

LEGAL CHALLENGES FOR MARITIME OPERATIONS IN THE SOUTHERN OCEAN

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Abstract

The Southern Ocean has a long and proud maritime history extending back to the late seventeenth century and the voyage of discovery by Captain James Cook, which then paved the way for other explorers, mariners and whalers over the course of the next 200 years. In 1959 the Antarctic Treaty was concluded which became the foundation for the development of the Antarctic Treaty System which has sought to regulate and manage activities not only on the continent but also in the Southern Ocean. A particular legal focus has been upon the protection and preservation of the environment, however, this creates challenges in the case of the marine environment given the operation of multiple IMO conventions and the increasing presence of a variety of actors in the region, including traditional shippers, cruise ship operators, fishers, whalers and also protestors. Over the past decade increased attention has been given to shipping in the Southern Ocean partly as a result of the spike in maritime incidents, violent clashes between Japanese whalers and the Sea Shepherd Conservation Society, and the ever increasing access into the Southern Ocean as a result of climate change and increased interest in the region. This paper will address these issues, and seek to highlight the legal challenges for current and future maritime operators in the Southern Ocean.

1. INTRODUCTION

There has been a renewed focus on the polar oceans early in the Twenty-First century.¹ This has been partly driven by the attention generated by claims to an outer continental shelf made in both the Arctic Ocean and Southern Ocean by a number of countries. These claims have been the subject of review by the Commission on the Limits of the Continental Shelf (CLCS) and that process remains ongoing.² It has also been driven by renewed interest in the polar regions as a result of the impact of climate change making both regions more accessible to a range of activities, including commercial shipping, fishing operations, and

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¹ For the author's views on this general issue see Donald R. Rothwell "Polar Oceans Governance in the 21st Century" (2012) 26 *Ocean Yearbook* 343-360.

² See discussion in Donald R. Rothwell "The Commission on the Limits of the Continental Shelf: Its Establishment and Subsequent Practices" presented at International Seminar *The Thirtieth Anniversary of the UNCLOS from the Perspective of the Commission on the Limits of the Continental Shelf as its Organ*, Ocean Policy Research Foundation, Tokyo, Japan, 11 July 2012 available at <http://www.sof.or.jp/en/topics/pdf/02-3.pdf> (28 August 2012).

seabed exploration and development. The polar oceans have also been the scene of clashes over contentious environmental issues such as whaling, which in the Southern Ocean has resulted in Australia commencing a case before the International Court of Justice over the legitimacy of Japan's scientific whaling program.³ While the polar oceans are governed by a legal regime founded upon the 1982 United Nations Convention on the Law of the Sea (LOSC),⁴ different regional approaches apply. In Antarctica large parts of the Southern Ocean are subject to the Antarctic Treaty and associated international legal instruments that regulate fisheries and marine environmental protection. In the Arctic there is no equivalent regional legal regime, though the Arctic Council is increasingly paying attention to Arctic Ocean.⁵

This paper seeks to review these issues particularly in the context of the Southern Ocean using the law of the sea under the LOSC as the lens for the analysis. The law of the sea and the polar regions remain in a dynamic state of interaction and is perhaps one of the most significant global examples of interaction between global and regional regimes. For Antarctica this interaction has been present since adoption of the 1959 Antarctic Treaty⁶ which made direct reference in Article VI to the high seas. Since that time, with the evolution of the law of the sea and especially the expansion of maritime zones as reflected in the LOSC,⁷ that dynamic has emerged as a tension between the rights and interests of the seven Antarctic territorial claimants,⁸ the non-claimant Antarctic Treaty Consultative Parties,⁹ and the other members of the international community.¹⁰ In particular, reactions to CLCS submissions have highlighted that notwithstanding the success of the Antarctic Treaty in

³ *Whaling in the Antarctic* (Australia v Japan), Application instituting proceedings (31 May 2010) available at <www.icj-cij.org/docket/>.

⁴ 1833 UNTS 397.

⁵ For details on the Arctic Council see <www.arctic-council.org/>; see also Timo Koivurova and David L. VanderZwaag "The Arctic Council at 10 years: retrospect and prospects" (2007) 40 *University of British Columbia Law Review* 121-194.

⁶ 402 UNTS 71.

⁷ Those being the territorial sea (12 nautical miles), contiguous zone (24 nautical miles), exclusive economic zone (200 nautical miles), and continental shelf (minimum of 200 nautical miles).

⁸ Those states are Argentina, Australia, Chile, France, New Zealand, Norway, and United Kingdom.

⁹ There are currently 28 states with status as ATCPs, of which 7 are claimant states, making 21 non-claimant ATCPs.

¹⁰ The United Nations currently has a total membership of 193, of which 50 UN member states are parties to the Antarctic Treaty, making 143 states in the international community who are not parties to the Antarctic Treaty.

suppressing simmering territorial tensions during the 1950s,¹¹ those tensions remain and can be brought to the surface through law of the sea related actions.

With that context, this paper seeks to assess particular issues associated with the legal challenges that arise for maritime operations in the Southern Ocean given the nature of the law of the sea, the Antarctic Treaty System (ATS), and the range of additional legal instruments that also apply in the Southern Ocean. To begin, a brief assessment will be undertaken of the law of the sea and the polar regions, followed by a consideration of Southern Ocean governance.

2. THE LAW OF THE SEA, MARITIME LAW AND THE POLAR REGIONS¹²

The LOSC is the most significant international law instrument dealing with the oceans and is often referred to as a 'constitution for the oceans'. It has been supplemented by additional instruments over the past 30 years dealing with deep seabed mining, and straddling and highly migratory fish stocks, in addition to a raft of regional and bilateral instruments which complement and expand aspects of the LOSC's operations. However, there are two areas which by general consensus the LOSC specifically did not address in any level of detail. The first is military operations at sea, and the second is Antarctica.¹³ This is significant as it suggests that these issues were just too sensitive at the time to be placed on the law of the sea agenda. While that is most likely the case with respect to military operations, in the case of Antarctica it more than likely is a result of a sense that the Antarctic Treaty had in effect 'covered the field' with respect to Antarctic affairs, and accordingly the law of the sea had no clear field of operation.

