Regulating Shipping in the Arctic Ocean: An Analysis of State Practice

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Abstract: The United Nations Convention on the Law of the Sea (LOSC) permits State Parties to establish an Exclusive Economic Zone (EEZ) 200 nautical miles from their coast. Coastal States have exclusive jurisdiction over resources within the EEZ, but navigational and other high seas freedoms continue to exist. A significant number of States have, however, enacted legislation that departs from the LOSC, interfering with the navigational rights and freedoms of other States. This article analyses this development with a specific focus on the Arctic. It investigates the powers of Arctic coastal States to regulate shipping in the EEZ and thereby navigation in the Arctic Ocean. It adds to the existing literature by providing an analysis of State practice, suggesting that despite uncertainty concerning the interpretation of the LOSC Article 234 and the right to exercise legislative jurisdiction over ice-covered waters, a not insignificant number of States have claimed jurisdiction in their own EEZ beyond the rights granted in the LOSC, and are therefore not in a position to object to extensive jurisdictional claims in the Arctic.
I. Introduction

The Arctic Ocean is subject to increasing attention. Climate change and the resulting rise in temperatures has, among other things, raised interest in using the Arctic for commercial shipping between Europe and the Atlantic and Pacific oceans. An interest that was strengthened in 2017, when, for the first time, a cargo ship travelled through the northern sea route without an icebreaker escort, highlighting how climate change is opening up the high Arctic. The Arctic Ocean has two other important features, making it the subject of specific interest. Firstly, the Arctic Ocean is completely encircled by the coastal seas of the five Arctic coastal States, also known as the “Arctic Five” (Canada, Denmark/Greenland, Norway/Svalbard, Russia and the United States of America) all of which have claimed an Exclusive Economic Zone (EEZ). Thus, while there are still significant areas of high seas in the Central Arctic Basin, the Arctic Ocean itself can only be accessed after navigating through the EEZ or territorial sea of the Arctic Five, including by way of the Northwest and Northeast Passage. Another important feature is that parts of the Arctic Ocean are covered by multi-year ice. Article 234 of the United Nations Convention on the Law of the Sea (LOSC/Convention) provides States with a special right to adopt and enforce environmental laws and regulations in ice-covered areas within their EEZ that are stricter than general international standards. These two features, coupled with the increased interest in the Arctic Ocean as a new and valuable commercial route, merit an analysis of the rights of the Arctic coastal States to regulate shipping in the EEZ. In order to examine this issue, the article first provides a working definition of the “Arctic Ocean”. It then examines the powers of coastal States to regulate shipping in the EEZ, focusing on civil navigation. Finally, it addresses the general rights of coastal States to enact environmental laws and regulations, as well as the special rights conferred upon them in regards to ecologically sensitive and ice-covered
areas in the EEZ. After having examined the relevant provisions in the LOSC, the article assesses whether State practice might have changed the traditional interpretation of the LOSC creating new rights to regulate shipping. Most of the already abundant literature on Article 234 focuses on a textual interpretation of the said provision and its drafting history.\textsuperscript{8} By contrast, little attention has been paid to subsequent practice regarding the application of Article 234. In addition, the article also considers practice outside the Arctic, concluding that irrespective of the uncertainty surrounding the interpretation of Article 234, a not insignificant number of States have claimed jurisdiction in their own EEZ beyond the rights granted in the LOSC, and are therefore not in a position to object to extensive jurisdictional claims in the Arctic.

II The Arctic Ocean

There is no universally accepted definition of the Arctic Ocean. In order to avoid possible politically and legally sensitive issues, the present article relies on the definition of “Arctic Waters” in the new Chapter XIV of the International Convention for the Safety of Life at Sea (SOLAS).\textsuperscript{9}

\begin{quote}
Regulation 1 – Definitions
3. Arctic waters mean 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 the latitude 70º49.’.56 N and longitude 008º59.’.61 W (Sørkapp, Jan Mayen) and by the southern shore of Jan Mayen to 73º31.’.6 N and 019º01.’.0 E by the Island of Bjørnøya, and thence by a great circle line to the latitude 68º38.’.29 N and longitude 043º23.’.08 E (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 056º37.’.1 W and thence to the latitude 58º00.’.0 N, longitude 042º00.’.0 W.
\end{quote}

The definition establishes an almost perfect circle, with the North Pole at its centre and the boundary of what constitutes Arctic waters running on the 60\textsuperscript{th} northern parallel. Only at the southern tip of Greenland and in the westerly part of Russia is the circular line interrupted and the
Arctic waters’ boundary defined with reference to specific seas, islands, capes, straits, passages and bays. As such, most of the Arctic waters are within the Arctic Circle (approximately 66.3° N) and include the coastal waters of the Arctic Five.  

1. Regulating Shipping in the Arctic

The Arctic waters, like any other part of the world’s oceans, are regulated by the LOSC. Four of the five Arctic coastal States have ratified the LOSC and the US, which has not, generally accepts that the Convention reflects customary international law. In addition, the Arctic waters are subject to a vast array of international treaties. International law applicable to commercial vessels is predominantly found in various treaties adopted within the IMO. Prominent among these are the MARPOL and SOLAS conventions. Until the entry into force of the Polar Code in January 2017, most IMO conventions contained few provisions specific to the Arctic and most provided that the sole responsibility to implement and enforce international standards rested with flag States.  

Despite being the world’s smallest ocean, the Arctic waters cover some 14.056 million square kilometres, making it almost six times larger than the Mediterranean Sea. Climate change and the resulting rise in temperatures have raised interest in using the Arctic waters for commercial shipping between Europe and the Atlantic and Pacific Oceans. Two routes in particular are garnering substantial interest: (1) along the northern coast of North America (known as the “Northwest Passage”); and (2) around the North Cape and along the north coast of Eurasia and Siberia until the Bering Strait (which includes what is known as the “Northeast Passage” or “Northern Sea Route”).  

Both passages are surrounded by controversy. According to the official Canadian position, the Northwest Passage lies within Canada’s historic internal waters. This claim is contested both
by the United States and the European Union which protested the drawing of straight baselines around the Canadian Arctic archipelago in 1986.\textsuperscript{18} It is the Russian Government’s position that parts of the Northern Sea Route lie within Russia’s territorial sea and internal waters.\textsuperscript{19} Thus, whatever laws or regulations Canada and Russia adopt for the Northwest Passage or the Northern Sea Route – by virtue of the sovereignty coastal States exercise in their internal waters and territorial sea – will affect navigation to or from the Arctic. The same is true for similar regulation by other Arctic States. The following section will focus on what rights appertain to coastal States in regulating shipping in the EEZ.

\section*{III. \textbf{The Exclusive Economic Zone}}

The establishment of the EEZ is a comparatively recent innovation in the law of the sea. During the negotiations of the First and Second UN Conference on the Law of the Sea, in 1958 and 1960, States failed even to agree on the limits of the territorial sea.\textsuperscript{20} Agreement was only finally reached during the Third UN Conference 1973-1982 (see Article 3 of the LOSC which establishes a maximum breadth of 12 nautical miles).

