo and personnel ...' in Antarctica.⁴⁹ Initially inspections focused on ensuring that activities in the region remained peaceful. However, with the advent of the *Madrid Protocol*, inspections have become increasingly focused on ensuring that the environmental protocol is being observed.⁵⁰

44 Mr Simon Moore, AMSA, *Committee Hansard*, Canberra, 19 October 2017, p. 3.

45 AMSA, *Submission 19*, p. 5.

46 AMSA, *Submission 19*, p. 5.

47 AMSA, *Submission 19*, p. 4.

48 DFAT, *Submission 17.1*, p. [3].

49 DFAT, *Submission 17.1*, p. [3].

50 Ms Gillian Slocum, Manager, Territories, Environment and Treaties, Australian Antarctic Division (AAD), Department of the Environment and Energy, *Committee Hansard*, Canberra, 15 February 2018, p. 20.

- 3.28 While inspections can be conducted throughout Antarctica, the Director of the AAD, Dr Nicholas Gales, noted that the majority of inspections occur on the Antarctic Peninsula, where stations are located close to each other. Conversely, inspections are less frequent in East Antarctica, where significantly more logistical support is required to reach each station.⁵¹ Despite these challenges, Australia is an active participant in the inspections regime, and has conducted nine inspections since 1963.⁵² Moreover, evidence to the Committee highlighted that Australia's ability to conduct inspections has significantly increased over the past decade with the advent of Australia's inter- and intracontinental aviation system in Antarctica.⁵³
- 3.29 Australia's contribution to the inspection regime is administered by DFAT and the AAD.⁵⁴ Most recently, Australia inspected the American Amundsen-Scott South Pole Station in 2016 in the first South Pole inspection any country has conducted without logistics support from the United States.⁵⁵ DFAT noted that 'the ability to conduct inspections independently is critical to [Australia's] interest in promoting compliance with key Treaty system obligations.'⁵⁶
- 3.30 Dr Gales highlighted more informal arrangements as part of the *Larsemann and Vestfold Hills Management Group* in which Australia, China, India and Russia work closely together in the Vestfold Hills.⁵⁷ These arrangements include regular station visits and exchange of station personnel.⁵⁸
- 3.31 When asked if Australia could have greater involvement in conducting inspections, Dr Gales suggested that Australia is 'doing as many inspections as [it] can within [its] operational capacity at the moment.'⁵⁹ However, Dr Gales also noted that it would be desirable for Australia to

51 Dr Nicholas Gales, Director, AAD, Department of the Environment and Energy, *Committee Hansard*, Hobart, 10 November 2017, p. 54.

52 DFAT, *Submission 17.1*, p. [3].

53 Ms Slocum, AAD, Department of the Environment and Energy, *Committee Hansard*, Canberra, 15 February 2018, p. 20.

54 Dr Sawczak, Department of Defence, *Committee Hansard*, Canberra, 19 October 2017, p. 2.

55 DFAT, *Submission 17.1*, p. [3].

56 DFAT, *Submission 17*, p. [6].

57 Dr Gales, AAD, Department of the Environment and Energy, *Committee Hansard*, Canberra, 15 February 2018, p. 20.

58 Dr Gales, AAD, Department of the Environment and Energy, *Committee Hansard*, Canberra, 15 February 2018, p. 20.

59 Dr Gales, AAD, Department of the Environment and Energy, *Committee Hansard*, Canberra, 15 February 2018, p. 21.

have the 'capability to undertake treaty inspections a little more regularly' than it currently does within East Antarctica.⁶⁰

Antarctic Ambassador

- 3.32 Evidence to the Committee noted that some nations have special counsels for Antarctic relations or Antarctic Ambassadors.⁶¹ Such roles lead engagement in the Antarctic Treaty meetings and diplomatic engagement with their counterparts.⁶² Professor Brady recommended that Australia appoint an Antarctic Ambassador to oversee diplomatic activities and to protect Australia's national interests in the region.⁶³ It was suggested to the Committee that this would provide Australia with 'a bit more muscle' in Antarctic affairs.⁶⁴
- 3.33 Mr Justin Whyatt, a legal adviser from DFAT, suggested that current arrangements for leading Australia's engagement in Antarctic matters were sufficient and that appointing an Antarctic Ambassador would not be of benefit.⁶⁵ Mr Whyatt stressed that Australia is currently '... represented at very senior levels comparatively in the [ATS].'⁶⁶

