

# THE ANTARCTIC TREATY SYSTEM: CHALLENGES AND OPPORTUNITIES

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## I. INTRODUCTION: ANTARCTIC GEOPOLITICS

Over the last 60 years, the scope of international governance of Antarctica has steadily expanded in scope. In 1959, during the geopolitical tension of the early cold-war period, the Antarctic Treaty<sup>2</sup> was formed by the twelve original states to primarily prevent security competition in the Antarctic region. From its very creation, resolution – or at least management – of geopolitical tension has been a core norm of the Antarctic Treaty. This instrument was negotiated and entered into force during a period of heightened Cold War competition between the United States and the Soviet Union.<sup>3</sup> The Antarctic Treaty effectively managed this tension by demilitarising the Antarctic continent and directing all human presence on the continent towards peaceful use and scientific research. Throughout its history the Antarctic Treaty has been viewed as a successful example of international governance because of its successful responses to internal and external pressures.<sup>4</sup>

The Antarctic Treaty now faces a potential new set of geopolitical strains. The current parties include emerging economic and strategic powers of China and India and newly acceding members such as Malaysia and Pakistan. There are also significant governance challenges from increased tourism, shipping, fishing and bio prospecting, economic uses that create new interests and potential geopolitical tensions. A warming climate is a key driver of change within Antarctic and the Southern Ocean environments.<sup>5</sup> This change will likely generate new geopolitical tensions between states, including tensions arising from range shifting of commercially valuable marine species from mid to high latitudes.<sup>6</sup> There also remains ongoing discussion of the mining prohibition under the

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2 The Antarctic Treaty, 402 U.N.T.S. 71, entered into force June 23, 1961.

3 M Haward and T Griffiths (editors) *Australia and the Antarctic Treaty System: Fifty Years of Influence* (UNSW Press, Sydney 2011) at 2.

4 O R Young *Institutional Dynamics: Emergent Patterns in International Environmental Governance* (Cambridge Mass. MIT Press, 2010) at 53.

5 A J Constable, J Melbourne-Thomas, S P Corney, *et al.* “Climate change and Southern Ocean Ecosystems I: How Changes in Physical Habitats Directly Affect Marine Biota” (2014) 20 *Global Change Biology* 3004.

6 A J Hobday and G T Pecl “Identification of Global Marine Hotspots: Sentinels for Change and Vanguards for Adaptation Action” (2014) 24, 2 *Reviews in Fish Biology and Fisheries* 415.

Madrid Protocol, although much of this discussion appears to misunderstand, or misinterprets, the specific provisions and element underpinning this prohibition.<sup>7</sup>

## II. DEVELOPMENT OF THE ANTARCTIC TREATY

The development of the Antarctic Treaty was a significant diplomatic effort balancing the aspirations and interests of a number of different actors.<sup>8</sup> The Antarctic Treaty, in summary:

- Stipulates that Antarctica should be used exclusively for peaceful purposes — military activities, such as the establishment of military bases or weapons testing, are specifically prohibited;
- Guarantees freedom to conduct scientific research;
- Promotes international scientific cooperation and requires that the results of research be made freely available;
- Sets aside the potential for sovereignty disputes between Treaty parties by providing that no activities will enhance or diminish previously asserted positions with respect to territorial claims, provides that no new or enlarged claims can be made, and makes rules relating to jurisdiction;
- Prohibits nuclear explosions and the disposal of radioactive waste;
- Provides for inspection to ensure compliance with the Treaty — a world-first inspection system;
- Requires advance notice of expeditions; and
- Provides for the parties to discuss measures to further the Treaty.<sup>9</sup>

Article VI of the Antarctic Treaty defines its area of application as south of Latitude 60° South. This area includes all ice shelves and airspace, but it does not include airspace above high seas. While the Treaty applies to marine areas it explicitly states that it does not prejudice high seas rights in international law.<sup>10</sup>

## III. THE ANTARCTIC TREATY SYSTEM

Following the entry into force of the Antarctic Treaty in 1961, international governance of Antarctic steadily expanded through formation of a number of issue-specific treaties that sit under, or side-by-side, with the Antarctic Treaty. These treaties are the 1972 Convention for the Conservation of Antarctic Seals,<sup>11</sup> 1980 Convention on the Conservation of Antarctic Marine Living Resources

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7 S Vöneky and S Addison-Agyei “Antarctica” in R Wolfrum (editor) (2012) 1 *Max Planck Encyclopaedia of Public International Law* 418; A J Press “The Antarctic Treaty System: Future Mining Faces Many Mathematical Challenges” (2015) 7, 1 *The Yearbook of Polar Law* 623.