The Third UN Conference also produced an agreement on the establishment of the EEZ.\textsuperscript{21} The agreement represented a revolutionary development of the international law of the sea, bringing about one third of the world’s oceans within coastal States’ jurisdiction.\textsuperscript{22} The LOSC gave, \textit{inter alia}, coastal States “sovereign rights” over natural resources within the EEZ, but not sovereignty.\textsuperscript{23} Other than providing sovereign rights over natural resources in their EEZ, the LOSC provides an explicit basis, and indeed an obligation, for States to regulate, protect, and preserve the marine environment.\textsuperscript{24}

The agreement on the EEZ represented a compromise between two competing sets of interests. The first group included States that had staked extensive claims to broad territorial seas
and fishing zones. The second group was represented by major maritime powers, which while supporting coastal States’ right to explore and exploit the natural resources in coastal waters, also wanted to ensure the freedom of navigation. The compromise achieved in Part V of the LOSC reflects the traditional balance that has shaped the law of the sea, viz. the balance between the competing interests of coastal States and major maritime powers.

Article 55 of the LOSC defines the EEZ as “an area beyond and adjacent to the territorial sea”, subject to the specific legal regime established in Part V of the LOSC. It further provides that, …the rights and jurisdiction of the coastal State and the rights and freedoms of other States are governed by the relevant provisions of this Convention. Thus, the rights of all States – coastal or otherwise – are regulated by the LOSC. This means that the EEZ is neither under the complete sovereignty of coastal States nor part of the high seas.

1. Navigation in the Exclusive Economic Zone

Navigational freedom is an essential part of the law of the sea. The LOSC contains various navigational regimes which apply in distinct zones: “innocent passage” through the territorial sea, the “right of transit passage” through international straits, the “right of archipelagic sea lanes passage” in archipelagic waters, and “freedom of navigation” on the high seas. What distinguishes the various forms of navigational rights is the degree of jurisdiction States may exercise over foreign flagged vessels navigating in the different zones.

In relation to the EEZ, the drafters of the LOSC sought to balance the rights of maritime States in relation to freedom of navigation with the interests of coastal States in regards to the environment and resources in adjacent seascapes. Thus, Article 58 of the LOSC guarantees freedom of navigation:

In the exclusive economic zone, all States, whether coastal or land-locked, enjoy, subject to the relevant provisions of this Convention, the freedoms referred to in Article 87 of navigation… and other internationally lawful uses of the sea related to
these freedoms, such as those associated with the operation of ships… and compatible with the other provisions of this Convention.

However, Article 58 also clearly provides that the freedom of navigation in the EEZ is subject to limitations defined in other articles of the LOSC. One such limitation is imposed by Article 58(3) which stipulates that States exercising their rights in the EEZ must “have due regard to the rights and duties of the coastal State” and that they must comply with the laws and regulations adopted by the coastal State in accordance with the LOSC. Similarly, Article 87(2) of the LOSC provides that the freedoms on the high seas shall be exercised with “due regard” for the interests and rights of other States. In addition, foreign flagged ships are subject to coastal States’ powers for pollution control, including special powers over environmentally sensitive areas, which include ice-covered areas, as will be explained below.

2. **Pollution Control over Foreign Flagged Ships**

Coastal States’ jurisdictional powers in the territorial sea are relatively unrestricted, whereas powers within the EEZ are substantially restrained. The scope of coastal States’ powers for pollution control are elaborated in Part XII of the LOSC, which deals with the prevention of marine pollution from various sources: land-based marine pollution, the dumping of waste, pollution from seabed activities, pollution from the atmosphere, and the most relevant to this study, pollution from vessels. Article 211(5) of the LOSC states that coastal States:

…may in respect of their exclusive economic zones 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 organization or general diplomatic conference.

It follows that all laws regulating pollution of foreign flagged vessels in the EEZ must conform to and give effect to generally accepted international rules and standards, commonly adopted via the IMO.
Enforcement jurisdiction is also limited. Physical inspection of foreign flagged vessels in the EEZ may only occur where a vessel has refused to give information relevant to pollution control, or if the information supplied is manifestly at variance with the evident factual situation.\textsuperscript{42} There must, moreover, be “clear grounds” for believing that a vessel has committed a violation resulting in a “substantial discharge causing or threatening significant pollution of the marine environment”.\textsuperscript{43}

A coastal State may only take enforcement measures where there is “clear objective evidence” that a vessel has committed a violation resulting in a discharge causing “major damage or threat of major damage to the coastline or related interests of the coastal State” or “to any resources of its territorial sea or exclusive economic zone”.\textsuperscript{44} Thus, unless a vessel calls into one of its ports, a coastal State can only interfere with the navigation of a foreign vessel in its EEZ where significant pollution or major damage to the environment has occurred or is threatened. Coastal States have no explicit authority in the LOSC to take preventative measures.\textsuperscript{45}

There are two exceptions to the general requirement that coastal States’ environmental legislation targeting the EEZ must conform to international standards. The first exception concerns ecologically sensitive areas and the second concerns ice-covered areas.

In ecologically sensitive areas within their EEZ, coastal States may, in accordance with Article 211(6) of the LOSC, adopt special measures where international rules and standards are “inadequate to meet special circumstances”. However, the establishment of such special measures requires prior consultation through a “competent international organization” (\textit{i.e.} the IMO), as well as consultation with any concerned State.\textsuperscript{46} As no State has ever made use of this provision, it is currently of a more academic than practical interest.\textsuperscript{47}
It follows that coastal States’ power to protect and preserve the marine environment in the EEZ is limited. States, for example, could not generally ban the movement of hazardous waste or prevent navigation by certain vessels, such as oil tankers. Thus, while the LOSC contains detailed rules providing coastal States with legislative jurisdiction to protect against pollution, they cannot, except for very limited circumstances, interfere with the navigational rights of foreign flagged vessels. The only possible exception is in ice-covered areas.

(a) Ice-Covered Areas

Ice-covered areas are subject to a special legal regime. In ice-covered areas, coastal States may, in accordance with Article 234, adopt and enforce non-discriminatory environmental laws that are stricter than general international standards. This was a unique development of the law of the sea, initiated by Canada and negotiated during the Third UN Conference on the Law of the Sea with the Soviet Union and the US, with little interest or opposition shown by other States.

The negotiations were chiefly driven by the Canadian government, which was trying to achieve international support for its 1970 Arctic Water Pollution Prevention Act, under which Canada unilaterally claimed competence to regulate pollution out to 100 nautical miles from its shore. This underlying aim was explicitly recognised by the US, which stated that the purpose of Article 234 was to “provide the basis for implementing the provisions applicable to commercial and private vessels found in the 1970 Arctic Waters Pollutions Prevention Act”.

Unlike Canada, which was mainly interested in environmental protection, the United States’ and the Soviet Union’s main interest was freedom of navigation. The resulting provision was yet another compromise which, although! it ostensibly concerns all ice-covered areas, is “really only about the Arctic Ocean.”
Article 234 provides coastal States with the “right to adopt and enforce non-discriminatory laws and regulations for the prevention, reduction and control of marine pollution from vessels”, without any procedural requirements or need for prior consultation. At the same time, Article 234 is restricted and only applies 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, and pollution of the marine environment could cause major harm to or irreversible disturbance of the ecological balance.

Furthermore, any laws or regulations adopted pursuant to Article 234 must have “due regard to navigation and the protection and preservation of the marine environment based on the best available scientific evidence”.

The wording of Article 234 reflects a delicate balance between competing priorities and as a result, its interpretation is shrouded in uncertainty: it has in fact been described as “probably the most ambiguous, if not controversial, clause in the entire treaty [LOS]”.