¹¹ This was particularly highlighted following the Australian CLCS submission in 2004, see Andrew Serdy, "Towards Certainty of Seabed Jurisdiction Beyond 200 Nautical Miles from the Territorial Sea Baseline: Australia's Submission to the Commission on the Limits of the Continental Shelf" (2005) 36 *Ocean Development and International Law* 201-217; which resulted in Germany, India, Japan, Netherlands, Russian Federation, USA all directly commenting on the Australian submission with respect to continental shelf data associated with the Australian Antarctic Territory.

¹² See generally Donald R. Rothwell and Christopher C. Joyner "The Polar Oceans and the Law of the Sea" in Alex G. Oude Elferink and Donald R. Rothwell (eds) *The Law of the Sea and Polar Maritime Delimitation and Jurisdiction* (Martinus Nijhoff, The Hague: 2001) 1-22; Donald R. Rothwell and Stuart Kaye, "Law of the Sea and the Polar Regions: Reconsidering the Traditional Norms" (1994) *Marine Policy* 41-58; Christopher C. Joyner, *Antarctica and the Law of the Sea* (Martinus Nijhoff, The Hague: 1992).

¹³ By way of contrast, it is considered that the LOSC, Art 234, specifically addressed issues in the marine Arctic: see Rob Huebert, "Article 234 and Marine Pollution Jurisdiction in the Arctic" in Alex G. Oude Elferink and Donald R. Rothwell (eds) *The Law of the Sea and Polar Maritime Delimitation and Jurisdiction* (Martinus Nijhoff, The Hague: 2001) 249-267.

This has resulted in some ongoing debate as to whether the law of the sea – as represented by the LOSC – applied to the Southern Ocean. That the ATS predated the LOSC raised issues as to whether it created a *lex specialis* which is so comprehensive and distinctive that all other international law is excluded. However, the fact that the Antarctic Treaty made express reference to the ‘high seas’¹⁴ at a minimum suggested that the two regimes – that dealing with Antarctica up to the limits of 60°S and that dealing with the sea – did apply within the Antarctic Treaty area.

Nevertheless, that the LOSC made so little allowance for the Southern Ocean had consequences as the ‘new’ law of the sea was implemented.¹⁵ One is that some of the Antarctic claimants have sought to assert maritime claims, consistent with their status as ‘coastal States’ under the law of the sea. Yet doubt remains as to whether there exists ‘coastal States’ in Antarctica, given that each of the seven territorial claims to the continent remain contested and in any event the active assertion of claims has been effectively suspended during the life of the Antarctic Treaty. Nevertheless, some of the Antarctic claimants have continued to assert some semblance of traditional maritime claims.¹⁶ For example, Australia’s claim to a 200 nm ‘Australian Whale Sanctuary’ offshore the Australian Antarctic Territory has been under the spotlight as a result of the conduct of Japanese ‘special permit’ whaling in those waters.¹⁷

Closely associated with the law of the sea, maritime law also has application within the Southern Ocean in the same way in which it applies globally. MARPOL has particular application in the Southern Ocean, as do the associated 2010 IMO Guidelines for Ships Operating in Polar Waters,¹⁸ which are discussed in more detail below. Likewise, with respect to safety of life at sea, the 1974 International Convention on the Safety of Life at Sea

¹⁴ Antarctic Treaty, Article VI.

¹⁵ This being a reference to the law of the sea as found in the LOSC, as opposed to that developed within the framework of the four 1958 Geneva Conventions.

¹⁶ See the discussion in Stuart B. Kaye and Donald R. Rothwell "Southern Ocean Boundaries and Maritime Claims: Another Antarctic Challenge for the Law of the Sea?" (2002) 33 *Ocean Development and International Law* 359-389.

¹⁷ See Donald K. Anton, "Australian Jurisdiction and Whales in Antarctica: Why the Australian Whale Sanctuary in Antarctic Waters Does Not Pass International Legal Muster and is also a Bad Idea as Applied to Non-Nationals", (2008) 11 *Asia Pacific Journal of Environmental Law* 159 – 192; Joanna Mossop, "Opposing Japanese Whaling in the Southern Ocean: the International Law Implications of Contrasting Approaches", (2008) 11 *Asia Pacific Journal of Environmental Law* 221 – 234.

¹⁸ International Maritime Organization, *2010 IMO Guidelines for Ships Operating in Polar Waters* (IMO, London: 2010).

(SOLAS),¹⁹ and the 1978 International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW)²⁰ are crucial given remote and extreme conditions in the Southern Ocean.

The law of the sea as reflected in the LOSC and general maritime law is therefore central to an understanding of the regulation and management of Southern Ocean activities, as is the case for all of the world's oceans and seas. Nevertheless, the ambiguity regarding the existence of coastal states in the Southern Ocean raises some very particular issues which are not replicated elsewhere, and is a particular issue in the Southern Ocean where flag state jurisdiction predominates more than coastal state jurisdiction. The particular governance framework created under the Antarctic Treaty is also relevant, and that shall now be considered.

3. SOUTHERN OCEAN GOVERNANCE

Following a period of rising tension over territorial claims and increased scientific interest in Antarctica, states with an interest in the future of the continent gathered in Washington in 1959 to negotiate the Antarctic Treaty. The Treaty provided the foundation for the development of the ATS which now includes a framework of additional conventions and instruments in addition to the decisions, recommendations and measures adopted at Antarctic Treaty Consultative Meetings (ATCMs). Those instruments include:

- 1972 Convention for the Conservation of Antarctic Seals (CCAS);²¹
- 1980 Convention for the Conservation of Antarctic Marine Living Resources (CCAMLR);²² and the
- 1991 Madrid Protocol on Environmental Protection (Madrid Protocol).²³

A feature of these additional instruments is that they have all had a focus on the Southern Ocean, with both CCAS and CCAMLR being predicated on the regulation of marine living resources.

The Antarctic Treaty focussed on the critical issues of Antarctica's management as identified at the time. Provisions dealing with demilitarisation,²⁴ the importance of science,²⁵ and the

¹⁹ 1184 UNTS 278.

²⁰ 1361 UNTS 190.

²¹ 1080 UNTS 175.

