ΕΛΛΗΝΙΚΗ ΔΗΜΟΚΡΑΤΙΑ
Εθνικόν και Καποδιστριακόν
Πανεπιστήμιον Αθηνών
ΙΔΡΥΘΕΝ ΤΟ 1837

ΝΟΜΙΚΗ ΣΧΟΛΗ

ΕΝΙΑΙΟ ΠΡΟΓΡΑΜΜΑ ΜΕΤΑΠΤΥΧΙΑΚΩΝ ΣΠΟΥΔΩΝ
ΚΑΤΕΥΘΥΝΣΗ: ΔΗΜΟΣΙΟ ΔΙΕΘΝΕΣ ΔΙΚΑΙΟ
ΠΑΝΕΠΙΣΤΗΜΙΑΚΟ ΕΤΟΣ: 2017 – 2018

ΔΙΠΛΩΜΑΤΙΚΗ ΕΡΓΑΣΙΑ
του Κωνσταντίνου Σπυρίδωνος Δεληγιάννη - Βίρβου
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The Arctic in International Law: Navigation

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Αθήνα, 7/12/2018

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Οι απόψεις και θέσεις που περιέχονται σε αυτήν την εργασία εκφράζουν τον συγγραφέα και δεν πρέπει να ερμηνευθεί ότι αντιπροσωπεύουν τις επίσημες θέσεις του Εθνικού και Καποδιστριακού Πανεπιστημίου Αθηνών.

Θερμές ευχαριστίες στους Καθηγητές του Τομέα Δημοσίου Διεθνούς Δικαίου της Νομικής Σχολής του Εθνικού Καποδιστριακού Πανεπιστημίου Αθηνών, και ιδίως στον Ε. Παπασταυρίδη για την πολύτιμη βοήθεια και τη συνεχή του στήριξη.

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I. Introduction

On 19 May 1845 the *HMS Terror* and *HMS Erebus* set sail from Greenhithe, England towards the Canadian Arctic. The expedition, led by Sir John Franklin and with a crew of 24 officers and 110 men, had orders to find and chart the legendary Northwest Passage, a sea route connecting the Atlantic and Pacific Oceans. By 1848 the two ships would be declared lost at sea, their crews deceased and the British Admiralty would set of expeditions to find their wreckages.[1] The *HMS Erebus* would be found only in 2014 and the *HMS Terror* in 2016.[2] About 30 years later, in 1878, baron Adolf Erik Nordenskiöld would lead his ship, the *SS Vega*, in a more successful expedition along the northern Russian coastline that would lead in the discovery of the Northeast Passage (today known as the Northern Sea Route).[3]

These expeditions to the Arctic were not the first to be commenced; and surely they were not the last. Roald Amundsen would be the first explorer to travel through the Northwest Passage to the Pacific in a three year period from 1903 to 1906 and he would sail through the Northern Sea Route from 1918 to 1920,[4] concluding the age of exploration of the Arctic and opening the age of exploitation.

But what and where exactly is the "Arctic"? Many different but accurate definitions exist. However, each definition describes a different aspect of the area. The "Arctic" in general is the Earth's northern polar region consisting of both the Arctic Ocean and its adjacent seas, and the northern terrestrial parts of Alaska (US), Finland, Greenland, Iceland, Northern Canada, Norway, Russia and Sweden.[5] Another definition is that of the "Arctic Circle". The "Arctic Circle" is the most northerly latitude circle, at approximately 66°30′ N, marking the northernmost point at which the center of the noon sun is just visible on the December solstice and the southernmost point at which the center of the midnight sun is just visible on the June solstice.[6] Finally the "Arctic Ocean" is a large water mass, a roughly circular basin that covers an area of about 14,090,000 km^2 and bordered by the northern

[1] Knopf K., "Exploring for the Empire", in Buchenau B. et al. (eds.) *Post-Empire Imaginaries?* Brill Rodopi (2015), pp. 73-74.
[2] The Guardian, "Ship found in Arctic 168 years after doomed Northwest Passage attempt", 12 September 2016 accessed 6 December 2018 at <https://www.theguardian.com/world/2016/sep/12/hms-terror-wreck-found-arctic-nearly-170-years-northwest-passage-attempt>.
[3] McCannon J. *Red Arctic: Polar Exploration and the Myth of the North in the Soviet Union, 1932-1929*, Oxford University Press (1998), p. 17.
[4] *Ibid.*
[5] Encyclopaedia Britannica, "Arctic", accessed 6 December 2018 at <https://www.britannica.com/place/Arctic>.
[6] Encyclopaedia Britannica, "Arctic Circle", accessed 6 December 2018 at <https://www.britannica.com/place/Arctic-Circle>.

coasts of Canada, Russia, Alaska (US), Greenland and the Norwegian islands of Jan Mayen and the Svalbard Archipelago.[7]

Since the main object of this thesis is on the international legal regime of navigation in the Arctic, the applicable definition is the third one, that of the Arctic Ocean. The International Convention for the Safety of Lives at Sea (hereinafter SOLAS)[8] and the International Convention for the Prevention of Pollution from Ships as modified by the Protocol of 1978 (hereinafter MARPOL 73/78)[9] provide for an even more specific and technical definition of the "Arctic waters", equivalent to the aforementioned definition of the Arctic Ocean:

> "Arctic waters means those waters which are located north of a line from the latitude 58º00.0′ N and longitude 042º00.0′ W to latitude 64º37.0′ N, longitude 035º27.0′ W and thence by a rhumb line to latitude 67º03.9′ N, longitude 026º33.4′ W and thence by a rhumb line to Sørkapp, Jan Mayen and by the southern shore of Jan Mayen to the Island of Bjørnøya, and thence by a great circle line from the Island of Bjørnøya to Cap Kanin Nos and hence by the northern shore of the Asian Continent eastward to the Bering Strait and thence from the Bering Strait westward to latitude 60º N as far as Il'pyrskiy and following the 60th North parallel eastward as far as and including Etolin Strait and thence by the northern shore of the North American continent as far south as latitude 60º N and thence eastward along parallel of latitude 60º N, to longitude 56º37.1′ W and thence to the latitude 58º00.0′ N, longitude 042º00.0′ W."[10]

Global Warming is particular dangerous for the Arctic Ocean. According to the relevant NASA calculations, Arctic sea ice reaches its minimum each September. September Arctic sea ice is now declining at a rate of 12.8% per decade.[11]

In addition to rising temperatures caused by Global Warming, change is being driven by Arctic-specific "feedback loops" arising out of the delicate balance between frozen and liquid water.[12] An increase in the average annual temperature can change the highly reflective

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[7] Encyclopaedia Britannica, "Arctic Ocean", accessed 6 December 2018 at <https://www.britannica.com/place/Arctic-Ocean>.
[8] International Convention for the Safety of Lives at Sea [SOLAS] (signed 1 November 1974, entry into force 25 May 1980), 1184 *UNTS* 278
[9] International Convention for the Prevention of Pollution from Ships as modified by the Protocol of 1978 [MARPOL 73/78] (signed 17 February 1978, entry into force 2 October 1983), 1340 *UNTS* 61 and 1341 *UNTS* 3.
[10] SOLAS Chapter XIV, Reg. 1.2 and 1.3; MARPOL 73/78 Annex I, Reg. 1.11.7 and 46.2, Annex II, Reg. 13.8.1 and 21.2, Annex IV, Reg. 17.2 and 17.3, and Annex V, Reg. 1.14.7 and 13.2. For an illustration of this definition see Annex, Figure 1.
[11] NASA, Global Climate Change, Arctic Sea Ice Minimum, accessed 6 December 2018 at <https://climate.nasa.gov/vital-signs/arctic-sea-ice/>.
[12] Byers M., *International Law and the Arctic*, Cambridge University Press (2013), p. 2.

sea-ice into heat-absorbing open ocean waters.[13] The same temperature increase can result in a melting of the ancient permafrost which in turn would release methane, a greenhouse gas many times more effective than carbon dioxide in causing climate warming, into the atmosphere.[14]

However, the melting of the sea ice results in previously frozen sea routes opening for long periods of time. For ships carrying commercial cargo, northern sea routes offer the chance to considerably reduce journey distances.[15] Also, the increase of energy exploitation in the Arctic Ocean, along with the mineral resources found in the whole region constitute another source of increased maritime traffic.[16] Finally, the Arctic faces a steady boost in tourism, which adds to the increase of shipping in the coasts of the Arctic States.[17] Nevertheless, it should be noted that even if the sea ices is melting, navigation still remains hazardous in the Arctic Ocean, due to limited charting of the Arctic waters, reduced visibility and the persisting extreme cold.

In order to adequately facilitate this increase in Arctic shipping, while at the same time taking into consideration the fragile Arctic environment, a legal regime for navigation is vital. In general, international navigation is facilitated by the relevant provisions of the United Nations Law of the Sea Convention (hereinafter LOSC).[18] This legal regime regarding navigation in the Arctic is further expanded by the "Arctic exception" of Article 234 LOSC and the adoption of the International Code for Ships Operating in Polar Waters (hereinafter Polar Code).[19] The five Arctic coastal States, Canada, the Russian Federation, the United States of America, Denmark (by virtue of Greenland) and Norway implement this legal framework, while simultaneously participating in the Arctic Council, a high level forum under the auspices of which a number of Arctic-related issues are discussed.[20]

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[13] *Ibid.*

[14] Macko S., "Changes in the Arctic Environment", in Nordquist M., Heidar T. and Norton Moore J. *Changes in the Arctic Environment and the Law of the Sea*, Martinus Nijhoff Publishers (2010) p. 110.

[15] Deggim H., "The International Code for Ships Operating in Polar Waters (Polar Code)", in Hildebrand L. et al. (eds.) *Sustainable Shipping in a Changing Arctic*, Springer (2018) p. 16.

[16] *Ibid.*

[17] *Ibid.*

[18] United Nations Law of the Sea Convention [LOSC] (signed 10 December 1982, entry into force 16 November 1994), 1833 *UNTS* 3.

[19] IMO Doc. MSC 385(94) - MEPC 68/21/Add.1, Annex 10, "International Code for Ships Operating in Polar Waters" [Polar Code].

[20] Sweden, Finland and Iceland also members of the Arctic Council but they have no coasts adjacent to the Arctic Ocean according to the given definition.

II. Actors in the Arctic Ocean

A. The Arctic littoral States

The Arctic Ocean is surrounded by five coastal States: Canada and Russia, which are the largest, the US by virtue of the state of Alaska, Denmark by virtue of Greenland and Norway. The three other Arctic States, Sweden, Finland and Iceland, do not have coasts adjacent to the Arctic Ocean. Since the scope of this thesis includes only navigation in the Arctic Ocean, as it was defined in the Introduction, there is no need to examine the policies of these three States.

Canada is the second largest Arctic coastal State. It assumes this position due to the size of its Arctic lands, the length of its Arctic coastlines, and the significance of the straits and passages over which it exercises jurisdiction, especially the Northwest Passage.[21] Canada has contributed significantly to Arctic governance on maritime matters at both global and regional forums and was a key player in negotiating Article 234 LOSC during the Montego Bay negotiations.[22]

Canada has a 12 nm territorial sea, a contiguous zone of 24 nm from the baselines and a 200 nm EEZ.[23] The only territorial dispute in the Arctic exists between Canada and Denmark with respect to Hans Island, a small island between Canada and Greenland. However this dispute has not significant consequences to the maritime delimitation between Canada and Denmark since the two countries agreed to draw the boundary line up to a point near the southern side of the island and to continue from a mark to the northern side.[24]

The Russian Federation (Russia) is the largest of the Arctic littoral states. Two main Arctic marine routes are located along its coastline: the Bering Strait which cuts between the Russian territory and Alaska and the Northern Sea Route, also called the North East Passage,

[21]Henriksen T. "Norway, Denmark (in respect of Greenland) and Iceland", in Beckman R. et al. (eds.) *Governance of Arctic Shipping*, Brill Nijhoff (2017), p. 243.
[22] Hartman J., "Regulating Shipping in the Arctic Ocean: An Analysis of State Practice", 49 *Ocean Development and International Law* 276 (2018), p. 281.
[23] Vanderzwaag D., Shipping and Marine Environmental Protection in Canada: Rocking the Boat and Riding a Restless Sea, in Rothwell D. and Bateman S. (eds.), *Navigational Rights and Freedoms and the new Law of the Sea*, Martinus Nijhoff (2000), p. 212.
[24] Scott K. and Vanderzwaag D., "Polar Oceans and Law of the Sea", in Rothwell D. et al. (eds.) *Oxford Handbook of the Law the Sea*, Oxford University Press (2015), p. 731.

which runs along its northern coast connecting the Atlantic Ocean with the Pacific Ocean.[25] Russia's size, its geopolitical position and its location along the Arctic Ocean render it as an important State for the formation of the legal framework regarding the navigation in the area.

By two Decrees of the Council of Ministers of 7 February 1984 and of 15 January 1985, the former Soviet Union established straight baselines along the Arctic Ocean.[26] The Russian Federation has a territorial sea of 12 nm, a contiguous zone of 24 nm and has declared an EEZ of 200 nm,[27] measured from the 1985 straight baselines. [28]

The United States of America (US) have coasts along the Arctic by virtue of Alaska, the largest of the fifty states. Alaska is bordered by Yukon and British Columbia in Canada to the east, the Gulf of Alaska and the Pacific Ocean to the south and southwest, the Bering Sea, Bering Strait, and Chukchi Sea to the west and the Arctic Ocean to the north.

United States and Russia (the then Soviet Union) negotiated a 1.600 nm all-purpose maritime boundary in the Bering Sea, Bering Strait, and Chukchi Sea in 1990.[29] The boundary provided for in this treaty, named the "Baker–Shevardnadze Line" after its signatories, is based on a line described in the 1867 treaty by which the United States purchased Alaska from Russia.[30] In addition the US and Canada are in disagreement regarding the maritime delimitation of the Beaufort Sea and as of today they have not reached an agreement regarding this boundary.[31]

The US are not party to the LOSC,[32] even though they recognize its provisions as customary law.[33] It must be noted that Arctic issues have historically had a low profile in the

[25] Laruelle M., "Russia's Arctic Strategies and the Future of the Far-North", M.E. Sharpe (2014), p. 168.

[26] Declaration 4604, UN DOALOS National Legislation, USSR, accessed 6 December 2018 at <http://www.un.org/Depts/los/LEGISLATIONANDTREATIES/PDFFILES/RUS_1984_Declaration.pdf>; Declaration 4450, UN DOALOS National Legislation, USSSR, accessed 6 December 2018 at <http://www.un.org/Depts/los/LEGISLATIONANDTREATIES/PDFFILES/RUS_1985_Declaration.pdf>.

[27] Decree of the Presidium of the Supreme Soviet of the USSR on the Economic Zone of the USSR, UN DOALOS National Legislation, USSR, accessed 6 December 2018 at <http://www.un.org/Depts/los/LEGISLATIONANDTREATIES/PDFFILES/RUS_1984_Decree.pdf>.

[28] Scovazzi T. "New Developments Concerning Soviet Straight baselines", 3 *International Journal of Estuarine and Coastal Law* 37 (1988), p. 37.

[29] Agreement between the United States of America and the Union of Soviet Socialist Republics on the Maritime Boundary (signed 1 June 1990) 29 *ILM* 941.

[30] Convention ceding Alaska between Russia and the United States, (signed 30 March 1867, entry into force 20 June 1867) reprinted in Parry C. (ed.) *Consolidated Treaty Series*, Vol. 134, Oceana Publications (1969), p. 331; *Supra n. 12* Byers p. 33.

[31] For a detailed presentation of the Beaufort Sea delimitation dispute see *ibid.* Byers pp. 56-91.

[32] UN, Oceans & Law of the Sea, Division for Ocean Affairs and the Law of the Sea (DOALOS), Table Recapitulating the Status of the Convention and of the related Agreements, accessed 6 December 2018 at <http://www.un.org/Depts/los/reference_files/status2018.pdf>.

[33] Rothwell D., *Arctic Ocean Shipping: Navigation, Security and Sovereignty in the North American Arctic*, Brill (2018), p. 12.

US.[34] Alaska and the seas surrounding it have been mainly appreciated for their strategic significance, especially during the Cold War.[35] Nevertheless, the US has shown interest in maintaining freedom of navigation within the Arctic because of the importance of ensuring maritime access to Alaskan ports for both security and trade, which is pivotal for Alaska's economy.[36]

Denmark is not itself an Arctic littoral State since it is situated north of Germany and south of the Scandinavian Peninsula. However the Kingdom of Denmark consists of Denmark, the Faroe Islands and Greenland.[37] Greenland, or *Kalaallit Nunaat* (Country of the Greenlanders), is the world's largest island and it is located wholly within the Arctic.[38] In 1931 Norway occupied certain territories in Eastern Greenland, an act that was contested by Denmark before the PCIJ. In 1933 the PCIJ adjudicated regarding the legal status of Eastern Greenland and found that the occupation of these territories by Norway was unlawful and invalid and that the whole island was subject to the sovereignty of Denmark.[39] Until 1953 Greenland was regarded as a colony under both international and domestic law.[40]

Since 1953 and the adoption of the Danish Constitution[41] Greenland enjoys autonomy within the Kingdom of Denmark.[42] The Self-Government consists of the legislative body called *Inatsisartut*, the executive body, called *Naalakkersuisut*, and the Greenlandic courts of law.[43] Greenland, in contrast to Denmark, is not a member of the European Union and thus the European Union's Directives and Regulations do not apply to it.[44]

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[34] Rothwell D., "Canada and the United States", in Beckman R. et al. (eds.) *Governance of Arctic Shipping*, Brill Nijhoff (2017), p. 225.
[35] *Ibid.*
[36] *Ibid.*; *supra n. 33* Rothwell, p. 10.
[37] Winkler T. Danish Interests in the Arctic, in Nordquist M., Heidar T. and Norton Moore J. *Changes in the Arctic Environment and the Law of the Sea*, Martinus Nijhoff Publishers (2010), p. 478.
[38] *Supra n. 21* Henriksen p. 248.
[39] *Legal Status of Eastern Greenland* (Denmark v. Norway), Judgment, PCIJ Rep. Series A/B No. 53 (1933).
[40] *Supra n. 37* Winkler.
[41] The Constitutional Act of Denmark of 5 June 1953, accessed 6 December 2018 at <http://www.stm.dk/_p_10992.html>.
[42] For a detailed presentation of the relationship between Greenland and the Kingdom of Denmark see Rytter J., "Self-Determination of Colonial Peoples - The Case of Greenland revisited", 77 *Nordic Journal of International Law* 365 (2008), pp. 387-395.
[43] Act No 473 of 12 June 2009 on Greenland Self-Government (Greenland Self-Government Act), [English Translation], accessed 6 December 2018 at <https://naalakkersuisut.gl/~/media/Nanoq/Files/Attached%20Files/Engelske-tekster/Act%20on%20Greenland.pdf>.
[44] Greenland became part of the Community alongside Denmark in 1973. In a consultative referendum in Greenland in February 1982, 52 % of voters were in favour of altering the status of Greenland vis-a-vis the Community. Consequently, Denmark proposed to modify the Treaties. On 1 February 1985, the "Greenland

The Self-Government has assumed legislative and executive competence over a wide range of issues including the protection of the environment and resource management, even though this competence is limited to issues that exclusively concern Greenlandic affairs.[45] The Act on Greenland Self-Government includes two lists with fields of responsibility that the Greenlandic Self-Government could assume after the Self-Government Act entered into force. According to Article 3 of the Act:

> "(1) Fields of responsibility that appear from List I of the Schedule shall be transferred to the Greenland Self-Government authorities at points of time fixed by the Self-Government authorities.
> (2) Fields of responsibility that appear from List II of the Schedule shall be transferred to the Greenland Self-Government authorities at points of time fixed by the Self-Government authorities after negotiation with the central authorities of the Realm."

Maritime issues, namely shipwreck, wreckage and degradation of depth, security at sea, ship registration and maritime matters, charting, the buoyage, lighthouse and pilotage area, and marine environment are included in List II. However the Greenland Self-Government does not have the competence to conclude international agreements and its international relations are mostly accumulated by the government of Denmark.[46] As a result the laws and regulations regarding navigation are enacted by both the Danish and the Greenlandic Governments.

Since 1963 Greenland has a territorial sea of 3 nm.[47] Even though the outer limits of the Danish territorial sea were extended to 12 nm in 1999,[48] the extension is not applicable to the territorial sea off Greenland.[49] A 200 nm EEZ off the coast of Greenland was established

Treaty", came into force and granted to Greenland the status applicable to the Overseas Countries and Territories associated with the Community. See: Communication from the Commission - A new comprehensive partnership with Greenland in the form of a joint declaration and a Council Decision based on Article 187 of the EC Treaty /COM/2006/0142 final/, par. 2.2.; Treaty amending, with regard to Greenland, the Treaties establishing the European Communities (signed 13 March 1984, entered into force 1 February 1985) *Official Journal of the European Communities* No L 29/1.

[45] *Supra n. 21* Henriksen, p, 248.

[46] *Supra n. 37* Winkler, p. 479.

[47] Order No 191 of 27 May 1963 on the Delimitation of the Territorial Sea of Greenland, accessed 6 December 2018 at <http://www.un.org/Depts/los/LEGISLATIONANDTREATIES/PDFFILES/DNK_1963_Order.pdf>.

[48] Act No 200 of 7 April 1999 on the Delimitation of the Territorial Sea, accessed 6 December 2018 at <http://www.un.org/Depts/los/LEGISLATIONANDTREATIES/PDFFILES/DNK_1999_Act.pdf>.

[49] *Ibid.* par. 6 (1)

in 2004.[50] The Self-Government is responsible for the territorial sea and internal waters of the island and the Danish Government for the 200 nm EEZ.[51]

Norway is located in Northern Europe, in the western part of the Scandinavian Peninsula. Its territory includes the island of Jan Mayen and the archipelago of Svalbard. Norway is not a member of the EU but is a member of the European Economic Area (EEA).[52]

Jan Mayen is an island of 377 km² in the North Atlantic, 550 km northeast of Iceland and 500 km east of Greenland. The island has no permanent population. It formally became a part of the Kingdom of Norway in 1930.[53]

Svalbard is an Arctic archipelago lying in the Barents Sea, midway between Norway and the North Pole, and includes all the islands situated between 74° and 81°N and 10°E and 35°E. The southernmost island of the archipelago, Bear Island, is situated some 220 miles north of mainland Norway, and the southernmost point of the main group of islands in the archipelago lies some 350 miles north of the Norwegian mainland.[54] It consists of the islands of Spitsbergen, Bjørnøya, Nordaustlandet, Barentsøya, Edgeøya, Kong Karls Land, Hopen, Prins Karls Forland, Kvitøya and other islands, islets and rocks.[55] The islands cover a total area of 61,020 km².[56] It used to be named Spitsbergen Archipelago, named after the largest island, but nowadays is known as the Svalbard Archipelago.[57]

The Svalbard Archipelago is part of the Kingdom of Norway, however under the Spitsbergen/Svalbard Treaty of 1920, which recognized this status, the state-parties enjoy certain rights in its land and territorial sea.[58] Article 2 of the Treaty provides for equal access by all ships and nationals of the contracting parties to fishing and hunting and the right of

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[50] Royal Decree No 1005 of 24 October 2004 on the entry into force of Act on Exclusive Economic Zone for Greenland, on the basis of Section 5 of the Act No 411 of 22 May 1996 on Exclusive Economic Zone, , accessed 6 December 2018 at <www.un.org/Depts/los/doalos_publications/LOSBulletins/bulletinpdf/bulletin56e.pdf>.

[51] *Supra n. 21* Henriksen p. 256.

[52] Agreement on the European Economic Area, (signed 2 May 1992, entry into force 1 January 1994).

[53] *Maritime Delimitation in the area between Greenland and Jan Mayen* (Denmark v. Norway), Judgment, ICJ Rep. 1993, p. 38, par. 13.

[54] Churchill R. and Ulfstein G. "The Disputed Maritime Zones around Svalbard", in Nordquist M., Heidar T. and Norton Moore J. (eds.) C*hanges in the Arctic Environment and the Law of the Sea* (Martinus Nijhoff Publishers 2010), p. 552.

[55] *Supra n. 21* Henriksen p. 246.

[56] *Ibid.*

[57] Spitsbergen was the Dutch name, meaning "jagged mountains", while the word Svalbard stands for "land with the cold coasts" in Norwegian, *supra n. 12* Byers p. 16.

[58] Treaty Concerning the Archipelago of Spitsbergen (adopted 9 February 1920, entered into force 14 August 1925) 2 *LNTS* 7.

Norway to impose non-discriminatory conservation measures for marine living resources.[59] There is a controversy whether this provision applies to maritime zones beyond the territorial sea of the archipelago.[60] However Norway, based on the regime of traditional fishing rights, allows fishing access to various states within these waters in order to defuse this controversy.[61]

Historically, Norway has claimed a 4 nm territorial sea.[62] In 2003 Norway extended its Territorial Sea at 12 nm measured from the baselines.[63] The extension of the breadth of the territorial sea is applicable to mainland Norway, as well as for Jan Mayen and Svalbard.[64] Norway had also established a 200 nm economic zone off its mainland in 1977.[65]

With regards to the island of Jan Mayen and the Svalbard Archipelago, Norway established 200 nm fisheries zones.[66] It is worth noting that the delimitation of the Jan Mayen fisheries zone and continental shelf was contested by Denmark and was adjudicated by the ICJ in 1993.[67] In 2006, Denmark and Norway negotiated an all-purpose maritime boundary between Greenland and the archipelago of Svalbard.[68] However Norway has not established an EEZ. The exclusive fisheries zones are of no importance for international shipping and navigation since they are equivalent to the high seas and the EEZ provisions of LOSC are not applicable on them.[69]

B. The International Maritime Organization

Since the LOSC is characterized as a framework convention,[70] it often refers to the "competent organization", through the work of which its provisions are to be implemented.[71]

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[59] *Ibid.* Article 2; *Supra n. 24* Scott and Vanderzwaag p. 732.

[60] *Ibid.*

[61] Molenaar E., "Fisheries Regulation in the Maritime Zones of Svalbard", 27 *International Journal of Marine and Coastal Law* 3 (2012), pp. 13-17.

[62] Churchill R. and Lowe A., *The Law of the Sea*, Manchester University Press (1999), pp. 77–78.

[63] Act No 57 of 27 June 2003 on Norway's Territorial Waters and Contiguous Zone, 54 *Law of the Sea Bulletin* 97 (2004), par. 1.

[64] *Ibid*. par. 5.

[65] Act No 91 of 17 December 1976 relating to the Economic Zone of Norway, accessed 6 December 2018 at <www.un.org/Depts/los/LEGISLATIONANDTREATIES/PDFFILES/NOR_1976_Act.pdf>.

[66] *Supra n. 61* Molenaar, p. 7.

[67] *Supra n. 53 Jan Mayen Case*.

[68] *Supra n. 12* Byers p. 38.

[69] For the legal nature of the Exclusive Fisheries Zone see Evans M. "The Law of the Sea", in Evans M. (ed.) *International Law*, 4th ed., Oxford University Press (2014) pp. 672-673.

[70] Koh T., "A Constitution for the Oceans", in Nordquist M. (ed.), *United Nations Convention on the Law of the Sea 1982: A Commentary*, Volume 1, Martinus Nijhoff, (1985), pp. 11-16.

[71] See for instance LOSC Article 22 par. 3(a).

It is generally accepted that in matters of navigation and shipping this competent organization is the International Maritime Organization (IMO).[72] IMO is a United Nations specialized agency created in 1948, as the Intergovernmental Maritime Consultative Organization.[73] IMO has 171 member states, including all of the Arctic States. [74] Its main purpose is, according to the 1948 Convention on the International Maritime Organization that established it:

> "to provide machinery for cooperation among Governments in the field of governmental regulation and practices relating to technical matters of all kinds affecting shipping engaged in international trade; to encourage and facilitate the general adoption of the highest practicable standards in matters concerning maritime safety, efficiency of navigation and prevention and control of marine pollution from ships."[75]

In order for IMO to fulfill its purpose it adopts two kinds of instruments: resolutions adopted by its General Assembly or its committees[76] and international treaties. In many instances the LOSC refers to "generally accepted international rules or standards"[77] or "generally accepted international regulations".[78] As a general rule, coastal state prescriptive jurisdiction cannot be more stringent than the generally accepted rules, standards and regulations.[79] They establish a minimum standard for flag states and a maximum standard for coastal states.[80] When LOSC refers to generally accepted rules, standards and regulations in

[72] IMO Doc. LEG/MISC.8, 30 January 2014, "Implications of the United Nations Convention on the Law of the Sea on the International Maritime Organization", p. 7,

[73] Chircop A. "The IMO, its Role under UNCLOS and its Polar Shipping Regulation", in Beckman R. et al. (eds.) *Governance of Arctic Shipping*, (Brill Nijhoff 2017), p. 107.

[74] See <http://www.imo.org/en/about/membership/pages/memberstates.aspx> accessed 6 December 2018.

[75] Convention on the International Maritime Organization (signed 6 March 1948, entry into force 17 March 1958), 289 UNTS p. 3 and 1520 *UNTS* 297, Article 1.

[76] For instance the Maritime Safety Committee which addresses issues regarding safety matters related to shipping and the Marine Environment Protection Committee, which addresses issues regarding marine pollution by vessels. Both of those Committees played a vital role in the drafting of the Polar Code. See *supra n. 73* Chircop pp. 111-113 and 132-138.

[77] LOSC Article 21 par. 2.

[78] LOSC Article 21 par. 4.

[79] Boone L., "International Regulation of Polar Shipping", Molenaar E. et al (eds.) *The Law of the Sea and the Polar Regions*, Martinus Nijhoff (2013), p. 195.

[80] *Ibid.*

the context of shipping and navigation, it refers to the IMO treaties and documents.[81] These treaties and documents have to be kept updated as and when the need arises.[82]

The most important of these treaties are SOLAS and MARPOL 73/78. SOLAS provides for the legal framework that ensures the safety of mariners during shipping operations. To this day it has been ratified by 163 States.

MARPOL 73/78 deals with vessel-sourced pollution globally. It places limitations on ships discharging oil and noxious substances at sea, it regulates garbage and sewage from ships, and ship-sourced air pollution. This way, MARPOL functions as a supplementary tool to the LOSC provisions that regulate vessel-sourced pollution in a general manner.[83] As of today 156 States have ratified the convention.

A similar convention that should be referenced is the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW)[84] that concerns the certification standards for crew at sea with the goal to ensure the safety of shipping operations in the same way as SOLAS.

Finally, it must be noted that the International Convention on Maritime Search and Rescue (SAR)[85] has been adopted under the auspices of IMO. It aims at developing an international SAR plan, so that, no matter where an accident occurs, the rescue of persons in distress at sea will be coordinated by a coastal State and, when necessary, by co-operation between neighboring States.[86]

C. The Arctic Council

The Arctic Council was established by the Ottawa Declaration of 1996 as a high-level forum under the auspices of which a number of Arctic-related issues would be discussed.[87] Specifically the Ottawa Declaration states that the Council "[is established to] provide a means for promoting cooperation, coordination and interaction among the Arctic states, with the

[81] Sun Z. and Beckman R., "The Development of the Polar Code and Challenges to its Implementation", in Zou K. (ed.) *Global Commons and the Law of the Sea*, Brill Nijhoff (2018), p. 308.
[82] *Ibid.*
[83] LOSC part. XII.
[84] International Convention on Standards of Training, Certification and Watchkeeping for Seafarers [STCW] (signed 7 July 1978, entry into force 28 April 1984), 1361 *UNTS* 2.
[85] International Convention on Maritime Search and Rescue [SAR] (signed 27 April 1979, entered into force 22 June 1985), 1405 *UNTS* 119.
[86] Moen A., "For those in Peril on the Sea: Search and Rescue under the Law of the Sea Convention", 24 *Ocean Yearbook* 377 (2010), p. 383.
[87] Bloom E., "The Establishment of the Arctic Council" 93 *American Journal of International Law* 712 (1999), p. 715.

involvement of the Arctic indigenous communities and other Arctic inhabitants on common Arctic issues, in particular issues of sustainable development and environmental protection in the Arctic".[88]

The eight States with territories in the Arctic area are the Council's member States: Canada, Denmark (including the Faroe Islands and Greenland), Finland, Iceland, Norway, Russia, Sweden and the United States. In addition, organizations representing indigenous peoples in the Arctic are permanent members of the Council. These organizations are the Aleut International Association, the Arctic Athabaskan Council, the Gwich'in Council International, the Inuit Circumpolar Council, the Russian Association of Indigenous Peoples of the North, and the Saami Council.[89]

The Arctic Council is not regarded as an intergovernmental organization with an international legal personality different from the legal personality of its member States.[90] However, this fact does not diminish its importance as an actor in the Arctic region, nor as an effective forum of discussion and cooperation.[91]

However the Arctic Council's cooperation system seemed to be breached in 2007 when Russia planted a titanium flag on the seabed of the North Pole and declared that "the Arctic is Russian".[92] This incident (which was later dismissed as a publicity stunt lacking legal importance)[93] was followed by the adoption of the Ilulissat Declaration. The five Arctic littoral states -the "Arctic Five"- issued the Ilulissat Declaration in May 2008 without the participation of the non-littoral States, Sweden, Finland, and Iceland, nor of the permanent participants to the Council.[94]

The Ilulissat Declaration is important as the "Arctic Five" reaffirmed their commitment to resolving any disputes within an existing framework of international law and in particular the law of the sea. The "Arctic Five" rejected the need for a new comprehensive legal regime

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[88] Declaration on the Establishment of the Arctic Council, (19 September 1996), accessed 6 December 2018 at <https://oaarchive.arctic-council.org/bitstream/handle/11374/85/EDOCS-1752-v2-ACMMCA00_Ottawa_1996_Founding_Declaration.PDF?sequence=5&isAllowed=y>.

[89] Nordtveit E. "Arctic Council Update" in Nordquist M. et al. (eds.) *Freedom of Navigation and Globalization,* Brill Nijhoff (2015), p. 140.

[90] Takei Y., "The Role of the Arctic Council from an International Law Perspective: Past, Present and Future", 6 *The Yearbook of Polar Law* 349 (2015), p. 354.

[91] *Ibid.* p. 356.

[92] Molenaar E., "The Arctic, the Arctic Council and the Law of the Sea", in Beckman R. et al. (eds.) *Governance of Arctic Shipping*, Brill Nijhoff (2017), p. 24;

[93] Ohnishi F., "The Struggle for Arctic Regional Order: Developments and Prospects of Arctic Politics", 5 *Eurasia Border Review* 81 (2014), p. 93.