Environmental engagement

- 3.34 One of the fundamental principles of the ATS is the protection of Antarctica's unique and pristine environment.⁶⁷ The *Madrid Protocol* designates Antarctica as a natural reserve and provides wide-ranging protection of the environment and its related ecosystems.⁶⁸
- 3.35 Some of the inquiry participants drew the Committee's attention to Australia's ongoing commitment to protecting the Antarctic environment.⁶⁹ For example, the Institute for Marine and Antarctic Studies

60 Dr Gales, AAD, Department of the Environment and Energy, *Committee Hansard*, Canberra, 15 February 2018, p. 21.

61 Professor Brady, private capacity, *Committee Hansard*, Canberra, 15 February 2018, p. 4.

62 Mr Justin Whyatt, Legal Adviser, Sanctions, Treaties and Transnational Crime Legal Branch, DFAT, *Committee Hansard*, Canberra, 15 February 2018, pp. 9-10.

63 Professor Brady, private capacity, *Committee Hansard*, Canberra, 15 February 2018, p. 4.

64 Professor Brady, private capacity, *Committee Hansard*, Canberra, 15 February 2018, p. 4.

65 Mr Whyatt, DFAT, *Committee Hansard*, Canberra, 15 February 2018, pp. 9-10.

66 Mr Whyatt, DFAT, *Committee Hansard*, Canberra, 15 February 2018, pp. 9-10.

67 *The Antarctic Treaty*, opened for signature 1 December 1959, 402 UNTS 71, (entered into force 23 June 1961).

68 *The Protocol on Environmental Protection to the Antarctic Treaty (Madrid Protocol)*, opened for signature 4 October, 1991, (entered into force 14 January, 1998).

69 Department of the Environment and Energy, *Submission 13*, p. 16; IMAS University of Tasmania, *Submission 8*.

(IMAS) at the University of Tasmania emphasised Australia's longstanding commitment to these principles, highlighting the nation's role in establishing a range of mechanisms under the ATS to protect the environment.⁷⁰ For example, Australia played a major role in negotiating both CCAMLR and the *Madrid Protocol*.⁷¹ IMAS also noted that Australia has been active in the Committee on Environment Protection, including twice serving as its chair.⁷²

- 3.36 The Department of the Environment and Energy stressed that Australia aims to be a leader and to 'promote best practice in environmental stewardship in Antarctica across all aspects of its Antarctic Program.'⁷³ Mr James Larsen, Senior Legal Adviser at DFAT, mirrored these sentiments when he highlighted Australia's role in encouraging and supporting the efforts of non-members to accede to the *Madrid Protocol*.⁷⁴ In particular, Mr Larsen noted that Australia is working with Malaysia as it develops legislation to make protocol obligations part of its domestic law.⁷⁵
- 3.37 The Australian Academy of Science noted the important role that Australia's infrastructure assets and capability play in enabling:
- Australia to take an exemplary and leading role in developing and implementing the strong environmental protections that are required to meet international obligations under the [ATS].⁷⁶
- 3.38 Australia's infrastructure assets and capability are discussed in further detail in chapter 4.
- 3.39 The following section explores the leadership role Australia has taken in regards to the protection of the Antarctic environment.

Preservation of the Antarctic marine system

- 3.40 The Antarctic marine system is unique both ecologically and biologically from other marine systems, and its preservation is threatened by a range of sources.

