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The Marine Protection Regime in Svalbard's maritime zones with regard to Cruise Tourism

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Abbreviations:

AEPS	Arctic Environmental Protection Strategy
AMAP	Arctic Monitoring and Assessment Programme
CS	Continental Shelf
CLCS	Commission on the Limits of the Continental Shelf
EEA	European Economic Area
EEZ	Exclusive Economic Zone
FPZ	Fisheries Protection Zone
HS	High Seas
ICJ	International Court of Justice
IMO	UN International Maritime Organization
ITLOS	International Tribunal for the Law of the Sea
MARPOL 73/78	The 1973 International Convention for the Prevention of Pollution from Ships, modified by the 1978 Protocol
NCA	Norwegian Coastal Administration
London Convention	The 1972 Convention on the Prevention of Marine Pollution by Dumping Wastes and Other Matter
LOSC	United Nations Convention on the Law of the Sea
MOSJ	Environmental Monitoring of Svalbard and Jan Mayen
NM	Nautical Miles
SEPA	Svalbard Environmental Protection Act
SOLAS Convention	International Convention for the Safety of Life at Sea
TS	Territorial Sea
VCLT	Vienna Conventions on the Law of Treaties
WWF	World Wildlife Found

Chapter 1 Introduction

1.1 Background

It is generally accepted that the Arctic is a unique and vulnerable area that, to some extent has been undisturbed until recently. Climate change poses significant challenges to the environment in various ways, especially in the polar regions. From an ocean governance perspective, increased human access to current and future ice-covered areas, along with the potential for increased activities like fishing, shipping, tourism and oil and gas activities, creates a need for laws and regulations to avoid overexploitation and, consequently, serious damage to the environment.¹ Such regulations will prepare the Arctic States for the potential effects of these activities in the future.

Svalbard is a particularly interesting areas in the Arctic. Located between Norway and the North Pole, Svalbard is one of the most accessible regions in the Arctic.² Svalbard includes, according to the Treaty concerning the Archipelago of Spitsbergen (hereinafter the Svalbard Treaty),³ all the small and large islands that are situated between 74° and 81° North and 10° and 35° East⁴. Tourists have come to Svalbard for many years, and it appears that the tourist industry will increase in the future as climate changes makes the waters of Svalbard more accessible and interesting to explore; moreover, the Norwegian government has the desire to further develop tourism in Svalbard.⁵ In the White Paper on the Future of Svalbard, the Norwegian government has stated that, “by strengthening research, tourism and the general businesses, the government will develop Svalbard further”.⁶

Tourism in Svalbard has increased significantly in the last decade, and the type of activities has also changed. For instance, cruise ships makes landings all around the archipelago, and there are arranged snowmobile, boat and hiking excursions.⁷ All these activities might affect the environment in different ways. It is difficult to foresee what effects

¹ Rayfuse, Rosemary. *Melting Moments: The Future of Polar Oceans Governance in a Warming World*, 2007, Blackwell Publishing, p. 196.

² Kaltenborn, Bjørn P. and Lars Emmelin, *Tourism in the High North: Management Challenges and Recreation Opportunity Spectrum Planning in Svalbard, Norway*, 1993, Springer-Verlag New York Inc. p. 41.

³ The Treaty concerning the Archipelago of Spitsbergen, 9 February 1920, hereafter The Svalbard Treaty, Enacted 9 February 1920, In force 14 August 1925.

⁴ The Svalbard Treaty Article 1.

⁵ Kaltenborn, Bjørn P. and Lars Emmelin, *Op. Cit.* p. 41.

⁶ Ministry of Justice and Public Security, *White Paper on the Future of Svalbard*, No.60–2016.

⁷ Madsen, Jesper, Ingunn Tombre and Nina E. Eide, *Effects of disturbance on geese in Svalbard*, 2009, Norwegian Polar Institute, p. 376.

these tourism activities will have on the different species and ecosystems that exists in the waters around Svalbard. Tourism activities in Svalbard are all related to the nature in different ways; for example, the amazing surroundings offer the possibility to see glaciers, icebergs, and Artic wildlife. In wintertime the main tourist activities are ski trips, snowmobiling and dog-sledding, while in the summertime, they include boat trips, cruises, hiking trips and stay in Longyearbyen.⁸

The cruise ships, as well as the smaller vessels that bring the tourists on guided tours around the islands to see whales, birds and other species, might frighten the animals in the surrounding areas, such as the geese that nest on some of the islands. The relevance of this is that the species of geese in Svalbard have long escape flights, giving the predators the opportunity to eat the eggs and chicks while the adult geese have been frightened away.⁹ Moreover, all vessels, including cruise ships, can have accidents when it comes to fuel and other wastes. One must keep in mind that humans are the main source of all the waste that ends up in the ocean; particularly while on tours in such vulnerable areas, humans might leave harmful garbage, or the cruise ships might discharge waste or pollute in other ways. This can, again, lead to harm and death for the various species that lives in the ocean and eats or get trapped by this waste.

A cruise gives the tourists an amazing nature experience and increased knowledge, but there are also some negative effects, which may impact the natural environment and the cultural heritage of the region.¹⁰ The fact that the Norwegian government facilitates tourism in Svalbard, and that the spotlight has been directed towards Svalbard and other areas in the Arctic, has drawn awareness to the marine environment but also to the nature and views in the areas. This has created an interest for tourists to travel to these areas to enjoy this experience and scenery.

1.2 Objective

The aim of the thesis is to research the regulation of pollution in the marine environment by cruise ships that are navigating in the waters of Svalbard. Specifically, the objective of this thesis is to present and analyze international and national regulations that govern marine environmental pollution with regard to tourism in the maritime zones of Svalbard, and as well as to examine whether Norway has enforcement jurisdiction in the waters of Svalbard. The

⁸ Viken, Arvid, *Svalbard, Norway* in *Extreme Tourism: Lessons from the world's cold water islands*, Godfrey Baldacchino (ed), 2006, Elseviser Ltd., p. 129.

⁹ Madsen, Jesper, Ingunn Tombre and Nina E. Eide, *Op .Cit.* p. 387.

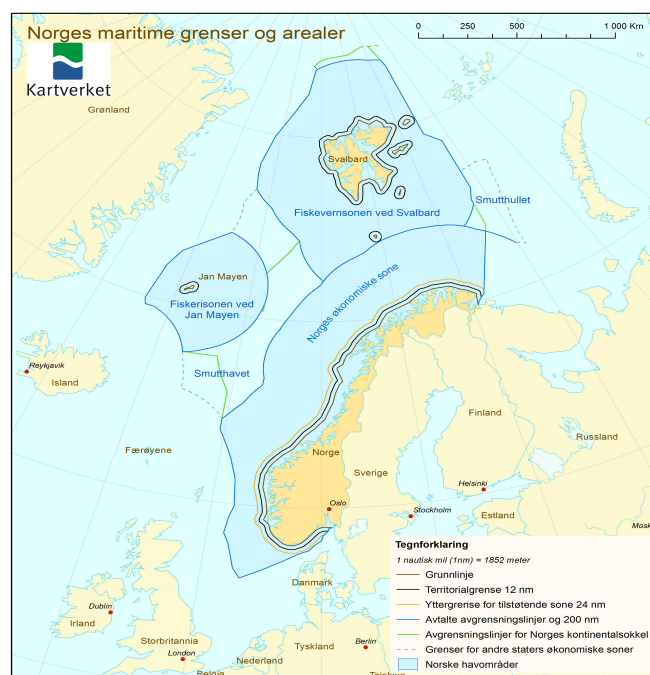
¹⁰ MOSJ.no, Cruise tourism, last updated May 2016.

main tourism activity that will be discussed in this thesis is that of cruise ships and guided tours in vessels around the islands, which means that vessel-source pollution is a primary focus of in this thesis.

Specifically, this thesis is aimed at addressing the following research questions:

- What international and national legislation is applicable in Svalbard with regard to tourism, vessel-source pollution and marine environmental protection?
- Does Norway have enforcement jurisdiction in the waters of Svalbard in the case of tourism activities and ship-based pollution?

1.3 The Legal Status of Svalbard



Source¹¹: Kartverket, Norges Maritime Grenser, 2015

Before the establishment of the Svalbard Treaty, the Archipelago of Svalbard was characterized as a *terra nullius*, or no man's land.¹² The waters around the archipelago were considered as high seas, with all the freedoms that comes as a result of the United Nations Convention on the Law of the Sea (hereinafter LOSC).¹³ Even though several states has tried to claim the sovereignty over Svalbard, it was not until the Paris Peace Conference that the

¹¹ Kartverket, Norges Maritime Grenser, 2015.

¹² Wolf, Sarah, *Svalbard's Maritime Zones, their Status under International Law and Current and Future Disputes Scenarios*, Working Paper FG 2, 2013/Nr. 02, SWP Berlin, p. 7.

¹³ United Nations Convention on the Law of the Sea, opened for signature 10 December 1982, (entered into force 16 November 1994), Montego Bay, 1834 UNTS 397, Article 87.

matter was settled by conferring the sovereignty of Svalbard over to Norway. Under international law, sovereignty over a *terra nullius* is usually acquired by occupation and administration in some form.¹⁴

However, this was not how Norway gained sovereignty over Svalbard in 1920. Instead, Norway asked the Paris Peace Conference to examine the legal status of Svalbard and proposed that Norway should gain sovereignty over the region. This led to the establishment of the Spitsbergen Commission, which asked Norway to make a draft convention.¹⁵ The draft convention was based on the idea of Norwegian sovereignty while preserving some of the *terra nullius* rights by granting equal rights to the State Parties of the Svalbard Treaty for hunting, fishing and other maritime, industrial and commercial activities. The Svalbard Treaty was signed February 9th 1920 and entered into force on 14th August 1925.¹⁶

The Svalbard Treaty Article 1 states that: “*The High Contracting Parties undertake to recognize (...) the full and absolute sovereignty of Norway over the Archipelago of Spitsbergen*”. The “full and absolute sovereignty” means that Norway has the same sovereign rights and duties as any other states that has sovereignty over their territory.¹⁷ The only limitations set forth in the Svalbard Treaty primarily involves the non-discrimination principle and equal rights of the State Parties, within the geographical scope of the Treaty.¹⁸

As the law of the sea developed, new maritime zones became available to claim. It is clear from the Svalbard Treaty that the rights of both Norwegian and foreign nationals apply to the economic activities on land and the territorial sea; however, since the Treaty does not mention any other maritime zones, it has created controversy. Article 1 of the Svalbard Treaty only refers to the land territory of the Archipelago, and one principle in the law of the sea is that the land dominates the sea.¹⁹ This means that, since Norway has sovereignty over the land territory as stated in the Svalbard Treaty Article 1, it automatically has sovereignty over the sea territory as well. Article 1 has thus been interpreted such that sovereignty is also applied in the Territorial Sea (hereinafter TS).

In 2003, Norway extended the breadth of the TS from 4 nm to 12 nm;²⁰ this was an effect of the developments in the general law of the sea. In the case of the Continental Shelf

¹⁴ Anderson, D. H, *The Status Under International Law of the Maritime Areas around Svalbard*, Routledge, Taylor & Francis Group, LLC, p. 373.

¹⁵ The Svalbard Treaty Article 2.

¹⁶ Wolf, Sarah, *Op. Cit.* p. 7.

¹⁷ *Ibid*, p. 9.

¹⁸ Svalbard Treaty Article 2.

¹⁹ Wolf, Sarah, *Op. Cit.* p. 12.

²⁰ Anderson, D. H, *Op. Cit.* p. 376.

(hereinafter CS), Norway is not required to claim sovereign rights to exercise them, because they come automatically by operation of international law.²¹ This supports Norway's view for the establishment of the CS, but whether the Svalbard Treaty is applicable remains an issue.