[94] *Ibid.*

to govern the Arctic Ocean. Instead, they stated that they "remain committed to this legal framework and to the orderly settlement of any possible overlapping claims"[95] and thus dismissed the perception of the Arctic Ocean as an international law vacuum.[96] In addition, they agreed to cooperate between them and the other interested parties to ensure the protection of the Arctic marine environment and to strengthen measures for the safety of shipping and reduction of vessel based pollution.[97]

Even if someone considers the Ilulissat Declaration as a well-meant step towards the rule of law, its adoption by the "Arctic Five" was criticized by the Arctic Council's other three Members and its permanent participants for undermining the Council.[98] After the Ilulissat Declaration and the reactions it brought, all the Arctic Council's member States decided to take successive actions aimed at strengthening the Council, including the development of treaties through its commissions and task forces.[99] The "Arctic Five" held another ministerial meeting in March 2010, in Chelsea, Canada. At that meeting, however, the US Secretary of State expressed doubts over the appropriateness of ministerial meetings of the "Arctic Five", and no such further meetings have since taken place.[100]

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[95] Ilulissat Declaration (adopted 28 May 2008), 48 *ILM* 382 (2009).

[96] *Supra n. 92* Molenaar, p. 20.

[97] *Supra n. 95* Ilulissat Declaration.

[98] *Supra n. 92* Molenaar, p. 60; Nord D., "The Shape of the Table, the Shape of the Arctic", 65 *International Journal* 825 (2010), p. 829.

[99] *Supra n. 90* Takei, p. 359.

[100] *Supra n. 92* Molenaar, p.60.

III. The Law of the Sea framework for Navigation in the Arctic Ocean

LOSC entered into force on 16 November 1994 and it covers nearly all aspects of the international law of the sea, including navigation. The framework established by the LOSC recognizes a number of maritime zones, each with its own applicable provisions regarding navigation. These are the internal waters, the territorial sea, the exclusive economic zone and the high seas. With respect to navigation, one has to include the straits used for international navigation, since the special regime of the transit passage is applicable there.

The contiguous zone and the continental shelf are of no relevance for the thesis at hand. In the contiguous zone apart from the coastal State's control over the items set out in Article 33 par. 1 LOSC,[101] navigational rights of States are governed by the same rules applicable to the EEZ or the high seas.[102] The continental shelf provisions concern the exploration and exploitation of mineral resources on the seabed and its subsoil. The rights of the coastal State over the continental shelf do not affect the legal status of the superjacent waters or of the airspace above those waters.[103] As a result, in general, the navigational rules of the EEZ or the high seas apply to theses superjacent waters too.[104]

Finally, it must be noted that the terms "Canadian High Arctic Archipelago" and the "Spitsbergen/Svalbard Archipelago", which are often used, do not imply that these areas qualify, nor claim to qualify, as archipelagic States, as defined by Article 46 LOSC.[105]

A. Internal Waters

The regime of internal waters is a direct consequence of the recognition of the legitimacy of straight baselines in the course of the 20th century.[106] The ICJ in the *Anglo-Norwegian Fisheries Case* of 1951 between the UK and Norway described the Norwegian waters on the landward side of the claimed baselines as being part of the "regime of internal waters".[107]

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[101] In the contiguous zone the coastal State may exercise the control necessary to prevent and punish infringement of its customs, fiscal, immigration or sanitary laws and regulations within its territory or territorial sea. LOSC Article 33, par. 1.
[102] Tanaka Y., "Navigational Rights and Freedoms", in Rothwell D. et al. (eds.) *The Oxford Handbook of the Law of the Sea* Oxford University Press (2015)p. 537.
[103] LOSC Article 78 par. 1.
[104] *Supra n. 102* Tanaka, p. 538.
[105] *Supra n. 92* Molenaar, p. 26.
[106] Rothwell D. and Stephens T., *The International Law of the Sea*, 2nd edition, Hart Publishing (2016), p. 53.
[107] *Anglo-Norwegian Fisheries Case* (UK v. Norway), Judgment, ICJ Rep. 1951, p. 116, p. 133.

According to Article 8 LOSC the internal waters are 'those waters which lie landward of the baseline from which the territorial sea is measured'.[108] Specifically, internal waters in a legal sense embrace (a) parts of the sea along the coast down to the low-water mark, (b) ports and harbours, (c) estuaries, (d) landward waters from the closing line of bays, and (e) waters enclosed by straight baselines.[109] The coastal State enjoys full sovereignty in its internal waters encompassing prescriptive and enforcement jurisdiction, subject only to the limitations imposed under international law.[110]

Unlike the territorial sea, the right of innocent passage does not apply in the internal waters of a coastal State, unless in case Article 8 par. 2 LOSC applies.[111] Article 8 par. 2 LOSC provides for an exception to this regime, since the right of innocent passage still exists within internal waters that were prior to the adoption of the Convention not considered as such.[112]

The coastal State is entitled to accept or deny access to its ports to vessels which it considers do not comply with its laws and regulations.[113] As ports are part of a State's territory, the ICJ has recognized in the *Nicaragua Case* that the coastal state has wide discretion in exercising this jurisdiction.[114] All foreign vessels within internal waters and anchoring at ports of a coastal State are subject to the criminal and civil laws and regulations of this coastal State, with the exception of sovereign immune vessels. [115]

This exception of immune vessels is provided for primarily in Article 32 LOSC, according to which no provision of the LOSC, with the exceptions contained in subsection A and in Articles 30 and 31, affects the immunities of warships and other government ships operated for non-commercial purposes.[116] ITLOS in the *ARA Libertad Case* emphasized the fact that Article 32 LOSC does not specify its geographical scope[117] and that, along with Article

[108] LOSC Art. 8, par. 1

[109] Tanaka Y., *The International Law of the Sea*, Cambridge University Press (2012), p. 77.

[110] *Supra n. 106* Rothwell and Stephens, p. 56.

[111] *Supra n. 109* Tanaka, p. 53.

[112] *Supra n. 106* Rothwell and Stephens p. 56

[113] Molenaar E.,"Port and Coastal States", in Rothwell D. et al. (eds.) *The Oxford Handbook of the Law of the Sea* Oxford University Press (2015), p. 285.

[114] *Case Concerning Military and Paramilitary Activities in and against Nicaragua* (Nicaragua v. USA), Judgment, ICJ Rep. 1986, p. 14, par. 213.

[115] Lowe V., "The Right of Entry into Maritime Ports in International Law", 14 *San Diego Law Review* 597 (1977), p. 622.

[116] LOSC, Article 32.

[117] *The "ARA Libertad" Case* (Argentina v. Ghana), Provisional Measures, Order of 15 December 2012, ITLOS Rep. 2012, p. 332, par. 63.

29 LOSC, is applicable to all maritime areas, notwithstanding the fact that it is included in Part II of the Montego Bay Convention.[118]

Nonetheless, LOSC confirms the absence of a right of access for foreign ships to ports under customary international law.[119] No State is obliged to allow foreign vessels into its internal waters and especially its ports, except in cases of distress or *force majeure*, or where this is provided for in a bilateral or multilateral treaty.[120] This may apply to every ship wishing to enter a coastal States internal waters, including warships.[121]

In addition, there is not an objection, at least in principle, to prescribe conditions for departure from a port of foreign vessel.[122] The exercise of such jurisdiction relating to departure of foreign vessels may be mandatory in cases where applicable international rules and standards relating to seaworthiness of ships or to the protection of the marine environment are violated.[123] Furthermore ITLOS has made clear that the right to freedom of navigation on the high seas does not give a foreign-flagged ship the right to leave port and "gain access to the high seas notwithstanding its detention in the context of legal proceedings against it".[124]

The internal waters regime is of particular importance for the navigation in the Arctic Ocean. First of all, the coastal States can enforce their national legislation easily in their internal waters and ports. Secondly, as it will be examined and clarified in the relevant Chapter, Canada and Russia maintain that the two main Arctic routes, the Northwest Passage and the Northern Sea Route, constitute in fact internal waters. If their respective positions are correct, the internal waters regime would apply to these routes.

B. The Territorial Sea and the right of innocent passage

The territorial sea is a marine space under the sovereignty of the coastal State up to a limit not exceeding 12 nm measured from baselines. The territorial sea comprises the seabed and its subsoil, the adjacent waters, and its airspace. The landward limit of the territorial sea is

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[118] *Ibid.* par. 64.
[119] For instance articles 25 par. 2, 38 par. 2, 211 par. 3; *Supra n. 113* Molenaar, p. 284.
[120] *Supra n. 62* Churchill and Lowe, p. 63.
[121] Lathrop C., "Baselines", in Rothwell D. et al. (eds.) *The Oxford Handbook of the Law of the Sea* Oxford University Press (2015), p. 70.
[122] *Ibid.* p. 286.
[123] *Ibid.* p. 287; *supra n. 106* Rothwell and Stephens, p. 58.
[124] *The M/V "Louisa" Case* (Saint Vincent and the Grenadines v. Spain), Judgment, ITLOS Rep. 2013, p. 4, par. 109.

the baseline, while the outer limit of the territorial sea is the line every point of which is at a distance from the nearest point of the baseline equal to the breadth of the territorial sea.[125]

Coastal States may regulate activities and take enforcement actions in their territorial seas subject to the LOSC and other rules of international law.[126] This territorial sovereignty of the coastal State is largely reconciled by the right of innocent passage. The concept of innocent passage was firstly developed by the eminent scholar Emer de Vattel in 1758 and is considered to be established as a custom in the middle of the nineteenth century.[127] It was later recognized at the 1930 Hague Conference for the Codification of International Law and finally codified in Article 14 par. 1 of the 1958 Geneva Convention on the Territorial Sea and Contiguous Zone.[128] Today, Article 17 LOSC provides for the right of innocent passage by stating that "Subject to this Convention, ships of all States, whether coastal or land-locked, enjoy the right of innocent passage through the territorial sea".[129] According to Article 18 par. 1 LOSC, innocent passage comprised lateral passage and inward/outward-bound passage. Lateral passage is the passage traversing the territorial sea without entering internal waters or calling at port while inward/outward-bound passage is to proceed to or from internal waters or call at port.[130] In order for the passage to be innocent it has to be continuous and expeditious[131] and not prejudicial to the peace, good order or security of the coastal State.[132]

All foreign vessels exercising the right of innocent passage must comply with all such rules and regulations and all generally accepted international regulations relating to this right. Hence, the coastal State possesses legislative jurisdiction relating to the right of innocent passage with respect to (a) the safety of navigation and the regulation of maritime traffic; (b) the protection of navigational aids and facilities and other facilities or installations; (c) the protection of cables and pipelines; (e) the prevention of infringement of the fisheries laws and regulations of the coastal State; (f) the preservation of the environment of the coastal State and the prevention, reduction and control of pollution thereof; (g) marine scientific research and hydrographic surveys; (h) the prevention of infringement of the customs, fiscal, immigration

[125] LOSC Article 2.
[126] LOSC Article 2 par. 3; Noyes J., "The Territorial Sea and Contiguous Zone", in Rothwell D. et al. (eds.) *The Oxford Handbook of the Law of the Sea* Oxford University Press (2015), p. 91.
[127] O'Connell D., *The international Law of the Sea* (ed. I. Shearer), Volume I, Clarendon Press Oxford (1982), p. 275.
[128] *Supra n. 109* Tanaka, p. 85.
[129] LOSC Article 17.
[130] *Supra n. 102* Tanaka, p. 540.
[131] LOSC Article 18 par. 2.
[132] LOSC Article 19 par. 1.

or sanitary laws and regulations of the coastal State.[133] Such laws and regulations shall not apply to the design, construction, manning or equipment of foreign ships unless they are giving effect to generally accepted international rules or standards.[134] There is a number of IMO documents and conventions that include provisions regarding design, construction, manning and equipment of ships, to which the contracting parties should abide.[135] The coastal State shall give due publicity to all such laws and regulations.[136] Finally, foreign ships exercising the right of innocent passage through the territorial sea shall comply with all such laws and regulations and all generally accepted international regulations relating to the prevention of collisions at sea.[137] The most important regulations are those provided for in the 1972 Convention on the International Regulations for Preventing Collisions at Sea (COLREG).[138]

A violation of the coastal State's laws and regulations does not *ipso facto* renders the passage non-innocent, unless it falls within the scope of Article 19 LOSC.[139] Nevertheless the coastal State has the capacity to take regulatory measures and suspend the innocent passage of foreign-flagged vessels under the conditions stipulated in Article 25 par. 3 LOSC. The suspension must be temporal, essential to the protection of the State, non-discriminatory and limited to specific areas of the territorial sea. The coastal State shall duly publish this suspension.[140]

The coastal State may require foreign-flagged vessels to use sea lanes and traffic separation schemes while exercising the right of innocent passage. These sea lanes and traffic separation schemes have to be duly published and indicated on charts.[141]

The coastal State on its part shall not hamper the innocent passage of foreign ships in its territorial sea.[142] In addition the coastal State is obliged to give appropriate publicity to any danger to navigation present in its territorial sea, an obligation which was also mentioned in the judgment of the ICJ in the *Corfu Channel Case*.[143]

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[133] LOSC Article 21 par. 1.
[134] LOSC Article 21 par. 2.
[135] Mainly SOLAS and MARPOL 73/78.
[136] LOSC Article 21 par. 3.
[137] LOSC Article 21 par. 4.
[138] *Supra n. 102* Tanaka, p. 541.
[139] *Supra n. 126* Noyes, p. 100.
[140] LOSC Article 25 par. 3; *supra n. 102* Tanaka, p. 544.
[141] LOSC Article 22; *Ibid.* Tanaka.
[142] LOSC Article 24 par. 1.
[143] *Corfu Channel Case* (UK v. Albania), Judgment, ICJ Rep. 1949, p.4, p. 22; *supra n. 102* Tanaka, p. 540.

There are three kinds of vessels and ships, i.e. submarines, warships and nuclear-powered ships and ships carrying inherently dangerous or noxious substances, for the innocent passage of which a special regime has been formulated.

Submarines and other underwater vessels have to navigate on the surface of the sea and show their flag.[144] Submergence in the territorial sea will not instantly justify the use of force against the submarine. O'Connell maintains that, above all, every measure should be taken short of armed force to require the submarine to leave the territorial sea.[145]

With regards to warships, the ICJ in the *Corfu Channel Case* did not directly answered the question whether they can exercise the right of innocent passage in the territorial sea.[146] Tanaka suggests that customary international law is obscure on this subject.[147] However he makes three points that suggest that warships enjoy the freedom of innocent passage. First of all the fact that Article 17 LOSC is under the general title "Rules Applicable to all Ships". Secondly the aforementioned provision of Article 20 regarding submarines, which are mostly governmental military ships. Finally he maintains that Article 19 par. 2 LOSC sets out a catalogue of activities which render passage non-innocent. A number of these activities, such as the exercise or practice with weapons,[148] the launching, landing or taking on board of aircraft[149]or any military device,[150] relate specifically, if not exclusively, to warships.[151] Furthermore, Natalie Klein suggests that the mere fact of a vessel is a warship will not of itself determine whether passage is innocent or not. The acts undertaken by the ship will indicate the innocent nature of the passage.[152]

It must be noted that a number of States, most notably China, maintain that foreign warships must notify their presence and obtain prior authorization to enter a State's territorial

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[144] LOSC Article 20.
[145] *Supra n. 127* O'Connell, p. 297.
[146] However Judges Alvares, Krylov and Azevedo discussed the question in their respective Separate and Dissenting Opinions. See Separate Opinion of Judge Alvarez in the *Corfu Channel Case* (UK v. Albania), Judgment, ICJ Rep. 1949, p. 39, pp. 46-47; Dissenting Opinion of Judge Krylov in the *Corfu Channel Case* (UK v. Albania), Judgment, ICJ Rep. 1949, p. 68, p. 74; Dissenting Opinion of Judge Azevedo in the *Corfu Channel Case* (UK v. Albania), Judgment, ICJ Rep. 1949, p. 78, p. 99.
[147] *Supra n. 102* Tanaka, p. 545.
[148] LOSC Article 19 par. 2 (b).
[149] LOSC Article 19 par. 2 (e).
[150] LOSC Article 19 par. 2 (f).
[151] *Supra n. 102* Tanaka, p. 546; *supra n. 106* Rothwell and Stephens p. 238.
[152] Klein N., *Maritime Security and the Law of the Sea*, Oxford University Press (2011), p. 31.

sea.[153] Other States, such as Germany and the UK claim that such a practise is in violation with the relevant LOSC provisions.[154]

Finally Article 23 LOSC states that "Foreign nuclear-powered ships and ships carrying nuclear or other inherently dangerous or noxious substances shall, when exercising the right of innocent passage through the territorial sea, carry documents and observe special precautionary measures established for such ships by international agreements." In practise some States require prior notification or authorization of the passage of foreign-flagged nuclear-powered ships and ships carrying hazardous cargoes through their territorial sea.[155] Such a practice is supported by maintaining that if the coastal state is not entitled to know about the passage of these kinds of ships through its territorial zone, the State will not be in position to exercise its rights under Articles 22 par. 1 and par. 2 LOSC.[156] On the other hand, the compatibility of a requirement of prior authorization with the LOSC is questionable since such a requirement could easily result to the denial of the right of innocent passage of foreign nuclear-powered ships and ships carrying hazardous cargoes.[157]

It goes without saying that the regime of the innocent passage and the territorial sea is important for every Arctic State, as it is important for every other coastal State in general. Every Arctic littoral State has a 12 nm territorial sea, with the exception of Greenland whose territorial sea has a breadth of 3 nm. Importantly, that 3 nm territorial sea and the Greenlandic internal waters, are the only waters where the Greenlandic Self-Government can adopt and implement its laws and regulations, since the 200 nm EEZ is under the jurisdiction of Denmark.[158] In a similar note, the Svalbard Archipelago and Jan Mayen have only a territorial sea of 12 nm.[159]

Finally the question of innocent passage for warships, submarines and nuclear-powered ships and ships carrying hazardous cargoes is of particular importance in the Arctic Ocean. Especially submarines, including nuclear-powered ones, and nuclear-powered icebreakers constitute main users of the Arctic Ocean.[160]

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[153] *Supra n. 106* Rothwell and Stephens, p. 238, n. 106.
[154] *Ibid.*
[155] *Supra n. 102* Tanaka, p. 549.
[156] Roscini M., "The Navigational Rights of Nuclear Ships", 15 *Leiden Journal of International Law* 251 (2002), p. 253.
[157] Molenaar E., "Innocent Passage: Past and Present", 23 *Marine Policy* 131 (1999), p. 144.
[158] *Supra n. 21* Henriksen p. 256
[159] *Supra n. 63* Act No 57 of 27 June 2003 on Norway's Territorial Waters and Contiguous Zone, par. 5.
[160] See Harriet C., "Polar Deployment of Soviet Submarines" 39 *International Journal* 828 (1984); *Supra n. 12* Byers pp. 167-169.

A particular agreement between the US and the then-USSR is of great importance regarding the right of innocent passage in the Arctic Ocean. The two States have agreed in 1989 that “All ships, including warships, regardless of cargo, armament or means of propulsion, enjoy the right of innocent passage through the territorial sea in accordance with international law, for which neither prior notification nor authorization is required.”[161]

However Russia, following the 2018 Kerch incident in Crimea,[162] may change its position on the matter of the innocent passage of warships in its Arctic waters. According to Russian news agencies, the Russian Defense Ministry spokesman, Mikhail Mizintsev, stated on 30 November 2018 that Russia will work on amending legislation that would require foreign warships to notify Russia before being able to pass through Russian Arctic waters, including the territorial sea.[163] This amendment will, allegedly, come into force in 2019 and it is doubtful whether it will be in accordance with the applicable international law rules.

C. Straits used for international navigation

Geographically, straits are narrow passages of water connecting two seas. Their legal status has been part of the international debate on the Law of the Sea for many decades. Especially the right of passage through straits has been of international concern at every conference on the law of the sea. The notion of greater navigation freedoms for ships navigating through straits is an old idea, since various efforts were made in the late nineteenth and early twentieth centuries to consider the status of straits and whether a distinctive regime was necessary.[164] It was the ICJ in the *Corfu Channel* case, which laid down two important requirements for the characterization of a strait as a strait “used for international navigation”.[165]

[161]Joint Statement by the United States of America and the Union of Soviet Socialist Republics: Uniform Interpretation of Rules of International Law Governing Innocent Passage (23 September 1989) reprinted in *Kristina Schönfeldt* (ed.) *The Arctic in International Law and Policy*, Hart Publishing (2017), p. 1393

[162] On Sunday 25 November 2018 Russian coast guard patrol boats first intercepted and later fired on three Ukrainian naval ships near the entrance to the Kerch Strait which borders the Crimean peninsula. Two Ukrainian sailors were injured, the Ukrainian ships seized and the crews arrested. See Kraska J., “The Kerch Strait Incident: Law of the Sea or Law of Naval Warfare?” *EJIL: Talk*, 3 December 2018, accessed 6 December 2018 at <https://www.ejiltalk.org/the-kerch-strait-incident-law-of-the-sea-or-law-of-naval-warfare/>.

[163] The Moscow Times “Russia Will Restrict Foreign Warships in Arctic Ocean, Defense Official Says”, 30 November 2018, accessed 6 December 2018 at <https://themoscowtimes.com/news/russia-will-restrict-foreign-warships-in-arctic-ocean-defense-official-says-63672>; Russia Today “You shall not pass: Russia changes rules for foreign warships navigating through its Arctic”, 30 November 2018, accessed 6 December 2018 at <https://www.rt.com/russia/445245-new-rules-russia-arctic/>.

[164] Rothwell D., “International Straits”, in Rothwell D. et al. (eds.) *The Oxford Handbook of the Law of the Sea* Oxford University Press (2015), p. 116.

[165] Nandan S. and Rosenne S., *United Nations Convention on the Law of the Sea, 1982: A Commentary*, Volume II, Martinus Nijhoff (2003), p. 280.

In reference to Albania's contention that the UK had violated Albanian sovereignty by sending warships through the Corfu Channel without prior authorization, the Court noted:

> "It is, in the opinion of the Court, generally recognized and in accordance with international custom that States in time of peace have a right to send their warships through straits used for international navigation between two parts of the high seas without the previous authorization of a coastal State, provided that the passage is innocent. Unless otherwise prescribed in an international convention, there is no right for a coastal State to prohibit such passage through straits in time of peace."[166]

That way the ICJ concluded that warships were entitled to exercise the right of innocent passage through straits and coastal States were not entitled to suspend this right within such straits for any kind of ship. Moreover, by that contention, the ICJ set out the first criterion for a strait to be considered as "used for international navigation". It is a geographical criterion, according to which a strait connects two parts of the high seas.

Even more importantly, the ICJ set out a functional criterion used to characterize a strait as "been used for international navigation". Addressing Albania's contention that the Corfu Channel was not of great importance and was used almost exclusively for local traffic, the Court stated that:

> "It may be asked whether the test is to be found in the volume of traffic passing through the Strait or in its greater or lesser importance for international navigation. But in the opinion of the Court the decisive criterion is rather its geographical situation as connecting two parts of the high seas and the fact of its being used for international navigation. Nor can it be decisive that this Strait is not a necessary route between two parts of the high seas, but only an alternative passage between the Aegean and the Adriatic Seas. It has nevertheless been a useful route for international maritime traffic."[167]

[166] *Supra n. 143 Corfu Channel Case*, p. 28.
[167] *Ibid.*

By virtue of Article 16 par. 4 of the 1958 Convention on the Territorial Sea and the Contiguous Zone (hereinafter TSC)[168] the regime of international straits was expanded to include straits linking the high seas with the territorial sea of a third State.[169]

Articles 34 to 45 LOSC, which constitute Part III of the Convention, build upon the *Corfu Channel* Judgment and the 1958 TSC and set out the regime for straits used for international navigation. LOSC acknowledges four different types of straits: (a) straits used for international navigation between one part of the high seas or EEZ and another part of the high seas or EEZ;[170] (b) straits used for international navigation between one part of the high seas or EEZ and the territorial sea of a third State,[171] or straits which exist between the mainland and an island where there exists, seaward of the island, a route through the high seas or EEZ of similar convenience,[172] where the right of non-suspendable innocent passage applies; (c) straits which are regulated by longstanding international conventions;[173] (d) and straits where there exists a route through the high seas or EEZ of similar convenience.[174] In the last two cases the provisions of Part III of the LOSC do not apply by virtue of Articles 35 (c) and 36 respectively.

In Straits used for international navigation between one part of the high seas or EEZ and another part of the high seas or EEZ the regime of transit passage applies. Moreover it should be noted that Article 35 (a) LOSC states that Part III is not applicable to "any areas of internal waters within a strait, except where the establishment of a straight baseline in accordance with the method set forth in article 7 has the effect of enclosing as internal waters areas which had not previously been considered as such". In such areas, the right of transit passage shall apply.

The right of transit passage is defined in Article 38 par 2. As shown in by the wording of the second sentence of this provision, transit passage includes lateral and inward / outward-bound passage.[175]

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[168] Convention on the Territorial Sea and the Contiguous Zone [TSC] (signed 29 April 1958, entry into force 10 September 1964), 516 *UNTS* 205.
[169] *Supra n. 69* Evans p. 663.
[170] LOSC Article 37.
[171] LOSC Article 45 par. 1 (b).
[172] LOSC Article 38 par. 1 and LOSC Article 45 par. 1 (a)
[173] LOSC Article 35 (c).
[174] LOSC Article 36.
[175] *Supra n. 102* Tanaka, p. 500.

The right of transit passage in international straits differs from the right of innocent passage in the territorial sea in four respects.[176] First, Article 38 par. 1 clearly states that all ships and aircraft enjoy the right of transit passage. Therefore there is no dispute about whether warships enjoy the right of transit passage.[177] Second, the right of transit passage includes overflight by all aircraft, and, in the same respect, military aircraft.[178] Third there shall be no suspension of transit passage. Fourth, the LOSC provides no explicit obligation for submarines to navigate on the surface and to show their flag. According to Article 39 par. 1 (c) ships and aircraft, while exercising the right of transit passage, shall "refrain from any activities other than those incident to their normal modes of continuous and expeditious transit unless rendered necessary by *force majeure* or by distress". Arguably, the normal mode for submarines to transit is submerged navigation.[179]

Nevertheless, the right of transit passage is not without its limitations. Ships and aircraft must proceed without delay[180] and refrain from any threat or use of force against the States bordering the strait.[181] Moreover ships exercising the right of transit passage have to comply with generally accepted international regulations, procedures, and practice for safety at sea, including the International Regulations for Preventing Collisions at Sea.[182] And for the prevention, reduction, and control of pollution from ships.[183] They must refrain from carrying out any research or survey activities without the prior authorization of the States bordering straits,[184] respect applicable sea lanes and traffic separation schemes[185] and comply with law and regulations adopted by States bordering a strait under Article 42 par. 1 LOSC.[186]

In the same manner, aircraft in transit passage shall observe the Rules of the Air established by the International Civil Aviation Organization as they apply to civil aircraft[187] and monitor the radio frequency assigned by the competent internationally designated air traffic control authority or the appropriate international distress radio frequency.[188]

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[176] *Ibid.*
[177] *Supra n. 69* Evans, p. 664.
[178] *Ibid.*
[179] *Supra n. 127* O'Connell, p. 333.
[180] LOSC Article 39 par. 1 (a).
[181] LOSC Article 39 par. 1 (b).
[182] LOSC Article 39 par. 2 (a).
[183] LOSC Article 39 par. 2 (b).
[184] LOSC Article 40.
[185] LOSC Article 41 par. 7.
[186] LOSC Article 42 par. 4.
[187] LOSC Article 39 par. 3 (a).
[188] LOSC Article 39 par. 3 (b).

As for the State bordering a strait, it has a right to adopt laws and regulations relating to transit passage in the issues enumerated in Article 42 par. 1 LOSC. These laws and regulations have to be given due publicity.[189] In addition, it may designate sea lanes and prescribe traffic separation schemes for navigation in straits where necessary to promote the safe passage of ships pursuant to Article 41 par. 1 LOSC.

However, the legislative jurisdiction of the State bordering a strait is limited by Article 42 par. 2 LOSC in two respects. First, the laws and regulations of a State bordering an international strait shall not discriminate in form or in fact among foreign ships. Second, the application of the laws and regulations shall not have the practical effect of denying, hampering or impairing the right of transit passage.

In this respect, an issue arises in regards to the enforcement jurisdiction of the bordering State and whether, in the case the violation of these laws and regulations, that State could terminate the right of transit passage unilaterally.[190] The wording of Article 42 LOSC suggests that a States bordering a strait may not directly deny the right of transit passage merely on grounds of breach of its adopted laws and regulations.[191] As a result, the balance struck clearly favours the freedom of navigation, in the form of the right of transit passage.[192] However, in the case of a violation of the laws and regulations referred to in Article 42 par. 1(a) and (b) there exists another applicable provision. Article 233, which refers to the protection and preservation of the marine environment in straits used for international navigation, explicitly allows the State bordering a strait to exercise enforcement jurisdiction.[193] This provision suggests that law enforcement against delinquent foreign ships engaged in transit passage is permitted, which by implication would extend to stopping and barring further passage of a vessel to contain any threat to the marine environment.[194]

Finally, as it was mentioned earlier, the right of innocent passage applies to straits used for international navigation which are excluded from the application of Article 38 par.1 LOSC and to straits between a part of the high seas or an EEZ and the territorial sea of a third State. Unlike the right of innocent passage through the territorial sea, Article 38 par. 1 LOSC states that the right innocent passage through these international straits shall not be impeded. As with

[189] LOSC Article 41 par. 3.
[190] *Supra n. 164* Rothwell, p. 130.
[191] *Supra n. 102* Tanaka, p. 552.
[192] *Supra n. 69* Evans, p. 664.
[193] Rosenne S. and Yankov A., *United Nations Convention on the Law of the Sea 1982: A Commentary*, Volume IV, Martinus Nijhoff (1991), p. 291.
[194] *Supra n. 164* Rothwell, p. 130.

innocent passage through the territorial sea, aircraft do not enjoy the freedom of overflight and submarines and other underwater vehicles are required to navigate on surface and to show their flag in the exercise of the right of non-suspendable innocent passage.[195]

The importance of the legal regime for navigating straits is apparent in respect to the Arctic Ocean. Two main shipping routes in the Arctic Ocean are the Northwest Passage and the Northern Sea Route, two routes whose legal status is contested by the US, which maintains that they are both straits used for international navigation.[196] The border States, Canada and Russia dismiss this position and maintain that the two routes do not meet the *Corfu Channel* criteria to be characterized as straits for international navigation.[197]

The Northwest Passage and the Northern Sea Route are large areas of water that adjacent to the northern coasts of Canada and Russia respectively.[198] There is an ongoing dispute about whether they constitute straits used for international navigation or not. The disputes over the legal status of the Northwest Passage and the Northern Sea Route mattered little when only powerful icebreakers could pass through.[199] However, today, the rapidly melting ice and increasing volume of shipping means that these two gateways to the Arctic are of great importance for Canada and Russia as well as the other Arctic States and third States willing to utilize them. The Northern Sea Route cuts the distance from China to Northern Europe via the Suez Canal by forty percent, while the Northwest Passage provides a forty percent shortcut between the Pacific and Atlantic Oceans over the Panama Canal route.[200]

Both Canada and Russia maintain that the straits and channels along their northern coastlines constitute internal waters.[201] Their legal reasoning is similar but not identical. The two straits will be examined separately in Chapter IV in order to assess whether they are "used for international navigation" or not.

Notwithstanding the question of the legal status of the Northwest Passage and the Northern Sea Route which will be examined in Part III of this thesis, there is a number of international straits in the Arctic Ocean, or lead up there, whose status is not contested. These include the Bering Strait, which is used as an entry for both the Northwest Passage and the

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[195] *Supra n. 102* Tanaka, p. 552.
[196] *Supra n. 33* Rothwell, p. 17.
[197] *Ibid.*
[198] Scovazzi T., "Legal Issues relating to Navigation through Arctic Waters", 1 *The Yearbook of Polar Law* 371 (2009), p. 374. See also Annex Figures 3, 4 and 5.
[199] *Supra n. 12* Byers p. 131.
[200] Rainwater S., "International Law and the "Globalization" of the Arctic: Assessing the rights of non-Arctic States in the High North", 30 *Emory International Law Review* 115 (2015), pp. 119-120.
[201] *Supra n. 12* Byers p. 129. See Annex, Figures 3, 4, 5.

Northern Sea Route,[202] the Nares Strait,[203] the Davis Strait,[204] the Fram Strait[205] and the Denmark Strait.[206] In these straits the regime of transit passage is undoubtedly applied.