²² 1329 UNTS 47.

²³ (1991) 30 ILM 1461.

²⁴ Antarctic Treaty, Article I.

resolution of sovereignty claims²⁶ in particular stand out. Nevertheless, the Treaty contained limited provisions dealing with environmental and resource management. This is where the subsequent development of the ATS, and especially CCAS, CCAMLR and the Madrid Protocol has helped to fill in some of these gaps.²⁷ Article IV of the Treaty and its provisions dealing with sovereignty are remarkable. Article IV (1) provides that nothing in the Treaty shall be a basis for an interpretation supporting a renunciation or diminution of previously asserted, or existing, or even potential claims to Antarctica, and in particular as not prejudicing the position of those States who had a possible basis of claim which had not yet been asserted. This provision thereby sought to deal with the position concerning the existing territorial claims, and potential claims that could be made in Antarctica and in doing so deals with the interests of a variety of States. These include the seven territorial claimants, those territorial claimants who may be in dispute with other claimants over the validity of their claims,²⁸ and others such as the United States or Russian Federation (as the successor to the USSR) that may wish to assert a claim in the future. The formula provided is therefore such that all of the principal parties in Antarctic affairs could come together under the control of a single regime without compromising their position on the status of sovereignty claims, or potential sovereignty claims.²⁹ In addition, Article IV (2) provides that “no acts or activities taking place while the present Treaty is in force” shall be a basis for “asserting, supporting or denying a claim” to sovereignty in Antarctica. The effect of this is therefore that all claims, bases of claims, or potential claims were in effect suspended as of the entry into force of the Treaty in 1961 and nothing which occurs while the Treaty is in force will affect the pre-existing position of all of the interested parties – both the claimants and the non-claimants.³⁰

4. SOUTHERN OCEAN SHIPPING

²⁵ Antarctic Treaty, Article II.

²⁶ Antarctic Treaty, Article IV.

²⁷ See the essays in Davor Vidas (ed), *Implementing the Environmental Protection Regime for the Antarctic* (Cambridge University Press, Cambridge: 2000).

²⁸ The claims made by Argentina, Chile and the UK to parts of the Antarctic Peninsula overlap.

²⁹ Arthur D. Watts, *International Law and the Antarctic Treaty System* (Cambridge University Press, Cambridge: 1992) 127-129.

³⁰ F.M. Auburn, *Antarctic Law and Politics* (C. Hurst & Co, London: 1982) 104-110; Gillian Triggs, *International Law and Australian Sovereignty in Antarctica* (Legal Books, Sydney: 1986) 137-150. There has been some consideration as to whether consistent with Article IV of the Antarctic Treaty, outer continental shelf claims can be asserted in the Southern Ocean consistent with the LOSC; see Alan D. Hemmings and Tim Stephens “The extended continental shelves of sub-Antarctic Islands: implications for Antarctic governance” (2010) 46 (239) *Polar Record* 312-327; Mel Weber, “Delimitation of the continental shelves in the Antarctic Treaty area: Lessons for regime, resource and environmental Security” in Alan D. Hemmings, Donald R. Rothwell and Karen N. Scott (eds), *Antarctic Security in the Twenty-First Century: Legal and Policy Perspectives* (Routledge, Abingdon: 2012) 172-196.

The Southern Ocean has a long maritime history and since Captain James Cook's first circumnavigation of Antarctica in 1772-1775, discovery, science and development in Antarctica and the Southern Ocean have been closely linked with mariners and shipping.³¹ There have been various phases as part of that history, with explorers, sealers and whalers all having a prominent role up until the 1950s. Since that time, and with increased regulation of both sealing and whaling, much Southern Ocean shipping is now undertaken in support of Antarctic research bases and stations scattered all throughout the continent including along parts of the warmer and ice free coastal fringe, or in the pursuit of fishing activities, or by way of commercial or private tourism ventures.

Shipping undertaken in support of Antarctic scientific activities is limited to the summer and is principally focussed on the re-supply of existing scientific bases via major 'gateway' ports such as Hobart (Tasmania, Australia) and Lyttelton (New Zealand). Fishing activities, which are closely regulated under CCAMLR, are strictly controlled and limits are placed upon the number of fishing vessels which have access to the CCAMLR area in the Southern Ocean. For example, in 2011/12 a total of 44 CCAMLR registered fishing vessels were engaged in exploratory longline krill fishing.³² In the case of cruise ship operations, in 2011/12 a total of 43 ships registered with the International Association of Antarctic Tour Operators (IAATO) visited Antarctica, undertaking a total of 236 voyages to and from the region and carrying over 43,000 persons of which 60 per cent were passengers on tourist visits.³³ In addition, there has also been an upward trend in yacht visits to Antarctica, with 37 recorded during the 2011-12 season.³⁴ While Southern Ocean shipping numbers do not equate with that of more temperate oceans, the composition of the Southern Ocean 'fleet' is broadly comparable to that which would be found elsewhere.³⁵

³¹ See generally David Day, *Antarctica: A Biography* (Random House, Melbourne: 2012).

³² Commission for the Conservation of Antarctic Marine Living Resources, *Report of the Thirtieth Meeting of the Commission* (Hobart, Australia : 24 October – 4 November 2011) 54, Table 1.

³³ IAATO "2011-2012 Summary of Seaborne, Airborne, and Land-Based Antarctic Tourism" (28/08/2012) available at <iaato.org> (27 September 2012).

³⁴ United Kingdom/IAATO, "Data Collection and Reporting on Yachting Activity in Antarctica in 2011-12" Antarctic Treaty Consultative Meeting XXXV (Hobart 2012) Information Paper 42; the increased number of yachts visiting the Southern Ocean has raised concerns given they are not subject to SOLAS; see Germany, Australia, Norway, United Kingdom, United States, "Yacht guidelines to complement safety standards of ship traffic around Antarctica" (XXXIV Antarctic Treaty Consultative Meeting, Buenos Aires, 2011) Working Paper 37.

³⁵ See generally Antarctic and Southern Ocean Coalition (ASOC), 'Antarctic Shipping', Information Paper 58, XXXI Antarctic Treaty Consultative Meeting, 2008; there has to date been no comprehensive survey undertaken of Southern Ocean shipping, which is in contrast to the 2009 published study of Arctic shipping: see Arctic Council, *Arctic Marine Shipping Assessment 2009 Report* (Arctic Council, Tromsø: 2009).

