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**Challenges for icebreaker assistance for ships:**

**Exercising navigational rights under the LOSC**

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## Introduction

### 1.1 Context

With the advent of climate change and other factors, the Arctic has, in comparison to previous decades, become more accessible from a domestic and international standpoint.<sup>1</sup> The Arctic navigation window has increased in length as sea-ice continues to recede. What was known as one of the last untouched locations on earth is now within human conquest within one's lifetime.<sup>2</sup> As more vessels traverse these waters, there will be a rise of ships operating in convoys. Though this is not to say that travel in the Arctic is without peril or hazards. On the contrary, vessels must prepare extensively to navigate in the Arctic as it is still a harsh environment.<sup>3</sup>

Sea-ice of varying thickness pose a danger to ships in the Arctic, and as a result, assistance is needed to mitigate this hazard. This assistance is provided by icebreaker ships and support vessels that play a crucial role in supporting navigation in the Arctic. Icebreaker assistance is an essential service; that, without, would make Arctic navigation practically unfeasible. As the Arctic becomes, more accessible icebreakers will continue to play a crucial role, both presently and in the future. The more one navigates in the Arctic; the more icebreaker assistance will be utilized to meet these demands. For this thesis - icebreaker assistance will be defined as a service or an activity that involves, at minimum, two vessels – one icebreaker and one ship that is unable to navigate without the icebreaker.<sup>4</sup>

The Arctic is not one uniform area, as different sections are under the jurisdiction of different Arctic coastal states, and some pockets consist of high seas, which are subject to the jurisdiction of no State.<sup>5</sup> The entirety of the Arctic is subject to the 1982 United Nations Convention on the

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<sup>1</sup> Aldo Chircop, Pamel PG and Czarski M, "Canada's Implementation of the Polar Code" [2018] 24 *The Journal of International Maritime Law* 429.

<sup>2</sup> Aldo Chircop, 'Climate Change and The Prospects of Increased Navigation in The Canadian Arctic' (2007) 6 *WMU Journal of Maritime Affairs* 195.

<sup>3</sup> This thesis will make use of the word vessels and ships interchangeably and will make distinctions when needed.

<sup>4</sup> A more thorough definition will be given to icebreaker assistance in chapter 2. The definition of icebreaker assistance will be synthesized by looking the Polar Code as well as at the state practice of the Arctic Coastal States.

<sup>5</sup> Lawson W Brigham, 'The Changing Maritime Arctic and New Marine Operations', *Governance of Arctic Shipping* (Brill Nijhoff 2017) 12.

Law of the Sea ('LOSC'). The LOSC also applies to vessels operating in the Arctic, such as icebreakers. The LOSC applies via the general regime of different maritime zones but also via virtue of Article 234, which applies specifically to the Arctic.<sup>6</sup> Article 234 gives the Arctic Coastal States the right to adopt rules and regulations for the prevention, reduction, and control of marine pollution within their maritime boundaries when certain conditions are met.<sup>7</sup> The Arctic States, namely the Dominion of Canada ('Canada'), the Russian Federation ('Russia'), Kingdom of Norway ('Norway'), Kingdom of Denmark ('Denmark'), and the United States of America ('United States') have keen interests in the Arctic as the area is rich in resources and provides new avenues of navigation.

In particular, Canada and Russia, two important Arctic coastal states who have relied on Article 234 of the LOSC as a means to adopt regulations in their respective areas of the Arctic, have an extensive list of domestic legislation, policy, and State practice when it comes to navigation in the ice-covered regions of the Arctic. Both states make extensive use of icebreakers and offer icebreaker assistance to vessels in lateral passage. These two states together own most of all icebreakers in operation and have the most robust icebreaker services of all icebreaker owning actors.

Along the maritime zones of the Russian Federation, gone are the days where the Northern Sea Route ('NSR') was only opened for a trivial navigation season. The NSR constitutes the Kara, Laptev, East Siberian, and Chukchi Seas.<sup>8</sup> The NSR is connected by a network of different straits ranging from the Kara Strait in the west to the Long Strait in the East.<sup>9</sup> With the use of icebreaker assistance, the navigational season has been extended continuously year after year.

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<sup>6</sup> Kristin Bartenstein, 'The "Arctic Exception" In the Law of The Sea Convention: A Contribution to Safer Navigation in The Northwest Passage' (2011) 42 *Ocean Development and International Law* 25 - 26.

<sup>7</sup> Article 234 reads – “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”.

<sup>8</sup> Jan Jakub Solski, 'Russian Coastal State Jurisdiction Over Commercial Vessels Navigating the Northern Sea Route' (PhD, University of Tromsø 2018) 6.

<sup>9</sup> *Ibid.*, 6.



In 2020, the Russian Federation released its new Basic Principles on Arctic Strategy 2035, where the emphasis on settling the Arctic through the use of the NSR was a critical point.<sup>10</sup> Further complementing the new 2035 Strategy is Project 22220, which will render unto service the latest and most powerful class of Russian icebreakers to have ever come into existence. Russian icebreakers and the icebreaker assistance provided will continue to play a pivotal role in the development of the Russian Arctic.

While not having the same navigational pedigree as Russia, the ice-covered areas of the Arctic, along the Canadian Northwest Passage ('NWP'), have also seen an upscale in vessels navigating in the area. The NWP is a set of waterways that connect the Bering Strait on the West Coast to the Baffin Bay on the East coast of Canada.<sup>11</sup> Canada has had domestic legislation since the 1970s, relating to navigation in the ice-covered Arctic and has continued to adopt new legislation over the decades. A key component found in all Canadian Arctic legislation is the importance of icebreaker assistance and its role in ensuring safe navigation along the NWP. Thus, icebreakers are also of paramount importance for the Canadian State.

Icebreakers and icebreaker assistance are not just limited to Canada and Russia. On the contrary, numerous stakeholders, both Arctic and non-Arctic, see the importance of having icebreakers on hand and see the need to have icebreakers themselves. The fact that other states own icebreakers will potentially create future challenges along the lines of foreign-flagged icebreakers operating in both the NSR and NWP.

Icebreaker assistance and its value have also been addressed in the international sphere via the auspices of the International Maritime Organization ('IMO') and the International Code for Ships Operating in Polar Waters ('Polar Code'), which came into force on 1 January 2017. In these regulations for navigation in the Arctic – specific guidelines gave reference to icebreaker assistance and their necessity.

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<sup>10</sup> President of Russia, 'Executive Order - Basic Principles of Russian Federation State Policy in The Arctic to 2035' (President of Russia 2020).

<sup>11</sup> Brigham (n 5) 6.

## 1.2 Research Questions

Within the context of Arctic navigation and marine environmental protection, icebreaker assistance plays an integral role. Therein lies a potential problem as while icebreaker assistance plays a crucial role, there are still unresolved challenges regarding its compatibility within the law of the sea framework. It is uncertain to what extent the current legal framework for icebreaker assistance harmonizes with the law of the sea. Potential issues arise, such as icebreaker assistance in different maritime zones, Coastal State jurisdiction over foreign icebreakers, the role of immunity as found within the LOSC, and how this applies to immune vessels. While some of the problems are theoretical now, they can become of paramount importance in the next decade. Once practical limitations such as year-round Arctic navigation are solved and more icebreakers constructed, these problems will become a reality, and whether the current framework is enough remains to be seen.

This is also the primary focus of this thesis. Namely, this thesis aims to look at the regime of icebreaker assistance and, to that end to answer the following main research question:

- To what extent is the law of the sea suitable to address challenges posed by the activity of icebreaker assistance?

To answer the main research question, smaller sub-questions must be asked to conclude. These separate but interlocked questions will consist of the following issues identified as pertinent to the thesis:

- How does icebreaker assistance as an activity fit into the legal framework of the law of the sea?
- To what extent is the Russian Federation requirement that only ships flying the Russian flag can provide icebreaker assistance consistent with international law?
- How does the regime of icebreaker assistance interact with the regime of immunity?
- Who bears responsibility for any possible environmental harm when icebreaker assistance is provided?

The goal of this thesis is to identify, analyze, and answer the questions to the best of the author's ability.

### **1.3 Scope of the Thesis**

This thesis will focus on the ice-covered areas in the Arctic in general but with attention to both the NSR and the NWP. This thesis will primarily look at the legislation, policy, and state practice of Canada and Russia. Both Canada and Russia have adopted national legislation and regulations relating to the icebreaker assistance in ice-covered areas. This thesis will be making use of the definitions for the Arctic, like that found in the Polar Code.

The legislation and state practice of other Arctic states such as the United States and Norway will not be relied upon as much, if at all, as there is not enough data on the subject to merit further review. As this thesis will be focusing on icebreaker assistance as a means of exercising navigational rights, it is focusing more on a lateral passage within the areas as those described in the LOSC and not in areas with the Arctic, which do not meet the definition of Article 234. This thesis will also not focus on other relevant Arctic actors such as the Arctic Council as the mandate of such an organization does not relate to the regime of icebreaker assistance.

### **1.4 Methodology**

This thesis will primarily analyze the legal sources found in international law.<sup>12</sup> It will make use of the doctrinal ("black letter") methodology. With a particular focus on the law of the sea, the 1982 LOSC will be consulted extensively. To ascertain how Canada and Russia define icebreaker assistance; policy and regulations must also be consulted extensively. This author has benefited tremendously from the work of Jan Jakub Solski' whose Ph.D. dissertation provides an insight into Russian legislation and state practice as not all documents are available in English. As article 234 is of importance to this thesis, its impact and scope must also be analyzed.

Other legal instruments to be consulted will include the Polar Code provisions found within SOLAS and MARPOL. An extensive review of legal jurisprudence and legal academic articles will also be used in this thesis as they provide a thorough background on the subject.