D. The Exclusive Economic Zone

The Exclusive Economic Zone (EEZ) is an area beyond and adjacent to the territorial sea which extends up to 200 nm from the baselines.[207] Under the regime established by the LOSC, the EEZ is comprised of neither territorial seas nor high seas but is considered to be a *sui generis* zone, subject to a distinct jurisdictional framework.[208] The coastal State does not have full sovereignty in the EEZ, it enjoys however a number of sovereign rights.[209] Specifically, the coastal State has the sovereign right to explore and exploit, conserve and manage the natural resources, whether living or non-living, of the waters superjacent to the seabed and of the seabed and its subsoil, and with regard to other activities for the economic exploitation and exploration of the zone, such as the production of energy from the water, currents and wind.[210] Moreover it has jurisdiction with regard to the establishment and use of artificial islands, installations and structures, marine scientific research and the protection and preservation of the marine environment.[211]

Article 58 par. 1 LOSC provides that in the EEZ, all States enjoy the freedom of navigation, by direct reference to Article 87 LOSC. At the same time, under Article 58 par. 3, States are obliged to "have due regard to the rights and duties of the coastal State and shall comply with the laws and regulations adopted by the coastal State in accordance with the provisions of this Convention and other rules of international law in so far as they are not incompatible with this Part V". Consequently, unlike in the high seas, the freedom of

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[202] The Bering Strait is bordered by Russia to the west and the United States to the east and is approximately 51 nm wide. See *Supra n. 33* Rothwell, pp. 46-52.
[203] *Ibid.* p. 52; Nares Strait is situated between Ellesmere Island (Canada) and Greenland and connects the Lincoln Sea on the fringe of the Arctic Ocean with Baffin Bay which eventually leads to Davis Strait, the Labrador Sea and the Atlantic Ocean.
[204] *Ibid.* p. 54; Davis Strait lies to the south of Nares Strait and is principally located between Baffin Bay and the Labrador Sea and fringed to the west by Baffin Island (Canada) and Greenland.
[205] *Ibid.* p. 55; Fram Strait is a large body of water within the Greenland Sea which lies between Greenland and Svalbard. It provides the most northern accessible access route from the Atlantic Ocean (via the Denmark Strait or Norwegian Sea) to the Arctic Ocean.
[206] *Ibid.* p. 56; The Denmark Strait lies between Greenland and Iceland.
[207] LOSC Article 57.
[208] *Supra n. 69* Evans, p. 673.
[209] *Ibid.*; *supra n. 109* Tanaka, p. 126.
[210] LOSC Article 56, par. 1 (a).
[211] LOSC Article 56, par. 1 (b).

navigation may be restricted by the coastal State's jurisdiction in the EEZ.[212] For instance, navigation of foreign vessels through an EEZ is also subject to regulation of the coastal State with respect to marine pollution.[213] In this sense, the freedom of navigation enjoyed by foreign-flagged vessels in the EEZ is not identical with the freedom of navigation in the high seas.[214]

Article 73 of the LOSC provides for a broad range of measures, including boarding, inspection, arrest, and judicial proceedings that can be adopted on foreign vessels only in the exercise of the coastal State's sovereign right to explore exploit, conserve and manage the living resources in its EEZ.[215] Nevertheless, it is expressly provided that, when a foreign-flagged ship is detained, its flag State must be notified immediately and the vessel and crew "promptly released upon the posting of reasonable bond or other security".[216] It is further specified that the penalties, which the coastal State may impose in case of violation of its fisheries laws and regulations, may not include imprisonment or any other form of corporal punishment.[217]

There is a note that must be made with respect to the protection of the marine environment. As already mentioned, the coastal State has jurisdiction with regard to the protection of the marine environment within the EEZ. However the provisions of Part XII of the LOSC do not grant coastal States exclusive and extensive rights in this field, but rather selected and specific powers, tailored according to the various types of pollutants under consideration: pollution from seabed activities, from installations and other devices, from dumping, or directly from vessels.[218] For each of these types of pollution, except pollution from vessels, coastal States enjoy wide regulatory and enforcement powers, since the related activities are subject to their previous consent and are not limited by international standards.[219]

By contrast, with respect to ship source pollution, the coastal State may only "adopt laws and regulations for the prevention, reduction and control of pollution from vessels conforming to and giving effect to generally accepted international rules and standards established through the competent international organisation or general diplomatic

[212] *Supra n. 102* Tanaka, p. 554.
[213] Andreone G., "The Exclusive Economic Zone", in Rothwell D. et al. (eds.) *The Oxford Handbook of the Law of the Sea,* Oxford University Press (2015), p. 179.
[214] *Supra n. 102* Tanaka, p. 554.
[215] *Supra n. 213* Andreone, p. 168.
[216] *Ibid.*
[217] LOSC Article 73, par. 3.
[218] *Supra n. 109* Tanaka, p. 130.
[219] *Supra n. 213* Andreone p. 176.

conference".[220] If the coastal State deems it necessary to adopt "special mandatory measures it should do so after appropriate consultations through the competent international organization take place.[221] The cumbersome procedure provided for in Article 211 par. 6 (a) LOSC may lead to the designation of special areas where the coastal State can adopt national measures of implementation of stricter national legislation.[222]

Every Arctic littoral State has declared an EEZ of 200 nm and as a result a large percentage of the Arctic Ocean is covered by the respective five EEZs.[223] Only the Svalbard Archipelago and Jan Mayen do not have an EEZ but an Exclusive Fisheries Zone. Consequently, the largest percentage of Arctic navigation takes place in the Arctic States' EEZs.

Importantly there is one more provision in the LOSC, which specifically refers to the EEZ that grants the Arctic States greater powers with respect to protection of the marine environment. That is the provision of Article 234 which will be discussed in great detail afterwards.

E. The High Seas

Before examining Article 234 LOSC, a note should be made on the legal regime applicable on the high seas.

The high seas form one of the few areas of the planet over which no claims of sovereignty can be made.[224] The relevant LOSC provisions are applicable to all parts of the sea that are not included in the, internal waters, territorial sea, EEZ or archipelagic waters of a State,[225] defining thus the spatial extent of the high seas.

The high seas are open to all States, whether coastal or landlocked.[226] The traditional freedoms of the high seas are provided for in Article 87 LOSC. These are: (a) freedom of navigation; (b) freedom of overflight; (c) freedom to lay submarine cables and pipelines,

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[220] LOSC Article 211, par. 5.
[221] LOSC Article 211, par. 6 (a).
[222] Gavouneli M., *Functional Jurisdiction in the Law of the Sea*, Martinus Nijhoff (2008), p. 43.
[223] See Annex, Figure 2.
[224] Guilfoyle D., "The High Seas", in Rothwell D. et al. (eds.) *The Oxford Handbook of the Law of the Sea,* Oxford University Press (2015), p. 208.
[225] LOSC Article 86.
[226] LOSC Article 125 which states that "Land-locked States shall have the right of access to and from the sea for the purpose of exercising the rights provided for in this Convention including those relating to the freedoms of the high seas".

subject to Part VI; (d) freedom to construct artificial islands and other installations permitted under international law, subject to Part VI; (e) freedom of fishing, subject to the conditions laid down in section 2; (f) freedom of scientific research, subject to Parts VI and XIII.[227]

The rights of navigation and overflight shall be exercised by all States with due regard for the interests and rights of other States.[228] The principle of the nationality of ships and the jurisdiction of the flag State over the ship on the high seas ensure that the high seas are reserved for peaceful purposes and public is maintained.[229] These rules are long-established and found both in treaty and customary law.[230]

With the exception of small pockets of high seas between the Norwegian coasts and Greenland and the Norwegian coasts and Russia, only the Central Arctic Ocean consists of high seas.[231] The conditions in the Central Arctic Ocean are still particularly harsh with no possibility in the near future of an ice-melting to open navigational route there.[232] However the fact that the Central Arctic Ocean constitutes an area beyond national jurisdiction is important regarding the protection of the marine environment in that area.[233]

Nevertheless, the relevant provisions of IMO's Polar Code regarding construction, design, equipment and manning are applicable to vessels of the member States navigating the high seas pockets of the Arctic Ocean, by virtue of the flag State jurisdiction, since the flag State has the responsibility to ensure compliance with national and international law of vessels flying its flags on the high seas.[234] The flag states have to foster the adoption of these construction, design, equipment and manning requirements and the development of the ship-specific Polar Water Operational Manual which is now required for ships voyaging in polar waters.[235]

[227] LOSC Article 87 par. 1.
[228] LOSC Article 87 par. 2.
[229] *Supra n. 224* Guilfoyle, p. 209.
[230] O' Connell D., *The international Law of the Sea* (ed. I. Shearer), Volume II, Clarendon Press Oxford (1984), pp. 799-801.
[231] *Supra n. 92* Molenaar, pp. 26-27; See also Annex, Figure 2.
[232] *Ibid.* Molenaar.
[233] For the importance of Central Arctic Ocean's marine environment and the efforts to protect it see Thiele T., "Arctic High Seas Governance of Biodiversity", in Hildebrand L. et al. (eds.) *Sustainable Shipping in a Changing Arctic*, Springer (2018).
[234] *Supra n. 102* Tanaka, p. 556.
[235] Brigham L. and Hildebrand L., "Introduction to the new Maritime Arctic", in Hildebrand L. et al. (eds.) *Sustainable Shipping in a Changing Arctic*, Springer (2018), p. 9.

F. The Arctic Exception of Article 234 LOSC

Article 234 LOSC could be described as the cornerstone of the legal regime governing navigation in the Arctic Ocean. Article 234 LOSC provides that:

> "Coastal States have the right to adopt and enforce non-discriminatory laws and regulations for the prevention, reduction and control of marine pollution from vessels in ice-covered areas within the limits of the exclusive economic zone, where particularly severe climatic conditions and the presence of ice covering such areas for most of the year create obstructions or exceptional hazards to navigation, and pollution of the marine environment could cause major harm to or irreversible disturbance of the ecological balance. Such laws and regulations shall have due regard to navigation and the protection and preservation of the marine environment based on the best available scientific evidence."

Article 234 is the sole provision of Section 8 of Part XII (Protection and Preservation of the Marine Environment), titled "Ice-covered Areas". It picks up the theme of Article 194 par. 5 LOSC which refers to "rare or fragile ecosystems".[236] Article 234 is the only provision in Part XII which accords to a coastal State the right to adopt and enforce within the limits of its EEZ its own non-discriminatory laws and regulations for the prevention, reduction and control of marine pollution. To that extent it is a *lex specialis,* particularly in relation to Article 211 paras. 5 and 6 LOSC, which it overrides in the ice-covered areas to which it relates.[237]

Article 234 was negotiated during the UNCLOS III by Canada, the Soviet Union and US with little interest or opposition shown by other states.[238] Canada in particular wished to ensure that its 1970 Arctic Waters Pollution Prevention Act (AWPPA) and underlying regulations and orders would no longer be regarded as inconsistent with international law.[239] However, one should not believe that the three States acted out of self-interest and "manipulated" the international community in granting them more powers in their Arctic waters. Their concern related principally to vessel source oil pollution, be it deliberate or accidental. If such pollution would occur, it would have potentially disastrous consequences on the marine and the terrestrial Arctic environment. The negotiations during UNCLOS III

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[236] *Supra n. 193* Rosenne and Yankov, p. 393.

[237] Chircop A. et al, "Course Convergence? Comparative Perspectives on the Governance of Navigation and Shipping in Canadian and Russian Arctic Waters", 28 *Ocean Yearbook* 291 (2014), p. 299.

[238] *Supra n. 22* Hartman, p. 281.

[239] *Supra n. 92* Molenaar, p. 35.

should be viewed in the context of some well-known accidents that resulted in major oil spills such as the *Torrey Canon* (1967), the *Sea Star* (1972), and the *Amoco Cadiz* (1978).[240]

Canada, along with other coastal States was interested in extending coastal States' jurisdiction off their coasts, in contrast to maritime powers like the US that were determined to ensure that this creeping jurisdiction did not interfere with the freedom of navigation.[241] That is why Canada needed the support of the USSR, which however had protection concerns only with regard to the Arctic and was not interested in a general right for coastal states to extend their jurisdiction and hamper the freedom of navigation.[242] The negotiation of Article 234 LOSC is seen as a great example of finding a compromise in international treaty negotiations, particularly since Canada, the Soviet Union and the US avoided the question whether the respected Canadian and Russian waters (the Northwest Passage and the Northern Sea Route respectively) constitute straits used for international navigation and instead focussed on the protection of the marine environment.[243]

There is a lingering question regarding the interpretation and application of Article 234 LOSC. Undoubtedly the provision grants the coastal State more power in respect to its "ice-covered" EEZ. As will be examined in the relevant Chapter, Canada and Russia explicitly base their legislation on Article 234. The US, Denmark and Norway have different views on the interpretation of the provision and their legislation mirrors their views on the matter.

The problems begin from the very title of the provision: "ice-covered areas". The provision later tries to clarify the term by referring to "[…] ice-covered areas within the limits of the exclusive economic zone, where particularly severe climatic conditions and the presence of ice covering such areas for most of the year create obstructions or exceptional hazards to navigation […]". First of all, it must be noted that only Arctic States refer to this provision and it has not been implemented in the Antarctic, even if LOSC does not differentiates between the two.[244] No Antarctic claimant State which could be classified as an "Antarctic coastal State" has enacted legislation implementing Article 234.[245] Only Argentina's legislation might vaguely hold its options open regarding Article 234 and Antarctic waters.[246]

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[240] Bartenstein K., "The 'Arctic Exception' in the Law of the Sea Convention: A Contribution to safer Navigation in the Northwest Passage?", 42 *Ocean Development and International Law* 22 (2011), pp. 24-25.
[241] Nordquist M., *United Nations Convention on the Law of the Sea, 1982: A Commentary*, Volume I, Martinus Nijhoff, (1985), p. 70.
[242] *Supra n. 240* Bartenstein p. 27.
[243] *Ibid.*
[244] *Supra n. 79* Boone, p. 195.
[245] Brubaker R., *The Russian Arctic Straits*, Martinus Nijhoff (2005), p. 53.
[246] *Ibid.*

There is no definition in the LOSC of "ice" or "ice-covered areas". According to the Virginia Commentary of the Convention, the use of the World Meteorological Organization's standardized classification of sea-ice terminology and ice reporting codes[247] is a useful tool to define scientifically the ice encountered at sea.[248]

In addition the wording of Article 234 refers to this "ice-coverage" condition being present "for most of the year". Yet, even areas that are covered by ice for most of the year are not completely ice-covered all year round. If one region meets this condition, should the coastal State take measures applicable all year round or would these measures apply only during the period where the conditions prevail? Bartenstein points out that "if the jurisdiction of the coastal state requires that the listed conditions actually exist, it could result in the coastal state having to enact a twin set of measures applying to the Arctic, one for the ice-free moments and another for the rest of the year".[249] Taking into account the practical drawbacks of a coastal State having a "twin set of measures" and the fact that conditions listed in Article 234 do not shift twice a year at a predictable moment, but pass through transitional situations, it should be the general features of the climate that are of significance.[250]

Another important aspect of the term "ice-covered" relates to the actual increasing ice melting happening in the Arctic due to Global Warming. If, or more probably when, these areas cease to be ice-covered for most of the year, will Article 234 continue to apply in the Arctic? One could argue that the term "ice-covered areas" constitutes a term that was used as to merely describe the Arctic and divide it from other vulnerable zones or special areas,[251] a generic term which could be subject to an "evolutionary interpretation".[252] To arrive to such a conclusion is an ambitious and far-fetched goal. The most convincing answer, taking into account the object and purpose of LOSC is that if / when the ice will not cover these areas for most of the time, Article 234 will fall in disuse. However the Arctic coastal States may not sympathize with such an opinion since it will deprive them the rights provided for by Article 234.

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[247] World Meteorological Organization, WMO Sea Ice Nomenclature (WMO No. 259, volume 1 – Terminology and Codes, Volume II – Illustrated Glossary and III – International System of Sea-Ice Symbols) by March 2014, accessed 6 December 2018 at
<https://www.jcomm.info/index.php?option=com_oe&task=viewDocumentRecord&docID=14598>

[248] *Supra n. 193* Rosenne and Yankov, p. 397.

[249] *Supra n. 240* Bartenstein p. 31.

[250] *Supra n. 193* Rosenne and Yankov, p. 397.

[251] Demliuga R., "A Note on the Application of Article 234 of the Law of the Sea Convention in light of Climate Change: Views from Russia", 48 *Ocean Development and International Law* 128 (2017), p. 131.

[252] For the evolutionary interpretation of treaty terms see Dupuy P., "Evolutionary Interpretation of Treaties: Between Memory and Prophecy" in Cannizzaro E. (ed.) *The Law of Treaties Beyond the Vienna Convention*, Oxford University Press (2011), pp. 123–137.

As of the territorial application of Article 234, it states that it applies to the EEZ, provided that the conditions described exist. However it is not clear whether the provision applies only to the EEZ, as in the waters beyond the 12 nm of the territorial sea in accordance to Article 55 LOSC ("The exclusive economic zone is an area beyond and adjacent to the territorial sea […]"), or if it implies the application of Article 234 to the full breadth of the EEZ, including the parts which overlap with the territorial sea.[253] In the same manner, it is not clear if Article 234 applies also to international straits within the EEZ of a coastal State.[254]

Bartenstein correctly suggests that whether Article 234 applies to the territorial sea and international straits depends on the actual powers that Article 234 confer on the coastal states. If they are more far reaching than those of the innocent and transit passage regimes, it would seem logical that Article 234 can be applied to the territorial sea and international straits therein.[255] As a result it is imperative to firstly discuss the rights of the coastal State based on this provision.

First of all, as it was analysed before, coastal States in order to adopt laws and regulations related to their territorial sea, they have to request and take into account recommendations by the IMO. For example this requirement is applicable before designating sea-lanes and traffic separation schemes.[256] Likewise, coastal States are free to adopt laws and regulations with respect to some matters in an international strait, but before adopting them they must refer their proposals to the competent international organization, which is again the IMO.[257] Within their EEZ, coastal States are subjected to even more constraints if they wish to adopt laws and regulations for the preservation, reduction and control of pollution from vessels, since such laws and regulations are to give effect to generally accepted international rules and standards established through the competent international organization.[258] Coastal States may, however, establish special areas in the EEZ in order to protect a particularly vulnerable environment.[259]

It is evident that, normally, the coastal State's authority is subject to the "generally accepted rules and standards" and often, the approval of the international community given

[253] *Supra n. 240* Bartenstein, p. 28.
[254] *Ibid.*
[255] *Ibid.* p. 30.
[256] LOSC, Article 22, par. 3(a).
[257] LOSC Article 41, par. 4
[258] LOSC Article 211, par. 5.
[259] LOSC Article 211, par. 6 (a)

through the IMO. This is not the case with Article 234. As Gavouneli observes "there is a conspicuous absence of any further reference to the 'competent international organisation' or the world community at large".[260]

The absence of an international review process is one of the few certitudes in Article 234.[261] It was actually one of Canada's objectives and Canada eventually prevailed over the US, which in the early stages of the negotiations favoured an international review process for coastal state measures relating to Arctic waters.[262] As a consequence of the absence of a prior review process under the IMO, the review of the coastal state's Arctic measures, if any, will be subsequent to the adoption of the objected measure. Moreover, it will not be automatic, but occur only in cases of disputes arising out of practical problems, and it will mostly be a matter of bilateral discussions between the coastal state and the concerned flag state, or a matter that should be adjudicated by a third party.[263]

Nevertheless Article 234 restricts the coastal State's powers by stipulating the necessity to ensure that the relevant laws and regulations are based on the best available scientific evidence. The reference to scientific evidence is intended to deter the coastal State from adopting and implementing arbitrary restrictions on international navigation since it must be able to establish that its measures have a scientific justification in the possibility of an arisen dispute.[264] For example, scientific evidence has to confirm the adequacy between the adopted measures and the need for protection or compliance with the ice-covered condition.

Article 61 LOSC on the conservation of living resources in the EEZ also refers to scientific evidence albeit with a slightly different wording. Under this provision the coastal state is required to take into account the best scientific evidence available to it.[265] Article 234 is, therefore, stricter as it is not the coastal State's scientific standards, but internationally accepted standards that must be respected.

The best available scientific evidence assumes to some extent the role reserved to IMO review and the application of generally accepted rules and standards.[266] Given the reference to the best available scientific evidence in general and not to that held by the coastal State, the

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[260] *Supra n. 222* Gavouneli p. 71.
[261] *Supra n. 240* Bartenstein, p. 37.
[262] McRae D., "The Negotiation of Article 234," in Griffiths F. (ed.) *Politics of the Northwest Passage*, Queen's University Press, (1987), p. 108
[263] *Supra n. 240* Bartenstein, p. 37.
[264] *Supra n. 193* Rosenne and Yankov, p. 398.
[265] LOSC Article 61, par. 2.
[266] *Supra n. 222* Gavouneli, p. 71.

risk of scientific bias or, worse, manipulation is reduced and the coastal State's measures are exposed to some indirect control via scientific arguments.[267] Be that as it may, this reference to best available scientific evidence grants the coastal State more freedom than a reference to generally accepted rules or the IMO.

Secondly, Article 234 allows the Arctic coastal states to take measures dealing with navigation for the protection of the particular vulnerable marine environment. The provision clearly states that the coastal State has the right to adopt and enforce laws and regulations for the prevention, reduction, and control of marine pollution from vessel. As a result the coastal State has both prescriptive and enforcement jurisdiction on the designated areas.

The inclusion of enforcement jurisdiction in Article 234 deserves close attention because it is fairly exceptional in the law of the sea.

It is a common feature in the LOSC to distinguish between prescription powers on the one hand and enforcement powers on the other.[268] Generally, the coastal states have more restricted powers with regard to enforcement measures than with regard to prescription measures with the prime exception of Article 220 LOSC which refers to enforcement measures enjoyed by coastal States, subject to international laws and regulations or applicable international rules and standards. Article 234, in contrast, instead of drawing a clear dividing line between these two types of power, unambiguously declares that a coastal state has a "right to adopt and enforce" measures. Nevertheless the coastal State is obligated to ensure that laws and regulations adopted under Article 234 have "due regard to navigation".

LOSC, along with customary law of the sea, has framed three major forms of acknowledgment of international navigation, which were described previously: innocent passage in the territorial sea, transit passage in international straits and freedom of navigation on the high seas and in the EEZ. The extent of these freedoms and rights shapes the sovereign powers of both coastal and flag states in every maritime zone. All three are well defined by the LOSC, contrary to the "due regard" requirement of Article 234.[269] The due regard requirement is frequently used in other provisions of the LOSC when states are asked to take into consideration the differing interests of other states.[270] Most notably, Articles 56 par. 2 and 58 par. 3 LOSC which refer in the EEZ, impose mutual obligations on the coastal State to take into account the rights and duties of other States and on other States to take due regard of the

[267] *Supra n. 240* Bartenstein, p. 40.
[268] *Ibid.* p. 39.
[269] *Ibid.* p. 41.
[270] For example LOSC Articles 27 para. 4, 56 par. 2, 58 par. 3, 79 par. 5, 87 par. 2, 267 et al.

rights and duties of the coastal State.[271] Especially the obligation of Article 56 par. 2 is an obligation of conduct, a "due diligence obligation" of the coastal State to have regard for the potential interference with the other States' rights and to attempt to mitigate such interference.[272] Giving no further indication, Article 234 leaves it up to the Arctic coastal States to determine what is needed to meet the due regard obligation in order to not hamper the navigational rights of other States.[273]

The phrase "due regard to navigation" could be a reference to the navigational rights of third states in the concerned zone. According to this interpretation, Article 234 should not modify the navigational freedoms and rights provided for by the Law of the Sea. If one determines that Article 234 applies only to the EEZ, the "due regard" reference would thus require the coastal State to respect the freedom of navigation as limited by the provisions relating to the EEZ and especially the "due diligence obligation" of Article 56 par. 2.

This interpretation, although it appears to be the most literal one, has, a major flaw from a teleological point of view. Article 234 was negotiated in order to give the Arctic littoral States broader powers to protect the Arctic marine environment. If the coastal State has the same limitations it would normally have in its EEZ, the fact that ice-covered areas and fragile ecosystems are met in its Arctic EEZ would not make a difference in the laws and regulations it could adopt. Requiring it to uphold the freedom of navigation in this manner would deprive Article 234 of its intended meaning.[274]

As a result, in order to delineate the spatial application of Article 234, suffice it to say that, in any case, the coastal state would have more far-reaching powers in an Arctic, ice-covered, EEZ than in a non-Arctic EEZ. Bearing that to mind, the question arises again of whether it would be consistent to interpret the due regard clause as a reference to either the freedoms of the transit passage regime or those of the innocent passage regime, and consequently, whether Article 234 applies to the territorial sea and to international straits.

There is no express support for this in the wording of Article 234. Nevertheless, in order to properly interpret Article 234, it is essential to consider again some of the limitations on the coastal State's powers that exist in these regimes.

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[271] Papastavridis E., "Intelligence Gathering in the Exclusive Economic Zone", 93 *International Law Studies* 446 (2017), p. 454

[272] *Ibid.* p. 458

[273] *Supra n. 240* Bartenstein, p. 41.

[274] McRae D. and Goundrey D., "Environmental Jurisdiction in Arctic Waters: The Extent of Article 234," 16 *University of British Columbia Law Review* 197 (1982), p. 221.

As was described earlier, Article 21 LOSC states that:

> "1. The coastal State may adopt laws and regulations, in conformity with the provisions of this Convention and other rules of international law, relating to innocent passage through the territorial sea, in respect of […] (f) the preservation of the environment of the coastal State and the prevention, reduction and control of pollution thereof [...]
> 2. Such laws and regulations shall not apply to the design, construction, manning or equipment of foreign ships unless they are giving effect to generally accepted international rules or standards. […]"

In essence, this provision allows the coastal state to take some prescription measures to prevent environmental damage in its territorial sea.[275] Furthermore, these preventive measures cannot be taken with respect to design, construction, manning, or equipment of the foreign-flagged vessel unless they respect international rules and standards, which are usually provided for by IMO.[276]

Even though the measures of Article 21 LOSC are to be complied with by foreign vessels, their violation does not remove the innocent character of the passage, unless the foreign vessel commits an "act of wilful and serious pollution."[277] Only in such cases would the coastal State be justified to "take the necessary steps in its territorial sea to prevent passage which is not innocent".[278] Shearer suggests that these "steps" amount to expulsion of the offending vessel from the coastal State's territorial sea.[279]

A similar, but stricter restriction applies to the powers of the states bordering straits. They may adopt laws and regulations relating to transit passage through straits, in respect of the prevention, reduction and control of pollution, by giving effect to applicable international regulations regarding the discharge of oil, oily wastes and other noxious substances in the strait.[280] In addition, laws and regulations shall not discriminate in form or in fact among foreign ships or in their application have the practical effect of denying, hampering or impairing the right of transit passage.[281] In other words, States bordering straits have, in principle, limited powers for both prescriptive and enforcement measures, especially relating to design,

[275] *Supra n. 240* Bartenstein, p. 43.
[276] *Supra n. 126* Noyes, p. 105.
[277] LOSC Article 19, par. 2 (h).
[278] LOSC Article 25 par. 1.
[279] Shearer I., "Problems of Jurisdiction and Law Enforcement against delinquent Vessels", 35 *International and Comparative Law Quarterly* 320 (1986), p. 326.
[280] LOSC Article 42, par. 1(b).
[281] LOSC Article 42, par. 2.

construction, manning or equipment aspects, their powers being primarily limited to discharge measures.[282]

On the other, Article 233 provides for the State bordering a strait to have enforcement jurisdiction in cases a vessel exercising the right of transit passage violates the laws and regulations of Article 42 par. 1 (a) and (b) LOSC. This is of particular interest, since Article 42 par. 1 (a) refers to laws and regulations relating to the safety of navigation and the regulation of maritime traffic, and thus associating the safety of navigation with the protection and preservation of the marine environment, provided for in part (b) of the same provision.[283]

Pharand, taking into account the aforementioned provisions, argues that Article 234 "permits preventive regulations" and "may, therefore, apply to the design, constructions, manning, and equipment of foreign ships".[284] In addition, Bartenstein observes that "the safety of Arctic navigation is to a large extent dependent on special design, construction, and equipment as well as on particularly trained crews".[285]

Of great importance is the phrasing of Article 234 "[…] where particularly severe climatic conditions and the presence of ice covering such areas for most of the year create obstructions or exceptional hazards to navigation" which concerns safety issues, though Article 234 is part of LOSC's Part XII on the "Protection and Preservation of the Marine Environment".[286] Of course, issues relating to the safety of navigation in inhospitable and remote regions, especially in fragile ecosystems as the Arctic's, can quickly become issues relating to the protection of the environment. It can thus be argued that the antipollution legislation should have the objective of ensuring that obstructions or hazards caused by severe climatic conditions and the presence of ice are best contained for the safety of navigation and consequently the environment. As a result, it is only logical that a coastal State can adopt measures with regard to construction, design, equipment and manning of vessels in accordance with Article 234.

It is evident that the coastal State has more limited enforcement jurisdiction in respect to navigation in the territorial sea and international straits, than the jurisdiction provided for in Article 234. This is supported by the wording of the clause. Due regard has to be paid to the navigation as well as to the protection and preservation of the marine environment. Therefore,

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[282] *Supra n. 240* Bartenstein, p. 43.

[283] Van Dyke J., "Rights and Responsibilities of Strait States", in Caron D. and Oral N. (eds.) *Navigating Straits*, Brill Nijhoff (2014), p. 40.

[284] Pharand D., *The Northwest Passage: Arctic Straits*, Martinus Nijhoff (1984), p. 108.

[285] *Supra n. 240* Bartenstein, p. 43.

[286] *Ibid.* p. 38.

linking navigational and environmental considerations in this clause seems to indicate that the balance to be struck is not the same as the balance struck in the innocent and the transit passage regimes, giving greater weight to the need to protect and preserve the fragile environment.[287]

In short, the acknowledgment of navigation, applicable to the ice-covered areas provided for by Article 234, would give the coastal states broader powers than the regime of innocent passage, at least in some respects and especially in respects that are of particular importance for Arctic navigation, such as construction, design, equipment and manning of a vessel. Taking into consideration the absence of a reference to generally accepted international rules and the competent international organization, Article 234 recognizes more far-reaching powers for the coastal state than the regimes of innocent and transit passage. As a result the only consistent interpretation of the latter reference to the limits of the EEZ is the one that considers Article 234 also applicable to the territorial sea and international straits therein.[288] A different interpretation would result in an incoherent regime that gives the coastal State broader powers in its EZZ than in its territorial waters and straits.

It must be noted that this interpretation of the spatial application of Article 234 is not accepted by everyone. Most prominently, Roach argues that Article 234 applies only in the EEZ by virtue of Article 55 LOSC which defines the EEZ as an area beyond and adjacent to the territorial sea.[289]

The non-discriminatory requirement is the final restriction to the coastal State's powers and it another fundamental concern of flag states. Non-discrimination is a common feature of the LOSC with several provisions referring to it.[290]

Article 234 safeguards the right of passage of foreign vessels, but it should be interpreted as prohibiting discrimination against vessels, whether they are foreign-flagged or they bare the coastal State's flag.[291] This interpretation of Article 234 is corroborated by Article 227, which generally forbids discrimination "against vessels of any other state" with respect to measures taken under Part XII LOSC.

[287] *Supra n. 240* Bartenstein, p. 43.
[288] *Ibid.* p. 44; *Supra n. 245* Brubaker, p. 57; *Supra n. 193* Rosenne and Yankov, p. 397; *Supra n. 22* Hartman p. 281.
[289] Roach J., "Arctic Navigation: Recent Developments", in Nordquist M. et al., *Challenges of the Changing Arctic*, Brill Nijhoff (2016), p. 228.
[290] For example LOSC Articles 24, 25, 26, 141, 151 and 227.
[291] *Supra n. 245* Brubaker, p. 56.

In addition, Article 227 LOSC explicitly prohibits discrimination "in form or in fact." Article 234, read together with the wording of Article 227, suggests that a coastal state must not discriminate, be it directly or indirectly.[292]

Nevertheless, indirect discrimination can be the result of an otherwise well-intentioned and rational rule. Bartenstein gives the example of prescriptions relating to a ship's hull which are intended to ensure its ice strength for Arctic navigation. Such laws and regulations could discriminate in fact against foreign-flagged vessels that are not capable to navigate the Arctic Ocean due to their inadequate design.[293] In that kind of incidents, it cannot be argued that the coastal State acts discriminatorily. If such measures are regarded as "indirect discrimination", the application of Article 234 would be rendered impossible.

Taking into consideration the above analysis one can safely assume the following conclusions: According to Article 234 the Arctic coastal State shall have prescriptive and enforcement jurisdiction for the prevention, reduction and control of marine pollution from vessels, in areas which are ice-covered for most of the year, within the limits of the EEZ, including the territorial sea and international straits within its EEZ. In order for the coastal State to adequately protect the fragile environment, the measures it is able to take should include the designation of construction, design, equipment and manning requirements for vessels operating in ice-covered areas. This jurisdiction is subject to three limitations: the laws and regulations adopted and enforced must be based to the best available scientific data, they must have due regard to navigation and they must not be discriminatory.

[292] *Supra n. 240* Bartenstein, p. 41.
[293] *Ibid.*

IV. The Arctic Ocean Navigation Regime

The Law of the Sea as examined in the previous chapter is applicable in every part of the planet's seas and the Arctic Ocean is not an exception. The "Arctic Five" have already stated that in their Ilulissat Declaration.[294] Of course, LOSC is not the only legal instrument applicable in Earth's oceans, but it is supplemented by the international customary law, aspects of which have already been discussed, and other international or regional treaties.[295] With respect to the Arctic Ocean, it is up to the Arctic littoral States to implement this legal framework. In the following part of this thesis there is going to be an examination and assessment of the regional legal regime of the Arctic Ocean.

Moreover there is going to be an analysis of lingering questions of sovereignty that are still present in the Arctic Ocean. Sovereignty disputes around the land territories of the Arctic Ocean are almost completely solved. As mentioned earlier, there is a dispute regarding the small Hans Island, between Canada and Greenland.[296] The same cannot be said about the seas that constitute the Arctic Ocean. One major controversy exists towards the extended continental shelves of the Arctic coastal States,[297] an issue that is beyond the scope of this thesis. Another important dispute, which in contrast is crucial for an examination of navigation in the Arctic Ocean, and was noted earlier, is the legal status of the Northwest Passage and the Northern Sea Route. The question of the status of these routes is going to be discussed in the context of Canada's and Russia's practice respectively.

