# The Arctic Ocean: Boundaries and Disputes

Andreas Østhagen & Clive H. Schofield

The Arctic region is sometimes described as an area of geopolitical competition and boundary disputes. However, in terms of maritime claims, such portrayals are misleading. Our examination of maritime boundaries in the Arctic, maritime claims and extended continental shelf submissions in the central Arctic Ocean, shows that the Arctic is a space where states have settled disputes before real conflict could emerge. In that sense the Arctic is arguably an ocean apart and the case of the Arctic can be of broader relevance regarding maritime disputes in other regional contexts.

### Introduction<sup>1</sup>

"Unresolved maritime boundaries can be among the most difficult disputes for states to resolve" (Lavrov & Støre, 2010). This remark came in 2010 as the Norwegian and Russian foreign ministers had successfully resolved a maritime boundary dispute in the Arctic that had been a thorn in the side since the 1970s. The benefits of agreeing on and delimiting maritime boundaries clarifying the limits of jurisdiction and sovereign rights of all states might seem to outweigh the costs of concessions made through negotiations. Still, however, almost *40 percent* of all maritime boundaries remain unsettled and frequently disputed, across all continents (Østhagen, 2021: 1).

In this paper we examine how the United Nations Convention on the Law of the Sea (LOSC) has set the parameters for the maritime claims and boundary agreements in the Arctic (United Nations, 1982) [hereinafter, LOSC or the Convention]. In turn, we examine each of the maritime claims in the Arctic, and the factors that have enabled agreement on these (when that is the case). Our work leans on a legal analysis and an evaluation of political factors, building on the range of scholarly work that has emerged over the last decade examining the various legal aspects of maritime boundary claims in the north.<sup>2</sup> We add to this literature by comparing and contrasting different practices and outcomes, while also adding a 'global' outlook to the Arctic's recent developments.

Locating the Arctic in the international legal context (the law of the sea in particular), we find that the maritime claims of the Arctic coastal states are predominantly in keeping with international legal norms, and that these states have made substantial progress in resolving overlapping maritime claims through maritime boundary agreements between themselves. Greater uncertainty exists concerning 'outer' or 'extended' continental shelf rights seawards of 200 nautical miles (M) from

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baselines along the coast. Nonetheless, despite broad areas of overlapping assertions to continental shelf rights in the central Arctic Ocean, the region has been characterized by substantial scientific and legal cooperation – not conflict.

### The Law of the Sea and the Arctic Ocean

The 1982 United Nations Convention on the Law of the Sea (LOSC) provides the generally accepted legal framework governing maritime jurisdictional claims and the delimitation of maritime boundaries between national maritime zones (United Nations, 1982). The LOSC has gained widespread international recognition: at the time of writing, 167 states (plus the European Union) had become parties to it (United Nations, 2021).

A key achievement of the LOSC was agreement on the spatial limits to national claims to maritime jurisdiction, predominantly defined as extending to a set distance from baselines along the coast. Thus, the territorial sea, contiguous zone and exclusive economic zone (EEZ) are not to exceed 12, 24 and 200 M respectively from baselines along the coast (LOSC Articles 3 and 4, 33 and 57). The delineation of the outer limits of each of these zones of maritime jurisdiction requires an understanding of the location of baselines along the coast (see Figure 1). Defining the outer limits of the continental shelf is more complex, involving a range of geophysical criteria as well as distance measurements, as explored below in relation to the central Arctic Ocean.

Of the five Arctic Ocean coastal states – Canada, Denmark, Norway, Russia and USA – four are parties to the LOSC. Although not a party to the LOSC, the USA generally regards the core principles of UNCLOS as being reflective of customary international law and thus binding on all states.<sup>4</sup>

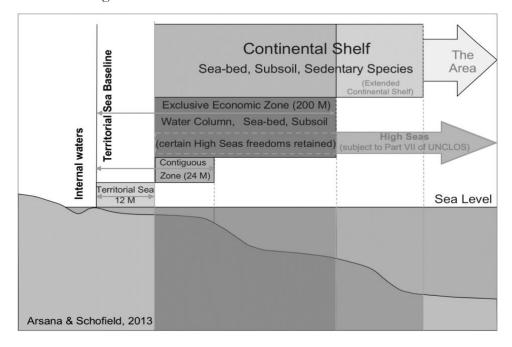


Figure 1: Schematic of maritime jurisdiction claims of a coastal State measured seawards from baselines along the coast.<sup>5</sup>

### Arctic Maritime Boundary Agreements

All the Arctic coastal states have advanced broad maritime claims, in keeping with both international law and their own national interests (R. R. Churchill, 2001). These maritime claims include 12 M-broad territorial seas (except in respect of Greenland, where a 3 M territorial sea is claimed). Canada, Norway, Russia and the USA also claim contiguous zone rights out to 24 M, although Norway's claim here does not apply to Jan Mayen Island or Svalbard. Additionally, all the Arctic coastal states claim EEZs out to 200 M (see Figure 2), although Norway has only claimed a Fisheries Protection Zone around Svalbard.

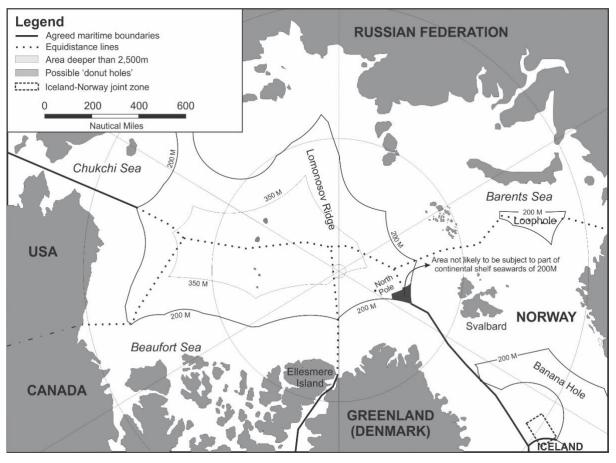


Figure 2: Arctic Maritime Claims and Boundaries.