Norway wanted to establish an Exclusive Economic Zone (hereinafter EEZ) around Svalbard, like the one along the mainland of Norway, but because the other State Parties objected to this, Norway claimed a Fisheries Protection Zone (hereinafter FPZ) with equal rights instead. The main reason for the objection was the other states' fear of losing the rights under Article 2 of the Svalbard Treaty. The FPZ and the EEZ are closely linked,²² except that the FPZ is limited to fishery matters, while the EEZ gives the coastal state sovereign rights for exploring, exploiting, conserving and managing both the living and non-living resources.²³

The Norwegian government has the view that since the Svalbard Treaty is silent on the maritime zones beyond the TS, the State Parties do not have any rights beyond the TS.²⁴ However, this view has been contested by other states and writers. Some argue that the Svalbard Treaty should be interpreted in light of the developments in the general law of the sea, while others argue that Norway is not entitled to establish maritime zones beyond the TS under the Svalbard Treaty at all. Finally, some states accept that Norway can establish a CS and an FPZ, as long as the rights and obligations under the Svalbard Treaty are also applicable in these zones.²⁵

Finding the "right" answer regarding the applicability of the Svalbard Treaty beyond the TS is outside the scope of this thesis. However, some recognize that the law of the sea is dynamic and thus there is a need to interpret the intent behind international treaties as well as the context, as stated in the Vienna Convention on Law of Treaties (hereinafter VCLT)²⁶ Article 31, when answering this question. The intention of the Svalbard Treaty was to create an equitable regime for Svalbard to ensure its development and utilization in the future. Furthermore, this regime should be continued with the new developments in mind and should be applicable to the CS and the FPZ, as well as other zones that might be developed in the future. In any case, Norway has based its current regime in Svalbard on non-discrimination and equality, which should give State Parties equal rights in the CS and FPZ, even though Norway

²¹ *Ibid*, p. 377.

²² Wolf, Sarah, *Op. Cit.* pp.13-14.

²³ LOSC Article 56 (1) (a).

²⁴ Churchill, Robin R, *Claims to maritime zones in the Arctic - Law of the sea normality or polar peculiarity?* in Oude Elfenrik and Rothwell, 2001, pp.106-107.

²⁵ Anderson, D. H, *Op. Cit.* p. 374.

²⁶ Vienna Convention on the Law of Treaties, Enacted 23 May 1969, In force 27 January 1980.

does not agree that the Svalbard Treaty is applicable beyond the TS. The enforcement jurisdiction beyond the TS of Svalbard is exercised with caution, mainly because of the international controversy and Norway's fear of conflicts in this area.²⁷

1.4 Legal sources and Method

The international sources are stipulated in Article 38 of the Statute of the International Court of Justice²⁸ (hereinafter the Statute). The method of interpretation of international treaties is set by Article 31 of the VCLT. The thesis uses relevant writings of different authors, statements from the Norwegian Government and international and national legislation to present and discuss regulations of marine environmental pollution in Svalbard when it comes to cruise tourism. The sources used in this thesis are used in an analytical and descriptive manner, and various aspects must be considered and discussed regarding marine environmental pollution. The focus will be on the regulations that protect against damage to the marine environment from tourism activities such as ship-related pollution. The discussion will deal with vessel-source pollution and the regulations that concerns cruise ships and pollution in the waters of Svalbard.

Given the objective of this thesis, both international and national sources that needs to be discussed. Regarding the international sources, the basis taken in this thesis is the Statute Article 38 (1), specifically letters a to d, which are sources that are accepted under international law and includes international conventions, customary international law, principles, case law, and to some extent, state practice.

LOSC is one of the central international conventions related to the law of the sea, and its Part XII is dedicated to the protection and preservation of the marine environment. It takes a zonal approach to the rights and duties that states have in the different maritime zones. Part XII of the LOSC addresses several different sources of pollution, cooperation globally and regionally and the enforcement jurisdiction of the Port, Coastal and Flag States regarding different sources of pollution. This is central in the discussion in this thesis, because the type of state that Norway is gives the country different jurisdiction and the possibility to create and enforce legislation. Coastal State are those States that has coasts and maritime zones in which

²⁷ Pedersen, Torbjørn, *The constrained politics of the Svalbard offshore area*, 2008, Elsevier Ltd., p. 917.

²⁸ United Nations, Statute of the International Court of Justice, San Francisco, Enacted 26 June 1945, In force 24 October 1945.

vessels navigates in. Port State, on the other hand, is the State whose port the vessel is in, while Flag State is the State of the flag a vessel is flying during its voyage at sea.

Another important international sources used in this discussion is the 1972 Convention on the Prevention of Marine Pollution by Dumping Wastes and Other Matter²⁹ (hereinafter London Convention), which is relevant in relation to dumping of various substances. The cooperation through the International Maritime Organization (hereinafter IMO) has led to the establishment of the International Convention for the Safety of Life at Sea³⁰ (hereinafter SOLAS Convention), which is relevant due to its purpose related to the safety of life at sea and, therefore, is relevant when discussing cruise ships, as there are passengers onboard. The Svalbard Treaty gives the basis of Norway's jurisdiction over Svalbard, but it was negotiated by several states and is thus seen as an international source; for this reason, it will be discussed in chapter 3.

International conventions and agreements can be implemented and become national law, like the 1973 International Convention for the Prevention of Pollution from Ships and its Protocols from 1978³¹ (hereinafter MARPOL 73/78). The focus of this work will be on the Svalbard Act,³² the Svalbard Environmental Protection Act³³ and the regulations relating to tourism, field operations and other travel in Svalbard.³⁴ Also the Annexes of MARPOL 73/78 will be discussed in this part, because Norway has implemented these Annexes and made them part of Norwegian law.

MARPOL's purpose is to prevent pollution of the marine environment by the discharge of harmful substances. As one can see from the Svalbard Act and the Svalbard Environmental Act, it is only applicable to the land territory and the TS, but one can argue that these laws changes according to the developments of general law of the sea and also become applicable beyond the TS. This will be discussed further in chapter 4 of this thesis. The Svalbard Act only states that Norwegian civil, penal and procedural laws are applicable to Svalbard; it does not

²⁹ Convention on the Prevention of Marine Pollution by Dumping by Wastes and Other Matter (London Convention), opened for signature 13 November 1972, entered into force 30 August 1975, 1046 UNTS 138.

³⁰ International Convention for Safety of Life at Sea (SOLAS Convention), opened for signature 1 November 1974, (entered into force 25 May 1976), 1184 UNTS 278.

³¹ International Convention for the Prevention of Pollution from Ships, opened for signature 2 November 1973, as modified by the Protocol of 1978 to the 1973 Convention, opened for signature 17 February 1978, (entered into force 2 October 1983) (MARPOL 73/78), London, 3040 UNTS 62.

³² The Svalbard Act ("Svalbardloven"), 17 July 1925 (only available in Norwegian).

³³ Act relating to the protection of the environment in Svalbard (the Svalbard Environmental Protection Act), Enacted 15 June 2001, In force 1 July 2002.

³⁴ Sysselmannen, *Regulations relating to Tourism, field operations and other travel in Svalbard*, entered into force 1 January 1992.

contain any provisions about marine environmental protection or tourism. The latter will, therefore, not be discussed further.

1.5 Structure

Regarding the structure of this thesis, there are six chapters. The first chapter comprises an introduction to this theme, the objective, a presentation of Norway's sovereignty over Svalbard and a short discussion of the legal status of Svalbard, the legal sources and method as well as the structure of the thesis.

The second chapter of the thesis, presents an introduction to tourism on Svalbard, a short discussion of cruise tourism in the waters of Svalbard, and an introduction to vessel-source pollution. The main activities discussed are cruise ships and other guide vessels that navigate between the islands of the Archipelago, and the chapter will discuss the effects of cruise ships navigating in the waters of Svalbard. The effects of cruise ship landings around the islands and bringing the tourists on tours to see historical sites, wildlife and the scenery will be discussed.

Chapter three of this thesis will analyze the current international regulations of marine environmental pollution that are applicable to cruise ships in Svalbard. There will be a short discussion of whether there are different rights and duties in the different maritime zones of Svalbard and whether the EEZ will give Norway a better right to implement environmental protection regulations than the existing FPZ. The maritime zones that will be discussed are the TS, the CS and the FPZ. In Chapter four, the analysis will concern the national regulations that are applicable to Svalbard in terms of tourism and marine environmental pollution from cruise ships.

In chapter five, there will be a discussion of Norway's enforcement jurisdiction in the maritime zones of Svalbard as it relates to marine environmental pollution and cruise ship activities. The discussion comprises some of the most important international conventions and agreements related to marine environmental protection and to Norway's enforcement jurisdiction according to national legislation related to marine environmental protection in Svalbard.

The sixth chapter concludes and presents a summary and future considerations related to environmental protection and tourism in Svalbard and the Arctic in general.

Chapter 2 Tourism and vessel-source pollution in Svalbard

2.1 Introduction

Tourism is only one activity that poses a potential threat to the marine environment. Because of the turbulent history of overexploitation in Svalbard, the need to establish a framework for tourism planning and management has become more apparent. Norway's ministry of the environment³⁵ stated that:

“The purpose of the plan is to ensure that development of tourism and outdoor recreation takes place within the limits which the natural environment and the heritage can tolerate and in such a way that the distinctive, pristine wilderness character of Svalbard remains unchanged”.

The main goal of the plan was to provide a variety of recreational opportunities within the sustainable of the environment.³⁶ It is not only now when the ice is melting in the Arctic that people are traveling to Svalbard; rather, people have been traveling to Svalbard for both recreational and adventure purposes for almost 150 years. The tourist experiences that are offered in Svalbard are related to nature and the scenery. The fact that there is a special kind of scenery and a special history makes it more attractive and interesting for different types of tourists to travel to Svalbard.³⁷ There is a myth that it is difficult to travel to Svalbard; if one is going there, some peoples believe that one must prepare for an expedition.

However, this is not true. Longyearbyen is only 90 minutes by plane from Tromsø and a three-hour flight from Oslo. Travel time differs depending on the season of the year, but tourists can stay in hotels in Longyearbyen, take boat trips and ski trips, drive snowmobiles and go dog-sledding once they arrive.

Vessel-source pollution, can have serious effects on Svalbard, mainly because it is seen as a vulnerable area. Even though vessel-source pollution is a small part of the global marine pollution, there is a special concern related to pollution in such vulnerable areas. There are a lot of possible impacts on the environment of cruise ship activities, but the impacts on the environment can be minimized if managed well. Cruise tourism can create additional concerns, such as degradation of the sites when the passengers goes ashore,³⁸ or damage to

³⁵ Ministry of Environment, *Management plan for Tourism and Outdoor Recreation in Svalbard: Guidelines*, 1995.

³⁶ Kaltenborn, Bjørn K. And Lars Emmelin, *Op. Cit.* p. 44.

³⁷ Viken, Arvid, *Op. Cit.* p. 129.

³⁸ WWF International Arctic Programme, *Cruise tourism on Svalbard – a risky business?* 2004, p. 18.

the corals and other species on the sea floor when anchoring. Other potential impacts on the environment related to cruise tourism are oil pollution, pollution through wastewater or garbage, air pollution and ballast water pollution.

Before the identification and discussion begin, it is important to know what a vessel and vessel-source pollution are. According to MARPOL 73/78 Article 2 (4), a ship is “*a vessel of any type whatsoever operating in the marine environment and includes hydrofoil boats, air-cushion vehicles (...)*”. The most generally accepted definition of pollution of marine environment, is found in LOSC Article 1 (4), which states that:

“pollution of the marine environment” means the introduction by man, directly or indirectly, of substances or energy into the marine environment, which results or is likely to result in such deleterious effects as harm to living resources and marine life, hazardous to human health, hindrance to marine activities, including fishing and other legitimate uses of the sea, impairment of quality for use of sea water and reduction of amenities”.

Thus, cruise ships fulfil the requirements of Article 2 (4) of MARPOL 73/78; moreover, since cruise ships are controlled by humans, it is humans that introduce pollution in case of an accident or discharge. It can therefore be seen as “pollution of the marine environment” when leaks, discharges of waste or accidents occur. This chapter gives an introduction to cruise tourism and a presentation of types of pollutants from ships and identifies both impacts and risks of cruise ships navigating in the waters of Svalbard.