8 M Haward, D R Rothwell, J Jabour, R Hall, A Kellow, L Kriwoken, G Lugten, and A Hemmings “Australia’s Antarctic Agenda” (2006) 60, 3 *Australian Journal of International Affairs* 439.

9 A Bergin and M Haward *Frozen Assets: Securing Australia’s Antarctic Future*. Strategic Insight No 34, (Canberra, Australian Strategic Policy Institute, 2007).

10 Antarctic Treaty Art VI “The provisions of the present Treaty shall apply to the area south of 60° South Latitude, including all ice shelves, but nothing in the present Treaty shall prejudice or in any way affect the rights, or the exercise of the rights, of any State under international law with regard to the high seas within that area”.

11 Convention for the Conservation of Antarctic Seals, 11 February 1972. 29 U.S.T. 441, 11 ILM. 251 (1972).

(CCAMLR)<sup>12</sup> and 1991 Protocol on Environmental Protection to the Antarctic Treaty (Madrid Protocol).<sup>13</sup> In 2001, a related treaty, the Agreement on the Conservation of Albatrosses and Petrels (ACAP),<sup>14</sup> was formed to provide protection to sub-Antarctic seabirds. ACAP is an agreement under the Convention on Migratory Species (CMS).<sup>15</sup>

This related group of treaties and the yearly meeting of parties to the Antarctic Treaty – the Antarctic Treaty Consultative Meeting (ATCM) – have become collectively known as ‘The Antarctic Treaty System’ (ATS) or treated in academic literature as a leading institution in international environmental governance.<sup>16</sup> At least at face value, the ATS has been very successful in ensuring that Antarctica and the Southern Ocean have been free from military conflict, retained their demilitarised status, and that decision-makers within the regular ATCM meetings have balanced the interests of claimant and non-claimant states. In this sense the regime that developed from the treaty has been effective – in that it has avoided the problem (i.e. security competition) that led to its original negotiation.<sup>17</sup>

#### IV. ANTARCTIC GOVERNANCE: MANAGING INTERNAL STRESSORS AND EXTERNAL CHALLENGES

The ATS has demonstrated significant ability to respond and adapt to major pressures and challenges.<sup>18</sup> In this period since 1961 the ATS has faced significant internal debates – most notably on the regulation of mineral resource activities; and faced external criticism – most clearly focused through the Malaysian-led United Nations debate on the “Question of Antarctica” in the period 1982–2002.<sup>19</sup> Critics have, however, argued that over recent decades, the ATS has been slow to respond to emerging issues<sup>20</sup>; but alternative views have also been presented.<sup>21</sup> This criticism suggests that the ongoing success of the ATS cannot be taken for granted and its ongoing positive development to address emergent issue and concerns will likely require careful management.

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12 Convention for the Conservation of Antarctic Marine Living Resources. 33 UST 3476; 1329 UNTS 48; 19 ILM 841 (1980).

13 Protocol on Environmental Protection to the Antarctic Treaty 30 ILM 1455 (1991).

14 Agreement on the Conservation of Albatrosses and Petrels, done 19 June 2001, 2258 UNTS 257 (entered into force 1 February 2004).

15 Convention on Migratory Species of Wild Animals. 1651 UNTS 333; 19 ILM 15 (1980).

16 C C Joyner *Governing the Frozen Commons: The Antarctic Regime and Environmental Protection* (Columbia, University of South Carolina Press, 1998); see also Young, note 4.

17 Haward and Griffiths, 2011, note 3; O S Stokke and D Vidas (editors) *Governing the Antarctic: The Effectiveness and Legitimacy of the Antarctic Treaty System*, (Cambridge, Cambridge University Press, 1996); O R Young “Building and International Regime Complex for the Arctic: Current Status and Next Steps” (2014) 2, 2 *The Polar Journal* 391–407.

18 Young, 2010, note 4, at 56.

19 R Tepper and M Haward “The Development of Malaysia’s Position on Antarctica: 1982–2004” (2005) 41 (217) *Polar Record* 113; B A Hamzah, “Malaysia and the Southern Ocean: Revisiting the Question of Antarctica” (2010) 41, 2 *Ocean Development and International Law* 186–195.

