

Faculty of Law

# **Enhancing The Role of Arctic port States in Ensuring Maritime Safety and Combating Vessel-source Pollution in the Arctic Region.**

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## List of Acronyms and Abbreviations

- ABNJ	Areas Beyond National Jurisdiction
- AIRS	Applicable International Rules and Standards
- AMSA	Arctic Marine Shipping Assessment
- BWC	Ballast Water Convention
- CDEM	Construction, Design, Equipment and Manning
- COLREG	The International Regulations for Preventing Collisions at Sea
- ECEC	Environmental Compliance and Enforcement Committee
- EEZ	Exclusive Economic Zone
- GAIRS	Generally Accepted International Rules and Standards
- HFO	Heavy Fuel Oil
- IACS	The International Association of Classification Societies
- ICJ	The International Court of Justice
- IMO	International Maritime Organization
- INTERPOL	The international criminal police organization
- LOSC	The United Nation Convention of the Law of the Sea
- MARPOL	The International Convention for the Prevention of Pollution from Ships
- MoU	Memorandums of Understanding
- MRV	Monitoring, Reporting and Verification Scheme
- OPA	The US 1990 Oil Pollution Act
- PAME	The Protection of Arctic Marine Environment
- PRF	Port Reception Facilities
- PSC	Port State Control
- PSJ	Port State Jurisdiction
- STCW	The International Convention on Standards of Training, Certification and Watchkeeping for Seafarers
- SOLAS	The International Convention for the Safety of Life at Sea
- SAR`	The International Convention on Maritime Search and Rescue
- US	The United States of America
- VCLT	The Vienna Convention on the Law of Treaties

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# 1. Chapter I – Introduction

## 1.1 Introduction

Global warming has noticeably affected the Arctic region. The Arctic temperature rate has nearly increased twice as much as in the past decade.<sup>1</sup> Correspondingly, the Arctic sea ice is melting and melting fast.<sup>2</sup> It has been predicted that by 2050 the Arctic Ocean will be ice free, and the sea ice will be vanished.<sup>3</sup> Today many scientists are anxious that the meltdown of the Arctic is irreversible.<sup>4</sup> The reduction in Arctic sea ice coverage has facilitated human access to the Arctic resources, which lead to the expansion of shipping and offshore hydrocarbon extraction activities.

The Arctic region encompasses a very fragile environment. The growth of Arctic shipping and the expansion of vessels traversing Arctic waters, poses great pressure to the Arctic marine environment and its living resources. The risk of introducing alien species, and pollution generated by illegal discharges and accidental pollution are significantly high. Furthermore, the arctic marine shipping assessment (AMSA) report of 2009 indicates that pollution from illegal discharges and accidental pollution are today the main threat to the Arctic marine environment.<sup>5</sup> The remoteness of the Arctic region, poor weather conditions, the harsh environment imposed by the presence of ice, and the lack of infrastructure placed vessels operating in Arctic water to a higher number of risks. Consequently it demonstrated the need for additional requirements on flag States to ensure the capability of their vessels to operate under these hazard conditions, and to prevent marine pollution.

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<sup>1</sup> See Arctic Climate Impact Assessment (ACIA) report on Impacts of a Warming Arctic, Cambridge University Press, 2007, p.14.

<sup>2</sup> Ibid.

<sup>3</sup> See The Intergovernmental Panel on Climate Changes (IPCC) Fifth Assessment Synthesis Report. Available at: <http://ipcc.ch/report/ar5/syr/> accessed 5/09/2016.

<sup>4</sup> Molenaar, Erik, Arctic Fisheries Conservation and Management: Initial Steps of Reform of the International Legal Framework, Yearbook of Polar Law, March 2009, p.2.

<sup>5</sup> Arctic Marine Shipping Assessment (AMSA) 2009 Report, Arctic Council (PAME), Available at: <http://www.pame.is/index.php/projects/arctic-marine-shipping/amsa/amsa-2009-report>, accessed 5/9/2016.

Today, substandard-vessels continue to sail under flags of convenience and poorly performing flag States, placing both maritime safety and the marine environment in jeopardy. Therefore, it's not appropriate anymore to rely only on flag State jurisdiction. In this context port State jurisdiction has devolved as a subsidiary jurisdiction to rectify the deficiencies of flag state jurisdiction.

Safety and environmental standards are closely related. Measures adopted to improve vessels' safety at sea help to prevent environmental damage from occurring in the first place by reducing maritime incidents.<sup>6</sup> Safety standards are often referred to as construction, design, equipment and manning (CDEM) standards and environmental standards are often referred to as "discharge standards". These standards were incorporated into a number of conventions adopted by the International Maritime Organization (IMO).<sup>7</sup> The inclusion of port enforcement provisions within the IMO instruments does not just serve the port States national interest, but enables them to act as "trustees" or "last safety net" for the international community.<sup>8</sup> In this context, the concept of port State control (PSC) has developed through the adoption of international conventions and still developing to ensure that the exercise of port State jurisdiction (PSJ) is in support of internationally agreed standards and conservation measures.<sup>9</sup>

## **1.2 Port State jurisdiction and port State control**

The concept of port State is often used where the coastal State is exercising jurisdiction that has an extraterritorial effect. The term port State is not defined in the United Nations Convention on the Law of the Sea (LOSC)<sup>10</sup>, or any other global instrument with a universal participation.<sup>11</sup> It could be defined as "the State in one of whose port or offshore terminals a vessel lays".<sup>12</sup>

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<sup>6</sup> Marten, Bevan, *Port State Jurisdiction and the Regulation of International Merchant Shipping*, Springer International Publishing, Heidelberg, 2014, p.53.

<sup>7</sup> The International Maritime Organization is a specialized agency of the United Nations, established 17/3/1948.

<sup>8</sup> Henriksen, Tore, *Norway and Arctic Marine shipping*, Fram Centre Report Series No.2, 2015, p.23.

<sup>9</sup> Marten, *supra* note 6, p.48.

<sup>10</sup> United Nations Convention on the Law of the Sea, Montego Bay, 10/12/1982.

<sup>11</sup> Molenaar, Erik, *Port and Coastal States in: The Oxford Handbook of the Law of the Sea*, Edited by: Donald R. Rothwell ... [et al.] Oxford University Press, 2014, p.280.

<sup>12</sup> Bang, Ho-Sam, *Recommendations for Policies on Port State Control and Port State Jurisdiction*, *Journal of Maritime Law & Commerce*, Vol.44, No.1, 2013, p.116.

The term PSJ relates to activities that occur at ports, the maritime zones of the port State, other States maritime zone, and high seas.<sup>13</sup> PSJ involves the exercise of three types of jurisdiction: prescriptive, enforcement and adjudicative. Prescriptive jurisdiction is the “jurisdiction to mandate a vessel's compliance with particular [laws and] standards”.<sup>14</sup> Enforcement jurisdiction is the competence of to apply measures adopted or to punish vessels for noncompliance with applicable laws and standards. Adjudicative jurisdiction is the competence of port State to institute proceedings against foreign vessels at courts or tribunals.

PSC is the exercise of enforcement ‘administrative’ powers by port States to verify whether a foreign vessels in port comply with their national laws, and the international rules and standards ratified by port States. The objective of PSC is to ensure compliance with relevant domestic regulation and international rules and standards.<sup>15</sup> Since exercising enforcement jurisdiction presupposes that the port State have legislative competence to enact laws, the central element for distinguishing between PSC and PSJ is the exercise of juridical jurisdiction.<sup>16</sup>

When a State is exercising PSC the State limits itself to exercising administrative powers, such as detention for non-compliance with international rules and standards. Unlike PSJ, the State does not exercise jurisdictional power, and does not prosecute vessels for breaches of their legislation.<sup>17</sup> Moreover, neither the IMO conventions nor the Memorandums of Understandings (MoU) provide port States with the right to prosecute foreign vessels for non-compliance with international standards.<sup>18</sup> While PSJ includes jurisdictional powers, and port States have the competence to prosecute foreign vessels for offences committed in areas beyond national jurisdiction (ABNJ) as illustrated by article 218 of the LOSC. However, in practice States rarely prosecute, if they are satisfied with the rectifications of the deficiencies. Therefore, PSC can be regarded as a precondition for exercising PSJ.<sup>19</sup>

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<sup>13</sup> Molenaar, *supra* note 11, p.281.

<sup>14</sup> Bodansky, Daniel, *Protecting the Marine Environment from Vessel-Source Pollution: UNCLOS III and Beyond*, *Ecology Law Quarterly*, Volume 18(4), 1991, p.721.

<sup>15</sup> Henriksen, *supra* note 8, p.23.

<sup>16</sup> Bang, *supra* note 12, p.120.

<sup>17</sup> *Ibid.*, p.119.

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

<sup>19</sup> *Ibid.*



### 1.3 Objective, outline and limitation

The thesis seeks to examine whether the current international legal framework of the law of the sea, is sufficient to provide Arctic port States with effective legislative and executive powers to ensure maritime safety and the protection of the marine environment from vessels-source pollution. The thesis also aims to investigate several options for enhancing and strengthening Arctic port State jurisdiction.<sup>20</sup> The first option is by effective implementation of Articles 211(3) and 218 of the LOSC. The Second is by developing a PSC strategy in the Arctic region. The third is by exercising port State residual jurisdiction.<sup>21</sup> These options will be discussed in details within the content of the six following chapters.

Chapter two has the objective of examining and assessing the rights and obligations of Arctic port States under general international law. Further it will address the legal basis for exercising port State jurisdiction.

Chapter three has the objective of analyzing the relevant articles of the LOSC, which provide Arctic port States with the competence to adopt and to enforce CDEM and discharge standards.

Chapter four will contain an introduction to the most important IMO instruments and has the objectives of: discussing selected shortcomings of the Polar Code<sup>22</sup>, discussing the interplay between the Polar Code and the LOSC and to address possible ways to overcome the problem of lack of infrastructure in the Arctic region.

Chapter five will address the role of PSC, PSC measures and it will focus on the possible initiatives for Arctic States to develop a PSC strategy.

Chapter six will examine whether principles of international law and adherence to IMO instruments impose restrictions on Arctic port State residual jurisdiction. Finally, chapter seven will contain the conclusion and final remarks.

Within the content of this thesis an analysis of the entire applicable international regulation is not possible. Thus, only the main applicable international regulation will be focused on. Further, the thesis will not deal with any fishing and trade related activities.

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<sup>20</sup> Molenaar, Erik J., Arctic Marine Shipping: Overview of the International Legal Framework, Gaps, and Options, *Journal of Transnational Law & Policy*, 18(2), 2009, p.321.