With the growth in Antarctic shipping in the past decade, especially in cruise ships, there has been an upward trend in significant maritime incidents. In the period 2006-2009 it was reported that eight major maritime incidents occurred in the Southern Ocean, including four groundings, the loss of the *M/S Explorer* in November 2007 following it being holed by ice, and an explosion and fire aboard the Japanese whaler *Nisshin Maru* in February 2007 which resulted in the loss of one life.³⁶ Since that time the Sea Shepherd Conservation Society protest vessel, *Ady Gil*, was scuttled following a collision with the *Shonan Maru No 2* in January 2010 north of Adelie Land,³⁷ and in December 2010 the Korean-flagged fishing vessel *Insung No 1* sank in the Ross Sea, with the loss of 22 crew.³⁸

These developments have highlighted some growing trends with respect to Southern Ocean shipping. The first is that climate change will result in a general warming trend across Antarctica impacting upon both the continent and Southern Ocean. Parts of Antarctica may therefore become more ice free, and parts of the Southern Ocean may become more navigable on a year round or seasonable basis as the sea ice cover retreats. While the impact of these developments upon shipping are difficult to quantify, it would seem clear that the Southern Ocean will become more accessible to shipping which may result in more merchant shipping in the Southern Ocean.³⁹ There will be inevitable limits to any upsurge in Southern Ocean navigation due to its relative remoteness from major economies and trade routes, and the fact that unlike the Arctic, new trans-Antarctic shipping routes have never been seriously contemplated. This is not to suggest that the Southern Ocean will not continue to experience an increase in shipping, rather any surge will more than likely be modest, and may principally arise through increased visitations by tourist cruise ships.

Second is the increasing importance of maritime search and rescue capability throughout the Southern Ocean. A number of high profile incidents over the past decade involving cruise

³⁶ ASOC “Antarctic Ship-borne Tourism: Perspectives on Shipping Management” Antarctic Treaty Meeting of Experts (9-11 December 2009, Wellington, New Zealand), Annex 1.

³⁷ Australian Maritime Safety Authority, ‘Fact finding report into the reported collision involving the New Zealand registered craft *Ady Gil* and the Japan registered whaling ship *Shonan Maru No 2* in the Southern Ocean on 6 January 2010’, undated, available online at <www.amsa.gov.au>.

³⁸ See “South Korean trawler sinks in Antarctic” *The Guardian* (13 December 2010) available at <www.guardian.co.uk/world/2010/dec/13/south-korea-fishing-ship-sink>; see also Commission for the Conservation of Antarctic Marine Living Resources, *Report of the Thirtieth Meeting of the Commission* (Hobart, Australia : 24 October – 4 November 2011) 2.11.

³⁹ See generally Julia Jabour “Maritime Security: Investing in Safe Shipping Operations to help prevent Marine Pollution” in Alan D. Hemmings, Donald R. Rothwell and Karen N. Scott (eds), *Antarctic Security in the Twenty-First Century: Legal and Policy Perspectives* (Routledge, London: 2012) 238-256.

ships,⁴⁰ protest vessels,⁴¹ and fishing vessels,⁴² have highlighted the limited response capability of states with responsibility for Southern Ocean maritime search and rescue under SOLAS. Australia, for example, has a SOLAS designated 'Search and Rescue Region' (SRR) of 52.8 million km²,⁴³ which is one tenth of the earth's surface and sees Australia assume responsibility for all of the maritime domain in the Southern Ocean between 75°E and 163°E.⁴⁴ This encompasses much of the waters offshore the Australian Antarctic Territory, Adelie Land (France), waters adjacent to Heard and McDonald Islands, and Macquarie Island. Despite this responsibility, Australia has no permanent search and rescue assets stationed in the area and has indicated in the past that it has little capacity to respond to major maritime incidents that occur in the Southern Ocean.⁴⁵ While there has been some attempt to address this gap in the search and rescue regime,⁴⁶ there is clearly more that could be done in the Southern Ocean to better align the global regime with the general rights and responsibilities assumed by ATS states including the territorial claimants which under the global international legal framework bear particular responsibility as recognised coastal states.

5. CONTEMPORARY SOUTHERN OCEAN SHIPPING ISSUES

5.1 Marine Pollution and Shipping

With increased shipping activity in the Southern Ocean, there has also been increased attention given to the regulation of ship-sourced marine pollution. There have been a number of developments here at the global and regional level. The IMO has taken an interest in the

⁴⁰ The *MS Explorer* sank in the Southern Ocean in 2007 after striking submerged ice; all passengers and crew were safely evacuated: "MS Explorer sinks" *The Guardian* (23 November 2007) <www.guardian.co.uk/world/gallery/2007/nov/23/antarctica>.

⁴¹ The Sea Shepherd Conservation Society vessel *Ady Gil* collided with the Japanese whaler *Shonan Maru No 2* on 6 January 2012 in the Southern Ocean offshore Adelie Land (France) but within the Australian SRR; the *Ady Gil* was scuttled within 48 hours without loss of life.

⁴² In December 2010, the South Korean trawler *Insung No 1* sank in the Southern Ocean half way between New Zealand and Antarctica: "South Korean trawler sinks in Antarctic" *The Guardian* (13 December 2010) available at <www.guardian.co.uk/world/2010/dec/13/south-korea-fishing-ship-sink>.

⁴³ Australian Maritime Safety Authority (Australia) "Search and Rescue Arrangements in Australia" at <www.amsa.gov.au/Search_and_Rescue/Search_and_Rescue_in_Australia/Arrangements_in_Australia.asp>(17 September 2012).

⁴⁴ Australian Maritime Safety Authority (Australia), "AUSREP: Ship reporting instructions for the Australian area 2012 edition" 5.2 AUSREP Coverage Area at <www.amsa.gov.au/publications/AUSREP_Book.pdf>.

⁴⁵ See Australia, Netherlands, New Zealand, United States "Joint statement on whaling and safety at sea" (14 December 2011), available at <foreignminister.gov.au/releases/2011/kr_mr_111214.html> (28 September 2012).