2.2 Cruise tourism on Svalbard

In case of cruise tourism, all recreational ships coming to Svalbard must notify the Governor of Svalbard. This applies both to commercial and private ships. The Governor of Svalbard must approve a vessel’s travel plans before the trip begins, and when the trip is finished, the commercial operators must file a report about the activities they have engaged in while in the waters of Svalbard.³⁹

There were around 20 000 passengers on vessels or cruises in 2000, and this number increased in 2012 to 42 000, but these figures have fallen slightly since then. Many of the cruise tourists arrives by plane in Svalbard and then joins 4 to 7day expedition cruises on tours around the archipelago. About 5 000 tourists did this in 2001, while in 2013 this number

³⁹ *Ibid*, p. 6.

increased to 10 000.⁴⁰ Today, there is both overseas cruise tourism, with tourists that follows the ship from the European mainland and back, and cruise operators that are based locally in Svalbard.

In the case of cruise operators that are located in Svalbard, the tourists come to Svalbard mainly by plane.⁴¹ The main attractions for the cruise passengers are the scenery and the beautiful views of the glaciers, icebergs and wildlife. Many of the cruise ships have landing sites, which gives the tourists the opportunity to go ashore for hiking, bird watching, and seeing natural features and heritage sites at close range, such as old whale stations, old mining locations, trapping stations and places used for expeditions by explorers.⁴²

Vessels in the coastal cruise category are mostly smaller vessels and are therefore able to take the tourists outside settlements and established landing sites. Most of these cruises start and end in Longyearbyen, and it is often smaller cruise vessels. The non-local operators often combine the start and end of the trip with other destinations, like the Norwegian mainland or Greenland.⁴³ The overseas cruises on the other hands, visits Svalbard as a part of a “Northern” itinerary that includes other destinations, such as the Norwegian mainland, Greenland or Iceland. These vessels are usually bigger and have more passengers, and because of the size of the ships the tourists are mostly set ashore where there are settlements or enough space for larger ships to make landings. These ships are mostly seen as the core attraction of the trip, while the destination is secondary.⁴⁴

In addition to the activities on board, the cruise operators offer a variety of activities for their passengers on land. On board the operators can offer bird watching from the cruise ship, kayaking, diving and zodiac cruising. Furthermore, the amount of landing sites increased from around 100 different sites in 2000 to around 220 in 2013.⁴⁵ For land-based activities, the cruise operators can set the tourists ashore for walks, hikes, glacier climbs, visits to settlements or historical sites or opportunities to watch birds and other wildlife.⁴⁶ These activities can make cruise tourism a bigger threat to the environment, as they can have effects on both marine life and land areas.

⁴⁰ SSB, *this is Svalbard 2014: What the figures say*, 2014.

⁴¹ Viken, Arvid, *Op. Cit.* p. 134.

⁴² *Ibid*, p. 135.

⁴³ WWF International Arctic Programme, *Op. Cit.* p. 7.

⁴⁴ *Ibid*, p. 7.

⁴⁵ SSB.no, *Op. Cit.* 2014.

⁴⁶ WWF International Arctic Programme, *Op. Cit.* p. 7.

There has been external collaboration with other Arctic destinations and with international NGO's, primarily with the World Wildlife Fund (Hereinafter WWF). WWF has used Svalbard as its planning ground for the creation of Arctic Guidelines for Tourism, but these guidelines have not been used much in Svalbard, because they have been set up by an external organization and because the local guidelines are more restrictive.⁴⁷ An important instrument for implementation of the governmental policy goal for Svalbard is a monitoring system called the Environmental Monitoring of Svalbard and Jan Mayen (hereinafter MOSJ). MOSJ aims to collect and analyze data about pressure on the environment and assess the state of nature and heritage. On the basis of this, they describe the changes and give management advice.⁴⁸

MOSJ also report on climate changes as well as the presence of toxic substances that are observed in the area as well as the concentration of toxic in mammals.⁴⁹ It is difficult to know whether the underwater structures and ecosystems have been harmed because of the cruise ship propellers and when anchoring, because the areas around Svalbard have not been sufficiently charted.⁵⁰ The local tourist business and the Governor of Svalbard have created Guidelines for the visitors of Svalbard to describe how they should behave when visiting. There are ten rules,⁵¹ all of which says something about the behavior of the visitors. The Svalbard Safety rules can also be found at visitsvalbard.com.⁵²

2.3 Environmental impacts of ship-based tourism

Pollution from ships is generally operational or accidental, and this includes cruise ships. The marine pollutant that has received the most attention is oil. Pollution through oil is the most serious environmental impact caused by ships. Operational discharges of oil include, for instance oil leaks into the water during fueling, when the crew lack or have neglected routines for handling oily liquids outside the bilge or when the bilge water has been contaminated with oil or other lubricants from engines. Also, bad mechanical equipment or leakages are seen as an operational discharge. This fits the criteria of the definition of marine

⁴⁷ Viken, Arvid, *Op. Cit.* p. 136.

⁴⁸ *Ibid*, p. 137.

⁴⁹ *Ibid*, p. 137.

⁵⁰ WWF International Arctic Programme, *Op. Cit.* p. 37.

⁵¹ Sysselmannen, *Svalbard Safety rules*, 2012.

⁵² [visitsvalbard](http://visitsvalbard.com), *Svalbard rules of common sense*.

environment pollution in LOSC 1 (4), while accidental discharges are discharges that comes from unexpected incidents like collision or grounding of the ship.⁵³

An oil spill can create damage wherever it happens, but since the environment around Svalbard is vulnerable and partly covered in ice, it can become even more damaging and difficult to clean up.⁵⁴ Article 234 of LOSC is one of the provisions that concerns ice-covered areas and can be seen as established with the Arctic region in mind. It gives the coastal state the right to adopt and enforce laws and regulations for the “prevention, reduction and control of marine pollution from vessels in ice-covered areas”, as long as it is within the limits of its EEZ.⁵⁵ This will be discussed further in chapter 3.

Oil spills can drift ashore and can kill wildlife. The wildlife impacts are often immediate and lethal due to suffocation, drowning and damage to internal organs.⁵⁶ Birds, for instance, may drown because they cannot fly with oil on their wings. The type of fuel used in cruise ships can also play a part in the potential impacts of an oil spill. Cruise ships that navigate in vulnerable areas such as Svalbard should therefore use lighter and better fuel even if it is more expensive. It is also important that the cruise ships have good response equipment on board at all times to be prepared for accidents.

To supply the passengers with good service, the cruise ships carry and process water for drinking, food preparation, showering and toilets while at sea. The water left over from these activities, called wastewater, is created and released by humans and therefore fulfils the criteria of marine environmental pollution. Wastewater is often divided into two categories, black water and grey water. Black water is sewage from the toilets on the ship and from the medical facilities, while grey water includes all non-sewage waste liquids, which often are seen as less problematic than black water in terms of the impacts on the environment.⁵⁷

Pollution from wastewater is among the issues that are widely discussed as environmental threats from cruise ships; this is primarily because these ships travel in sensitive areas and generate huge volumes of wastewater during their voyage. It is therefore important that the cruise ships have the best equipment to separate and avoid pollution through wastewater. Incorrectly discharged wastewater can lead to an imbalance in the

⁵³ WWF International Arctic Programme, *Op. Cit.* p. 20.

⁵⁴ Arctic Environmental Protection Strategy, *Declaration on the Protection of the Arctic Environment*, Finland, 1991, pp. 14-15.

⁵⁵ Jakobsen, Ingvild U. and Tore Henriksen, *Norway and Arctic Marine Shipping*, Fram Centre Report Series No. 2, p. 11.

⁵⁶ WWF International Arctic Programme, *Op. Cit.* p. 20.

⁵⁷ *Ibid*, p. 23.

ecosystem and can become a hazard to the wildlife and the public health if the toxins and contaminants accumulate into the food chain. For instance, shellfish are particularly sensitive to these impacts because they filter the water and retain the dissolved nutrients and toxins. If contaminated shellfish are present in harvested populations, they could become a threat to the public health.⁵⁸ Shrimp is an example of shellfish that are harvested in the waters of Svalbard and in the Barents Sea.⁵⁹

While on the sea, cruise ships accumulate a large amount of garbage. The garbage comes from many different sources such as goods, packaging and food preparations. The IMO estimates that each passenger on a cruise ship, on average generates 3.5 kilograms of waste.⁶⁰ There are different ways to handle the waste on cruise ships; usually, it is recycled to separate the different type of waste, then delivered in the next harbor, burned onboard or dumped at sea. It is therefore important to implement good recycling procedures on cruise ships. The garbage floating in the ocean is often washed up onshore, and the Governor of Svalbard has therefore created a program wherein both the cruise operators and the inhabitants help to reduce environmental impacts from garbage and litter by participating in the Clean Up Svalbard Programme.⁶¹ Plastic in particular is very damaging for the marine environment because animals get stuck and dies because of it, and it is therefore important to regulate this more thoroughly in the future.

Regarding air pollution, the main sources of air emissions are the engines that generate the power of the ships and the garbage incinerators. There are three emission categories for ship-related air pollution; greenhouse gases, toxic pollutants and soot and other visible emissions.⁶² Greenhouse gases are created when fossil fuels are burned and lets various compounds into the air. Such gases affect the air in different ways and can create both health problems and holes in the ozone layer.⁶³

Ballast water is another type of pollution from cruise ships; it is what, the ship carries to ensure that there is stability and structural integrity. It has an operational function, since when ships are in a port and unload weight, this weight needs to be replaced by water to keep the balance.⁶⁴ The reason ballast water is seen as a threat to the environment is that each area

⁵⁸ *Ibid*, p. 23.

⁵⁹ The Norwegian Ministry of Trade, Industry and Fisheries, *Shrimp (Pandalus borealis)*, 2013

⁶⁰ WWF International Arctic Programme, *Op. Cit.* p. 26.

⁶¹ *Ibid*, p. 28.

⁶² *Ibid*, p. 29.

⁶³ *Ibid*, pp. 29-30.

⁶⁴ *Ibid*, p. 33.

has its own ecosystem and organisms, and the water in the ship's holding tanks contains many different species and organisms. When there is no need for ballast water, it is released into the ocean, often in another area with different species. The species from the ballast water might not survive in this new area, or they might affect the existing species in a negative way.⁶⁵

There has been a change in the types of activities undertaken in Svalbard. The cruise ships now give their passengers the opportunity to go ashore for tours to view historical sites, the scenery and the wildlife up close. The largest cruise ships mostly land their passengers where the conditions are good enough for them to land with their large ships, or they can anchor not far from the shore and send their passenger to shore with smaller vessels. The smaller ships provide more opportunities to explore destinations where it is more difficult for larger ships to land.⁶⁶ There are several factors that can impact the vegetation, including the size of the tour group, the type of vegetation, the duration of the tour, and the knowledge and the authority of the guides.⁶⁷ The reason for this is that big tour groups cover a bigger area, and can litter more; in addition, it is more difficult for the guide to keep track of everyone, and the groups can damage sensitive plants and scare animals.

Svalbard's historical and cultural sites have become more attractive to cruise tourists. Most cruise ships disembark passengers at one or several cultural sites during a trip, but most of the sites are not designed to meet the needs of the visitors. Therefore, some damage and degradations has occurred at these sites due to, the lack of information.⁶⁸ Even though the majority of cruise passengers refrain from leaving trash behind, some cigarette butts and candy wrappers are still left on land after the tours. This has also been seen on the cruise ships as well, where the passengers often throw cigarette butts overboard.⁶⁹ These cigarette butts can create health problems for animals that eats them.

Furthermore, the cruise ships that are navigating in the waters of Svalbard are sailing and anchoring in sensitive areas. They can damage the underwater structures in Svalbard, such as coral reefs. The propellers, the use of sonar, the anchoring practices and the level of competence in navigating in these areas are all factors that can result in physical damage to the marine environment.⁷⁰ During cruises, the tourists wants to see nature and wildlife, such as whales, birds, glaciers and the scenery. More and more people wants to see exotic animals

⁶⁵ *Ibid*, p. 33.