20 S L Chown, J E Lee, K A Hughes, J Barnes, et al. “Challenges to the Future Conservation of the Antarctic” (2012) *Science* 337 13 July 2012 158; D French and K Scott “International Legal Implications of Climate Change for the Polar Regions: Too Much, Too Little, Too Late?” (2009) 10, 2 *Melbourne Journal of International Law* 631; A D Hemmings “Antarctic Politics in a Transforming Global Geopolitics” in K Dodds, A D Hemmings and P Roberts (editors) *Handbook on the Politics of Antarctica* (Cheltenham, Edward Elgar Publishing, 2017) 507–522.

21 M Haward, J Jabour and A J Press “Antarctic Treaty System Ready for a Challenge” (2012) 338 *Science* at 603.

### A. *Internal Stressors: Old Norms and New Players*

The guiding norms of the Antarctic Treaty – international collaboration, peaceful use and scientific endeavour – originated in the planning for Antarctic activities associated with the International Geophysical Year (IGY) of 1957–58. The IGY reactivated the “standstill” proposal developed by Chilean academic Professor Escudero as a solution to the “Antarctic problem”,<sup>22</sup> that is collaboration and scientific cooperation should take place without being used to advance challenges to existing Antarctic territorial claims or support disputes over the claims. These norms have been reinforced; the preamble to the Madrid Protocol states, “that Antarctica shall continue forever to be used exclusively for peaceful purposes and shall not become the scene or object of international discord”.<sup>23</sup> Article 2 of the Madrid Protocol reiterates that Antarctic shall be a “natural reserve, devoted to peace and science”.<sup>24</sup>

The membership of the Antarctic Treaty has significantly expanded from its 12 original signatories (ATCPs) in 1961 (including the 7 claimants)<sup>25</sup> to 53 contracting parties including Monaco that acceded in 2008, Malaysia (acceded in 2011), Pakistan (acceded in 2012), Mongolia (acceded in 2015), Iceland (acceded in 2015) and Kazakhstan (acceded in 2015).

**Table 1 – Parties to the Antarctic Treaty**

	ATCP*	CP**	Cumulative Total
<b>1961–70</b>	12	1	13
<b>1971–80</b>	1	1	15
<b>1981–90</b>	13	9	37
<b>1991–00</b>	1	4	42
<b>2001–10</b>	1	4	47
<b>2011–18</b>	1	5	53
<b>Total</b>	29	24	53

\* ATCP Antarctic Treaty Consultative Parties

\*\* CP Contracting Parties

Source: Author compiled from data from Antarctic Treaty Secretariat.

Table 1 provides interesting data. The Antarctic Treaty had the largest number of accessions in the period in which it was under the most internal stress – the period 1981–1990 – in which first a proposed treaty to regulate mining in the Antarctic was developed, and second as this instrument,

22 E W Hunter Christie *The Antarctic Problem* (London, George Allen & Unwin, 1951).

23 Madrid Protocol note 13, Preamble.

24 Ibid. Madrid Protocol Article 2 “The Parties commit themselves to the comprehensive protection of the Antarctic environment and dependent and associated ecosystems and hereby designate Antarctica as a natural reserve, devoted to peace and science”.

25 M Haward “The Originals: The Role and Influence of the Original Signatories to the Antarctic Treaty” in Alan Hemmings, Klaus Dodds and Peder Roberts (editors) *Handbook on the Politics of Antarctica* (Cheltenham, Edward Elgar Publishing, 2017): 232–240.

the Convention for the Regulation of Antarctic Mineral Resource Activities (CRAMRA)<sup>26</sup> was set aside and the Protocol on Environmental Protection to the Antarctic Treaty<sup>27</sup> was being negotiated.

The development of the Protocol on Environmental Protection to the Antarctic Treaty has attracted a considerable literature.<sup>28</sup> While the process was unprecedented, with Australia and France declaring their opposition to CRAMRA once the instrument had been concluded, both these parties worked hard to ensure the maintenance of the Antarctic Treaty System and to rebuild, and then maintain, consensus.