⁴⁶ See International Maritime Organization "Enhanced Contingency Planning Guidance for Passenger Ships Operating in Areas Remote from SAR Facilities" 2006, MSC.1/Circ.1184, 31 May 2006.

development of a Polar Code for shipping in the polar oceans.⁴⁷ The Code has experienced difficulties in its development, partly due to ATS concerns as to the ability of the IMO to adopt special measures that have application in the Southern Ocean. Development of the Code remains ongoing and there is an expectation that agreement will be reached on a text within the next 3-5 years. For the timebeing, the IMO has responded to the particular circumstances of the polar oceans through instruments such as MARPOL.⁴⁸ The Southern Ocean is listed as a 'Special Area' under MARPOL, Annex I, II, and V.

While MARPOL has given increasing attention to coastal and port state implementation, with the exception of the Southern Ocean's sub-Antarctic islands, coastal states in the Southern Ocean are not recognised as having sovereignty or jurisdiction and are therefore unable to exercise traditional coastal state jurisdiction with respect to marine pollution. Likewise, Southern Ocean port states may be some considerable distance from areas where a pollution incident has occurred, which due to its isolation may never have been identified in the first instance. Issues arise here also with respect to the potential for port state jurisdiction to also be effective. While Annex IV of the Madrid Protocol seeks to address some of these issues, there has to date been no comprehensive legal response. These factors suggest the need for MARPOL to be modified to reflect the particular issues that arise in regard to marine pollution in the Southern Ocean.

It can therefore be observed that a significant issue exists with respect to the regulation of shipping within the region because it is almost exclusively dependent upon flag state regulation and enforcement. As a result of the provisions of the Antarctic Treaty, and the widespread lack of recognition of coastal states in Antarctica other than in the instance of the sub-Antarctic islands,⁴⁹ the capacity to enforce traditional marine pollution laws and regulations is significantly compromised. This results in a law enforcement challenge in that within the Southern Ocean, it is flag state measures and flag state enforcement that predominantly regulates Southern Ocean shipping. This is a significant variation from the dominant paradigm in the law of the sea, which is dominated by the presence and actions of coastal states, and also MARPOL. Similar issues of enforcement arise in the context of

⁴⁷ See Jabour, note 39, 251-254.

⁴⁸ International Convention for the Prevention of Pollution from Ships, as Modified by the Protocol of 1978 Relating Thereto, 1340 UNTS 62.

⁴⁹ These islands include Amsterdam Island (France), Auckland Island (New Zealand), Bouvetøya (Norway), Campbell Island (New Zealand), Crozet Archipelago (France), Heard and McDonald Islands (Australia), Kerguelen (France), Macquarie Island (Australia), Marion and Prince Edward Islands (South Africa), Saint Paul (France), and South Georgia and South Sandwich Islands(UK); see discussion in Andrew Jackson, "International Instruments and Arrangements in the Sub-Antarctic" (2007) 141 (1) *Papers and Proceedings of the Royal Society of Tasmania* 141, 143.

relevant provisions of the Madrid Protocol dedicated to the prevention of marine pollution which likewise rely upon flag state enforcement, though Annex IV does extend to other ships engaged in supporting the “Antarctic operations” of the state parties.⁵⁰ A Polar Shipping Code will be an important step in this area and go some way to raising the standards of vessels operating in the Southern Ocean and, in the process, address concerns about the implementation and enforcement of marine pollution standards.⁵¹ The Code will still very much depend upon flag state implementation and enforcement, though there does remain the potential for seeking to enhance port state controls through so-called ‘gateway’ ports which provide access to Antarctica.⁵² Nevertheless, in the absence of traditional coastal state jurisdiction capable of being enforced against delinquent shipping, environmental security in Antarctica remains compromised because of the limitations upon the enforcement regime.

5.2 IUU Fishing

Maritime regulation and law enforcement against IUU fishing has been a major issue in the Southern Ocean since the late 1990s, raising multiple issues for the CCAMLR regime and states with sub-Antarctic territories around which national law enforcement can be undertaken. A range of ongoing measures have been adopted to monitor fishing vessels in the Southern Ocean, including more recently automated satellite-linked vessel monitoring systems.⁵³ In addition, there have been a number of high profile arrests and prosecutions of Southern Ocean IUU fishers arising from determined efforts within CCAMLR and amongst key Antarctic Treaty parties to combat the problem.⁵⁴

, a number of these cases have been contentious and found their way into the courts. The most high profile of these cases was that of the *Volga*,⁵⁵ a Russian flagged long-line fishing vessel that was apprehended in the Australian Fishing Zone offshore Heard Island in 2002

⁵⁰Madrid Protocol, Annex IV, Article 2.

⁵¹ See Julia Jabour, “‘Safe Ships and Clean Seas’: Evading a Mandatory Shipping Code for Antarctic Waters” (2008) 6 *New Zealand Yearbook of International Law* 93-110.

⁵² See Resolution 7 (2010) ATCM XXXIII “Enhancement of port State control for passenger vessels bound for the Antarctic Treaty area”; and New Zealand, “The Enhancement of Port State Control for Passenger Ships Departing to Antarctica” (XXXIII Antarctic Treaty Consultative Meeting, 2010) Working Paper 37.

⁵³ See CCAMLR Conservation Measure 10-04 (2011).

⁵⁴ See Marcus Haward, “Marine resources management, security and the Antarctic Treaty System” in Alan D. Hemmings, Donald R. Rothwell and Karen N. Scott (eds), *Antarctic Security in the Twenty-First Century: Legal and Policy Perspectives* (Routledge, Abingdon: 2012) 215, 228-230.