⁶⁶ *Ibid*, p. 45.

⁶⁷ *Ibid*, p. 45.

⁶⁸ *Ibid*, p. 48.

⁶⁹ *Ibid*, p. 53.

⁷⁰ *Ibid*, p. 37.

in the wild up close. This creates a demand that, if not regulated, can be harmful for the different species in Svalbard, since they can become frightened and flee from their native areas.⁷¹

Some species are more vulnerable in the spring and in the early part of the summer when they are breeding, and some female animals, like polar bears, become more aggressive when they have young to protect. Because of the increase in demand and interest, more and earlier cruises are being scheduled, and this puts extra pressure on the wildlife and the environment.⁷²

As well as impacts on the environment, there are some factors that contributes to environmental risks when it comes to cruise activities in Svalbard. One of the things that might be the most important is that the cruise ship itself is in good condition. If a cruise ship is badly constructed and maintained, it can affect the security of the passengers as well as how fast and how much the ship can sink or release substances. The quality of the ship can save lives if the ship is able to take longer before it sinks or releases substances, especially when it is navigating in remote and vulnerable areas such as Svalbard.⁷³

Potential problems may include a lack of navigational skills, poor quality or lacking sea bottom and coastal mapping, lack of proper navigational equipment and information, icy conditions and problems with large ships navigating between islands. When there is a large number of passengers, the response time for dealing with environmental damage will increase, because it will take longer for rescue and cleanup services to reach the site in desolate areas, and the passengers must be rescued before damage control of any oil spills can commence. This gives more time for the fuel and the other substances to drift and affect a bigger area, and the impact on the environment will be correspondingly larger.⁷⁴

When a cruise ship is navigating in the waters of Svalbard, more difficulties may occur if, for instance, there are strong winds, drift ice, icing or currents. It also increases the possibilities of collision, running the ship a ground or other kinds of accidents that can have negative effects on the marine environment. Weather conditions can make it more difficult to navigate between the islands or make landings so the passengers can go ashore. Even after a grounding has happened, the weather conditions can play a major role in how difficult it is to

⁷¹ *Ibid*, p. 40.

⁷² *Ibid*, p. 44.

⁷³ *Ibid*, pp. 57-58.

⁷⁴ *Ibid*, p. 58.

clean up the spill and rescue the passengers. With strong winds, currents and ice, it becomes more difficult to arrive at the ship and the spill can spread to a bigger area.

There is also a higher risk of cruise ships running aground because they often navigate close to shore. This can be prevented by operators by being more conscious of where they are navigating, and taking the size of the ship into consideration when deciding which ships to navigate into certain areas. The seriousness of the environmental damage also depends on how much fuel is in the tank at the time, as well as the ship has light fuel or heavy fuel. Heavy fuel is more difficult to clean up and therefore more damaging to the environment.

The navigational skills of the captain will also have an impact on the risk of grounding or collision, but the information and mapping of the area will also affect the possibility of an accident. The waters of Svalbard are insufficient chartered, and it is therefore important that the navigational equipment and the navigational skills are sufficient. If not, it can increase the risk of events that can have negative impacts on the environment, as well as on the passengers.

Chapter 3 International legislation of marine environmental pollution from cruise ships in Svalbard

3.1 Introduction

The aim of this chapter is to analyze the main international regulations of marine environmental pollution that are applicable to cruise ships navigating in the waters of Svalbard. Due to the limited scope of this thesis, Port and Flag State jurisdictional issues will only be briefly discussed, while the Coastal State jurisdiction will be discussed further. The regulation frameworks that will be discussed here, includes the LOSC, MARPOL 73/78 and, SOLAS Convention, as well as the Svalbard Treaty, which is the overall framework at Svalbard.

As much of the Arctic is under the sovereignty of the Arctic States, the laws applicable to the Arctic are therefore implemented through national legislation and customary international law. The governments of each of the Arctic States considers, adopts and implement their national laws as they feel serve their national interests in their Arctic seas. Thus, the concepts and principles that have developed through the years are adopted and applied by each Arctic State in its own waters.⁷⁵ The Arctic Environmental Protection Strategy (hereinafter AEPS) has had a central role in the developments of environmental protection, especially in the Arctic. The AEPS was founded at the first ministerial conference in Rovaneimi, Finland in June 1991, and it was a non-binding environmental protection agreement between the eight Arctic States.⁷⁶

3.2 LOSC

3.2.1 General Provisions

The LOSC is applicable for all oceans and therefore applicable in the waters of Svalbard. This is also confirmed by the Illulissat Declaration,⁷⁷ wherein the Arctic Coastal States, including Norway, have acknowledged the applicability of the Law of the Sea in the Arctic. The Declaration does not directly mention the LOSC, but it can be argued that the LOSC is applicable because it is seen as general law of the sea and customary international law. Also,

⁷⁵ Rothwell, Donald. R and Christopher C. Joyner. *The Polar Ocean and the Law of the Sea*, 2001, p. 1.

⁷⁶ The eight Arctic States are Canada, Sweden, Greenland (Denmark), Russia, Svalbard (Norway), the United States of America and Iceland.

⁷⁷ The Ilulissat Declaration, 2008.

the fact that Norway ratified the LOSC on June 24 1996⁷⁸ show that the LOSC is applicable on Svalbard. Furthermore, the LOSC codified important principles that regulate marine environmental pollution from vessels and has made this obligatory for the State Parties of LOSC. Cruise ships are not mentioned in the LOSC, but since LOSC is applicable to all ships that are navigating on the ocean, it is also applicable to cruise ships. The main provisions that concerns marine environmental protection are found in Part XII of the LOSC.

As stated in Article 192 of the LOSC, “*States have an obligation to protect and preserve the marine environment*”. This is a general obligation for all states, which gives the States a duty to take measures to fulfil this obligation and protect and preserve the marine environment. However, there are no specifics or a set standard for the minimum protection and preservation actions. This also makes it difficult to agree on protection and preservation regulations, since there are different views on how strict this obligation is and what it contains. A general provision is elaborated in Article 194, which concerns the measures the state is obligated to take to “*prevent, reduce and control marine environmental pollution*”. These two provisions are general and are applicable to all sources of pollution, not only pollution from vessels.

Article 194 (1) mention that states shall either “*individually or collectively*” take “*measures consistent with this Convention that are necessary to prevent, reduce and control pollution of the marine environment from any source*”. This provision does not state specific measures that the States shall take to fulfil the obligation. In paragraph 2, there is a confirmation that states have jurisdiction over their own territory, but activities within their jurisdiction must not cause damage to the environment of other states. This means that Norway cannot allow activities that can damage the environment in either its own territory or other states’ territory. Since the entire ocean is seen as connected and considered as a whole, one can argue that by allowing activities that can create damage to the marine environment without sufficient regulations and measures, the State will not fulfil this obligation. The *Trail Smelter case*⁷⁹ between Canada and the United States built on this provision and expanded the customary obligation that states cannot knowingly permit the use of their territory in a way that can cause serious injury by pollution in the territory of another state.

For States to be able to protect the marine environment according to Article 197 of LOSC, the States are entitled to cooperate on a global and regional basis in order to fulfil their obligation. In the 2002 *Mox Plant case*⁸⁰ between Ireland and the United Kingdom, ITLOS

⁷⁸ Oceans & Law of the Sea, *ratifications of LOSC*, last updated 2016.

⁷⁹ The *Trail Smelter Case*, United States and Canada, ICJ, (1938, 1941).

⁸⁰ The *Mox Plant Case*, Ireland and United Kingdom, ITLOS, (2002) (provisional measures).

recognized that “*the duty to cooperate is a fundamental principle in the prevention of pollution of the marine environment under Part XII of the Convention and general international law*”.⁸¹ There is a need for cooperation between the States to avoid pollution that can affect other areas than where the pollution happened. Also, because the Arctic waters, including Svalbard, are seen as vulnerable and will become more accessible in the future, the Ilulissat Declaration agreed to cooperate to protect this area as well as to prevent further problems. The Arctic Council is another of the ways Norway cooperates with both Arctic and non-Arctic states to avoid pollution of the marine environment.

Regarding provisions that are directed at pollution from vessels, LOSC Article 211 (1) states that:

“States (...) shall establish international rules and standards to prevent, reduce and control pollution of the marine environment from vessels and promote the adoption, in the same manner, wherever appropriate, of routing systems designed to minimize the threat of accidents which might cause pollution of the marine environment, including the coastline, and pollution damage to the related interests of coastal states.”

In this case, Norway has adopted several international laws for the prevention of marine environmental pollution, as well as national regulations that aim at reducing and preventing pollution. Other international regulations include, for instance MARPOL 73/74, which will be discussed further later on.

3.2.2 Coastal State Jurisdiction

Cruise ships navigating in the waters of Svalbard are under the jurisdiction of Norway, but as the LOSC takes a zonal approach, this jurisdiction differs in the different maritime zones of Svalbard. Furthermore, the equality principle in the Svalbard Treaty are also relevant to mention in this context. When it comes to the rights of the Coastal State, in this case Norway, it is stated in LOSC Article 2 (1) that Norway has sovereignty over its land territory as well as its internal waters and the TS. This gives Norway, according to LOSC Articles 2 (1) and 3, sovereign rights over its land territory and in the TS.

⁸¹ Rothwell, Donald R. and Tim Stephens, *Marine Environmental Protection in The International Law of the Sea*, 2001, Hart Publishing, p. 343.

Cruise ships navigating In the case of tourism activities and marine environmental protection, the cruise ships enjoy innocent passage as long as there is no willful or serious pollution.⁸² However, one can argue that all pollution in vulnerable areas, such as Svalbard, is serious pollution. LOSC Article 21 (1) concerns the navigation of vessels in the TS, and states that the Coastal State may adopt laws and regulations regarding the vessels that exercise innocent passage.

*“The Coastal State may adopt laws and regulations (...) relating to innocent passage through the territorial sea, in respect of (...) the safety of navigation and the regulation of maritime traffic (...) conservation of the living resources of the sea (...) the preservation of the Coastal State environment and the prevention, reduction and control of pollution thereof”.*⁸³

Cruise ships that comply with these regulations must be seen as complying with the right of innocent passage in the TS of Svalbard. To prevent the Coastal States from taking their jurisdiction too far, Articles 24 (1) and 211 (4) states that the Coastal States must not hamper the innocent passage of foreign vessels when trying to prevent, reduce and control marine pollution from foreign vessels.

Norway has the competence to claim a CS, as the competence to claim maritime zones derives from the State’s the sovereignty over its land territory. Since Norway has sovereignty over Svalbard and there are no restrictions in the Svalbard Treaty with regard to claiming a continental shelf, Norway can therefore claim a continental shelf.⁸⁴ The outer limits set by Norway have been sent to the Commission on the Limits of the Continental Shelf (hereinafter CLCS) for recommendation and accepted, 27 March 2009. Norway has the sovereign rights to explore and exploit its natural resources on its CS, according to LOSC article 77 (1). This does not give Norway the right to establish rules and regulations for the protection of the marine environment in this zone. Norway can, on the other hand, establish rules and regulations that protect the sedentary species on the CS from effects of tourism activities such as noise, pollution and effects of toxic substances like those found in some anti-fouling paint.

The concept of the FPZ, where the Coastal State is entitled to exercise jurisdiction, in order to manage and conserve fish stocks, became part of international law in the 1960s.⁸⁵ In the FPZ,

⁸² LOSC Article 19 (2) (h).

⁸³ LOSC Article 21(1)(a), (d) and (f).

⁸⁴ Ulfstein, Geir, *Spitsbergen / Svalbard* in Max Planck Encyclopedia of Public International Law, R. Wolfrum (ed), 2008, Oxford University Press, p. D, 2, 44.

⁸⁵ Anderson, D. H, *Op. Cit.* p. 378.

Norway's jurisdiction is confined to prescribing and enforcing measures for the conservation and management, of living resources such as fish in a non-discriminating way.⁸⁶ An interesting question is whether or not Norway would had a better right to establish regulations with regard to marine environmental protection, if they had claimed an EEZ instead.