Source: Prepared for the authors by I Made Andi Arsana

Focusing on the Arctic Ocean-area specifically, there are five bilateral maritime boundary situations on the Arctic Ocean: Russia–USA, USA–Canada, Canada–Denmark (Greenland), Denmark (Greenland)–Norway (Svalbard), and Norway–Russia (see Figure 1).<sup>6</sup> Considerable progress has been achieved in the resolution of overlapping maritime claims between adjacent Arctic States, at least within 200 M of the coast.

We commence by looking at each agreement chronologically. In 1973, Canada and Denmark, on behalf of Greenland, agreed on an almost 1,500 M long continental shelf boundary (Canada–Denmark, 1973). The boundary stretches from near the intersection of their 200 M limit at the mouth of the Davis Strait, to the Lincoln Sea by way of Baffin Bay, Nares Strait and Robeson

Channel (Alexander, 1993: 371–72). The agreement is innovative in two ways. First, the boundary includes a short gap in the Nares Strait within which the disputed Hans Island lies. Measuring just over 1km<sup>2</sup>, this islet is the sole disputed land territory in the Arctic region. Entirely ignoring this disputed feature was a creative way to circumvent this sovereignty dispute (see Figure 3).

Moreover, while the boundary is based on equidistance between opposite shores, at the time of its negotiation there was uncertainty over the location of certain basepoints in the high Arctic, so the treaty made provision for later adjustment of the line, in light of new surveys, on the basis of the same principles (Canada–Denmark, 1973: para. 4). Accordingly, a slight adjustment to the boundary line was made in 2004 (Canada–Denmark, 2004).

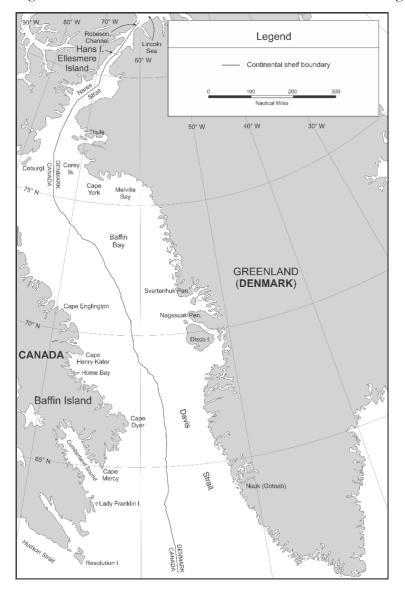


Figure 3: Maritime Delimitation between Canada and the Kingdom of Denmark (Greenland).

Source: Prepared for the authors by I Made Andi Arsana

A further long maritime boundary was delimited between the USA and the then-USSR in 1990 (United States–Union of Soviet Socialist Republics, 1990; Verville, 1993). This agreement stretches

through the Bering Strait between Alaska and Russia, and extends into the Arctic Ocean to the north and the Bering Sea to the south. The agreement is based on the line defining the western limit of the area covered by the 1867 Convention whereby the USA purchased Alaska from the Russian Empire (Russia–United States, 1867). The boundary line relevant to the Arctic Ocean is a straight line heading due north from a specified point in the Bering Straits 'as far as permitted under international law' and thus to their 200 M limits and potentially further seaward in the central Arctic Ocean depending on the delineation of outer continental shelf limits beyond their EEZ limits.

The agreement provides for four 'Special Areas', one of which is located in the Arctic Ocean (the other three being in the Bering Sea) and comprises an area on the US side of the boundary line which lies within 200 M of the baselines of the USSR but beyond 200 M from the baselines of the USA (United States–Union of Soviet Socialist Republics, 1990: para. 3 (1)). These special areas ensured that all maritime spaces within 200 M of either or both of their coasts are delimited between these two states. Although this boundary treaty is not in force (Russia has not formally ratified it), both sides have respected its terms, consistent with an exchange of notes between them (see Figure 4) (Verville, 1993: 454; Smith, 1994; Schofield, 2015).

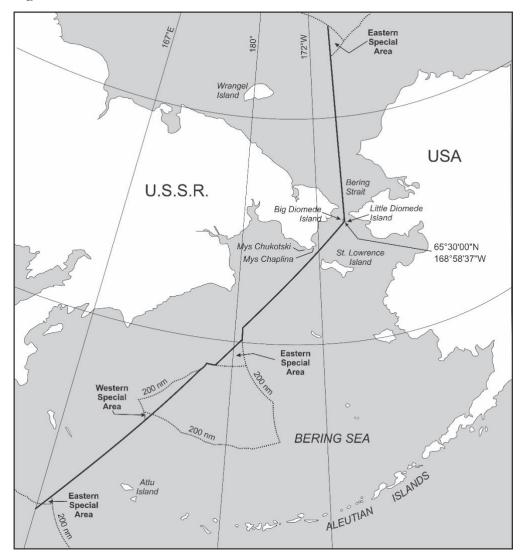


Figure 4: Maritime Delimitation between the USA and USSR/Russian Federation.