A. The IMO framework relating to Navigation in the Arctic

The IMO Conventions SOLAS, MARPOL 73/78 and STCW are of great importance for the legal regime of navigation, regardless of geographical application. They constitute the "general rules and standards" to which LOSC often refers.[298] All Arctic coastal States are parties to the aforementioned conventions.[299] The Polar Code, which applies to the waters of

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[294] *Supra n. 95* Ilulissat Declaration.
[295] *Supra n. 69* Evans, pp. 653-654.
[296] For a detailed description of the Hans Island dispute see *supra n. 12* Byers pp. 10-16.
[297] For the issue of extended continental shelves of the Arctic coastal States see McDorman T. "The outer Continental Shelf in the Arctic Ocean: Legal Framework and recent Developments" in Vidas D. (ed.) *Law, Technology and Science for Oceans in Globalisation*, Martinus Nijhoff (2010).
[298] *Supra n. 72.*
[299] IMO Status of IMO Treaties, 16 November 2018, accessed 6 December 2018 at <http://www.imo.org/en/About/Conventions/StatusOfConventions/Documents/Status%20-%202018.pdf>.

both the Arctic and the Antarctic ("polar waters") constitutes an amendment to these conventions.[300]

i. Amendment procedure of the IMO Conventions

The IMO Conventions provide for a tacit acceptance procedure with regards to amendments. They contain provisions enabling the adoption of amendments to their annexes that help keep the regulations they provide for current and adaptive to new circumstances and technologies.[301]

The tacit acceptance procedure applies mainly to amendments to the technical Annexes of the IMO conventions.[302] According to SOLAS Article VIII, an amendment shall be deemed to have been accepted at the end of a period of no less than one year after its adoption at the competent committee, unless it is objected to by more than one third of contracting Parties, or contracting Parties owning not less than 50% of the world's gross merchant tonnage. The amendment enters into force six months after the date on which it is deemed to have been accepted for all contracting States, except those that have objected to it.[303]

A similar provision is contained in in MARPOL 73/78 Article XVI, which states that an amendment to an Annex shall be deemed to have been accepted at the end of a period of no less than ten months at the time of its adoption, unless within that period a certain number of objections from the Parties have been communicated to the IMO Secretariat. After that time, the amendment enters into force six months after its acceptance for all the Parties, again with the exception of the contracting States that objected to it.[304]

This way the IMO Conventions are not susceptible to lengthy amendment procedures as other international treaties. Most notably, the Vienna Convention on the Law of Treaties (VCLT)[305] provides for lengthy amendment procedure for those treaties that do not include a provision on their amendment procedure. [306] The tacit acceptance procedure ensures that the technical parts of the major conventions keep current with the rapid development of the technology and techniques in the shipping industry. For example, six new chapters have been added to SOLAS

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[300] Polar Code, Introduction, Article 1.
[301] *Supra n. 81* Sun and Beckman, p. 312.
[302] *Ibid.*
[303] SOLAS Article VIII.
[304] MARPOL 73/78 Article XVI.
[305] Vienna Convention on the Law of Treaties [VCLT] (signed 23 May 1969, entry into force 27 January 1980), 1155 *UNTS* 331.
[306]See Aust A., *Modern Treaty Law and Practice*, 2nd edition, Cambridge University Press (2007), pp. 262-276.

by the tacit acceptance procedure: Chapter IX on Management for the Safe Operation of Ships, Chapter X on Safety Measures for High-Speed Craft, Chapter XI-1 on Special Measures to Enhance Maritime Safety, Chapter XI-2 on Special Measures to Enhance Maritime Security, Chapter XII on Additional Safety Measures for Bulk Carriers and Chapter XIII regarding Verification of Compliance.[307] The Polar Code, that will be discussed below is an example of an amendment that entered into force following this procedure.

ii. The Polar Code

IMO, taking into account the extreme conditions present in the Arctic Ocean, and after the recommendations of a number of member States, decided to draft a comprehensive legal framework that would govern the Arctic region.

In October and December 2002 the Maritime Safety Committee (MSC) and the Marine Environment Protection Committee (MEPC) of IMO adopted the nonbinding IMO Guidelines for Ships Operating in Arctic Ice-Covered Waters.[308] The 2002 IMO Guidelines applied to ships subject to the SOLAS Convention including passengers' ships of 500 gross tonnage or more.[309] The Guidelines were divided into four parts regarding construction of ships, equipment, operation and environmental protection and damage control.[310]

The 2002 Guidelines were criticized because of a lack of details concerning a number of issues.[311] In addition, it was noted by the Antarctic Treaty Consultative Meeting that the Guidelines should apply not only to the Arctic but they should also include the Antarctic due to the similarities of the two Polar Regions.[312] The Antarctic Treaty Consultative Meeting in 2004 formulated such a request and addressed it to IMO.[313]

The need for guidelines for ships operating in both the Arctic and the Antarctic made IMO to start working on such a project in 2008. In December 2009, IMO adopted the

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[307] *Supra n. 81* Sun and Beckman, p. 312.
[308] IMO Doc. MSC/ Circ.1056– MEPC/ Circ.399, "Guidelines for Ships Operating in Arctic Ice-Covered Waters".
[309] Symonides J., "Problems and Controversies Concerning Freedom of Navigation in the Arctic", in del Castillo L. (ed.) *Law of the Sea, from Grotius to the International Tribunal for the Law of the Sea*, Brill Nijhoff (2015), p. 231.
[310] *Ibid.*
[311] *Ibid.* p. 232. For example a lack of details concerning the preparation, the necessary experience and practice of the polar pilots.
[312] Antarctic Treaty Consultative Meeting, Final Report of the XXVII ATCM, (24 May - 4 June 2004), Decision 4, p. 191.
[313] *Ibid.* p. 189.

Guidelines for Ships Operating in Polar Areas covering the Arctic and Antarctic Waters that would replace the 2002 Guidelines.[314] They entered into force on the 1 January 2011. The 2009 Guidelines applied in effect the recommendations of the 2002 Guidelines to the Antarctic. The Preamble explains that whilst the Arctic and the Antarctic waters have a number of similarities, there are also significant differences.[315] It is characteristically noted that "The Arctic is an ocean surrounded by continents, while the Antarctic is a continent surrounded by an ocean".[316]

During the drafting of the 2009 Guidelines a number States together with those participating in the meetings of the Antarctic Treaty Consultative Committee gave the strong support to the idea of an elaboration and adoption of mandatory guidelines which would in turn replace the recommendatory Guidelines of 2009.[317]

IMO once again decided to go one step further and draft a binding legal document for ships navigating the polar waters. Various subcommittees progressed the work during 2010 until 2014, and the MSC and the MEPC adopted the draft Polar Code in 2014 and 2015.[318] The safety provisions of the Polar Code and the amendments to SOLAS required to make them legally binding were passed on 21 November 2014 and the environmental provisions of the Polar Code and the amendments to MARPOL 73/78 were passed on 15 May 2015.[319] The mandatory Code became effective on 1 January 2017 by the tacit amendment procedure described before. The provisions relative to the STCW became effective on 1 July 2018.[320]

The Polar Code is structured into an Introduction and two separate mandatory safety measures (Part I) and pollution prevention measures (Part II).[321] The Introduction contains mandatory provisions applicable to both parts I and II.[322] Both Parts contain mandatory provisions (Parts I-A and II-A) and are supplemented by "Additional Guidance" provisions

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[314] IMO Doc. A26/Res.1024, "Guidelines for Ships Operating in Polar Waters".
[315] *Ibid.* Preamble 1.2
[316] *Ibid.*
[317] *Supra n. 309* Symonides, p. 233.
[318] For a detailed presentation of the procedure of adopting the Polar Code see Roach J., "A Note to make the Polar Code Mandatory" in Lalonde S. and McDorman T. (eds.) *International Law and Politics of the Arctic Ocean* Brill Nijhoff (2015), pp. 128-135
[319] Williams L., "An Ocean between Us: The Implications of Inconsistencies between the Navigational Laws of Coastal Arctic Council Nations and the United Nations Convention on the Law of the Sea for Arctic Navigation", 70 *Vanderbilt Law Review* 379 (2017), p. 392-393.
[320] IMO Doc. MSC 416(97) "Amendments to the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers 1978, as Amended". See also <http://www.imo.org/en/mediacentre/hottopics/polar/pages/default.aspx>.
[321] Roach J., "The Polar Code and its Adequacy", in Beckman R. et al. (eds.) *Governance of Arctic Shipping*, Brill Nijhoff (2017), p. 146.
[322] Polar Code, Introduction, Art. 4.

which provide polar specific measures for ships operating in polar waters encountering ice (Parts I-B and II-B).[323] Parts I-A and I-B are dealing with construction, design, equipment and manning requirements for vessels navigating through polar waters. They include safety measures such as ship structure, watertight and watertight integrity, fire safety/protection, life-saving, safety of navigation, voyage planning, manning and training.[324] Part I is embodied in the SOLAS.[325] Parts II-A and II-B address pollution prevention.[326] This Part mirrors the MARPOL 73/78 Annexes.[327]

The Polar Code has been developed to supplement the existing IMO treaties in order to increase the safety of ships' operation and mitigate the impact on the people and environment in the remote, vulnerable and potentially harsh polar waters.[328] It utilizes a risk-based approach in determining scope and to adopt a holistic approach in reducing identified risks.[329]

In its Preamble the Polar Code lists a number of issues, dangers, and considerations regarding navigation in polar waters. First of all, it is acknowledged that polar water operation may impose additional demands on ships, their systems, and operation beyond the existing requirements of SOLAS and MARPOL 73/78 and other relevant IMO documents,[330] as well as that the polar waters impose additional navigational demands beyond those normally encountered.[331] As for the environment, the Polar Code is stated to acknowledge that coastal communities in the Arctic could be, and that polar ecosystems are, vulnerable to human activities, such as ship operation,[332] and that any safety measure taken aims to taken to reduce the probability of an accident, for the benefit of the environment.[333]

As of the application of the Polar Code to both the Arctic and Antarctic, it is stated that, even though there are similarities between the two territories, the legal and geographical

[323] *Supra n. 33* Rothwell, p. 20.
[324] *Ibid.*
[325] They became an additional chapter under SOLAS (Chapter XIV - Safety Measures for Ships operating in Polar Waters) that entered into force on 1 January 2017; *supra n. 321* Roach, p. 146.
[326] *Supra n. 33* Rothwell, p. 20.
[327] Part II was integrated in MARPOL by amending Annexes I, II, IV, and V. The amendments also entered into force on 1 January 2017; *supra n. 321* Roach, p. 146.
[328] Polar Code, Preamble Art. 1.
[329] Polar Code, Preamble Art. 7.
[330] Polar Code, Preamble Art. 2
[331] Polar Code, Preamble Art. 3. As an example this Article refers to chart coverage that may not currently be adequate and that existing charts may be subject to unsurveyed and uncharted shoals.
[332] Polar Code, Preamble Art. 4
[333] Polar Code, Preamble Art. 5.

differences between the two areas have been taken into account.[334] It is worth noting that the Polar Code suggests that the mitigating measures required to address the various navigational hazards may vary within polar waters and may be different in Arctic and Antarctic waters.[335]

The goal of the Polar Code is stated in Article 1 of its mandatory Introductory provisions as "[...] to provide for safe ship operation and the protection of the polar environment by addressing risks present in polar waters and not adequately mitigated by other instruments of the Organization".[336] It then provides for definitions of terms used in the Code and states that Terms used in part I-A, but not defined in this section shall have the same meaning as defined in SOLAS and that terms used in part II-A, but not defined in this section shall have the same meaning as defined in article 2 of MARPOL 73/78 and the relevant MARPOL 73/78 Annexes.[337] Article 3 of the Introduction contains a list of sources of hazards which may lead to elevated levels of risk due to increased probability of occurrence, more severe consequences, or both.[338]

An important prerequisite set out by the Polar Code is that vessels are required to apply for a Polar Ship Certificate[339] to be classified as Category A (ship designed for operation in polar waters at least in medium first year ice which may include old ice inclusions),[340] Category B (ship designed for operation in polar waters in at least thin first year ice which may include old ice inclusions)[341] or Category C (ship designed for operation in open waters or in ice conditions less severe than Categories A and B)[342]. The Polar Ship Certificate includes an assessment of anticipated conditions and dangers, as well as information on identified operational limitations and procedures or additional equipment to enhance safety.[343] The Polar Ship Certificate is mandatory for ships wishing to undergo voyages in the polar waters and it confirms compliance with the Polar Code.[344] This Certificate is supplemented by a Record of

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[334] Polar Code, Preamble Art. 6. See also Dalaklis D. and Baxevani E., "Maritime Transport in the Arctic after the Introduction of the Polar Code: A Discussion of the new Training Needs", in Hildebrand L. et al. (eds.) *Sustainable Shipping in a Changing Arctic*, Springer (2018), p. 387.
[335] Polar Code, Introduction Art. 3 par. 2.
[336] Polar Code, Introduction, Art. 1.
[337] Polar Code, Introduction, Art. 2.
[338] Polar Code, Introduction, Art. 3. par.1.
[339] Polar Code, Part I-A, Chapter 1, Art. 1.3.
[340] Polar Code, Introduction, Art. 2.1.
[341] Polar Code, Introduction, Art. 2.2.
[342] Polar Code, Introduction, Art. 2.3.
[343] *Supra n. 334* Dalaklis and Baxevani, p. 389.
[344] *Ibid.*

Equipment, where any additional equipment required by the Polar Code that go beyond the minimum SOLAS requirements shall be mentioned.[345]

B. The work of the Arctic Council in the Arctic Ocean

The Arctic Council's contribution to facilitate Arctic navigation is important since it highlights the fact that the Arctic States are in fact closely cooperating to tackle the many problems the area is facing. Moreover, the documents and agreements of the Arctic Council are applicable to the whole Arctic Ocean area, irrespective of the maritime zones of its coastal States.

The Arctic Council does not have the competence to enact binding regulations for the Arctic for member States or other states, but can work to establish agreements between the member States on how they shall exercise their jurisdiction in the areas where they enjoy sovereignty or sovereign rights. Concerning navigation, the strategy of the Arctic Council has been to encourage the establishment of active cooperation with and within IMO on development of relevant measures to reduce the environmental impact of shipping in Arctic waters and ensure the safety of maritime operations.[346]

i. The Arctic Marine Shipping Assessment

The Council's commissions and task forces can propose measures and actions that the member States' governments may or should implement.[347] The Arctic Council has specifically addressed the protection of the Arctic marine environment through the Working Group on the Protection of the Arctic Marine Environment (PAME). Its mandate includes address policy, non-emergency pollution prevention and control measures related to the protection of the Arctic marine environment from both land and sea-based activities.[348]

The most important document regarding navigation and shipping in the Arctic Ocean is the Arctic Marine Shipping Assessment (AMSA)[349] which was produced by PAME and was

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[345] *Ibid.*; Polar Code, Appendix 1.
[346] *Supra n. 89* Nordtveit, p. 143.
[347] McDorman T., "The Safety of Navigation in the Arctic Ocean and the role of Coast Guards", 2 *Korean Journal of International and Comparative Law* 27 (2014), p. 36.
[348] Cinelli C., "Protection and Preservation of the Arctic Marine Environment", 24 *Italian Yearbook of International Law* 159 (2014), p. 171.
[349] Arctic Marine Shipping Assessment of 2009 (AMSA), accessed 6 December 2018 at <www.arctic.noaa.gov/detect/documents/AMSA_2009_Report_2nd_print.pdf>.

approved by the Council's 2009 ministerial meeting in Tromsø, Norway.[350] The AMSA focuses mainly on the Bering Strait, the Northern Sea Route along the coast of the Russian Federation, and the seas off the coast of Canada including the Northwest Passage.[351] The AMSA, in the same manner as the relevant IMO documents, refers to the many problems that ships navigating the Arctic Ocean may encounter and the environmental issues the region is facing. According to the AMSA, the Arctic littoral States should anticipate greater marine access and longer navigation seasons as a consequence of melting sea ice. However AMSA emphasizes that the reduced ice will not automatically render the marine activities less difficult.[352]

A key requirement for the AMSA was the establishment of a database on Arctic marine activity.[353] The Arctic States had to list the vessels in their respective Arctic waters for the year 2004, when PAME started working on the Assessment.[354] It was agreed that the database would include many types of ships and vessels including icebreakers, container ships, cruise ships, bulk carriers, fishing vessels, tug/barge combinations, general cargo carriers, tankers, ferries, and government and industry survey/exploration vessels.[355]

According to the Arctic States' reports, there were approximately 6.000 vessels operating in the Arctic region in 2004.[356] Although this number does not appear to be very high, PAME regarded it as "significant in the context of both the unique aspects of the Arctic environment and the insufficient infrastructure and emergency response in many parts of the region, relative to southern waters."[357] Of course, in the 14 years after the reports of the Arctic States it is safe to assume that the number of vessels navigating the Arctic Ocean has increased.

The AMSA database indicated that there is a growing presence of large and small cruise ships in the Arctic, with 1.600 of the vessels sailing being fishing vessels.[358] A majority of the cruise ships were not purpose-built for operating in Arctic waters. The vast majority of these resource and tourism voyages were destinational, meaning the ship sails north, performs some

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[350] *Supra n. 12* Byers p. 186.
[351] *Supra n. 347* McDorman, p. 28.
[352] AMSA, p. 4.
[353] Weidemann L., *International Governance of the Arctic Marine Environment*, Springer International Publishing (2014), p. 22.
[354] *Ibid.*
[355] Brigham L., "The Arctic Council's Arctic Marine Shipping Assessment", in Nordquist M., Heidar T. and Norton Moore J. (eds.), *Changes in the Arctic Environment and the Law of the Sea*, Martinus Nijhoff Publishers (2010), p. 162.
[356] *Ibid.* p. 163.
[357] AMSA, p. 89
[358] *Ibid.* p. 77.

marine activity, and sails south.[359] A key AMSA finding was the general lack of uniform, mandatory, and non-discriminatory Arctic ship regulations and mariner standards for the Arctic Ocean.[360]

ii. The Arctic Search and Rescue Agreement

Following the AMSA and taking under consideration its observations, the members of the Arctic Council decided to establish a Task Force for the purpose of negotiating an international instrument on cooperation in search and rescue operations in the Arctic in order to ensure the safety of Arctic maritime operations.[361] The Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic (Arctic SAR Agreement) was finalized and signed on May 2011 and entered into force on 19 January 2013.[362] The Arctic SAR Agreement is the first legally binding agreement that was negotiated and adopted by all eight Arctic Council member States.[363]

The Arctic SAR Agreement is in conformity with the existing legal framework regarding search and rescue operations.[364] Its preamble refers to the LOSC, the SAR Convention and the 1944 Convention on International Civil Aviation.[365] The Arctic SAR Agreement provides for a comprehensive framework for search and rescue operations in the area. However it should be noted that a number of bilateral agreements and treaties with similar provision already existed in the Arctic region.[366]

The principles governing the search and rescue operations in the region are provided for in Article 7 of the Arctic SAR Agreement. They include consistency with the laws and regulations of the party in whose territory search and rescue operations are conducted; urgent steps to be taken upon receiving information of distress and the possibility of request for assistance by the other parties; forwarding all available information to the party in whose search and rescue area a person, a vessel or other craft or aircraft is in a state of emergency; assistance

[359] *Supra n. 355* Brigham, p. 165.
[360] *Ibid.* p. 166.
[361] Molenaar E., "Current and Prospective Roles of the Arctic Council System within the Context of the Law of the Sea", 27 *The International Journal of Marine and Coastal Law* 553 (2012), p. 554.
[362] *Ibid.*
[363] Takei Y., "Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic: an assessment" 2 *Aegean Review of the Law of the Sea and Maritime Law* 81 (2013), p. 82.
[364] *Ibid.* p. 84.
[365] Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic [Arctic SAR Agreement] (signed 12 May 2011, entry into force 19 January 2013) 50 *ILM* 1119, Preamble.
[366] See the complete list of those agreements in *supra n. 363* Takei, p. 84 cit. 20.

to any person in distress, regardless of the nationality or status of such a person or the circumstances in which that person is found.[367]

Article 9 of the Arctic SAR Agreement provides for the rules regarding cooperation between the State parties when conducting search and rescue operations. The cooperation in the conduct of search and rescue operations is further provided for in LOSC[368] and the SAR Convention.[369] Under the Arctic SAR Agreement, the State parties shall exchange information that may serve to improve the effectiveness of search and rescue operations. This may include, but is not limited to communication details; information about search and rescue facilities; lists of available airfields and ports and their refueling and resupply capabilities; knowledge of fueling, supply and medical facilities; and information useful for training search and rescue personnel.[370]

Moreover the State parties shall promote mutual search and rescue cooperation by giving due consideration to collaborative efforts including, but not limited to exchange of experience; sharing of real-time meteorological and oceanographic observations, analyses, forecasts, and warnings; arranging exchanges of visits between search and rescue personnel; carrying out joint search and rescue exercises and training; using ship reporting systems for search and rescue purposes; sharing information systems, search and rescue procedures, techniques, equipment, and facilities; providing services in support of search and rescue operations; sharing national positions on search and rescue issues of mutual interest within the scope of this Agreement; supporting and implementing joint research and development initiatives aimed, inter alia, at reducing search time, improving rescue effectiveness, and minimizing risk to search and rescue personnel; and conducting regular communications checks and exercises, including the use of alternative means of communications for handling communication overloads during major search and rescue operations.[371]

In addition, Article 9 paragraph 4 states that "when conducting joint exercises, the parties should apply the principles of this Agreement to the extent possible".[372] However the State parties are not under an obligation to undertake such joint search and rescue operations.[373]

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[367] Arctic SAR Agreement Art. 7 par. 3.
[368] LOSC, Article 98 par. 2.
[369] SAR Convention, Chapter 3.
[370] Arctic SAR Agreement Art. 9 par. 2.
[371] Arctic SAR Agreement Art. 9 par. 3.
[372] Arctic SAR Agreement Art. 9 par. 4.
[373] *Supra n. 363* Takei, p. 85.

The area of application of the Arctic SAR Agreement is stipulated in Article 3 and its Annex. Takei observes that the area of application of the Arctic SAR Agreement is larger than the definitions of the Arctic Ocean that are generally used.[374] According to his assessment: "This would have been influenced by the factors such as coordination with the existing SAR regions of the parties as well as the avoidance of overlaps with the existing SAR regions in other instruments or of gaps in coverage".[375]

Finally the Arctic SAR Agreement clearly states that "the delimitation of search and rescue regions is not related to and shall not prejudice the delimitation of any boundary between States or their sovereignty, sovereign rights or jurisdiction".[376]

C. The Arctic coastal States

The "Arctic Five" have all adopted rules and regulations regarding navigation in the waters under their jurisdiction. Their domestic legislation mirrors the positions and the views of each State towards the interpretation of the relevant LOSC provisions, and especially Article 234. However, are these rules and regulations compatible with the international framework? To answer this question one has to examine the domestic legislation of the Arctic Five in great detail.

Since Article 234 provides for both prescriptive and enforcement jurisdiction, the most adequate way to examine the legislation of the Arctic littoral States is by following this distinction. Furthermore there is going to be an assessment of the respective Canadian and Russian positions on the status of the Northwest Passage and the Northern Sea Route and the US contest of them.

i. Canada

a. The Northwest Passage

The Northwest Passage consists of seven possible shipping routes and passes through Canada's High Arctic Islands (also called Canadian Arctic Archipelago).[377] The islands

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[374] *Ibid.* p. 86.
[375] *Ibid.* p. 87.
[376] Arctic SAR Agreement Art. 3 par. 2.
[377] Headland P. K. and Colleagues, "Transits of the Northwest Passage to End of the 2018 Navigation Season (Atlantic Ocean, Arctic Ocean, Pacific Ocean)", Scott Polar Research Institute, University of Cambridge,

themselves have been Canadian since the United Kingdom transferred title over them in 1880,[378] while the nearly impenetrable sea-ice meant that the issue of ownership and control over the water was never discussed nor disputed. This situation has changed after the acquisition of powerful icebreakers by the United States and, more recently, by the dramatic melting of sea-ice.[379]

The US is the State that most fiercely disputes the Canadian claim that the Northwest Passage constitutes internal waters. The US position is that the Northwest Passage is a strait used for international navigation and, as a result, ships travelling through it do so by exercising the right of transit passage.[380]

The dispute over the status of the Northwest Passage was crystalized in 1969.[381] In that year, the non-governmental ship *SS Manhattan*, an ice-strengthened super tanker, was sent to travel through the Northwest Passage in order to test the feasibility of it as an alternative route for shipping oil from Alaska to the Atlantic.[382] The US government sent a Coast Guard icebreaker, the *USCG Northwind* for assistance. Neither the *SS Manhattan's* owner company, Exxon, nor the US government sought Canada's permission for the voyage. Concerned that a precedent might be created, the Canadian government decided to offer aerial reconnaissance and the assistance of a Canadian icebreaker, the *John A. McDonald*, even if the *SS Manhattan* did not request such an assistance.[383] A Canadian representative, Navy Captain T. C. Pullen, was accepted on board the *SS Manhattan* as a representative of Canada.[384]

Washington's decision not to request permission was based on a belief that the *SS Manhattan* and the *USCGC Northwind* would not have to enter areas under Canadian jurisdiction. At the time, Canada claimed only a 3 nm territorial sea, which left a high seas corridor through the Northwest Passage, and as a result the American officials intended for the two ships to remain on the high seas throughout the voyage.[385]

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revised 5 October 2018, accessed 6 December 2018 at
<https://www.spri.cam.ac.uk/resources/infosheets/northwestpassage.pdf>, p. 1.

[378] Kenney G., *Dangerous Passage: Issues in the Arctic*, Natural Heritage Books (2006), p. 173.

[379] *Supra n. 12* Byers p. 131.

[380] *Supra n. 309* Symonides, p. 237.

[381] *Supra n. 12* Byers p.134 ; Kraska J., "The Law of the Sea Convention and the Northwest Passage", 22 *The International Journal of Marine and Coastal Law* 257 (2007), p. 263.

[382] *Ibid.* Byers; *Supra n. 378* Kenney, p. 172.

[383] *Ibid.* Byers.

[384] *Supra n. 378* Kenney, p. 172; Pharand D., "The Arctic Waters and the Northwest Passage: A Final Revisit", 38 *Ocean Development and International Law* 3 (2007), p. 38.

[385] Reid R., "The Canadian Claim to Sovereignty over the Waters of the Arctic." 12 *Canadian Yearbook of International Law* 111 (1974), p. 120.

However, on September 10, 1969, the *SS Manhattan* was trapped in the ice. It managed to escape with the assistance of her Canadian companion, the icebreaker *John A. McDonald.* The *John A. Macdonald* went on to free the SS Manhattan from the sea-ice on at least eleven further occasions during the trip.[386]

After the voyage of the *SS Manhattan,* 16 years passed without another US contention of the status of the Northwest Passage. In 1985 the US announced that *USCG Polar Sea* would sail through the Passage from east to west. On 21 May 1985, the US Embassy in Canada informed the Canadian Government of the proposed voyage but did not seek permission for the voyage to take place.[387] Canada responded in 31 July 1985 that, it was committed to facilitating navigation through the waterway, even though the Passage constitutes Canadian internal waters.[388] The US responded in turn in 24 June by observing that it did not share this view and made clear that while it was pleased to invite Canadian participation in the transit, it has not sought the permission of the Government of Canada, nor has it given notification of the fact of the transit.[389] The Polar Sea completed its transit of the Northwest Passage between 1 and 11 August 1985 without further exchange of the opinions of the two sides.

The voyages of the *SS Manhattan* and the *USCG Polar Sea* prompted various Canadian reactions. In 1970, following the voyage of *SS Manhattan*, Canada adopted the Arctic Waters Pollution Prevention Act (AWPPA)[390] which extended the Canadian environmental enforcement out to 100 nm from the baselines and into the Arctic Ocean and Beaufort Sea.[391]After the *USCG Polar* Sea voyage, the Canadian government decided to take a number of measures which aimed to clarify its legal position and enhance its powers over the

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[386] *Supra n. 12* Byers p. 135.

[387] Rothwell D., “The United States and Arctic Straits: The Northwest Passage and the Bering Strait” in Lalonde S. and McDorman T. (eds.) *International Law and Politics of the Arctic Ocean*, Brill Nijhoff (2015), p. 168.

[388] *Ibid*.; See also Diplomatic Note from the Canadian Department of External Affairs to the US Embassy in Ottawa concerning the transit of the United States Coast Guard Cutter Polar Sea (31 July 1985), reprinted in *Kristina Schönfeldt* (ed.) *The Arctic in International Law and Policy*, Hart Publishing (2017), p. 1374.

[389] Diplomatic Note from the US Embassy in Ottawa to the Canadian Department of External Affairs concerning the transit of the United States Coast Guard Cutter Polar Sea (24 June 1985), reprinted in *Kristina Schönfeldt* (ed.) *The Arctic in International Law and Policy*, Hart Publishing (2017), p. 1375.

[390] Arctic Water Pollution Prevention Act (AWPPA), R.S.C. 1985, c. A-12, accessed 6 December 2018 at <https://laws-lois.justice.gc.ca/eng/acts/a-12/>.

[391] *Supra n. 381* Kraska, p. 264.

Passage,[392] including drawing straight baselines around the High Arctic Islands.[393] Also, in 1997 Canada extended its territorial sea from 3 nm to 12 nm.[394]

Despite of this ongoing dispute, the US and Canada signed in 1988 the Arctic Cooperation Agreement.[395] The Agreement provides that all navigation by the US icebreakers within waters claimed by Canada to be internal will be undertaken with the Canadian consent. Nevertheless, both Parties declared that nothing in this agreement nor any practice under it affects their respective positions on the Law of the Sea in this or other maritime areas or their respective positions regarding third parties.[396]

The drawing of the straight baselines by Canada in the Northwest Passage has been challenged vigorously. The US and the then-European Community protested the 1985 drawing of the Canadian baselines that rendered the Northwest Passage internal waters. The European Commission stated that the Canadian position relating the system of straight lines is incompatible with the international law. The Commission paid particular attention to "unusual" lengths of several of these lines exceeding limits allowed by the LOSC.[397]

Specifically, the UK, acting on behalf of all the members of the European Communities, issued the above statement through its British High Commission:

> "The validity of the baselines with regard to other states depends upon the relevant principles of international law applicable in this case, including the principle that the drawing of baselines must not depart to any appreciable extent from the general direction of the coast. The Member States acknowledge that elements other than purely geographical ones may be relevant for purposes of drawing baselines in particular circumstances but are not satisfied that the present baselines are justified in general. Moreover, the Member States cannot recognize the validity of a historic title as justification for the baselines drawn in accordance with the order."[398]

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[392] See Statement No 85/49 in the House of Commons by the Canadian Secretary of State for External Affairs Joe Clark on Canadian Sovereignty (10 September 1985), reprinted in *Kristina Schönfeldt* (ed.) *The Arctic in International Law and Policy*, Hart Publishing (2017), p. 1378.

[393] *Supra n. 12* Byers, p. 136.

[394] *Supra n. 381* Kraska, p. 264.

[395] Agreement between the Government of Canada and the Government of the United States of America on Arctic Cooperation, Canada Treaty Series 1988, No. 29.

[396] *Ibid.*, Article 4; *Supra n. 198* Scovazzi, p. 376.

[397] *Supra n. 309* Symonides, p. 238.

[398] British High Commission Note No. 90/86 of 9 July 1986, reprinted in Roach J. and Smith R., *Excessive Maritime Claims*, 3rd edition, Martinus Nijhoff (2012), p. 112.

The ICJ firstly referred to the "general direction of the coast" requirement in the *Anglo-Norwegian Fisheries Case* of 1951 between UK and Norway.[399] Both Byers and Pharand claim that the "general direction of the coast" requirement, is not in fact problematic, but it appears to be because of the widespread use of "Mercator" or "conic" projections which distort the size and shape of objects near the poles and thus make the coast and the High Arctic Islands look like an appendage to the North American landmass rather than an integral part of it.[400] Byers suggests the use of a globe[401] and Pharand the use of the "Robinson" projection,[402] two methods that provide a much more accurate portrayal of the geography. Coincidentally, they also provide more credibility to Canada's legal position. However it must be noted that the ICJ in the *Anglo-Norwegian Fisheries Case* stated in spite of the fact that delimitation is necessarily a unilateral act, the validity of the delimitation with regard to other States depends upon international law.[403]

A similar aspect of the Northwest Passage dispute is the fact that Canada bases its internal waters position in the historic usage of the Passage.

LOSC does not contain a definition of the term "historic waters" and refers only to historic bays[404] and to "historic title" with regards to the delimitation of the territorial sea between States with opposite or adjacent coasts.[405] In addition, the 1982 Law of the Sea Convention contains an optional exception, removing "historic bays or titles" from the applicability of compulsory procedures resulting in binding decisions for the settlement of disputes.[406]

As a result the law regarding historic waters is largely customary. According to the *Anglo-Norwegian Fisheries Case*, historic waters constitute waters which are treated as internal waters but which would not have that character were it not for the existence of a historic title.[407]

In 1962, a study by the UN Secretariat indicated three basic elements for a title to historic waters, including historic bays. The State claiming the historic right should exercise authority over the area, this exercise of authority should be continuous and foreign States

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[399] *Supra n. 107 Anglo-Norwegian Fisheries Case*, p. 129 and 133.
[400] *Supra n. 12* Byers p. 138; *Supra n. 384* Pharand, pp. 18-19.
[401] *Ibid*. Byers.
[402] *Supra n. 384* Pharand, p. 19; see Annex Figure 6.
[403] *Supra n. 107 Anglo-Norwegian Fisheries Case*, p. 132.
[404] LOSC Art. 10 par. 6.
[405] LOSC Art. 15.
[406] LOSC Art. 298, par. 1 (a) (i).
[407] *Supra n. 107 Anglo-Norwegian Fisheries Case*, p. 130.

should have acquiesced to this exercise of authority.[408] It further concluded that the legal status of historic waters "would in principle depend on whether the sovereignty exercised in the particular case over the area by the claiming State and forming a basis for the claim, was sovereignty as over internal waters or sovereignty as over territorial sea."[409]

Furthermore, the concept of historic waters and historic titles was revisited in the *South China Sea Arbitration* (2016)[410] in which the arbitral Tribunal restricted the scope and contemporary relevance of historic claims by finding that the LOSC supersedes any previous historic titles and rights apart from those explicitly recognized in articles 10 and 15 LOSC, namely, historic bays and historic titles in the territorial sea/internal waters.[411] However this view has been contested since in most cases historic rights relate to a regime that reflects a continuous, long-established situation.[412] As the 1962 UN Secretariat study suggested, historic rights should be assessed on an *ad hoc* basis, taking into account the particular circumstances of each case.[413]

Pharand, after carefully examining the history of the Northwest Passage[414] concluded that Canada is not in position to provide proof that it has exercised exclusive jurisdiction over the Passage for a sufficiently long period of time and with the acquiescence of foreign states, particularly those primarily affected by its claim. He brings forth four reason in support of this conclusion: First, neither the British nor Canadian explorers ever took possession of any part of the Arctic waters, especially not those of the Northwest Passage. Second, the first official claim that the waters around the High Arctic Islands are historic internal waters was made only in 1973. Third, as soon as Canada drew the straight baselines, the US and the member States of the EC protested this act. Fourth, Canada has not succeeded in subjecting all foreign ships to prior authorization to enter the Northwest Passage, in particular US ships.[415] Consequently, it is safe to conclude that the "historic title" argument of Canada is not valid.

Apart from the issue of historic title, the main question on the status of the Northwest Passage as a strait used for international navigation is not whether it is indeed geographically

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[408] UN Secretariat, "Judicial Régime of Historic Waters, Including Historic Bays", Document A/CN.4/143, 2 *Yearbook of the International Law Commission* 1 (1962),p. 13.
[409] *Ibid.* p. 23.
[410] PCA Case Nº 2013–19 in the matter of the *South China Sea Arbitration* (Republic of the Philippines v. People's Republic of China) Award of 12 July 2016 on the Merits.