The FPZ is a limited type of EEZ. If Norway instead had claimed an EEZ around Svalbard, Norway would, according to LOSC article 56 (1) (a), had sovereign rights to manage and conserve all the natural resources in its EEZ. Norway thus would have had more jurisdiction and ability to regulate the waters of Svalbard in terms of marine environmental protection with an EEZ regime.⁸⁷ However, an EEZ regime would not give Norway the right to establish laws and regulations with regard to tourism, and the main jurisdiction Norway has when it comes to the FPZ is with regard to the regulation and enforcement of the fisheries.

3.2.3 LOSC Article 234

Article 234 gives the Coastal States additional jurisdiction to adopt and enforce environmental regulations in ice-covered areas. The background for the establishment of this provision was the awareness of the vulnerability to pollution of ice-covered areas and, therefore, the need to give Coastal States extra jurisdiction to avoid pollution from ships in such areas.⁸⁸ According to Article 234 of LOSC, the:

“Coastal State 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”.

However, some conditions need to be fulfilled for this provision to be applicable in the waters of Svalbard. To answer whether Article 234 is applicable in the waters of Svalbard, there is a need to examine the territorial and temporal scope of the Article. Due to the wording “within the limits of the exclusive economic zone”, one can argue that the Article is not applicable, since Svalbard does not have an EEZ. When it comes to the temporal scope, one can argue that the Article gives the Coastal State jurisdiction to regulate shipping within the ice-covered areas only when the climatic conditions and the presence of ice creates difficult navigation, or only in the period when the waters are covered by ice.⁸⁹

⁸⁶ *Ibid*, p. 378.

⁸⁷ LOSC Part V.

⁸⁸ Jakobsen, Ingild U and Tore Henriksen, *Op. Cit.* p. 11.

⁸⁹ *Ibid*, p. 11.

Article 234 is an exception to the general rule related to the Coastal State's prescriptive jurisdiction over vessel-source pollution, and it entails that the Coastal State can adopt stricter laws and regulations in areas that fulfil the criteria in Article 234. Due to climate changes, the applicability of this provision might not be relevant in the future because of the lack of ice in these areas.

The fjords and sea areas north and east of Svalbard are covered with ice for 8 to 9 months of the year; therefore, one can argue that Article 234 is applicable here due to ice-coverage for most of the year. However, the fjords on the west side of Svalbard can be ice-free for large parts of the winter, and it becomes more difficult to argue for the applicability of this provision in these areas.⁹⁰ This provision would allow Norway to establish stricter regulations for vessels navigating in its TS and EEZ; however, since Norway has not established a EEZ around Svalbard, Article 234 will therefore not be applicable in the waters of Svalbard, even though some of the areas in the north and east of Svalbard are ice-covered for most of the year.

3.3 IMO Instruments

3.3.1 Introduction

International organizations have been a part of the development of the environmental law and the law of the sea. One of these is the International Maritime Organization (hereinafter IMO), which has participated in the development of the legal regime in the Arctic. The IMO was established by the 1948 Convention on the International Maritime Organization, as a specialized agency of the United Nations.⁹¹ The IMO is the organization that has arguably had the most substantial direct effect on the law of the sea.⁹²

The IMO's primary task is to develop a detailed set of regulations for international shipping, addressing efficiency of navigation, maritime safety, prevention of marine pollution and maritime security.⁹³ The IMO has a wide competence in terms of shipping matters, and it has played an important role in regulations that concerns navigation and pollution.⁹⁴ With regard to marine environmental protection and tourism in Svalbard, the two main IMO

⁹⁰ Norwegian Polar Institute, *Svalbard, Climate*.

⁹¹ Rothwell, Donald R. and Tim Stephens, *Op. Cit.* p. 344.

⁹² Churchill, R. R and A. V. Lowe, *the law of the sea*, 3rd edition, 1999, Manchester University Press, p. 23.

⁹³ Rothwell, Donald R. and Tim Stephens, *Op. Cit.* p. 344.

⁹⁴ Churchill, R. R and A. V. Lowe, *Op. Cit.* p. 23.

instruments that will be discussed in this thesis, are MARPOL 73/78 and the SOLAS Convention.

3.3.2 MARPOL 73/78

The MARPOL Convention was adopted under the auspices of the IMO in 1973 to deal with pollution from ships on the ocean. These regulations are set out in six annexes, which has been adopted by Norway and made national law.⁹⁵ MARPOL 73/78 is currently the main convention that regulates the prevention of pollution from ships. It has given both the Flag States and Coastal States authority to enforce violation of its pollution regulations. The different annexes concern different types of discharges, for instance Annex I on the Prevention of Pollution by Oil, Annex IV on the Prevention of Pollution by Sewage from Ships, Annex V on the Prevention of Pollution by Garbage and Annex VI on the Prevention of Air Pollution from Ships.

Furthermore, all the Arctic States have ratified the MARPOL 73/78, which can be seen as a cooperation to create common discharge and emission standards in the Arctic. Norway has adopted all these Annexes and made them national law; therefore, this discussion will continue in chapter 4.4.

3.3.3 SOLAS Convention

The SOLAS convention is applicable to all ships that fly the flag of Contracting Parties, which means that since Norway has signed this Convention, all ships that are flying the flag of Norway are bound by these regulations regardless of whether or not they are navigating in the waters of Norway.⁹⁶ Since this thesis mainly discusses the Coastal States, this Convention will only be discussed briefly because it gives the Flag States the main prescription and enforcement jurisdiction. The relevance of the SOLAS Convention is that it concerns the safety of merchant ships.

The first version was adopted after the Titanic disaster, in which many passengers died partly because there were not enough life boats.⁹⁷ It aims at making ships as environmentally friendly and safe as possible, thereby minimizing the risk of loss of the ship or pollution to the

⁹⁵ *Ibid*, p. 399.

⁹⁶ SOLAS Convention Article II.

⁹⁷ IMO, International Convention for the Safety of Life at Sea (SOLAS), 1974.

marine environment due to structural failure, such as collapse.⁹⁸ The importance of the safety of the passengers is central and therefore relevant, since there are passengers on cruise ships.

The main objective of the SOLAS Convention was to set a minimum standard for the construction, equipment and operation of ships. Under the SOLAS Convention, the Flag States are responsible for ensuring that the ships that are flying its flag comply with its regulations. The Port State have also gained some jurisdiction in the SOLAS Convention, as some control provisions have been established that give the Port States the right to inspect the ships of other Contracting States, if it is believed that the ship has violated these standards and regulations. The technical provisions are particularly relevant for this discussion, because cruise ships that are navigating in the waters of Svalbard have passengers onboard. It is therefore important that the cruise ships are constructed in a safe way and have safety equipment onboard, such as life boats, rescue boats and life jackets.⁹⁹ Norway signed the SOLAS Convention on 15 February 1977, and it entered into force in May 1980. There are now 162 Contracting Parties to the SOLAS Convention.¹⁰⁰

3.4 The Svalbard Treaty

Regarding environmental protection under the Svalbard Treaty, Article 2 (2) provides that:

“Norway shall be free to maintain, take or decree suitable measures to ensure the preservation and, if necessary, the reconstruction of the fauna and flora of the said regions, and their territorial waters”.

This gives Norway the right to adopt rules that concerns the protection of the marine flora and fauna. The type of rules and regulations are not mentioned, and one can therefore argue that Norway adopt the rules and regulation they see is needed in different areas. This is what they have done in terms of the Protected Areas around Svalbard, by see what areas that are especially vulnerable and in need of regulations to avoid pollution or noise. Even though it is believed that tourism activities will increase in the future, there are no provisions in the Svalbard Treaty that explicitly refers to tourism.

⁹⁸ SOLAS Convention chapters II-IV.

⁹⁹ IMO, International Convention for the Safety of Life at Sea (SOLAS), 1974.

¹⁰⁰ IMO Documentation, International Convention for the Safety of Life at Sea, 1974, as amended (SOLAS 1974).

The Svalbard Treaty does not mention other maritime zones such as the CZ and FPZ, nor whether Norway can adopt rules to protect the marine environment in these zones. As discussed earlier, the applicability of the Svalbard Treaty in other maritime zones than the TS is controversial; therefore, there are two ways to look at this situation. If the Svalbard Treaty is applicable beyond the TS, then the equality principle is applicable, whereas if the Svalbard Treaty is not applicable beyond the TS, the regulations under LOSC give Norway as a Coastal State the rights according to Articles 56 and 77.

Tourism activities will fall under Article 3 (2) of the Svalbard Treaty, and all tourism activities in Svalbard must be based on equal treatment in the development of tourism on land, in the TS and in the FPZ.¹⁰¹ This means that all states can navigate their cruise ships in the waters of Svalbard. When interpreting the Svalbard Treaty dynamically, while taking account of the development in environmental law, Norway is obligated to take effective measures to preserve and protect the natural environment. This obligation will also include tourism activities.¹⁰² One of the measures taken by Norway is the establishment of the Svalbard Environmental Protection Act, which will be discussed further in chapter 4.

3.5 AEPS

The AEPS was an initiative of the Finish Government to discuss cooperative measures to protect the Arctic Environment, and as a result the Declaration on the Protection of the Arctic Environment was established.¹⁰³ As Norway is one of the Arctic States, and Svalbard lies within the defined area seen as the Arctic, the Declaration on the Protection of the Arctic Environment is applicable in Svalbard.

The States that signed this Declaration committed themselves to a joint Action Plan, which includes assessment of potential environmental impacts of activities in the Arctic.¹⁰⁴ Norway has made these assessments and subsequently established Protected Areas in Svalbard. This has led to 65% of the land area and 86% of the TS being protected by 2008.¹⁰⁵

¹⁰¹ Wolf, Sarah, *Op. Cit.* p. 32.

¹⁰² *Ibid*, p. 30.

¹⁰³ Arctic Environmental Protection Strategy, *Declaration on the Protection of the Arctic Environment*, Rovaniemi, Finland, June 1991.

¹⁰⁴ *Ibid*, p. 2.

¹⁰⁵ Norwegian Directorate for Nature Management, *Protected Areas in Svalbard: Securing Internationally Valuable Cultural and National Heritage*, miljodirektoratet.no, p. 3.

3.6 The London Convention

The London Convention is one of the first global conventions to protect the marine environment from human activities. It was agreed on in 1972 and entered into force in 1975.¹⁰⁶ The London Convention is an international treaty that has created a global system to protect the marine environment from pollution caused by dumping in the ocean.¹⁰⁷ According to Article I of the London Convention, the:

“Contracting Parties shall individually or collectively promote the effective control of all sources of pollution of the marine environment, and (...) take all practicable steps to prevent the pollution of the sea by the dumping of waste and other matter that is liable to create hazardous to human health, to harm living resources and marine life, to damage amenities or to interfere with other legitimate uses of the sea”.

The London Convention supports the terms of the LOSC and has similar goals to MARPOL 73/78 in terms of marine environmental protection and marine pollution. It tries to ensure that companies and operators takes the necessary steps to prevent pollution of the sea through the dumping of wastes or other matter that can be damaging to human health or can harm living resources and marine life.¹⁰⁸ It also gives the Contracting Parties the duty, either individually or collectively, to prevent pollution caused by dumping (the London Convention Article II).¹⁰⁹

According to Rothwell, the London Convention has a particular application to polar waters because of the potential for waste disposal and the dumping of hazardous wastes in the polar region.¹¹⁰ The reason for this might be that it is easier to dump or discharge waste and other material in these areas as a result of their remoteness and the difficulty to enforce regulations and prove which ships have dumped wastes in these areas.

The provision is applicable to cruise ships that discharge waste such as waste water and ballast water. According to the London Convention Article III(4), “wastes or other matter” means material and substances of any kind, form or description. This definition

¹⁰⁶ IMO, Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter.

¹⁰⁷ EPA, 1972 Prevention of Marine Pollution by Dumping of Wastes and Other Matter (London convention).

¹⁰⁸ The London Convention Article I.