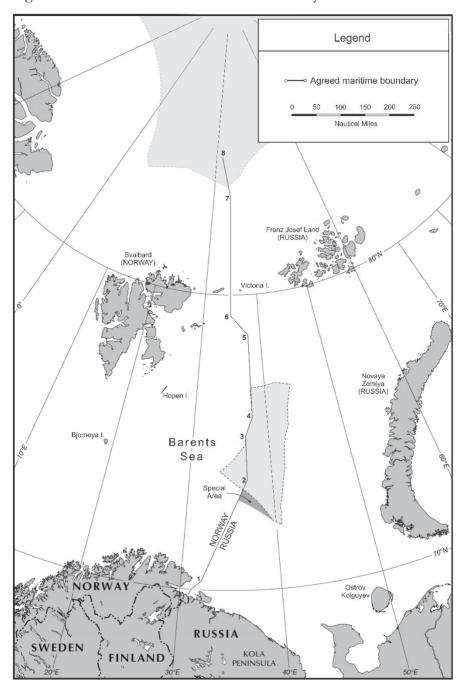
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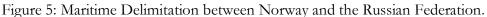
Further progress was made in maritime delimitation in the Arctic Ocean, when in **February 2006 Denmark and Norway** reached agreement on an approximately 430 M-long equidistance-based continental shelf and fisheries zone boundary between the coasts of Greenland and Svalbard (Denmark–Norway, 2006; Oude Elferink, 2007). In concluding that treaty, Denmark implicitly recognised that Svalbard generates both fishing and continental shelf rights. For Norway, this was an important consideration, as it underpins the Norwegian view that Svalbard can generate offshore zones and thus its relevance for maritime boundary delimitation in the Arctic (see Figure 1). This point is at times disputed by other states on the wording of the Svalbard Treaty.<sup>6</sup>

Then the perhaps most significant recent progress in resolving Arctic Ocean maritime disputes involves **Norway and Russia and the 2010**-maritime boundary agreement. First, in 2007, the two countries reached an agreement essentially replacing the 1957 Varangerfjord treaty, extending the delimitation line to 39.41 M (Russia–Norway, 2007). However, further north, in the Barents Sea and Arctic Ocean, overlapping claims to continental shelf and encompassing an area of approximately 175,000 km<sup>2</sup> persisted from the 1970s (Moe, Fjærtoft, & Øverland, 2011). At the core of the dispute was Norway's preference for a median line solution and Russia's preference for a sector line. Access to fisheries resources, especially commercially valuable cod and haddock stocks supported by the highly productive and diverse ecosystem of the Barents Sea, also caused friction, although ultimately this led to cooperative management measures being adopted before the boundary agreement (R. Churchill & Ulfstein, 1992; Stabrun, 2009; Hønneland, 2012).

The breakthrough on the remaining boundary issues came in 2010, when the two countries committed to an all-purpose boundary to be drawn "on the basis of international law in order to achieve an equitable solution", recognizing "relevant factors ... including the effect of major disparities in respective coastal lengths" while dividing "the overall disputed area in two parts of approximately the same size" (Norwegian Government, 2010). The four-decade-long dispute was resolved through a landmark agreement whereby the disputed area, within and beyond 200 M limits, was delimited for continental shelf and EEZ rights between the two states (Norway–Russian Federation, 2010), as well as the Fisheries Protection Zone around Svalbard. The agreement contains provisions aimed at continued cooperation over fisheries (Henriksen & Ulfstein, 2011: 1); there are also provisions on co-management of any hydrocarbons that straddle the boundary (Byers, 2013: 43–44; Fjærtoft et al., 2018).

An innovative feature of the agreement is that, analogous to the Special Areas defined between the USA and USSR, an area of EEZ located on the Russian side of the boundary line is actually beyond 200 M from Russian baselines but is within 200 M of the Norwegian coast (Norway–Russian Federation, 2010: para. 3). This arrangement enabled the two states to divide the entirety of the EEZ area within 200 M of their coasts, albeit not necessarily within 200 M of the baselines of the state on whose side of the line a particular area of EEZ is located (see Figure 5).





Source: Prepared for the authors by I Made Andi Arsana

Finally, **in 2012, Canada and Denmark** (Greenland) announced an agreement in principle on a maritime boundary out to 200 M in the Lincoln Sea (Canadian Department of Foreign Affairs, 2012): equidistance would be applied, with further technical adjustments to be made to the 1973 Agreement (see Figure 1).

#### Arctic Disputes and Overlaps

The main dispute remaining in regards to Arctic maritime zones concerns delineation in the **Beaufort Sea between Canada and the USA**. The dispute centres on the wording of a treaty

concluded between Russia and Great Britain in 1825 (the USA assumed Russia's Treaty rights when it purchased Alaska in 1867; Canada acquired Britain's rights in 1880). This treaty set the eastern border of Alaska at the "meridian line of the 141st degree, in its prolongation as far as the frozen ocean" (Great Britain-Russia, 1825: para. 3). Canada asserts that this treaty provision established both the land border and the maritime boundary, and that both must follow a straight northern line. In contrast, the USA holds that the delimitation applies only to land and therefore does not extend beyond the terminus of the land boundary on the coast. For delimitation in the Beaufort Sea, the USA considers an equidistance line to be the legally and geographically appropriate solution (see Figure 6) (US Department of State, 1995).

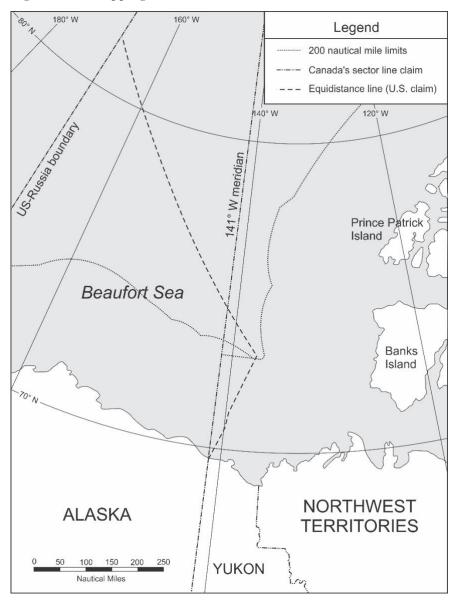


Figure 6: Overlapping Maritime Claims in the Beaufort Sea.