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

<sup>22</sup> The IMO's International Code for Ships Operating in Polar Waters (Polar Code), 2014.

In the context of Arctic port States, article 234 of the LOSC is relevant, however a full analysis of the article is beyond the scope of the thesis. Therefore, it will only be dealt with when it has legal implications on port State jurisdiction.

The role of Arctic Council is of a particular importance; however a full analysis of its role is also beyond the scope of this study. Thus it will be dealt with in the context that it offers a platform for discussing the regional implementation of the IMO's Polar Code and the negotiation of establishing an Arctic MoU under the auspices of the Arctic Council. Reference to other regulation other than the main ones focused on, is to enhance a deeper understanding of the issues addressed.

#### **1.4 Legal resources and methods**

To achieve the objectives of the thesis, the following methodological approach is used. The primarily method used is the analysis of international legal sources, as laid down by the statute of the international court of justice (ICJ) article 38<sup>23</sup>, and the analysis of articles and books of legal scholars. Moreover, the interpretation of treaties as stipulated by article 31 of the Vienna convention on the law of treaties (VCLT) is also used.<sup>24</sup> Special focus is also given to the applicable international instruments in particular the provisions of the LOSC; the IMO's regulatory instruments in particular MARPOL 73/78<sup>25</sup>, SOLAS 74<sup>26</sup> and The Polar Code conventions, as well as State practice and judicial decisions. Furthermore, to support the legal arguments, the analysis of additional scientific reports in particular the 2009 AMSA report and other scientific documents have been used.

#### **1.5 The spatial scope of the Arctic region**

The Arctic is the home of four million people.<sup>27</sup> The Arctic region lies “where the sun... [never] rises above the horizon at winter solstice, and... [never] sets below it at summer solstice”.<sup>28</sup> There are no generally legal accepted definitions to the Arctic region; however it could be defined by various criteria such as “the area above the Arctic Circle 66° north

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<sup>23</sup> The Statute of The International Court of Justice (1945).

<sup>24</sup> The Vienna Convention on the Law of Treaties (VCLT), 23/5/1969.

<sup>25</sup> The International Convention for the Prevention of Pollution from Ships (MARPOL) 1973 as modified by the Protocol of 1978.

<sup>26</sup> The International Convention for the Safety of Life at Sea (SOLAS), 1974.

<sup>27</sup> See (ACIA) report, Supra note 1, p.14.

<sup>28</sup> Ibid, p.10.

latitude”.<sup>29</sup> It encompasses the territories of eight States: Iceland, Finland, Sweden, Canada, Denmark (Greenland), Norway, the Russian Federation and the United States of America (US), where the last five States are the only Arctic Ocean coastal States.



Figure 1, Maximum extent of Arctic waters application.<sup>30</sup>

## 1.6 The current legal framework governing the Arctic region

The current existing legal framework governing the Arctic region is complex and consists of an overabundance of different types of: global instruments, multilateral and bilateral agreements and soft law agreements. There is no comprehensive international agreement dealing with the Arctic region as the situation is in the Antarctic. Nonetheless, the current international law of the sea legal framework applies to the Arctic region as any

<sup>29</sup> Jensen, Øystein, *The IMO Guidelines for Ships Operating in Arctic Ice-covered Waters, From Voluntary to Mandatory Tool for Navigation safety and Environmental Protection*, FNI Report 2/2007, p.1.

<sup>30</sup> SOLAS, regulations XIV/1.3, (IMO Doc. MEPC 68/21/Add.1, Annex 10), p.9.

other international waters. The pillars regulating the Arctic region are the provisions of the LOSC, IMO instruments, the Arctic Council<sup>31</sup> and relevant port States MoUs.

The LOSC often referred to as the “Constitution of the oceans” applies to all maritime areas including those in the Arctic region. Its main objective is to establish “a legal order for the seas and oceans”.<sup>32</sup> Its primary concerns are the spatial distribution of coastal State jurisdiction, and maintaining the balance of coastal States’ interests and those of flag States. Under the LOSC oceans are divided into several maritime zones, where it recognizes the sovereignty, sovereign rights, jurisdiction and rights of coastal States within their maritime zones. It also places obligations on coastal States and reserves the rights and freedoms of other States within the maritime zones of coastal States. The LOSC functions as a framework umbrella and encompasses 320 Articles that provide general rules, which are a mixture of codification and development of law.<sup>33</sup> The LOSC leaves the more technical rules to other relevant conventions adopted by the competent organizations by using ‘the rules of reference’.<sup>34</sup> Today the LOSC has 168 parties<sup>35</sup>; All Arctic States are parties to the LOSC with the exception of the US.<sup>36</sup>

In 2008 the five Arctic Ocean coastal States declared, that they are committed the international framework of the law of the sea, and there is “no need to develop a new comprehensive international legal regime to govern the Arctic Ocean”.<sup>37</sup> Moreover, they addressed that development in the Arctic alerted the necessity for further measures related to navigation safety, emergency response and the protection of marine environment from vessel-source pollution.<sup>38</sup>

The Arctic council was established by a non-legally binding instrument as a high level form to enhance cooperation between Arctic States on sustainable developments and protection of the arctic environment.<sup>39</sup> The Ottawa declaration provides that the council does not have the competence to adopt legally binding instruments and the decisions of the

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<sup>31</sup> The Ottawa Declaration on the Establishment of the Arctic Council, Sept. 19, 1996, 35 ILM 1387.

<sup>32</sup> LOSC, preamble.

<sup>33</sup> Churchill, Robin R., The 1982 United Nations Convention on the Law of the Sea in: The Oxford Handbook of the Law of the Sea, Edited by: Donald R. Rothwell ... [et al.] Oxford University Press, 2014, p.30.

<sup>34</sup> See Chapter III-3.5.

<sup>35</sup> LOSC List of Ratifications available at:

[http://www.un.org/depts/los/reference\\_files/chronological\\_lists\\_of\\_ratifications.htm](http://www.un.org/depts/los/reference_files/chronological_lists_of_ratifications.htm) accessed 20/9/2016.

<sup>36</sup> The US takes the view that the LOSC represents customary international law with the exception of part XI.

<sup>37</sup> Ilulissat Declaration, Arctic Ocean Conference, 28/5/2008, 48 ILM 362.

<sup>38</sup> Molenaar, supra note 4, p.9.

<sup>39</sup> The Ottawa Declaration on the Establishment of the Arctic Council, Sept. 19, 1996, 35 ILM 1387.

council shall be by consensus of all eight States members. The Arctic Council consists of six working groups; one of the most important working groups is the Protection of Arctic Marine Environment (PAME) which focuses on the protection of the Arctic marine environment. In 2009 PAME issued a significantly important report, The AMSA report. The report addresses many regulation of arctic shipping and based on the report's findings many recommendations regarding maritime safety and the protection of the Arctic marine environment were developed.<sup>40</sup> Furthermore, the Arctic Council offers a platform for discussing the regional implementation of the IMO's Polar Code; one approach as illustrated under chapter V is the negotiation of establishing an Arctic MoU under the auspices of the Arctic Council.

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<sup>40</sup> See, AMSA report, *supra* note 5, p.6.



## **2. Chapter II – Arctic Port States Jurisdiction under General International Law**

### **2.1 Introduction**

Ports have been long regarded as practical points to control customs, immigration and security purposes.<sup>41</sup> The reason behind this is that ports are sea borders and they give access to the State's territory. Ports are the logical choice for verifying whether foreign vessels at port are complying with national or international standards, and whether they have committed certain illegal behavior in the port State's maritime zones or in other States' maritime zones, or on the high seas.<sup>42</sup>

Since the international legal frame work governing the oceans is applicable to the arctic region, it's necessary to provide under this chapter: First, an over view of port State jurisdiction under general international law. Second, an over view of the legal basis for exercising such jurisdiction under general international law.

### **2.2 Access to ports, conditions for entry and for leaving ports**

#### **2.2.1 Access to ports**

There are no rights under customary international law for vessels to access ports.<sup>43</sup> The ICJ confirmed this in the Nicaragua decision "by virtue of sovereignty, that the coastal State may regulate access to its ports".<sup>44</sup> However, the right to access ports could be agreed upon by bilateral and multilateral treaties.<sup>45</sup> In the absence of such treaties, Arctic coastal States may impose conditions on foreign vessels in relation to port access and may even deny access. Even when an exception exists, such in the case of a vessel in distress or in force majeure situation, the right of access is not absolute.<sup>46</sup> Thus, Arctic port State may

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<sup>41</sup> Molenaar, supra note 11, p.282.

<sup>42</sup> Ibid.

<sup>43</sup> Lowe, Alan, The Right of Entry into Maritime Ports in International Law, San Diego Law Review 14, 1977, p.619.

<sup>44</sup> Nicaragua v. United States, I.C.J Rep.12,111, June 27, 1986.

<sup>45</sup> McDorman, Ted, Port State Enforcement: A comment on Article 218 of the 1982 Law of the sea convention, Journal of Maritime Law and Commerce vol.28(2), 1997, p.310.

<sup>46</sup> Molenaar, supra note 11, P.284.

deny access when its interest over rides those of the ship, such as in the case where a significant risk to the port State's marine environment exists.<sup>47</sup>

### **2.2.2 Conditions for entry**

Under general international law, Arctic port States have the competence to enact laws and prescribe port entry conditions. However this right is not absolute and subject to a number of restrictions. The first restriction arose from international law, which provides that enforcement towards foreign vessels only applies to activities that have occurred while vessels being in port, or when it affects the port State. Therefore, port States have traditionally refrained from exercising jurisdiction over vessel's internal matters which did not have an effect to the coastal State.<sup>48</sup> The second restriction is derived from diplomatic immunities and sovereign immunities for foreign warships and non-commercial government ships. The third restriction arises from widely recognized principles in international law of the sea, international trade law and IMO instruments, such as the principles of non-discrimination and abuse of right.<sup>49</sup> Finally, other restrictions occur from commitment to specific treaties such as the LOSC and IMO conventions.

### **2.2.3 Conditions for leaving ports - 'Departure State jurisdiction'**

Arctic Port States can prescribe conditions and enact laws for departure as conditions for entry, for instance: vessels are not allowed to leave port unless they discharge all wastes in a port reception facility to ensure that no illegal discharges will occur after departure.<sup>50</sup> In cases where "applicable international rules and standards" related to vessels seaworthiness are being violated, the exercise of such jurisdiction is mandatory to prevent any threats or damage from occurring to the marine environment.<sup>51</sup> Further discussion on departure state jurisdiction is carried out under chapter IV-(4.6).