[411] *Ibid.* par. 238.
[412] For example see Kopela S., "Historic Titles and Historic Rights in the Law of the Sea in the Light of the South China Sea Arbitration", 48 *Ocean Development and International Law* 181 (2017).
[413] *Ibid.* p. 199.
[414] *Supra n. 384* Pharand, pp. 4-13.
[415] *Ibid.* p. 13.

a strait. Rothwell asks if it is possible to equate it with a single strait or whether it is appropriate to characterize it as a series of interconnected straits.[416] In this regard, the Northwest Passage could be considered unique as both customary international law and the LOSC focus on the situation of a single strait, and not a series of straits that in sum comprise a navigational route from one area of the high seas/EEZ to another. However this question is quickly dismissed since the two States and scholars from both sides agree that the Northwest Passage meets the geographical requirement of a strait or a series of straits as reflected in the *Corfu Channel Case* and in treaty law.[417]

The main disagreement is about the functional requirement referred to in the *Corfu Channel Case* that the strait actually be used for international navigation.[418]

The US generally asserts that the right of transit passage can be exercised through any strait capable of being used for international navigation.[419] On the other hand Canada's Governments, along with eminent scholars, maintain that because of the low number of recorded transits of the strait it would not be possible to classify the Northwest Passage as a "strait used for international navigation".[420]

Rothwell observes that these different opinions raise issues as to the actual recorded number of transits that have taken place, whether distinctions should be made between historical figures and more contemporary assessments, and the percentage of transits completed by non-Canadian flagged vessels.[421]

From the time of the very first complete transit of the Passage in the years 1903–1906 by the Norwegian explorer Roald Amundsen, until 2005, Pharand identified 69 foreign transits of the Northwest Passage.[422] According to his list, 15 transits were undertaken by US flagged vessels in the period up to 2005, of which only two were by non-government vessels, the *SS Manhattan* and an adventure yacht, the *Belvedere*.[423]

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[416] *Supra n. 387* Rothwell, p. 171.

[417] *Ibid.;* Pharand D., *Canada's Arctic Waters in International Law*, Cambridge University Press (1988), pp. 223-224; Satei S. "The Legal Status of the Northwest Passage: Canada's Jurisdiction or International Law in Light of Recent Developments in Arctic Shipping Regulation?", in Hildebrand L. et al. (eds.) *Sustainable Shipping in a Changing Arctic*, Springer (2018), p. 248;

[418] *Ibid.* Pharand, pp. 202-214; *Supra n. 387* Rothwell, p. 172; *Supra n. 12* Byers pp. 136-137; *Supra n. 309* Symonides 238; Roach J. and Smith R., *Excessive Maritime Claims*, 3rd edition, Martinus Nijhoff (2012), pp. 478-479.

[419] *Ibid.* Roach and Smith pp. 277-278.

[420] *Supra n. 33* Rothwell, p. 41; *supra n. 417* Pharand, pp. 202-214.

[421] *Ibid.* Rothwell; *Supra n. 387* Rothwell, p. 172.

[422] *Supra n. 384* Pharand, pp.31-33, table 1.

[423] *Ibid.*

Relying upon the use of the Northwest Passage in this 100-year timeframe, Pharand has maintained that the Passage is not an international strait.[424] He notably argued that "those who contend otherwise confused potential use with actual use and that mere capacity is not what is required but rather actual use".[425]

The United States, however, continues to reassert its position in regards to the legal status of the Northwest Passage. Roach and Smith observed in 2012 that on the basis of the statistics of usage of the strait that "to deny, as Canada continues to do, that the Northwest Passage is not a strait used for international navigation, as that term is used in Part III LOSC, is simply not credible."[426]

As a result an issue of temporality arises. Pharand's view that the Northwest Passage was not an international strait until at least 2005 must be regarded as accurate. 69 transits hardly amount to "international navigation". But what about the timeframe from 2005 until 2018? And more importantly, taking into account the rapid ice melting in the region, what is going to happen in the coming years? Can the status of a strait that is not characterized as "used for international navigation" change through the passage of time?

First of all, one has to clarify the possible ambiguity that exists in the English expression "Straits used for international navigation". That ambiguity does not occur in the other languages, which clarify that Part III applies to straits whenever they are being used for international navigation.[427] The English text of Article 37 LOSC is "straits which are used for international navigation". Such wording may introduce a temporal aspect into the functional criterion of "used for international navigation". Such an interpretation would suggest that only those straits that are used for international navigation at the time the LOSC entered into force would be governed by the regime of transit passage set out in section 2.[428] However it is apparent that phrase "used for international navigation" is dynamic term, meant to have a descriptive, not a temporal, effect.[429] Consequently a strait that was not used for international navigation can become an international strait if the number of transits through it increase through time.

With respect to the Northwest Passage, it is already noted that Pharand identified that 69 transits have occurred between 1903 and 2005. Brigham, by referencing to the work of the

[424] *Ibid.*p. 42.
[425] *Supra n. 417* Pharand, p. 225.
[426] *Supra n. 418* Roach and Smith, pp. 478-479.
[427] *Supra n. 165* Nandan and Rosenne, p. 290.
[428] *Ibid.*
[429] *Ibid.*

Scott Polar Research Institute and himself, refers to 236 Complete Marine Transits (ocean to ocean) through the Canadian Archipelago by 176 Different Vessels (in the period between 1906 and 2015.[430] The 69 transits identified by Pharand are included in this list. As a result 167 transits have occurred in the decade between 2005 and 2015. Moreover, in 2016, 18 transits have occurred through the Northwest Passage, and all were undertaken by non-Canadian vessels.[431] In 2017, 32 transits have occurred and only 1 of them was undertaken by a Canadian vessel.[432] As of 2018 two ships have completed the transit, the *Infinity* and the *Thor*, and both of them are German-flagged.[433] One more ship, the Canadian cargo tug *Jim Kilabuk* sailed through the Northwest Passage from 2015 to 2018.[434] By examining these recent figures, it becomes apparent that foreign-flagged vessels complete the transit more frequently than Canadian vessels.[435] The "potential use" to which Pharand referred to is today a reality.

This increase in the regularity of transits by foreign-flagged vessels could suffice in order for the Northwest Passage to be characterized today as a strait used for international navigation. However some caution is warranted in this regard. The enclosure of the Passage by Canada's straight baselines, thereby converting them to internal waters, has the result that all transits conducted since 1985 have been undertaken with consent and not by way of exercise of the right of transit passage.[436] As Rothwell observes: "by consenting to foreign vessels undertaking navigation through the Northwest Passage, Canada is able to regulate and monitor ships as they engage in passage, and because passage has not been barred Canada has averted diplomatic protests similar to those that have arisen in the past with the US".[437] Moreover, the requests of the flag-states for the consent of Canada would nullify the argument that the right of transit passage applies on the Northwest Passage.

In light of this, it bears reiterating, Article 35 (a) LOSC which states that Part III is not applicable to "any areas of internal waters within a strait, except where the establishment of a straight baseline in accordance with the method set forth in article 7 has the effect of enclosing

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[430] Brigham L., "The Changing Maritime Arctic and New Marine Operations", in Beckman R. et al. (eds.) *Governance of Arctic Shipping*, Brill Nijhoff (2017) p. 8; *Supra n. 377* Headland pp. 3-11.
[431] *Ibid.* Headland p. 11.
[432] *Ibid.* pp. 11-12.
[433] *Ibid.* p. 12.
[434] *Ibid.*
[435] It must be noted that according to the authors of the list of the Scot Polar Research Institute, it is subject to revision and confirmation as additional information and improved details are received, *ibid.*
[436] *Supra n. 33* Rothwell, p. 42.
[437] *Ibid.*

as internal waters areas which had not previously been considered as such". Could that be the case in the Northwest Passage?

As it was already seen, the validity of the 1985 Canadian baselines is contested. Nevertheless, due to the fact that there is no definite answer to their validity, in order to examine the application of Article 35 (a) LOSC, one has to assume that they are drawn in accordance with the *Anglo-Norwegian Fisheries Case.* Otherwise, the Northwest Passage would not be internal waters to begin with, and there would be no question of the application of Article 35 (a).

The result of the 1985 drawing of baselines was that all of the enclosed water areas, including those of the Northwest Passage, became internal waters where the right of innocent passage could not be exercised. The TSC provided that where baselines were employed, a right of innocent passage existed in "areas which previously had been considered as part of the territorial sea or of the high seas."[438] Canada was not a party to the 1958 Territorial Sea Convention.[439] Consequently, one must examine the possibility of the relevant TSC provision having become part of customary international law, in order for it to be binding upon Canada.

The TSC came into force in 1964. By 1985, when Canada established its baselines, it was ratified by 45 States.[440] However, these 45 parties included only 21 of the 66 states that had used the straight baseline system.[441]

The *Gulf of Maine Case* (1984) is of relevance on this matter.[442] In that case, the ICJ stated with regards to the equidistance method of continental shelf delimitation provided for by the 1958 Continental Shelf Convention,[443] that it had not become a rule of customary law and neither had it been adopted into such law as a method to be given preference over others.[444]

Pharand maintains that, in the same manner, it cannot be the case that Article 5 par. 2 TSC had become binding on all states by 1985 as a rule of customary international law.[445] As a result the relevant areas of the Northwest Passage became in fact internal waters by the 1985

[438] TSC Article 5 par. 2.
[439] *Supra n. 384* Pharand, p. 43.
[440] *Ibid.*
[441] *Ibid.*
[442] *Delimitation of the Maritime Boundary in the Gulf of Maine Area* (Canada v. USA), Judgment, ICJ Rep. 1984, p. 246.
[443] Convention on the Continental Shelf (signed 29 April 1958, entry into force 10 June 1964), 499 UNTS 311.
[444] *Supra n. 442 Gulf of Maine Case*, par. 107.
[445] *Supra n. 384* Pharand, p. 43.

drawing of the baselines and therefore the Northwest Passage was considered as internal waters since 1985, thus rendering Article 35 (a) inapplicable to it.

The dispute over the Northwest Passage will likely persist in the years to come. Canada has made use of its right under Article 298 by attaching a declaration regarding settlement of disputes when it ratified LOSC in November 2003. The declaration excludes from binding decisions "disputes concerning the interpretation or application of articles 15, 74 and 83 relating to sea boundary delimitations, or those involving historic bays or titles".[446] That way, the possibility of the dispute being adjudicated by an international court or tribunal appears very thin.

It must be noted that except for the US and Denmark -as a member state of the EU and not individually- the other Arctic States have not protested the Canadian claims. As of Russia, this position is easily understood since it does not want to hamper its own position regarding the Northern Sea Route.

b. Rules for navigation and the protection and preservation of the marine environment

Canada regulates maritime safety and navigation primarily through the Arctic Water Pollution Prevention Act (AWPPA).[447] As it was mentioned previously, the adoption of the AWPPA was a direct consequence of the voyage of the *SS Manhattan* through the Northwest Passage. AWPPA is supplemented by the 2001 Canada Shipping Act (CSA),[448] the Marine Liability Act[449] and the Navigable Waters Protection Act.[450]

AWPPA applied to zones extending 100 nautical miles from Canadian islands north of the 60th northern parallel.[451] It was amended in 2009[452] and today it applies to the "arctic waters".[453] The Canadian arctic waters are defined by AWPPA as:

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[446] Canada, Declaration made upon ratification (7 November 2003), UN DOALOS, accessed 6 December 2018, at <http://www.un.org/Depts/los/convention_agreements/convention_declarations.htm#Canada>.
[447] *Supra n. 381* Kraska, p. 264
[448] Canada Shipping Act (CSA), S.C. 2001, c. 26, accessed 6 December 2018 at <https://laws-lois.justice.gc.ca/eng/acts/c-10.15/>.
[449] Marine Liability Act, S.C. 2001, c. 6, accessed 6 December 2018 at <https://laws-lois.justice.gc.ca/eng/acts/M-0.7/>.
[450] Navigation Protection Act, R.S.C., 1985, c. N-22, accessed 6 December 2018 at <https://laws-lois.justice.gc.ca/eng/acts/N-22/>.
[451] *Supra n. 22* Hartman p. 284.
[452] An Act to amend the Arctic Waters Pollution Prevention Act, S.C. 2009, c. 11, accessed 6 December 2018 at <https://laws-lois.justice.gc.ca/eng/annualstatutes/2009_11/FullText.html>
[453] AWPPA Section 2.

> “the internal waters of Canada and the waters of the territorial sea of Canada and the exclusive economic zone of Canada, within the area enclosed by the 60th parallel of north latitude, the 141st meridian of west longitude and the outer limit of the exclusive economic zone; however, where the international boundary between Canada and Greenland is less than 200 nautical miles from the baselines of the territorial sea of Canada, the international boundary shall be substituted for that outer limit.”[454]

It is apparent that this definition of the Canadian “arctic waters” is in conformity with the interpretation of Article 234 as applicable to the whole breadth of the EEZ, including the territorial sea.

Under the AWPPA, Canada implements the Arctic Waters Pollution Prevention Regulations (AWPPR).[455] These regulations refer specifically to the protection and preservation of the marine environment.[456] They prohibit the discharge of domestic and industrial waste in the Canadian arctic waters, except as may be authorized by law.[457] In addition, AWPPA provides for a corollary duty to report all discharges, including those made accidentally or under distress, to a pollution prevention officer.[458]

In accordance with AWPPA Section 11 Canada has subdivided its waters into 16 shipping safety control zones, within which it regulates standards for regional shipping and navigation.[459] The designation of these shipping safety control zones enables adoption of regulations for ships of specified classes navigating in those zones.[460] AWPPA empowers prohibition of navigation in those zones where a ship does not comply with prescribed standards concerning construction, design, equipment and manning requirements.[461] Specifically: (a) hull and fuel tank construction, including the strength of materials used therein, the use of double hulls and the subdivision thereof into watertight compartments; (b) the construction of machinery and equipment, the electronic and other navigational aids and equipment and telecommunications equipment to be carried and the manner and frequency of maintenance thereof; (c) the nature and construction of propelling power and appliances and

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[454] *Ibid.*
[455] Arctic Waters Pollution Prevention Regulations (AWPPR), C.R.C., c. 354, accessed 6 December 2018 at <https://laws-lois.justice.gc.ca/eng/regulations/C.R.C.,_c._354/>.
[456] *Supra n. 237* Chircop et al., p. 302.
[457] AWPPR, Sections 5, 6.
[458] AWPPA, Section 5.
[459] Shipping Safety Control Zones Order, C.R.C., c. 356, accessed 6 December 2018 at https://laws-lois.justice.gc.ca/eng/regulations/C.R.C.,_c._356/.
[460] AWPPA, Section 11.
[461] *Ibid.* Section 12.

fittings for steering and stabilizing; (d) the manning of the ship, including the number of navigating and lookout personnel to be carried who are qualified in a manner prescribed by the regulations; (e) with respect to any type of cargo to be carried, the maximum quantity thereof that may be carried, the method of stowage thereof and the nature or type and quantity of supplies and equipment to be carried for use in repairing or remedying any condition that may result from the deposit of any such cargo in the Arctic waters; (f) the free-board to be allowed and the marking of load lines; (g) quantities of fuel, water and other supplies to be carried; (h) the maps, charts, tide tables and any other documents or publications relating to navigation in the Arctic waters to be carried.[462]

According to the same provision, navigation may be prohibited when it is conducted without the aid of a qualified pilot or ice navigator as may be required for prescribed classes of ships under regulation, or during specified periods during the year or under particular ice conditions.[463]

The aforementioned standards of construction, design, equipment and manning apply also to ships owned or operated by "a sovereign power, other than Canada", but which may be exempted from application of the regulations if the competent Canadian authority is satisfied that:

> "(a) appropriate measures have been taken by or under the authority of that sovereign power to ensure the compliance of the ship with, or with standards substantially equivalent to, standards prescribed by regulations made under paragraph (1)(a) that would otherwise be applicable to it within any shipping safety control zone; and
> (b) in all other respects all reasonable precautions have been or will be taken to reduce the danger of any deposit of waste resulting from the navigation of the ship within that shipping safety control zone".[464]

Moreover, under AWPPA Section 15, par. 4, the competent authorities have excessive enforcement jurisdiction in cases of breaches of the relevant standards provided for in Section 12, without differentiating between governmental and non-governmental ships.[465] This provision raises serious questions concerning the extent to which government owned ships on

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[462] *Ibid.* Section 12, par. 1 (a).
[463] *Ibid.* Section 12, par. 1 (b), (c).
[464] AWPPA, Section 12, par. 2.
[465] *Ibid.* Section 15, par. 4. The provisions regarding enforcement will be examined in further detail in the next segment.

non-commercial service enjoy immunity in Canadian Arctic waters as they do elsewhere under the relevant LOSC provisions.[466]

This provision of AWPPA is undoubtedly *contra legem*. As it was examined in chapter 4 (A), a warship and a ship on governmental, non-commercial service enjoys immunity even in the internal waters. Besides, according to the definition of Canadian "arctic waters", AWPPA is also applicable in the territorial sea and the EEZ of Canada. Articles 95 and 96 LOSC, which are applicable to the EEZ by virtue of Article 58 par. 2 LOSC, grant warships and ships used only on government non-commercial service "complete immunity from the jurisdiction of any State other than the flag State."[467] In the same manner, Article 236 LOSC clearly states that the provisions of LOSC regarding the protection and preservation of the marine environment –thus including Article 234 LOSC- do not apply to any warship, naval auxiliary, other vessel or aircraft owned or operated by a State and used only on government non-commercial service.[468] And, most importantly, Article 32 LOSC reads: "With such exceptions as are contained in subsection A and in articles 30 and 31, nothing in this Convention affects the immunities of warships and other government ships operated for non-commercial purposes". Even the broadest interpretation of Article 234 could not give Canada such enforcement powers over warships and government owned vessels.[469]

In 2010 Canada adopted the Reporting System of certain ships entering the Northern Canada Vessel Traffic Services Zone (NORDREG).[470] The NORDREG is a compulsory reporting system adopted under the 2001 CSA and not AWPPA. It was strictly voluntary until 2010, when the Canadian Government decided to make it mandatory.[471] It applies to shipping safety control zones provided for in AWPPA Section 11 and to other designated areas in the Canadian internal waters.[472] The scope of the waters covered is such that any vessel which falls

[466] *Supra n. 237* Chircop et al., p. 303.
[467] LOSC Articles 95 and 96.
[468] LOSC Article 236.
[469] Fields S., "Article 234 of the United Nations Convention on the Law of the Sea: The overlooked Linchpin for achieving Safety and Security in the US Arctic?" 7 *Harvard National Security Journal* 55 (2016), p. 103.
[470] Northern Canada Vessel Traffic Services Zone Regulations (NORDREG), SOR/2010-127, accessed 6 December 2018 at https://laws-lois.justice.gc.ca/eng/regulations/SOR-2010-127/FullText.html
[471] *Supra n. 237* Chircop et al., p. 306; *Supra n. 34* Rothwell, p. 237; Pharand argued that in order for Canada to assert its position on the legal status of the Northwest Passage had to make the NORDREG system mandatory. See *supra n. 384* Pharand, pp. 49-51.
[472] NORDREG, Section 2. These areas are the waters of Ungava Bay, Hudson Bay and Kugmallit Bay that are not in a shipping safety control zone, the waters of James Bay, the waters of the Koksoak River from Ungava Bay to Kuujjuaq, the waters of Feuilles Bay from Ungava Bay to Tasiujaq, the waters of Chesterfield Inlet that are not within a shipping safety control zone, and the waters of Baker Lake, and the waters of the Moose River from James Bay to Moosonee.

within the reach of NORDREG would need to pass through such waters to be able to transit the Northwest Passage.[473] That way, Canada has managed to render its prior authorization mandatory for any transit of the Northwest Passage undertaken by a commercial vessel, thus avoiding the further discussion on the legal status of it.

The NORDREG system applies to vessels of 300 gross tonnage, vessels engaged in towing or pushing certain other vessels, and vessels that are carrying or pushing or towing a vessel carrying a pollutant or dangerous goods.[474] Vessels entering the NORDREG controlled area are to provide a sailing plan report, position reports upon entry into the NORDREG area and thereafter on a 24 hour basis, and as soon as feasible once a vessels master becomes aware of another vessel in difficulty, an obstruction to navigation, hazardous navigational conditions, or a pollutant in the water.[475] Moreover the vessel has to issue final reports once it has arrived at a berth within the NORDREG Zone, or exited the Zone[476] and a deviation report if it changes its sailing plan.[477]

The adoption of the NORDREG system, and especially its mandatory character, has been criticized by the United States, other States and the shipping industry, and was the subject of discussion at the 2010 meetings of the IMO Subcommittee on the Safety of Navigation and the MSC.[478] The criticism was mainly grounded in Canada's failure to follow the relevant SOLAR requirements.[479]

In these discussion, Canada maintained that the NORDREG system was adopted in accordance with Article 234 LOSC. However, one feature that seems especially difficult to reconcile with Article 234 is the indiscriminate application of NORDREG in the arctic waters, regardless of ice cover, climatic conditions, or conditions of navigation.[480]

Notwithstanding the legality of the NORDREG system, in these discussions Canada managed to partially resolve the issue of application of its laws to warships and other governmental ships.[481] Canada stated that the NORDREG system will not apply to any warship,

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[473] *Supra n. 33* Rothwell, p. 43.
[474] NORDREG, Section 3.
[475] *Ibid.* Sections 5, 6, 7.
[476] *Ibid.* Section 8.
[477] *Ibid.* Section 9.
[478] *Supra n. 289* Roach, p. 227.
[479] IMO Doc. MSC 88/11/2, 22 September 2010, US.
[480] *Supra n. 22* Hartman p. 285.
[481] Xue G. and Long Y., "Equal Treatment and non-Discrimination for User States", in Beckman R. et al. (eds.) *Governance of Arctic Shipping*, Brill Nijhoff (2017), p. 345.

naval auxiliary, other vessels or aircraft owned or operated by a State and used, for the time being, only on government non-commercial service.[482]

c. *Enforcement*

Failure to comply with the NORDREG system's reporting requirements, or the other relevant Canadian laws and regulations triggers the non-compliance and enforcement provisions of AWPPA.[483] The AWPPA provides for significant enforcement powers.[484]

The pollution prevention officer is mandated with substantial investigative and directing powers. If the officer suspects non-compliance, or where it is justified for safety reasons, or is informed that substantial wastes have been discharged, or there is an imminent danger that they may be, he/she may board a ship within a shipping safety control zone to determine compliance or order it to proceed outside a zone and anchor.[485] The pollution prevention officer enjoys also a power of seizure. If any provision of AWPPA or the regulations has been contravened by a ship the officer may, with the consent of the Governor in Council, seize the ship and its cargo anywhere in the arctic waters or elsewhere in the territorial sea or internal or inland waters of Canada.[486]

Ships in distress, stranded, wrecked or sunk that are releasing or are likely to release wastes may be removed or destroyed.[487] Any ship may be ordered to take part in the cleaning up of waste or in actions to control or contain waste.[488]

Finally, AWPPA provides for a system of financial penalties largely based on summary conviction.[489] Among others, these include navigation which is non-compliant with standards in a shipping safety control zone, failure to comply with a pilot's instructions or an order of a pollution prevention officer, and failure of the master to report waste discharge to the pollution prevention officer.[490]

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[482] IMO Doc. MSC 88/11/3, 5 October 2010, Canada.
[483] *Supra n. 319* Williams, p. 401.
[484] *Supra n. 237* Chircop et al., p. 304.
[485] AWPPA, Section 15.
[486] *Ibid.* Section 23.
[487] *Ibid.* Section 13.
[488] *Ibid.* Section 15, par. 4, (c), (ii).
[489] *Supra n. 237* Chircop et al., p. 304.
[490] AWPPA, Section 19.

d. Implementation of the Polar Code and views on Article 234

The Polar Code was incorporated in the Canadian legislation by the 2017 Arctic Shipping Pollution Prevention Regulations (ASPPR),[491] adopted under the AWPPA. Part 1 of the ASPPR concerns safety measures and implements the relevant SOLAS provisions, while Part 2 is titled "Pollution Prevention Measures" and concerns the implementation of the relevant MARPOL 73/78 provisions. ASPPR Section 3 states that "These Regulations do not apply to government vessels and vessels owned or operated by a foreign state when they are being used only in government non-commercial services" thus rectifying in a way the *contra legem* provisions of AWPPA.

It is evident that Canada supports a broad interpretation of Article 234 LOSC which would allow it to adopt and enforce far-reaching measures in the Canadian High North. This is easily explained since the legal regime under Article 234 is arguably less controversial than the claim for more authority over the Northwest Passage than a claim based on historic rights or the 1985 adoption of contested baselines.[492]

ii. Russia

a. The Northern Sea Route

The Northern Sea Route stretches along the northern Russian coasts from the Atlantic to the Pacific. The route, beginning in the west, connects major Russian ports: Murmansk and Arkhangelsk, then Dickson, near the Yenisei Gulf, coming into the Laptev Sea, through Nordvik, then Tiksi (Delta of Lena), Ambarchik (mouth of Kolyma), and Pevek and the port in Provideniya.[493] The Northern Sea Route has already become seasonally ice-free and the Russian Government is determined to utilize it in the coming years.[494] In this very year, 2018, the Danish container ship *Venta Maersk* has become the first ship of its class to traverse through the Northern Sea Route, opening the way for more ships to attempt to make this journey.[495]

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[491] Arctic Shipping Pollution Prevention Regulations (ASPPR), C.R.C., c. 353, accessed 6 December 2018 at https://laws-lois.justice.gc.ca/eng/regulations/C.R.C.,_c._353/page-1.html.

[492] See also Solski J., "Russia", in Beckman R. et al. (eds.) *Governance of Arctic Shipping*, Brill Nijhoff (2017), p. 186, where the author refers to the similar scheme of Russia regarding the Northern Sea Route.

[493] Sorokina T. and Phalen W., "Legal Problems of the Northern Sea Route Exploitation: Brief Analysis of the Legislation of the Russian Federation", in Nordquist M. et al. (eds.), *International Marine Economy*, Brill Nijhoff (2017), p. 104

[494] *Supra n. 12* Byers pp. 143-144.

[495] The Guardian "Melting Arctic ice opens new route from Europe to east Asia", 28 September 2018 accessed 6 December 2018 at < https://www.theguardian.com/world/2018/sep/28/melting-arctic-ice-opens-new-route-from-europe-to-east-asia>.

The Russian legislation provides for a definition of the Northern Sea Route. According to Article 5.1 of the amended Merchant Shipping Code:

> "The water area of the Northern Sea Route shall be considered as the water area adjacent to the Northern coast of the Russian Federation, comprising the internal sea waters, the territorial sea, the adjacent zone and the exclusive economic zone of the Russian Federation and confined in the East with the Line of Maritime Demarcation with the United States of America and Cape Dezhnev parallel in Bering Strait, with the meridian of Cape Mys Zhelania to the Novaya Zemlya Archipelago in the West, with the eastern coastline of the Novaya Zemlya Archipelago and the western borders of Matochkin Strait, Kara Strait and Yugorski Shar." [496]

As is becoming apparent from this definition, which includes the internal waters, the territorial sea, the adjacent zone (meaning the contiguous zone) and the 200 nm EEZ of Russia, the whole Northern Sea Route cannot be characterized as internal waters.

The Russians actually consider parts of the Northern Sea Route, and especially the Vil'kitskii, Shokal'skii, Dmitrii Laptev, and Sannikov Straits of the Northern Sea Route as internal waters.[497] And it is again the US that challenges this view and regards these parts of the Northern Sea Route as comprising single strait used for international navigation, where the right of transit passage would apply.[498]

In 1963 the US sent the *USCG Northwind* to travel through and chart the Laptev Sea. The next summer it sent the *USS Burton Island* to do the same in the East Siberian Sea. The then-Soviet Union sent an Aide-Mémoire to the US embassy in 1964 in order to clearly set its position that the straits constitute in fact Russian internal waters, due to historical usage by only Russian vessels.[499] The US Government in turn responded with an Aide-Mémoire that stated that it did not accepted the Soviet position that the Northern Sea Route is not a strait used

[496] Federal Law of the Russian Federation of 3 July 2012, No 132-FZ On Amendments to Certain Legislative Acts of the Russian Federation Concerning State Regulation of Merchant Shipping on the Water Area of the Northern Sea Route [unofficial translation], reprinted in *Kristina Schönfeldt* (ed.) *The Arctic in International Law and Policy*, Hart Publishing (2017), p. 1394, Clause 3, par. 1. See also Annex, Figures 4 and 5.
[497] *Supra n. 12* Byers p. 144.
[498] *Ibid.*
[499] Aide-Mémoire from the Soviet Ministry of Foreign Affairs to the US Embassy in Moscow [extracts only] (21 July 1964) reprinted in Kristina Schönfeldt (ed.) *The Arctic in International Law and Policy*, Hart Publishing (2017), p. 1387.

for international navigation since it meets the geographical criterion set out in the *Corfu Channel Case*.[500]

Afterwards, in the summer of 1965 the US sent again the *USCG Northwind* to the Vil'Kitskii Straits, which are located between Bolshevik Island at the southern end of the Severnnaia Zemlia archipelago, and the Taimyr Peninsula, which is the northernmost portion of the Russian mainland.[501] The Soviet Union demanded the ship to turn around and this time the US complied and ordered the *USCG Northwind* to leave the area.[502]

In the summer of 1967, the *USCG* icebreakers *Edisto* and *East Wind* set out to circumnavigate the Arctic Ocean. The plan, as communicated to the Soviet government, was for the vessels to sail north of Novaya Zemlya and Severnaya Zemlya in the high seas and to not enter areas under Soviet jurisdiction.[503] Heavy ice conditions forced the ships to change course toward the Vil'Kitskii Straits and a message was sent to the Soviet authorities[504] that was carefully worded so as not to constitute a request for permission. It stated that the two ships would exercise the right of innocent passage through the straits of Vil'kitskii with no deviation or delay.[505] The Soviet Union responded with an oral de´marche the very same day, [506] followed by an Aide Mémoire four days later, reiterating that the straits were Soviet waters and that foreign vessels had to submit requests to enter thirty days in advance.[507] The US Government aborted its plans but stated that it strongly protests the Soviet position.[508] The *Edisto* left the area but the *East Wind* remained in the Kara and Barents Seas for another month.[509]

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[500] Aide Mémoire from the US Department of State Bureau of Oceans and International Environmental and Scientific Affairs [extracts only] (22 June 1965) reprinted in Kristina Schönfeldt (ed.) *The Arctic in International Law and Policy*, Hart Publishing (2017), p. 1387.
[501] *Supra n. 12* Byers p. 146.
[502] *Ibid.*
[503] *Supra n. 245* Brubaker, p. 143; Note from the US State Department to the Soviet Embassy in Washington concerning the voyages of the United States Coast
Guard Cutters Edisto and East Wind (14 August 1967), reprinted in Kristina Schönfeldt (ed.) *The Arctic in International Law and Policy*, Hart Publishing (2017), p. 1389.
[504] Message from the United States Coast Guard Cutter Edisto to Coastal Radio Station of USSR at Dikson (28 August 1967), reprinted in Kristina Schönfeldt (ed.) *The Arctic in International Law and Policy*, Hart Publishing (2017), p. 1390.
[505] *Supra n. 245* Brubaker, p. 143.
[506] USSR Ministry of Merchant Marine, Oral Dé marche to the United States Coast Guard Cutter Edisto (28 August 1967), reprinted in Kristina Schönfeldt (ed.) *The Arctic in International Law and Policy*, Hart Publishing (2017), p. 1390.
[507] *Supra n. 245* Brubaker, p. 143.
[508] *Ibid.*; Diplomatic Note from the US Government to the USSR Government regarding the circumnavigation of the Arctic by the United States Coast Guard Cutters Edisto and Eastwind [extracts only] (30 August 1967), reprinted in Kristina Schönfeldt (ed.) *The Arctic in International Law and Policy*, Hart Publishing (2017), p. 1391.
[509] *Ibid.* Brubaker.

The Soviet and the later Russian position on the status of the Northern Sea Route is not contested the same way the Canadian position regarding the Northwest Passage. Most scholars agree that the Northern Sea Route constitute internal waters and not an international strait.[510] Roach and Smith discuss the Northern Sea Route but do not make a reference regarding its legal status.[511] Rothwell once again suggests that given the relative infrequency of foreign-flagged vessels passing through these straits, it would seem difficult to classify any of the major straits in the Northern Sea Route as a strait used for international navigation.[512]

Byers suggests that the drawing of the baselines by the then-Soviet Union, which is still in force today, is problematic.[513] This is due to the fact that the offshore Arctic Islands enclosed by the straight baselines do not lie in the general direction of the coast, as is the requirement set out by the *Anglo-Norwegian Fisheries Case*.[514] However he quickly dismisses this notion by stating that: "Russia's internal waters position pre-dates the drawing of the straight baselines by several decades, and is therefore based on the long-standing acquiescence of other countries".[515]

Since the adoption of the straight baselines in 1985, the Northern Sea Route is considered "open" for foreign-flagged vessels.[516] For example, in September 2009, two German container ships successfully navigated the Northern Sea Route on a voyage that began in Ulsan, South Korea, and ended in Rotterdam, Netherlands and in August 2012, the Chinese research icebreaker *Xuelong* transited the Northern Sea Route.[517] *Venta Maersk* is the latest of foreign-flagged vessels that have travelled through the Northern Sea Route.

Do these transits, and the ones that are to come, mean that the Northern Sea Route will meet the functional criterion for it to be characterized as a strait used for international navigation? The answer to this question is probably no. Despite the increase in shipping, none of these voyages indicate that Russia believes the Northern Sea Route should be opened to unrestricted access, since all the vessels have requested prior authorization and were accompanied by Russian icebreakers. Russia exercises substantial jurisdiction and control in

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[510] *Ibid.* p. 189; *Supra n. 12* Byers pp. 148-150; *Supra n. 309* Symonides, p. 234; *Supra n. 492* Solski pp. 177-178; *Supra n. 493* Sorokina and Phalen, pp. 104-106.

[511] *Supra n. 418* Roach and Smith, pp. 495-496.

[512] Rothwell D., *The Polar Regions and the Development of International Law*, Cambridge University Press (1996), p. 206.

[513] *Supra n. 12* Byers, p. 149.

[514] *Ibid.,* p. 150.

[515] *Ibid.*

[516] *Supra n. 492* Solski, p. 178.