It is commonly agreed that coastal States can unilaterally adopt pollution control measures within their EEZ that are stricter than generally accepted international standards, but where and when Article 234 grants this right is disputed. One interpretation confines the scope of Article 234 to the EEZ, excluding the territorial sea. Another includes the territorial sea, straits and, so far as relevant, internal waters. The second interpretation seems contrary to Article 55 of the LOSC, which defines the EEZ as the area “beyond and adjacent to” the territorial sea, but it does promote desirable consistency as it would allow States to apply the same standards to both their territorial seas and their EEZ. In contrast, if Article 234 does not apply to the territorial sea, it leads to the anomalous result that coastal States have greater powers to regulate shipping in ice-covered areas of their EEZ than in ice-covered areas of their territorial sea.
There is, moreover, no common definition of “ice-covered areas” or indeed any of the various cumulative conditions that must be fulfilled before Article 234 applies, such as “severe climatic conditions”, ice-cover for “most of the year”, or “obstructions or exceptional hazards to navigation”, all of which are open to interpretation.\(^{61}\)

There is also significant uncertainty as to how far Article 234 allows coastal States to limit the freedom of navigation, with some views almost diametrically opposed. Some scholars take a de minimis view, according to which the importance of Article 234 should not be overstated and that it cannot be read as “conferring upon the Arctic States the ability to implement marine pollution provision for the entire Arctic Ocean.”\(^{62}\) Others, in contrast, take a de maximis view, according to which coastal States have wide-ranging powers under Article 234 which allow States to “regulate shipping in substantially the same way as [they] would if the waters were… internal waters” and that the “main limitation with Article 234 is that the authority it grants to coastal states does not extend to the regulation of warships or other government vessels.”\(^{63}\) Two vital aspects are at the heart of both interpretations: the geographical extent of Article 234 and the scope of coastal States’ legislative jurisdiction. Both extremes, de minimis and de maximis interpretations, are reflected in State practice, although the de maximis stance, as will be illustrated below, has only been espoused by Canada and Russia.

Despite the uncertainty surrounding its interpretation and application, Article 234 is important because it potentially provides Arctic States with an explicit and extensive power to regulate navigation to and from the Arctic, strengthening the otherwise limited powers of coastal States in the EEZ.
IV. Practice by the Arctic Five

Regardless of the uncertainty surrounding Article 234, most States seem to accept that it is *lex specialis* in respect of coastal States’ jurisdiction in Arctic waters. How far the scope of their jurisdiction extends is, however, controversial and the wording of Article 234 is unclear.

Numerous scholars have sought to clarify the meaning of Article 234, but little consensus exists. It seems futile to add to the already abundant literature seeking to find the “true” meaning of Article 234 by way of a textual interpretation. Instead, the remainder of this article will focus on State practice.

It is a well-established principle that subsequent practice in the application of a treaty, as a reflection of the parties’ agreement regarding its interpretation, can be taken into account when interpreting the terms of a specific provision. The principle is recognised both in treaty and customary international law. As every application of a treaty presupposes some interpretation of its provisions, practice may reflect the original intention of the parties, and thus aid in its interpretation, or it may reflect a subsequent consensus among the parties concerning the meaning of a specific provision.

A subsequent consensus may even override the original meaning of the drafters. This outcome, however, is controversial and while some international tribunals have occasionally confirmed that subsequent practice may lead to a modification of the express terms of a treaty, the International Court of Justice (ICJ) seems to prefer to use subsequent practice to confirm a broad interpretation of extant treaty provisions, even if such an interpretation may stretch the ordinary meaning of the terms applied.

This still leaves the question: what is subsequent practice? The International Law Commission (ILC) has recognised that subsequent practice under Article 31(3)(b) of the Vienna
Convention on the Law of Treaties (VCLT) consists of any “conduct” in the application of a treaty that may contribute to establishing an agreement regarding its interpretation. This includes legislative practice, as well as executive and judicial acts. Arguably, it also includes legislative practice that predates the treaty, if this practice continues after the relevant State becomes a party, such as Canada’s 1970 Arctic Water Pollution Prevention Act and its subsequent ratification of the LOSC.

How much practice is needed is uncertain, but the ICJ and most other international tribunals have been flexible in their approach. The ILC has suggested that:

Subsequent practice under article 31(3)(b) can take a variety of forms and must reflect a common understanding of the parties regarding the interpretation of a treaty. Its value as a means of interpretation depends on the extent to which it is concordant, common and consistent.

The formula “concordant, common and consistent” does not establish a minimum threshold but the extent to which subsequent practice complies with the formula may reveal a discernible pattern and thus the agreement of the parties. Accordingly, the ILC has found that “the value of subsequent practice varies depending on how far it shows the common understanding of the parties as to the meaning of the terms.”

The tribunal established pursuant to the LOSC in the South China Sea Arbitration stated that ICJ decisions confirm that the “threshold for accepting an agreement on the interpretation by State practice is quite high.” Gardiner writes that the practice must be “concordant”, that is, identical or sufficiently identical so as to demonstrate the parties’ agreement. He further states that this does not necessarily mean that there has been abundant practice by all parties to a treaty, but rather that the practice of one or two States suffices if there is good evidence that other parties have endorsed the practice. Similarly, Aust writes that although it is not necessary to show that each party has engaged in a practice, all must have accepted it, even if tacitly.
Schmalenbach state that if not every party has participated in the practice, there must be at least good evidence that the other inactive parties have endorsed it.\textsuperscript{80}

In relation to Article 234, it is therefore not sufficient to focus only on the practice of the Arctic coastal States. The reaction of other parties is equally important, as it may provide evidence that the practice has either been endorsed or rejected. Similarly, inaction may be important if it can be interpreted as acquiescence.

Even though the practice of a few States may be sufficient to fulfil Article 31(3)(b) of the VCLT, the rule’s application in regards to Article 234 of the LOSC is, nonetheless, odd. Currently, the LOSC has 168 parties but only four of these can in effect rely on Article 234, \emph{viz.} Canada, Denmark, Norway and Russia.\textsuperscript{81} The other States do not have maritime zones with multi-year ice-cover. The only exception is the US, but it is not a party to the LOSC.

Navigation in Arctic waters are moreover limited and, with a few notable exceptions, most of the parties to the LOSC seem to have little or no interest in the Arctic. Disinterested States are unlikely to object to practice by the Arctic States and it may therefore be difficult to assess whether all parties to the LOSC have accepted practice relating to Article 234. Reliance on State practice to clarify the content of this provision should therefore be exercised with the utmost care.\textsuperscript{82}

So far, only Canada and Russia have enacted legislation that is explicitly based on Article 234 and both have seemingly gone beyond existing international standards, for instance, by requiring prior notification and authorisation for entry into their respective EEZ.\textsuperscript{83} The following section provides an overview of the practice of the Arctic Five regulating shipping in the EEZ.

1. \textbf{Canada}

Canadian Arctic environmental legislation not only predates, but was also a major catalyst for the adoption Article 234.\textsuperscript{84} The 1969 voyage of the American oil tanker, the \textit{Manhattan}, through the
Northwest Passage created a “groundswell of opposition” within Canada and focused attention on the Arctic. This focus, combined with an increased environmental awareness, led to the adoption of the 1970 Arctic Water Pollution Prevention Act. The Act applied to zones extending 100 nautical miles from Canadian islands north of the 60th northern parallel and banned the discharge of all waste by vessels. It also regulated their design, construction and navigation within designated zones.