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<sup>12</sup> Statute of the International Court of Justice (adopted 26 June 1945, entered into force 24 October 1945, 1946) USTS 993 Article 38.

## **1.5 Structure**

This thesis will consist of 5 chapters - an introduction, three body chapters, and finally, a conclusion.

Chapter 1 consists of the introduction to the thesis topic and presents the research question concerning icebreaker assistance as well as the scope and methodology to be used.

Chapter 2 will address the notion of icebreakers and answer the first research question of what icebreaker assistance is. Chapter 2 will further address what are icebreakers and present some practical information such as icebreakers in operation and the different types of icebreakers in existence.

Chapter 3 will focus on the international legal framework surrounding icebreaker assistance as set out in the LOSC. It will introduce the general LOSC framework applicable in ice-covered areas in the Arctic. Furthermore, an in-depth analysis of sovereign immunities will also be addressed and how it plays a role in the future of icebreaker assistance.

Chapter 4 will discuss the challenges faced by the regime icebreaker assistance. This thesis will address three challenges that are specific to the regime of icebreaker assistance. The first is the interplay between immune foreign-flagged icebreakers providing mixed escorts to merchant vessels. The second is the requirement that only Russian flagged vessels can provide icebreaker assistance in the NSR. The last challenge concerns the responsibility for the conduct and its consequences posed by icebreaker assistance.

Chapter 5 concludes the findings of this thesis as well as provide some general comments for what this might mean for the future of icebreaking assistance.

## 2 Icebreaker Assistance an overview

### 2.1 Introduction

Before discussing the legal framework of icebreaker assistance as well as the subsequent challenges, one must first ask: what is icebreaker assistance? Icebreaker assistance is not a singular activity but instead a plethora of different services and operations under the guise of enabling navigation in ice-covered waters. Icebreaker assistance is carried out by icebreakers and accompanying support vessels. Chapter 2 will, therefore, explain what icebreakers are and how they differ from other ships operating in the Arctic. Following that, Chapter 2 will define icebreaker assistance as well as limit the scope of icebreaker assistance for this thesis.

### 2.2 What are Icebreakers?

The first question that must that is asked though self-evident is, "what exactly are icebreakers"? The most common definition defines icebreakers as ships or vessels with the capability to break through sea-ice.<sup>13</sup> However, this is a misnomer as not all icebreakers are equipped to the same standard, and even within the ship class of icebreakers, some are unable to break through thick ice and are only limited to thin ice. Operationally speaking, there exist three categories of icebreakers – icebreakers that can traverse in light, medium, or heavy sea ice.<sup>14</sup> The distinction is based on the age of the sea-ice as older ice is both thicker and more difficult to break apart without the use of an appropriate icebreaker.<sup>15</sup>

The Polar Code defines icebreakers as ships with the operational profile relating to either escorting or ice management capabilities with the ability to undertake aggressive operations in ice-covered waters.<sup>16</sup> The functional profile for icebreakers primarily concerns the construction of the hull, as icebreakers must be both reinforced and thickened to withstand the impact of the

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<sup>13</sup> 'Icebreaker' (2020) <<https://www.oxfordlearnersdictionaries.com/definition/english/icebreaker,>> accessed 10 September 2020.

<sup>14</sup> Subhdeep Ghosh, 'Understanding Design of Ice Class Ships' (*Marine Insight*, 2020) <<https://www.marineinsight.com/naval-architecture/design-of-ice-class-ships/#:~:text=Icebreakers%20are%20special%20purpose%20vessels,or%20for%20other%20special%20purposes.>> accessed 10 September 2020.

<sup>15</sup> *Ibid.*

<sup>16</sup> IMO Doc. MSC 385(94) - MEPC 68/21/Add.1, Annex 10, "International Code for Ships Operating in Polar Waters" Polar Code 1.2 Definitions / 1.2.5

ice.<sup>17</sup> Furthermore, icebreakers must also be designed in a particular manner to break the ice in front of the vessel as well as have the necessary power to achieve this – as breaking apart, ice requires a tremendous amount of energy.<sup>18</sup> Regardless of the technical definition across the spectrum – the main attribute to icebreakers is their ability to both break ice as well as transverse in waters that would otherwise be deemed inaccessible for other vessels. Currently, icebreakers operate in both the Arctic and Antarctic and any area with significant ice-coverage though this thesis will focus exclusively on the Arctic.

Current Icebreakers have been in operation for the past 180 years.<sup>19</sup> Early 19<sup>th</sup> century icebreakers relied on steam-powered engines as a means of propulsion to make use of their mass to break the sea-ice.<sup>20</sup> During the mid - 20<sup>th</sup> century, modern icebreakers started operating in the Arctic, with the Soviet Union vessel Lenin being the first atomic or nuclear-powered icebreaker to come into service in 1957.<sup>21</sup> Since that time, icebreakers have significantly benefited from advancements thanks to modern technology, though remain the same in principle – a ship with a reinforced hull and an angled bow with ice cutting capabilities.

Icebreakers come in all shapes of sizes and have different ice-cutting capabilities. A majority of icebreakers run on normal fuel, and dependent on the size and other ice load requirements, can either operate independently for a fixed amount of time or must always be within distance of a port to refuel and restock, which in turn limits the capacity of icebreaker assistance. On the opposite end of the spectrum, you have nuclear power icebreakers that are considered the most powerful of all classes of icebreakers.<sup>22</sup> Nuclear powered icebreakers both have advantages and disadvantages. A significant advantage of nuclear icebreakers is that they can operate for an indefinite amount of time before calling to homeport – only being limited by supplies on the vessel.<sup>23</sup> A significant disadvantage is regarding their mode of power – a nuclear accident in

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<sup>17</sup> Kaj Riska, 'Design of icebreaking ships' [2010] Encyclopedia of Life Support Systems 5.

<sup>18</sup> *Ibid.*, 7.

<sup>19</sup> Stephen Jones, 'A History of Icebreaking Ships' (2008) 3 Journal of Ocean Technology 55.

<sup>20</sup> *Ibid.*, 56.

<sup>21</sup> *Ibid.*, 59.

<sup>22</sup> *Ibid.*, 68.

<sup>23</sup> *Ibid.*, 68

the Arctic would have devastating consequences for the marine environment, though as of 2020, there have not been any significant incidents involving nuclear icebreakers.<sup>24</sup>

The largest icebreaker in existence, though not yet in service, is the nuclear powered Russian icebreaker Arktika with a length of 173 meters and the capacity of providing 60 MW of power; when operational, the Arktika will have the capability to break through three meters thick sea-ice in the Arctic.<sup>25</sup>

Icebreakers are owned by both state and non-state actors, though due to the cost of building, maintaining, and supplying such vessels, most icebreakers are in whole or in a part state or state-sponsored ships. This will be discussed in further detail below.

### **2.2.1 Difference between icebreakers and ice-strengthened vessels**

Ships wishing to operate in the Arctic need to have ice-strengthened vessels to withstand the harsh conditions. However, there is a difference between ships able to perform in the Arctic and ships able to break sea-ice. This distinction is what separates icebreakers from regular ice-strengthened vessels. All icebreakers are ice-strengthened vessels, but not all ice-strengthened vessels are icebreakers.

Both States and different organizations have similar definitions when it comes to icebreakers, albeit with some technical differences concerning ice class as various actors have additional requirements.<sup>26</sup> For instance, the International Association of Classification Societies ("IACS"), which represents more than 90 percent of the world's cargo carrying tonnage and tasked with establishing and maintaining construction standards for ships, designate vessels wishing to navigate in polar waters to have a Polar Class ranging from 1- 7.<sup>27</sup> Polar class 1

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<sup>24</sup> *Ibid.*, 68.

<sup>25</sup> Malte Humpert, 'Russia's Brand-New Nuclear Icebreaker "Arktika" To Begin Sea Trials' (*High North News*, 2020) <<https://www.highnorthnews.com/en/russias-brand-new-nuclear-icebreaker-arktika-begin-sea-trials>> accessed 11 September 2020.

<sup>26</sup> OCIMF, 'Briefing Paper for OCIMF Chartering and Vetting Groups: Shipping Operations in The Arctic Region' (Oil Companies International Marine Forum 2010) <<https://www.ocimf.org/media/8922/Shipping%20Operations%20in%20Arctic%20Regions%20-%20Nov%2011.pdf>> accessed 10 September 2020.

<sup>27</sup> 'IACS' (*Iacs.org.uk*, 2020) <<http://www.iacs.org.uk/about/>> accessed 10 September 2020.

means that vessels meet the requirement to operate in polar waters year-round.<sup>28</sup> Polar class 7 designates that vessels are only able to operate during a certain period of the year and is limited to only sailing close to light or first-year ice.<sup>29</sup> The Polar Class designation is applicable to both commercial and icebreaker vessels. Vessels that wish to be designated icebreakers must further meet additional technical requirements laid out in the Polar Code to be named as icebreakers.

### **2.2.2 Icebreakers in operation around the globe**

Though icebreakers play a crucial role in providing icebreaker assistance in both the Arctic and other locations fraught with sea-ice – their numbers are limited. Data from Marine Traffic shows that ships with the vessel class designation icebreaker number less than 100, though this data also counts non-operational icebreakers as well.<sup>30</sup> The United States currently has just three icebreakers, of which only two are operational.<sup>31</sup> The United States recognizes the importance of icebreakers has requested more to be built with the United States Coast Guard, estimating that six icebreakers are needed in the coming decade.<sup>32</sup> The price for these additional six icebreakers will cost an estimated 2.6 billion American dollars.<sup>33</sup> This, in part, is the reason that most icebreakers are state-owned or state-funded – the undertaking for such a vessel is massive, costly, and cumbersome.