⁵⁵ *Volga* (Russian Federation v Australia) (prompt release) (22 December 2002), 42 ILM 159 (hereinafter ‘*Volga*’).

and arrested for illegal fishing. The maritime operation involved the Australian navy frigate HMAS *Canberra* and a boarding party dispatched by helicopter. After the arrest the *Volga* was escorted over the high seas back to the Australian port of Fremantle; a journey of approximately 2,500 nm. It was at that point that a number of legal issues arose concerning the nature of the arrest, whether a hot pursuit of the vessel had been properly undertaken and whether Australia was under an obligation of 'prompt release' with respect to the vessel and its crew.⁵⁶ The International Tribunal for the Law of the Sea (ITLOS) decision, which ultimately found in favour of the Russian argument for prompt release and that the Australian fisheries law was contrary to LOSC regarding the setting of a reasonable bond,⁵⁷ highlighted some of the law enforcement challenges in dealing with IUU fishing in the Southern Ocean even for those states whose sovereignty in the region is not contested.

An issue that was raised but ultimately not considered by the Tribunal in the *Volga* was hot pursuit. However, there have been two other prominent examples of Southern Ocean hot pursuit that highlight some of the challenges associated with Southern Ocean maritime law enforcement. In 2001 the Togo-registered *South Tomi* was pursued from within the Australian EEZ adjacent Heard Island by the Australian-flagged *Southern Supporter* for a total of 14 days over 3,300 nm until two South African naval vessels with Australian personnel aboard were eventually able to effect an arrest 320 nm south of Cape Town. In the 2003 case of the Uruguayan-flagged *Viarsa I*, that vessel was also pursued by the *Southern Supporter* for 21 days over a total of 3,900 nm until the pursuit was brought to an end with the aid of South African and United Kingdom flagged vessels.⁵⁸ Whilst the LOSC is silent as to the capacity of third states to join in to assist with a hot pursuit,⁵⁹ no protests were lodged by either Togo or Uruguay following the Southern Ocean pursuits and, as the final arrest in each instance was effected by Australia officials, the principle of coastal state enforcement of its laws and regulations was maintained.⁶⁰ Like the *Volga*, the arrests of the *South Tomi* and the *Viarsa I* also raised issues with respect to the escort of the detained vessel and crew back to Australia for the commencement of legal proceedings; a law enforcement scenario that rarely exists in the terrestrial domain.

⁵⁶ See the discussion in Tim Stephens and Donald R. Rothwell, "Case Note: Law of the Sea – *The Volga (Russian Federation v. Australia)* I.T.L.O.S. No. 11 (23 December 2002)" (2004) 35 *Journal of Maritime Law and Commerce* 283-291.

⁵⁷ See *Volga*, note 55, [60]-[89] discussing the consistency of the *Fisheries Management Act 1991* (Australia) with the LOSC, Article 73.

⁵⁸ Erik J. Molenaar, "Multilateral Hot Pursuit and Illegal Fishing in the Southern Ocean: The Pursuits of the *Viarsa I* and *South Tomi*" (2004) 19 *International Journal of Marine and Coastal Law* 19-42.

⁵⁹ Molenaar refers to this as 'multilateral hot pursuit': *Ibid.*

⁶⁰ *Ibid.*, 19-23.

The challenges posed for law enforcement by Southern Ocean IUU fishing have prompted states to adopt novel approaches as is illustrated by the 2003 Australia-France Treaty.⁶¹ The treaty, which only applies in the territorial sea and EEZ of the Australian and French sub-Antarctic territories in the Southern Ocean,⁶² allows each state to request assistance from the other when engaged in a hot pursuit,⁶³ and also for hot pursuit to continue through the territorial sea of the other state provided they are informed and no physical law enforcement or other coercive action is taken against the pursued vessel whilst in those waters.⁶⁴ The 2003 Australia-France Treaty has been further amplified by a 2007 Agreement on cooperative fisheries enforcement between Australia and France in the Southern Ocean,⁶⁵ which permits further bilateral cooperation with respect to hot pursuit, jurisdiction, apprehension and enforcement. These types of cooperative maritime enforcement arrangements have particular application in remote regions where there are vast oceans to patrol and limited capacity to do so.⁶⁶

5.3 Criminal and Civil Law Enforcement

As discussed above, the inherent limitations of the ATS make it difficult to enforce criminal and civil law against anyone other than nationals, or in the case of CCAMLR fisheries enforcement, non-nationals operating within proclaimed and recognised EEZ's north of 60°S. In some instances, the limitations of the Antarctic Treaty may be circumvented because of another jurisdictional link. This was the case with the litigation arising from the 1979 Air New Zealand Mt Erebus incident, which resulted in the deaths of all 257 persons aboard the aircraft. In that instance, the aircraft and its operator were all registered in New Zealand and so jurisdiction over the matter, including legal liability, was clear.⁶⁷ On the other hand law

⁶¹2003 Treaty between the Government of Australia and the Government of the French Republic on cooperation in the maritime areas adjacent to the French Southern and Antarctic Territories (TAAF), Heard Island and the McDonald Islands[2005] AustTS 6 (hereinafter '2003 Australia France Treaty').

⁶² Excepting Australia's Macquarie Island that lies to the north of the CCAMLR area. See the 2003 Australia France Treaty, Article 1, which makes clear that the Treaty applies to the territorial sea and EEZ of the Heard and McDonald Islands (Australia), and the French territories of Kerguelen Islands, Crozet Island, Saint-Paul Island, and Amsterdam Island.

⁶³2003 Australia France Treaty, Article 3 (3).

⁶⁴2003 Australia France Treaty, Article 4.

⁶⁵2007 Agreement on Cooperative Enforcement of Fisheries Laws between the Government of Australia and the Government of the French Republic in the Maritime Areas Adjacent to the French Southern and Antarctic Territories, Heard Islands and McDonald Islands[2011] AustTS 1.

⁶⁶ See comment in Warwick Gullett and Clive Schofield, "Pushing the Limits of the Law of the Sea Convention: Australia and French Cooperative Surveillance and Enforcement in the Southern Ocean" (2007) 22*International Journal of Marine and Coastal Law*545-584.