## **2.3 The legal basis of Port State jurisdiction**

### **2.3.1 Territorial jurisdiction**

Arctic States enjoy sovereignty over their internal waters and territory. When foreign vessels are in port or internal waters they become subject to the territorial sovereignty of

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<sup>47</sup> Ibid.

<sup>48</sup> Churchill, Robin & Lowe, Alan, *The Law of the Sea*, Manchester University Press, 1999, P.65-66.

<sup>49</sup> Further discussion on how these principles restrain port State prescriptive jurisdiction is carried under chapter VI-(6.3).

<sup>50</sup> Molenaar, supra note 11, p.287.

<sup>51</sup> Ibid; see also LOSC, art.219.

the coastal State which is described as ‘the territorial principle’.<sup>52</sup> It has been long recognized under customary international law that the territorial principle provides States with the rights to exercise prescriptive and enforcement jurisdiction over activities taking place in their territory, internal waters and ports.<sup>53</sup> For example: non-compliance with static standards such as CDEM standards or committing an illegal behavior while being in port. However, under customary international law States can only exercise jurisdiction when there a link/connection between the event and the State exercising jurisdiction.<sup>54</sup>

### **2.3.2 Extra-territorial jurisdiction**

Extra-territorial jurisdiction refers to the exercise of jurisdiction by port states in ABNJ. In principle the exercise of extraterritorial jurisdiction must be based on legislation that has been enacted in accordance with international law otherwise the exercise of enforcement jurisdiction is unlawful.<sup>55</sup> In this context the territorial principle does not provide Arctic port States with a legal base to exercise jurisdiction over vessels’ activities in ABNJ. The rights of port States to exercise extra-territorial jurisdiction over discharge incident in ABNJ such as the high seas could be justified on several bases.

The first justification is based on two principles of international law: the ‘effect principle’ and ‘the universality principle’. The former provides that States are competent to enforce their laws and regulations to incidents which occur in ABNJ only if they have a damage effect to that State.<sup>56</sup> However, the principle does not provide Arctic port States with legal bases to exercise jurisdiction where the discharge violations occur on the high seas, and do not have an effect or damage to the port State. The connection between the discharge incident and the damage to the port State maritime zones is usually hard to prove and might even be impossible.<sup>57</sup> When it’s hard to prove the link between the discharge incident and the damage to the port State, the “universality principle” comes into play. The notion behind the universality principle, that it provides States with the competence to enforce their laws towards violations of international law, regardless the existence of a link between the event and the State exercising jurisdiction and regardless where the violation

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<sup>52</sup> Henriksen, *supra* note 8, p.26.

<sup>53</sup> Keselj, Tatjana, *Port State Jurisdiction in Respect of Pollution from Ships: The 1982 United Nations Convention on the Law of the Sea and the Memoranda of Understanding*, *Ocean Development & International Law* (30), 1999, P.134.

<sup>54</sup> Churchill and Lowe, *supra* note 48, p.65-66.

<sup>55</sup> McDorman, *supra* note 45, p.314.

<sup>56</sup> Schachter, Oscar, *International Law in Theory and Practice*, M. Nijhoff Publishers, 1991, pp.261-263.

<sup>57</sup> Keselj, *supra* note 53, p.136.

occurs. The only condition imposed is that the activity must constitute a violation, which has been recognized by the international community as a violation of international law such as piracy.<sup>58</sup> However, McDorman argues that the universality principle cannot be used to justify the exercise of extraterritorial jurisdiction of port States in ABNJ in relation to discharge violations. Seeing that the international community hasn't yet recognized pollution generated by vessels, as an equivalent activity to piracy that would suffice for universal enforcement regardless of the location of the discharges.<sup>59</sup>

The Second justification for exercising extra-territorial jurisdiction could be based on treaties, such as the LOSC. As it will follow in the next chapter article 218 extends the competence of port State to enact and enforce laws against foreign vessels for illegal discharges that occur in ABNJ.

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<sup>58</sup> LOSC articles 100 & 105.

<sup>59</sup> McDorman, *supra* note 45, p.318.

## **3. Chapter III – Arctic Port States Jurisdiction under the LOSC**

### **3.1 Introduction**

As illustrated under chapter I, the LOSC applies to all maritime areas including those in the Arctic region. The purpose of this chapter is to analyze the rights and obligations of Arctic port States in insuring maritime safety and protecting the marine environment from vessels-source pollution under the LOSC. The following section will give a brief historical introduction to the development of port state jurisdiction. Sections 3.3 and 3.4 will deal with the relevant LOSC articles on port State jurisdiction and the safe guards. The final section will address the relation between the LOSC and the IMO instruments.

### **3.2 Historical developments**

During the negotiation of the LOSC the problem of non-compliance with international rules and standards was pointed out, as substandard-ships continued to sail under flags of convenience. It was agreed then that relying solely on flag States could not ensure compliance with international regulations.<sup>60</sup> The question was, whether expanding port States jurisdiction to allow for prosecuting vessels for illegal discharges, and for non-compliance with safety standards would alert the balance of the LOSC and constitute a threat to the freedom of navigations.<sup>61</sup>

At the third United Nation conference on the LOSC, several proposals dealing with port State jurisdiction were introduced. Both the US and the seabed committee drafted articles which extends port State jurisdiction. The proposals were considered as a significant departure from prior LOSC instruments, such as: the provisions of the 1958 Geneva Conventions on the Law of the Sea, and relevant IMO instruments.<sup>62</sup> The US proposed to extend the port State jurisdiction to include punishments not only towards vessels' discharge violations but also to violations of international rules and standards dealing with

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<sup>60</sup> Birnie, Patricia; Boyle, Alan; Redgwell Catherine, *International Law and The Environment*, Oxford University Press, 3<sup>rd</sup>.ed., 2009, p.420.

<sup>61</sup> Ibid.

<sup>62</sup> Keselj, supra note 53, p.129.



marine pollution.<sup>63</sup> The Seabed Committee proposal suggested allowing port State to initiate investigations and to institute proceedings against foreign vessels violations of applicable international rules and standards, related to vessels seaworthiness and vessels discharge violation, regardless where the violation occurs.<sup>64</sup> The result was that coastal States could not enforce international rules and standards in the exclusive economic zone or the high Seas, and they can only do so in their competence as port States when the vessel is voluntarily within its port.<sup>65</sup>

### **3.3 The LOSC provisions on port State jurisdiction**

The purpose of port State jurisdiction provisions is to provide a balance between the rights and obligations of flag States and those of port States. Port State jurisdiction under the LOSC could be divided in two main categories, the first deals with CDEM standards and the second deals with discharge standards.

#### **3.3.1 Arctic port States regulates CDEM standards**

CDEM standards could be regarded as a preventive measure for the protection of the marine environment. Improving maritime safety in general reduces the risk of maritime incidents from occurring, and minimizes the consequences of such incidents.<sup>66</sup> For instance adopting construction features such as ‘double hull’ requirement had an obvious effect on the marine environment. This is illustrated by the collision of the Norwegian double hull oil tanker *SKS Satilla*. The Tanker was carrying 41 million gallons of heavy fuel oil and collided with an oil ring in the Gulf of Mexico, despite the damage that occurred to the tanker, no oil was spilled.<sup>67</sup> Moreover, regulating CDEM standards could facilitate the implementation and monitoring of discharges, e.g. by requiring vessels to have adequate onboard storage facilities, ballast water treatment systems and equipment that automatically records discharges.<sup>68</sup>

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<sup>63</sup> United States, Draft Articles on the Protection of the Marine Environment and the Prevention of Marine Pollution, UN Doc A/AC.138/SC.III/L.40 (July 13,1973).

<sup>64</sup> Ibid.

<sup>65</sup> Birnie, Boyle & Redgwell, supra note 60, p.421.

<sup>66</sup> Bodansky, supra note 14, p.730.

<sup>67</sup> National Oceanic and Atmospheric Administration (NOAA), office of response and restoration, A Final Farewell to Oil Tankers with Single Hulls. Available at: <http://response.restoration.noaa.gov/about/media/final-farewell-oil-tankers-single-hulls.html> accessed 20/9/2016.

<sup>68</sup> MARPOL, annex I, reg. 16; Bodansky, supra note 14, p.730.

The objective of this section is to investigate whether Arctic port States are competent in accordance to the relevant LOSC provisions to require foreign vessels operating in Arctic waters to comply with stricter CDEM regulations, or whether their competences to legislate and adopt CDEM standards are restricted to a certain extent. To answer these questions analysis of articles 211(3) and 219 is necessary.

The purpose of article 219 is to prevent pollution resulting from violation of “applicable international rules and standards” (AIRS) in relation to vessel’s seaworthiness. As Molenaar points out the word “seaworthiness” suggests a reference to CDEM standards.<sup>69</sup> Two arguments support this interpretation: first, giving an interpretation in accordance with the ordinary meaning of the word “seaworthiness”<sup>70</sup> it means that “the ship is in suitable condition to sail” and its equipment and crew are capable to undertake a voyage and encounter stormy weather.<sup>71</sup> Second, interpreting the wording “applicable international rules and standards relating to seaworthiness of vessels” as international CDEM rules and standards could provide port States with the legitimacy to use enforcement measures for noncompliance with international CDEM standards.<sup>72</sup> In this context, Arctic port States pursuant to article 219 have the competence to adopt and enforce regulations related to CDEM standards, as long as they conform to the level of AIRS.<sup>73</sup>

When Arctic port States are ascertained that foreign a vessel present at port, committed a violation of “applicable international rules and standards relating to seaworthiness of vessels” which may threatens or cause damage to the marine environment<sup>74</sup>, the port State is obligated by the word “shall” in article 219 to prevent the vessel from sailing. It may only allow it to proceed to the nearest repair yard. Once the cause of the violation is removed, port States are obliged to “permit vessels to continue immediately”.<sup>75</sup>

It must also be noted that the wording of article 219 “administrative measures” indicates that port States jurisdiction is limited only to take administrative measures and they cannot institute judicial proceedings. The reference in Article 219 to AIRS indicates that unless

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<sup>69</sup> Molenaar, Erik J., *Coastal State Jurisdiction over Vessel-Source Pollution*, Kluwer Law International, 1998, p.189.

<sup>70</sup> VCLT, Art.31(1).

<sup>71</sup> Hornby, A.S, *Oxford Advanced Learner’s Dictionary*, 7<sup>th</sup> Edition, Oxford University Press, 2005, p.1369; see also W.A. MacEwen W.A & A. H. Lewis A.H, *Encyclopedia of Nautical Knowledge*, (Cambridge, MD: Cornell Maritime Press, 1985), p.487.