The extension of legislative jurisdiction over the Arctic waters was clearly inconsistent with the then-existing legal regime and the US promptly objected on the grounds that:

International law provides no basis for these proposed unilateral extensions of jurisdiction on the high seas, and the United States can neither accept nor acquiesce in the assertion of such jurisdiction. We are concerned that this action by Canada if not opposed by us, would be taken as a precedent in other parts of the world for other unilateral infringements of the freedom of the seas. If Canada had the right to claim and exercise exclusive pollution and resource jurisdiction on the high seas, other countries could assert the right to exercise jurisdiction for other purposes, some reasonable and some not, but all equally invalid according to international law.

The United States was the only State to formally object and the principle that coastal States are entitled to exercise legislative jurisdiction over ice-covered waters outside but adjacent to their territorial sea was eventually accepted and, as explained above, included in Article 234 of the LOSC.

In 2009, Canada amended the Arctic Waters Pollution Prevention Act and extended the reach of its pollution regulation from 100 to 200 nautical miles, thus covering the entire Canadian EEZ in the Arctic. In addition, the previously voluntary vessel reporting system, NORDREG, was made mandatory in 2010. Under the new scheme, large non-governmental vessels are subject to a mandatory system of prior notification and authorisation. The system also applies to any vessel that transports pollutants or dangerous goods, regardless of size. Vessels that do not
report can be requested to leave Canadian waters and noncompliance is punishable by criminal sanctions and the possible detention of the vessel.\textsuperscript{93}

The notification and authorisation system applies to all Canadian “Arctic waters”, which are defined in the amended Arctic Waters Pollution Prevention Act as:

…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…\textsuperscript{94}

The Act takes into account Canada’s contentious claim to straight baselines around the islands that comprise the Canadian archipelago.\textsuperscript{95} The definition includes various routes connecting the Beaufort Sea to the Davis Strait.

Canada has justified its mandatory NORDREG system with reference to Article 234. In a formal submission to the IMO Safety Commission, Canada asserted, \textit{inter alia}, that Article 234 provided “a complete legal justification in international law for NORDREG.”\textsuperscript{96} Two States and international shipping organisations have objected to the mandatory notification and authorisation requirement.\textsuperscript{97}

As noted by the ILC, the conduct of non-State actors, such as international shipping organisations, does not constitute subsequent practice under Articles 31 of the VCLT, but may, nonetheless, be relevant when assessing the subsequent practice of state parties.\textsuperscript{98} The reaction of state parties is, however, paramount.

The two States that have unequivocally objected to NORDREG are the US and Singapore. The US has stated that whilst it supports the navigational safety and environmental protection objectives of NORDREG, it considers the mandatory system of prior notification and authorisation to be:
…a sweeping infringement of freedom of navigation within the exclusive economic zone and the right of innocent passage within the territorial sea, both of which are bedrock principles of the law of the sea.\textsuperscript{99}

Singapore has stated that:

…it is not apparent how the mandatory ship reporting… ties in with the fundamental purpose of Article 234… which is to allow for the prevention, reduction and control of marine pollution.\textsuperscript{100}

This was not the first time that Canadian measures had caused international consternation. At the time of its accession to the 1978 Protocol to the MARPOL Convention on 16 November 1992, Canada deposited a declaration based on Article 234 which stated, \textit{inter alia}, that Canada had the right to adopt and enforce special non-discrimination laws and regulations in ice-covered waters:

…Consequently, Canada considers that its accession to the Protocol of 1978, as amended, relating to the International Convention for the Prevention of Pollution from Ships, 1973 (MARPOL 73/78) is without prejudice to such Canadian laws and regulations as are now or may in the future be established in respect of Arctic waters within or adjacent to Canada.\textsuperscript{101}

The US and a group of European States subsequently issued a communication insisting that laws and regulations enacted on the basis of Article 234 must have “due regard to navigation” and be based on the best available scientific evidence.\textsuperscript{102}

Whether Article 234 provides sufficient legal basis for NORDREG is still fiercely debated.\textsuperscript{103} One feature that seems especially difficult to reconcile with Article 234 is the indiscriminate application of NORDREG above the 60\textsuperscript{th} northern parallel, regardless of ice-cover, climatic conditions or conditions of navigation. Thus it seems fair to conclude that Canadian state practice supports a \textit{de maximis} reading of Article 234, although this reading has been criticised both by the US and Singapore, as well as by international shipping organisations.
2. Russia

In 2012, Russia adopted a new regulation governing shipping in the Arctic.\textsuperscript{104} The new regulation amended the existing legal framework dating from the Soviet era.\textsuperscript{105} The purpose of the 2012 amendment was, \textit{inter alia}, to improve environmental regulation in line with Article 234.\textsuperscript{106} The explanatory note to the new legislation explicitly invokes Article 234, stating that:

The available Rules of Navigation on the Northern Sea Route approved by the Ministry of the Maritime Fleet of the USSR on September 14, 1990, are consistent with the requirements of Clause 234 of the UN Convention on the Law of the Sea of 1982 that empowers the coastal states to adopt and provide observance of the non-discriminatory laws and regulations to prevent, reduce and control pollution of the marine environment from the vessels in the regions within the exclusive economic zone covered with ice for the most of the year.\textsuperscript{107}

The explanatory note further states that the situation in the Arctic has changed dramatically since the Rules of Navigation in the Northern Sea Route were first approved and that the new rules provide an updated contemporary legal framework based on Article 234.\textsuperscript{108}

The Russian regulations apply to the “Northern Sea Route”, which is defined in Article 5(1) of the amended Merchant Shipping Code as:

…a water area adjoining the northern coast of the Russian Federation, including internal sea waters, territorial sea, contiguous zone and exclusive economic zone of the Russian Federation, and limited in the East by the line delimitating the sea areas with the United States of America and by the parallel of the Dezhnev Cape in the Bering Strait; in the West, by the meridian of the Cape Zhelanie to the Novaya Zemlya archipelago, by the east coastal line of the Novaya Zemlya archipelago and the western limits of the Matochkin Shar, Kara Gates, Yugorski Shar Straits.

Earlier legislation had controversially left open the possibility that Russia might extend legislative jurisdiction beyond its EEZ.\textsuperscript{109} This controversy now seems to have been settled, as the new definition does not extend Russian jurisdiction beyond either the Russian EEZ or to the adjacent parts of the Barents or Bering Sea.\textsuperscript{110}
In 2013, Russia also adopted the “Rules of navigation in the water area of the Northern Sea”. The new rules establish rights and prerogatives that go beyond the existing legal framework. Similar to NORDREG, the Russian scheme subjects foreign flagged shipping to a mandatory system of prior notification and authorisation before entering the Russian EEZ.

Although the stated aim of the new rules is to ensure “safe navigation and protection of the marine environment,” Russian practice does not always seem to support this goal. In 2013, for example, the *Arctic Sunrise* was denied access to the Northern Sea Route as part of Greenpeace’s operation “Save the Arctic”, which sought to stop offshore oil drilling and industrial fishing in Arctic waters. As part of its operation, Greenpeace wanted to stage a protest at the Russian offshore oil platform Prirazlomnaya, located within the Russian EEZ. Greenpeace made several unsuccessful applications for authorisation to enter Russia’s EEZ. In replying to the fourth application, the Russian authorities made explicit reference to Article 234. The *Arctic Sunrise* subsequently entered the Russian EEZ without authorisation and staged a protest near the Prirazlomnaya platform, with two activists managing to reach the platform itself. In response, the *Arctic Sunrise* was boarded by the Russian authorities and the crew detained.