The debate over development of marine protected areas (MPAs) in CCAMLR has displayed similar stresses. While CCAMLR did establish the world's first high seas MPA in 2009 with the South Orkney Islands southern shelf (an MPA of 94 000 km<sup>2</sup> in area in the South Atlantic) progress with other MPAs has been difficult. In 2011 CCAMLR adopted Conservation Measure 91-04 (CM 91-04) General Framework for the Establishment of CCAMLR Marine Protected Areas.<sup>29</sup> At the 2012 CCAMLR Meeting a suite of MPAs were proposed:

- East Antarctic representative system of MPAs (proposed by Australia, France and European Union)
- Ross Sea (proposed by New Zealand and United States of America) – originally separate proposals but linked during debate at the 2012 Commission meeting.
- West Antarctic (proposed by the European Union).

Consensus not achieved on any of these proposals. Agreement was reached to hold a special meeting of the Commission in June 2013 to continue discussions. At this special meeting further concerns and legal argument over MPAs were raised by Russia. Commission meetings in 2013, 2014 and 2015 failed to gain consensus on MPAs, with continued debate on the East Antarctic and Ross Sea MPAs. At the 2016 meeting of the Commission agreement was reached on the designation of the Ross Sea MPA.<sup>30</sup>

The debate over MPAs in CCAMLR provides an example of the ongoing internal stresses within the ATS. Parties may have different views how issues areas should be managed and addressed, and consensus can be difficult to achieve. The MPA case also highlights the impacts of external challenges, interplay between the ATS and other environmental and resource management regimes applying to, or seeking to be applied to, Antarctica and the Southern Ocean.

## *B. External Challenges*

Institutional interplay in Antarctica and the Southern Ocean has two, related, effects on the Antarctic regime. It influences current institutional resilience and second acts as a key driver in shaping

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26 The Convention for the Regulation of Antarctic Mineral Resource Activities 27 ILM 868. Did not enter into force.

27 Protocol on Environmental Protection, note 13.

28 This literature focuses on the development of the protocol following the setting aside of the CRAMRA agreement, its entry into force and implementation, the use of environmental impact assessment, and the assessment of the performance.

29 Conservation Measure 91-04 (2011) states that "CCAMLR MPAs shall be established on the basis of the best available scientific evidence and shall contribute, taking full consideration of Article II of the CAMLR Convention where conservation includes rational use, to the achievement of the objectives specified" CM 91-04 General framework for the establishment of CCAMLR Marine Protected Areas. [www.ccamlr.org/en/measure-91-04-2011](http://www.ccamlr.org/en/measure-91-04-2011).

30 Conservation Measure 91-05 (2016) Ross Sea Region Marine Protected Area. [www.ccamlr.org/sites/default/files/91-05\\_11.pdf](http://www.ccamlr.org/sites/default/files/91-05_11.pdf).

interaction arising from external issues. To this end we claim evolving patterns of institutional interplay will continue to shape a regime complex, such that future governance of the region will be as much influenced by such external interactions as it is by the work of the ATS. Different regimes may claim interest and jurisdiction and compete for competence. Examples of competition include the focus on the Law of the Sea Convention to provide alternative norms and principles.<sup>31</sup> One outcome of duplicate claims for competence may be the creation of possibilities of ‘forum shopping’.<sup>32</sup> A relevant example here is with the regulation of open ocean iron fertilization<sup>33</sup> that resulted in the CBD<sup>34</sup> and London Protocol/Convention<sup>35</sup> arriving at different outcomes.

While increasing competition between regimes is a possibility, with challenges to specific competence of either the ATS or other regimes addressing specific issue areas or regimes, complementarity and congruence will also provide important drivers of the emerging regime complex. While the ATS has continued to develop it has address interplay in a range of ways, all helping to shape an evolving regime complex. The ATS has tended to address marine resource management, environmental protection, biological prospecting and heritage issues in this way, that is assert its competence.

The ATS has also recognized the competence of another body. Southern Ocean whaling<sup>36</sup> is a good example of complementarity as it is specifically excluded from CCAMLR’s competence by the parties’ interpretation of Article VI of the CAMLR Convention. This article states that ‘Nothing in this Convention shall derogate from the rights and obligations of Contracting Parties under the International Convention for the Regulation of Whaling and the Convention for the Conservation of Antarctic Seals’.<sup>37</sup> In an interesting example the ATCPs defer to the IAATO to provide industry-based self-regulation of Antarctic tourism operations while setting broad frameworks and operational guidelines.