<sup>72</sup> Keselj, *supra* note 53, p.139.

<sup>73</sup> LOSC, Art.219.

<sup>74</sup> *Ibid.*

<sup>75</sup> *Ibid.*

these regulations are giving effect to AIRS port States cannot enforce them on foreign vessels present at port. This could lead to the conclusion that port State jurisdiction is restricted. However, article 25(2) and Article 211(3) implies that port State jurisdiction is not restricted and can exceed the level of “applicable international rules and standards”.<sup>76</sup>

The right of Arctic port States to regulate access to their ports, is confirmed by the LOSC article 211(3). Article 211(3) provides that port States may impose particular requirements on foreign vessels “for the prevention, reduction and control of pollution of the marine environment as a condition for the entry of foreign vessels into their ports”. In cases of non-compliance with such requirements, Arctic port States are competent to ban foreign vessels from accessing to ports. Arctic port States are obligated when establishing particular entry requirement to “give due publicity” and to notify the competent organization in order for these requirements to be adopted and enter into force.<sup>77</sup> Further, article 211(3) foresee and count on cooperation between States in establishing similar port entry requirements by establishing regional arrangements. Accordingly, if Arctic port States establish regional arrangements on port entry requirements, they would be competent to request information from States participating in the same regional arrangements, regarding whether the vessel is proceeding to a State of the same region, and whether the port entry requirements of that State are complied with.<sup>78</sup>

Pursuant to article 211(3) “cooperative arrangements” can be established to enable a group of States to agree upon “particular requirement”. The wording “particular requirement” as Molenaar points out, indicates that these requirements may differ from applicable international rules and standards.<sup>79</sup> Therefore, Arctic port States may enact particular CDEM requirements that could exceed the level of AIRS, and deny port access to foreign vessels when they are not complying with such requirement.<sup>80</sup> As it will follow in chapter IV-(4), Arctic port States could use such jurisdiction to adopt particular CDEM standards as condition for port entry to resolve some of the shortcomings of the Polar Code.

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<sup>76</sup> McDorman, *supra* note 45, p.309.

<sup>77</sup> LOSC, Art.211(3).

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

<sup>79</sup> Molenaar, Erik J., *Port State Jurisdiction: Toward Comprehensive, Mandatory and Global Coverage*, Ocean development & International Law, Taylor & Francis, 2007, p.230-231.

<sup>80</sup> Keselj, *supra* note 53, p.128.

When there are clear grounds that a foreign vessel in port has breached port entry requirement, can Arctic port States inspect the vessel and/or apply enforcement measures against the offending vessel in accordance to article 211(3)?

On one hand there have been some arguments that article 211(3) provides port States only with prescriptive jurisdiction, and the territorial principle cannot be used as a justification to exercise jurisdiction over noncompliance with CDEM standards.<sup>81</sup> Further, States shall not “abuse such principle when dealing with violations of CDEM standards to avoid undue limitations to vessels’ port entry for trade purposes”<sup>82</sup> as failure to meet with CDEM standards is a continuing activity that cannot be regarded as an activity carried out while vessels being in port.

On the other hand, there have been arguments that paragraph 3 of article 211 is an exception to article 211 in the way that it includes enforcement jurisdiction features and the exercise of enforcement jurisdiction can be based on the territorial principle.<sup>83</sup> This view is supported by Molenaar and Ringbom as the extent of port State prescriptive jurisdiction depends on the location of the violation and the nature of the rules.<sup>84</sup> Since CDEM standards are of static nature, a failure to meet with CDEM standards follows the ship during the entire journey. Therefore, noncompliance will still continue to occur while vessels are present in port. Since noncompliance with CDEM standards continues to occur in port, the exercise of jurisdiction could be based on the territorial principle.

At first glance the absence of a connection between Article 211(3) and Articles 218, 219 of the LOSC could lead to the conclusion that port State enforcement jurisdiction is limited, and port States are restricted from enforcing rules and standards that are stricter than AIRS. This conclusion could be reached as port state enforcement in accordance to article 218 is limited only to discharge violations. In addition article 219 limits the port State enforcement powers to violations of “applicable international rules and standards relating to seaworthiness of vessels”. However, the absence of a connection between Article 211(3) and Articles 218, 219 does not mean that Arctic port States are deprived from their rights to enact and enforce requirements over non-compliance by foreign vessels

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<sup>81</sup> *Ibid*, p.134.

<sup>82</sup> *Ibid*.

<sup>83</sup> McDorman, *supra* note 45, p.311.

<sup>84</sup> Ringbom, Henrik, *The EU Maritime Safety Policy and international Law*, Martinus Nijhoff Publishers, 2008, p.214; Molenaar, *supra* note 80, p.230.

pursuant to article 211(3). As Article 25(2) of the LOSC preserve the rights of coastal States in its capacity as a port State to take all measure necessary when foreign vessels are approaching to its ports or internal waters, to prevent any violations of laws the vessels are subject to. This preventative enforcement provides Arctic port States not only with prescriptive jurisdiction for port entry conditions but also enforcement power in cases of noncompliance by foreign vessels as protection measure.<sup>85</sup>

It's worth noting that pollution resulting from maritime incident led major Arctic port States like the US to use their sovereignty and jurisdiction over ports and internal water as powerful bases to adopt stricter rules and standards than those agreed globally upon as port entry requirements. One example is the US Oil Pollution Act (OPA) adopted after the Exxon Valdez accident in Alaska where 11 million gallons of crude oil were spilled.<sup>86</sup> The unilateral act required oil tankers sailing in the EEZ of the US or anchoring at any of its ports to have double hull requirements.<sup>87</sup> At the time the US adopted a double hull standard, MARPOL did not contain a double-hull requirement. In that sense, the strength of OPA exceeded "general accepted international rules and standards". This exercise of jurisdiction could be based under articles 25(2) and 211(3) which have broader prescriptive and enforcement powers.<sup>88</sup>

When a state unilaterally adopts particular port entry requirements, it may result in vessels avoiding calling at its ports and seek calling to other ports with less entry requirements. This may lead to the creation of what is known as 'port of convenience'.<sup>89</sup> Consequently, it may lead to a situation where relevant instruments are poorly applied or not applied at all. Therefore, unless these particular requirements are adopted by powerful economic states that can impose its will on foreign-flagged vessels such as the US or adopted at a regional level it may lead to the problem of port of convenience.

To conclude, CDEM standards are of static nature that follows the ship during its entire journey. And thus a violation of these standards continues to occur wherever the vessel is located. Accordingly, regulating CDEM standards has an extraterritorial effect for instance the US OPA had an obvious extraterritorial effect outside the US maritime zones. Bearing

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<sup>85</sup> Molenaar, supra note 79, p.230; Keselj, supra note 53, p.133.

<sup>86</sup> The US 1990 Oil Pollution Act (OPA).

<sup>87</sup> Molenaar, supra note 79, p.233.

<sup>88</sup> Ibid, p.230; Churchill & Lowe, supra note 48, p.276; Mcdorman, Ted L., "regional port State control agreements: some issues of international law, ocean and coastal law journal, 2000, p.223.

<sup>89</sup> There are several reasons for states to operate as port of convenience, especially when visiting vessels are strengthening the local economy of the port state.



in mind the fact that, neither general international law nor the LOSC restrict Arctic port State jurisdiction. The question here is to what extent Arctic port State may use its jurisdiction over foreign vessel in port without interfering with the freedom of navigation and the rights of flag states?

When such rules and standards are giving effect to AIRS<sup>90</sup>, the exercise of port State jurisdiction is uncontroversial, and can be regarded as assisting flag states to ensure compliance with the relevant regulations.<sup>91</sup> The controversy arises when Arctic port States are applying unilateral CDEM standards which exceed the level of AIRS as conditions for entry to port. And thus may be regarded as interfering with flag states navigational rights.

On one hand, there have been some arguments in favor of port state jurisdiction for instance, when foreign vessel voluntarily enters to port, they have expressed their consent to be subject to port state entry requirements.<sup>92</sup> Moreover, since violations of CDEM standards continue to occur in ports the exercise of enforcement jurisdiction could be based on the port state sovereignty or as often referred to as ‘the territorial principle’. As Henriksen points out “There are no clear limits as to how far the port State may rely on the territorial principle in adopting unilateral CDEM rules and standards”.<sup>93</sup>

On the other hand Ringbom points out, that the right of port State to regulate access to ports is uncontroversial, but there must be some limitation for such jurisdiction and the exercise of port State jurisdiction shall be subject to a number of safeguards.<sup>94</sup> Consequently the unilaterally adoption of stricter CDEM standards will eventually restrict navigational rights, especially when the same regulations are adopted at a regional level.<sup>95</sup> Ringbom further state that such limitation cannot be found under the LOSC but can be found under the relevant IMO instruments and principles of general international law.<sup>96</sup> Whether Arctic port States adherence to regulatory convention could impose limitations on its competence to prescribe stricter regulations and standards than those agreed at the international level will be discussed under chapter VI.

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<sup>90</sup> LOSC, art.219.

<sup>91</sup> Henriksen, supra note 8, p.31.

<sup>92</sup> Ibid, p.32.

<sup>93</sup> Ibid, p.31.

<sup>94</sup> Ringbom, supra note 84, p.204.

<sup>95</sup> Ibid, p.340.

<sup>96</sup> Ibid, p.341.

### 3.3.2 Arctic port States regulates discharge standards: an analysis of articles 218 and 220(1)

Discharges from vessels are of two kinds: operational and accidental. Operational discharges includes: the disposal of oily residue at sea, discharge of oil wastes from engines, discharges of sewage, rubbish and ballast water. While accidental discharges are the result of maritime incident such as the sinking of an oil tanker like the Torrey canyon and the Erika.

State practice indicates that port States usually make use of their jurisdiction when it's serving their own interest.<sup>97</sup> This can be the reason behind that there is hardly any state practice regarding article 218.<sup>98</sup> Article 218 provides port States with extra-territorial jurisdiction over violations of discharge standards in areas beyond national jurisdiction. Accordingly the notion behind it is to serve the international interest rather than the national interest.<sup>99</sup> States are unwilling to make use of article 218, to avoid the risk of vessels avoiding their ports and to sustain the local economy of the port.<sup>100</sup> However, since the Arctic Region consist of a fragile environment and one oil incident can have catastrophic damage to the marine environment. Therefore implementing Article 218 of the LOSC by Arctic States is essential for the protection of the marine environment and to strengthen Arctic port State jurisdiction.