Source: Prepared for the authors by I Made Andi Arsana

Canada and the USA sought to resolve the Beaufort Sea dispute in the late 1970s, but without success. Collaborative mapping beyond 200 M with a Canadian and a US icebreaker (2008–2011) arguably opened the way to resolution of this, by showing that the continental shelf in the Beaufort Sea might stretch 350 M or more offshore (Baker & Byers, 2012; Byers & Østhagen, 2017). The extended continental shelf adds a twist to the Beaufort Sea boundary dispute as seawards of 200 M, an equidistance line is diverted to the northwest because of the influence of Canadian Arctic islands (Baker & Byers, 2012). In spatial terms, therefore, both Canada and the USA would benefit from adopting the other's position (see Figure 6).

In March 2010, the Canadian government signalled its desire to "work with other northern countries to settle boundary disagreements" (Government of Canada, 2010). Discussions were, however, suspended in 2011, after the two countries decided they would need more scientific information on the existence and location of hydrocarbon reserves before negotiating a boundary.

The other dispute that remains concerning maritime zones is between **Canada and Denmark in the Lincoln Sea**. In 2004, the scope of the dispute was reduced when Denmark modified its straight baselines, replacing the 40.9 M baseline east of Beaumont Island with a series of shorter baselines, including one connecting Beaumont Island to John Murray Island, the next island in the chain (Kingdom of Denmark, 2004). These Danish changes reduced the size of the northernmost disputed area almost to the point of eliminating it, and likely contributed to the announcement made by the Canadian and Danish foreign ministers in 2012 that negotiators "have reached a tentative agreement on where to establish the maritime boundary in the Lincoln Sea" (Canadian Department of Foreign Affairs, 2012; Mackrael, 2012).

The only issue left for negotiation was a joint management regime for any straddling hydrocarbon deposits. This point could not be dealt with solely by the Danish and Canadian negotiators, because, although Denmark retains control over Greenland's foreign policy, the Greenland government has since 2008 exercised control over natural resources, including on the continental shelf (Erdal, 2013). In 2018, Denmark and Canada established a 'Joint Task Force on Boundary Issues' in order to settle the outstanding issues regarding this maritime,<sup>7</sup> which has yet to lead to a final agreement as per October 2021.

#### Outer continental shelf areas and the Central Arctic Ocean

On 2 August 2007, a Russian expedition used a submersible to drop a rustproof titanium casket containing a Russian flag on the Arctic seabed at around 4,200 m depth beneath the North Pole (BBC News, 2007). This action generated considerable media coverage, much of which was decidedly alarmist in nature. This tone extended to the diplomatic arena when the Canadian Foreign Minister, Peter MacKay, appeared to dismiss the flag-dropping incident as a stunt, stating "This isn't the 15<sup>th</sup> century. You can't go around the world and just plant flags and say 'We're claiming this territory" (Parfitt, 2007). In response, the Russian Foreign Minister, Sergei Lavrov, observed that "no one is throwing flags around"; analogies were drawn between Russia's action and Hillary and Tenzing planting the Union Jack on the summit of Everest in 1953 (Parfitt, 2007). Indeed, Lavrov was at pains to emphasize that Russia was not acting unilaterally: its actions were "in strict compliance with international law" (Novosti, 2007).

Concerning continental shelf areas seawards of 200 M, LOSC Article 76 lays down complex criteria whereby the outer limits of the continental shelf may be determined with assistance from a

scientific and technical body established through the Convention – the Commission on the Limits of the Continental Shelf (CLCS). This complexity arises because continental shelf entitlements seawards of 200 M limits are delineated not solely by reference to a distance formula. These areas of continental shelf seawards of 200 M limits are often referred to as 'outer' or 'extended' continental shelf, although legally there is only one continental shelf. Two maximum constraint or cut-off lines are then applied: a limit of 100 M from the 2500-metre depth isobath or depth contour, or 350 M from the coastal state's baselines (Article 76(5)).

It has been suggested that delineating the outer limits of the continental shelf seawards of 200 M limits is challenging because of numerous 'complexities and ambiguities' associated with Article 76 (Macnab, 2004b; 2004a; Cook & Carleton, 2000), as well as issues concerning the way in which the Commission works (McDorman, 2002). Preparing a submission for the CLCS requires a coastal state to gather information related to the morphology of its continental margin and its geological characteristics as well as bathymetric information relating to water depth, and also to determine distance measurements, for example, the location of 200 M and 350 M limit lines. Although this is necessarily an expensive and time-consuming task, this process does have the significant virtue of providing for a definable outer limit to the continental shelf – which McDorman has termed "the real achievement" of Article 76 of LOSC (McDorman, 2002: 307).

All the Arctic coastal states have been active in gathering the data required to formulate submissions. Some – like the USA and Canada – have cooperated amongst themselves, for example, in order to facilitate joint surveys. All the Arctic littoral states except the USA (as a non-LOSC party) have made submissions to the CLCS. It appears from these submissions that, should the Commission be in agreement, the vast majority of the seabed of the Arctic Ocean will form part of the outer or extended continental shelf of the coastal states.