In comparison, Canada currently operates 21 icebreakers, with 19 of them being owned by the Canadian Coast Guard and two held by private firms.<sup>34</sup> The Russian Federation has the largest icebreaker fleet in operation in both the Arctic as well as the rest of the world. Russia's

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<sup>28</sup> International Association of classification societies, 'Requirements Concerning Polar Class' (IACS 2019) 2.

<sup>29</sup> *Ibid.*, 4.

<sup>30</sup> Data on icebreakers comes from paid access to MarineTraffic.com, Author has the export of data on hand if more clarification is needed. 'List of Icebreakers' (*Marinetraffic.com*, 2020). <<https://tinyurl.com/y4zo55c4>> accessed 12 September 2020.

<sup>31</sup> CRS, 'Coast Guard Polar Security Cutter (Polar Icebreaker) Program: Background and Issues for Congress' (Congressional Research Service 2020) 1.

<sup>32</sup> *Ibid.*

<sup>33</sup> *Ibid.*

<sup>34</sup> 'Icebreakers the Canadian Encyclopedia' (*Thecanadianencyclopedia.ca*, 2020) <<https://www.thecanadianencyclopedia.ca/en/article/icebreakers#:~:text=Canada%20operates%2021%20of%20the,and%202%20by%20private%20firms.>> accessed 11 September 2020.



icebreaker fleet consists of 40 operational icebreakers with a plan to build 11 more within the next 15 years – in line with the 2035 policy.<sup>35</sup>

The Arctic States are not the only actors with icebreakers; there are non-Arctic states with icebreakers who also have a keen interest in the Arctic as well. The People's Republic of China ('PRC') has two operational icebreakers and has expressed interest in the Arctic due to the nature of a new shipping route between Asia and Europe.<sup>36</sup>

One of the main reasons for a discrepancy among Arctic states over the number of icebreakers each State owns is due to both practical and historical reasons. Along the NSR, ice conditions are much more favorable for navigation. Furthermore, in Northern parts of Russia where there are not any significant roads, ship resupplies are the only manner possible for the communities in the North to survive. This creates a need for constant access, which in turn led to icebreakers being more prevalent in the area than say the other Arctic States.<sup>37</sup> The Canadian Archipelago does not have the same infrastructure and human resources capabilities like those found in the Russian Arctic.<sup>38</sup> As a result, Russia has been the leader in icebreaker technology and expertise and has some of the most in-depth regulations and policies on icebreakers.

### **2.3 What is Icebreaker Assistance?**

With a thorough understanding of what makes icebreakers unique in ice-covered waters, the logical question to ask next is, what exactly is icebreaker assistance? Icebreaker assistance comprises of multiple activities or operations that entail the support of icebreakers and icebreaker support vessels.

The Polar Code does not give a definition to icebreaker assistance but does provide guidance on a non-exhaustive list of items that should be considered when discussing icebreaker

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<sup>35</sup> Franz-Stefan Gady, 'Russia Launches New Nuclear-Powered Icebreaker' (*TheDiplomat.com*, 2019) <[<sup>36</sup> Deukhoon Han and Sung-Woo Lee, 'Rights, Interests, Positions and Practices of Asian Flag States, With Special Reference to The Republic of Korea', \*Governance of Arctic Shipping\* \(Brill Nijhoff 2017\) 300.](https://thediplomat.com/2019/05/russia-launches-new-nuclear-powered-icebreaker/#:~:text=Russia's%20current%20icebreaker%20fleet%20consists,of%20which%20are%20nuclear%20powered.> accessed 12 September 2020.</a></p></div><div data-bbox=)

<sup>37</sup> Jan Solski, 'Russia', *Governance of Arctic Shipping* (Brill Nijhoff 2017) 175.

<sup>38</sup> Donald Rothwell, 'Canada and the United States', *Governance of Arctic Shipping* (Brill Nijhoff 2017) 226.

assistance. Namely, it implicitly refers to ice convoys or ships in ice escorts being led by an icebreaker.<sup>39</sup> Icebreaker assistance consists of icebreakers leading ships while clearing the ice in front of them as a form of route assistance. Other types of route assistance include maintaining shipping routes, freeing vessels stuck in ice, escorting single ships, making sure harbors are free of ice.<sup>40</sup> Icebreaker assistance also includes participating and supporting search and rescue ('SAR') operations when needed.<sup>41</sup> Furthermore, icebreaker assistance can also include purely scientific collection as such ships are designed to operate in the most hazardous of conditions, they can collect important weather and ice information.<sup>42</sup>

For purposes of this thesis, when discussing icebreaker assistance, the use of icebreakers for harbor breakouts and collection of scientific information will not be included in the discussion as there is a specific focus on defining icebreaker assistance as a form of route assistance.

### **2.3.1 Icebreaker Assistance, Escorts, and Convoys**

Documents dealing with icebreaker assistance use terms such as escorts and convoys are used when referring to the route assistance aspect of icebreaker assistance.<sup>43</sup> Understanding the significance of these terms allows one to understand icebreaker assistance further. There is a difference between an escort and a convoy, as both are used interchangeably but do differ based on context. The main difference between an escort and a convoy is the number of vessels involved.<sup>44</sup> An escort involves one leading ship (can either be an icebreaker or another vessel and at least one vessel behind the lead ship).<sup>45</sup> A convoy is a lead ship with multiple vessels following. A convoy involves more vessels that are spread over a uniform distance and who are reliant on the lead ship to determine the path.<sup>46</sup> Fundamentally, there is no significant difference

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<sup>39</sup> Polar Code (n 16).

<sup>40</sup> Canadian Coast Guard, 'ICEBREAKING OPERATIONS LEVELS OF SERVICE' (Fisheries and Oceans 2001) <<https://waves-vagues.dfo-mpo.gc.ca/Library/328231e.pdf>> accessed 9 September 2020.

<sup>41</sup> *Ibid.*

<sup>42</sup> *Ibid.*

<sup>43</sup> Within the Polar Code for instance, there are numerous references to ice convoys, escorts, escorted operations, icebreaker escort among other terms that interlink.

<sup>44</sup> Floris Goerlandt and others, 'An Analysis of Ship Escort and Convoy Operations in Ice Conditions' (2017) 95 *Safety Science* 5.

<sup>45</sup> *Ibid.*, 5 - 6.

<sup>46</sup> *Ibid.*, 5 - 6.

between an escort and a convoy, and for this thesis, it will be used interchangeably in this thesis, and distinctions will be made when appropriate.

Within the law of the sea, escorts or convoys are a term traditionally attached to naval operations as a mode of naval warfare.<sup>47</sup> Naval escorts consist of warships or vessels belonging to the armed forces of State leading merchant vessels through an area as means to safeguard said ships from being attacked by belligerent forces.<sup>48</sup> The most critical factor of naval escort services is that the ship leading the escort bears command for all issues relating to navigation.<sup>49</sup> Escort operations are still used in modern times, even in times of peace. Currently, European Union member military vessels escort merchant ships of the coast of Somalia as a means to deter piracy and armed robbery.<sup>50</sup> Recently, as a means to ensure that the global oil trade is kept operational, states like the United Kingdom have been escorting merchant vessels within the strait of Hormuz, even though the Islamic Republic of Iran ("Iran") has denounced such escort operations as infringements on their sovereignty.<sup>51</sup>

Escorts are also prevalent in both the Arctic and Antarctic. Escorts are a necessity due to hazards in navigating the area, as well as the logistics involved due to the limited number of icebreakers in existence. Icebreakers are tasked with leading these escorts and can be considered the primary means of icebreaker assistance in the form of route assistance. An important point that will be discussed in Chapter 4 is that icebreaker escorts can be led both by either merchant icebreakers vessels or sovereign immune icebreakers. This distinction is vital as dependent on the status of the lead ship; different legal frameworks are applicable.

#### **2.4 Icebreaker assistance offered by the Arctic States**

Icebreaker assistance as a service is a necessity, and therefore it is in the interest of Arctic Coastal States to regulate such services. Both Canada and Russia control icebreaker assistance

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<sup>47</sup> Ingo Venzke, 'Convoy', *Max Planck Encyclopedias of International Law* (2010).

<sup>48</sup> *Ibid.*

<sup>49</sup> *Ibid.*

<sup>50</sup> International Maritime Organization, 'Piracy and Armed Robbery Against Ships' (IMO)

<sup>51</sup> 'Britain Begins Escorting All UK Vessels Through Strait of Hormuz' (*Voice of America*, 2019) <<https://www.voanews.com/europe/britain-begins-escorting-all-uk-vessels-through-strait-hormuz>> accessed 12 September 2020.

in different but similar manners. The activities offered are subject to domestic legislation, and ships wishing to make use of icebreaker assistance must, in certain instances, pay fees.

#### **2.4.1 Canadian Icebreaker Assistance**

Canadian icebreaker assistance falls under the purview of the Canadian Coast Guard. From December to May, the Coast Guard provides icebreaking assistance on the east coast of Newfoundland along the North-West Passage. From June to November, during the summer months when the ice has receded, the Coast Guard also provides icebreaker assistance in the Canadian Arctic.<sup>52</sup> While a majority of the costs concerning icebreaker assistance are covered by the Canadian government, vessels using icebreaker assistance for commercial purposes are obligated to pay a nominal fee depending on the "ice zone" and "ice season." The cost itself is no more than 3200 Canadian dollars and is not applicable to state-owned vessels.<sup>53</sup> To make use of icebreaker assistance, vessels are mandated to be part of NORDREG – the Canadian Coast Guards Arctic Canada Traffic System.<sup>54</sup> Ships that refuse to join NORDREG can be denied icebreaker assistance and other services needed to navigate along the NWP.