The detention led to several protests, including by the Netherlands, the flag State of the *Arctic Sunrise*. A Dutch Minister declared that “Article 234… is no license to inhibit the freedom of navigation without restrictions.” The case was brought before an arbitral tribunal constituted under annex VII of the LOSC. The tribunal was not satisfied that the “boarding, seizure, and detention of the *Arctic Sunrise* constituted enforcement in accordance with Article 234”, although this conclusion was based on factual circumstances and not an interpretation of the LOSC. This and other incidents do, however, show that the Russian authorities have become less tolerant of vessels sailing in their EEZ without prior authorisation. Russian legislation thus also supports a
de maximis interpretation of Article 234, whereas the reaction of the Netherlands seems to suggest that Article 234 does not provide an unfettered right to interfere with the freedom of navigation.

3. **Denmark/Greenland**

Denmark was one of the few States that spoke on record at the Third Law of the Sea Conference on the importance of Article 234, but it has not adopted any special legislation for ice-covered areas. In 2002, Denmark introduced a mandatory vessel reporting system known as GREENPOS applicable to the Arctic waters around Greenland. Unlike the Canadian or Russian schemes, there is no requirement of prior authorization for entering the EEZ, but all ships on voyages to or from Greenlandic ports and places of call are required to report. A failure to do so can be punished with a fine or imprisonment. The rules are adopted in accordance with SOLAS regulation V/8-1.

Denmark’s Arctic strategy states that it will work to establish global rules and standards for navigation in the Arctic via the IMO. The strategy further provides:

> Should it prove that agreement on global rules cannot be reached, and in view of the especially vulnerable Arctic environment and the unique challenges of security, 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.

The statement clearly refers to Article 234, although it does not impose a requirement for prior consultation. The reference could also be taken to mean that Denmark has reserved its right to rely on Article 234 at a later stage, although there is no need for this type of formal notice.

It may further be questioned whether the statement is still valid. The Polar Code entered into force in 2017, amending both SOLAS and MARPOL. It introduced mandatory rules on measures covering safety (part I-A) and pollution prevention (part II-A) as well as non-mandatory recommendations on a wide range of issues. The aim of the Polar Code is to supplement existing
IMO instruments in order to increase the safety of navigation and mitigate the impact on the people and environment in polar waters.\textsuperscript{126}

4. **Norway/Svalbard**

Norway has not adopted any special legislation for 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. Article 234 is therefore inapplicable, although Canada and Russia’s broad exercise of legislative jurisdiction in their respective EEZ seems to suggest that the requirement has been interpreted generously. The lack of Norwegian regulation could therefore indicate a disagreement over the interpretation of Article 234 or simply a lack of interest. Another possible reason for the lack of legislation is that Norway’s maritime boundaries and jurisdiction over its Arctic waters have been disputed for decades, particularly near the Svalbard archipelago, which is located far north of the 60\textsuperscript{th} northern parallel.\textsuperscript{127} The 1920 Spitsbergen (today known as “Svalbard”) Treaty established Norwegian sovereignty over the archipelago.\textsuperscript{128} Norway claims that the treaty does not affect its rights beyond the territorial sea around Svalbard.\textsuperscript{129} But several parties have contradicted this claim.\textsuperscript{130} Although it has encouraged States holding different views to go to the ICJ, Norway has largely refrained from challenging any contradictory claims.\textsuperscript{131} Thus in 1976 when Norway established an EEZ off its mainland it did not include Svalbard.\textsuperscript{132} One explanation for Norway’s restraint is it longs standing policy of maintaining of peace and stability in the area.\textsuperscript{133}

5. **The United States\textsuperscript{134}**

As noted initially, the US has not ratified the LOSC and can therefore only rely on Article 234 as the legal basis for its legislative jurisdiction if it reflects customary international law, which is
accepted by the US.\textsuperscript{135} It is not, however, entirely clear how a provision that was negotiated by three States, with little interest shown by other States, and which has only been applied by Canada and Russia can have generated enough practice to satisfy the general requirements for the establishment of customary international law.\textsuperscript{136} Especially as Canada is the only State that had established a clear practice before becoming party to the LOSC, a significant fact given that the importance of subsequent practice remains theoretically unclear.\textsuperscript{137} In addition, the US position with regard to Article 234, has been somewhat inconsistent and ambiguous.\textsuperscript{138}

Unlike Canada and Russia, however, the US has not established a system of prior notification and authorisation for entering its EEZ. The US is, moreover, unlikely to do so as it would be inconsistent with its objections to the Canadian NORDREG scheme, as well as with its long established Freedom of Navigation Program, initiated in 1979 \textit{inter alia} to preserve and protect global navigation rights.\textsuperscript{139}

The US is sometimes accused of having passed as equally far-reaching legislation as Canada and Russia, often with reference to the 1990 Oil Pollution Act (OPA), which was adopted in response to the \textit{Exxon Valdez} oil spill in 1989.\textsuperscript{140} Brubaker, for instance, writes that while Russian and US laws are not directly comparable (because Russia has a formal system for prior notification and authorisation), the US system “clearly has procedures for determining authorised passage upon sufficient proof of financial security.”\textsuperscript{141} He continues:

Under the OPA, if a foreign vessel cannot prove financial security, then denial of clearance into the USA or US navigable waters, detention at the place where the lack of evidence is discovered, and seizure and forfeiture with US navigable waters may result.\textsuperscript{142}

Brubaker refers to the Certificate of Financial Responsibility, issued by the National Pollution Funds Center of the US Coast Guard.\textsuperscript{143} A certificate is required by all vessels over 300 gross tons calling into US ports.\textsuperscript{144} The requirement also applies to foreign flagged vessel that use the EEZ
to “transship or lighter oil destined for a place subject to the jurisdiction of the United States”, which includes, but is not limited to, ports.\textsuperscript{145} In the latter case, a certificate is required both by the vessel that receives the oil as well as by the vessel that delivers it, although the latter may not visit a US port. Molenaar has referred to the requirement as a “very extensive and unusual exercise of port State jurisdiction”, which arguably constitutes an “unjustifiable interference with activities carried out by other States in the exercise of their rights” pursuant to the LOSC Article 194(4).\textsuperscript{146}

Even though the US regime established by the OPA is broader and more comprehensive than the international regime established under the auspices of the IMO, it is not as far reaching as either the Canadian or Russian laws applicable in the Arctic.\textsuperscript{147} Firstly, the OPA only applies to vessels that have a clear connection with the US, either by being destined, or cooperating with another vessel destined, for a place subject to US sovereignty.\textsuperscript{148} Thus vessels merely transiting through the American EEZ are not affected. Secondly, the exercise of legislative jurisdiction by the US may also be supported by traditional bases of jurisdiction, such as the territorial principle (via the effects doctrine) or the protective principle.\textsuperscript{149} The application of the effects doctrine to vessels that have not yet reached port is controversial, but not uncommon.\textsuperscript{150}

V. Preliminary Conclusions: Arctic Practice is Inconclusive

The practice of the Arctic coastal States sheds little light on the interpretation of Article 234. While both Canada and Russia have implemented far-reaching laws, neither Denmark nor Norway has exercised its right under Article 234. The US cannot directly rely on Article 234, and its domestic legislation is, in any case, less intrusive than that of Canada and Russia. It is further important to note that the adoption of extensive legislation and/or the exercise of authority over (ostensibly) ice-covered areas has sometimes been met by protest. There are therefore clear differences of opinion, and the practice of Canada and Russia cannot be said to reflect a consensus among parties.
to the LOSC. This means that there is little support in State practice for a *de maximis* interpretation of Article 234. The silence of many states also means that there is little support for a *de minimis* interpretation, but as will be seen in the next section, general practice concerning legislative jurisdiction over the EEZ might also influence the interpretation of Article 234.