70 IMAS University of Tasmania, *Submission 8*, p. [1].

71 IMAS University of Tasmania, *Submission 8*, p. [1].

72 IMAS University of Tasmania, *Submission 8*, p. [1].

73 Department of the Environment and Energy, *Submission 13*, p. 16.

74 Mr Larsen, DFAT, *Committee Hansard*, Canberra, 14 September 2017, p. 1.

75 Mr Larsen, DFAT, *Committee Hansard*, Canberra, 14 September 2017, pp. 1-2.

76 Australian Academy of Science, *Submission 4*, p. 1.

Marine pollution

- 3.41 The Antarctic Treaty covers over 20 million square kilometres of the Southern Ocean, extending from the Antarctic coast to 60 degrees South latitude.⁷⁷ Over time the international community has taken steps to minimise the occurrence of sea pollution from vessels operating within this area, and in 1990 the International Maritime Organisation designated these waters as a 'Special Area' which introduced mandatory requirements to prevent sea pollution.⁷⁸ Moreover, Annex IV to the *Madrid Protocol* prohibits the discharge of oil, noxious liquid substances, sewage and garbage in the ATS region.⁷⁹
- 3.42 Evidence to the Committee focused particularly on Australia's management of maritime environmental emergencies, and vessel safety to minimise the environmental impacts of shipping in Antarctic waters.
- 3.43 Australian Government agencies take a collaborative approach to the management of maritime environmental emergencies within Antarctic waters as outlined in the *National Plan for Maritime Environmental Emergencies*.⁸⁰ Moreover, in conjunction with the AAD, AMSA has recently developed the *Australian Antarctic Marine Pollution Contingency Plan* which outlines the responsibilities of the Australian Government and other agencies in the event of a marine pollution incident in the Australian Antarctic Territory, the subantarctic, and Southern Ocean.⁸¹
- 3.44 AMSA noted that, as a party to the *International Convention of the Prevention of Pollution from Ships* (MARPOL), Australia has multiple measures in place to prevent the discharge of pollution from ships into the sea.⁸² In particular, AMSA highlighted Australia's role in influencing international best practice by contributing to the development of the International Maritime Organisations mandatory *Polar Code*.⁸³ The *Polar Code* aims to increase the safety of vessel operations and to minimise the environmental impacts of shipping, in both Arctic and Antarctic waters.⁸⁴ This included

77 Secretariat of the Antarctic Treaty, 'Prevention of Marine Pollution', <http://www.ats.aq/e/ep_marine.htm>, viewed 15 February 2018.

78 Secretariat of the Antarctic Treaty, 'Prevention of Marine Pollution', <http://www.ats.aq/e/ep_marine.htm>, viewed 15 February 2018.

79 Secretariat of the Antarctic Treaty, 'Prevention of Marine Pollution', <http://www.ats.aq/e/ep_marine.htm>, viewed 15 February 2018.

80 AMSA, *Submission 19*, p. 2.

81 AMSA, *Submission 19*, p. 2.

82 AMSA, *Submission 19*, p. 3.

83 AMSA, *Submission 19*, p. 2.

84 AMSA, *Submission 19*, p. 1.

the introduction of mandatory safety requirements relating to things such as vessel structure, machinery installations, operational safety, communications, and voyage planning, manning, and training.⁸⁵

Illegal fishing

- 3.45 In a previous report of this Committee, illegal fishing was identified as a major concern as it had resulted in the depletion of fish stocks, led to high levels of seabird and bycatch mortality, and negatively impacted the environment through the disposal of rubbish and fishing equipment at sea.⁸⁶ To address this, the *Australian Antarctic Strategy and 20 Year Action Plan* committed to establish 'a clear approach in conjunction with key international partners to prevent, deter and eliminate illegal fishing.'⁸⁷
- 3.46 The Department of Defence noted that, through the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR), Australia continues to play a role in the regulation of fishing activity in Antarctic waters.⁸⁸ The Department emphasised its ongoing role in supporting Australia's maritime resource protection operations, particularly in the fisheries of Australia's Heard and McDonald Islands Exclusive Economic Zone.⁸⁹
- 3.47 Illegal fishing was not raised as a significant issue in the current inquiry. This could indicate improvements in this area since the previous report of this Committee. Commodore Jaimie Hatcher AM, of the Department of Defence, suggested that issues surrounding illegal fishing, particularly in relation to the Patagonian toothfish, is a more 'subdued issue at the moment' than previously.⁹⁰

The Commission for the Conservation of Antarctic Marine Living Resources

- 3.48 The *CAMLR Convention*, which came into force in 1982, ensures the conservation and reasonable use of krill, fin fish and other marine living

85 AMSA, *Submission 19*, p. 1.

86 Joint Standing Committee on the National Capital and External Territories, *Antarctica: Australia's Pristine Frontier: Report on the adequacy of funding for Australia's Antarctic Program*, June 2005, p.54.