The basis for icebreaker assistance is found in the Arctic Waters Pollution Prevention Act (AWPPA), which formulated Canadian policy on traveling in Canadian ice-covered waters.<sup>55</sup> Under the AWPPA further, regulations were promulgated to manage sea activities in the Arctic while also protecting the marine environment. Most recently, the Arctic Shipping Safety and Pollution Prevention Regulations (ASSPPR) updated the AWPPA and incorporated the obligations found in the Polar Code and harmonized it with Canadian domestic law.<sup>56</sup> The basis for the CCG providing icebreaker assistance is located within the Oceans act. The CCG is the sole entity authorized and responsible for icebreaking and ice management services along the NWP.<sup>57</sup>

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<sup>52</sup> Canadian Coast Guard, 'Icebreaker Requirements 2017-2022' (CCG 2017).

<sup>53</sup> *Ibid.*

<sup>54</sup> Christopher P Knight, 'NORDREG Now Mandatory Within the Northwest Passage'.

<sup>55</sup> Canada Arctic Waters Pollution Prevention Act R.S.C 1985,

<sup>56</sup> Kristin Bartenstein, "Between the Polar Code and Article 234: The Balance in Canada's Arctic Shipping Safety and Pollution Prevention Regulations" (2019) 50 Ocean Development & International Law 335.

<sup>57</sup> Canada Oceans Act S.C 1996.

## 2.4.2 Russian Icebreaker Assistance

Understanding the regime of icebreaker assistance in the Russian Federation is more complicated due to the multifaceted nature of different administrations and organizations in charge of various aspects of maritime traffic in Russian ice-covered waters. The "Federal State Budgetary Institution the Northern Sea Route Administration" NSRA is tasked with organizing all navigational activities along the NSR.<sup>58</sup> The NSRA is located under both the Ministry of Transport of the Russian Federation as well as the Federal Agency for maritime and river transport.<sup>59</sup> To make use of icebreaker assistance in the NSR, vessels are obligated to pay fees dependent on criteria ranging from the length of trip, type of vessel, and other mitigating factors.<sup>60</sup>

But the administration itself does not provide icebreaker assistance. Instead, vessels wishing to make use of icebreaker assistance in the NSR must contact the NSRA when applying for permission to navigate in the Arctic. In turn, the NSRA states that either the vessel can navigate independently or must make use of icebreaker assistance.<sup>61</sup> Vessels themselves must contact any of the relevant organizations that provide icebreaker assistance to negotiate icebreaker assistance when it comes to route assistance.<sup>62</sup>

Organizations that provide icebreaker assistance range from commercial shipping companies to enterprises under the control of the Russian State. The federal-state unitary enterprise ROSMORPORT is one state entity tasked with icebreaker assistance.<sup>63</sup> At its disposal are a fleet of 36 icebreakers with assistance provided by eight different branches based on geographical location. As a state entity, the icebreakers operated by ROSMORPORT are State-owned vessels. The second entity and arguably the leading provider of icebreaker assistance in the NSR is the unitary enterprise ATOMFLOT, which is under ROSATOM, the Russian State nuclear energy company.<sup>64</sup> ATOMFLOT has a monopoly on Russian nuclear-powered

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<sup>58</sup> The Northern Sea Route Administration, 'Object of Activity and Functions Of NSRA'.

<sup>59</sup> *Ibid.*

<sup>60</sup> The Northern Sea Route Administration, Icebreaker assistance value calculating.

<sup>61</sup> Solski (n 8) 286.

<sup>62</sup> *Ibid.*, 288.

<sup>63</sup> Federal State Unitary Enterprise ROSMORPORT, 'Icebreaking Services'.

<sup>64</sup> Solski (n 8) 289.

icebreakers. As a state company reporting directly to the President of Russia, all icebreakers under its purview are to be considered State-owned vessels.<sup>65</sup>

The basis for icebreaker assistance is based on the 1999 Merchant Shipping Code with prescribes that requirement that only icebreakers having the Russian flag can render icebreaker assistance in the waters of the NSR.<sup>66</sup> In 2012 the Russian Federation adopted a new Federal Law, which amended the legal regime of the NSR.<sup>67</sup> Further supplementing the Merchant Shipping Code and the 2012 Federal was the 2013 Northern Sea Route Rules ('NSR Rules'), which promulgated rules concerning navigation in the NSR but also gave in-depth regulations concerning icebreaker assistance.<sup>68</sup> Point 21 of the 2013 NSR Rules re-affirmed that icebreaker assistance in the Arctic could only be rendered by icebreakers authorized to fly the Russian flag; this at *prima facie* bars any foreign-flagged icebreakers from offering such services themselves.

## 2.5 Conclusion

Icebreakers play a crucial role in keeping the Arctic navigable. Without icebreakers, navigating would be limited to a specific period or be near impossible regardless of how ice-strengthened a vessel was. One of the essential functions of icebreakers is that they have the unique role of providing escort services for vessels who want to traverse in thick sea-ice. This provides a near-continuous lateral passage in both the NWP and NSR. Such escort services range in scope from leading a vessel from port to port or multi-ship convoys where ships navigate for weeks at a time until reaching their destination. A key criterion concerning icebreaker assistance is that it not a singular activity. Icebreaker assistance requires both an icebreaker and at least one vessel. The icebreaker itself can either be a merchant or state-owned vessel. Canadian and Russian documentation has shown that most icebreakers are in part or in whole State-owned. With a thorough understanding of icebreaker assistance, one must now put it into context with the legal framework of the law of the sea. Further complicating this framework is the concept of

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<sup>65</sup> *Ibid.*, 289.

<sup>66</sup> *Ibid.*, 288.

<sup>67</sup> Federal Law on Amendments to the legal regime of the NSR 2012.

<sup>68</sup> Rules of navigation in the water area of the Northern Sea Route 2013 (NSR Rules 2013).

immunity that applies to state-owned vessels; how these two interact and overlap must be both analyzed and discussed further.

### **3 The regime of Icebreaker Assistance within International Law**

#### **3.1 Introduction**

In Chapter 3, the regime of icebreaker assistance will be dealt with from the perspective of public international law. The regime of icebreaker assistance falls under the domain of the United Nations Convention on the Law of the Sea ('LOSC'). Both coastal and flag states have rights and duties concerning navigation. Under the LOSC and general international law, certain state-owned vessels are entitled to immunity, and the interplay between the LOSC, sovereign immune vessels in from of icebreakers, and icebreaker assistance must also be addressed.

#### **3.2 Law of the Sea legal framework**

The LOSC acts as an umbrella framework for maritime issues and applies both to coastal states as well as flag states. Under the LOSC, rights, and obligations are accorded to States.<sup>69</sup> In reference to Hugo Grotius's call for a *mare liberum* – vessels, no matter the location and regardless if they come from landlocked countries, are in principal able to have access to all the maritime zones subject to some restrictions.<sup>70</sup> Navigation is one of the oldest ways human beings have used the ocean, and the significance of navigation as a principle of the freedom of the sea, at least for navigation, has been very well reflected in the LOSC. How navigation is dealt with by the LOSC must be understood before asking how icebreaker assistance falls under this paradigm.

##### **3.2.1 Navigation in LOSC**

Navigational rights under the LOSC are primarily maritime zone dependent and are constrained by duties owed to other actors. Generally, the closer a vessel commences lateral passage through a coastal state – the more authority the coastal State can exude over the vessel.<sup>71</sup> Conversely, the opposite is generally true as the further a vessel is from the coastal State, the more freedom it has in turns of what it is allowed to do.<sup>72</sup>

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<sup>69</sup> United Nations Convention on the Law of the Sea (LOSC) Adopted 10 December 1982, entered into force 16 November 1994, 1833 UNTS 397 Pre-amble.

<sup>70</sup> Donald Rothwell and Tim Stephens, *The International Law of The Sea* (2nd edn, Hart Publishing 2016) 30.

<sup>71</sup> Yoshifumi Tanaka, *The International Law of The Sea* (Cambridge University Press 2012) 45.

<sup>72</sup> *Ibid.*, 50.



### 3.2.1.1 Territorial Sea

From the baselines of a coastal state and up to a maximum of 12 nautical miles ('NM'), vessels can find themselves within the maritime zone known as the Territorial Sea ('TS').<sup>73</sup> Article 2 of the LOSC states that the coastal State has sovereignty over the waters of the TS, except for the right of innocent passage.<sup>74</sup> The coastal State has a positive duty not to hamper innocent passage for vessels navigating in its TS.<sup>75</sup>

Innocent passage consists of two factors, the first being that the passage must be continuous and expeditious and the second concerns the nature of the passage itself.<sup>76</sup> The passage remains innocent insofar; it does not prejudice the coastal State.<sup>77</sup> The exceptions to innocent passage are located in Article 19(2).

Innocent passage is not applicable in the internal waters ('IW') of a coastal state as the IW are a continuation of the State immovable, and no navigational rights can be accorded.<sup>78</sup> The only exception to this is found in Article 8(2) of the LOSC, which states when the use of straight baselines encloses water areas that were not enclosed before, then the right of innocent passage is applicable even in internal waters.<sup>79</sup>

### 3.2.1.2 High Seas / Exclusive Economic Zone

In the high seas ('HS'), and by virtue of Article 58(1) also in the Exclusive Economic Zone ('EEZ'), all States enjoy the freedom of navigation.<sup>80</sup> The EEZ commences where the TS ends and has a maximum breadth of 200 NM from the baselines. The HS includes also includes all waters beyond 200 NM and is not subject to any claims of sovereignty purported by any State.<sup>81</sup> Under Article 87, the freedoms of the high seas apply to all vessels. These freedoms include freedom of navigation, though states exercising this freedom shall do in conjunction with giving

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<sup>73</sup> LOSC (n 69) Part 2.

<sup>74</sup> *Ibid.*, Article 2.

<sup>75</sup> *Ibid.*, Article 19(2).