VI. **Practice from outside the Arctic: creeping jurisdiction**

A significant number of States outside the Arctic have enacted legislation that departs from the LOSC, interfering with the navigational rights and freedoms of foreign States.\(^{151}\) Most of the legislation concerns military use of the EEZ,\(^{152}\) but there is also a tendency to implement extensive rules on civil navigation, in particular in relation to environmental protection. The tendency of coastal States to exercise ever wider control over the EEZ has been referred to as “creeping jurisdiction”\(^{153}\) or “territorialisation”\(^{154}\) of the EEZ.

Various States have made extensive claims restricting navigation in the EEZ. Some States have asserted that they have a right to be informed of planned voyages carrying ultra-hazardous cargo, such as nuclear material.\(^{155}\) India, for example, requires 24-hour advance notice before vessels carrying hazardous and dangerous goods can transit through its EEZ.\(^{156}\) Other States maintain that they have not only a right to be informed, but that they can also deny passage of such cargo through their EEZ.\(^{157}\)

The controversy concerning the advance notification requirement is reflected in declarations and objections to the 1989 Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal. The Convention *inter alia* seeks to restrict the transboundary movements of hazardous wastes, but explicitly acknowledges that nothing in the “Convention shall affect in any way the... rights and freedoms as provided for in international law and as reflected in relevant international instruments”, such as the LOSC.\(^{158}\)
Several States, including Egypt, Colombia, Mexico, Portugal, Uruguay, and Venezuela, have made declarations intimating that the Basel Convention strengthens their jurisdiction over the EEZ.\textsuperscript{159} However, a number of other States have objected to any assertion that the Basel Convention requires prior permission or authorization for the passage of vessels transporting hazardous wastes while exercising the right of innocent passage through the territorial sea or freedom of navigation in the EEZ.\textsuperscript{160}

The LOSC contains no provision that allows coastal States to regulate the transport of goods through the EEZ \textit{per se} and such restrictions are therefore difficult to reconcile with the Convention.\textsuperscript{161} Kraska writes that as a result of coastal States pressing for stronger environmental regulations on foreign flagged ships in the EEZ, many States are now reluctant to exercise their rights to transport nuclear material.\textsuperscript{162}

It is not only ultra-hazardous cargo that is being limited. After the \textit{Prestige} oil spill in 2002, Spain, France and Portugal banned single hulled oil tankers from their EEZ.\textsuperscript{163} At the time, these measures were stricter than the international standards and incompatible with the LOSC.\textsuperscript{164} Other States have gone even further. One of the most extreme cases is the Maldives, which requires prior authorisation for any foreign flagged vessel to enter its EEZ, regardless of its cargo.\textsuperscript{165} Many other States have made extensive claims of jurisdiction and at least five States – Barbados, Guyana, India, Mauritius and Pakistan – claim the right to extend any law in force within their territorial sea to the EEZ.\textsuperscript{166} Burma claims rights and jurisdiction for the construction, maintenance or operation of artificial islands, offshore terminals, installations and other structures and devices necessary for the exploration of its natural resources, which is permitted under the LOSC, but also, for the convenience of shipping, or for any other purpose.\textsuperscript{167} Grenada, Guyana, India, Mauritius, Pakistan and the Seychelles claim similar rights.\textsuperscript{168}
While these excessive maritime claims are well documented, according to Kraska, nearly all States have failed to protest. Accordingly, the “cumulative result of this diplomatic nonfeasance is that the clear direction of the global trend in oceans politics and law is toward diminished rights and freedoms in the EEZ.” This might, however, be an overstatement. Although a significant number of States have acted in a way that is clearly inconsistent with the LOSC, as Churchill concludes, none of the practice seems sufficiently widespread or uniform to amount to an agreed interpretation of the Convention [LOSC] or to have given rise to a new rule of customary international law modifying or supplementing the Convention.

Although Churchill reached this conclusion in 2005, as the number of States claiming extensive rights in the EEZ remains limited, his assessment is still valid today. This is inter alia confirmed by protests levelled against the declaration made by Ecuador upon accession to the LOSC in 2012, providing that within its “maritime spaces”, which included the EEZ,

prior notification and authorization shall be required for the transit through its maritime spaces of ships powered by nuclear energy or transporting radioactive, toxic, hazardous or harmful substances.

Belgium, Finland, Germany, Italy, Ireland, Latvia, the Netherlands, Spain, Sweden, the United Kingdom and the European Union protested the Ecuadorian declaration.

Although the above mentioned practice might not modify the LOSC or create new customary norms, it is still significant. Indeed, those States that have claimed a right to exercise extensive jurisdiction in their EEZ – such as Barbados, Guyana, India, Mauritius and Pakistan – or have adopted rules on prior notification and/or authorisation – such as India or the Maldives – are no longer in a position to object to such measures by Canada or Russia. They are in effect estopped. The same is true of those States that have accepted the extensive jurisdictional claims. Even States that have not officially accepted such claims but are specially affected and
have failed to protest might be said to have acquiesced.\textsuperscript{177} This could have been the case, for example, in regards to the \textit{Arctic Sunrise} incident, if the Netherlands had not protested over Russia’s exercise of jurisdiction based on Article 234.\textsuperscript{178}

It is important to note, however, that not every lack of protest should be interpreted as acquiesce. In this regard, Churchill writes that there are several good theoretical and practical reasons why a State should not be considered as having impliedly recognised or acquiesced in practice by parties to a multilateral treaty.\textsuperscript{179} Firstly, if a failure to protest could so easily be regarded as acquiescence, it would undermine the fundamental principle that agreements must be performed in good faith (\textit{pacta sunt servanda}). Similarly, if States could adopt practice contrary to the Convention and if such practices is then accepted merely by reason of the absence of protests, individual States are in effect being given a right of unilateral interpretation of their obligations, which seems to weaken the prohibition in the LOSC against reservations.\textsuperscript{180}

Imposing a strict obligation to protest would also arguably place too onerous a burden upon State parties, forcing them to constantly monitor a great number of multilateral treaties.

\textbf{VII. Conclusion}

There is obviously some controversy concerning the right to regulate shipping in the Arctic. Article 234 is unclear and neither the drafting history nor subsequent practice in the application of the provision establishes much clarity regarding its interpretation. Both Canada and Russia have interpreted Article 234 liberally, implementing stringent environmental laws in vast areas of the Arctic, and, more controversially, requiring prior notification and authorisation for entry into their respective EEZ, measures clearly reflecting a \textit{de maximis} interpretation.

In contrast, the actions of a few states support a \textit{de minimis} interpretation of Article 234, but condemnation is far from universal. Apart from the US and Singapore, few States have
protested Canadian and Russian actions. The US is not party to the LOSC and, while its protest might affect the development of customary international law, it has no direct effect on the interpretation of the LOSC.\textsuperscript{181}

Some States are not, moreover, in a position to protest. As discussed, many States have, like Canada and Russia, made extensive claims over their own EEZ. These States would be acting inconsistently with their own claims if there were to object to claims made in the Arctic. The Maldives, for example, which requires prior authorisation for any foreign flagged vessel to enter its EEZ, could not object to similar measures by other States, and especially not by Canada and Russia, which at least have some support for their actions in Article 234.