Article 218 is found within the enforcement section of the LOSC. It applies only when there are clear evidences that a vessel committed a violation of AIRS related to discharge standards. Article 218 provides port States with enforcement power, including inspection and detention of vessels and instituting proceedings.<sup>101</sup> Port State enforcement presupposes that the port States enjoy legislative competence to enact laws dealing with violation of discharges standards on the high seas or in other States maritime zones.<sup>102</sup> Arctic port State enforcement competence pursuant to article 218 varies upon whether the discharge occurred on the high seas, or in other State's maritime zones, and whether it has damage effect to the Arctic port State's maritime zones.

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<sup>97</sup> Ryngaert, Cedric & Ringbom, Henrik, Introduction: Port State Jurisdiction: Challenges and Potential, *The International Journal of Marine and Coastal Law* 31 (2016) p.391.

<sup>98</sup> *Ibid.*

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

<sup>100</sup> *Ibid.*

<sup>101</sup> Keselj, *Supra* note 53, p.135.

<sup>102</sup> McDorman, *supra* note 45, p.315.

Where discharge incident occurs on the high seas, article 218 (1) provides that port States are competent to enforce and to institute proceedings against foreign vessels only “when a vessel is voluntarily within a port”.<sup>103</sup> Giving an interpretation in accordance with the ordinary meaning of the word ‘voluntarily’<sup>104</sup>, it indicates that the presence of vessels in distress or emergency situation in port is not voluntarily. Thereby, Arctic port States are not entitled to exercise jurisdiction in such cases.<sup>105</sup> Unlike article 219, article 218 is conditional on vessels being present voluntary in port.

Arctic port States are not free to enforce their laws on all high seas discharge violation. The wording of article 218 indicates that the competence of port States is limited only to discharge violations which constitute a violation of AIRS. Moreover, the wording of article 218 “may undertake” indicates that Arctic port State enjoy a wide discretion and is not obligated to carry out an investigations or institute proceedings in respect of discharge violations on the high seas.

Where the discharge violation occurs within other State’s maritime zones, port States are obligated to undertake an investigation when requested by the flag State, or the third State threatened or damaged by the discharge.<sup>106</sup> The controversy arise when vessels are present within Arctic port States such as Norway, and being requested by another Arctic States such as Russia or Canada to undertake an investigation for a discharge violation that has occurred within their territorial sea or EEZ.<sup>107</sup> In this context it must be noted that Canada and the Russian Federation adopted stricter discharge standards in accordance to article 234 of the LOSC. Article 234 provides that in ice-covered areas, States can adopt and enforce regulation stricter than AIRS, without the need to go through IMO to obtain an approval for these regulations, as is required elsewhere. In this context, is Norway as port State obligated to exercise jurisdiction pursuant to article 218 if requested by Russia or Canada with regards to violation of stricter regulations than AIRS?

As stated earlier, article 218 limits the competence of port States jurisdiction only to discharge violations which constitutes a violation of AIRS. Therefore, unless these stricter rules and standards obtain the status of AIRS, Norway would not be competent to undertake an investigation when requested by other States even if these standards are

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<sup>103</sup> LOSC, Art 218(1).

<sup>104</sup> VCLT, Art.31(1).

<sup>105</sup> Molenaar, *supra* note 11, p.284.

<sup>106</sup> LOSC, Art.218(2)(3).

<sup>107</sup> Henriksen, *supra* note 8, p.35.

consistent with article 234 of the LOSC.<sup>108</sup> As it will follow in chapter IV-(5), since the Polar Code provisions have been incorporated into the relevant IMO's conventions, they obtained the status of generally accepted international rules and standards (GAIRS). And thus they have become legally binding on all merchant tonnage. Consequently when foreign vessels are not complying with the Polar Code provisions, port States pursuant to article 218 of the LOSC would be competent to undertake an investigation once requested by flag State or third State threatened or damaged by the discharge.<sup>109</sup>

Furthermore, article 218(4) imposes other limitations on port State judicial jurisdiction as - upon the request of the flag State or the coastal State - any proceedings instituted by the port State may get suspended. Upon such request the records of the case shall be transmitted to the relevant State, once the transmittal is complete, port State cannot continue the proceedings.

When the discharge violation occurs in other State's maritime zone e.g. 'in the Russian EEZ' but has adverse effects to other port State's maritime zones e.g. 'to Norway's maritime areas', Norway would be competent pursuant to article 218(2) to enforce its laws and start proceedings against the foreign vessel-source pollution when present at port.<sup>110</sup> It must also be noted when the illegal discharges committed in other maritime zones "caused or is likely to cause pollution" to the port State maritime zone, it does not justify the use of more enforcement powers than what a port State is entitled to for violations of AIRS in its own EEZ pursuant to Article 220(1).<sup>111</sup>

With respect to violation of discharge standards committed by foreign vessels in the port State's maritime zones prior port entry, article 220(1) of the LOSC provides Arctic coastal States in their competence as a port States with jurisdiction in respect of such violations.<sup>112</sup> Similar to Article 218(1), enforcement competence is recognized only over vessels that are 'voluntarily' in ports. Since article 220 applies only to violations that occur

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<sup>108</sup> Ibid.

<sup>109</sup> Further discussion on whether the Polar Code provisions are regarded as GAIRS is carried out under chapter IV-(6).

<sup>110</sup> LOSC, Art 218(2).

<sup>111</sup> Molenaar, *supra* note 79, p.237.

<sup>112</sup> Ringbom, *supra* note 84, p.217; McDorman *supra* note 45 p.318.

in the State's maritime zones, the jurisdiction granted in comparison to article 218 is more limited *ratione loci*.<sup>113</sup>

Contrary to article 218, article 220(1) is not limited to AIRS it may involve the enforcement of national standards, as long as they are adopted in accordance with the LOSC. Furthermore, in contrast to article 218, article 220(1) is not limited to discharges standards, but relates to any violation of rules in relation to the prevention, reduction, control of pollution of the marine environment.<sup>114</sup> In this context, article 220(1) could provide Arctic States with the competence to take enforcement measures for violations of navigation measures. For instance, if Arctic coastal States establish mandatory ships routing system in their maritime zones, to enhance maritime safety and the protection of the marine environment, Arctic port States would be competent to take enforcement measures against vessels that do not comply with the ship routing systems.<sup>115</sup>

Furthermore, it should be noted that Article 220(1) does not provide Arctic port States with any jurisdiction on violations of CDEM standards, as it only refers to violations of "rules and standards for the prevention, reduction, control of pollution from vessels".<sup>116</sup>

The reference to "institution of proceedings" in article 220(1) indicates that Port States enjoy extensive and wide range of enforcement jurisdiction. This is also evident, as article 220(1) does not set any limitations on the measures that could be taken.<sup>117</sup>

### 3.4 Safeguards

The exercise of port enforcement is subject to the safe guards of section 7 part XII of the LOSC and the prompt release procedure of Article 292 of the LOSC. These safe guards are only applicable when the measures enforced are consistent with the objective of part XII which is the protection and preservation of the marine environment.<sup>118</sup> Consequently they apply to the enforcement measures taken for violations of illegal discharges pursuant to article 218 of the LOSC. Moreover, regulations of CDEM standards adopted by Arctic port States for the protection of the marine environment fall down under these safeguards such as in the case of regulations adopted in accordance to article 219 of the LOSC.

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<sup>113</sup> Ringbom, supra note 84, p.217.

<sup>114</sup> Ibid.

<sup>115</sup> The bases for establishing ships routing system can be found under the LOSC articles 22 and 234, further they could be adopted under SOLAS, Ch.V, Reg.10.

<sup>116</sup> Molenaar, supra note 69, p.187.

<sup>117</sup> Ringbom, supra note 84, p.217.

<sup>118</sup> Henriksen, supra note 8, Pp.39-40.



The safeguards are aimed to protect the interest of flag States and to ensure that port States enforcement does not expand at the cost of flag States.

These safeguards impose limitations on port State enforcement jurisdiction, and they vary as some contains general limitation that applies to all enforcement measures such as the obligation to notify flag states, liability of States arising from unlawful enforcement measures, non-discrimination, good faith and the abuse of rights. While other safeguards set specific material limitations.<sup>119</sup> For instance Article 226 deals with inspection and detention of foreign vessels and how they should be conducted. Article 226 encourages States to cooperate to develop harmonized procedures to avoid “unnecessary physical inspection of vessel at sea”.<sup>120</sup> Unless vessels are not carrying the required certifications or there are clear ground for believing that the conditions of the vessels do not reflect the certificates that the vessels have to carry, inspection shall be limited on verifying these certificates.<sup>121</sup> Moreover, article 226(2) indicates that port States shall always avoid undue delay. However, in the case where the violation is related to vessel’s seaworthiness, if the release of the vessel would put the marine environment into “unreasonable threat or damage”, the vessel’s release shall be refused or “made conditional upon proceeding to the nearest repair yard”.<sup>122</sup>

Article 229 reserve the rights of Arctic port States to “institute... civil proceedings in respect of any claim for loss or damage resulting from pollution of the marine environment”. However, in cases where the discharge standards adopted by Arctic port States are stricter than “applicable international rules and standards” the institution of civil proceeding regarding any damage of pollution will not be successful unless these stricter standards are adopted by the relevant IMO instrument.<sup>123</sup> Since the discharge violations in the EEZ are linked to the level of AIRS granting port State with such right will mean that port States enjoy an extended jurisdiction at the cost of flag States.<sup>124</sup> However, Arctic port States could use their rights and deny access to their ports, or refuses the use of their port services and facilities pursuant to article 25(2) and 211(3).<sup>125</sup>

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<sup>119</sup> Ringbom, *supra* note 84, p.218.

<sup>120</sup> LOSC, art.226(2).

<sup>121</sup> *Ibid.*

<sup>122</sup> LOSC, art.226(1)C.

<sup>123</sup> Molenaar, *supra* note 79, p.237.

<sup>124</sup> *Ibid.*

<sup>125</sup> *Ibid.*

### 3.5 The rules of reference

As illustrated under chapter I the LOSC contains fundamental rules and general principles and leaves the more technical rules to other relevant conventions adopted by the competent organizations via so-called “rules of reference”. By linking the LOSC via the rules of reference to other relevant conventions, and future instruments that are yet to be established, the LOSC became a dynamic framework. Consequently, it avoided the need to be amended when international rules and standards related to maritime safety and environmental protection develops.