<sup>76</sup> Solski (n 8) 69.

<sup>77</sup> *Ibid.*, 69.

<sup>78</sup> *Ibid.*, 69.

<sup>79</sup> LOSC (n 69) Article 8.

<sup>80</sup> *Ibid.*, Article 58(1).

<sup>81</sup> *Ibid.*, Article 89.

due regards to the interests of other States.<sup>82</sup> Unless certain crimes that are mentioned in Part VII of the LOSC are committed, such as piracy, coastal states, and other flag states cannot, in principle, impede the right of navigation for any vessel.<sup>83</sup> Icebreaker assistance carried out in the EEZ and HS has the benefit of not per se being under the jurisdiction of the coastal State due to the nature of freedom of navigation though there is a conflict via Article 234 that will be discussed further below.

### 3.2.1.3 Straits

Under Part III of the LOSC, a special regime of passage exists for vessels navigating through straits. Straits are a body of water that lies between two areas of land.<sup>84</sup> Straits are used for international navigation and are subject to certain navigational rights.<sup>85</sup> Vessels are either entitled to the right of transit passage through straits or the right of non-suspendable innocent passage.<sup>86</sup> Transit passage occurs when vessels commence lateral passage between one part of the HS or EEZ and another part of the HS or EEZ. This passage.<sup>87</sup> The passage must be both continuous and expeditious. Non-suspendable innocent passage occurs when vessels are commencing lateral passage between a HS or EEZ and the TS of a coastal state.<sup>88</sup>

Straits are an essential entity as both the legal status of the NWP and the NSR are disputed.<sup>89</sup> Canada considers that NWP as part of its 'historic internal waters' and, as such, would be subject to Canadian jurisdiction and would entail that States would not have access to navigate through straits in the NWP.<sup>90</sup> Russia has further claimed that individual sections of the NSR are part of their internal waters as the use of both normal and straight baselines has enclosed all navigable NSR straits.<sup>91</sup> This distinction is vital as if the areas enclosed are not considered straits as per the LOSC, than vessels are not entitled to navigate through them or make use of icebreaker

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<sup>82</sup> *Ibid.*, Article 87.

<sup>83</sup> Rothwell and Stephens (n 70) High Seas.

<sup>84</sup> *Ibid.*, 252.

<sup>85</sup> LOSC (n 69) Article 34.

<sup>86</sup> Solski (n 8) 75.

<sup>87</sup> LOSC (n 69) Articles 37 and 38.

<sup>88</sup> Rothwell and Stephens (n 70) 252.

<sup>89</sup> Han and Lee (n 36) 309.

<sup>90</sup> *Ibid.*, 310.

<sup>91</sup> Solski (n 37) 175.

assistance. As such, the LOSC would not be applicable, but instead, domestic legislation would. By having certain areas not be under the purview of the LOSC, coastal states can impose more stringent conditions than those generally accepted within the international community.<sup>92</sup>

Though these general rights and duties do become obfuscated when taking into consideration the challenges when it comes to navigating in the Arctic.

### **3.3 Navigation in the Arctic**

The general rules of the LOSC on navigation apply in the Arctic, subject, however, to the Arctic exception.<sup>93</sup> Due to the unique nature of the Arctic marine environment, a special regime is included within LOSC that deals with environmental protection in the Arctic via Article 234 that is applicable only in ice-covered areas. Article 234 is known as the convention within the convention, although brief in scope, allocates extra authority to coastal states to enact additional laws and regulations on top of those found within the general framework of the LOSC.<sup>94</sup> The wording of Article 234 excludes the Antarctic as Article 234 refers to rights accorded to coastal states of which there are none in the Antarctic.<sup>95</sup>

#### **3.3.1 Article 234**

Under Article 234, Arctic coastal states are given the right to adopt and enforce laws and regulations for the prevention, reduction, and control of vessel source pollution, giving coastal states both prescriptive and enforcement jurisdiction.<sup>96</sup> There are different views concerning the geographic and temporal scope of Article 234 which will not be discussed within this thesis as such discourse does not fall under the purview of icebreaker assistance – as icebreakers in the function of providing icebreaker mainly operate within the confines of both the TS and EEZ of Arctic coastal states. And for navigational and cost purposes, most vessels traverse as close

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<sup>92</sup> Aldo Chircop, 'Jurisdiction Over Ice-Covered Areas and The Polar Code: An Emerging Symbiotic Relationship?' (2016) 22 *Journal of International Maritime Law* 280.

<sup>93</sup> Bartenstein (n 56) 347.

<sup>94</sup> Bartenstein (n 6) 25 - 26.

<sup>95</sup> Erik J Molenaar, 'The Arctic, the Arctic Council, and the Law of the Sea', *Governance of Arctic Shipping* (Brill Nijhoff 2017) 36.

<sup>96</sup> Franckx and Boone, 'Article 234 Ice-covered areas' in A Proelss (ed), *The United Nations Convention on the Law of the Sea: A commentary* (Beck Hart 2017) 1570 - 1571.

as possible to the land where sea-ice is relatively weak even when in ice escorts or ice convoys.

Article 234 reads:

'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'.<sup>97</sup>

The substantive scope of the rights found under Article 234 has been subject to academic debate.<sup>98</sup> How far can the regulations adopted stray from the purposes found in Article 234 has been discussed with fervor. Article 234 limits itself to pollution matters as it is located under Part XII of the LOSC, which also deals with the same subject matter. Therefore, would laws and regulations relating to navigation adopted under the guise of Article 234 meet the substantive scope of permissible actions?

How would, for instance, icebreaker assistance, which primarily serves as a means of ensuring navigational safety, rather than the protection of the marine environment, fit under Article 234? Or, if icebreaker assistance does not fall under the purview of Article 234, would it be able to fall under a different paradigm? For in the Arctic, both safety and environmental issues are often interrelated and are interwoven in the Polar Code to this end.

Icebreaker assistance adopted under Article 234 as a means of preventing pollution does seem permissible. While the substantive aspect of icebreaker assistance relates to ensuring navigation, arguments can be made that there is also an environmental aspect as well. Under

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<sup>97</sup> LOSC (n 69) Article 234.

<sup>98</sup> Franckx and Boone, (n 96) 1571.

Article 234, coastal states are allowed to adopt any measures it deems necessary and does not have to give effect to generally accepted international rules and standards ('GAIRAS').<sup>99</sup>

### **3.3.2 Adopting Icebreaker assistance under the LOSC**

Outside of Article 234, coastal states can adopt rules and regulations relating to innocent passage in the TS. Article 21 serves as the basis for a coastal State to exert relating to both safety of navigation as well as pollution prevention measures. Article 21 states:

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 all or any of the following:

(a) the safety of navigation and the regulation of maritime traffic;

(b) the protection of navigational aids and facilities and other facilities or installations;

(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.

[...]

4. 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.<sup>100</sup>

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<sup>99</sup> *Ibid.*, 1574.

<sup>100</sup> LOSC (n 60) Article 21.

The regime of icebreaker assistance falls under the permissible scope of Article 21, as the primary purposes of icebreaker assistance relate to ensuring safety as permitted by 21(1)(a).

There is a pause when considering that, in certain instances, the use of icebreaker assistance is mandatory, and ships refusing to take part would be infringing on the laws and regulations of the coastal State. This becomes a conflict of norms, of whether vessels who enjoy innocent passage in the TS must make use of icebreaker assistance. Does a flag-state vessel have to make use of icebreaker assistance if it does not wish for it? This is also relevant if per se, a vessel that does not have an ice-class or meet Polar Code requirements can be barred from navigating in the area if it does not take mandatory icebreaker assistance.

The coastal State can only impose requirements that relate to construction, design, equipment, or manning ('CDEM') as long as those standards give effect to GAIRAS. In the Arctic, the Polar Code essentially prohibits navigation of ships when those vessels do not have the relevant ice class. Thus, icebreaker assistance proves an invaluable service or activity that allows vessels wishing to navigate in the Arctic have an alternative even if they do not meet the requirements in the Polar Code.

The coastal State is allowed under LOSC to adopt such measures relating to icebreaker assistance. 21(1)(a) and 21(1)(f) are the essential subparts that provide the basis for icebreaker assistance.<sup>101</sup> Primarily escort services are done for safety purposes as navigation is not possible without these escorts for most of the season. The safety aspect also ties in with the environmental part as these escort services are meant to minimize the impact on the Arctic and to stop any possible collisions of vessels against the ice, which would cause pollution.

### **3.4 Sovereign Immunity**

Sovereign immunity is of importance to this thesis, as it has been shown in Chapter 2, icebreaker vessels are severe financial investments, and the majority of such vessels are state-owned in whole in part.<sup>102</sup> A large portion of icebreakers and support vessels are owned by the

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<sup>101</sup> *Ibid.*

<sup>102</sup> The List of icebreakers provided by Marine Traffic lists the owner of icebreakers. A cross reference shows that most of the owners are either the state or state entities. 'List of Icebreakers' (n 30).

naval or coast guard services of a state. Other icebreaker vessels are owned by a governmental agency that would still classify it as a state-owned vessel.

As long as the Law of the Sea has existed, so has the notion of sovereign immunity of vessels.<sup>103</sup> Sovereign immunity derives from the principle of sovereign equality of States, which states that all states are equal.<sup>104</sup> States and their properties cannot be subject to the commands of another sovereign.<sup>105</sup> In the 1958 Geneva Conventions on the Law of the Sea, immunity was accorded to certain vessels that were owned by the State, and this distinction was also transported to the LOSC.<sup>106</sup> Immunity was granted two distinct vessel types of government ships that are categorized as warships and government ships used for non-commercial purposes.<sup>107</sup> The notion immunity is also found within different sections of the LOSC and should not be addressed separately but instead must be read in conjunction with one another.