Many States may still challenge extensive claims in the Arctic. The traditional international means for challenging such claims is by protest or by instituting legal proceedings under the LOSC or other international organs or by taking peaceful countermeasures.\textsuperscript{182} Currently, however, these options have only been used by the US and Singapore. A more likely option is a jurisdictional “battle”, which refers to the confrontation of competing claims, for instance by the exercise of legislative or enforcement jurisdiction, such as those by Canada and the US. At times, opposition to the exercise of jurisdiction will lead the legislating State to withdraw or modify its claim. At other times, the objecting State has to accept the new claim, as was the case with the United States and Article 234, which sought to preserve the freedom of navigation.

The battle over the Arctic has arguably been raging for decades if not centuries, but the battleground is changing.\textsuperscript{183} Climate change has increased the interest in Arctic shipping and in Article 234, but it may also decrease the importance of the latter. If ice-cover in the Arctic is reduced as a result of global climate change to the extent that is widely predicted, many parts of Arctic EEZ will no longer be covered with ice for “most of the year” and thus the Arctic coastal
States will no longer be able to rely on Article 234. When this may happen is still uncertain and it does not satisfactorily explain why so many States seem disinclined to make a clear statement on the appropriate reach of Article 234.


4 The fact that ships have to navigate through the territorial sea and/or EEZ of the five Arctic coastal States to reach the central Arctic Basin has led to the Arctic being described as “zone-locked”. Cf J. Kraska, Maritime Power and the Law of the Sea: Expeditionary Operations in World Politics (Oxford University Press: 2010) 4. The central Arctic Basin is not the only zone-locked area. Other examples include the “Banana Hole” in the North-East Atlantic and, more broadly speaking, the Mediterranean Sea. Whether the Arctic Ocean is an enclosed or semi-enclosed sea in terms of Articles 122 and 123 of the United Nations Convention on the Law of the Sea (LOSC), adopted 10 December 1982, entered into force 16 November 1994, 1833 U.N.T.S. 396 has been long been debated but is not directly relevant for the purposes of this paper. Cf. B. Baker, “The Developing Regional Regime for the Marine Arctic” in E.J. Molenaar, A.G.O. Elferink and D.R. Rothwell (eds.), The Law of the Sea and the Polar Regions: Interactions between Global and Regional Regimes (Martinus Nijhoff Publishers: 2013) 35, 51.
5 Arctic sea ice has been declining for the past five decades. The 2017 SWIPA assessment predicts that the Arctic could be largely free of sea ice in summer as early as the late 2030s. AMAP, 2017. Snow, Water, Ice and Permafrost. Summary for Policy-makers. Arctic Monitoring and Assessment Programme (AMAP), Oslo, Norway 3.


7 The LOSC contains special provisions on naval forces in the EEZ. On this topic, see Kraska, supra note 4, pp. 221–90.


9 Amendments to the International Convention for the Safety of Life at Sea, 1974, as amended, Resolution MSC.386(94), IMO Doc MSC 94/21/Add.1 Annex 7 (21 November 2014);
Amendments to the Annex of the Protocol of 1978 Relating to the International Convention for the Prevention of Pollution from Ships (Amendments to MARPOL Annexes I, II, IV and V), Resolution MEPC.265(68), IMO Doc MEPC 68/21/Add.1 Annex II (15 May 2015);


16 Arctic Council, supra note 1, at 16.

17 Ibid., at 20-24.

18 See Roach and Smith, supra note 10, at 318-328.


21 Ibid.


24 Article 192 of the LOSC.

25 A few States still claim sovereign rights over the EEZ. See Kraska, supra note 4, at 26-27.


27 Rothwell and Stephens, ibid., at 285-87.

28 Ibid., at 112.

29 Articles 17-26 and 52 of the LOSC.

30 Article 38 of the LOSC.

31 Article 53 of the LOSC.

32 Articles 87(1)(a) and, in relation to the EEZ, Article 58(1) of the LOSC.
Freedom of navigation in the EEZ suffers from the same limitations as those imposed on navigation on the high seas by virtue of Article 58 and is also subject to the coastal State’s specific EEZ rights, such as those defined in Articles 60(6), 210 and 211 of the LOSC. Cf Churchill and Lowe, supra note 26, at 170-173.

34 States have an explicit right to regulate the safety of navigation as well as other issues, but may not impose requirements on foreign ships that are either discriminatory or which have the practical effect of denying or impairing the right of innocent passage. Pollution from vessels is regulated in Article 221(4). See also Article 17, 21, and 24.


36 Articles 207 and 213 of the LOSC.

37 Articles 210(5) and 216 of the LOSC.

38 Articles 208 and 214 of the LOSC.

39 Articles 212 and 222 of the LOSC.

40 Articles 211(5)-(6), 220 and 234 of the LOSC.

41 On this subject, see e.g. E.J. Molenaar, *Coastal State Jurisdiction Over Vessel-Source Pollution* (Kluwer Law International: 1998).

42 Article 220(5) of the LOSC.


44 Article 220(6) of the LOSC.

45 See Article 220(1) and Tan, supra note 36, at 213.
For a detailed analysis, see T. Dux, *Specially Protected Marine Areas in the Exclusive Economic Zone (EEZ): The Regime for the Protection of Specific Areas of the EEZ for Environmental Reasons under International Law* (Lit Verlag: 2011).


Rothwell and Stephens, supra note 26, at 126 and 517.

See Articles 56(1)(b)(iii), 58(3), 194(5), 210, 211, 216-21, 234 of the LOSC.


58 This interpretation seems to be supported by Churchill and Lowe, supra note 26, at 348.


60 Brubaker, supra note 51, at 227.

61 See e.g. Bartenstein, supra note 8; T. Henriksen, ”Rollen Til Kyststaten i Regulering av Arktisk Skipsfart” in T. Henriksen and Ø. Ravna (eds.), Juss i Nord: Hav, Fisk og Urfolk: En Hyllest til det Juridiske Fakultet ved Universitet i Tromsøs 25-Årsjubileu (Gyldendal: 2012) 4, 80-84.


63 D. McRae, “Arctic Sovereignty? What Is at Stake?” (2007) 64 Behind the Headlines 1, 17. The latter is undisputed, as warships or vessels owned or operated by States are explicitly excluded from any provisions in the LOSC regarding the protection and preservation of the marine environment. See Article 236 of the LOSC.


65 For a recent overview of the literature, see Bartenstein, supra note 8.


68 Nolte, supra note 67, at 59.

69 Ibid., at 20.

70 Ibid.


72 Nolte, supra note 67, at 21–22.

73 Draft conclusion 8. Ibid., at 24.

74 Ibid., at 23.


76 In the matter of the South China Sea Arbitration (The Republic of the Philippines / The People’s Republic of China), Award on the Merits (12 July 2016), paras. 552-553, available on


80 Dürr and Schmalenbach, supra note 68, at 559.


83 Cf Rayfuse, supra note 65, at 239.


85 Huebert, supra note 54, at 252.

86 Cf R.B. Bilder, supra note 52.


88 An Act to amend the Arctic Waters Pollution Prevention Act (S.C. 2009, c. 11).


The reporting requirement applies to all vessels of 300 gross tonnage or more as well as to vessels involved in towing or pushing operations with a combined gross tonnage of 500 or more. *Ibid.*, at sections 3(a) and (b).

*Ibid.*, at section 3(c).