The ATS’s adoption of the International Maritime Organization (IMO) standards for shipping and the (eventual) adoption by the ATS of the IMO’s mandatory International Code of Safety for

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31 M Haward “The Law of the Sea Convention and the Antarctic Treaty System; Constraints or Complementarity” in S-Y Hong and J van Dyke (editors) *Maritime Boundary Disputes, Settlement Processes, and the Law of the Sea* (Leiden, Martinus Nijhoff Publishers, 2009) 231–251.

32 H Murphy and A Kellow “Forum Shopping in Global Governance: Understanding States, Business and NGOs in Multiple Arenas” (2013) 4, 2 *Global Policy* 139.

33 Antarctic Climate and Ecosystems Cooperative Research Centre *Position Analysis Ocean Fertilisation: Science and Policy Issues* (Hobart, ACE CRC, 2008); S Broder and M Haward “The International Legal Regimes Governing Ocean Iron Fertilization in Paik, Lee and Schieber, (editors) *Implementing the Law of the Sea: Institutions and Regions in Ocean Governance* (Leiden, Martinus Nijhoff Publishers, 2013) 185–220.

34 Convention on Biological Diversity, 31 ILM 842 (1992).

35 Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972 26 UST 2403, 1046 UNTS 120, 11 ILM 1294 (1972). Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, London 1996 (1997) 36 ILM 1.

36 J Jabour and M Iliff “Theatre Sports in the Southern Ocean: Engagement Options for Australia in Whale Research Protest Action” (2009) 63, 2 *Australian Journal of International Affairs* 268.

37 Article VI of the CAMLR Convention.

Ships Operating in Polar Waters (Polar Code)<sup>38</sup> shows the broadening and deepening of interplay and emergence of congruent actions

### 1. *Antarctica, the Southern Ocean and the Law of the Sea*

Antarctica was specifically excluded from discussion at the third United Nations Conference on the Law of the Sea (UNCLOS III) but the nexus between the two regimes is likely to be a significant driver in the future.<sup>39</sup> The sub-Antarctic Islands – under national jurisdiction and outside the Treaty Area are not subject to Article IV of the Antarctic Treaty – can legitimately generate Exclusive Economic Zones and continental shelves.<sup>40</sup> The Australian sub-Antarctic Territory of Heard Island and McDonald Islands, for example, due to its distinctive seabed geomorphology, generates significant large area that can be delimited as ‘legal continental shelf’ under section 76 of the LOSC.<sup>41</sup>

The relation of the LOSC to the Antarctic Treaty remains an important and unresolved issue area. The unresolved issues centre on the extent to which claimant states can claim rights as ‘coastal states’ or even whether coastal states exist in Antarctica, given the particular status of Antarctic claims under the Antarctic Treaty. This links also to the critical issue of whether an EEZ and/or Continental Shelf can be claimed, with differences between Treaty Parties over declaration of maritime zones offshore Antarctica.<sup>42</sup>

### 2. *Human Impacts and Tourism*

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 Treaty Parties and self-management by tour operators through the International Association of Antarctica Tour Operators (IAATO).<sup>43</sup> 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 tourist operations landing tourists within the AAT, the sub-Antarctic Macquarie Island is a stopping-off point for such cruises, with limits on landings and numbers of people.<sup>44</sup> One aspect of Antarctic tourism is worth noting. Tourist flights from Australia to Antarctica are popular, with an Australian travel company chartering a Boeing 747 400 to overfly the AAT in the summer season.<sup>45</sup> The numbers of these types of tourists are counted in annual IAATO statistics on tourism

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38 J Jabour “‘Safe Ships and Clean Seas’: Evading a Mandatory Shipping Code for Antarctic Waters”, (2008) 6, *New Zealand Yearbook of International Law* 93; J Jabour “Progress Towards the Mandatory Code for Polar Shipping” (2014) 6, 1 *Australian Journal of Maritime and Ocean Affairs*: 64–67.

39 Haward 2009, note 21.

40 R Baird “Can Australia assert an Extended Continental Shelf off the Australian Antarctic Territory Consistent with the Law of the Sea and Within the Constraints of the Antarctic Treaty?” (2004) 138 *Maritime Studies* 1–19.