Most references included within The LOSC are related to regulatory instruments e.g., SOLAS and MARPOL. In this context the IMO is critically important, as the reference to the competent international organization which can formulate these more detailed rules and standards is a reference to the IMO.<sup>126</sup> Many IMO instruments are indirectly binding on States once they gain the status as AIRS/GAIRS. To understand the links between the LOSC and IMO’s instrument via the rules of reference, it should be clear first which regulations qualify as GAIRS. To determine what qualify as GAIRS it’s important to define what “generally accepted” means and what “international rules and standards” means.

It’s plausible to consider that the meaning of generally accepted consists more than customary law, and legal instruments ratified by States.<sup>127</sup> Further, it’s also reasonable to understand it as the rules and standards which have gained a wide spread by the majority of States.<sup>128</sup> International rules, are the legally binding regulations that are part of customary law or that have been embodied in treaties.<sup>129</sup> The term international standards contain both, legally binding regulation, non-legally binding regulations and recommendations.<sup>130</sup> Accordingly, international standards are broader in contrast to the term international rules.<sup>131</sup> In this context the IMO’s recommendation could become

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<sup>126</sup> Jensen, Øystein, *The International Code for Ships Operating in Polar Waters: Finalization, Adoption and Law of the Sea Implications*, *Arctic Review on Law and Politics*, Vol.7, No.1, 2016, p.73.

<sup>127</sup> Ringbom, *supra* note 84, p.393.

<sup>128</sup> Henriksen, *supra* note 8, p.45.

<sup>129</sup> *Ibid*, p.44.

<sup>130</sup> *Ibid*.

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

GAIRS, and thus made legally binding through the rules of reference once they gain a wide support by the majority of States.<sup>132</sup>

As it will follow, the Polar Code consists of two legally binding parts and two recommendatory parts. Whether the provisions of the Polar Code can be regarded as GAIRS and thereby be covered by the rules of reference and whether the rules of reference can include the recommendatory parts of the Polar Code, will be further discussed and developed under the following chapter.

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<sup>132</sup> *Ibid.*

## 4. Chapter IV – IMO Instruments

### 4.1 Introduction

In order to harmonize the application of rules and standards related to maritime safety and the protection of marine environment, a uniformity of regulations is required. This has led the IMO to adopt primary conventions such as MARPOL, SOLAS, and the Polar Code. This chapter will encompass a brief introduction to the IMO and the IMO's relevant instruments namely "SOLAS, MARPOL and the Polar Code". A discussion of all relevant IMO's instruments regulation maritime safety and protection of the marine environment is beyond the scope of this thesis. Such instruments include COLREG<sup>133</sup>, the SAR Convention<sup>134</sup>, and the STCW Convention.<sup>135</sup> Furthermore, The Polar Code will be dealt with in-depth in comparison to other instrument and will be followed by an assessment. The last section of this chapter will address possible solutions to the problem of lack of infrastructure and waste management in the Arctic region.

### 4.2 The international maritime organization (IMO)

The IMO is the primary body responsible for regulating the shipping industry. Today the IMO has 171 State parties representing almost 100% of the world merchant fleet and adopted over fifty conventions and protocols.<sup>136</sup>

The core purpose of the IMO is to facilitate the adoption of the foremost practicable standards in matters related to the efficiency of navigation and navigation safety.<sup>137</sup> The 1975 amendments to the IMO convention expanded the IMO's objectives by including the prevention of marine pollution to its objectives.<sup>138</sup>

The IMO has no power to enforce the international rules and standards within the IMO's conventions. Compliance with the IMO's conventions e.g. SOLAS, MARPOL and

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<sup>133</sup> The International Regulations for Preventing Collisions at Sea (1972)

<sup>134</sup> The International Convention on Maritime Search and Rescue (1979)

<sup>135</sup> The International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (1978)

<sup>136</sup> IMO Membership: <http://www.imo.org/en/About/Membership/Pages/Default.aspx>

<sup>137</sup> Convention on the International Maritime Organization, Geneva 6 March 1948 and subsequent amended, Art.1(a).

<sup>138</sup> Khee-Jin Alan T., Vessel-Source Marine Pollution, The Law and Politics of International Regulation, Cambridge: Cambridge University Press, 2006, p.76.

the Polar Code is a usually carried out by the IMO members, mainly flag States. In addition, in the main IMO instruments port States were acquired a role of inspection to verify whether the vessels in port are complied with such regulations. When vessels are inspected and found to be in breach of the relevant regulatory conventions, it could lead to the detention of vessels. The main goal here is to prevent substandard vessels from sailing until a minimum set of standards are complied with.

## **4.3 Important IMO instruments**

### **4.3.1 SOLAS and MARPOL**

#### **- *SOLAS 74***

The core objective of SOLAS 74 is to set minimum standards for the construction, equipment and vessels operations to ensure maritime safety. In 2016 the number of State parties that ratified the convention is 162 States, representing 99% of the global merchant tonnage.<sup>139</sup>

The convention consists twelve chapters that regulates maritime safety and sets out standards in relation to vessels' construction – subdivision and stability, machinery and electrical installations, Fire protection, Life-saving appliances and safety of navigation, carriage of grain and carriage of dangerous goods, safe management and operation of ships 'ISM Code', ships' routing, ship reporting systems and vessel traffic services. The Convention also has an indirect relation in preventing pollution from ships, as the measures adopted to improve the safety of vessels reduces maritime incidents. And thus it helps to prevent environmental damage from occurring in the first place.<sup>140</sup>

#### **- *MARPOL 73/78***

MARPOL is the main framework convention for protecting the marine environment and the prevention of marine pollution from ships. MARPOL is of particular importance since it implements the LOSC articles 211 and 220.<sup>141</sup> MARPOL imposes various operational and technical requirements on vessels. Like SOLAS the convention has a relation on preventing maritime incidents since Annexes I and II compromise construction standards. The convention is comprised of six Annexes which regulate all kinds of marine pollution from ships and sets out pollution standards for release and discharge of oil,

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<sup>139</sup> Jensen, supra note 126, p.73.

<sup>140</sup> Marten, Supra note 6, p.53.

<sup>141</sup> Birnie, Boyle, Redgwell, supra note 60, p.402.

noxious liquid substances carried in bulk, harmful substances carried by sea in packaged form, sewage, garbage, and air pollution. All MARPOL State parties are bound by Annexes I and II, the other four Annexes are optional. In 2016 MARPOL Annexes I and II were ratified by 153 States, representing 99% of the global merchant tonnage, while ratification of the four optional Annexes varies as of annex IV represents 90.75%, annex V represents 98%. Annex IV represents today the lowest participation of States in MARPOL Annexes.<sup>142</sup> Since at least 90% of the world tonnages are bound by MARPOL Annexes, it could be therefore safe to conclude that they have become GAIRS.<sup>143</sup>

### **4.3.2 The Polar Code**

#### **4.3.2.1 Introduction**

The melting of sea ice have increased the number of vessels sailing in Arctic waters, new shipping lanes have been established which are considered shorter than traditional routes, for example the Northwest Passage offers a 7000 Kilometers shorter route between Tokyo and New York than the route through the Panama Canal.<sup>144</sup> However, vessels operating in Arctic waters are exposed to higher risks, due to; the lack of infrastructure, the remoteness of the Arctic region, the presence of ice and poor weather conditions. Vessels that are found to be in good condition to operate in other maritime areas could be found substandard to operate in Arctic waters. Thus, navigating Arctic waters requires more structural and operational standards. This has been illustrated by The T/S Maxim Gorkiy incident, where the vessel entered a drifting field of ice on its way from Iceland to Spitsbergen.<sup>145</sup> The ship collided with an ice floe and sank, around 575 passengers and 498 ship's crew were holding to lifeboats and ice floes luckily they were rescued by the Norwegian coast guard.<sup>146</sup>

Polar waters are more vulnerable to the impacts of shipping; a small oil spill could have devastating consequences for the marine biodiversity and ecosystem. Oil spill remains much longer in polar water due the presence of ice, hence having increased impact on wildlife and the people living in the Arctic region.<sup>147</sup> Notwithstanding, the operational and

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<sup>142</sup> Jensen, *supra* note 126, p.73.

<sup>143</sup> Birnie, Boyle, Redgwell, *supra* note 60, p.402.

<sup>144</sup> United Nations Conference on Trade and Development, *The Review of Maritime Transport 2015*, UNCTAD/RMT/2015 p.80.

<sup>145</sup> Jensen, *supra* note 29, p.4.

<sup>146</sup> *Ibid.*

<sup>147</sup> *Ibid.*

environmental challenges faced by vessels operating in Arctic waters, the shipping volume is predicted to grow over the upcoming years. These concerns and challenges persuaded the IMO to set out a specific code that covers only polar waters which resulted in the adoption of the Polar Code.

The amendments to SOLAS and MARPOL ‘the Polar Code’ are meant to provide better protections measures for the polar marine environment and safer vessels operation in polar waters.<sup>148</sup> The code consists of a preamble, an introduction and two main parts. Part I address the safety measures and sets out measures to ensure that vessels can operate safely in polar waters. While Part II addresses pollution prevention measures; each part consists of a legally binding set of rules and recommendations.<sup>149</sup>

In 2014, the IMO’s maritime safety committee adopted – the Polar Code safety measures parts I A and B.<sup>150</sup> In May 2015, the IMO’s marine environmental protection committee adopted – the Polar Code pollution prevention measures parts II A and B.<sup>151</sup>

The Polar code amendments to MARPOL and SOLAS will come into force on January 1<sup>st</sup>, 2017. The code will apply to all vessels constructed after 2017, and vessels constructed before 2017 shall meet the requirements of the code by 1<sup>st</sup> January 2018.<sup>152</sup> Depending on the ice regime, different requirements are imposed on vessels.

#### **4.3.2.2 Safety measures**

The Polar Code safety provisions are contained in Parts I-A and I-B of the Polar Code and will become part of SOLAS as a new chapter ‘Chapter XIV’.<sup>153</sup> The main purpose of the safety provisions is to establish an extensive framework placing far-reaching set of rules and standards to increase maritime safety. The safety measures are placed in 12 Chapters. Chapter one sets out the minimum requirements for vessels to meet with, in order to operate in polar waters and the obligations of carrying polar ship certificate. Chapters 2–12 could be divided in two main categories; pre-journey preparations and seaworthiness standards.<sup>154</sup>

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<sup>148</sup> The Polar Code, Introduction, Article 1.

<sup>149</sup> The Polar Code, Structure of the Code N.4.

<sup>150</sup> IMO, Polar Code, (Safety related provisions), IMO Resolution MSC. 385(94).

<sup>151</sup> IMO, Polar Code, (Environment related provisions), IMO Resolution MEPC. 264(68).

<sup>152</sup> Jensen, *supra* note 126, p.66.