¹⁰⁹ Rothwell, Donald R, *Global Environmental Protection Instruments and the Polar Marine Environment* in D. Vidas (ed) Protection the Polar Marine Environment. Law and Policy for Pollution Prevention, 2000, Cambridge University Press, p. 63.

¹¹⁰ *Ibid*, p. 64.

certainly applies to discharges of grey water or black water in the waters of Svalbard. Norway has implemented regulations that concerns where ships can discharge waste water.

Chapter 4 National regulations of marine environmental pollution from cruise ships in Svalbard

4.1 Introduction

This chapter aims to examine the Norwegian regulations of marine environmental pollution from cruise ships in Svalbard. Due to the Governor of Svalbard's monitoring function, ships that enters the waters of Svalbard must notify the Governor and give a report when the trip has ended, and the prescription on the control of passenger vessels are applicable to Svalbard as well.

The legal basis for the status of the archipelago of Svalbard is the Svalbard Treaty, which gives Norway the sovereign rights over the land territory, extending out to the territorial sea limit. The legal regime that governs Svalbard is the legislation of Norway. The laws and regulations in Norway will also apply in Svalbard, but it is evident that Norway has excluded some laws and agreements. An example of this is the 1992 Agreement on the European Economic Area (hereinafter EEA), which Norway has signed, but Svalbard is excluded from its application.¹¹¹ This is also stated in the Svalbard Act¹¹² Section 2. The Svalbard Act does not have any provisions regarding marine environmental protection or tourism; it only states that Norwegian civil law, penal law and procedural law are applicable in Svalbard, unless other provisions are made.¹¹³

All tour operators must comply with national laws and regulations, and in Norway the Norwegian Coastal Administration (hereinafter NCA) is responsible for protecting the coast and national waters from pollution. The NCA is also in charge of coastal management, maritime safety and communication. The objective of the NCA is to “ensure safe and efficient navigation in the fairways along the coast and into ports, as well as national preparedness for acute pollution”. The NCA participates in coastal planning and exercises authority pursuant to the Harbor and Fairway Act and Pilotage Act, as well as parts of the Pollution Act, Svalbard Environmental Act, and Planning and Building Act.¹¹⁴

¹¹¹ Ulfstein, Geir, *Op. Cit.* p. C,1,23.

¹¹² The Svalbard Act, 17 July 1925.

¹¹³ Svalbard Act Section 2.

¹¹⁴ The Norwegian Coastal Administration, *Coastal Administration's main tasks*, Kystverket, 2001, last updated 2014.

4.2 The Svalbard Environmental Protection Act

The establishment of the Svalbard Environmental Protection Act (hereinafter SEPA) was one of the measures Norway took on the basis of the Svalbard Treaty.¹¹⁵ The purpose of the SEPA is according to Section 1, to:

“preserve a virtually untouched environment in Svalbard with respect to continuous areas of wilderness, landscape, flora, fauna and cultural heritage”.

According to Section 2, this Act applies to the entire land area as well as the waters out to the territorial limit. As the internal waters and the TS belong to the territory of the Coastal State, the SEPA is applicable in these zones. However, there are some doubts as to whether it applies to the CS and in the FPZ.

As the SEPA came into effect in 2002, the CS and FPZ regimes were well established in the general law of the sea, so one may wonder why Norway did not refer to these maritime zones. If one interprets the term “territorial limit” in the sense that it refers to the limit of the Coastal State’s territorial sovereignty, both the CS and the FPZ would be excluded from the geographical scope of the SEPA. Such an interpretation, according to Sarah Wolf, must be seen as too narrow, as most provisions use a broad wording.¹¹⁶ The fact that there is a general obligation to protect the marine environment under LOSC Article 192 can be used as an argument that Norway can establish rules and regulations related to marine environmental protection and tourism in the CS and FPZ.

The relevant parts of the SEPA it pertains to marine environmental protection and tourism in the waters of Svalbard are pollution, waste disposal and traffic, dumping from ships and the precautionary principle. The precautionary principle is a good principle on which to base, for instance, a postponement of activities with unknown consequences.¹¹⁷

In Section 24 of the SEPA, it is stated that the:

“flora and fauna (...) in the sea shall be managed in such a manner that the natural productivity and diversity of species and their habitats are maintained, and Svalbard’s natural wilderness is protected for future generations”.

¹¹⁵ Wolf, Sarah, *Op. Cit.* p. 30.

¹¹⁶ *Ibid*, pp. 30-31.

¹¹⁷ SEPA Article 7.

Since cruise ships can affect the diversity and productivity of the species in the waters of Svalbard by pollution, waste and noise, it is important that such activities are managed well. In particular, chapter VII ii, contains provisions related to pollution and waste. Ships are prohibited from releasing waste into the sea, unless the waste is sanitary waste or waste food from small vessels and it is released in the open sea, outside the territorial limit of Svalbard.

Furthermore, the public has the right of passage and access through the natural environment of Svalbard according to Section 73, and this will give cruise ships the right to navigate in the waters of Svalbard. However, the motor traffic is regulated according to Section 79 and permitted by the Governor of Svalbard.¹¹⁸ Among other factors, the type of fuel can affect the marine environment through pollution. According to section 82a, Norway can adopt regulations with regard to the fuel quality in the territorial waters of Svalbard.

Wastewater discharges in the waters around Svalbard are regulated through SEPA Section 67, which states that:

*“No person may release waste into the sea from a ship or other vessel. However, the discharge of uncontaminated waste food from small vessels or of sanitary wastewater in the open sea is permitted.”*¹¹⁹

There is no Norwegian law that regulates emissions from vessels, and the SEPA does not specifically address air pollution. It is easy to believe that the pure atmosphere in Svalbard will cause the air emissions from ship-based activities to disseminate before they become an environmental issue. This is not necessarily the case, however, because of the limited activity radius of some of the vessels, the quality of the emissions from older ships and the volume of emissions from the larger ships.¹²⁰

Section 66 of the SEPA prohibits the release of substances that are hazardous to the environment. This regulation does not apply to the anti-fouling paint per se, but it gives the environment ministry the ability to prohibit the use of certain hazardous substances in Svalbard.¹²¹ The impacts that the toxins in the anti-fouling hull paint can have on the environment have not been comprehensively evaluated so far, but according to a report from the Arctic Monitoring and Assessment Programme (hereinafter AMAP), dog whelks with imposex (a disorder caused by toxic pollutants) have been observed in Svalbard.¹²²

¹¹⁸ SEPA Section 82.

¹¹⁹ WWF International Arctic Programme, *Op. Cit.* p. 25.

¹²⁰ *Ibid*, p. 32.

¹²¹ *Ibid*, p. 36.

¹²² *Ibid*, p. 36.

The number of vessels that are operating around Svalbard, which still uses organotin-based hull paints, are unknown, but in the future some regulations might be established which will prohibit paint containing hazardous toxins, so as to avoid negative impacts on species in this area and the marine environment.

4.3 Regulations relating to tourism, field operations and other travel in Svalbard

These regulations are also among Norway's measures according to the Svalbard Treaty Article 2 (2), with the purpose of regulating, within the framework of the Norwegian Svalbard Policy, tourism, field operations and other travel in Svalbard.¹²³ The Regulations relating to tourism and other travel in Svalbard¹²⁴ cover matters such as insurance and accountability for trips that are organized in Svalbard.

The scope of these regulations includes, according to Section 2 "*Svalbard's land territory and sea territory to the limit of the territorial waters*". This means that these regulations are only applicable for the cruise ships that are navigating in the TS, and not beyond it. These regulations, which are applicable for both companies and individual travelers, include a rule that the Governor of Svalbard must be notified before a trip in the waters of Svalbard begins. For instance, these regulations shall provide for the safety of tourists and other travelers according to Section 1 (a). According to Section 3 (a), a tour operator is:

"Anyone who, in return for payment, organizes travels with accompanying services, or who transports persons within Svalbard for tourist purposes (...)".

Such operators arrange the tours around the archipelago, which can be found on the Visit Svalbard homepage.

4.4 MARPOL regulations

Norway has made all the Annexes of MARPOL 73/78 national law, which means that it is also applicable for Svalbard, and it determines the framework for the prevention of pollution.¹²⁵ Depending on its size, a cruise ship can carry a large enough volume of fuel and other oily liquids to pose a considerable environmental threat in the waters of Svalbard.

¹²³ Sysselmannen.no, *Regulations relating to tourism, field operations and other travel in Svalbard*, Section 1.

¹²⁴ Sysselmannen.no, *Op. Cit.*

¹²⁵ WWF International Arctic Programme, *Op. Cit.* p. 22.

Furthermore, the harsh climate and icy conditions can cause an accident. An oil spill near the coast or in an area with ice can become damaging for the environment and difficult to contain.¹²⁶

4.4.1 Annex I

In Norway, the legislation with regard to oil pollution is found in the regulation on environmental safety for ships and mobile offshore units. These regulations implement the MARPOL Annex I, and the general rule is that any discharge of oil or oily mixtures from ships is prohibited unless a number of conditions are met.¹²⁷

According to the regulations of 30 May 2012 No. 488 Section 1 (a), these regulations are applicable to all vessels flying the flag of Norway as well as foreign vessels in the TS of the waters of Norway, which includes Svalbard. As stated in Section 4, the MARPOL Annex I shall apply as Norwegian legislation. Annex I has become part of Norwegian law and gives the framework of the provisions which regulate prevention of oil pollution.¹²⁸

4.4.2 Annex IV

As stated in the Regulations of 30 May 2012 No. 488 on environmental safety from ships and mobile offshore units Section 10, discharge of sewage, grey water and the like into the Norwegian waters is prohibited. As Svalbard is under the Sovereignty of Norway, these regulations are applicable in the waters of Svalbard as well. According to Section 10 (1), *“discharge of sewage, grey water and similar into waterways is prohibited”*. This means that it is always prohibited to discharge sewage into the waters of Svalbard, unless the operator has received special permission to discharge sewage in some parts of the water. The Norwegian Maritime Authority grants exceptions for the legal discharge of sewage in the waters of Svalbard according to Section 10 (5).

Annex IV aims at preventing pollution by sewage from ships. According to §1 (a) (*“Forskrift om miljømessig sikkerhet for skip og flyttbare innretninger”*), these regulations are applicable to Svalbard as well. §9 of the regulations aims at avoiding pollution from sewage from ships such as cruise ships. As cruise ships accrue a large amount of sewage due to the

¹²⁶ *Ibid*, p. 22.

¹²⁷ Norwegian Maritime Authority, *Regulations*, 2013, last changed 2014.

¹²⁸ Regulations to avoid pollution (*“Forskrift om hindring av forurensing av fra ship m.m”*), 16-06-1983, 1122.

large number of passengers on board, it is important that the ship has the capacity to store and handles huge amount of sewage.¹²⁹

It is not legally permitted for any ships to incinerate or discharge waste or other materials within the 12 nm of Svalbard. This creates some difficulties for ships sailing in the Archipelago of Svalbard. Some of these ships do not go into harbors for several days, and some of them might not even visit Longyearbyen. This makes it important for the ships that are sailing in the waters of Svalbard to have adequate treatment for the waste that is generated throughout the voyage.

4.4.3 Annex V

Regarding pollution through garbage, Annex V (“Forskrift om hindring av forurensing fra skip m.m”) regulates specific waste disposal routines. This regulation is not overruled by the SEPA Section 67 (“discharges from ships”) or Section 68 (“dumping and incineration of waste and other materials”).¹³⁰ Meanwhile, in the regulations of May 30 2012 No. 488 Section 11, it is stated that Annex V of MARPOL is applicable in the waters of Svalbard.

Pollution through garbage is regulated similar to pollution through sewage and other wastes, and has been discussed previously. The Governor of Svalbard does not encourage cruise ships to dispose of waste in Longyearbyen, due to its limited capacity to handle waste locally. Therefore, it would be good to improve Longyearbyen’s waste capacity and make sure that the standards of the treatment of waste on cruise ships are sufficient, to avoid waste from ships in the environment.¹³¹

There is not any legislation regulating ballast water. In light of the comparatively small volume of ballast water used by cruise ships and the fact that the Arctic marine environment is quite hostile to introduced species, it is assumed that the threat from ballast water is limited in the Arctic.¹³² However, this does not mean that there are no concerns related to possible impacts ballast water might have on the environment. The Norwegian government should improve on in this future by developing some regulations with regard to ballast water.