41 Ibid.

42 J Jabour “The Australian Continental Shelf: Has Australia’s High Latitude Diplomacy Paid Off?” (2008) 33 *Marine Policy* 429.

43 J Jabour “Strategic Management and Regulation of Antarctic Tourism” in T Tin, D Liggett, P Maher and M Lamers (eds) *Antarctic Futures: Human engagement with the Antarctic Environment* (Dordrecht: Springer, 2014) 273–286.

44 note 28.

45 Antarctic Flights. <https://www.antarcticaflights.com.au> <accessed 17 March 2019>.

and the popularity of such flights reinforces the public interest in Antarctica. Increasing interest in ‘adventure tourism’ and small expedition-style activities have led to concerns from Treaty Parties related to search and rescue, and repatriation of individuals following accidents.<sup>46</sup>

### 3. Resource Management

The adoption and entry into force of the Madrid Protocol was a key factor in environmental and resources management. A key aspect of the Protocol is the moratorium it places upon mineral resource activities in Antarctica. Whilst for the time being exploitation of these resources is prohibited under the Madrid Protocol, the Protocol only binds a small number of States in the international community.

The ATS, through CCAMLR, is continuing to address the problem of illegal unregulated and unreported (IUU) fishing in the Southern Ocean.<sup>47</sup> The Commission for the Conservation of Antarctic Marine Living Resources has worked hard to address the significant management challenges posed by IUU fishing within the CCAMLR area.<sup>48</sup>

### 4. Environmental Protection

In addition to the ATS instruments, there are a number of other environmental instruments that can intersect with the ATS and apply to Antarctica and the Southern Ocean. The Convention Concerning the Protection of the World Cultural and Natural Heritage<sup>49</sup> (World Heritage Convention) has been utilized by Australia to secure World Heritage listing for the sub-Antarctic Macquarie Island, and the Heard and McDonald Islands. The CMS<sup>50</sup> has been used to address issues related to the impacts of incidental catch of seabirds, regarded as a major conservation problem within the CCAMLR and Antarctic Treaty Areas, linked the Agreement for the Conservation of Albatrosses and Petrels (ACAP).<sup>51</sup>

At the CBD’s seventh meeting of the conference of parties in 2004, parties highlighted “the urgent need for international cooperation and action to improve conservation and sustainable use of marine biodiversity in ABNJ”.<sup>52</sup> In the same year the United Nations General Assembly established the Ad Hoc Open-Ended Informal Working Group “to study issues related to conservation and sustainable use of marine biological diversity in areas beyond national jurisdiction”. The 9th meeting of the Ad Hoc Open-ended Informal Working Group, held in New York from 20–23 January 2015 recommended proceeding with a new legally binding instrument on the conservation and

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46 J Jabour “Underneath the Radar: Emergency Search and Rescue Insurance for East Antarctic Tourism” (2007) 4, 2 *Tourism in Marine Environments* 202–220.

47 M Haward “The Southern Ocean, Climate Change and Ocean Governance” in Clive Schofield, Seokwoo Lee, and Moon-Sang Kwon (editors) *The Limits of Maritime Jurisdiction* (Leiden, Martinus Nijhoff Publishers, 2014) 507–523.

48 J A Nilsson, E A Fulton, M Haward and C Johnson “Consensus Management in Antarctica’s High Seas – Past Success and Current Challenges” (2016) 73 *Marine Policy* 172–180.

49 Convention Concerning the Protection of World Cultural and Natural Heritage, 1037 UNTS 151; 27 UST 37; 11 ILM 1358 (1972).

50 Convention on Migratory Species, note 15.

51 ACAP, note 14. See also R Hall “Saving Seabirds” in L Kriwoken, J Jabour and A D Hemmings (editors) *Looking South: Australia’s Antarctic Options* (Sydney, Federation Press, 2007).

52 High Seas Alliance “A Legally Binding Instrument For The Conservation of Marine Life on the High Seas” [http://highseasalliance.org/sites/highseasalliance.org/files/HSA\\_Legally\\_Binding\\_Treaty\\_june2018\\_English.pdf](http://highseasalliance.org/sites/highseasalliance.org/files/HSA_Legally_Binding_Treaty_june2018_English.pdf) 2018. Accessed 22 March 2019.



sustainable use of marine life in ABNJ.<sup>53</sup> At this meeting governments agreed to meet to develop the draft text of this legally binding instrument and to request that the U.N. General Assembly establish an intergovernmental conference to finalize this instrument.<sup>54</sup>

A resolution, “Development of an international legally-binding instrument under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction” was adopted by the UNGA on 19 June 2015.<sup>55</sup> The first meeting of the intergovernmental conference in BBNJ was held in New York in September 2018 and its ongoing works has direct influence on the ATS, even though the ATCM has not formally engaged with the BBNJ process.