<sup>153</sup> *Ibid*, p.65.

<sup>154</sup> Bai, Jiayu, *The IMO Polar Code: The Emerging Rules of Arctic Shipping Governance*, *The International Journal of Marine and Coastal Law* 30, 2015, p.681.

Pre-journey preparations covers the obligations of carrying polar water operational manual (ch.2); requirements on safety of navigation (Ch.9); adequate communications equipment (Ch.10); voyage planning (Ch.11); and manning and training (Ch.12).<sup>155</sup>

The second category relates to Seaworthiness standards and covers, vessels' structure (Ch.3), rules of subdivision and stability (Ch.4), watertightness and watertight integrity (Ch.5), machinery installations (Ch.6), fire safety/protection (Ch.7), and life-saving appliances and arrangements (Ch.8).

#### **4.3.2.3 Pollution prevention measures**

The pollution prevention measures are contained in Parts II-A and II-B, The provisions will become part of MARPOL by amendments to its Annexes. Part II-A contains the mandatory pollution prevention measures in five chapters which address various types of pollution. The chapters correlate with MARPOL Annexes I, II, IV and V, but are stricter in comparison.

Chapter one prohibits any discharge of oil or oily mixtures into the sea and refers to the rules of MARPOL contained in Annex I. Moreover, it places structural requirements for oil tankers and other ships design e.g. the distance from the oil fuel and sludge tanks to the hull.<sup>156</sup> Chapter two prohibits any discharges of noxious liquid substances or mixtures containing such substances in Arctic waters. It also provides that operation in polar waters shall be consistent with MARPOL Annex II.<sup>157</sup> Chapter four prohibits the discharge of sewage, except when performed in accordance with MARPOL Annex IV<sup>158</sup>. An additional structural requirement imposed on ships constructed after 1 January 2017, is to carry on board sewage treatment plant.<sup>159</sup> Chapter five deals with the discharge of garbage in polar waters, it should be noted that the Polar Code contains stricter regulations and more requirements for the discharge of garbage in Arctic waters than in the Antarctic.<sup>160</sup>

Chapter five deals with the prevention of pollution by harmful substances carried by sea in packaged, however chapter three was kept blank intentionally and no additional guidance is provided by the code. This could be an indication that compliance with MARPOL requirements within Annex III is deemed to be sufficient to oppose the potential risk.

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<sup>155</sup> Ibid.

<sup>156</sup> Ibid, p.682; see Polar Code, Part II-A, ch.1, Reg. 1.2.4.

<sup>157</sup> Polar Code, Part II-A, Ch.2, Reg. 2.1.2.

<sup>158</sup> Ibid, Ch.4, Reg.4.2.1.

<sup>159</sup> Ibid

<sup>160</sup> Ibid, Ch.5, Reg. 5.2.1 and 5.2.2; see Jensen, supra note 126, p.70.



#### 4.4 An assessment to the Polar Code's pollution prevention measures

Are the measures incorporated within the Polar Code sufficient to ensure the protection of the Arctic marine environment?

One shortcoming of The Polar Code is that it doesn't deal with the discharge of ballast water. Ballast water often introduces non-native species, which could damage the native species and the ecological system of the Arctic marine environment. Since the discharge of ballast water is only addressed under the recommendation of part II-B, the risk of the invasion of alien species is significantly high. One way to solve this shortcoming is by the effective implementation of the Ballast Water Management Convention (BWM)<sup>161</sup> as a supplementary instrument to the Polar Code since it's applicable to Arctic water. Another possible way for Arctic port States is to prescribe additional CDEM standards on foreign vessels as conditions for port entry. In this context article 211(3) provide port State with the legitimacy to adopt stricter regulations that can exceed the level of GAIRS. Accordingly, Arctic port States may require foreign vessels entering to have ballast water treatment system as port entry conditions. Moreover, they can prescribe rules as condition for port departure, e.g. by requiring the discharge of ballast water in port reception facilities before departure.

In contrast to the Antarctic region, there is no ban under the polar code for the usage of heavy fuel oil (HFO) or the carriage of HFO in Arctic waters. The growth of shipping in the Arctic region and the usage of HFO by most large vessels and tourist ships, pose significant risks to the Arctic environment in two aspects: oil spills and the production of black carbon emissions into the air.

Oil spills like the Erika that occurred near the coast of France and The Exxon Valdez accident in Prince William Sound, Alaska, indicates that "HFO can remain at the surface of the water for long time".<sup>162</sup> HFO spills sink to the sea floor which makes it difficult to remove using the regular clean-up techniques, and costs 10 times more than the removal of lighter oil spills.<sup>163</sup>

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<sup>161</sup> International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM) Adopted in 13 February 2004; Entry into force: 8 September 2017.

<sup>162</sup> Andersson, Karin ... [et al.] Shipping and the Environment: Improving Environmental Performance in Marine Transportation, Springer, 2016, p.139

<sup>163</sup> Ibid; See also AMSA report, supra note 5, p.119; Andersson, supra note 161, p.139.

One possible way for Arctic States to mediate this problem, is to request the IMO to examine the efficiency for restricting the use of HFO in Arctic waters in light of the adverse consequences of oil spills and black carbon emissions could have in the Arctic environment, similar to the 2005 request of the Antarctic Treaty Consultative Meeting (ATCM) to the IMO which resulted in a ban of usage of HFO.<sup>164</sup> If such request is denied, Arctic port States could unilaterally or multilaterally adopt additional CDEM standards on vessels carrying or using heavy fuel oil as requirement for port entry in accordance to article 211(3). This raises the question whether the usage or carriage of HFO could qualify as a CDEM standard.<sup>165</sup>

The carriage of HFO could qualify as a CDEM standard under MARPOL if it's carried by single hulled tankers, as a regulation that apply to the vessel's construction. However, the usage of HFO as fuel is controversial, a restrictive interpretation of what qualify as CDEM standards would indicate that fuel requirements does not qualify as CDEM standards, as it does not relate directly to the vessel's construction, design, equipment or manning.<sup>166</sup> On the other hand, it has been argued that engines running on HFO cannot use lower viscosity fuels as it may lead to technical problems. Therefore, it relates to the vessels construction and should be dealt with as CDEM standards.<sup>167</sup> Similar to the US OPA, Arctic port States can require tankers carrying HFO to have triple-hull requirement to access their ports. Consequently the adoption of stricter CDEM standards as requirements for port entry at a regional level will restrict vessels carrying or using HFO from sailing in Arctic waters. This exercise of jurisdiction as illustrated under chapter III could be based under articles 25(2) and 211(3) which have broader prescriptive and enforcement powers.<sup>168</sup>

Moreover, the usage of HFO in Arctic waters will increase the production of black carbon emissions into the air; this will have the consequences of increasing the temperature rate in the Arctic region which will accelerate the melting of Arctic sea ice.<sup>169</sup> Scientific

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<sup>164</sup> ATCM XXVIII, Decision VIII (2005); MEPC Res.189(60), Amendments to MARPOL Annex I, Reg.43, adopted 26 March 2010.

<sup>165</sup> Henriksen, *supra* note 8, p.45

<sup>166</sup> Ringbom, *supra* note 84, p.434

<sup>167</sup> Henriksen, *supra* note 8, p.46, see also Det Norske Veritas, Heavy Fuel in the Arctic (Phase 1), p.8, available at <https://oaarchive.arctic-council.org/handle/11374/1059> accessed 24/9/2016.

<sup>168</sup> See *supra* note 88.

<sup>169</sup> Winther, M, ... [et al.], Emission inventories for ships in the Arctic based on satellite-sampled AIS data, 91:1, Atmospheric Environment, 2014, p. 1.

studies show that despite the prohibitions of plastic discharges into the sea, around 60% to 80% of all ocean wastes are plastic.<sup>170</sup> Studies have proven that small pieces of plastic are being carried into the Arctic Ocean, and the accumulation of micro plastics in the arctic ice cap are three times more than those found in open ocean waters.<sup>171</sup> The usage of HFO will accelerate the melting of the ice cap which could result in releasing plastic debris into the Arctic waters. The release of plastic debris could have toxic circumstance once absorbed by marine plants, fish, mammals and animals.<sup>172</sup> One possible way to reduce black carbon emissions is by adopting a monitoring, reporting and verification (MRV) scheme similar to the European Union adoption of the MRV scheme that applies to all emissions from vessels calling at European ports as a step to reduce greenhouse gas emissions.<sup>173</sup> Arctic port States can make use of their jurisdiction under Article 211(3) to adopt such scheme as port entry requirement for all vessels calling at their ports as a port entry requirement.<sup>174</sup>

Another issue that should also be considered by the IMO is that the code doesn't apply to other types of vessels operating in polar waters including, government non-commercial vessels, pleasure yachts, fishing vessels, wooden ships and cargo ships less than 500 gross tons.

#### **4.5 The interplay between the Polar Code and the LOSC**

An emerging issue is whether the Polar Code provisions qualify as GAIRS/AIRS and thereby could be applied by port States in accordance to the relevant LOSC articles. Provisions within regulatory conventions have to fulfil certain criteria in-order to be regarded as GAIRS. They must first qualify as international rules and standards. Secondly they must obtain the status of being generally accepted.

If provisions are to qualify as international rules and standards, they must fulfil two conditions. First, the provisions should be developed by the competent organizations or by general diplomatic conference.<sup>175</sup> In this context, not all the provisions of the Polar Code were developed by the competent organizations or by the States. For instance the

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<sup>170</sup> Derraik, J.G.B., *The Pollution of the Marine Environment by Plastic Debris: a review*, *Marine Pollution Bulletin* 44, 2002, p.842.

<sup>171</sup> Obbard, R.W., ... [et al.] *Global Warming Releases Micro-plastic Legacy Frozen in Arctic Sea ice*, *Earth's Future* 2, 2014, p.316–320.

<sup>172</sup> Condino, David A. *Ship generated waste in the Arctic Marine Environment: Marine Pollution, MARPOL and the Polar code*, US Coast Guard, 2016, p.7.

<sup>173</sup> Ryngaret & Ringbom, *supra* note 97, p.393. See also: MRV Regulation, Preamble, para.37.