The major uncertainty here relates to the CLCS's view of how the major Arctic Ocean ridge systems are to be treated. These include the Lomonosov and Gakkel Ridges, where the submissions of Canada, Denmark (Greenland) and Russia overlap; and the Alpha Rise, where the submissions of Canada, Russia and the USA intersect (see Figures 1 and 7). Here it is important to note that the provisions of Article 76 of the LOSC are without prejudice to delimitation of continental shelf boundaries (LOSC, Article 76(10)). If a submission involves an area of continental shelf subject to overlapping claims and a protest arises, the Commission lacks the mandate to consider the submission unless all the states concerned agree that the CLCS can proceed.<sup>8</sup>

Ultimately, therefore, these overlapping assertions of continental shelf rights will need to be resolved by the submitting states themselves through diplomacy and negotiations. Indeed, the three Arctic littoral states most likely to have to enter bilateral or trilateral negotiations over delimitation of their extended continental shelves – Canada, Denmark (Greenland) and Russia – have all declared their intention to work within the framework of LOSC and international diplomacy (Byers, 2017; Østhagen, 2018; Bykova, 2019). A significant caveat here is that it is as yet less than clear whether maritime delimitation for outer continental shelf areas will follow the same approach as that for delimitation within 200 M limits. An assessment of existing practice concerning delimitation of the outer continental shelf suggests that the vast majority of agreements either only marginally stray beyond 200 M limits or continue the methodology applied within 200 M of the coast and indicate a line continuing seawards of EEZ limits (Schofield & Leonardo, 2020: 181). This suggests that there may be only a "a limited role" for geophysical factors in delimitation of

outer continental shelf areas (Van Pay, 2012: 56), but the practice thus far is limited and there are exceptions to the rule.<sup>9</sup>

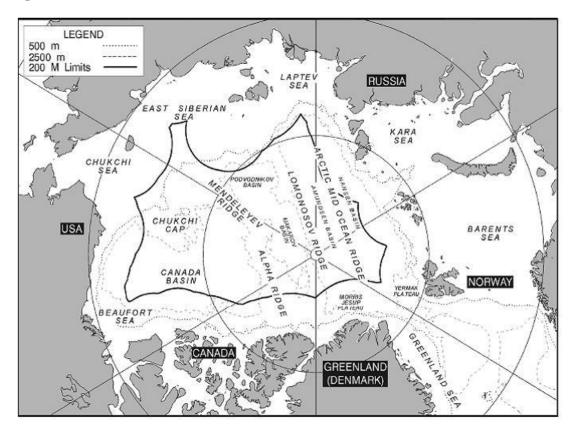


Figure 7: Arctic Ocean 200 M Limits and Undersea Features.

Source: Prepared for the authors by I Made Andi Arsana

### The Arctic Ocean Experience

We have outlined how the Arctic littoral states, in their efforts to delineate the outer limits of their maritime zones and delimit maritime boundaries where such claims overlap with those of neighbouring states, have largely abided by the international legal regime for the oceans (LOSC).

The counterpoint to this general compliance with the international law of the sea provisions is the practice of the Arctic States concerning some of the baselines from which maritime claims are predominantly measured. That said, excessive straight baselines claims are by no means confined to the Arctic Ocean (Lathrop, Roach, & Rothwell, 2019: 126–53). Fundamentally, affirming LOSC and agreeing on maritime boundaries in the Arctic region have not only been steps taken in order to provide frameworks for ocean-based resource development: they have involved efforts to ensure the primacy of the Arctic states as other actors are increasingly engaged in regional affairs ranging from science to fisheries.

Further, they have shown considerable innovation in their ocean boundary-making practice – as illustrated by the provisions in Canada and Denmark's treatment of Hans Island as well as provisions allowing for the boundary line to change in response to more accurate surveys of

formerly ice-covered coastlines. Similarly, innovation is evident in the USA–USSR/Russia and Norway–Russia's boundary arrangements concerning the creation of Special Areas.

Such creative practice may well be necessary in the future, especially in the context of a changing climate and coastline. This necessarily has implications for Arctic baselines, maritime zones and undelimited maritime boundaries. That said, efforts and experiences across the Arctic region are not uniform. In other words, the different boundary agreements and processes leading to those agreements across the Arctic do not seem to reflect any 'special Arctic circumstances' or one distinct *approach* to these issues. Rather, the resolution of each maritime delimitation dispute depends on a unique suite of inter-related issues specific to each distinct case.<sup>10</sup>

However, in a broad sense, it can be observed that the heightened attention given to the Arctic by the littoral states at the start of the new millennium appear to have prompted renewed efforts in settling the boundaries still in dispute at that time. Between 2006 and 2012, four agreements or tentative agreements were signed, while Canada and the USA embarked on an attempt to solve their maritime boundary delimitation issues in the Beaufort Sea even if a resolution remains out of sight for the present (Byers & Østhagen, 2017).

What seems clear from these Arctic cases is how the entitlements that LOSC has delivered to the littoral states has prompted cooperation, ranging from managing shared fish stocks (relevant across all cases examined here) to joint development projects regarding petroleum resources. While the 2010 maritime boundary treaty between Norway and the Russian Federation appears to have taken four decades to realise, it was arguably built on longstanding and substantive maritime cooperation. This is especially true with respect to fisheries in that part of the Barents Sea subject to competing maritime claims and, crucially, this fisheries-related cooperation continues to the present day. Similarly, despite concerns being raised over access to and control over the central Arctic Ocean, this area has featured a series of submissions to the relevant scientific and technical body established under the LOSC, the CLCS, as well as cooperative management of pressing issues through regional 'soft law' instruments, especially under the auspices of the Arctic Council.