[517] *Supra n. 12* Byers, p. 148.

the Northern Sea Route, subjecting international navigation to a permitting system, and applications for permits to navigate the Northern Sea Route have been rejected, without being contested by the flag states of these ships.[518] The Russian position is that this is a long-standing practice, at least since 1926, and followed by Soviet era legislation regarding admission of foreign vessels into the Northern Sea Route.[519] According to this position, and taking into account that only the US has reluctantly and only since 1965 contested it, the Northern Sea Route meets the at least the requirement of long acquiescence for it to be characterized as "historic waters", in a way the Northwest Passage does not.

b. Rules regarding navigation and the protection and preservation of the marine environment under the Prior Authorization System

The regime of Russia's internal waters, territorial sea and contiguous zone is set out in a 1998 Federal Law on the Internal Waters, Territorial Sea and Contiguous Zone of the Russian Federation [520] that implements the relevant LOSC provisions. It explicitly recognises the legal regime of innocent passage but it does not address the legal regime of transit passage related to straits used for international navigation.[521] The legal regime of the EEZ is set out in the Federal Law of the Russian Federation of 17 December 1998 No 191-FZ, "On the exclusive economic zone of the Russian Federation".[522]

Russia may have "officially opened" the Northern Sea Route in 1991,[523] but it has sought strict regulation of foreign navigation in the area.[524] Until 2012 navigation in the Northern Sea Route was regulated exclusively by the 1998 Federal Laws. In 2012 Russia revised this legal regime by adopting the 2012 Federal Law,[525] amending the 1998 Federal Law

[518] *Supra n. 237* Chircop et al., p. 315.
[519] *Ibid.*
[520] Federal Law of the Russian Federation of 31 July 1998 No 155-FZ, "On the internal sea waters, territorial sea and contiguous zone of the Russian Federation" [English translation], accessed 6 December 2018 at <http://cis-legislation.com/document.fwx?rgn=1412>.
[521] *Supra n. 492* Solski, p. 179.
[522] *Ibid.*
[523] *Ibid.* p. 178.
[524] Franckx E., "The Legal Regime of Navigation in the Russian Arctic" (2009) 18 *Journal of Transnational Law & Policy*, 327 (2009), p. 328–329.
[525] *Supra n. 496* 2012 Federal Law.

and the Merchant Shipping Code of the Russian Federation.[526] These amendments serve as the legal basis for the establishment of and a dedicated set of rules of navigation.[527]

As it was provided for in Chapter III, B ii, the 2012 Federal Law amending the Merchant Shipping Code defines the Northern Sea Route in such a way that the Russian arctic waters coincide with the geographical position of the Northern Sea Route,[528] with the exception of portions of the Barents Sea or the Bering Sea.[529]

Under the definition of the Russian legislation, the whole area of the Northern Sea Route is treated as one distinct area with a uniform legal regime, in spite of the fact that it encompasses different maritime zones.[530] This fact is an indication that Russia interpret Article 234 LOSC as covering both the EEZ and the territorial sea.

The Northern lacks a single and constant most convenient route used for navigation. The availability of a navigable route may vary, depending on the season of navigation, the presence of ice, and weather conditions.[531]

Russia's authority to coordinate and regulate navigation on the Northern Sea Route is less extensive under the 2013 Rules than it was under the previous regulations.[532] The relevant Russian legislation is centred around the system of prior authorization that is implemented on the Northern Sea Route.[533]

Russia has established the Northern Sea Route Administration (ANSR), a body tasked with administrative and coordinative duties to ensure safe navigation and protect the marine environment in the Northern Sea Route from vessel source pollution.[534] Foreign-flagged vessels, as well as Russian vessels, can enter and navigate within the Northern Sea Route only if they obtain a permit from the ANSR.[535]

The ANSR provides prior authorization for transit through the Northern Sea Route on an *ad hoc* basis, taking upon consideration the criteria incorporated in Annex 2 to the 2013

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[526] Merchant Shipping Code of the Russian Federation No. 81-FZ of 30 April 1999 [English translation], accessed 6 December at <http://cis-legislation.com/document.fwx?rgn=1565>.
[527] Rules of Navigation in the water area of the Northern Sea Route of 17 January 2013 [unofficial translation], reprinted in *Kristina Schönfeldt* (ed.) *The Arctic in International Law and Policy*, Hart Publishing (2017), p. 1397
[528] *Supra n. 496* 2012 Federal Law.
[529] *Supra n. 22* Hartman 286.
[530] *Supra n. 492* Solski, p. 181.
[531] *Ibid*.
[532] *Ibid.* p. 182.
[533] *Supra n. 22* Hartman p. 286.
[534] Order of the Government of Russian Federation No 358-p, 15 March 2013 [English translation], accessed 6 December 2018 at <https://cis-legislation.com/docs_list.fwx?countryid=008&page=1>.
[535] *Supra n. 492* Solski, p. 182.

Rules.[536] According to the applied methodology, the admission to the Northern Sea Route depends on the following criteria: navigational period, actual ice conditions (light, medium, heavy), category of ice strengthening, and intended mode of navigation, that it may be independent or with icebreaker assistance.[537] Icebreaker assistance is mandatory only under certain conditions.[538] Moreover, the 2013 Rules provide rules for ice pilotage assistance.[539] They fail to clarify under what conditions ice pilotage becomes mandatory, but it is likely that the determinative factor is the shipmaster's and crew experience in ice navigation.[540]

Nevertheless applicants are required to provide evidence of compliance, and vouch that the vessel in question fulfils the necessary requirements as a condition for the legality of the ship's navigation.[541] The application must include information on the vessel's characteristics as well as the planned voyage, including a specific dates of entry and departure.[542]

The application has to be submitted to the ANSR no earlier than 120 and no later than 15 days prior to planned entry.[543] The ANSR, on its part, is obligated to respond within 10 days of the application and publish the decision on its website together with its reasoning.[544]

In principal, the ANSR may refuse a vessel to traverse the Northern Sea Route only if the applicant fails to prove that the vessel fulfils requirements concerning safety of navigation and protection of the marine environment from vessel-source pollution.[545] The Russian legal frameworks does not provide for a clear procedure to appeal a refusal, and consequently, in such case, a new application is required.[546]

In addition to the above, Russia has unilaterally adopted an extensive system of reporting, including prior notification and a ship reporting system within the Northern Sea Route for the ships that have been granted the prior authorization of entry.[547]

Prior to approaching the Norther Sea Route, the shipmaster is obligated to notify the ANSR about its planned time of arrival to it 72 hours and 24 hours in advance.[548] Further

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[536] *Ibid.* p. 198.
[537] *Ibid.*
[538] *Supra n. 527* 2013 Rules, Part III, Article 22.
[539] *Ibid.* Part IV, Articles 31-41.
[540] *Supra n. 492* Solski, p. 208.
[541] *Supra n.* 527 2013 Rules, Part II, Article 3.
[542] *Ibid.* Part II, Article 10.
[543] *Ibid.* Part II, Article 6
[544] *Ibid.* Part II, Article 9.
[545] *Supra n. 496* 2012 Federal Law, Clause 3. par. 4.
[546] *Supra n. 492* Solski, p. 199.
[547] *Ibid*. p. 206.
[548] *Supra n. 527* 2013 Rules, Part II, Articles 14 and 15

reports are required during the transit of the Northern Sea Route: after crossing its eastern or western boundary, a daily report with information about the ship and the conditions relevant for navigation as observed is required.[549] This daily reporting system is justified as allowing the ANSR to collect on-site information on navigation on the Northern Sea Route and disseminate it further to other users.[550]

c. Enforcement

The specific legislation regarding navigation in the Northern Sea Route is unclear on the subject of the enforcement measures Russia is able to take. The 2013 Rules do not include a provision on enforcement actions.

The vast majority of foreign-flagged ships navigating the Northern Sea Route comply with the applicable Russian legislation.[551] The publicly available information[552] suggests that when the ANSR identifies non-compliance, it informs Rostransnadzor, the Federal Service for Supervision of Transport, about the incident, which in turn imposes an administrative fine upon the shipmaster and owner of the vessel based on the Code for Administrative Offences of the Russian Federation.[553]

Undoubtedly, the most famous incident of non-compliance with the relevant Northern Sea Route regulations was the 2013 incident of the *M/V Arctic Sunrise*, an incident which was examined by ITLOS (preliminary objections)[554] and the PCA (jurisdiction and merits).[555]

The *Arctic Sunrise Case* touches upon many issues of the Law of the Sea, including proceeding under Part XV LOSC, the prompt release of vessels, security of installation, piracy etc.

On 18 September 2013 the *Arctic Sunrise*, a vessel registered in Netherland and operated by Greenpeace staged a protest at the Russian offshore oil platform *Prirazlomnaya*, located within the Russian EEZ in the south-eastern part of the Barents Sea, [556] and thus out of

[549] *Ibid.* Part V, Article 42.
[550] *Supra n. 492* Solski, p. 206
[551] *Ibid.* p. 210
[552] See the website of the ANSR http://www.nsra.ru/en/home.html.
[553] *Supra n. 492* Solski, p. 210.
[554] *The "Arctic Sunrise" Case* (Kingdom of Netherlands v. Russian Federation), Provisional Measures, ITLOS Rep. 2013, p. 230.
[555] PCA Case Nº 2014-02 in the matter of the *Arctic Sunrise Arbitration* (Kingdom of Netherlands v. Russian Federation) Award of 26 November 2014 on Jurisdiction; PCA Case Nº 2014-02 in the matter of the *Arctic Sunrise Arbitration* (Kingdom of Netherlands v. Russian Federation) Award of 14 August 2015 on the Merits.
[556] *Ibid. Arctic Sunrise Case*, Merits, par. 79.

the area constituting the Northern Sea Route as it is defined in Russian legislation. On 19 September 2013, in response to the protest, the *Arctic Sunrise* was boarded, seized, and detained by the Russian authorities.[557]

In order to arrive to the *Prirazlomnaya*, the *Arctic Sunrise* entered the Northern Sea Route without a permit on 24 August 2013. The Netherlands alluded to four occasions in the summer of 2013 on which the *Arctic Sunrise* unsuccessfully attempted to obtain permission from Russian authorities to sail the Northern Sea Route.[558] The fourth denial of permission by the Russian authorities included express reference to rules of navigation for the area enforced in accordance with Article 234 LOSC.[559]

However the arbitration tribunal noted that the regulations adopted by Russia in accordance with Article 234 apply to the parts of the Russian EEZ that does not include the Barents Sea.[560] Even more importantly the tribunal stated that:

> "[…] at no time did Russia invoke its laws and regulations adopted under Article 234 of the Convention as the impetus for its boarding, seizure, and detention of the Arctic Sunrise on 19 September 2013. This contrasts with at least one previous instance in which the Russian Federation did expressly invoke rules of navigation adopted in accordance with Article 234 of the Convention after the *Arctic Sunrise* entered the "water area of the Northern Sea Route, ice-covered for most part of the year" without permission."[561]

The *Arctic Sunrise* Award, and especially the arguments of Russia, intensify the uncertainty surrounding the enforcement measures it has adopted and implements in the Northern Sea Route.

d. Implementation of the Polar Code and views on Article 234

Russia has not adopted specific legislation regarding the implementation of the Polar Code. The Polar Code is implemented automatically by its adoption in the IMO. It has to be noted that, according to the owing company, the *Venta Maersk* did abide to the relevant Polar Code requirements for construction, design, equipment and manning.[562] However it is not

[557] *Ibid*. paras 100-102.
[558] *Ibid.* par. 295.
[559] *Ibid.*
[560] *Ibid.* par. 296.
[561] *Ibid.*
[562] Maersk, "An Arctic Journey", published 10 October 2018, accessed 6 December 2018 at <https://www.maersk.com/en/news/2018/10/10/an-arctic-journey>.

clarified whether this was due to the implementation of the Polar Code by Russia or by the flag-State, Denmark.

As stated in Chapter IV, the then USSR was one of the prime drafters of Article 234 and, as the Russian Federation and along with Canada, continues to support a broad interpretation of it. Russia's broad interpretation of Article 234 is being mostly consistent with that of Canada and has faced more or less the same criticism.

In addition, the legality of Russia's prior authorization scheme is contested since Russia did not submit its ship reporting system to the IMO for adoption, as it should under Regulation V-11.1 of SOLAS.[563] Nevertheless, such systems may be submitted to the IMO for recognition, but even then, they will not attain a mandatory status under SOLAS. For the time-being, Russia has yet to make such a submission to the IMO.[564]

Finally, it should be noted that after the *Arctic Sunrise Case* was adjudicated, Russia responded by issuing a statement that it would not abide by the ruling.[565] This stance, along with the *Arctic Sunrise* award itself, gives rise to further concerns regarding the actual compatibility of Russia's legislation. [566]

However Solski notes that given the special purpose of the voyage of the *Arctic Sunrise*, i.e. to protest the Russian exploitation of its EEZ, it is difficult to conclude to what extent Russia's reaction reflects its actual position on the enforcement measures it is able and willing to take in the Northern Sea Route.[567] On the other hand, the 2018 Kerch incident, which took place between Russia and Ukraine in the Kerch Strait in the Black Sea,[568] shows that Russia may resort to extensive enforcement measures, even unlawful ones, in places where not even the *lex specialis* provision of Article 234 applies. As a result, it is doubtful that Russia will always act *intra legem,* especially in politically charged or controversial incidents such as the case of the *Arctic Sunrise* or the Kerch incident.

[563] SOLAS Chapter V, Reg. 11 par. 1.
[564] *Supra n. 492* Solski, p. 207, in which the author suggests that such a move from Russia would be a sign of its willingness to act in good faith.
[565] *Supra n. 319* Williams, p. 400.
[566] *Ibid.*
[567] *Supra n. 492* Solski, p. 216.
[568] *Supra n. 162* Kraska.

iii. United States

a. Rules regarding navigation in the waters under US jurisdiction

The US Arctic Policy is often described as inconsistent.[569] This can be explained as the US is acting primarily as a flag state rather than a coastal state.[570] Moreover, the US is the primal contestant of the Canadian and Russian policies in the region. As a result it would not be wise for the US to adopt and enforce extensive legislation because it would hamper its own position in respect to these matters.

The US implements the Federal Oil Pollution Act of 1990which regulates matters of Oil pollution prevention and removal, liability and compensation.[571] It applies to the US "navigable waters including the territorial sea"[572] a term that is interpreted as including the internal waters, the territorial sea and the EEZ.[573] OPA is not specifically applied to the Arctic waters of the US and it contains no provision relating to "ice-covered waters" or a similar term. Yet it contains special provisions about shipping in the Alaskan Prince William Sound and Cook Inlet south of the Aleutian Islands.[574] These areas may have ice masses part of the year.[575]

OPA establishes a number of construction, design, equipment and manning requirements for vessels navigating the US waters. Tank vessels operating in waters subject to US jurisdiction, including the EEZ are required to have double hulls.[576] Periodic gauging of plating thickness of commercial vessels and overfill and tank level or pressure monitoring devices are also required.[577] U.S. manning, training, qualifications and watchkeeping standards or international equivalents must be met by foreign tankers, or entry into the U.S. is prohibited until correction is made.[578]

Moreover, the US Federal Government may evaluate areas of navigable waters and the EEZ to determine whether they should be designated as special areas where the movement of tankers should be limited or prohibited.[579]

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[569] *Supra n. 22* Hartman p. 288
[570] Brubaker D., "The Arctic – Navigational Issues under International Law of the Sea", 2 *The Yearbook of Polar Law* 7 (2010), p. 63.
[571] Oil Pollution Act (OPA) of 1990, 33 *USC* 2701.
[572] *Ibid.* Title I, Sec. 1001 (21).
[573] *Supra n. 570* Brubaker, p. 64; *Supra n. 22* Hartman p. 289.
[574] OPA, Title V and VIII.
[575] *Supra n. 570* Brubaker, p. 64.
[576] OPA, Title IV, Sec. 4115.
[577] *Ibid.* Title IV, Sec. 4109.
[578] *Ibid.* Title IV, Sec. 4114.
[579] *Ibid.* Title IV, Sec. 4111 (7).

In regards to the Prince William Sound in Alaska special pilotage requirements or escort/towing requirements for single hull oil tankers over 5,000 gross tonnage are required.[580]

b. Enforcement

Under the OPA, any vessel not carrying evidence of financial responsibility may be denied entry to "any place in the US or the navigable waters".[581] In addition, any vessel may be detained at the place that upon request does not produce the evidence of required financial responsibility.[582] Finally, any vessel subject to the requirements which is found in the navigable waters without the necessary evidence of financial responsibility for the vessel shall be subject to seizure by and forfeiture to the US.[583] These measures are indicative of enforcement jurisdiction manifested through the interception and the inspection of such vessels.[584] However, Hartman notes that OPA only applies to vessels that have "a clear connection with the United States, either by being destined, or cooperating with another vessel destined, for a place subject to U.S. sovereignty".[585] Thus, vessels merely transiting through the U.S. EEZ are not affected, and the enforcement jurisdiction of the US does not hamper the rights of freedom of navigation.

c. Implementation of the Polar Code and views on Article 234

The Polar Code became directly applicable in the US Federal legislation by its adoption on 1 January 2017 for the SOLAS and MARPOL 73/78 provisions and on 1 July 2018 for the STCW provisions.[586]

As was mentioned earlier, the views and practice of the US on Article 234 have been described as inconsistent and ambiguous.[587] Since it is the only Arctic coastal State that has not ratified LOSC it is not bound by the relevant treaty provisions. Nevertheless the US views LOSC Part XII as customary law, including Article 234.[588]

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[580] *Ibid.* Title IV, Sec. 4116 (2).
[581] OPA, Title I, Sec. 1016 (2).
[582] *Ibid.*
[583] *Ibid.* Title I, Sec. 1016 (3).
[584] *Supra n. 570* Brubaker, p. 68.
[585] *Supra n. 22* Hartman, p. 289.
[586] See United States Coast Guard, Policy Letter 16-06 of 12 December 2016, accessed 6 December 2018 at < https://www.dco.uscg.mil/Portals/9/DCO%20Documents/5p/CG-5PC/CG-CVC/Policy%20Letters/2016/CG-CVC_pol16-06.pdf?ver=2016-07-06-120605-907>.
[587] See also *supra n. 469* Fields, p. 74.
[588] *Supra n. 245* Brubaker, pp. 53, 62.

The US position on navigational issues in the Arctic is seen as more reactionary than active. It focuses mainly on the opening of the Northwest Passage and the Northern Sea Route for international navigation,[589] and it was meticulously examined in Chapter III.

The United States has also accused Canada and Russia of promulgating navigational laws that violate the relevant LOSC principles of innocent passage and "due regard" for navigation by adopting prior notification schemes.[590] However, the regime established by the OPA is itself broader and more comprehensive than the international regime, although arguably it is not as far-reaching as either the Canadian or Russian laws applicable in the Arctic.[591]

iv. Denmark / Greenland

a. Rules for navigation and the protection and preservation of the marine environment

In Denmark, maritime safety is regulated through the Safety at Sea Act (Danish SSA).[592] The Danish SSA applies to the Greenlandic waters through a separate and specially adapted regulation, the Greenlandic SSA.[593]

The Greenlandic SSA applies to Danish ships, including those registered in Greenland[594] and to foreign-flagged vessels navigating in the 3 nm territorial sea and the internal waters of Greenland.[595] The Greenland SSA establishes standards regarding the construction, design, equipment, and manning of vessels navigating the waters of Greenland. Every ship shall be constructed, equipped and operated in such a way as to adequately protect human life at sea and in such a way that it is fit for the nature of the service for which it is intended at any time. As much regard as possible shall be paid to pollution protection.[596]

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[589] *Supra n. 319* Williams, p. 403.
[590] *Ibid.*
[591] *Supra n. 22* Hartman p. 289.
[592] Consolidated Act No 72 of 17 January 2014 on Safety at Sea (Danish SSA) [English translation], accessed 6 December 2018 at <http://www.dma.dk/Vaekst/Rammevilkaar/Legislation/Acts/Consolidated%20act%20on%20safety%20at%20sea.pdf>.
[593] Consolidated Decree No 1674 of 18 December 2015 on the entry into force for Greenland of the Act on Safety at Sea, (Greenlandic SSA) [English Translation], accessed 6 December 2018 at <https://www.dma.dk/Vaekst/Rammevilkaar/Legislation/Acts/Consolidated%20decree%20on%20the%20entry%20into%20force%20for%20Greenland%20of%20the%20act%20on%20safety%20at%20sea.pdf.>.
[594] Greenland SSA Part 1, Section 1.
[595] *Ibid.* Part 1, Section 1, subsection 3.
[596] *Ibid.* Part 2, Section 2.

The coastal State may apply construction, design, equipment, and manning rules and standards for foreign-flagged vessels that exercise their right to innocent passage only when these rules and standards give "effect to generally accepted international rules or standards".[597] As a result the stricter requirements of the Greenlandic SSA are not applicable to vessels exercising the right of innocent passage in the territorial sea of Greenland or their freedom of navigation rights in the Greenlandic EEZ. On the other hand, vessels that do not exercise these rights by navigating to or from the Greenlandic internal waters and ports are subject to these stricter requirements. In these instances, Denmark is not violating its obligations under SOLAS and the STCW Convention by applying stricter requirements than the safety measures set out in of the Polar Code, as neither SOLAS nor the STCW Convention prejudice the rights and obligations of States under international law.[598]

The Greenlandic SSA is supplemented by a number of Orders and Regulations establishing more elaborate rules regarding navigation in the waters of Greenland. In 2003, Denmark introduced a mandatory vessel reporting system applicable to the Arctic waters around Greenland, including the continental shelf and EEZ of the island, in accordance with SOLAS.[599] The Order No. 170 states that for the safety of navigation in the waters off Greenland, two ship reporting systems have been established with the purpose of monitoring ships' navigation in these waters and, if necessary, to cause search and rescue operations to be launched.[600] The first system, called GREENPOS, concerns ships engaged on voyages to and from Greenland internal waters and ports,[601] and the second one, called KYSTKONTROL (coastal control) concerns ships engaged in coastal trade between Greenland ports and places of call.[602] Under GREENPOS the vessels are required to give notification daily four times of their intended route, destinations, weather conditions and vessel information including position and velocity to the Greenlandic Command Centre.[603] Neither the Danish Government nor the Greenland Self-Government have adopted regulations regarding reporting and monitoring of non-commercial foreign-flagged vessels.[604]

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597 LOSC Art. 24 par, 1
598 SOLAS, Chapter XIV, Reg. 2 par. 5; STCW, Article V (4).
599 Order No. 170 of 17 March 2003 issued by the Danish Maritime Authority "Order on ship reporting systems in the waters off Greenland" (Order No. 170) [English translation], accessed 6 December 2018 at <https://www.dma.dk/Vaekst/Rammevilkaar/Legislation/Orders/Order%20on%20ship%20reporting%20systems%20in%20waters%20off%20Greenland%20(reporting%20service%20in%20Greenland).pdf.>.
600 *Ibid.* Section 1
601 *Ibid*. Section 1, subsection 2.
602 *Ibid.*
603 *Ibid.* Annex 1.
604 *Supra n. 570* Brubaker, p. 91.

Furthermore, in 2015 the Danish Maritime Authority has issued a new mandatory Order for Greenland on the safe navigation of ships and other matters.[605] The Order No. 1697 applies to different types of ships navigating the territorial waters of Greenland, taken into account the provisions on innocent passage of the LOSC.[606]

The intention behind some of the stricter requirements is to have a higher level of maritime safety for passenger vessels than provided for in the Polar Code.[607] For example, the Polar Code states that vessels are required to have an ice class corresponding to the forecasted ice conditions.[608] Under the Danish regulation, a passenger vessel with more than 250 passengers navigating in the northern navigation zone would be required to have a minimum ice class regardless of the presence of ice.[609] Nevertheless, it must be noted that the requirements under the Danish regulation regarding construction, design, equipment and manning that are stricter than the Polar Code are not applicable to foreign-flagged vessels exercising the right to innocent passage.[610]

On the other hand, the Order No. 1697 includes provisions regarding the navigation of vessels in the Greenlandic waters that are applicable to foreign-flagged vessels. For instance vessels are not permitted to sail in areas containing numerous rocks as indicated by the charts and may only navigate through areas indicated as foul or unsurveyed if the vessel is *inter alia* following recognised routes.[611] Passenger vessels with more than 250 passengers on a voyage in the Greenlandic waters are required to use a certified pilot while in the relevant waters,[612] while passenger vessels with less than 250 passengers and cargo vessels operating in the internal waters or in non-innocent passage through the territorial sea are required to have a person on-board with local knowledge of the waters.[613]

The aforementioned rules are compatible with International Law of the Sea. As was mentioned in Chapter 4, the coastal State is competent to regulate vessels in innocent passage

[605] Order No. 1697 of 11 December 2015 issued by the Danish Maritime Authority, “Order for Greenland on the safe navigation, etc. of ships” (Order No. 1697) [English translation], accessed 6 December 2018 at <https://www.dma.dk/Vaekst/Rammevilkaar/Legislation/Orders/Order%20for%20Greenland%20on%20the%20safe%20navigation,%20etc%20of%20ships.pdf>.
[606] *Ibid.* Section 1.
[607] *Supra n. 21* Henriksen, p. 279.
[608] Polar Code, Part I-A, par. 3.2.2.
[609] *Supra n. 605* Order No 1697, Part 4, Section 13.
[610] *Ibid.* Part 1, Section 1, subsection 4.
[611] *Ibid.* Part 3, Section 6.
[612] *Ibid.* Part 4, Section 11.
[613] *Ibid.* Part 3, Section 7.

for maritime safety and environmental protection purposes,[614] as long as the regulations do not have the practical effect of denying or hampering the right of innocent passage.[615] The requirements of the reporting of positions, banning or strictly regulating navigation through dangerous waters, and requiring pilotage and SAR plans can hardly qualify as the illegal hampering of innocent passage. These requirements may rather be seen as facilitating safe navigation within and through the territorial sea of Greenland.[616]

With respect to protection and preservation of the marine environment Denmark and Greenland implement the Marine Environmental Protection Act[617] that applies to the 200 nm EEZ of the island[618] and the Greenlandic Decree on Marine Environmental Protection[619] which applies in the Greenlandic territorial sea.[620] They are both applicable to foreign-flagged vessel by virtue of Articles 56 par. 1,b,(iii) and 58 par. 3 LOSC.[621]

b. *Enforcement*

The various Danish and Greenlandic laws regarding navigation provide for a different decree of enforcement jurisdiction in cases of violation. The Greenlandic SSA does not include provision for extensive enforcement jurisdiction in regards to foreign-flagged vessels operating within the EEZ of Greenland.[622] This is due to the nature of the sovereign rights that the coastal State enjoys in the EEZ.[623]

On the other hand, the Order No. 1697 on safe navigation provides for the use of enforcement measures only in cases of violations of its rules and standards by foreign vessels navigating through the internal waters of Greenland or not exercising the right of innocent passage in its territorial sea.[624] Moreover provisions regarding navigational and construction, design, equipment and manning rules and standards apply to foreign-flagged vessels exercising

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[614] LOSC, Article 21, par. 1 (a), (f).
[615] LOSC, Article 24, par. 1.
[616] *Supra n. 21* Henriksen, p. 283.
[617] Bekendtgørelse af Low nr. 963 af 3. juli 2013 om beskyttelse af havmiljøet (Consolidated Act No 963 of 3 July 2013 on the Protection of the Marine Environment) [available only in Danish] accessed 6 December 2018 at <https://www.retsinformation.dk/Forms/r0710.aspx?id=145889#not1>.
[618] *Supra n. 21* Henrisken p. 276.
[619] Landtingsforordning nr. 4 af 3 november 1994 om beskyttelse af havmiljoet (Greenland Decree on Marine Environmental Protection of 3 November 1994) [available only in Danish] accessed 6 December 2018 at <http://lovgivning.gl/lov?rid=%7b7FF13361-5A48-4D05-95B1-D998C96D73BF%7d>.
[620] *Supra n. 21* Henriksen p. 276.
[621] *Ibid.* p. 285.
[622] *Ibid.* p. 287.
[623] *Ibid.*
[624] *Supra n. 605* Order No. 1697, Part 1, Sec. 1, Subsection 4.

their right to innocent passage, such as the provisions of Part 3 regarding safety requirements. One example is the violation of the ban of navigating within areas marked as "talrige skær/numerous rocks", which is applicable both to vessels in innocent passage and to other foreign-flagged vessels on voyages within the Greenlandic territorial sea.[625]

According to the Order No. 1697, in case of contraventions of sections 4-16 (these are the safety requirements and the special requirements for ships carrying more than 250 passengers) measures may be laid down in accordance with the criminal code (*kriminalloven)* for Greenland.[626] When determining such measures, it shall be regarded as aggravating circumstances if: (i) the contravention has caused damage to life or health or risk of such damage; (ii) an injunction or order has previously been issued in connection with the same or equivalent situations; or (iii) the contravention has produced or has been intended to produce financial benefits to the contravener or others.[627]

The enforcement of these rules and standards may take place when vessels call at ports in Greenland or in the internal waters of the island, where the coastal State enjoys full sovereignty.[628]

However the Greenlandic MEPA and the Decree on Marine Environment Protection provide for the exercise of more extensive enforcement jurisdiction in the maritime zones beyond the internal waters and ports of Greenland.[629] These enforcement measures are consistent with Part XII of the LOSC and the jurisdiction of the coastal State in regards to environmental protection.[630]

c. *Implementation of the Polar Code and views on Article 234*

The construction, design, equipment and manning requirements for ships navigating the Danish and Greenlandic maritime zones are dependent on their use and area of operations. Some of the requirements provided for in the relevant legislation are identical with those of Part I-A of the Polar Code while other requirements are stricter.[631] Denmark has made the Polar Code directly applicable to Danish and Greenlandic waters.[632]

[625] *Ibid.* Part 3, Sec. 6.
[626] *Ibid.* Part 5, Sec. 17.
[627] *Ibid.* Part 5, Sec. 17, subsection 2.
[628] *Supra n. 21* Henriksen p. 288.
[629] *Ibid.*
[630] *Ibid.*
[631] *Ibid.* p. 280.
[632] Order No. 1188 of 7 November 2017 issued by the Danish Maritime Authority "Order amending the order on Notice B from the Danish Maritime Authority, the construction and equipment, etc. of ships" [English translation], accessed 6 December 2018 at

Denmark was one of the few States that made a statement regarding the importance of Article 234 during the Montego Bay negotiations of UNCLOS III.[633] Nevertheless, none of the aforementioned Danish regulations and law expressly rely on Article 234 of the LOSC. They do not even refer to "ice-covered area" but delimit their application to each Greenlandic maritime zone. However it is worth noting that according to the Danish public Arctic Strategy

> "The Kingdom will consider implementing non-discriminatory regional safety and environmental rules for navigation in the Arctic in consultation with the other Arctic states and taking into account international law, including the Convention on the Law of the Sea provisions regarding navigation in ice covered waters".[634]

As Hartmann observes, this statement refers to Article 234 LOSC.[635] It is understood that Denmark has reserved its right to rely on Article 234 at a later stage, although there is no need for this type of notice according to the wording of the Article.[636]

d. Norway

a. Rules for navigation and the protection and preservation of the marine environment

Norway has issued three acts regulating shipping in the waters under its jurisdiction. The 2007 Ship Safety and Security Act (SSSA)[637] provides for rules and standards regarding maritime safety and pollution prevention. The Harbours and Fairways Act of 2009[638] and the Act relating to Pilot Services of 2014[639] concern the regulation of navigation within the maritime zones of Norway.[640]

<https://www.dma.dk/Vaekst/Rammevilkaar/Legislation/Orders/Order%20amending%20Notice%20B%20from%20the%20DMA.pdf>.

633 Kraska J., "Governance of Ice-Covered Areas: Rule Construction in the Arctic Ocean", 45 *Ocean Development and International Law* 260 (2014), p. 267.

634 Kingdom of Denmark Strategy for the Arctic 2011–2020, accessed 6 December 2018 at <https://www.arctic-council.org/index.php/en/our-work2/8-news-and-events/60-denmarks-arctic-strategy>, p. 18.

635 *Supra n. 22* Hartman, p. 287.

636 *Ibid.*

637 Act No 9 of 16 February 2007 relating to Ship Safety and Security (SSSA) [English translation], accessed 6 December 2018 at <https://www.sdir.no/en/shipping/legislation/laws/ship-safety-and-security-act/>.

638 Lov om havner og farvann (havne- og farvannsloven) (Harbours and Fairways Act of 2009) [available only in Norwegian] accessed 6 December 2018 at <https://lovdata.no/dokument/NL/lov/2009-04-17-19?q=havnelov>.

639 Act No 61 of 15 August 2014 relating to Pilot Services [English translation], accessed 6 December 2018 at <http://www.kystverket.no/globalassets/los/regelverk-engelsk/pilotage-act.pdf>.

640 *Supra n. 21* Henriksen p. 262.

The three acts are applicable to all Norwegian vessels and to foreign-flagged vessels navigating the internal waters, the territorial sea and the EEZ of mainland Norway and the internal waters and territorial sea of Svalbard and Jan Mayen.[641] The SSSA is applicable to Norwegian-flagged vessels irrespective of where they operate, by virtue of the flag state jurisdiction of the respective LOSC provisions.[642]

The Norwegian SSSA provides for requirements regarding the construction, design, equipment and manning of vessels navigating the waters under Norway's jurisdiction,[643] in accordance with SOLAS, MARPOL 73/78 and the STCW Convention.[644] Moreover it introduces a general ban on discharges or dumping from vessels or incineration or other activities related to the operation of the vessel.[645]

The Harbour and Fairways Act of 2009 provides an additional legal basis for the Norwegian Coastal Administration to regulate national and international maritime traffic in the territorial waters and EEZ of mainland Norway and in the territorial waters of the Svalbard Archipelago.[646] Relevant measures include ships' routeing, restrictions on the use of certain fairways and notification requirements for vessels on their route to or from these maritime zones.[647] A reservation is included in Section 3, which states that the act is applicable within the limits of general international law and treaties to which Norway is a party.[648] Consequently, the Norwegian authorities may not adopt regulations that would hamper innocent passage in the territorial sea or establish a routeing measure in the EEZ without applying the procedures under the relevant conventions, such as SOLAS and COLREGs.[649]

Norway has submitted several proposals for such measures to the IMO following concerns over risks of accidents and marine pollution due to the increased traffic along the coastline of Norway to and from Russia.[650] The MSC has approved a number of mandatory traffic separation schemes as well as recommended routes, which together regulate navigation in the EEZ of mainland Norway.[651] One of these traffic separation schemes is located off the

[641] *Ibid.*
[642] SSSA, Chapter 1, Sec. 3.
[643] *Ibid.* Chapters 3-6.
[644] *Supra n. 21* Henriksen pp. 264-265
[645] SSSA, Chapter 5, Sec. 31.
[646] *Supra n. 21* Henriksen p. 266.
[647] *Ibid.*
[648] *Ibid.*
[649] *Ibid.*
[650] *Ibid.*
[651] *Ibid.*

coast between Vardø and Røst in the northernmost part of Norway.[652] This traffic separation scheme is supplemented by the mandatory Ship Reporting System in the Barents Area that is applicable to the EEZ and territorial seas of Norway and Russia.[653] It provides Norwegian and Russian authorities with improved means of control over and surveillance of maritime transport in the Barents Sea.