Canadian Arctic Waters Pollution Prevention Act, supra note 89, section 1.


Canada, Safety of Navigation: Comments on MSC 88/11/2, IMO Doc MSC 88/11/3, 5 October 2010, para. 5.

McDorman, supra note 56, at 412.


Diplomatic Note from the United States to Canada regarding NORDREG (19 March 2010). Available at: <www.state.gov/documents/organization/179286.pdf>.

MSC 88/26/Add.1 Annex 28 (19 January 2011) 1.

102 See the communication from the US and communications from Belgium, Denmark, France, Germany, Greece, Italy, the Netherlands, Portugal, Spain, and the United Kingdom reproduced in *Status of multilateral conventions and instruments in respect of which the International Maritime Organization or its Secretary-General performs depository or other functions* (last updated 19 January 2018). Available at <www.imo.org/en/About/Conventions/StatusOfConventions/Documents/Status%20-%202018.pdf >.

103 See McDorman, supra note 56 and Kraska, supra note 91.


107 Explanatory Note, *ibid.*


112 Franckx, supra note 111, at 203.


114 *In the matter of the Arctic Sunrise Arbitration (Kingdom of the Netherlands v Russian Federation),* Award on the Merits, 14 August 2015, paras. 293-297. Available on the PCA website at <https://www.pcacases.com/web/sendAttach/1438>.

115 Cited in Franckx, supra note 111, at 209.


117 Franckx, supra note 111, at 213.

118 This section does not consider Greenlandic legislation as the Greenland Self-Government authorities do not have jurisdiction over the waters beyond three miles from the coast.

119 Kraska, supra note 55, at 267.

120 See IMO SN/Circ 221 (29 May 2002).

121 Order on ship reporting systems in the waters off Greenland (reporting service in Greenland), Order no. 170 (17 March 2003) issued by the Danish Maritime Authority, Section 5.


124 Rayfuse, supra note 65, at 242.

125 Polar Code, supra note 9.

126 Ibid, Preamble.


128 The Svalbard treaty, which grants certain economic rights in the area to the contracting parties, is open to all States. Ibid., at 555. There are currently 42 State Parties to the Svalbard Treaty. L.N.T.S, Vol. 2, No. 1, 1920 at 7-19.


130 Pedersen, supra note 3, at 914 and Churchill and Ulfstein, supra note 127, at 564.

131 Pedersen, supra note 3, at 916.


133 White paper, supra note 130, at 12.

134 This section focuses on Federal legislation as only the US federal government has jurisdiction over the waters beyond three nautical miles.
McDorman, supra note 85, at 261. Brubaker notes that Article 234 is probably materialising as a customary international norm. For present purposes, it is unnecessary to evaluate this claim. Brubaker, supra note 12, at 26.

Cf North Sea Continental Shelf cases (Germany/Denmark; Germany/Netherlands), Judgment, [1969] I.C.J. Reports 3, at 39-43, paras. 60-74. One possibility could be that a local custom has been established, but then it would not be applicable against States that have opposed the liberal interpretation of Article 234. Cf Asylum Case (Colombia v Peru), Judgment [1950] I.C.J. Reports 266, at 277-278.

Cf the so-called Baxter paradox, according to which “as the number of parties to a treaty increases, it becomes more difficult to demonstrate what is the state of customary international law dehors the treaty.” R.R. Baxter, Treaties and Custom, (1970) 129 Recueil des Cours 36, 64 and 73.

See Fields, supra note 1, at 74.

Roach and Smith, supra note 10, at 637.

Oil Pollution Act of 1990 (33 USC 2701-2720).


Ibid.

A certificate is conditional on vessel operators demonstrating their ability to pay for potential clean-up and damages up to the liability limits required by the 1990 Oil Pollution Act (33 USC s. 2704).
Non-self-propelled vessels that do not carry oil as cargo or fuel are exempted (33 USC s. 2716(a)(1)).

33 USC s. 2716(a)(2).

Molenaar, supra note 42, at 377.


The relevant US legislation (33 USC s. 2716(a)(2)) refers to “jurisdiction”, but it is submitted that a better term is “sovereignty”.


On such military use of the EEZ, see Kraska, supra note 4.

Rothwell and Stephens, supra note 26, at 125, 454 and 483.

At least 65 States have limited navigation in the EEZ, mostly in relation to warships, but more than a dozen States have also denied nuclear-powered ships the right to sail through their EEZ. For a list of States, see Kaye, supra note 152, at 354-355. See also Kraska, supra note 4, at 344.

Kraska, supra note 4, at 310.

Rothwell and Stephens, supra note 26, at 125.


The declarations are available at <www.basel.int/>.

See objections by Germany, Italy, Singapore, the United Kingdom and the United States. Ibid. For comments, see Roach and Smith, supra note 10, at 260-61.

Rothwell and Stephens, supra note 26, at 125-126. See also Kraska, supra note 4, at 345.

Kraska, supra note 4, at 345.

Rothwell and Stephens, supra note 26, at 125-126. See also Kraska, supra note 4, at 345.

Kraska, supra note 4, at 345.

Single-hull tankers were phased out through revisions to MARPOL Annex I, so that from 2010 all oil tankers were required to have double hulls. Cf. Rothwell and Stephens, supra note 26, at 125-26 and 509-10.

Churchill, supra note 72, at 131; Roach and Smith, supra note 10, at 171. See also Kraska, supra note 4, at 26-27.

Roach and Smith, supra note 10, at 171.

Ibid., at 172.

On infringements within the EEZ, see ibid., at 170-180. See also the lists established under the U.S. Freedom of Navigation programme maintained by the U.S. Department of Defence, available at <policy.defense.gov/OUSDPOffices/FON.aspx>.

Kraska, supra note 4, at 9.

Ibid.

Churchill, supra note 72, at 140-41.


Communications from Belgium (22 October 2013), Finland (22 October 2013), Germany (21 October 2013), Ireland (21 October 2013), Italy (23 October 2013), Latvia (21 October 2013), the Netherlands (21 October 2013), Spain (17 October 2013), Sweden (18 October 2013), the United Kingdom (17 October 2013) and the European Union (23 October 2013). Available at https://treaties.un.org.

Cf supra note 72, at 100.

Ibid.

Some would go even further. For example, O’Connell argues that protest on its own may not be sufficient to prevent the consolidation of claims into rights. D.P. O’Connell, The International Law of the Sea (Oxford University Press: 1984) 41-42.

See, however, the statement by the Tribunal in the Arctic Sunrise Case wherein it declared that it was not satisfied that the boarding, seizure, and detention of the Arctic Sunrise by Russia...
constituted enforcement measures taken pursuant to Russian laws and regulations adopted in accordance with Article 234 of the LOSC. Supra note 115, para. 215.

179 Churchill, supra note 72, at 101-102.

180 Article 309 of the LOSC.

181 In this regard, Article 31(3)(b) of the VCLT is very clear: “Any subsequent practice in the application of the treaty which establishes the *agreement of the parties* regarding its interpretation…” [emphasis added]. The U.S. position as a non-party to the LOSC raises questions concerning the relationship between Article 31(3)(b) and customary international law, especially since the general rules on treaty interpretation specify that not only is state practice a mandatory element of interpretation but also “any relevant rules of international law applicable in the relations between the parties”, which obviously includes customary international law.

182 Churchill, supra note 72, at 100.


184 However, if Canada does not change its relevant legislation even in the face of such changed circumstances, this might also be interpreted as new practice leading to another jurisdictional battle.