The Arctic 'experience' in practice not only counters the reoccurring alarmist claims of territorial grabs, but it also showcases how the international legal framework that allows for maritime jurisdictional expansion underpins a situation devoid of outright conflict over who owns what, and where. What makes the Arctic Ocean exceptional with respect to maritime boundaries is that so many are *settled*, in contrast to the general trend across the world (e.g., Østhagen 2021). Moreover, relevant fisheries agreements and, perhaps more importantly, hydrocarbon resource-sharing arrangements have lowered the domestic costs for the Arctic states in regards to settling with neighbours.

Increased use of oceans as a resource base, for everything from seabed minerals to fisheries, has further heightened the importance of maritime space for states. However, as seen with the Arctic region, settling disputes *before* they escalate into outright conflict and/or stalemates can remove some of the impetus for friction. That is a lesson relevant not only to the Arctic, but to maritime regions across the globe.

#### Notes

- This article builds on the chapter by the authors from 2020: "A Divided Arctic: Maritime Boundary Agreements and Disputes in the Arctic Ocean." in *Handbook on Geopolitics and Security in the Arctic*, edited by Joachim Weber. This is, however, an updated and adapted version. For an extended version of this article, see also Andreas Østhagen & Clive H. Schofield (2021) "An ocean apart? Maritime boundary agreements and disputes in the Arctic Ocean", *The Polar Journal*, DOI: 10.1080/2154896X.2021.1978234.
- Amongst others (D. R. Rothwell 2012; Hoel 2009; D. Rothwell 1996; Byers 2013; Henriksen and Ulfstein 2011; Jensen 2016; Byers and Østhagen 2017; Schofield and Sas 2015; Townsend-Gault 2007; Fabri et al. 2021)
- 3. From time to time the issue of ratification is brought forward by US administrations from both parties, but the issue gets stranded in Congress (Roach and Smith, n.d., 10).
- 4. Source: (International Hydrographic Organization (IHO) 2014) Material from IHO-IAG publication C-51, A Manual on Technical Aspects of the United Nations Convention on the Law of the Sea 1982 (TALOS), Edition 5.0.0 dated June 2014 is reproduced with the permission of Professor Clive Schofield and Dr I Made Andi Arsana, authors of the animated graphics, and the Secretariat of the International Hydrographic Organization (IHO) and the Executive Council of the International Association of Geodesy (IAG) (Permission N° 8/2020) acting for the International Hydrographic Organization (IHO) and the International Association of Geodesy (IAG) which do not accept responsibility for the correctness of the material as reproduced: in case of doubt, the IHO-IAG's authentic text shall prevail. The incorporation of material sourced from IHO-IAG shall not be construed as constituting an endorsement by IHO or IAG of this product.
- 5. We have opted not to include the near-Arctic maritime boundary agreements between Iceland and Norway (Jan Mayen), and Iceland and Denmark (Faroe Islands), as these are just on the border of the Arctic Circle and do not extend into the Arctic Ocean proper.
- 6. (Svalbard Treaty 1920). For more on this dispute, see for example (Østhagen, Jørgensen, and Moe 2020; Tiller and Nyman 2015).
- 7. According to the Canadian government, '[t]he task force will explore options and provide recommendations on how to resolve outstanding boundary issues between the two nations. This includes the sovereignty of Hans Island, the maritime boundary line in Lincoln Sea and the Labrador Sea continental shelf overlap beyond 200 nautical miles.' (Global Affairs Canada 2018).
- 8. Rules of Procedure of the Commission on the Limits of the Continental Shelf, CLCS/40/Rev.1, 17 April 2008, Annex I, Article 5(a).
- 9. For example, geophysical factors were influential in respect of parts of the boundary seawards of 200 M limits agreed between Australia and New Zealand in 2004 (Schofield and Leonardo 2020, 175).
- 10. For a similar conclusion albeit with a country-specific focus, see (Byers and Østhagen 2017).

## References

Alexander, Lewis M. 1993. "Canada–Denmark (Greenland)." In *International Maritime Boundaries Vol. 1-2*, edited by Jonathan I. Charney and Lewis M. Alexander, 371–78. Dordrecht: Martinus Nijhoff.

Baker, James S., and Michael Byers. 2012. "Crossed Lines: The Curious Case of the Beaufort Sea Maritime Boundary Dispute." Ocean Development & International Law 43 (March 2010): 70–95.

BBC News. 2007. "Russia Plants Flag under N Pole." World, August 2, 2007. http://news.bbc.co.uk/1/hi/world/europe/6927395.stm.

Byers, Michael. 2013. International Law and the Arctic. New York: Cambridge University Press.

------. 2017. "Crises and International Cooperation: An Arctic Case Study." *International Relations* 31 (4): 375–402.

Byers, Michael, and Andreas Østhagen. 2017. "Why Does Canada Have So Many Unresolved Maritime Boundary Disputes?" *Canadian Yearbook of International Law* 54 (October): 1–62.

Bykova, Alina. 2019. "Canada Makes Substantial Step in Arctic Territory Delimitation, Submits Claim Which Includes North Pole." *High North News*, May 27, 2019.

Canada–Denmark. 1973. Agreement Relating to the Delimitation of the Continental Shelf between Greenland and Canada (with Annexes). Signed at Ottawa on 17 December 1973. https://treaties.un.org/doc/Publication/UNTS/Volume 950/volume-950-I-13550-English.pdf.

———. 2004. "Exchange of Notes Constituting an Agreement to Amend the 1973 Canada– Denmark Continental Shelf Agreement." 5 and 20 April, 2004.

Canadian Department of Foreign Affairs. 2012. "Canada and Kingdom of Denmark Reach Tentative Agreement on Lincoln Sea Boundary." http://news.gc.ca/web/article-en.do?nid=709479.