⁶⁷*Re Erebus Royal Commission; Air New Zealand Ltd v Mahon (No 2)* [1981] 1 NZLR 618.

enforcement gaps have been highlighted in other ways in recent years, including attempts to apply Australian law to prohibit Japanese whaling in the Southern Ocean, and matters which arose following clashes between the Japanese whaling fleet and environmental protestors in January 2010.⁶⁸

In recent decades Australia, along with Chile, New Zealand and the United Kingdom, have adopted a strong pro-conservation and anti-whaling stand in the International Whaling Commission, the international organisation with oversight of the 1946 International Convention for the Regulation of Whaling.⁶⁹ These developments have been reflected in Australian law with the adoption of the Whale Protection Act 1980 and, subsequently, the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act). A feature of both Acts is the purported application of Australian law offshore the AAT, with the effect that any whaling activity within the Australian Fishing Zone, the Exclusive Economic Zone⁷⁰ and now within the Australian Whale Sanctuary offshore the AAT, is prohibited. However, unlike much law which is applied in Antarctica, the EPBC Act purports to apply not only to Australian nationals and Australian flagged vessels but to all persons and vessels.⁷¹

Notwithstanding these provisions, Japan has been regularly conducting whaling activities offshore the AAT for nearly 20 years⁷² as part of various scientific research programs which Japan undertakes in reliance upon Article VIII of the International Convention for the Regulation of Whaling. Japan's whaling activities offshore the AAT have gradually gained greater attention in recent years. However, the position taken by various Australian governments is that notwithstanding the provisions of Australian law considerable difficulties would be faced by any active enforcement of that law.⁷³ Nevertheless, in 2004 a non-governmental organisation, Humane Society International (HSI), contested this view and commenced proceedings in the Australian courts arguing that Japanese whaling activity was contrary to the EPBC Act. In a series of proceedings before the Federal Court from 2004-

⁶⁸ See Joanna Mossop, "The security challenge posed by scientific permit whaling and its opponents in the Southern Ocean" in Alan D. Hemmings, Donald R. Rothwell and Karen N. Scott (eds), *Antarctic Security in the Twenty-First Century: Legal and Policy Perspectives* (Routledge, Abingdon: 2012) 307, 314-5.

⁶⁹ 1946 International Convention for the Regulation of Whaling, 161 UNTS 72.

⁷⁰ See Whale Protection Act 1980 (Australia), as amended by the Maritime Legislation Amendment Act 1994 (Australia).

⁷¹ Environment Protection and Biodiversity Conservation Act 1999 (Australia), s. 229.

⁷² See James Shevlin, "Japanese Whaling Activity Observed" (1992) 69 *ANARE News* 18.

⁷³ Ian Campbell, "It's not research – Japan's whale slaughter is commercial", *The Australian* (Sydney), 23 May 2005, p15.

2008,⁷⁴ declaratory and injunctive relief was sought concerning whaling alleged to have been carried out by Kyodo Senpaku Kaisha, a corporation holding a licence from the Japanese government to conduct 'special permit' whaling in the Australian Whale Sanctuary offshore the AAT. Following a series of legal proceedings,⁷⁵ the Federal Court of Australia in January 2008 delivered its final judgment in the matter.⁷⁶ Satisfied that a "significant number of whales were taken inside the Australian Whale Sanctuary",⁷⁷ the court concluded that Kyodo had contravened a number of relevant provisions of the EPBC Act in relation to both minke whales and fin whales and issued orders that they be restrained from engaging in any such further acts.⁷⁸ HSI arranged for the Federal Court's judgment to be served upon Kyodo in Japan in late January 2008,⁷⁹ however, this did not deter Kyodo from continuing with its whaling program during the 2007/2008 season. Since that time, the Japanese government and Kyodo have continued their whaling activities, effectively ignoring the decision of the Australian courts.

A related matter occurred in January 2010 following a collision offshore the French territory of Adelie Land between the Japanese whaler *Shonan Mauru No 2* and the New Zealand registered trimaran *Ady Gil*, a lightweight carbon fibre vessel engaged in part of the Sea Shepherd Conservation Society's anti-whaling protest activities. The *Ady Gil* was significantly damaged by the incident and was eventually scuttled. Notwithstanding enquiries into the incident by both Australian and New Zealand maritime authorities,⁸⁰ no criminal or civil proceedings have arisen. A particular feature of the incident was that Japanese maritime authorities and the Master and crew of the *Shonan Mauru No 2* refused to cooperate with the enquiries into the *Ady Gil* sinking.

5.4 Maritime Security

⁷⁴ Commencing with *Humane Society International Inc v Kyodo Senpaku Kaisha Ltd* [2004] FCA 1510.

⁷⁵ See discussion in T. Stephens and D.R. Rothwell, "Japanese Whaling in Antarctica: *Humane Society International Inc v Kyodo Senpaku Kaisha Ltd*" (2007) 16 *Review of European Community and International Environmental Law* 243-246

⁷⁶ *Humane Society International Inc v Kyodo Senpaku Kaisha Ltd* [2008] FCA 3.

⁷⁷ *Ibid*, [39].

⁷⁸ *Ibid*, [55].

⁷⁹ P. Alford, 'Aussie judgment served on whalers', *The Australian* (Sydney), 24 January 2008, p7.

⁸⁰ See Maritime New Zealand, *Investigation Report: Ady Gil and Shonan Maru No. 2* (Maritime New Zealand, Wellington: 2010); Australian Maritime Safety Authority, 'Fact finding report into the reported collision involving the New Zealand registered craft Ady Gil and the Japan registered whaling ship Shonan Maru No 2 in the Southern Ocean on 6 January 2010', undated, available online at www.amsa.gov.au.

The incidents noted above arising from clashes between protestors and Japanese whalers, has shone the spotlight upon maritime security in the Southern Ocean. For the foreseeable future, there is every likelihood there will be ongoing confrontation in the Southern Ocean over Japanese whaling, while there is also the possibility that Antarctic cruise ships may be vulnerable to attack by either terrorists or pirates.⁸¹ The legal and enforcement issues potentially associated with terrorist or pirate attacks have been highlighted by recent clashes between the Japanese whaling fleet and the Sea Shepherd Conservation Society (SSCS). In January 2008, two SSCS members boarded the Japanese whaler *Yushin Maru No. 2* without invitation and were detained onboard for three days.⁸² The environmental protestors were eventually handed over to the Australian customs vessel *Oceanic Viking* pending their transfer back to the SSCS vessel *Steve Irwin*.⁸³ In February 2010 a similar incident occurred when a SSCS member, Pete Bethune, boarded the Japanese whaler *Shonan Maru No 2*, in order to present the master of that vessel with a claim arising from the damage that had occurred a month earlier to the *Ady Gil*.⁸⁴ Bethune was detained on board the *Shonan Maru No 2* and taken back to Japan where he was placed on trial for a number of minor criminal charges. Bethune was eventually given a two-year suspended sentence after making certain admissions, following which he was deported.⁸⁵