Furthermore, Norway implements an elaborate legislation specifically concerning the protection and preservation of the marine environment. [654] The most important of these documents, the Regulations on Environmental Safety for Ships and Mobile Offshore Units are applicable to foreign-flagged vessels operating in waters within the territorial sea and EEZ of mainland Norway and the territorial sea of Svalbard and Jan Mayen.[655] It is also applicable to foreign-flagged vessels voluntarily in Norwegian ports in respect of discharges in waters outside the maritime zones of Norway.[656]

Another measure Norway has adopted to protect and preserve the marine environment is the establishment of marine protected areas (MPAs).[657] Within MPAs, navigation and other human activities, such as fishing, marine scientific research and oil exploitation, are significantly restricted.[658] These MPA's are established within the territorial waters off mainland Norway[659] and Svalbard.[660]

Under the relevant regulations, a ban on carrying and the use of heavy fuel was introduced for vessels operating in the MPAs.[661] Furthermore, an amendment to the regulation regarding Svalbard provides for a ban on vessels carrying and using heavy fuel oil while within the 12 nm territorial waters, including areas outside the MPAs.[662] This ban may be inconsistent

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652 COLREG.2/Circ.58 of 11 December 2006 on New and Amended Existing Traffic Separation Schemes (Vardø- Røst).
653 IMO Doc. MSC 348(91), "Adoption of a New Mandatory Ship Reporting System in the Barents Area".
654 Regulations No. 488 of 30 May 2012 on Environmental Safety for Ships and Mobile Offshore Units [English translation], accessed 6 December 2018 at <https://www.sdir.no/en/shipping/legislation/regulations/environmental-safety-for-ships-and-mobile-offshore-units1/>.
655 *Idid.* Sec. 1.
656 *Ibid.*
657 *Supra n. 21* Henriksen p. 270.
658 For the legal regime applicable in MPAs see Jacobsen I. *Marine Protected Areas in International Law*, Brill Nijhoff (2016), pp. 247-369.
659 Act No. 100 of 19 June 2009 Relating to the Management of Biological, Geological and Landscape Diversity (Nature Diversity Act) [English translation], accessed 6 December 2018 at <https://www.regjeringen.no/en/dokumenter/nature-diversity-act/id570549/>.
660 Act No.79 of 15 June 2001 Relating to the Protection of the Environment in Svalbard [English translation], accessed 6 December 2018 at <https://www.regjeringen.no/en/dokumenter/svalbard-environmental-protection-act/id173945/>.
661 *Supra n. 21* Henriksen p. 271.
662 *Supra n. 660* Act No. 79, Sec. 82 (a).

with the right of innocent passage under the law of the sea, [663] especially since Norway does not refer to Article 234, which could provide an adequate legal basis. Nevertheless, to date, no State has contested this legislation.

Finally, it must be noted that even if Norway is not a member-state of the EU, it is a member of the European Economic Area (EEA), along with Iceland and Liechtenstein.[664] The EU legislation that refers to maritime transport is part of the EEA Agreement.[665] Norway has implemented a large number of EU directives and regulations referring to maritime transport and navigation.[666] These include directives on port State control, flag State compliance, vessel traffic monitoring, and information and ship-source pollution.[667]

b. Enforcement

Norway enjoys limited jurisdiction under the law of the sea to enforce its legislation to foreign-flagged vessels exercising their navigational rights within its territorial sea and EEZ. Its legislation, in the same manner as the legislation of Denmark and Greenland, is not based on Article 234 LOSC and thus Norway cannot enjoy the broad enforcement jurisdiction provided for by it.

The Norwegian SSSA includes a provision that states that access to Norwegian territorial waters may be refused when a ship does not meet the requirements of international provisions, statutes or regulations.[668] The competent authority may issue regulations concerning implementation pursuant to the first paragraph, including provisions relating to refusal of access to Norwegian ports based on earlier detentions, circumstances in relation to the ship's flag state and other safety and security aspects.[669]

Norway enjoys an extensive enforcement jurisdiction in regards to enforcement of compliance with operational discharges. Under the environmental protection provisions of the

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[663] *Supra n. 21* Henriksen, p. 271.
[664] Agreement on the European Economic Area, adopted 2 May 1992, entered into force 1 January 1994 (EEA Agreement).
[665] *Ibid.* Annex XIII.
[666] *Supra n. 21* Henriksen, p. 261.
[667] For instance, Directive 2009/16/EC of the European Parliament and of the Council of 23 April 2009 on port State control; Directive 2009/21/EC of the European Parliament and of the Council of 23 April 2009 on compliance with flag State requirements; Directive 2002/59/EC of the European Parliament and of the Council of 27 June 2002 Establishing a Community Vessel Traffic Monitoring and Information System and Repealing Council Directive 93/75/EEC; Directive 2005/35/EC of the European Parliament and of the Council of 7 September 2005 on Ship-Source Pollution and on the Introduction of Penalties for Infringements.
[668] SSSA, Chapter 8, Sec. 54
[669] *Ibid.*

SSSA, a foreign-flagged vessel may be stopped, boarded and inspected while navigating through the 12 nm territorial sea of mainland Norway, Jan Mayen and Svalbard, or the mainland EEZ, if there are reasonable grounds for suspecting that it has violated international rules on vessel-source pollution.[670]

However Norway has no enforcement jurisdiction in regards to navigation in the exclusive fisheries zones of Svalbard and Jan Mayen. That is why, under the SSSA, Norway may take extensive enforcement measures in its ports. The SSSA states that:

> "The supervisory authorities may prohibit a ship from departing from a port or order it to call at a port or stipulate other necessary measures in relation to the ship, if necessary by force, within the limits following from international law, provided that:
> a) the ship does not comply with requirements in a statute or regulations regarding technical, operational or environmental safety or regarding working environment and personal safety, and the deficiencies clearly constitute a danger to the interests the requirements in question are set to protect; b) serious breaches of provisions of the Ship Labour Act or of regulations issued pursuant to the Act exist; c) the ship does not carry the necessary certificates; d) the company or anyone in its service prevents the supervisory authorities from boarding the ship to perform supervision which has not been complied with pursuant to section 45."[671]

Under this enforcement scheme, Norway is able to regulate navigation in the waters under its jurisdiction without violate the relevant international rules.

c. *Implementation of the Polar Code and views on Article 234*

In regards to the Polar Code, the Norwegian Maritime Authority has adopted a regulation on the implementation of Part I-A of the Polar Code and of Chapter XIV of SOLAS 74.[672] This regulation applies to Norwegian-flagged vessels certified under SOLAS,[673] and is identical to the relevant Polar Code provisions.

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[670] *Ibid.* Chapter 8, Sec. 53
[671] *Ibid.* Chapter 8, Sec. 52.
[672] Regulations No. 1363 of 23 November 2016 on Safety measures for Ships operating in Polar Waters [English translation], accessed 6 December 2018 at <https://www.sdir.no/en/shipping/legislation/regulations/safety-measures-for-ships-operating-in-polar-waters/>.
[673] *Ibid* Sec. 1.

The Part II-A of the Polar Code and the relevant amendments of MARPOL 73/78 Annexes are implemented in Norwegian law through an amendment to the pre-existing Regulations on environmental safety for ships and mobile offshore units.[674]

There is no official Norwegian position concerning the interpretation of Article 234. Norway, in the same manner as Denmark, has not adopted any legislation referring specifically to "ice-covered areas" in its maritime zones. This can partly be explained by the fact that large parts of Norway's Arctic waters are not ice-covered for most of the year.[675] This position has been expressed by an expert group on Arctic shipping established by the Norwegian Ministry of Foreign Affairs which noted that Norway is not entitled to apply Article 234 since the 200 nm EEZ off mainland Norway is not ice-covered. [676]

A question rises on whether Norway can implement Article 234 in the waters of the Jan Mayen and the Svalbard Archipelago. One can assume that Norway cannot adopt and implement legislation under Article 234 in the maritime zones off Svalbard Archipelago and Jan Mayen since no EEZ is declared there.[677] On the other hand, if Article 234 could apply to the territorial sea, as the practice of Canada and Russia indicate, would Norway be able to implement it only in these 12 nm territorial seas?[678] Since the wording of Article 234 clearly states that the relevant measures are to be taken in respect to the EEZ, the answer is probably no. Moreover, Norway does not seem willing to adopt a broad interpretation of Article 234 that would render its legislation incompatible with the international law regime and could possibly contravene with the provisions of the Svalbard Treaty.

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[674] *Supra n. 654* Regulations No. 488 Sec. 19.
[675] *Supra n. 22* Hartman p. 287.
[676] White Paper No 7 (2011–2012) on the High North, 60, accessed 6 December 2018 at < https://www.regjeringen.no/en/dokumenter/meld.-st.-7-20112012/id663433/>.
[677] *Supra n. 21* Henriksen, p. 253.
[678] Molenaar E., "Options for regional regulation of Merchant Shipping outside IMO, with particular reference to the Arctic Region", 45 *Ocean Development and International Law* 272 (2014), p. 277 where the author mentions that Norway could implement such legislation "in relation to Svalbard, but subject to the Spitsbergen Treaty" without entering the discussion on the interpretation of Article 234.

D. The interplay between the Law of the Sea framework and the Arctic Ocean Regime

The above analysis of the Arctic Ocean navigation regime gives rise to the important question which this master thesis tries to answer: it this legal framework adequate to regulate in a satisfactory manner the increasing navigation of the Arctic Ocean?

Taking into account that the Arctic Five have undeniably accepted LOSC as the treaty which should govern the Arctic Ocean,[679] Article 234 LOSC assumes the position of the cornerstone of this legal framework. In the relevant Chapter an interpretation of Article 234 was provided based on its text, in light of the object and purpose of LOSC[680] and its *travaux préparatoires*.[681]

After the meticulous examination of the relevant IMO conventions and the Arctic coastal State's practice, one is able to arrive to further conclusions regarding the interpretation and implementation of Article 234. Doing so will shed more light in the question of adequacy of the applicable legal framework.

Article 31, par. 3 (b) lists "any subsequent practice in the application of the treaty which establishes the agreement of the parties regarding its interpretation" as to be taken into account together with the context of the treaty.[682]

The ICJ stated in the *Kasikili / Sedudu Island Case* (1999) that the subsequent practice of the parties to a treaty constitutes an element to be taken into account when determining its meaning.[683]

In order to become relevant under Article 31 par. 3 (b) VCLT, State conduct has to constitute a sequence of acts, since "practice" cannot be established by one isolated incident.[684] Which elements of practice (legislation, enforcement acts, official statements, diplomatic correspondence etc.) are to be taken into account under this provision varies according to the treaty concerned.[685] In principle, any action, or even inaction, of parties with a view to implementing the treaty can be considered.[686]

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[679] *Supra n. 95* Ilulissat Declaration.
[680] VCLT, Article 31 par. 1.
[681] VCLT, Article 32.
[682] VCLT, Article 31, par. 3 (b).
[683] *Kasikili / Sedudu Island* (Botswana v. Namibia), Judgment, ICJ Rep. 1999, p. 1045, par. 49.
[684] Dörr O. and Schmalenbach K. (eds.) *Vienna Convention on the Law of Treaties: A Commentary*, Springer (2012), p. 556.
[685] Villiger M., *Commentary on the 1969 Vienna Convention on the Law of Treaties*, Martinus Nijhoff (2009), p. 431.
[686] *Supra n. 684* Dörr and Schmalenbach, p. 555.

The most important part of this provision is the term “agreement”. This term in essence seems to mean acceptance, even tacit, and is at the very minimum evidenced by the absence of any disagreement.[687] If not every party to a treaty has participated in the practice, there must be at least good evidence that the inactive parties have endorsed it.[688] On the contrary, state practice that in fact amounts to a “disagreement” cannot be used for the punctual interpretation of a treaty provision and it could actually amount to an indication of the existence of a dispute between the parties.[689]

The Arctic littoral States’ approach to Article 234 can be summarised thusly: two States, Russia and Canada support a *de maximis* interpretation of it, US supports –even if it is not a party of the LOSC- an interpretation that gives greater relevance on freedom of navigation, while Denmark and Norway remain largely silent on the matter, but have at least considered to adopt legislation based on it. As a result one can assume that there is not an agreement on the correct interpretation of Article 234.

The Arctic Council’s AMSA is not of particular help either. It refers to Article 234 and the fact that Canada and Russia base their national legislation on it.[690] However it does not provide any indication as to the actual interpretation of it. The drafters of AMSA decided to just refer to the fact that “Article 234 raises various questions of interpretation”.[691] Surely, this is a well-crafted reference, since the drafters of AMSA would not be willing to enter this debate.

Beyond Article 31 par. 3 (b) VCLT, lit (c) of the same provision, is of great relevance. Article 31, par. 3 (c) VCLT states that when interpreting a treaty, any relevant rules of international law applicable in the relations between the parties should be taken into account, together with the context of the treaty.[692] This is a well-established rule, to which international courts and tribunals often refer.[693]

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[687] *Ibid.* p. 560. See also *Kasikili / Sedudu Island,* par. 63.
[688] *Ibid.* Dörr and Schmalenbach, p. 559.
[689] A dispute is defined as “[…] a disagreement on a point of law or fact, a conflict of legal views or of interests between two persons”, *The Mavromatis Palestine Concession* (Greece v. UK), Judgment, PCIJ Rep. Series A No.2 (1924), p. 11; See also the Statute of the International Court of Justice, (26 June 1945), 33 *UNTS* 993, Article 36 par. 2 which provides that “The states parties to the present Statute may at any time declare that they recognize as compulsory ipso facto and without special agreement, in relation to any other state accepting the same obligation, the jurisdiction of the Court in all legal disputes concerning (a) the interpretation of a treaty […].
[690] AMSA, pp. 4, 53-54, 66-69.
[691] *Ibid.* p. 53.
[692] VCLT, Article 31, par. 3 (c).
[693] For example *Legal Consequences for States of the Continued Presence of South Africa in Namibia (South West Africa) notwithstanding Security Council Resolution 276* (Namibia Advisory Opinion), Advisory Opinion, ICJ Rep. 1971, p. 16.

The Arctic SAR Agreement, in the spirit of the Arctic Council, does not contain a reference to Article 234. Article 16 of the Arctic SAR Agreement states that "[…] the provisions of this Agreement shall not affect the rights and obligations of Parties under agreements between them which are in force on the date of the entry into force of this Agreement."

On the other hand, the Polar Code, as an integral part of SOLAS and MARPOL 73/78 is the prime example of a relevant rule of international law in regards to the interpretation of Article 234.

As was noted before, Article 234 does not contain a reference to "general adopted international rules and standards" or a similar reference to the IMO.[694] Moreover both SOLAS and MARPOL 73/78 specify that their provisions are without prejudice to the rights or obligations of States under international law[695] or without prejudice to the present or future claims and legal views of any State concerning the law of the sea and the nature of coastal and flag state jurisdiction.[696] As a result the Polar Code is to be regarded as applying simultaneously with Article 234, but as a relevant, mandatory, rule of international law, it can be used to delimit the application of this provision and provide for a more lawful application of requirements, such as construction, design, equipment and manning. States are still competent to adopt and enforce measures under Article 234 but these measures cannot extend the requirements provided for in the Polar Code. Where the Polar Code remains silent, it is safe to assume that the measures of the coastal States are subject only to the restrictions of Article 234, i.e. to be based on the best available scientific data, to not hamper the navigational rights of other States and to not be discriminatory.

As a result, it is evident that it is not the legal regime that is inadequate. It is a matter of implementation of the relevant provisions, which were carefully drafted to address navigation in the Arctic Ocean. It is safe to suggest that the States that have a comprehensive domestic legal regime for navigation in the zones under their jurisdiction, would not easily agree to a new regime. A new treaty would more likely include a "no prejudice" provision, which in the same manner as the relevant SOLAS and MARPOL 73/78 provisions, would not "cancel" the effect of Article 234. In the same manner, the Arctic Council avoids referring to States' disputes in order to produce work that actually and successfully addresses the issues arising in the Arctic. In order for the Arctic Five to address the many issues of the Arctic Ocean

[694] *Supra n. 222* Gavouneli p. 71.
[695] SOLAS, Chapter XIV, Reg. 2.
[696] MARPOL 73/78, Article 9.

navigation they have to work, and indeed they are willing to work, in the confines of the existing regime. Navigation in the Arctic Ocean should not be a cause of instability since there is a stable, rules-based system of governance under the existing regime.

V. Conclusion

One should not conclude that the Arctic region is an area of conflict and disputes. In contrast, the Arctic Ocean is an area of increasing international cooperation, even if States do have many differences. Although the Arctic Ocean was on the frontlines of the Cold War, the region has transformed into a zone of inter-state cooperation which also includes cooperation on security issues.[697] Today, apart from the severe impacts of Global Warming in the Arctic, the Arctic States have to address issues of the indigenous peoples, mining, oil and energy production and matters of security.

In this spirit, many have suggested the creation of an "Arctic Treaty", a new regime that would address all the Arctic related issues. Most notably, Pharand suggested the creation of an Arctic Region Council which would be created under the auspices of an Arctic Treaty, largely modelled after the Antarctic Treaty.[698] This idea was manifested through the creation of the Arctic Council, even if an actual "Arctic Treaty" was never adopted. The so-called "Arctic Law" is nothing but an implementation of the relevant international law rules applicable in the Arctic region, including regional and sub-regional agreements, as in other parts of the world.[699]

Of course, navigation in the Arctic Ocean is but a fraction of the many challenges present in the Arctic region in general. These challenges are going to increase over time, as the temperatures rise, the ice melts and more ships choose to use the Arctic Ocean. It is submitted that the relevant international law provisions are, in general, adequate to address these challenges, even though a more concrete and legal implementation by the Arctic Five should be sought.

The regime of international navigation in the Arctic Ocean follows in the steps of the cooperative initiatives taking place in the Arctic region in general. Acknowledging that international law is in fact adequate to address the problems facing the Arctic Ocean, navigation is regulated under these auspices. The Polar Code is an important step towards the harmonization of the domestic laws and regulations of the Arctic Five, but it surely is not the last.

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[697] *Supra n. 12* Byers, p. 279.
[698] Pharand D., "The Case for an Arctic Region Council and a Treaty Proposal" 23 *Revue générale de droit* 163 (1992).
[699] See Canuel E., "The Four Arctic Law Pillars: A Legal Framework" 46 *Georgetown Journal of International Law* 735 (2015).

The Polar Code does not address such issues as black carbon from ship emissions, heavy fuel use by ships in the Arctic, ballast water discharge, and the huge Arctic marine infrastructure gap.[700] Such issues and challenges have to be addressed in the near future before they lead to more catastrophic environmental consequences for the Arctic. The present regime is capable of addressing them as long as there is the will to do so.

The Arctic coastal States, along with IMO and the Arctic Council, have to adapt to the new Arctic that is forming as a result of the melting of sea ice and are called to strike a balance between their own interests, the interests of States wishing to use the Arctic Ocean as a navigational route and the protection and preservation of the marine environment. This is not an easy task. But it is a goal that should be achieved in the future and it could result in the closing of the chapter of Arctic conflicts once and for all.

[700] *Supra n. 92* Molenaar, p. 23.

VI. Annex – Maps

Figure 1: The Arctic Ocean and maximum extent of the Polar Code's Arctic waters application

Source: International Code for Ships Operating In Polar Waters, IMO Doc. MSC.385(94) - MEPC 68/21/Add.1, Annex 10.

Figure 2: High Seas pockets in the Arctic

Source: Molenaar E., “The Arctic, the Arctic Council and the Law of the Sea”, in Beckman R. et al. (eds.) *Governance of Arctic Shipping*, Brill Nijhoff (2017).

Figure 3: Canadian Arctic Baselines and main routes of the Northwest Passage

Source: Pharand D., “The Arctic Waters and the Northwest Passage: A Final Revisit”, 38 *Ocean Development and International Law* 3 (2007);

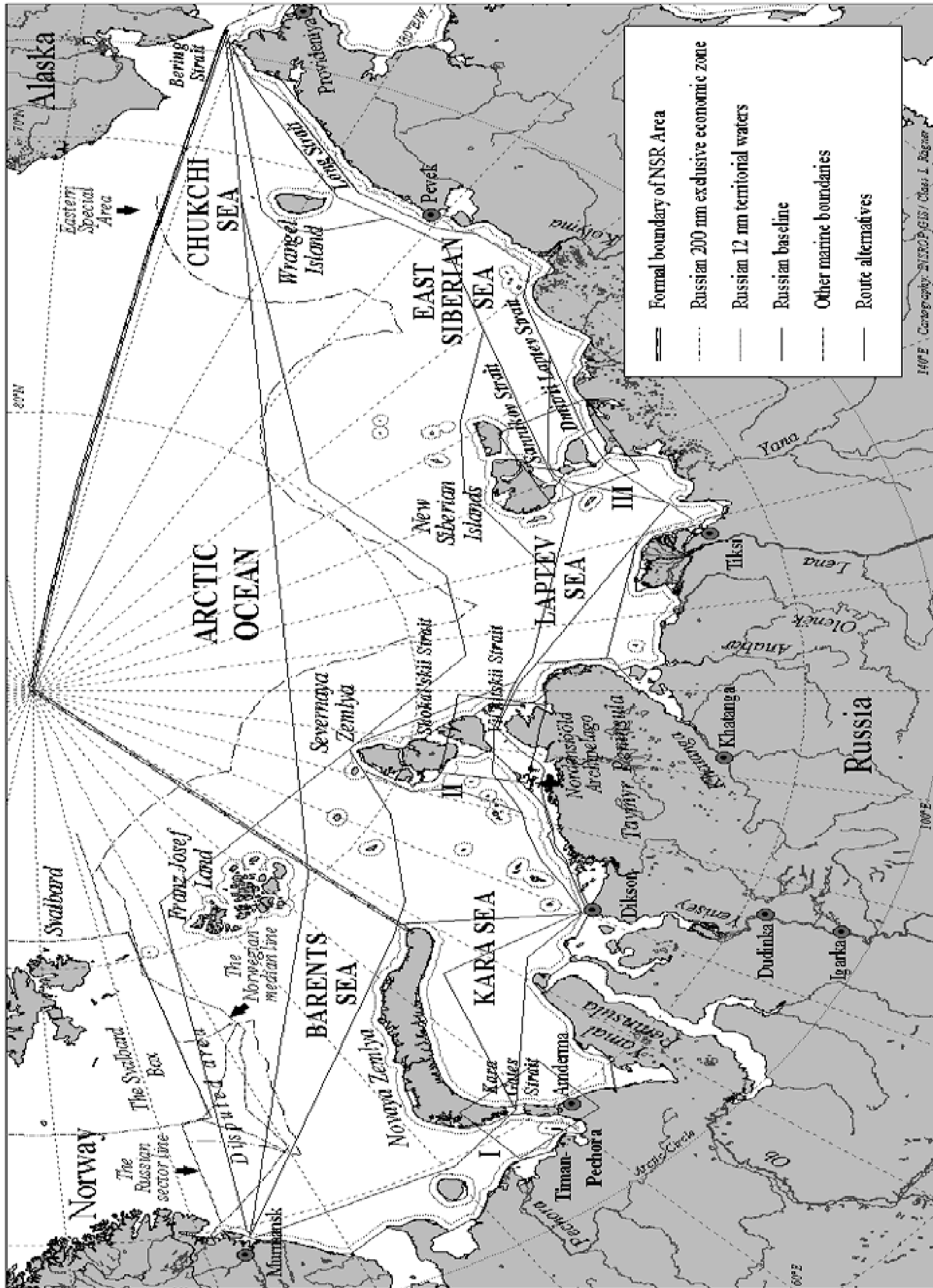

Figure 4: The Russian baselines, maritime zones and the Northern Sea Route

Source: Brubaker R., *The Russian Arctic Straits*, Martinus Nijhoff (2005).

Figure 5: Arctic Ocean Marine Routes, including the Northwest Passage and the Northern Sea Route

Source: Brigham L., “The Changing Maritime Arctic and New Marine Operations”, in Beckman R. et al. (eds.) *Governance of Arctic Shipping*, Brill Nijhoff (2017).

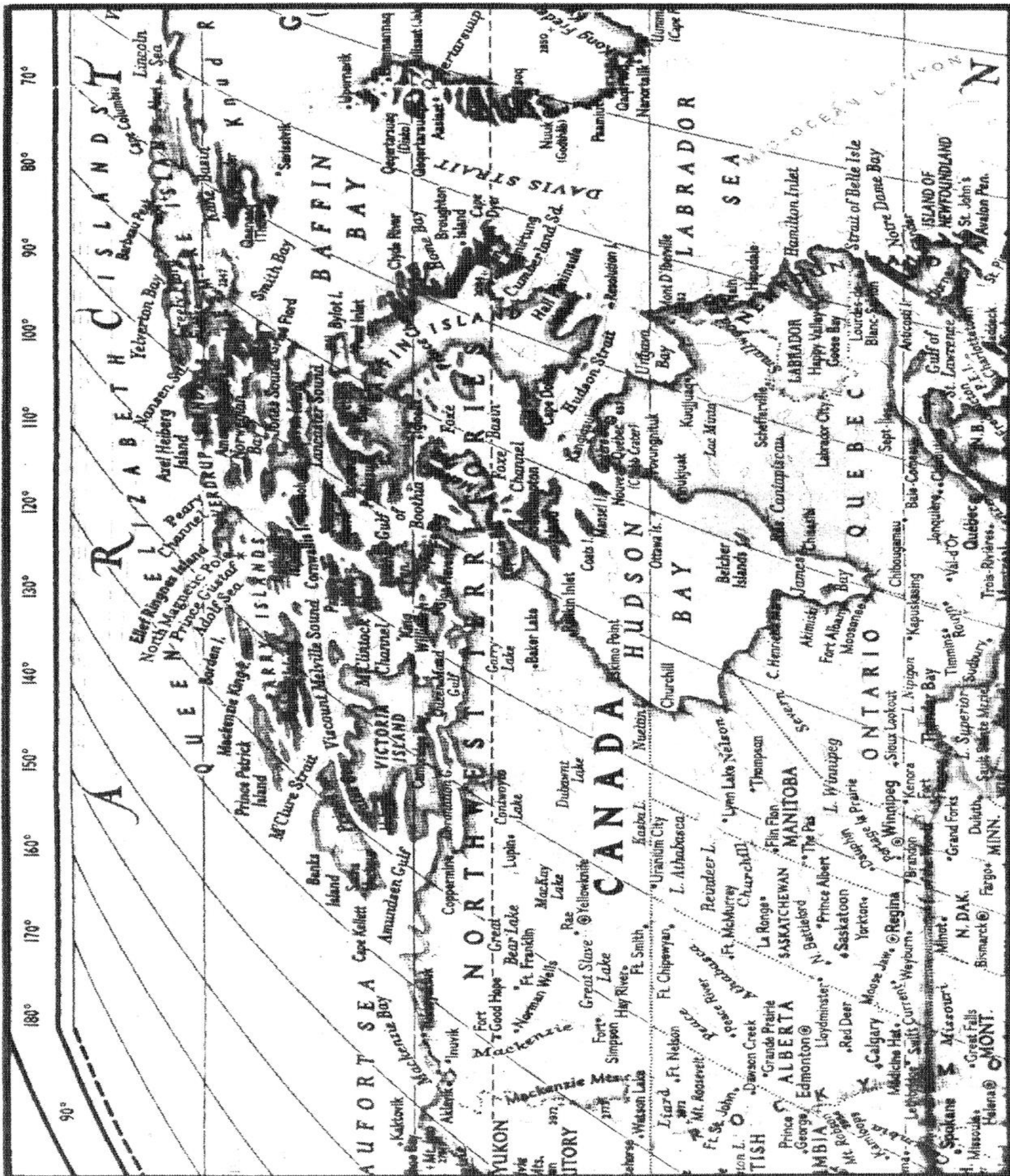

Figure 6: The Canadian High Arctic Archipelago, Robinson Projection

Source: Pharand D., “The Arctic Waters and the Northwest Passage: A Final Revisit”, 38 *Ocean Development and International Law* 3 (2007);

VII. Index of Authorities

International Conventions

Agreement between the Government of Canada and the Government of the United States of America on Arctic Cooperation, Canada Treaty Series 1988, No. 29;

Agreement between the United States of America and the Union of Soviet Socialist Republics on the Maritime Boundary (signed 1 June 1990) 29 *ILM* 941;

Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic [Arctic SAR Agreement] (signed 12 May 2011, entry into force 19 January 2013) 50 *ILM* 1119;

Agreement on the European Economic Area, (signed 2 May 1992, entered into force 1 January 1994);

Convention ceding Alaska between Russia and the United States, (signed 30 March 1867, entry into force 20 June 1867) reprinted in Parry C. (ed.) *Consolidated Treaty Series*, Vol. 134, Oceana Publications (1969), p. 331;

Convention on the Continental Shelf (signed 29 April 1958, entry into force 10 June 1964), 499 *UNTS* 311;

Convention on the International Maritime Organization (signed 6 March 1948, entry into force 17 March 1958), 289 *UNTS* 3 and 1520 *UNTS* 297;

Convention on the Territorial Sea and the Contiguous Zone [TSC] (signed 29 April 1958, entry into force 10 September 1964), 516 *UNTS* 205;

International Convention for the Prevention of Pollution from Ships as modified by the Protocol of 1978 [MARPOL 73/78] (signed 17 February 1978, entry into force 2 October 1983) 1340 *UNTS* 61 and 1341 *UNTS* 3;

International Convention on Maritime Search and Rescue [SAR] (signed 27 April 1979, entered into force 22 June 1985), 1405 *UNTS* 119.

International Convention for the Safety of Lives at Sea [SOLAS] (signed 1 November 1974, entry into force 25 May 1980), 1184 *UNTS* 278;

International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW) (signed 7 July 1978, entry into force 28 April 1984), 1361 *UNTS* 2;

Statute of the International Court of Justice, (26 June 1945), 33 *UNTS* 993;

Treaty amending, with regard to Greenland, the Treaties establishing the European Communities (signed 13 March 1984, entered into force 1 February 1985) *Official Journal of the European Communities* No L 29/1;

Treaty Concerning the Archipelago of Spitsbergen (adopted 9 February 1920, entered into force 14 August 1925) 2 *LNTS* 7;

United Nations Law of the Sea Convention [LOSC] (signed 10 December 1982, entry into force 16 November 1994), 1833 *UNTS* 3;

Vienna Convention on the Law of Treaties [VCLT] (signed 23 May 1969, entry into force 27 January 1980), 1155 *UNTS* 331

International Jurisprudence

PCIJ

Legal Status of Eastern Greenland (Denmark v. Norway), Judgment, PCIJ Rep. Series A/B No. 53 (1933);

The Mavromatis Palestine Concession (Greece v. UK), Judgment, PCIJ Rep. Series A No.2 (1924)

ICJ

Anglo-Norwegian Fisheries Case (UK v. Norway), Judgment, ICJ Rep. 1951, p. 116.

Case Concerning Military and Paramilitary Activities in and against Nicaragua (Nicaragua v. USA), Judgment, ICJ Rep. 1986, p. 14;

Corfu Channel Case (UK v. Albania), Judgment, ICJ Rep. 1949, p. 4;

Separate Opinion of Judge Alvarez in the *Corfu Channel Case* (UK v. Albania), Judgment, ICJ Rep. 1949, p. 39;

Dissenting Opinion of Judge Krylov in the *Corfu Channel Case* (UK v. Albania), Judgment, ICJ Rep. 1949, p. 68;

Dissenting Opinion of Judge Azevedo in the *Corfu Channel Case* (UK v. Albania), Judgment, ICJ Rep. 1949, p. 78;

Delimitation of the Maritime Boundary in the Gulf of Maine Area (Canada v. USA), Judgment, ICJ Rep. 1984, p. 246;

Kasikili / Sedudu Island (Botswana v. Namibia), Judgment, ICJ Rep. 1999, p. 1045;

Legal Consequences for States of the Continued Presence of South Africa in Namibia (South West Africa) notwithstanding Security Council Resolution 276 (Namibia Advisory Opinion), Advisory Opinion, ICJ Rep. 1971, p. 16.

Maritime Delimitation in the area between Greenland and Jan Mayen (Denmark v. Norway), Judgment, ICJ Rep. 1993, p. 38.

Permanent Court of Arbitration

PCA Case Nº 2013–19 in the matter of the *South China Sea Arbitration* (Republic of the Philippines v. People's Republic of China) Award of 12 July 2016 on the Merits;

PCA Case Nº 2014-02 in the matter of the *Arctic Sunrise Arbitration* (Kingdom of Netherlands v. Russian Federation) Award of 26 November 2014 on Jurisdiction;

PCA Case Nº 2014-02 in the matter of the *Arctic Sunrise Arbitration* (Kingdom of Netherlands v. Russian Federation) Award of 14 August 2015 on the Merits.

ITLOS

The "ARA Libertad" Case (Argentina v. Ghana), Provisional Measures, Order of 15 December 2012, ITLOS Rep. 2012, p. 332.

The "Arctic Sunrise" Case (Kingdom of Netherlands v. Russian Federation), Provisional Measures, ITLOS Rep. 2013, p. 230

The M/V "Louisa" Case (Saint Vincent and the Grenadines v. Spain), Judgment, ITLOS Rep. 2013, p. 4.

Arctic Council Documents

Arctic Marine Shipping Assessment of 2009 (AMSA), accessed 6 December 2018 at <www.arctic.noaa.gov/detect/documents/AMSA_2009_Report_2nd_print.pdf>;

Declaration on the Establishment of the Arctic Council, (19 September 1996), accessed 6 December 2018 at <https://oaarchive.arctic-council.org/bitstream/handle/11374/85/EDOCS-1752-v2-ACMMCA00_Ottawa_1996_Founding_Declaration.PDF?sequence=5&isAllowed=y>

European Union

British High Commission Note No. 90/86 of 9 July 1986, reprinted in Roach J. and Smith R., *Excessive Maritime Claims*, 3rd edition, Martinus Nijhoff (2012), p. 112;

Communication from the Commission - A new comprehensive partnership with Greenland in the form of a joint declaration and a Council Decision based on Article 187 of the EC Treaty /COM/2006/0142 final/, par. 2.2.;

Directive 2009/16/EC of the European Parliament and of the Council of 23 April 2009 on port State control;

Directive 2009/21/EC of the European Parliament and of the Council of 23 April 2009 on compliance with flag State requirements;

Directive 2002/59/EC of the European Parliament and of the Council of 27 June 2002 Establishing a Community Vessel Traffic Monitoring and Information System and Repealing Council Directive 93/75/EEC;

Directive 2005/35/EC of the European Parliament and of the Council of 7 September 2005 on Ship-Source Pollution and on the Introduction of Penalties for Infringements.