Churchill, Robin R. 2001. "Claims to Maritime Zones in the Arctic - Law of the Sea Normality or Polar Peculiarity?" In *The Law of the Sea and Polar Maritime Delimitation and Jurisdiction*, 105–24. The Hague: Martinus Nijhoff.

Churchill, Robin, and Geir Ulfstein. 1992. Marine Management in Disputed Areas: The Case of the Barents Sea. London: Routledge.

Cook, P. J., and C. M. Carleton, eds. 2000. *Continental Shelf Limits: The Scientific and Legal Interface*. Oxford: Oxford University Press.

Denmark–Norway. 2006. Agreement between the Government of the Kingdom of Norway on the One Hand, and the Government of the Kingdom of Denmark Together with the Home Rule Government of Greenland on the Other Hand, Concerning the Delimitation of the Continental Shelf and the Fis.

Erdal, Linnea. 2013. "Independence on the Horizon A Study of the Interplay Between Sovereignty and Natural Resources in Greenland." Lysaker, Norway. https://www.fni.no/publications/independence-on-the-horizon-a-study-of-the-interplaybetween-sovereignty-and-natural-resources-in-greenland-article866-290.html.

Fabri, Helene Ruiz, Erik Franckx, Marco Benatar, and Tamar Meshel, eds. 2021. A Bridge over

Troubled Waters: Dispute Resolution in the Law of International Watercourses and the Law of the Sea. Leiden: Brill Nijhoff.

Fjærtoft, Daniel, Moe Arild, Natalia Smirnova, and Alexey Cherepovitsyn. 2018. "Unitization of Petroleum Fields in the Barents Sea: Towards a Common Understanding?" *Arctic Review on Law and Politics* 9: 72–96. https://doi.org/10.23865/arctic.v9.1083.

Global Affairs Canada. 2018. "Canada and the Kingdom of Denmark (with Greenland) Announce the Establishment of a Joint Task Force on Boundary Issues." Government of Canada. 2018.

Government of Canada. 2010. "Speech from the Throne," March 3, 2010. http://www.speech.gc.ca/eng/media.asp?id=1388.

Great Britain-Russia. 1825. "Great Britain-Russia: Limits of Their Respective Possessions on the North-West Coast of America and the Navigation of the Pacific Ocean." 75 CTS 95: 16 February 1825.

Henriksen, Tore, and Geir Ulfstein. 2011. "Maritime Delimitation in the Arctic: The Barents Sea Treaty." Ocean Development & International Law 42 (1-2): 1-21.

Hoel, Alf Håkon. 2009. "Do We Need a New Legal Regime for the Arctic Ocean?" *The International Journal of Marine and Coastal Law* 24 (2): 443–56.

Hønneland, Geir. 2012. Making Fishery Agreements Work: Post-Agreement Bargaining in the Barents Sea. Cheltenham: Edward Elgar.

International Hydrographic Organization (IHO). 2014. "A Manual on Technical Aspects of the United Nations Convention on the Law of the Sea - 1982 (TALOS)." Special Publication No.51, 5th edition.

Jensen, Øystein. 2016. "The International Code for Ships Operating in Polar Waters: Finalization, Adoption and Law of the Sea Implications." *Arctic Review on Law and Politics* 7 (1): 60–82. https://doi.org/10.17585/arctic.v7.236.

Kingdom of Denmark. 2004. "Royal Decree on Amendment of Royal Decree on Delimitation oftheTerritorialWatersofGreenland,15October2004."http://www.un.org/Depts/los/doalos\_publications/LOSBulletins/bulletinpdf/bulletin56e.pdf.

Lathrop, Coalter G., J. Ashley Roach, and Donald R. Rothwell, eds. 2019. Baselines under the International Law of the Sea: Reports of the International Law Association Committee on Baselines under the International Law of the Sea. Leiden: Brill Nijhoff.

Lavrov, Sergei, and Jonas Gahr Støre. 2010. "Canada, Take Note: Here's How to Resolve Maritime Disputes." *The Globe and Mail*, September 21, 2010. http://www.theglobeandmail.com/opinion/canada-take-note-heres-how-to-resolve-maritime-disputes/article4326372/.

Mackrael, Kim. 2012. "Canada, Denmark Closer to Settling Border Dispute." *Globe and Mail*, November 29, 2012.

Macnab, Ron. 2004a. "The Case for Transparency in the Delimitation of the Outer Continental Shelf in Accordance with LOSC Article 76." Ocean Development & International Law 35: 1–17.

. 2004b. "The Outer Limit of the Continental Shelf in the Arctic Ocean." In Legal and

Scientific Aspects of Continental Shelf Limits, edited by M. H. Nordquist, J. N. Moore, and T. H. Heidar. Leiden: Martinus Nijhoff Publishers.

McDorman, Ted L. 2002. "The Role of the Commission on the Limits of Continental Shelf: A Technical Body in a Political World." *International Journal of Marine and Coastal Law* 17: 301.

Moe, Arild, Daniel Fjærtoft, and Indra Øverland. 2011. "Space and Timing: Why Was the Barents Sea Delimitation Dispute Resolved in 2010?" *Polar Geography* 34 (3): 145–62.

Norway–Russian Federation. 2010. "Treaty between Norway and the Russian Federation Concerning Maritime Delimitation and Cooperation in the Barents Sea and Arctic Ocean, 15 September 2010."

Norwegian Government. 2010. "Joint Statement on Maritime Delimitation and Cooperation in the Barents Sea and the Arctic Ocean." *Press Release*, 2010.

Novosti, RIA. 2007. "Russia Guided By International Law In Its Polar Shelf Probe." RLA Novosti, August 3, 2007.