87 Department of the Environment and Energy, 2016, *Australian Antarctic Strategy and 20 Year Action Plan*, p. 24.

88 Department of Defence, *Submission 14*, p. 4.

89 Department of Defence, *Submission 14*, p. 4.

90 Commodore Jaimie Hatcher, AM, RAN, Acting Head, Military Strategic Commitments, Department of Defence, *Committee Hansard*, Canberra, 19 October 2017, p. 3.

resources in the convention area.⁹¹ Under the *CAMLR Convention* the CCAMLR was established to oversee the management of these resources.⁹² CCAMLR's Secretariat is located in Hobart, Tasmania. The Secretariat supports the regular meetings and daily functions of the Commission and the Scientific Committee.⁹³

- 3.49 IMAS stressed the substantial role Australia has played in the governance and leadership of the *CAMLR Convention*, noting that Australia was heavily involved in negotiating the Convention, is the depositary state for the treaty, and hosts the secretariat and annual meeting of the Commission in Hobart.⁹⁴
- 3.50 Mr Larsen noted that DFAT is responsible for paying Australia's assessed annual contributions which support CCAMLR. In 2017 these contributions amounted to approximately A\$139,000 to the CCAMLR Secretariat.⁹⁵ Moreover, DAT also covers the cost of the Hobart CCAMLR headquarters lease in a 55-45 split between the Commonwealth and the Tasmanian state Government.⁹⁶ DFAT's contribution to that is currently approximately \$150,000 a year.⁹⁷

Marine protected areas

- 3.51 In order to mitigate some of the threats to Antarctica's marine systems CCAMLR uses marine protected areas (MPA) as one part of its approach to marine spatial protection.⁹⁸ In general, an MPA is an area that has been designated to provide protection to all or parts of the natural resources contained within it.⁹⁹ Protection is provided through the limitation or

91 Secretariat of the Antarctic Treaty, 'Antarctic Treaty: Related Agreements', <http://ats.aq/e/ats_related.htm>, viewed 15 February 2018.

92 AAD, Department of the Environment and Energy, 'Convention on the Conservation of Antarctic Marine Living Resources', <<http://www.antarctica.gov.au/law-and-treaty/ccamlr>>, viewed 15 February 2018.

93 Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR), 'Secretariat', <<https://www.ccamlr.org/en/organisation/secretariat>>, viewed 26 February 2018.

94 IMAS University of Tasmania, *Submission 8*, p. [1].

95 Mr Larsen, DFAT, *Committee Hansard*, Canberra, 14 September 2017, p. 1.

96 Mr Larsen, DFAT, *Committee Hansard*, Canberra, 14 September 2017, p. 1.

97 Mr Larsen, DFAT, *Committee Hansard*, Canberra, 14 September 2017, p. 1.

98 CCAMLR, 'Marine Protected Areas (MPAs)', <<https://www.ccamlr.org/en/science/marine-protected-areas-mpas>>, viewed 26 February 2018.

99 CCAMLR, 'Marine Protected Areas (MPAs)', <<https://www.ccamlr.org/en/science/marine-protected-areas-mpas>>, viewed 26 February 2018.

prohibition, of particular activities.¹⁰⁰ This can include the prohibition of activities such as fishing, research and other human activities.¹⁰¹ There are currently two MPAs established under CCAMLR: one in the South Orkney Islands southern shelf (established in 2009), and the other in the Ross Sea region (established in 2016).¹⁰²

3.52 Since 2012, Australia has collaborated with France and the European Union to advocate for an MPA to be established in East Antarctica through CCAMLR.¹⁰³ The proposed MPA would:

... conserve examples of biodiversity in the high latitudes of the Indian sector of the Southern Ocean ... [and] provide for comprehensive management, research and monitoring plans for managing multiple uses, including fishing, within the MPAs.¹⁰⁴

3.53 To date, unanimous support from the members of CCAMLR has not been reached, however, Dr Gales, noted that 'Australia is committed to continuing [its] approach to support the acceptance of marine protected areas ...'¹⁰⁵

Madrid Protocol

3.54 Whilst there are deposits of minerals such as coal and iron ore in Antarctica, currently Article 7 of the *Madrid Protocol* prohibits 'any activity relating to mineral resources, other than scientific research.'¹⁰⁶

3.55 A number of inquiry participants highlighted Australia's ongoing commitment to the *Madrid Protocol*, with many emphasising that Australia played a leading role in its negotiation.¹⁰⁷ This mirrors the *Australian*

100 CCAMLR, 'Marine Protected Areas (MPAs)', <<https://www.ccamlr.org/en/science/marine-protected-areas-mpas>>, viewed 26 February 2018.