IMO Documents

COLREG.2/Circ.58 of 11 December 2006 on New and Amended Existing Traffic Separation Schemes (Vardø- Røst);

IMO Doc. LEG/MISC.8, 30 January 2014, "Implications of the United Nations Convention on the Law of the Sea on the International Maritime Organization";

IMO Doc. MSC 348(91), "Adoption of a New Mandatory Ship Reporting System in the Barents Area";

IMO Doc. MSC 385(94) - MEPC 68/21/Add.1, Annex 10, "International Code for Ships Operating In Polar Waters" [Polar Code];

IMO Doc. MSC 416(97) "Amendments to the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers 1978, as Amended";

IMO Doc. MSC 88/11/3, 5 October 2010, Canada;

IMO Doc. MSC 88/11/2, 22 September 2010, US;

IMO Doc. MSC/ Circ.1056 – MEPC/ Circ.399, "Guidelines for Ships Operating in Arctic Ice-Covered Waters".

IMO Doc. A26/Res.1024, 18 January 2010, "Guidelines for Ships Operating in Polar Waters";

IMO Status of IMO Treaties, 16 November 2018, accessed 6 December 2018 at <http://www.imo.org/en/About/Conventions/StatusOfConventions/Documents/Status%20-%202018.pdf>.

States' Documents

Canada

Arctic Shipping Pollution Prevention Regulations (ASPPR), C.R.C., c. 353, accessed 6 December 2018 at <https://laws-lois.justice.gc.ca/eng/regulations/C.R.C.,_c._353/page-1.html>;

Arctic Water Pollution Prevention Act (AWPPA), R.S.C. 1985, c. A-12, accessed 6 December 2018 at <https://laws-lois.justice.gc.ca/eng/acts/a-12/>;

Arctic Waters Pollution Prevention Regulations (AWPPR), C.R.C., c. 354, accessed 6 December 2018 at <https://laws-lois.justice.gc.ca/eng/regulations/C.R.C.,_c._354/>;

An Act to amend the Arctic Waters Pollution Prevention Act, S.C. 2009, c. 11, accessed 6 December 2018 at <https://laws-lois.justice.gc.ca/eng/annualstatutes/2009_11/FullText.html>;

Canada, Declaration made upon ratification (7 November 2003), UN DOALOS, accessed 6 December 2018, at <http://www.un.org/Depts/los/convention_agreements/convention_declarations.htm#Canada>;

Canada Shipping Act (CSA), S.C. 2001, c. 26, accessed 6 December 2018 at <https://laws-lois.justice.gc.ca/eng/acts/c-10.15/>;

Diplomatic Note from the Canadian Department of External Affairs to the US Embassy in Ottawa concerning the transit of the United States Coast Guard Cutter Polar Sea (31 July 1985), reprinted in *Kristina Schönfeldt* (ed.) *The Arctic in International Law and Policy*, Hart Publishing (2017), p. 1374.

Marine Liability Act, S.C. 2001, c. 6, accessed 6 December 2018 at <https://laws-lois.justice.gc.ca/eng/acts/M-0.7/>;

Navigation Protection Act, R.S.C. 1985, c. N-22, accessed 6 December 2018 at <https://laws-lois.justice.gc.ca/eng/acts/N-22/>;

Northern Canada Vessel Traffic Services Zone Regulations (NORDREG), SOR/2010-127, accessed 6 December 2018 at <https://laws-lois.justice.gc.ca/eng/regulations/SOR-2010-127/FullText.html>;

Shipping Safety Control Zones Order, C.R.C., c. 356, accessed 6 December 2018 at <https://laws-lois.justice.gc.ca/eng/regulations/C.R.C.,_c._356/>;

Statement No 85/49 in the House of Commons by the Canadian Secretary of State for External Affairs Joe Clark on Canadian Sovereignty (10 September 1985), reprinted in *Kristina Schönfeldt* (ed.) *The Arctic in International Law and Policy*, Hart Publishing (2017), p. 1378

Denmark and Greenland

Act No 200 of 7 April 1999 on the Delimitation of the Territorial Sea, accessed 6 December 2018 at <http://www.un.org/Depts/los/LEGISLATIONANDTREATIES/PDFFILES/DNK_1999_Act.pdf>;

Act No 473 of 12 June 2009 on Greenland Self-Government (Greenland Self-Government Act), [English Translation], accessed 6 December 2018 at <https://naalakkersuisut.gl/~/media/Nanoq/Files/Attached%20Files/Engelske-tekster/Act%20on%20Greenland.pdf>;

Bekendtgørelse af Low nr. 963 af 3. juli 2013 om beskyttelse af havmiljøet (Consolidated Act No 963 of 3 July 2013 on the Protection of the Marine Environment) [available only in Danish], accessed 6 December 2018 at <https://www.retsinformation.dk/Forms/r0710.aspx?id=145889#not1>;

Consolidated Act No 72 of 17 January 2014 on Safety at Sea (Danish SSA) [English translation], accessed 6 December 2018 at <http://www.dma.dk/Vaekst/Rammevilkaar/Legislation/Acts/Consolidated%20act%20on%20safety%20at%20sea.pdf>;

Consolidated Decree No 1674 of 18 December 2015 on the entry into force for Greenland of the Act on Safety at Sea (Greenlandic SSA) [English translation], accessed 6 December 2018 at <https://www.dma.dk/Vaekst/Rammevilkaar/Legislation/Acts/Consolidated%20decree%20on%20the%20entry%20into%20force%20for%20Greenland%20of%20the%20act%20on%20safety%20at%20sea.pdf>;

Kingdom of Denmark Strategy for the Arctic 2011–2020, accessed 6 December 2018 at <https://www.arctic-council.org/index.php/en/our-work2/8-news-and-events/60-denmarks-arctic-strategy>;

Landtingsforordning nr. 4 af 3 november 1994 om beskyttelse af havmiljoet (Greenland Decree on Marine Environmental Protection of 3 November 1994) [available only in Danish] accessed 6 December 2018 at <http://lovgivning.gl/lov?rid=%7b7FF13361-5A48-4D05-95B1-D998C96D73BF%7d>;

Order No. 170 of 17 March 2003 issued by the Danish Maritime Authority "Order on ship reporting systems in the waters off Greenland" (Order No. 170) [English translation], accessed 6 December 2018, available at <https://www.dma.dk/Vaekst/Rammevilkaar/Legislation/Orders/Order%20on%20ship%20reporting%20systems%20in%20waters%20off%20Greenland%20(reporting%20service%20in%20Greenland).pdf>;

Order No 191 of 27 May 1963 on the Delimitation of the Territorial Sea of Greenland, accessed 6 December 2018 at <http://www.un.org/Depts/los/LEGISLATIONANDTREATIES/PDFFILES/DNK_1963_Order.pdf>;

Order No. 1188 of 7 November 2017 issued by the Danish Maritime Authority "Order amending the order on Notice B from the Danish Maritime Authority, the construction and equipment, etc. of ships" [English translation], accessed 6 December 2018 at <https://www.dma.dk/Vaekst/Rammevilkaar/Legislation/Orders/Order%20amending%20Notice%20B%20from%20the%20DMA.pdf>;

Order No. 1697 of 11 December 2015 issued by the Danish Maritime Authority, "Order for Greenland on the safe navigation, etc. of ships" (Order No. 1697) [English translation], accessed 6 December 2018 at <https://www.dma.dk/Vaekst/Rammevilkaar/Legislation/Orders/Order%20for%20Greenland%20on%20the%20safe%20navigation,%20etc%20of%20ships.pdf>;

Royal Decree No 1005 of 24 October 2004 on the entry into force of Act on Exclusive Economic Zone for Greenland, on the basis of Section 5 of the Act No 411 of 22 May 1996 on Exclusive Economic Zone, accessed 6 December 2018 at <www.un.org/Depts/los/doalos_publications/LOSBulletins/bulletinpdf/ bulletin56e.pdf>;

The Constitutional Act of Denmark of 5 June 1953, accessed 6 December 2018 at <http://www.stm.dk/_p_10992.html>.

Norway

Act No 57 of 27 June 2003 on Norway's Territorial Waters and Contiguous Zone, 54 *Law of the Sea Bulletin* 97 (2004);

Act No 91 of 17 December 1976 relating to the Economic Zone of Norway, accessed 6 December 2018 at <www.un.org/Depts/los/LEGISLATIONANDTREATIES/PDFFILES/NOR_1976_Act.pdf>;

Act No. 100 of 19 June 2009 Relating to the Management of Biological, Geological and Landscape Diversity (Nature Diversity Act) [English translation], accessed 6 December 2018 at <https://www.regjeringen.no/en/dokumenter/nature-diversity-act/id570549/>;

Act No 9 of 16 February 2007 relating to Ship Safety and Security (SSSA) [English translation], accessed 6 December 2018 at <https://www.sdir.no/en/shipping/legislation/laws/ship-safety-and-security-act/>;

Act No 61 of 15 August 2014 relating to Pilot Services [English translation], accessed 6 December 2018 at <http://www.kystverket.no/globalassets/los/regelverk-engelsk/pilotage-act.pdf>;

Act No.79 of 15 June 2001 relating to the Protection of the Environment in Svalbard [English translation], accessed 6 December 2018 at <https://www.regjeringen.no/en/dokumenter/svalbard-environmental-protection-act/id173945/>;

Lov om havner og farvann (havne- og farvannsloven) (Harbours and Fairways Act of 2009) [available only in Norwegian] accessed 6 December 2018 at <https://lovdata.no/dokument/NL/lov/2009-04-17-19?q=havnelov>;

Regulations No. 488 of 30 May 2012 on Environmental Safety for Ships and Mobile Offshore Units [English translation], accessed 6 December 2018 at <https://www.sdir.no/en/shipping/legislation/regulations/environmental-safety-for-ships-and-mobile-offshore-units1/>;

Regulations No. 1363 of 23 November 2016 on Safety measures for Ships operating in Polar Waters [English translation], accessed 6 December 2018 at <https://www.sdir.no/en/shipping/legislation/regulations/safety-measures-for-ships-operating-in-polar-waters/>.

Russian Federation and former Union of Soviet Socialist Republics

Aide-Mémoire from the Soviet Ministry of Foreign Affairs to the US Embassy in Moscow [extracts only] (21 July 1964) reprinted in Kristina Schönfeldt (ed.) *The Arctic in International Law and Policy*, Hart Publishing (2017), p. 1387;

Declaration 4604, UN DOALOS National Legislation, USSR, accessed 6 December 2018 at <http://www.un.org/Depts/los/LEGISLATIONANDTREATIES/PDFFILES/RUS_1984_Declaration.pdf>;

Declaration 4450, UN DOALOS National Legislation, USSSR, accessed 6 December 2018 at <http://www.un.org/Depts/los/LEGISLATIONANDTREATIES/PDFFILES/RUS_1985_Declaration.pdf>.

Decree of the Presidium of the Supreme Soviet of the USSR on the Economic Zone of the USSR, UN DOALOS National Legislation, USSR, accessed 6 December 2018 at <http://www.un.org/Depts/los/LEGISLATIONANDTREATIES/PDFFILES/RUS_1984_Decree.pdf>;

Federal Law of the Russian Federation of 31 July 1998, No 155-FZ, "On the internal sea waters, territorial sea and contiguous zone of the Russian Federation" [English translation], accessed 6 December 2018 at <http://cis-legislation.com/document.fwx?rgn=1412>;

Federal Law of the Russian Federation of 3 July 2012, No 132-FZ On Amendments to Certain Legislative Acts of the Russian Federation Concerning State Regulation of Merchant Shipping on the Water Area of the Northern Sea Route [unofficial translation], reprinted in *Kristina Schönfeldt* (ed.) *The Arctic in International Law and Policy*, Hart Publishing (2017), p. 1394;

Rules of Navigation in the water area of the Northern Sea Route of 17 January 2013 [unofficial translation], reprinted in *Kristina Schönfeldt* (ed.) *The Arctic in International Law and Policy*, Hart Publishing (2017), p. 1397;

Order of the Government of Russian Federation No 358-p, 15 March 2013 [English translation], accessed 6 December 2018 at <https://cis-legislation.com/docs_list.fwx?countryid=008&page=1> ;

USSR Ministry of Merchant Marine, Oral D é marche to the United States Coast Guard Cutter Edisto (28 August 1967), reprinted in Kristina Schönfeldt (ed.) *The Arctic in International Law and Policy*, Hart Publishing (2017), p. 1390.

United States of America

Aide Mémoire from the US Department of State Bureau of Oceans and International Environmental and Scientific Affairs [extracts only] (22 June 1965) reprinted in Kristina Schönfeldt (ed.) *The Arctic in International Law and Policy*, Hart Publishing (2017), p. 1387;

Diplomatic Note from the US Embassy in Ottawa to the Canadian Department of External Affairs concerning the transit of the United States Coast Guard Cutter Polar Sea (24 June 1985), reprinted in *Kristina Schönfeldt* (ed.) *The Arctic in International Law and Policy*, Hart Publishing (2017), p. 1375;

Diplomatic Note from the US Government to the USSR Government regarding the circumnavigation of the Arctic by the United States Coast Guard Cutters Edisto and Eastwind [extracts only] (30 August 1967), reprinted in Kristina Schönfeldt (ed.) *The Arctic in International Law and Policy*, Hart Publishing (2017), p. 1391.

Message from the United States Coast Guard Cutter Edisto to Coastal Radio Station of USSR at Dikson (28 August 1967), reprinted in Kristina Schönfeldt (ed.) *The Arctic in International Law and Policy*, Hart Publishing (2017), p. 1390;

Note from the US State Department to the Soviet Embassy in Washington concerning the voyages of the United States Coast
Guard Cutters Edisto and East Wind (14 August 1967), reprinted in Kristina Schönfeldt (ed.) *The Arctic in International Law and Policy*, Hart Publishing (2017), p. 1389;

Oil Pollution Act of 1990, 33 *USC* 2701;

United States Coast Guard, Policy Letter 16-06 of 12 December 2016, accessed 6 December 2018 at < https://www.dco.uscg.mil/Portals/9/DCO%20Documents/5p/CG-5PC/CG-CVC/Policy%20Letters/2016/CG-CVC_pol16-06.pdf?ver=2016-07-06-120605-907>.

Literature

Books

Aust A., *Modern Treaty Law and Practice*, 2nd edition, Cambridge University Press (2007);

Brubaker R., *The Russian Arctic Straits*, Martinus Nijhoff (2005);

Byers M., *International Law and the Arctic*, Cambridge University Press (2013);

Churchill R. and Lowe A., *The Law of the Sea*, Manchester University Press (1999);

Dörr O. and Schmalenbach K. (eds.) *Vienna Convention on the Law of Treaties: A Commentary*, Springer (2012);

Gavouneli M., *Functional Jurisdiction in the Law of the Sea*, Martinus Nijhoff (2008);

Jacobsen I. *Marine Protected Areas in International Law*, Brill Nijhoff (2016);

Kenney G., *Dangerous Passage: Issues in the Arctic*, Natural Heritage Books (2006);

Klein N., *Maritime Security and the Law of the Sea*, Oxford University Press (2011);

Laruelle M., *Russia's Arctic Strategies and the Future of the Far-North*, M.E. Sharpe (2014);

McCannon J. *Red Arctic: Polar Exploration and the Myth of the North in the Soviet Union, 1932-1929*, Oxford University Press (1998);

Nandan S. and Rosenne S., *United Nations Convention on the Law of the Sea, 1982: A Commentary*, Volume II, Martinus Nijhoff (2003);

Nordquist M., *United Nations Convention on the Law of the Sea, 1982: A Commentary*, Volume I, Martinus Nijhoff, (1985);

O'Connell D., *The international Law of the Sea* (ed. I. Shearer), Volume I, Clarendon Press Oxford (1982);

O'Connell D., *The international Law of the Sea* (ed. I. Shearer), Volume II, Clarendon Press Oxford (1984);

Pharand D., *Canada's Arctic Waters in International Law*, Cambridge University Press (1988);

Pharand D., *The Northwest Passage: Arctic Straits*, Martinus Nijhoff (1984);

Roach J. and Smith R., *Excessive Maritime Claims*, 3rd edition, Martinus Nijhoff (2012);

Rosenne S. and Yankov A., *United Nations Convention on the Law of the Sea 1982: A Commentary*, Volume IV, Martinus Nijhoff (1991);

Rothwell D. and Stephens T., *The International Law of the Sea*, 2nd edition, Hart Publishing (2016);

Rothwell D., *Arctic Ocean Shipping: Navigation, Security and Sovereignty in the North American Arctic*, Brill (2018);

Rothwell D., *The Polar Regions and the Development of International Law*, Cambridge University Press (1996);

Tanaka Y., *The International Law of the Sea*, Cambridge University Press (2012);

Villiger M., *Commentary on the 1969 Vienna Convention on the Law of Treaties*, Martinus Nijhoff (2009);

Weidemann L., *International Governance of the Arctic Marine Environment*, Springer International Publishing (2014)

Articles

Bartenstein K., "The 'Arctic Exception' in the Law of the Sea Convention: A Contribution to safer Navigation in the Northwest Passage?", 42 *Ocean Development and International Law* 22 (2011);

Bloom E. “The Establishment of the Arctic Council”, 93 *American Journal of International Law* 712 (1999);

Brubaker D., “The Arctic – Navigational Issues under International Law of the Sea”, 2 *The Yearbook of Polar Law* 7 (2010);

Canuel E., “The Four Arctic Law Pillars: A Legal Framework” 46 *Georgetown Journal of International Law* 735 (2015);

Cinelli C., “Protection and Preservation of the Arctic Marine Environment”, 24 *Italian Yearbook of International Law* 159 (2014);

Chircop A. et al., “Course Convergence? Comparative Perspectives on the Governance of Navigation and Shipping in Canadian and Russian Arctic Waters”, 28 *Ocean Yearbook* 291 (2014);

Demliuga R., “A Note on the Application of Article 234 of the Law of the Sea Convention in light of Climate Change: Views from Russia”, 48 *Ocean Development and International Law* 128 (2017);

Fields S., “Article 234 of the United Nations Convention on the Law of the Sea: The overlooked Linchpin for achieving Safety and Security in the US Arctic?” 7 *Harvard National Security Journal* 55 (2016);

Franckx E., “The Legal Regime of Navigation in the Russian Arctic” (2009) 18 *Journal of Transnational Law & Policy*, 327 (2009);

Harriet C., “Polar Deployment of Soviet Submarines” 39 *International Journal* 828 (1984);

Hartman J., “Regulating Shipping in the Arctic Ocean: An Analysis of State Practice”, 49 *Ocean Development and International Law* 276 (2018);

Kopela S., “Historic Titles and Historic Rights in the Law of the Sea in the Light of the South China Sea Arbitration”, 48 *Ocean Development and International Law* 181 (2017);

Kraska J., “Governance of Ice-Covered Areas: Rule Construction in the Arctic Ocean”, 45 *Ocean Development and International Law* 260 (2014);

Kraska J., “The Kerch Strait Incident: Law of the Sea or Law of Naval Warfare?” *EJIL: Talk*, 3 December 2018, accessed 6 December 2018 at <https://www.ejiltalk.org/the-kerch-strait-incident-law-of-the-sea-or-law-of-naval-warfare/>;

Kraska J., “The Law of the Sea Convention and the Northwest Passage”, 22 *The International Journal of Marine and Coastal Law* 257 (2007);

Lowe V., “The Right of Entry into Maritime Ports in International Law”, 14 *San Diego Law Review* 597 (1977);

McDorman T., “The Safety of Navigation in the Arctic Ocean and the role of Coast Guards”, 2 *Korean Journal of International and Comparative Law* 27 (2014);

McRae D. and Goundrey D., "Environmental Jurisdiction in Arctic Waters: The Extent of Article 234," 16 *University of British Columbia Law Review* 197 (1982);

Moen A., "For those in Peril on the Sea: Search and Rescue under the Law of the Sea Convention", 24 *Ocean Yearbook* 377 (2010);

Molenaar E., "Current and Prospective Roles of the Arctic Council System within the Context of the Law of the Sea", 27 *The International Journal of Marine and Coastal Law* 553 (2012);

Molenaar E., "Fisheries Regulation in the Maritime Zones of Svalbard", 27 *International Journal of Marine and Coastal Law* 3 (2012);

Molenaar E., "Innocent Passage: Past and Present", 23 *Marine Policy* 131 (1999);

Molenaar E., "Options for regional regulation of Merchant Shipping outside IMO, with particular reference to the Arctic Region", 45 *Ocean Development and International Law* 272 (2014);

Nord D., "The Shape of the Table, the Shape of the Arctic", 65 *International Journal* 825 (2010);

Ohnishi F., "The Struggle for Arctic Regional Order: Developments and Prospects of Arctic Politics", 5 *Eurasia Border Review* 81 (2014);

Papastavridis E., "Intelligence Gathering in the Exclusive Economic Zone", 93 *International Law Studies* 446 (2017);

Pharand D., "The Arctic Waters and the Northwest Passage: A Final Revisit", 38 *Ocean Development and International Law* 3 (2007);

Pharand D., "The Case for an Arctic Region Council and a Treaty Proposal" 23 *Revue Générale de Droit* 163 (1992);

Pushkareva E., "Concepts of Legal Status of the Arctic", 19 *Max Planck Yearbook of United Nations Law Online* 363 (2016);

Rainwater S., "International Law and the "Globalization" of the Arctic: Assessing the rights of non-Arctic States in the High North", 30 *Emory International Law Review* 115 (2015);

Reid R., "The Canadian Claim to Sovereignty over the Waters of the Arctic." 12 *Canadian Yearbook of International Law* 111 (1974);

Roscini M., "The Navigational Rights of Nuclear Ships", 15 *Leiden Journal of International Law* 251 (2002);

Rytter J., "Self-Determination of Colonial Peoples - The Case of Greenland revisited", 77 *Nordic Journal of International Law* 365 (2008);

Scovazzi T., "Legal Issues relating to Navigation through Arctic Waters", 1 *The Yearbook of Polar Law* 371 (2009);

Scovazzi T., "New Developments Concerning Soviet Straight baselines", 3 *International Journal of Estuarine and Coastal Law* 37 (1988);

Shearer I., "Problems of Jurisdiction and Law Enforcement against delinquent Vessels", 35 *International and Comparative Law Quarterly* 320 (1986);

Takei Y., "Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic: an assessment" 2 *Aegean Review of the Law of the Sea and Maritime Law* 81 (2013);

Takei Y., "The Role of the Arctic Council from an International Law Perspective: Past, Present and Future", 6 *The Yearbook of Polar Law* 349 (2015);

Williams L., "An Ocean between Us: The Implications of Inconsistencies between the Navigational Laws of Coastal Arctic Council Nations and the United Nations Convention on the Law of the Sea for Arctic Navigation", 70 *Vanderbilt Law Review* 379 (2017)

Chapters in Books

Andreone G., "The Exclusive Economic Zone", in Rothwell D. et al. (eds.) *The Oxford Handbook of the Law of the Sea,* Oxford University Press (2015);

Boone L., "International Regulation of Polar Shipping", Molenaar E. et al (eds.) *The Law of the Sea and the Polar Regions*, Martinus Nijhoff (2013);

Brigham L. and Hildebrand L., "Introduction to the new Maritime Arctic", in Hildebrand L. et al. (eds.) *Sustainable Shipping in a Changing Arctic*, Springer (2018);

Brigham L., "The Arctic Council's Arctic Marine Shipping Assessment", in Nordquist M., Heidar T. and Norton Moore J. (eds.), *Changes in the Arctic Environment and the Law of the Sea*, Martinus Nijhoff Publishers (2010);

Brigham L., "The Changing Maritime Arctic and New Marine Operations", in Beckman R. et al. (eds.) *Governance of Arctic Shipping*, Brill Nijhoff (2017);

Chircop A. "The IMO, its Role under UNCLOS and its Polar Shipping Regulation", in Beckman R. et al. (eds.) *Governance of Arctic Shipping*, Brill Nijhoff (2017);

Churchill R. and Ulfstein G. "The Disputed Maritime Zones around Svalbard", in Nordquist M., Heidar T. and Norton Moore J. (eds.), *Changes in the Arctic Environment and the Law of the Sea*, Martinus Nijhoff Publishers (2010);

Dalaklis D. and Baxevani E., "Maritime Transport in the Arctic after the Introduction of the Polar Code: A Discussion of the new Training Needs", Hildebrand L. et al. (eds.) *Sustainable Shipping in a Changing Arctic*, Springer (2018);

Dupuy P., “Evolutionary Interpretation of Treaties: Between Memory and Prophecy” in Cannizzaro E. (ed.) *The Law of Treaties Beyond the Vienna Convention*, Oxford University Press (2011);

Evans M. “The Law of the Sea”, in Evans M. (ed.) *International Law*, 4th edition, Oxford University Press (2014);

Guilfoyle D., “The High Seas”, in Rothwell D. et al. (eds.) *The Oxford Handbook of the Law of the Sea,* Oxford University Press (2015);

Henriksen T. “Norway, Denmark (in respect of Greenland) and Iceland”, in Beckman R. et al. (eds.) *Governance of Arctic Shipping*, Brill Nijhoff (2017);

Knopf K., “Exploring for the Empire”, in Buchenau B. et al. (eds.) *Post-Empire Imaginaries?* Brill Rodopi (2015);

Koh T., “A Constitution for the Oceans”, in Nordquist M. (ed.), *United Nations Convention on the Law of the Sea 1982: A Commentary*, Volume I, Martinus Nijhoff, (1985);

Lathrop C., “Baselines”, in Rothwell D. et al. (eds.) *The Oxford Handbook of the Law of the Sea* Oxford University Press (2015);

Macko S., “Changes in the Arctic Environment”, in Nordquist M., Heidar T. and Norton Moore J. *Changes in the Arctic Environment and the Law of the Sea*, Martinus Nijhoff Publishers (2010);

McRae D., “The Negotiation of Article 234,” in Griffiths F. (ed.) *Politics of the Northwest Passage*, Queen’s University Press, (1987);

McDorman T. “The outer Continental Shelf in the Arctic Ocean: Legal Framework and Recent Developments” in Vidas D. (ed.) *Law, Technology and Science for Oceans in Globalisation*, Martinus Nijhoff (2010);

Molenaar E.,“Port and Coastal States”, in Rothwell D. et al. (eds.) *The Oxford Handbook of the Law of the Sea* Oxford University Press (2015);

Molenaar E., “The Arctic, the Arctic Council and the Law of the Sea”, in Beckman R. et al. (eds.) *Governance of Arctic Shipping*, Brill Nijhoff (2017);

Noyes J., “The Territorial Sea and Contiguous Zone”, in Rothwell D. et al. (eds.) *The Oxford Handbook of the Law of the Sea* Oxford University Press (2015);

Nordtveit E. “Arctic Council Update” in Nordquist M. et al. (eds.) *Freedom of Navigation and Globalization,* Brill Nijhoff (2015);

Roach J., “A Note to make the Polar Code Mandatory” in Lalonde S. and McDorman T. (eds.) *International Law and Politics of the Arctic Ocean*, Brill Nijhoff (2015);

Roach J., “Arctic Navigation: Recent Developments”, in Nordquist M. et al., *Challenges of the Changing Arctic*, Brill Nijhoff (2016);

Roach J., "The Polar Code and its Adequacy", in Beckman R. et al. (eds.) *Governance of Arctic Shipping*, Brill Nijhoff (2017);

Rothwell D., "International Straits", in Rothwell D. et al. (eds.) *The Oxford Handbook of the Law of the Sea* Oxford University Press (2015);

Rothwell D., "The United States and Arctic Straits: The Northwest Passage and the Bering Strait", in Lalonde S. and McDorman T. (eds.) *International Law and Politics of the Arctic Ocean*, Brill Nijhoff (2015);

Rothwell D., "Canada and the United States", in Beckman R. et al. (eds.) *Governance of Arctic Shipping*, Brill Nijhoff (2017);

Satei S. "The Legal Status of the Northwest Passage: Canada's Jurisdiction or International Law in Light of Recent Developments in Arctic Shipping Regulation?", in Hildebrand L. et al. (eds.) *Sustainable Shipping in a Changing Arctic*, Springer (2018);

Scott K. and Vanderzwaag D., "Polar Oceans and Law of the Sea", in Rothwell D. et al. (eds.) *Oxford Handbook of the Law the Sea*, Oxford University Press (2015);

Solski J., "Russia", in Beckman R. et al. (eds.) *Governance of Arctic Shipping*, Brill Nijhoff (2017);

Sorokina T. and Phalen W., "Legal Problems of the Northern Sea Route Exploitation: Brief Analysis of the Legislation of the Russian Federation", in Nordquist M. et al. (eds.), *International Marine Economy*, Brill Nijhoff (2017);

Sun Z. and Beckman R., "The Development of the Polar Code and Challenges to its Implementation", in Zou K. (ed.) *Global Commons and the Law of the Sea*, Brill Nijhoff (2018);

Symonides J., "Problems and Controversies Concerning Freedom of Navigation in the Arctic", in del Castillo L. (ed.) *Law of the Sea, from Grotius to the International Tribunal for the Law of the Sea*, Brill Nijhoff (2015);

Tanaka Y., "Navigational Rights and Freedoms", in Rothwell D. et al. (eds.) *The Oxford Handbook of the Law of the Sea* Oxford University Press (2015);

Thiele T., "Arctic High Seas Governance of Biodiversity", in Hildebrand L. et al. (eds.) Sustainable Shipping in a Changing Arctic, Springer (2018);

VanderZwaag D., "Shipping and Marine Environmental Protection in Canada: Rocking the Boat and Riding a Restless Sea", in Rothwell D. and Bateman S. (eds.), *Navigational Rights and Freedoms and the new Law of the Sea*, Martinus Nijhoff (2000);

Van Dyke J., "Rights and Responsibilities of Strait States", in Caron D. and Oral N. (eds.) *Navigating Straits*, Brill Nijhoff (2014);

Winkler T. Danish Interests in the Arctic, in Nordquist M., Heidar T. and Norton Moore J. (eds.), *Changes in the Arctic Environment and the Law of the Sea*, Martinus Nijhoff Publishers (2010);

Xue G. and Long Y., "Equal Treatment and non-Discrimination for User States", in Beckman R. et al. (eds.) *Governance of Arctic Shipping*, Brill Nijhoff (2017).

Miscellanea

Antarctic Treaty Consultative Meeting, Final Report of the XXVII ATCM, (24 May - 4 June 2004);

Encyclopaedia Britannica, "Arctic", accessed 6 December 2018 at <https://www.britannica.com/place/Arctic>;

Encyclopaedia Britannica, "Arctic Circle", accessed 6 December 2018 at <https://www.britannica.com/place/Arctic-Circle>;

Encyclopaedia Britannica, "Arctic Ocean", accessed 6 December 2018 at <https://www.britannica.com/place/Arctic-Ocean>;

Headland P. K. and Colleagues, "Transits of the Northwest Passage to End of the 2018 Navigation Season (Atlantic Ocean, Arctic Ocean, Pacific Ocean)", Scott Polar Research Institute, University of Cambridge, revised 5 October 2018, accessed 6 December 2018 at <https://www.spri.cam.ac.uk/resources/infosheets/northwestpassage.pdf>;

Ilulissat Declaration (adopted 28 May 2008), 48 *ILM* 382 (2009);

Joint Statement by the United States of America and the Union of Soviet Socialist Republics: Uniform Interpretation of Rules of International Law Governing Innocent Passage (23 September 1989) reprinted in *Kristina Schönfeldt* (ed.) *The Arctic in International Law and Policy*, Hart Publishing (2017), p. 1393;

Maersk, "An Arctic Journey", published 10 October 2018, accessed 6 December 2018 at <https://www.maersk.com/en/news/2018/10/10/an-arctic-journey>;

NASA, Global Climate Change, Arctic Sea Ice Minimum, accessed 6 December 2018 at <https://climate.nasa.gov/vital-signs/arctic-sea-ice/>;

Russia Today "You shall not pass: Russia changes rules for foreign warships navigating through its Arctic", 30 November 2018, accessed 6 December 2018 at <https://www.rt.com/russia/445245-new-rules-russia-arctic/>;

The Guardian "Melting Arctic ice opens new route from Europe to east Asia", 28 September 2018, accessed 6 December 2018 at <https://www.theguardian.com/world/2018/sep/28/melting-arctic-ice-opens-new-route-from-europe-to-east-asia>;

The Guardian, "Ship found in Arctic 168 years after doomed Northwest Passage attempt", accessed 6 December 2018 at <https://www.theguardian.com/world/2016/sep/12/hms-terror-wreck-found-arctic-nearly-170-years-northwest-passage-attempt>;

The Moscow Times "Russia Will Restrict Foreign Warships in Arctic Ocean, Defense Official Says", 30 November 2018, accessed 6 December 2018 at <https://themoscowtimes.com/news/russia-will-restrict-foreign-warships-in-arctic-ocean-defense-official-says-63672>;

UN, Oceans & Law of the Sea, Division for Ocean Affairs and the Law of the Sea (DOALOS), Table Recapitulating the Status of the Convention and of the related Agreements, accessed 6 December 2018 at <http://www.un.org/Depts/los/reference_files/status2018.pdf>;

UN Secretariat, "Judicial Régime of Historic Waters, Including Historic Bays", Document A/CN.4/143, 2 *Yearbook of the International Law Commission* 1 (1962);

White Paper No 7 (2011–2012) on the High North, 60, accessed 6 December 2018 at < https://www.regjeringen.no/en/dokumenter/meld.-st.-7-20112012/id663433/>;

World Meteorological Organization, WMO Sea Ice Nomenclature (WMO No. 259, volume 1 – Terminology and Codes, Volume II – Illustrated Glossary and III – International System of Sea-Ice Symbols) by March 2014, accessed 6 December 2018 at <https://www.jcomm.info/index.php?option=com_oe&task=viewDocumentRecord&docID=14598>.