¹²⁹ Regulations prevention pollution by sewage from ships §9 (b).

¹³⁰ WWF International Arctic Programme, *Op. Cit.* p. 28.

¹³¹ *Ibid*, p. 28.

¹³² *Ibid*, p. 35.

Chapter 5 Norway's enforcement jurisdiction in the waters of Svalbard

5.1 Introduction

Enforcement jurisdiction concerns whether the state has the competence to enforce its legislative jurisdiction, and these measures are taken either by the Coastal, Port or Flag State. The enforcement power can involve both administrative measures and criminal proceedings.¹³³ The enforcement jurisdiction a state has regarding a particular vessel and its alleged violations of pollution regulations depends on whether it is a Coastal, Port or Flag State and in which maritime zones the alleged violation occurred. The reason for this is the fact that there are different rights and duties in the different maritime zones, and the Coastal States have less sovereignty and rights as one gets farther away from land.

As the international law of the sea has developed over time, coastal states have sought to exercise control over both the land and the waters that lie within its territory.¹³⁴ Svalbard is under the sovereignty of Norway, and Norway can therefore enforce the laws and regulations it has implemented. The discussion in this thesis has focused on the TS, CS, the FPZ of Svalbard, and what kind of jurisdiction Norway has in the different maritime zones depends on whether Norway is a Coastal, Port or Flag State. There will also be a short discussion of the enforcement jurisdiction Norway would have had if the country had established an EEZ around Svalbard, as well as what enforcement measures Norway would have had with an EEZ.

5.2 Norway's Enforcement Jurisdiction

The framework for the enforcement of pollution regulations was not satisfactory before the development of the LOSC. This was mainly because of "flags of convenience" and the broad wording of the pre-LOSC conventions. The "flags of convenience" gives shipowner and companies the ability to only follow the minimum regulations for equipment and regulations; moreover, the "flag of convenience" states often do not enforce violations as strictly. The "flag of convenience" are still an issue today.

Article 211 (7) of the LOSC gives some insight into what "generally accepted international rules" includes. For instance, the two first Annexes of MARPOL are assumed to

¹³³ Jakobsen, Ingvild U. and Tore Henriksen, *Op. Cit.*

¹³⁴ Rothwell, Donald R. and Tim Stephens, *Maritime Regulation and Enforcement in The International Law of the Sea*, 2001, Hart Publishing, p. 412.

be “generally accepted” because these two Annexes, according to Churchill and Lowe, are widely ratified.¹³⁵

When it comes to the CS, which is discussed in Part VI of the LOSC, it does not contain many provisions related to marine regulation and enforcement. Other distinctive aspects of the CS regime extend to the regulation and management of sedentary species. This includes their harvesting, matters associated with submarine cables and pipelines and their security and protection, and artificial islands, installations and structure.¹³⁶ Because of the controversy over whether the Svalbard Treaty is applicable to the CS, international sources like the LOSC and MARPOL 73/78 will be discussed in regard to the CS.

Norway’s enforcement jurisdiction over Svalbard’s offshore areas is exercised with caution because of the international controversy over Svalbard’s waters, especially in regard to the FPZ, and in cases where sedentary species are affected by the pollution, the CS.¹³⁷

The FPZ is much like an EEZ regime, as many of the maritime regulations and enforcement issues are subsumed within the EEZ regime.¹³⁸ Norway only has jurisdiction over fisheries in the FPS, hence the name Fisheries Protection Zone. The FPZ around Svalbard was established because the State Parties of the Svalbard Treaty were, afraid to lose their rights under the Svalbard Treaty. Due to international agreements like the LOSC, London Convention, and MARPOL 73/78, it will be possible for Norway to enforce pollution violations within its maritime zones; in cases where the alleged polluting vessels do not comply, Norway must contact the Flag State in the hope that it will enforce the violations of these pollution regulations.

The EEZ might be the most complex of the maritime zones in terms of maritime regulation and enforcement, due to the unique and limited sovereign rights and jurisdiction that the coastal states have in this area. The LOSC tries to find a balance between identifying the rights of the coastal state to undertake legitimate acts of maritime regulation and enforcement, while at the same time trying to safeguard the rights and interests of foreign ships, especially in the case of marine pollution. The rights of the Coastal State are stated in LOSC article 56.¹³⁹ Here, Norway has the jurisdiction to protect and preserve the marine environment,¹⁴⁰ even if

¹³⁵ Churchill, R.R. and A. V. Lowe, *Op. Cit.* p. 346.

¹³⁶ Rothwell, Donald R. and Tim Stephens, 2001, *Op. Cit.* p. 431.

¹³⁷ Pedersen, Torbjørn, *Op. Cit.* p. 917.

¹³⁸ Rothwell, Donald R. and Tim Stephens, *Op. Cit.* p. 431.

¹³⁹ Rothwell, Donald R. and Tim Stephens, *Op. Cit.* p. 428.

¹⁴⁰ LOSC Article 56 (1) (b) (iii).

some might argue this point due to the fact that since Norway has not established an EEZ regime.

However, there is a general obligation to protect and preserve the marine environment in LOSC Article 192. This is supported by case law such as the *Mox Plant* case, which has recognized that the duty to cooperate is fundamental to preventing marine environmental pollution, as well as by the fact that the wish among the Arctic States to cooperate to avoid pollution in the Arctic waters must be seen as trying to fulfill this cooperation duty.

With respect to other international laws in regard to a state's enforcement powers at sea, the LOSC has given significance to article 111, which addresses hot pursuit. It is accepted under customary international law that, when a foreign ship has violated a state's laws within its internal waters or TS, warships or military aircrafts has the right to *hot pursuit*, and to arrest it on the high seas (hereinafter HS). This is recognized in both the High Seas Convention Article 23 and LOSC Article 111. The pursuit must start while the ship or one of its boats is within the TS and close enough to see or hear the visual or auditory stop signal. The pursuit must also be hot, as it has just started, and continuous.¹⁴¹

In this context, the use of force that will be used involves the enforcement of Norway's laws and regulations in the maritime zones of Svalbard. The LOSC does not mention use of force but emphasizes the peaceful use of the oceans.¹⁴² Article 225 of LOSC indicates that, even though the coastal state has the right to enforce its laws and regulations in its maritime zones, it cannot endanger the safety of navigation or create any hazard to the vessel navigate in its maritime zones.

The SOLAS Convention established a minimum standard for the construction, equipment and operations of ships, giving the Flag State the ability to enforce these standards and regulations when they are violated. This means that, for Norway to have enforcement jurisdiction when cruise ships violate the provisions in the SOLAS Convention, the cruise ships have to fly the flag of Norway. The Port States have been given the right to inspect ships believed to have violated these standards, which Norway as a Port State can do in its three ports in Svalbard.¹⁴³ On the other hand, according to the London Convention, the enforcement jurisdiction is mainly given to the Flag State, to make sure that the provisions of this Convention are followed. Regarding the Regulations related to tourism, field operations and other travel in

¹⁴¹ Churchill, R.R and A.V Lowe, *Op. Cit.* pp. 214-215.

¹⁴² The preamble of the LOSC and Article 301.

¹⁴³ This will be discussed further in chapter 5.2.3.

Svalbard, Section 14 states that deliberate or negligent violations of these regulations are punishable by fines or imprisonment of up to one year.

5.2.1 Coastal State Jurisdiction

Coastal State are those states that have maritime zones in which vessels navigate; thus, in the present case, Norway is the Coastal State. The Coastal State can only enforce violations of pollution regulations within its own territory due to the Coastal State's enforcement jurisdiction being minimized when the violation occurs farther away from the land territory. Under customary international law, the coastal state can arrest foreign ships that have violated pollution regulations as long as the violation has been committed in its own territorial sea.¹⁴⁴ Norway has the sovereignty to establish laws and regulations in Svalbard according to the Svalbard Treaty Article 2 (1) and (2), and therefore it can also enforce these regulations as well. Norway must base its maritime regulation and enforcement measures on international law and municipal law, especially in the case of arrest, detention and criminal and civil proceedings.¹⁴⁵

The LOSC created its own framework regime for enforcement in the different maritime zones of the coastal state. In the TS of Svalbard, Norway has full sovereignty over the vessels navigating through these seas. Ships of all states have the right of innocent passage in the TS,¹⁴⁶ and this is applicable in the TS of Svalbard as well. As long as the passage in Svalbard's territorial sea is not prejudicial to the peace, good order or security of the coastal state,¹⁴⁷ there is nothing Norway can do to preventing cruise ships from navigating in its waters.

Regarding marine environmental protection, however, according to article 19 (2) (h) of LOSC, innocent passage does not apply when there is any act of willful or serious pollution. Pollution in the arctic region is often seen as serious, since pollution in this area is particularly difficult to clean up. One can therefore argue that any type of pollution in the territorial sea of Svalbard, can be seen as serious.

Coastal State enforcement jurisdiction is mainly based on LOSC Article 220, which states that when a vessel is suspected to have violated the Coastal State's regulations against pollution from ships, the state may undertake physical inspection of the vessel; if the evidence

¹⁴⁴ Churchill, R.R. and A.V. Lowe, *Op. Cit.* p. 345

¹⁴⁵ Rothwell, Donald R and Tim Stephens, *Op. Cit.* Hart Publishing, p. 423

¹⁴⁶ LOSC article 17

¹⁴⁷ LOSC article 19 (1)

found supports the suspicion, the Coastal State can start legal proceedings.¹⁴⁸ The Coastal State has the jurisdiction to arrest the crew and detain the vessel when the pollution is seen as “willful and serious” in its territorial sea, because in that case the passage is no longer seen as innocent.

Regarding the enforcement jurisdiction Norway could have if the country were to claim an EEZ, the Coastal State can require a vessel within its TS or EEZ to give the state information about the vessel’s identity and port of registry, its last and next port of call and other information that can help the Coastal State to find out whether it was this vessel or another vessel that polluted its waters. If the alleged violation in the EEZ has resulted “*in a substantial discharge causing or threatening significant pollution of the marine environment*”, the Coastal State can detain the vessel.¹⁴⁹ One must keep in mind, however, that Norway has only established an FPZ around Svalbard, and not an EEZ. This means that this provision is not applicable in this case. However, the Coastal State can exercise its enforcement jurisdiction in its TS or EEZ in the case of violations of both national and international pollution regulations.¹⁵⁰

Under the LOSC, the coastal state has, according to Article 21 (1) (f), the right to adopt laws and regulations related to the preservation, prevention, reduction and control of pollution in the TS. Norway must be able to enforce the laws and regulations it adopts; however, it is important for the country not to take its enforcement power too far, especially because of the equal rights that are established in the Svalbard Treaty Article 2. This has not been the case, even though some states disagree with Norway’s enforcement jurisdiction in the CS and FPZ.

The Coastal State also has, under LOSC Articles 27 and 28, criminal and civil jurisdiction. These articles can be applied in the territorial sea. Even though the criminal laws of the Coastal State are applicable in the TS, there are limitations to Article 27. The main reason for this is to avoid hampering navigation in the TS and too much interference by the Coastal States in navigation in the TS. The Coastal State’s criminal jurisdiction should not be exercised on board a foreign ship that is only passing through the TS¹⁵¹ and does not fulfill the requirements of article 27 (1) letters (a) to (d). Norway can, for instance, use this article in the case of a serious and willful pollution that affects Svalbard.

Norway has, according to the Svalbard Treaty Article 2, the right to “maintain, take or decree suitable measures to ensure the preservation and, if necessary, the re-constitution of the

¹⁴⁸ LOSC Article 220 (2).

¹⁴⁹ LOSC Article 220(3) - (8).

¹⁵⁰ Churchill, R.R. and A. V. Lowe, *Op. Cit.* p. 349.