The SSCS incidents in 2008 and 2010 once again highlight the difficulty associated with Southern Ocean law enforcement which would also arise following a terrorist or pirate attack. In the 2008 incident the Japanese whaler effectively had no choice but to hand the two protestors over to the Australian authorities aboard the *Oceanic Viking* as there were no Japanese law enforcement assets in place which could have arrested the protestors and returned them to Japan for trial. Though the *Yushin Maru No. 2* could have exercised the option of concluding its whaling operations for the season, that action would have resulted in

⁸¹ For the purposes of the current discussion it will be assumed that given the remoteness of Antarctic scientific bases, and the controlled access to those bases, they are relatively secure from a terrorist attack.

⁸² Andrew Darby, "Whale war showdown", *Sydney Morning Herald* (Sydney), 16 January 2008, p1.

⁸³ A. Fraser, "Police left with whales of a mess", *The Canberra Times* (Canberra) 19 January 2008, p1, 2; SSCS asserted that they sought to board the *Yushin Maru No .2* to present the Captain of the vessel with a letter "advising him that his company's activities in the Australian whale sanctuary were in violation of international conservation law and of ... [the] Federal Court ruling that outlawed whaling in the area": J. Madden and P. Alford, "Skippers' standoff on pair's release", *The Australian* (Sydney), 17 January 2008, 3.

⁸⁴ See discussion in Don Anton, "Protecting Whales by Hue and Cry: Is There a Role for Non-State Actors in the Enforcement of International Law?" (2011) 14 *Journal of International Wildlife Law and Policy* 137-145.

⁸⁵ K. Newton, "Bethune's Secret Deal" *Dominion Post* (Wellington), 8 July 2010, p1. For further details see Trevor Ryan, "Sea Shepherd v Greenpeace? Comparing Anti-Whaling Strategies in Japanese Courts" (2009) 7 *New Zealand Yearbook of International Law* 131-168.

a significant disruption of its planned operations and come at a considerable commercial cost. In 2010 the master of the *Shonan Maru No 2* was able to exercise the option of detaining Bethune on board his vessel and returning him to Japan because not only was the ship better equipped for that purpose, but also the incident arose towards the end of the Japanese whaling season and so did not prove to be commercially disruptive.

If a terrorist attack was to take place in Antarctica, setting aside the response to such an event, how would law be enforced? To begin with there is no Antarctic police force, nor are there police forces stationed at any of the Antarctic bases. While many Antarctic base managers have a role in maintaining discipline, that is a very distinctive role from the detention and arrest of a terrorist. Issues therefore arise as to both legal capacity and ability to undertake enforcement action following a terrorist act in Antarctica. Beyond that, the actual application of law to an Antarctic terrorist act would be problematic depending on where it took place. If the act occurred on the continent, then the provisions of the Antarctic Treaty would have clear application. If the perpetrators of the terrorist act were nationals of non-Antarctic Treaty parties a legal question may arise as to whether universal jurisdiction could be exercised over these persons so as to allow for a criminal prosecution. In the alternative, could terrorists be detained and handed over to their state of nationality? If a maritime act of terrorism occurred, similar issues would arise although in that instance the laws of the flag state of any vessel the subject of such an attack may be capable of application. However, again a question would arise with respect to enforcement. In this regard, while the provisions of the amended Convention for the Suppression of Unlawful Acts Against the Safety of Maritime Navigation (SUA Convention) would be applicable,⁸⁶ the convention still relies upon national law enforcement mechanisms for its effectiveness. In this respect some of the difficulties that would arise with respect to law enforcement and prosecutions following a terrorist incident at sea in Antarctica are not dissimilar to the challenges that have been confronted in addressing pirate attacks off the coast of Somalia between 2008-2011 when the naval forces undertaking the counter-piracy operations are constrained from prosecuting the pirates for a variety of legal reasons.⁸⁷

6. CONCLUDING REMARKS

Legal issues associated with Southern Ocean shipping are rapidly emerging. While the Southern Ocean is not *sui generis* and remains subject to the same laws of the sea and

⁸⁶1988 Convention for the Suppression of Unlawful Acts Against the Safety of Maritime Navigation, 1678 UNTS 222.

⁸⁷ J.A. Roach, "Countering Piracy off Somalia: International Law and International Institutions" (2010) 104 *American Journal of International Law* 397-416.

maritime law that apply elsewhere, there are a range of unique issues that arise in the Southern Ocean. The first is the absence of recognised coastal states with capacity to exercise both proscriptive and enforcement jurisdiction off the Antarctic coast. The second, arising from the first, is the predominant reliance upon flag state jurisdiction. The third is the particular issues arising from undertaking maritime regulation and enforcement in one of the world's most remote oceans and associated maritime safety and security issues. A possible response to these issues is the need for greater attention to be given to emergency prevention, preparedness and response (EPPR). The Southern Ocean is remote from emergency response facilities. Antarctica scientific bases along the continent have limited capacity and infrastructure to provide EPPR, and similar issues arise in the sub-Antarctic where islands are either uninhabited or have minimal infrastructure. These issues have been highlighted in the Southern Ocean by recent maritime incidents. The November 2007 sinking of the *MV Explorer* in the Bransfield Strait off King George Island resulted in a response from the Chilean mainland. An Action Group on Antarctic Fuel Spills (AGAFS) was formed following this incident. This is notwithstanding that EPPR is addressed under Article 15 of the Madrid Protocol under which the parties agree to provide response to environmental emergencies and cooperate in the formulation of contingency plans. However no more detailed mechanisms have been established by the Council of Managers of National Antarctic Programs (COMNAP). More attention needs to be given to the legal framework associated with shipping issues in the Southern Ocean addressing not only matters directly associated with the protection and management of the marine environment, but day-to-day shipping operations, which in the Southern Oceans' current legal and environment extremes may be tested to breaking point.