### 5. *Biological Prospecting*

While the Madrid Protocol provides a comprehensive regime to regulate the Antarctic environment, a number of challenges still remain. These challenges centre on emergent issues such as Antarctic biological prospecting (bio prospecting).<sup>56</sup> The issue of bio prospecting activities and related outcomes is relatively new to the Antarctic Treaty Consultative Parties (ATCPs). Although bio prospecting has been occurring from the 1980s, it was not until 1999 that the Scientific Committee on Antarctic Research (SCAR) addressed this issue. While the ATCMs have received information and working papers on this topic there has yet to be any decision within the ATS on regulating biological prospecting.<sup>57</sup>

### 6. *Climate Change*

Antarctica is providing important data on climate change, and considerable scientific effort has been directed at increasing understanding of the role of Antarctica in the global climate system.<sup>58</sup> The Antarctic and Southern Ocean also face direct effects of global climate change, with potential impacts on sea-ice and marine ecosystems, as well as on terrestrial Antarctica.<sup>59</sup> Research from Antarctica and the Southern Ocean is, however, increasingly important in ongoing responses to climate change.<sup>60</sup>

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53 Ninth Meeting of the Ad Hoc Open-ended Informal Working Group, <http://sdg.iisd.org/events/ninth-ad-hoc-open-ended-informal-working-group-to-study-issues-relating-to-the-conservation-and-sustainable-use-of-marine-bbnj/>.

54 Ibid.

55 United Nations General Assembly, 2015 A/RES/69/292.

56 J Jabour “Biological Prospecting in Antarctica: Fair game?” in A-M Brady (editor) *The Emerging Politics of Antarctica* (Abingdon: Routledge, 2013) 242–257.

57 Ibid.

58 note 37.

59 note 23.

60 M Haward “Climate change and the Southern Ocean: the regime complex for regional governance” in Paul G. Harris (editor) *Climate Change and Ocean Governance: Politics and Policy for Threatened Seas* (Cambridge, Cambridge University Press, 2019): 201–214.

## V. THE EMERGENCE OF AN ANTARCTIC REGIME COMPLEX<sup>61</sup>

A number of regimes and instruments have areas of application that include the Southern Ocean. These include, *inter alia*, the Law of the Sea Convention, (LOSC)<sup>62</sup> the International Convention for the Regulation of Whaling (ICRW),<sup>63</sup> the Convention for the Prevention of Pollution from Ships (MARPOL),<sup>64</sup> the Convention on Migratory Species of Wild Animals (CMS)<sup>65</sup> and the Convention on International Trade of Endangered Species Wild Flora and Flora (CITES).<sup>66</sup> In addition, global regimes governing the world's cultural and natural heritage (the Convention Concerning the Protection of World Cultural and Natural Heritage – World Heritage Convention)<sup>67</sup>, biodiversity (the Convention on Biological Diversity – CBD)<sup>68</sup> and climate change (the United Nations Framework Convention on Climate Change – UNFCCC)<sup>69</sup> have increasing influence on Antarctica and the Southern Ocean.

The increasing interplay between the ATS and these instruments suggests an emerging ‘*regime complex*’ in Antarctica and the Southern Ocean. A regime complex is defined ‘as a loosely coupled set of specific regimes’<sup>70</sup> ‘that pertain to the same issue domain or spatially defined area ... and interact with one another in the sense that the operation of each affects the performance of the others’.<sup>71</sup> Interplay involving signatory states and non-state actors with interests in Antarctica and the Southern Ocean, such as the International Association of Antarctica Tour Operators (IAATO) and the Antarctic and Southern Ocean Coalition (ASOC), has increased since key non-state actors were formally included as observers to the ATCM in the early 1980s.<sup>72</sup>

As discussed above, a number of different regimes and institutions, the number and scope of which have grown significance in the past five decades,<sup>73</sup> govern human activity in the Antarctic and Southern Ocean region. Activities in other regimes giving rise to interplay with the ATS

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61 This section is derived from M Haward “Contemporary Challenges to the Antarctic Treaty and Antarctic Treaty System: Australian Interests, Interplay and the Evolution of a Regime Complex” (2017) 9, 1 *Australian Journal of Maritime and Ocean Affairs* 21–24; and J McGee and M Haward “Antarctic Governance in a Climate Changed World” (2019) 11, 2 *Australian Journal of Maritime and Ocean Affairs* in press.