### **3.4.1 Immunity: Functional or Continuous?**

Immunity is not unique to the LOSC and is subject regulated by numerous treaties as well as customary international law.<sup>108</sup> There are different types of immunity, and not all actions that a vessel undertakes would be subject to immunity. The question arises of whether immunity is functional or continuous as if immunity is continuous, then all acts performed by an immune vessel would not be subject to authority by any state. There is a distinction between *jure imperii* (acts of the State) and *jure gestionis* (commercial acts) as only the former would be immune while the latter would not.<sup>109</sup> This is also reflected in the LOSC, which makes explicit reference to "government ships used for non-commercial purposes."<sup>110</sup> The exclusion of government

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<sup>103</sup> Stephens, 'Article 236 Sovereign Immunity' in A Proelss (ed), *The United Nations Convention on the Law of the Sea: A commentary* (Beck Hart 2017) 1593.

<sup>104</sup> *Jurisdictional Immunities of the State (Germany v Italy: Greece intervening)* (Judgment) [2012] ICJ Rep 99 para. 57.

<sup>105</sup> Ted L McDorman, 'Sovereign Immune Vessels: Immunities, Responsibilities and Exemptions', *Jurisdiction over Ships* (Brill Nijhoff 2015) 83.

<sup>106</sup> *Ibid.*, 87 -88.

<sup>107</sup> Stephens (n 103) 1592.

<sup>108</sup> McDorman (n 104) 83.

<sup>109</sup> *Ibid.*, 89.

<sup>110</sup> Stephens (n 103) 1595.

vessels used for commercial purposes making use of immunity is a phenomenon that has been noted since the 1926 Brussels Convention.<sup>111</sup>

### 3.4.2 Immunity within the LOSC

The immunity of warships and government ships is reflected in several provisions in the LOSC. Article 32 notes that nothing in the convention affects the immunities of warships and other government vessels operated for non-commercial purposes.<sup>112</sup> Warships and government ships are accorded immunity within the TS of a coastal state. Such immune ships also enjoy the right of innocent passage insofar they respect the laws and regulations of the coastal State and can be asked to vacate from the area in question if they refuse to comply.<sup>113</sup> Within international straits, bordering states to the straits are entitled to adopt laws and regulations relating to transit passage, and these are also applicable to ships entitled to immunity, although these vessels also enjoy both transit and non-suspendable innocent passage.<sup>114</sup> Within the high seas, warships are permitted to complete and sovereign immunity from the jurisdiction of any state except for the flag state.<sup>115</sup>

Warships are distinct from other government vessels as besides being accorded immunity; they have special permissions not offered to immune vessels. Namely, on the high seas, only warships and other duly authorized vessels have the right of visit on a foreign ship.<sup>116</sup> Government vessels used for non-commercial purposes are unable to carry out this function.

Considering the specific relationship with Article 234, Article 236 is of relevance to this thesis. Article 236 states:

The provisions of this Convention regarding the protection and preservation of the marine environment do not apply to any warship, naval auxiliary, other vessels or aircraft owned or operated by a State and used, for the time being, only on

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<sup>111</sup> *Ibid.*, 1595.

<sup>112</sup> Barnes, 'Article 32 Immunities of warships and other government ships operated for non-commercial purposes' in A Proelss (ed), *The United Nations Convention on the Law of the Sea: A commentary* (Beck Hart 2017).

<sup>113</sup> LOSC (n 69) Article 32.

<sup>114</sup> *Ibid.*, Article 42.

<sup>115</sup> *Ibid.*, Articles 95 and 96.

<sup>116</sup> McDorman (n 105) 89.



government non-commercial service. However, each State shall ensure, by the adoption of appropriate measures not impairing operations or operational capabilities of such vessels or aircraft owned or operated by it, that such vessels or aircraft act in a manner consistent, so far as is reasonable and practicable, with this Convention<sup>117</sup>

Article 236 is clear that the provisions regarding the protection and prevention of the marine environment are not applicable to both warships and government ships used for non-commercial purposes. This would postulate that any law and regulations adopted by the coastal State would not be relevant to government vessels with immunity.

Article 236 does place the burden on the flag state to ensure that appropriate measures that are 'reasonable and practicable' with the LOSC.<sup>118</sup> McDorman argues that the wording of 236 in regards to 'reasonable and practicable' gives flag-states considerable flexibility in determining which aspects they must follow.<sup>119</sup> This ensures that while the *onus* lies with the State, there are no external factors that can make immune vessels comply with their obligations under the LOSC, but they can arise from customary international law.<sup>120</sup> Concerning the phrase "for the time being, only on non-commercial government service" this will be addressed in Chapter 4 in the section dealing with mixed escorts, which are immune foreign-flagged icebreakers leading an ice escort of merchant vessels.

### **3.4.3 Icebreakers as immune vessels**

Icebreakers owned by States or governmental entities qualify as government vessels and, as such, are awarded immunity. It is not paramount to classify icebreakers as either warships or government vessels used for non-commercial purposes, as regardless, immunity would be applicable. Regarding icebreaker assistance – this categorizes icebreakers as immune vessels, and this creates two paradigms. First, there are immune icebreakers owned by the State and acting on their behalf by providing icebreaker assistance to commercial vessels. These immune

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<sup>117</sup> LOSC (n 69) Article 236.

<sup>118</sup> McDorman (n 105) 99.

<sup>119</sup> *Ibid.*, 99.

<sup>120</sup> *Ibid.*, 98-99.

icebreakers are subject to the laws and regulations of their coastal State. Such icebreakers are usually given special competence regarding icebreaker assistance that is not delegated to other actors. The different and more contentious paradigm involves foreign-flagged immune icebreakers operating in the maritime zones of the coastal State. Such foreign-flagged immune icebreakers are not subject to the jurisdiction of the coastal State nor its laws or regulations. Any laws or regulations adopted by coastal states under 234 would be inapplicable as a result of Article 236. This is a contentious issue that has already created problems in the Arctic. While not an icebreaker per se in July 2019, the French naval auxiliary vessel Rhone transited in the NSR without informing Russia as per Russian law and regulations.<sup>121</sup> The Rhone was a suitable immune vessel, and this shows the passage of immune vessels in the Arctic are still an issue without a solution.

### **3.5 Conclusion**

Icebreaker assistance under the LOSC is both permissible and established. Vessels enjoys certain navigational rights under the LOSC, subject to coastal state rights. Under LOSC, icebreaker assistance can be found under Article 21 if it involves passage along the TS. Furthermore, icebreaker assistance can also be established under Article 234, as broad discretion is given to the coastal State to enact measures for the prevention and pollution of the marine environment. Sovereign immune vessels are an established fact in the LOSC and are referenced throughout the LOSC. Immune vessels are not subject to the jurisdiction of coastal states and under Article 236, not bound by Part XII regarding pollution measures. Icebreakers owned by the State can be classified as immune vessels of which coastal States cannot exercise jurisdiction. Therefore, this can create challenges between the coastal State and the flag state, though this is not the only challenge identified.

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<sup>121</sup> Jan Jakub Solski, “Navigational rights of warships through the Northern Sea Route (NSR) – all bark and no bite?” (May 31, 2019).

## **4 A discussion over specific legal challenges posed by icebreaker assistance**

### **4.1 Introduction**

As previous chapters have shown, icebreaker assistance is scattered throughout different sections of the LOSC. It must co-exist with other legal frameworks, though; such cohesion is not always well defined. Numerous challenges face the regime of icebreaker assistance, and they are all unique insofar that they touch upon different areas of the LOSC. This thesis has identified three challenges endemic to icebreaker assistance. The first two challenges stem directly from the fact that when icebreakers provide routing assistance or escorts, the operations involve more than one vessel. The first challenge is the co-existence of mixed escorts that utilize both sovereign immune vessels as well as merchant vessels under the guise of providing icebreaker assistance. The second challenge deals with foreign-flagged icebreakers operating in the NSR. The last challenge deals with who bears responsibility for the conduct and its consequences relating to icebreaker assistance. Chapter 4 will present the challenges and the impact they can have on the regime of icebreaker assistance.

### **4.2 Mixed escorts**

Sovereign immune vessels are a unique existence within the LOSC, as they are *prima facie* exempt from a majority of the provisions applicable to normal vessels.<sup>122</sup> Furthermore, the Polar Code is not applicable to sovereign immune vessels by virtue of being attached to both MARPOL and SOLAS, which excludes warship and government vessels from its purview.<sup>123</sup> As shown in Chapter 3, warships and government ships are subject to general immunity, as this is a norm found within public international law as well as the LOSC.<sup>124</sup> Sovereign immune vessels are also exempt from provisions concerning the protection and preservation of the marine environment, although these vessels shall try to act in a manner consistent with the LOSC, as discussed previously.<sup>125</sup> As such, unless there are clearly defined exceptions found within the LOSC, a coastal state cannot exercise jurisdiction on a sovereign immune vessel.

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<sup>122</sup> McDorman (n 105) 99.

<sup>123</sup> MARPOL and SOLAS both have exception clauses found respectively in Article 3(3) and Regulation 3(a)(i).

<sup>124</sup> Ingrid Delupis, 'Foreign Warships and Immunity for Espionage' (1984) 78 American Journal of International Law 55.

<sup>125</sup> BH Oxman, 'The regime of warships under the United Nations Convention on the law of the Sea' (1984) 24 Virginia Journal of International law 820.