101 CCAMLR, 'Marine Protected Areas (MPAs)', <<https://www.ccamlr.org/en/science/marine-protected-areas-mpas>>, viewed 26 February 2018.

102 AAD, Department of the Environment and Energy, 'A proposal for a Marine Protected Area in the East Antarctic planning domain', 13 October 2017, <<http://www.antarctica.gov.au/law-and-treaty/ccamlr/marine-protected-areas>>, viewed 27 February 2018.

103 Dr Gales, AAD, Department of the Environment and Energy, *Committee Hansard*, Hobart, 10 November 2017, p. 51.

104 AAD, Department of the Environment and Energy, 'A proposal for a Marine Protected Area in the East Antarctic planning domain', 13 October 2017, <<http://www.antarctica.gov.au/law-and-treaty/ccamlr/marine-protected-areas>>, viewed 27 February 2018.

105 Dr Gales, AAD, Department of the Environment and Energy, *Committee Hansard*, Hobart, 10 November 2017, p. 52.

106 *Article 7 of the Protocol on Environmental Protection to the Antarctic Treaty (Madrid Protocol)*, opened for signature 4 October, 1991, (entered into force 14 January, 1998).

107 IMAS University of Tasmania, *Submission 8*, p. [1]; DFAT, *Submission 17.1*, p. [6].

Antarctic Strategy and 20 Year Action Plan which notes that 'Australia will be a leader and promote best practice in environmental stewardship in Antarctica across all aspects of its Antarctic programme,' including 'maintain[ing] the Environmental Protocol's ban on mining and oil drilling.'¹⁰⁸

- 3.56 Some inquiry participants suggested that aspects of the Protocol are misunderstood.¹⁰⁹ DFAT noted that '... media and academic commentary on the Protocol will sometimes suggest that the ban expires in 2048'.¹¹⁰ This concern stems from Article 25 of the Protocol which provides for amendments to the *Madrid Protocol* including parties to the Treaty being able to call for a conference to review the Protocol 50 years after it has been in force.¹¹¹
- 3.57 DFAT emphasised that, rather than signalling an expiration date, Article 25 acts as a 'review mechanism common to many treaties'.¹¹² Mr Whyatt noted that a review is not automatic after 2048; rather any party has the opportunity to call for a review conference after this time.¹¹³ Once a conference is called, three quarters of state parties would need to agree to any proposed amendments.¹¹⁴ Moreover, there is an additional threshold that requires all parties that were consultative parties at the time of the adoption of the *Madrid Protocol* to agree to the proposed amendments.¹¹⁵
- 3.58 Moreover, DFAT highlighted that:
- No Contracting Party has expressed any desire to revisit the mining ban, and at the Antarctic Treaty Consultative Meeting in 2016 the Parties unanimously adopted the *Santiago Declaration*, which reaffirmed their strong and unequivocal support for the mining ban.¹¹⁶

108 Department of the Environment and Energy, 2016, *Australian Antarctic Strategy and 20 Year Action Plan*, p. 19.

109 Professor Marcus Haward, Professor, Ocean and Antarctic Governance, IMAS University of Tasmania, *Committee Hansard*, Hobart, 10 November 2017, p. 37; DFAT, *Submission 17.1*, p. [6].

110 DFAT, *Submission 17.1*, p. [6].

111 *Article 25 of the Protocol on Environmental Protection to the Antarctic Treaty (Madrid Protocol)*, opened for signature 4 October, 1991, (entered into force 14 January, 1998).