62 United Nations Convention on the Law of the Sea, 1833 UNTS 3; 21 ILM 1261 (1982).

63 International Convention for the Regulation of Whaling, 62 Stat. 1716; 161 UNTS 72.

64 International Convention for the Prevention of Pollution from Ships, 12 ILM 1319 (1973); TIAS No. 10,561; 34 UST 3407; 1340 UNTS 184.

65 Convention on Migratory Species, note 15.

66 Convention on International Trade in Endangered Species Wild Flora and Flora, 27 UST 1087; TIAS 8249; 993 UNTS 243.

67 Convention Concerning the Protection of World Cultural and Natural Heritage, 1037 UNTS 151; 27 UST 37; 11 ILM 1358 (1972).

68 Convention on Biological Diversity 31 ILM 842 (1992).

69 United Nations Framework Convention on Climate Change, 1771 UNTS 107; S. Treaty Doc No. 102-38; U.N. Doc. A/AC.237/18 (Part II)/Add.1; 31 ILM 849 (1992).

70 K Raustiala and D Victor “The Regime Complex for Plant Genetic Resources” (2004) 58, 2 *International Organization* 277.

71 O R Young, note 17 at 394.

72 M Haward, note 61.

73 R Mitchell *International Politics and the Environment* (London, Sage Publications, 2010).

that leads to a ‘regime complex’<sup>74</sup> – potentially provides a wider and more nuanced lens on the processes and effects of interplay between international institutions.<sup>75</sup> Regime complexes are, as noted by Keohane and Victor, ‘outcomes that emerge from real-world political, organizational and informational constraints’.<sup>76</sup>

The Antarctic and Southern Ocean regime complex has generally evolved rather than been the outcome of deliberate global design. It is important to recognize that design can play a part here, usually in terms of specific and deliberate decisions recorded in the preamble or text of an instrument claiming or deferring competence (for example, the express recognition in CAMLR convention of IWC competence over whaling). As noted by Keohane and Victor, a regime complex arises through “connections”.<sup>77</sup> That is, the regime complex is the product of an ongoing pattern of interplay between institutions as issues emerge, in the absence of an overall architecture or hierarchy that might structure the whole set of relevant institutions.<sup>78</sup>

## VI. CONCLUSION

The ATS has been the primary and preeminent regime governing the Antarctic and Southern Ocean from the early 1960s. It has addressed key problem areas such as peaceful use of the region, maintaining international collaboration over science and managing geopolitical tensions between claimants and other parties. At the same time the ATS has been faced with development of sectorally focused regimes in areas such as marine pollution, natural and cultural heritage, and species and biodiversity protection that together have together contributed to an emergent regime complex in the Southern Ocean.<sup>79</sup>

The ATCM is likely to face further competition in issue areas such as marine biodiversity conservation. Interplay over climate change issues in the broader regime complex is however, identifying elements of complementarity and congruence, with the ATS increasing engaging with climate change. The ATCM has increasingly engaged with the climate change regime since 2010–12.<sup>80</sup> These developments suggest future governance of Antarctica and Southern Ocean is likely to focus on managing regime interplay between the ATS and other environmental and resource management regimes. Such interplay will likely require new and profound institutional resilience within the ATS, providing useful insights into the evolution of a regime complex.

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74 note 59.

75 O S Stokke and S Oberthür, “Introduction: Institutional Interaction and Global Environmental Change” in S. Oberthür and O.S. Stokke (editors) *Managing Institutional Complexity: Regime Interplay and Global Environmental Change* (Cambridge, Mass. MIR Press, 2011) 12–13.

76 R Keohane and D Victor “The Regime Complex for Climate Change” (2011) 9, 1 *Perspectives on Politics* 7 at 19.

77 Ibid.

78 Ibid at 8.

79 McGee and Haward, note 61.

80 Ibid.