Though this immunity is called into question when different legal frameworks are competing with one another, and it is unclear which area of the LOSC would be applicable. Such is the case when one thinks of a mixed escort lead by a sovereign immune foreign-flagged icebreaker leading a merchant convoy within the maritime zones of a different coastal state. These mixed convoys, while not currently in operation in the Arctic, will, in due time, be a distinct possibility as the sea-ice recedes and more ships need icebreaker assistance.<sup>126</sup> It is unclear whether mixed escorts would be subject to immunity clauses found within the LOSC, especially if such an escort runs contrary to the law and regulations of the coastal State, which it certainly does as foreign-flagged icebreakers cannot render icebreaker assistance along the maritime zones of the coastal State. This challenge will, therefore, be addressed in further detail.

The challenge posed by mixed escorts will be illustrated to show how the LOSC is not at *prima facie* prepared to deal with such a complex scenario. For instance, if Norwegian Coast guard icebreaker 'Svalbard' was leading an escort of several non-Norwegian flagged merchant vessels through parts of the Russian NSR, how would such an operation be viewed under the LOSC? The 'Svalbard' qualifies as a government ship as designated under articles 32 and 236 and therefore has immunity.<sup>127</sup> The merchant vessels are all making use of the icebreaker assistance provided by icebreaker Svalbard and are not make use of Russian icebreaker services along the NSR, which is required as laws enacted by Russia.

Different legal questions must be asked concerning this challenge. First, what is the status of such an operation – would it still be considered a sovereign immune activity, or does it become a commercial activity due to the fact it appears commercial? Would immunity still be applicable while this operation is being carried out? Would the ships in escort be obliged to inform the coastal State of their passage along the TS? Would the ships in convoy be obliged to follow the laws and regulations of the coastal State?

With all these questions above, the most pertinent is how to classify such an operation. This issue is not unique to sovereign immune icebreakers guiding mixed escorts but an issue that has been present since the adoption of the LOSC.<sup>128</sup> Vessels operating for dual-use purposes is

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<sup>126</sup> Bartenstein (n 56) 347.

<sup>127</sup> McDorman (n 105) 86.

<sup>128</sup> D. W. Greig, 'Specific Exceptions to Immunity Under the International Law Commission's Draft Articles' (1989) 38 International and Comparative Law Quarterly 581.

something that has been seen before in the LOSC, especially when it concerns activities that are functionally commercial but being conducted by immune government vessels.<sup>129</sup> It is unsure whether icebreaker assistance can be considered a commercial activity strictly. Icebreaker assistance is an activity that requires both an icebreaker as well as one other vessel, and in certain instances, payment is required for the use of these services, but the act itself of providing icebreaker assistance counts as a commercial activity is dubious. An argument can be made any services that must be paid for are commercial activities. Regardless of status, the fact that a foreign icebreaker would offer such a service already calls into question issues of jurisdiction. In this instance, the immune foreign-flagged icebreaker is facilitating a clearly commercial activity for the other merchant vessels, which could run in contravention of the regulations of Arctic States. Both Canada and Russia have domestic legislation that has given certain actors the competency to provide icebreaker assistance in their maritime zones, and immune foreign icebreakers do not have this competence.

The relevant provisions of the LOSC, namely Articles 32 and 236, refer to the term operated for "non-commercial purposes" – and it is within this term that one can qualify the mixed escort operations.<sup>130</sup> There are three possible outcomes, either a mixed escort is an operation or activity that is as a whole is a sovereign immune activity which in turn makes the entire escort immune OR that by leading the escort, the immune foreign-flagged icebreaker is now operating for commercial purposes and therefore has lost its immunity as provided by the LOSC. Unfortunately, there is no litmus test within the LOSC to designate the difference between "non-commercial and commercial purposes."<sup>131</sup> The only distinction to be made would be whether leading a mixed escort is no longer the act of the State but instead has been substituted by a commercial act to which immunity cannot be applied.<sup>132</sup> Thus, to classify these activities, one needs to see how the flag state and the coastal State would interpret these mixed escorts.

One must look at the status of general immunity under international law. With general immunity being an established process under LOSC, it would not be easy to qualify how to label such mixed escort operations legally. From the standpoint of the flag state, who would operate the

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<sup>129</sup> *Ibid.*, 582.

<sup>130</sup> Barnes, (n 112) 253.

<sup>131</sup> *Ibid.*

<sup>132</sup> McDorman (n 105) 89.

immune foreign-flagged icebreaker – they would wish to qualify such an activity as a sovereign immune activity so that no other state may exercise jurisdiction over.<sup>133</sup>

Conversely, the coastal State would not necessarily agree with the above statement and instead want to qualify such a mixed escort as being an activity used for non-commercial purposes and, as such, the immune foreign-flagged icebreaker would not be entitled to hold immunity. If a mixed escort were deemed to be an activity that would be offered immunity, then at the minimum domestic legislation of the coastal State would not apply to the entire convoy, and only the general sections of the LOSC would be applicable to these immune foreign-flagged icebreakers. In the case of the Arctic, Part XII and Article 234 would also not apply as via Article 236; sovereign immune vessels are exempt from those provisions.<sup>134</sup> Though it is unclear to what extent this would apply to the rest of the convoy, as the merchant ships themselves individually would not qualify for immunity as they are not government ships in any format.<sup>135</sup>

There is a third scenario where the mixed escorts operate as both an immune and non-immune activity. One would then have different legal frameworks apply to different sections of the convoy, which would, in turn, create issues of the convoy navigating in ice-covered areas of the Arctic. One would have a lead icebreaker be exempt from the jurisdiction of the coastal State, and the rest of the convoy be bound to the regulations imposed by the coastal State. In such a scenario, there would be multiple legal frameworks acting concurrently.

First, concerning lateral passage along the TS of a coastal state, the rest of the convoy would have to adhere to the jurisdiction of the coastal State and be forbidden from making use of an immune foreign-flagged icebreaker. There would be tension between the coastal State and the sovereign immune icebreaker if the convoy in question refuses to adhere to regulations of the coastal State. In the NSR, vessels wishing to traverse must notify the proper authorities and wait before commencing navigation. Making use of an immune foreign-flagged icebreaker would bypass those restrictions. If the coastal State were to posit that the foreign icebreakers rendering icebreaker assistance itself is not operationally capable of operating in certain areas

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<sup>133</sup> Polar Code (n 16).

<sup>134</sup> Franckx and Boone (n 96) 1575.

<sup>135</sup> Barnes (n 112) 256.

and would need to make use of an icebreaker itself, would you have an icebreaker leading an icebreaker that is leading a convoy?

Though in practice, due to the nature of sovereign immune vessels belong to the State, coastal states exercising jurisdiction over such a mixed escort seems doubtful due to the ramifications it may cause on a geopolitical level. Regardless, while this scenario seems implausible now, such a situation will bound to pop as more icebreakers come into fruition, and as the Arctic is used for commercial purposes. At some point, due to limitations, icebreaker assistance offered by the coastal State will not be enough, and it is plausible for other foreign-flagged icebreakers to fill this deficiency and a create a new type of navigational activity and possible economic activity in the Arctic.

#### **4.3 Restrictions on foreign-flagged icebreakers and the Russian standard**

The second challenge concerning icebreaker assistance is one that has been present since the 1990s—namely, that only Russian icebreakers can render icebreaker assistance in the NSR. Under the 2013 NSR Regulations hierarchically lower than Russian Federal Law, icebreaker assistance can only be rendered by icebreakers authorized to sail under the flag of the Russian Federation.<sup>136</sup> These regulations are based on the Russian Federal Law of 1999 concerning the commercial navigation of the NSR.<sup>137</sup>

This regulation, in practice, monopolizes the use of icebreaker assistance in the NSR, so only Russian vessels can provide such services and exclude icebreaker assistance being rendered by any foreign-flagged icebreakers. The 2013 regulations are applicable along the entirety of the NSR, including the EEZ, a maritime zone where the freedom of navigation is applicable.<sup>138</sup>

While foreign-flagged icebreakers sailing the NSR are uncommon, it is still a challenge as this can potentially limit the navigational rights and freedoms of all vessels wishing passage through the NSR. More concerning is that passage in the NSR may be made conditional on employing Russian icebreaker assistance dependent on the ice conditions as well as ice class of the

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<sup>136</sup> Solski (n 8) 287.

<sup>137</sup> Federal Law April 30, 1999.

<sup>138</sup> Solski (n 8) 287.

vessel.<sup>139</sup> Ships wishing to navigate and who do not meet any operational requirements are obligated to not only pay for the services.<sup>140</sup>

Though vessels are, for the most part, compliant with the 2013 Rules, the question arises if these regulations imposed by Russia on others are consistent with the rest of the LOSC. Would the requirement that only Russian flagged icebreakers can render icebreaker assistance be discriminatory under both the general navigational regime of the LOSC as well as the relevant provisions of Article 234?

Under the LOSC, the coastal State has both rights and obligations. Article 24 states that the coastal State cannot hamper innocent passage in the TS and subsequently cannot impose requirements that have the practical effect of impairing passage.<sup>141</sup> This reiterates that the coastal State, while sovereign, must give due regards to the rights of others.<sup>142</sup>

In the case of the Russian flag icebreaker assistance requirement – an argument can be made that the need to make use of icebreaker assistance without choice can constitute a failure by Russia as the coastal State to abide by its duties under the LOSC, significantly as it limits innocent passage. This can hamper navigational rights found under the LOSC and effectively bans any vessel from making use of the NSR.

In the EEZ, which enjoys the freedom of navigation, this becomes more troublesome, as Russia would effectively be exercising jurisdiction over vessels that it should not have under normal circumstances. Though, if adopted under the guise of laws and regulations found under Article 234, Russia has most likely circumvented this issue. Article 234 allows the coastal State to adopt and enforce laws and regulations insofar they are not discriminatory.<sup>143</sup> Non-discrimination can be interpreted in two manners, the first being that the coastal State cannot adopt laws and regulations that will make navigation a hindrance. While the coastal State is given broad powers to adopt laws under 234 for different purposes, it cannot impose rules that,

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<sup>139</sup> Solski (n 8) 362 - 363.