112 DFAT, *Submission 17.1*, p. [6].

113 Mr Whyatt, DFAT, *Committee Hansard*, Canberra, 15 February 2018, p. 9.

114 Mr Whyatt, DFAT, *Committee Hansard*, Canberra, 15 February 2018, p. 9.

115 Mr Whyatt, DFAT, *Committee Hansard*, Canberra, 15 February 2018, p. 9.

116 DFAT, *Submission 17.1*, p. [6].

- 3.59 By contrast, the Committee received evidence from Professor Brady who suggested that countries are already considering the feasibility of accessing Antarctic mineral resources.¹¹⁷ Moreover, she suggested that the recent increase in activity in Antarctica is, in part, driven by the desire to access the region's natural resources in the future.¹¹⁸ Highlighting these concerns, Professor Brady suggested that multiple countries are engaging in research to better understand Antarctic minerals, and that during internal discussions they are 'openly ... declaring an interest in exploring' these resources, and in some cases 'talking about utilising them.'¹¹⁹
- 3.60 Mr Larsen noted that whilst the Antarctic Treaty bans mining it does not prohibit work to understand the extent of resources in Antarctica.¹²⁰ He also conceded that countries may be currently conducting such work '... under the guise of scientific research.'¹²¹ Professor Brady shared a similar sentiment when she noted that to what extent current activity is 'exploration and to what extent is it normal academic scientific research is in the eye of the beholder.'¹²² In regards to the dual use nature of such scientific research, some inquiry participants suggested that inspections play an integral role in understanding what other countries are doing and ensuring that activities remain within the limits of the ATS.¹²³

Committee comment

- 3.61 It was evident to the Committee that there is a great sense of pride in Australia's longstanding role in the ATS. In particular, Australia has played a significant role in influencing Antarctic governance on issues related to environmental conservation through activities such as hosting the CCAMLR Secretariat. The Committee strongly supports the principles of the ATS and agrees with the assessment that it has served Australia's national interests well and promoted peace and security in a region close to Australia.

117 Professor Brady, private capacity, *Committee Hansard*, Canberra, 15 February 2018, p. 1.

118 Professor Brady, private capacity, *Committee Hansard*, Canberra, 15 February 2018, p. 1.

119 Professor Brady, private capacity, *Committee Hansard*, Canberra, 15 February 2018, p. 2.

120 Mr Larsen, DFAT, *Committee Hansard*, Canberra, 14 September 2017, p. 3.

121 Mr Larsen, DFAT, *Committee Hansard*, Canberra, 14 September 2017, p. 3.

122 Professor Brady, private capacity, *Committee Hansard*, Canberra, 15 February 2018, p. 2.

123 Dr Gales, AAD, Department of the Environment and Energy, *Committee Hansard*, Hobart, 10 November 2017, p. 54.

- 3.62 The Committee welcomes the *Australian Antarctic Strategy and 20 Year Action Plan* and its commitment to strengthening Australia's influence within the ATS by building and maintaining strong and effective relationships with other Antarctic Treaty nations. However, as the dynamics of Antarctica continue to change, the Committee has some concerns that maintaining established norms in the region may become more challenging in the future. To ensure that the ATS remains the best framework for addressing challenges within the region, Australian leadership in Antarctica needs to be further strengthened.
- 3.63 To address this, the Committee recommends appointing an Antarctic Ambassador to oversee diplomatic activities and to provide leadership in promoting Australia's national interests internationally. While noting DFAT's advice that the current arrangements are satisfactory, the Committee believes that the appointment of an Antarctic Ambassador will further demonstrate Australia's leadership and commitment to promoting discussion and engagement on Antarctic norms and principles. Moreover, an Antarctic Ambassador would be able to assess on a regular basis Australia's leadership in the region to ensure it remains relevant in addressing issues related to the ATS.
- 3.64 The Committee acknowledges that the AAD and DFAT work together closely and handle different aspects of international engagement in Antarctica. Subsequently, both agencies would need to be involved in considering how such a position can make the best contribution.

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.

Collaboration

- 3.65 During its visit to Antarctica, the Committee was impressed by the way Australia collaborates with other nations. It is clear that cooperation in Antarctica is necessary in order to support research and work in such a remote and hostile location. Moreover, collaboration allows Australia to enhance its diplomatic engagement with a wider range of nations, including those that it does not traditionally collaborate with beyond Antarctica.