Østhagen, Andreas. 2018. "Geopolitics and Security in the Arctic." In Routledge Handbook of the Polar Regions, edited by Mark Nuttall, Torben R. Christensen, and Martin Siegert, 348–56. Abingdon, UK: Routledge.

------. 2021. "Troubled Seas? The Changing Politics of Maritime Boundary Disputes." Ocean & Coastal Management 205 (May 2021): 105535. https://doi.org/10.1016/j.ocecoaman.2021.105535.

Østhagen, Andreas, Anne-Kristin Jørgensen, and Arild Moe. 2020. "Рыбоохранная ЗонаШпицбергена: Как Россия и Норвегия Разрешают Арктические Разногласия ("The SvalbardFisheries Protection Zone: How Russia and Norway Manage an Arctic Dispute")." Арктика и Север(ArcticandNorth)40:183–205.http://www.arcticandnorth.ru/article\_index\_years.php?ELEMENT\_ID=348131.

Oude Elferink, Alex G. 2007. "Maritime Delimitation between Denmark/Greenland and Norway." Ocean Development & International Law 38 (4): 375-80.

Parfitt, Tom. 2007. "Russia Plants Flag on North Pole Seabed." The Guardian, August 2, 2007.

Pay, Brian J. Van. 2012. "Disputed Areas Beyond 200 Nautical Miles: How Many and Will Geophysical Characteristics Matter in Their Resolution?" In *Maritime Border Diplomacy*, edited by Myron H. Nordquist and John Norton Moore. Leiden/Boston: Martinus Nijhoff Publishers.

Roach, J. Ashley, and Robert W. Smith. n.d. *Excessive Maritime Claims*. 3rd ed. Leiden/Boston: Martinus Nijhoff Publishers.

Rothwell, Donald. 1996. The Polar Regions and the Development of International Law. Cambridge Studies in International and Comparative Law CN - KZ4110.P65 R68 1996.

Rothwell, Donald R. 2012. "International Straits and Trans-Arctic Navigation." Ocean Development and International Law 43 (3): 267-82.

Russia–Norway. 2007. "Agreement between the Russian Federation and the Kingdom of Norway on the Maritime Delimitation in the Varangerfjord Area (2007)." UN Law of the Sea Bulletin 42, 2007.

Russia–United States. 1867. "Convention Ceding Alaska between Russia and the United States, 30

March 1867." Article I, reprinted in C. Parry, ed. Consolidated Treaty Series, Vol. 134 (pp. 331–335).

Schofield, Clive H. 2015. "Dividing and Managing Increasingly International Waters: Delimiting the Bering Sea, Strait and Beyond." In *Science, Technology and New Challenges to Ocean Law*, edited by James Kraska and H. Scheiberg, 313–344. Leiden/Boston: Martinus Nijhoff Publishers.

Schofield, Clive H., and Bernard Leonardo. 2020. "Disputes Concerning the Delimitation of the Continental Shelf Beyond 200 M." In *New Knowledge and Changing Circumstances in the Law of the Sea*, edited by Tomas Heidar, 157–82. Leiden/Boston: Brill.

Schofield, Clive H., and Blanche Sas. 2015. "Uncovered and Unstable Coasts: Climate Change and Territorial Sea Baselines in the Arctic." In *The Arctic Ocean: Essays in Honour of Donat Pharand*, edited by Suzanne Lalonde and Ted L. McDorman, 291–334. The Hague: Martinus Nijhoff Publishers.

Smith, Robert W. 1994. "United States-Russia Maritime Boundary." In *World Boundaries, Vol.5*, edited by Gerald H. Blake, 91–99. London: Routledge.

Stabrun, Kristoffer. 2009. "The Grey Zone Agreement of 1978: Fishery Concerns, Security Challenges and Territorial Interests." *FNI Report* 13: 1–43.

Svalbard Treaty. 1920. "Treaty between Norway, The United States of America, Denmark, France, Italy, Japan, the Netherlands, Great Britain and Ireland and the British Overseas Dominions and Sweden Concerning Spitsbergen Signed in Paris 9th February 1920." Longyearbyen: The Governor of

http://www.sysselmannen.no/Documents/Sysselmannen\_dok/English/Legacy/The\_Svalbard\_ Treaty\_9ssFy.pdf.

Tiller, Rachel, and Elizabeth Nyman. 2015. "Having the Cake and Eating It Too: To Manage or Own the Svalbard Fisheries Protection Zone." *Marine Policy* 60: 141–48.

Townsend-Gault, Ian. 2007. "Not a Carve-up: Canada, Sovereignty and the Arctic Ocean." International Zeitschrift 1 (3).

United Nations. 1982. "United Nations Convention on the Law of the Sea (LOSC)." 1833 U.N.T.S. 397 (in Force 16 November 1994), Publication No. E97.V10. Montego Bay.

———. 2021. "Status: United Nations Convention on the Law of the Sea." Treaty Collection. New York. 2021. https://treaties.un.org/pages/ViewDetailsIII.aspx?src=TREATY&mtdsg\_no=XXI-6&chapter=21&Temp=mtdsg3&clang=\_en.

United States–Union of Soviet Socialist Republics. 1990. "Agreement between the United States of America and The Union of the Soviet Socialist Republics on the Maritime Boundary." 1 June 1990, provisionally in force 15 June 1990.

US Department of State. 1995. Public Notice 2237: Exclusive Economic Zone and Maritime Boundaries.

Verville, Elizabeth G. 1993. "United States–Soviet Union." In *International Maritime Boundaries, Vol.* 1, edited by Jonathan I. Charney and Lewis M. Alexander, 447–460. Dordrecht: Martinus Nijhoff Publishers.