<sup>140</sup> ABS, 'Navigating the Northern Sea Route Advisory' (ABS)  
<[https://maddenmaritime.files.wordpress.com/2016/12/nsr\\_advisory.pdf](https://maddenmaritime.files.wordpress.com/2016/12/nsr_advisory.pdf)> accessed 9 September 2020.

<sup>141</sup> LOSC (n 69) Article 24.

<sup>142</sup> Tanaka (n 71) 23 - 24.

<sup>143</sup> LOSC (n 69) Article 234.



while *de jure* is legal, are, in fact, *de facto* discriminatory. The use of icebreaker assistance in the NSR is dependent on many factors, and more often than not, icebreaker assistance is required for valid purposes, but the hindrance would still be applicable.<sup>144</sup> Solski notes that icebreaker assistance provided by Russia does not constitute a burden on navigation but instead enhances the operational capability of the ship.<sup>145</sup> But this does not take into account Russia encroaching on the rights of other States in the NSR.

It must be stated that the 2013 NSR Rules apply to both foreign-flagged vessels as well as Russian flagged vessels.<sup>146</sup> The same standards based on the ice class, tonnage, cargo, and other factors are applicable regardless of the flag sailing the vessel. The second is that the law and regulations adopted under Article 234 cannot impact only certain vessels but must be applied to all vessels. For the second interpretation, Russia can make the argument that like in the case of Article 24 – the 2013 NSR Rules apply to all vessels, and the service fees to make use of icebreaker assistance fees rates are nominal and can be paid though if vessels wish to make use of the NSR must still have icebreaker assistance when needed.<sup>147</sup>

While the use of mandatory icebreaker assistance is not discriminatory to States, there remains an issue with foreign-flagged vessels being unable to render icebreaker assistance in the NSR. Exempting foreign-flagged icebreakers from rendering assistance in the TS of the NSR seems in line with the coastal state powers granted by the LOSC; there is an issue when the same restrictions are also applicable in the EEZ where the freedom of navigation is applicable.<sup>148</sup>

#### **4.4 Responsibility for conduct and consequences of icebreaker assistance**

Ultimately, icebreaker assistance is an activity that is both a necessity and a means to ensure safety during navigation for vessels. Identifying who is responsible for conduct and consequences is a challenge, especially when there are also different legal frameworks, and in cases of the icebreaker assistance, issues arising from possible damage to the marine environment.

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<sup>144</sup> Solski (n 8) 393.

<sup>145</sup> *Ibid.*, 393.

<sup>146</sup> NSR Rules 2013 (n 68).

<sup>147</sup> ABS (n 141).

<sup>148</sup> Solski (n 8) 287.

Under the LOSC, both flag-states and coastal states have rights and responsibilities to which they must adhere. Usually, these rules are found in different sections of the LOSC, but concerning the protection and preservation of the marine environment, under Article 235, States – both the coastal and the flag-state are responsible for carrying out their international obligations, and it is not limited to one or another.<sup>149</sup>

Ascertaining who is responsible is also dependent on a plethora of factors ranging from in which maritime zone the lateral passage is taking place in, the level icebreaker assistance being provided: Concerning escort operations, the legal status of all the vessels in convoy. For instance, on the high seas in the Arctic, if there is icebreaker assistance, then Part VII of the LOSC would be applicable – except for a few core crimes denoted in Part VII. Under Article 94, it is the flag state who bears final responsibility for conduct and consequences for any issues that may arise during the rendering of icebreaker assistance.<sup>150</sup>

Responsibility concerning conduct and consequences becomes muffled when icebreaker assistance is rendered along maritime zones subject to coastal jurisdiction who have enacted their own laws to environmental protection and pollution. In the TS, coastal states may have domestic legislation and regulations that deal specifically with icebreaker assistance and who is responsible for any damages. Under the 2013 Rules of Navigation, ships making use of icebreaker assistance anywhere along the NSR – give the command of all ships in convoy to the shipmaster of the lead icebreaker. Ships making use of icebreaker assistance in the NSR have their decision-making capacities limited and are required to comply with the instructions of the icebreaker fully.<sup>151</sup> The lead icebreaker is therefore bearing some responsibility for all operational factors of the escort ranging from the speed – navigation – to how far apart each ship is located from one another.<sup>152</sup> This power is given to the lead icebreaker for two main reasons – the vessels are dependent on the icebreaker clearing a path, and if vessels were given free reign, there would be a risk for safety and environmental harm as vessels while they maybe ice-strengthened are unable to operate in sea ice safely.

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<sup>149</sup> LOSC (n 69) Article 235.

<sup>150</sup> *Ibid.*, Article 94.

<sup>151</sup> NSR Rules 2013 (n 68).

<sup>152</sup> *Ibid.*

Along sections of the NWP, ships making use of icebreaker assistance led by the CCG give the command to the icebreaker leading the ice convoy, but under the Ice Regime System, the master of the escorted ship is still responsible for his vessel. Before commencing escort operations, both the master of the icebreaker and the master of the escorted vessel must agree to full cooperation.<sup>153</sup> Icebreaker assistance will not commence without this explicit cooperation that command is given to the CCG. But different from the Russian standard, which provides operational control for the lead icebreaker, in the NWP, the escorted ship still has some operational capabilities in decide to both follow the lead icebreaker but also determine at what speed. This creates uncertainty as while there are guidelines in place, ships in such a precarious situation could inadvertently cause an incident at sea.<sup>154</sup>

The Polar Code does not have formal provisions in place regarding icebreaker assistance but does have guidelines that are recommended. The guidelines recommend that ships in escort give the command to the lead icebreaker as well as comply with the instructions of the icebreaker. Though as these are guidelines and not a mandatory provision found under the Polar Code, vessels do not have to follow such advice.<sup>155</sup> Though in principle, these recommendations set by the Polar Code are adhered to, as to act to the contrary would risk the safety of all vessels in escort. Irrespective of the guidelines set by the Polar Code, Arctic coastal states have stricter requirements when it comes to icebreaker assistance but are not vocal about responsibility instead of leaving the burden on the ship receiving icebreaker assistance.

#### **4.5 Conclusion**

Currently, the three challenges identified in this chapter do not have definite answers, nor are they easily solvable problems. In terms of navigation, the Arctic is still relatively, new and best practices so far have not been established. The issue of mixed escorts presents a severe challenge for icebreaker assistance due to competing legal frameworks and the uncertainty as to whether mixed escorts can be classified as an immune activity. Foreign-flagged icebreakers being unable to give icebreaker assistance is a challenge and potential monopoly by Russia over the NSR, which can be inconsistent with the LOSC. Though the LOSC does provide a margin of appreciation to the coastal State to adopt and enforce legislation concerning the NSR,

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<sup>153</sup> Canadian Coast Guard, 'Ice Navigation in Canadian Waters' (CCG 2017)

<sup>154</sup> *Ibid.*

<sup>155</sup> Polar Code (n 16) I-B

whether Russia is making use of discriminatory practices remains uncertain. Lastly, responsibility for conduct for icebreaker assistance falls with both the master of the icebreaker but also the master of the escorted ship. Vessels give this command to icebreakers via virtue of the navigational concerns as well as a requirement under both domestic legislation but also under the guidance of the Polar Code but is silent on who is overall responsible for any issues.

## 5 Conclusion

The regime of icebreaker assistance is an integral part of Arctic navigation. Without icebreakers, Arctic navigation would not be what it is currently. States recognize the importance of such vessels and are known as most icebreakers are owned in part or in whole by States. Both Russia and Canada have adopted a plethora of complementary domestic laws and regulations relating to both Arctic navigation and the use of icebreaker assistance. The law of the sea convention allows coastal states in the Arctic to adopt laws regarding icebreaker assistance either under the auspices of Article 21 or under Article 234. That being stated, the regime of icebreaker assistance does face challenges that will need to be addressed by both coastal and flag states in the future.

This thesis identified three challenges to the regime of icebreaker assistance that show that while the LOSC is suitable to address the regime of icebreaker assistance, there remains more to be solved. In particular, the regime of icebreaker assistance will meet an impasse when mixed escorts start operating in either the NSR or the NWP. Mixed escorts present a challenge as those the icebreaker leading the convoys are entitled to immunity under the LOSC. This will create conflict with both coastal state laws and regulations as well as being in conformance with the general LOSC.

The Russian Federation requirement that only icebreakers who fly the Russian flag can provide icebreaker assistance potentially affects the navigational rights of all vessels in the NSR. This is evident when, in certain instances, passage through the NSR can be made conditional on vessels making use of icebreaker assistance. While this might be permissible in the territorial sea section of the NSR, it becomes uncertain when applying this to the EEZ along the NSR. Further, the extent of this requirement is unsure as making passage conditional based on the use of icebreaker assistance can be seen as a hamper on both passage and navigation.

Responsibility for conduct and consequences for icebreaker assistance in the form of escort operations is also uncertain as under the LOSC. Both Russia and Canada have different requirements. In both instances, Ships in escort are obligated to give the operational command to the master of the icebreaker, but there is uncertainty regarding who bears responsibility in the event of an incident or possible pollution infractions. The Polar Code is also silent on this, as the only provisions dealing with the responsibility of icebreaker assistance are only guidelines and are not mandatory for vessels to comply with.

Regardless of the challenges, the regime of icebreaker assistance will not disappear but instead become more robust in the upcoming decade. As more icebreakers enter operation in the upcoming decade, there will be more possibilities to make use of icebreaker assistance like never before. As this thesis deals with challenges that have not yet become problems, it is better for these challenges to be addressed as soon as possible. Addressing the challenges *ipso facto* can create uncertainty in Arctic navigation, which is something that could have disastrous consequences.

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