- 3.66 While the Committee applauds the *Australian Antarctic Strategy and 20 Year Action Plan's* emphasis on strengthening collaboration in East Antarctica, the Committee notes that there are also opportunities to learn from nations operating in West Antarctica where conditions differ significantly from the East.

Comprehensive Test Ban Treaty

- 3.67 The Committee welcomes the work being overseen by the AAD to operate radionuclide stations as part of the International Monitoring System for the *Comprehensive Test Ban Treaty*. The Committee acknowledges DFAT's comments that increases in funding to Australia's Antarctic infrastructure must consider Australia's ongoing ability to contribute to the IMS.

Search and rescue

- 3.68 The Committee recognises the substantial impact that search and rescue operations in Antarctica have on the work of the AAP, and more broadly on the nation. However, the Committee also notes that these contributions enhance Australia's standing in Antarctica. Moreover, this complementary arrangement has been beneficial to Australia during incidents involving the *Aurora Australis*.
- 3.69 The Committee acknowledges the contribution AMSA has made to reduce the likelihood of incidents occurring, and encourages the continuation of these efforts. In particular, with activity in the region projected to increase significantly in the future, the Committee encourages greater planning for the future to ensure that Australian search and rescue efforts will be able to respond appropriately.

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.

Site inspections

- 3.70 The Committee acknowledges the integral role that the ATS inspection regime plays in ensuring compliance with the treaty principles and enhancing collaboration and cooperation with other Antarctic nations. The

Committee welcomes Australia's independent inspection of the American Amundsen-Scott South Pole Station in 2016.

- 3.71 The Committee notes that the commitment made in the *Australian Antarctic Strategy and 20 Year Action Plan* to restore Australia's inland traverse capability would significantly enhance Australia's ability to conduct inspections more frequently. It is essential that once this capability has been restored it is used to conduct more frequent inspections in East Antarctica. This will enhance Australia's ability to ensure compliance with key Treaty system principles within East Antarctica.
- 3.72 As Australia further strengthens its ability to conduct site inspections there may be opportunities to lead training both domestically and with countries that have limited experience in conducting site inspections.
- 3.73 The Committee also welcomes the AAD's informal arrangement with the *Larsemann and Vestfold Hills Management Group* which includes regular station visits that allow the opportunity for informal site inspections. The Committee encourages further such arrangements, in particular in East Antarctica.

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.

Environmental engagement

- 3.74 The Committee applauds Australia's ongoing commitment to protecting Antarctica's pristine environment. The Committee encourages the AAD to continue to consider how best to minimise the impact of Australia's operations on the region and to demonstrate this to other nations.
- 3.75 The Committee notes that Australia hosts the CCAMLR secretariat and that this role enhances Australia's influence in the ATS and confirms

Australia's status as a responsible manager of marine services. Moreover, the presence of the CCAMLR Secretariat in Hobart strengthens Tasmania's position as an Antarctic Gateway. The Committee encourages the Australian Government to consider similar opportunities that could further strengthen Australia's role as an advocate for the continued protection of Antarctica's unique environment.

Marine protected areas

- 3.76 While Australia has been successful in influencing a range of issues relating to the protection of Antarctica's environment, the Committee notes that Australia continues to work towards establishing a marine protected area in East Antarctica. While the Committee acknowledges Australia's commitment to continuing its approach to support the acceptance of marine protected areas, the Australian Government may need to carefully evaluate the success of this approach and make changes if necessary.

Madrid Protocol

- 3.77 The Committee acknowledges that a number of inquiry participants expressed concern that aspects of the *Madrid Protocol* are misunderstood and that some media and academic commentary of the protocol suggests that the mining ban will expire in 2048. The Committee also acknowledges that this concern was also voiced by Dr Press in his *20 Year Australian Antarctic Strategic Plan*. The Committee reiterates Dr Press's recommendation that Australia should undertake diplomatic activities such as capacity building efforts and education on Parties' obligations under the *Madrid Protocol* and its provisions with respect to mining. Such efforts should also include educating commentators and the public on the mining ban and the process required to modify this.
- 3.78 Without these efforts, misinformed perspectives could significantly impact discussions on the future of the mining ban. The Committee also notes that, in any future discussions about possible changes, Australia would need to consider all aspects in order to make informed decisions, and work with countries to maintain a robust ATS into the future.