¹⁵¹ LOSC article 27 (1).

fauna and flora (...)"'. This also gives Norway the ability to enforce these measures. Norway's enforcement jurisdiction in Svalbard's maritime zones is, exercised through different regulatory authorities, mostly the Norwegian Coast Guard, in the maritime zones of Svalbard.

According to LOSC Article 77 (1), Norway as a Coastal State only has, sovereignty rights for the purpose of exploring and exploiting the natural resources of the CS. This means that Norway does not have the right, according to the LOSC, to establish and enforce pollution regulations in the CS. In terms of whether tourism activities can affect the resources on the continental shelf, they probably only affect sedentary species. As mentioned in chapter 4, toxic substances have been found in some species as an effect of anti-fouling paint and discharges. However, there are no regulations that explicitly apply to the CS with regard to pollution as an effect of cruise ships, but there are general provisions to protect the marine environment that can give Norway enforcement jurisdiction.

5.2.2 Flag State Jurisdiction

The Flag State is the state of the flag a cruise ship is flying during its voyage in Svalbard. This means that when the cruise ships are flying the flag of Norway, they will be bound by Norway's rules and regulations. If a cruise ship flying the flag of Norway violates any of Norway's pollution regulations, Norway has the jurisdiction to enforce these violations. In this case, it does not matter whether the ship's violation occurs on the high seas or within Svalbard's waters, as Norway has jurisdiction either as Port State, when the ship comes to the Port or a Flag State.¹⁵²

Regarding Norway's enforcement jurisdiction, the Flag State can, under customary international law, exercise jurisdiction over a vessel flying its flag when the vessel, for instance, has violated the Flag State's pollution regulations. The Flag State has jurisdiction over the vessel regardless of whether the vessel is on the high seas, at a port or in the territorial sea. If the vessel is in the TS or the port of another state, the Flag State cannot arrest the vessel, but it can start criminal proceeding in its own court if the shipowner or the Master returns to the Flag State's territory.¹⁵³ If a cruise ship is flying the flag of Norway, Norway can enforce the violations of its pollution regulation within its own territory, as well as on the high seas.

The Flag State is also, according to the MARPOL regulations Articles 4 (1) and 6 (4), obligated to establish sanctions and start criminal proceedings of the vessel that breaches its

¹⁵² Churchill, R.R. and A. V. Lowe, *Op. Cit. pp. 344-345.*

¹⁵³ *Ibid*, p. 345.

pollution regulations. Even though the Convention is only applicable to the states that have signed and ratified the Convention, Norway and all the other Arctic States have ratified it, as have 153 other states.¹⁵⁴

The Flag State's enforcement jurisdiction is found in Article 117 of the LOSC, which states, which states that the Flag States must enforce violations of pollution regulations by their own vessels. This is supported by Article 92 of the LOSC, where the Flag State's duties are stated. This gives Norway, as a Flag State enforcement power over the cruise ships that are flying its flag.

5.2.3 Port State Jurisdiction

The Port State is the state whose port the vessel is in. Svalbard has three ports, one in Longyearbyen, one in Barentsburg and one in Ny-Ålesund,¹⁵⁵ and cruise ships make landings in these ports during their cruises. This means that if the cruise ships that are navigating in Svalbard's maritime zones violates the pollution regulations that are established in Svalbard, Norway, as a Port State will have enforcement jurisdiction.¹⁵⁶

A Port State has, under MARPOL 73/78, enforcement jurisdiction against a vessel that has violated the Port State's pollution regulations, either in the territorial sea or in one of its ports. Even though a Port State cannot take any actions against a vessel that has violated the provisions of the Convention before entering its TS, the Port State can inspect the vessels; upon finding violations, the Port State must contact the Flag State, which is obligated to take legal proceedings.¹⁵⁷

According to Churchill and Lowe, the most radical innovations made to the enforcement of marine pollution standards by the LOSC is the enforcement jurisdiction that is given to the Port States.¹⁵⁸ LOSC Article 218 provides a Port State with the ability to take legal proceedings against a vessel that is in one of its ports and that is alleged to have discharged polluting matter *outside* that state's territorial sea or EEZ:

“in violation of applicable international rules and standards established through the competent international organization or general diplomatic conference”.

¹⁵⁴ IMO Documentation, *Contracting Parties to MARPOL 73/78*.

¹⁵⁵ World Ports, *Svalbard*.

¹⁵⁶ See chapter 5.2.3.

¹⁵⁷ Churchill, R.R. and A. V. Lowe, *Op. Cit.* p. 345.

¹⁵⁸ *Ibid*, p. 350.

However, the Port State cannot undertake legal proceedings if the discharge happened in the internal waters, the TS or the EEZ of another state, unless that State or the Flag State requests it.¹⁵⁹ When a Port State or Coastal State (in this case, Norway is both) arrests and starts proceedings against a vessel with regard to alleged pollution violations, the State is obliged to follow the safeguards that are set out in Articles 223 to 232 of the LOSC.¹⁶⁰ One important thing to note is that, enforcement of pollution regulations is not applicable to warships and governmental ships, and these powers of enforcement of the Coastal, Flag and Port State, can according to Article 224 of LOSC only be exercised by officials or by warships, military aircrafts or other ships and aircrafts that are marked for uses in government service.

¹⁵⁹ *Ibid*, p. 350.

¹⁶⁰ *Ibid*, p. 350.

Chapter 6 Conclusions

6.1 Summary

The goal of this thesis was to present and analyze the international and national regimes governing marine environmental protection and tourism in the waters of Svalbard. Three questions were addressed: 1) What international and national legislation is applicable to Svalbard with regard to marine environmental protection and tourism? 2) What international and national legislation is applicable to ship-based pollution in the waters of Svalbard? and 3) Does Norway have enforcement jurisdiction in the case of tourism activities and ship-based pollution in the waters of Svalbard?

From the discussion in this thesis, one can conclude that there is a complex legal regime in place in the Arctic and Svalbard. On the international level, the LOSC, the IMO instruments SOLAS and MARPOL 73/78 and the London Convention are the main conventions and organizations that gives the framework and jurisdiction related to ship-based pollution on Svalbard. The WWF International Arctic Programme has also been central in the research and discussion related to cruise tourism in Svalbard, as it has done research and gives a great overview over cruise tourism in the Arctic.

There is some controversy regarding the applicability of the Svalbard Treaty in the Continental Shelf and the FPZ. Until this issue is solved, there will be some challenges associated with legislation and enforcement. If some of the ships flying the flag of another state do not agree with Norway's enforcement jurisdiction and competence to implement regulations in the waters of Svalbard, conflicts can arise. Furthermore, as interests in oil, gas and tourism increases, the more controversy there are in these areas, the chances of conflicts will likely increase as well.

At the national level, there are several laws and regulations that deals with marine environmental protection and tourism in Svalbard. Among these are the Svalbard Treaty, the Svalbard Act, SEPA and the regulations relating to tourism, field operations and other travel. These laws and regulations contains important provisions to protect one of the last wilderness areas. Norway has also adopted international regulations such as MARPOL 73/78 Annexes and made them national laws. When it comes to marine environmental protection, the SEPA is central, while the regulations relating to tourism, field operations and other travel are central when it comes to tourism.

To some extent, there are difficulties in balancing the rights and duties of the Coastal State, Flag State and Port State. Also, the fact that each state has its own view and way of

interpreting the provisions makes it difficult to create compliance, implementation and enforcement. All states that are interested in Svalbard and its resources are mainly interested in promoting their own interests and gaining access to more resources. In terms of enforcement jurisdiction, Norway has, as a Coastal State, sovereign rights on the land and its territorial sea. Norway has the jurisdiction to enforce its rules and regulations, as long as all State Parties to the Svalbard Treaty are treated equally. However, Norway has exercised its enforcement power with caution, especially in the FPZ.

The question of whether the current legal framework is sufficient to ensure the protection of the marine environment and tourism activities is complicated to answer. Even though there are several regulatory legislations related to pollution, it is difficult to ensure that enough States has implemented and willing to enforce and comply with these regulations. There is also the need for balance among the rights and duties of the Port State, Coastal State and Flag State, as well as cooperation among the States. Furthermore, several of the provisions have a broad wording that makes them difficult to interpret when States have different values and interests. The broad wording also makes conflicts possible.

In conclusion, one can say that the standards and legislations related to marine environmental protection and ship-based pollution are sufficient even though there are some gaps and challenges. Also, the changes that happens, especially in the Polar Regions, as an effect of climate change create a need to think about future issues. There is also a need to create regulations for tourism, especially because climate change opens up new areas for cruise ship travel.

6.2 Future Aspects

Climate change will affect the future of the Archipelago of Svalbard, and it will give Svalbard a new economic role. Even though the melting of the ice opens opportunities for new fishing grounds, oil and gas exploration and tourism, it also poses a threat to the environment caused by the rising sea level, climate change and unknown effects on the ecosystems. There are, therefore, many states that sees the Arctic as an important area in the future and that want to create a legal regime to cover this area. The difficult aspect is that no state wants to create a legal regime that can cause difficulties for its interests in the Arctic.

Marine environmental protection of the polar regions is no longer the responsibility of the Polar States alone; rather, it is now seen as a global responsibility.¹⁶¹ The main reason for

¹⁶¹ Rothwell, Donald R. *Op. Cit.* p. 77.

this is the fact that the main threat to the environment in the Arctic is the pollution and waste that are carried from other places by the wind and water currents to the Arctic. The effects of climate change are most visible in the Arctic; however, if nothing change in the future, the changes will also affect other states that are not situated in the Arctic. This will hopefully create a common ground for States to change for both their own benefit and that of other states.

As an effect of the melting of ice in the Svalbard, new areas have opened up for fishing, shipping, tourism and oil and gas exploitation. It is hard to predict what the future will bring, but there is an anticipated rise in new conflicts over these new interests. Such conflicts relate to the exploration and exploitation of oil and gas activities in the controversial CS of Svalbard. There will be an economic loss for the state parties if the Svalbard Treaty is not applicable to Svalbard's CS, so it is unlikely that these states will stop claiming non-discrimination rights. The conflict over the legal status of the maritime zones of Svalbard is likely to intensify if it is not solved before the future activities in these areas begins.¹⁶²

As activities in Svalbard's maritime zones increase, stricter rules will likely be established for fuel on ships that are navigating in these zones, as in case of protected areas. There might also be more research, as the impacts of climate change and pollution in these areas are a precursor to their effects on the rest of the world. An Arctic Treaty, similar to the Antarctic Treaty might also be established. Today such a treaty is unlikely, but with time, more discussion and negotiation, it might be possible in the future.

If there is no clarification of the applicability of the Svalbard Treaty in the CS and FPZ, both conflicts and a fragmented regime may result over marine environmental protection in Svalbard. In 2008, Norway had protected 29 areas in the Archipelago of Svalbard, representing about 65% of its land area and 86% of its territorial waters.¹⁶³ This shows how committed Norway is to protecting Svalbard, even though there is still a need to improve the marine environmental protection regime in Svalbard.

One program that has worked in Ny-Ålesund, should perhaps be for expansion to other parts of the Archipelago of Svalbard. Even though Ny-Ålesund is owned and run by Kings Bay AS, the way the town is run and how it prepares for tourists is a good way to start. Information packages are sent with rules with which the tourists need to comply with when visiting Ny-Ålesund, as well as an agreement that the Captain needs to sign before ships can disembark there. In addition, a 1.5km path has been built, with cultural and environmental information

¹⁶² Wolf, Sarah, *Op. Cit.* p. 37

¹⁶³ Norwegian Directorate for nature Management, *Protected Areas in Svalbard: Securing Internationally Valuable Cultural and Natural Heritage*, 2009, p. 3

about the settlement, in order to protect the tundra, wildlife, and scientific research, as well as to protect the tourists from polar bear encounters.¹⁶⁴ This is a great vision for an environmentally friendly community and a model for other communities in the future.

¹⁶⁴ WWF International Arctic Programme, *Op. Cit.* pp. 73-74.

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