<sup>174</sup> *Ibid.*

<sup>175</sup> See for example: LOSC, Art.218.

provisions of ship structures were developed by the international association of classification societies (IACS).<sup>176</sup> On one hand it could be argued that these provisions cannot be regarded as GAIRS. The more convincing argument is that since the Polar Code is adopted by the IMO as the competent organization and States have accepted the reference to IACS regulations then States have expressed their consent to it and thus it fulfills the first condition.<sup>177</sup>

Second, the provisions should be incorporated into legally binding instruments. In this context, since the Polar Code's (Introduction, Parts I A and II A) are amendments to both MARPOL and SOLAS, they constitute international rules and standards.<sup>178</sup>

The Polar Code provision must also become "generally accepted" in order to be regarded as GAIRS and thereby covered by the rules of reference. The question here is whether the incorporation of the Polar Code into MARPOL and SOLAS suffice for the provisions to be deemed "generally accepted".

Since SOLAS comprises 162 contracting parties representing 99% of the global merchant tonnage, and since MARPOL Annexes I and II are ratified by 153 States representing 99% of the global merchant shipping tonnage, and the other three Annexes representing around 90% to 98% of the world tonnage.<sup>179</sup> It could be concluded that once the Polar Code provisions enter into force, they have become "generally accepted". And thus, they are GAIRS and covered by the rules of reference under the LOSC.

Another legal issue is, since the two recommendatory parts were not incorporated into legally binding instruments, could they still be covered by the rules of reference. First it's necessary to clarify that the recommendatory parts of the Polar Code were developed by the IMO.<sup>180</sup> Thereby they fulfill the first conditions of becoming international rules and standards, as they are adopted by the IMO. As illustrated in Chapter III-(3) the term "standards" includes both, legally binding regulation, and non-legally binding regulations.<sup>181</sup> And through the wording "international rules and standards" contained in the LOSC provisions it provides the ability of developing the Polar Code recommendations

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<sup>176</sup> Jensen, *supra* note 126, p.73.

<sup>177</sup> *Ibid.*

<sup>178</sup> *Ibid.*

<sup>179</sup> *Ibid.*, p.75.

<sup>180</sup> *Ibid.*, p.74.

<sup>181</sup> Henriksen, *supra* note 8, p.44.

into GAIRS, once they gain a wide support by the majority of States. And thereby they could become legally binding for vessels operating in the Arctic waters.

#### **4.6 The lack of infrastructure and waste management**

Under the Polar Code the discharge of almost all sorts of wastes in Arctic waters is prohibited. The key to prevent illegal discharges from vessels is by providing adequate port reception facilities (PRF), and to ensure that vessels do not leave ports unless all waste are being disposed in those PRF. The Arctic region lacks many infrastructures such as ports, PRF, ship repair facilities, deep-water ports and places of refuge.<sup>182</sup>

Waste management in the Arctic are facing many challenges not only by the lack of infrastructure but also when infrastructure are in place the changing ice conditions could prevent the usage of port facilities. In this context, it should be noted that the Arctic Council and its PAME working group are currently undertaking a study on regional waste management and engaged in finding possible solution to the implementing challenges of the Polar Code in Arctic waters.<sup>183</sup>

One solution - as pointed out by Condino - for vessels operating in arctic waters is to “Carry in, Carry out”.<sup>184</sup> The concept requires vessels to carry wastes till they reach a designated port with reception facilities to discharge these wastes. Not as easy as it sounds, the concept is challenging for both flag States and port States. Besides the long passage between ports of call in Arctic waters, vessels have to be designed or redesigned with sufficient reservoir space on board of vessels to store all wastes. Furthermore, designated ports must have adequate reception facilities for waste disposal.<sup>185</sup>

Exercising departure state jurisdiction on foreign vessels departing to Arctic waters can offer another partial solution to the problem of lack of infrastructure. As illustrated under chapter II-(2.2.3) Arctic port States can establish particular requirements for vessels leaving ports as to those requirements for entering to ports, e.g. the discharge of all wastes in PRF before proceeding to Arctic waters. This exercise of departure state jurisdiction could be based on the territorial principle. Further, similar to the New Zealand’s 1994 Antarctic Act, which allows New Zealand as a port State to inspect any vessel departing to

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<sup>182</sup> See AMSA report, *supra* note 5, p.175.

<sup>183</sup> Condino, *supra* note 172, p.8.

<sup>184</sup> *Ibid*, p.3.

<sup>185</sup> *Ibid*.

Antarctic waters, Arctic port state must exercise PSC on any vessel departing from their ports to Arctic waters. Arctic States shall also cooperate with both the Paris MoU and the Tokyo MoU, to ensure that any vessels departing – from states participating in these MoU – to Arctic waters are inspected and are in compliance with both safety measures and measures adopted for the protection of the marine environment. Further discussion on this cooperation will be carried under the following chapter V-(5.3).

## **5. Chapter V – Ensuring Compliance with the IMO’s Instruments: The Role of PSC.**

### **5.1 Introduction**

The responsibility of ensuring compliance with the requirements laid down in the IMO conventions lies primarily with flag States. However, relying solely on the control mechanisms applied by flag State and classification societies have proven to be insufficient, and substandard vessels continued to sail placing both maritime safety and the marine environment at high risk. This has been illustrated by massive oil incidents like the Torrey Canyon, the Exxon Valdez, the Erika and Prestige.

The purpose of PSC is to prevent sub-standard ships from sailing through a harmonized system of PSC to ensure maritime safety and prevention of marine pollution. The aim is “not to replace or challenge but rather to supplement the traditional flag State jurisdiction”.<sup>186</sup> It is only when flag States fail in exercising effective enforcement over their vessels, PSC comes into play. The inclusion of in port enforcement within the relevant IMO’s instruments allowed port States to inspect vessels to verify whether the vessel is manned and operates in compliance with the requirements laid down in the IMO convention.

A drawback of the Polar code is that, it doesn’t refer to PSC. However the only possible way to accomplish the objectives of the polar code is through PSC mechanism. PSC tools of inspection and detention addressed in the following section could greatly benefit in reducing the number of substandard vessels operating in Arctic waters. It must also be noted that the Polar Code’s amendments to MARPOL Annexes are generally specific to flag States and the provisions for PSC did not change and still apply to all ports. In this context MARPOL’s Annex I Reg.8, Annex II Reg.15, Annex III Reg.8 and Annex V Reg.9, provide Arctic port State with the right to inspect foreign vessels in ports to verify whether they are in compliance with the relevant regulations. If deficiencies are found,

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<sup>186</sup> Rayfuse, Rosemary, *The Role of Port States in: Routledge Handbook of Maritime Regulation and Enforcement*, Edited by Robin Warner & Stuart Kaye, Taylor & Francis, 2016, p.74.

vessels may be detained and prevented from leaving until they meet the minimum safety and environmental standards.

The following section of this chapter will comprise a brief introduction to the Memorandum of Understandings (MoUs) and will deal with PSC Measures and the final section will deal with initiatives for developing PSC strategy in the Arctic region.

## **5.2 The memorandum of understanding**

The MoU is a regional agreement for establishing PSC. The MoU does not set new standards; the aim is to ensure that vessels operating in the region are complying with the relevant international instruments in force. Most MoUs are based upon the Paris MoU. The Paris MoU was adopted in 1980 by the Regional European Conference on maritime safety, where the need for increased maritime safety and protection of the marine environment were acknowledged.<sup>187</sup> Both The IMO and the International Labour Organization agreed that eliminating substandard ships is best achieved by establishing a PSC based on the relevant IMO conventions in force.<sup>188</sup> In this context port States members to regional MoU can only enforce rules and standards embodied within the IMO's conventions in force. Today the Paris MoU has 27 participants, and many other regional MoU have been established. As Molenaar points out, almost a global coverage of PSC has been achieved as it's hard today to identify one port where vessels could anchor without having the risk of being inspected.<sup>189</sup>

### **5.2.1 Port State Control Measures**

#### **5.2.1.1 Inspection**

Arctic port States are expected to inspect foreign vessels calling at ports, to verify whether the vessels are in compliance with the provisions of the Polar Code and other relevant instruments. When foreign vessels are voluntarily in ports, the port State control officer (PSCO) can inspect vessels regarding the following: vessel's safety, pollution prevention, crewing standards. The vessels' flag, type and age are the main criteria for inspecting vessels at port.<sup>190</sup> These criteria are deemed to indicate how the ship operates

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<sup>187</sup> Özçayır, Z. Oya, *The Impact of Caspian Oil and Gas Development on Turkey and Challenges Facing the Turkish Straits*, (paper presented at Istanbul, 9 November 2001), P.4

<sup>188</sup> *Ibid.*

<sup>189</sup> Molenaar, *supra* note 79, p.244.

<sup>190</sup> Özçayır, *supra* note 187, p.8



and how the conditions of the ship are.<sup>191</sup> If vessels have been reported, or suspended from class, or there are concerns about the vessel operation, these factors would put the vessel on the top of the inspection list.<sup>192</sup> Unless there are clear grounds that the vessel conditions do not reflect the vessel's certificates, inspection should be limited on checking these certifications. Furthermore, Arctic port States are obligated by the principle of "no more favorable treatment". Therefore, even when ships are flying flags of non-parties to the relevant conventions, they are not exempt from inspection.

### 5.2.1.2 Detention

After the vessel has been inspected and deficiencies are found to be serious and clearly hazardous to maritime safety, or the marine environment, or the crew on board, the PSCO has the competence to prevent and detain the vessel from sailing until the deficiencies are rectified. In principle, vessels that have been detained can only be released when the deficiencies found are rectified. However, a PSCO has the competence to allow vessels to sail to the nearest repair yard when rectification cannot be carried out in port as long as it's safe for the vessel to sail to the repair yard.<sup>193</sup> It should be noted that one serious deficiency could warrant the detention of the vessel. Also minor deficiencies could warrant the detention of the vessel once combined and viewed together.<sup>194</sup>

Detention is a powerful measure that ship owners try always to avoid, as it involves serious effects to the vessel schedule and cost implications "loss of revenue, repairs at short notice which are more expensive".<sup>195</sup> This measure has influenced ship owners to comply with international rules and standards to avoid detention. If the vessel's owner does not comply with the conditions of release 'requirement for repairs', the vessel is risking being refused or banned to access all ports of the MoU participants.<sup>196</sup>

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<sup>191</sup> Ibid.

<sup>192</sup> Ibid, p.9.

<sup>193</sup> Kiehne, G., Investigation, Detention and Release of Ships under the Paris Memorandum of Understanding on Port State Control: A View from Practice, the International Journal of Marine and Coastal Law, 1996, P.222.

<sup>194</sup> Özçayır, supra note 187, p.10

<sup>195</sup> Rajadurai, A., Regulation of Shipping: The Vital Role of Port State Control, Maritime Law Association of Australia and New Zealand Journal 83, 2004, p.102.

<sup>196</sup> Henriksen, supra note 8, p.38.

### 5.2.1.3 Refusal of access

Refusal of access to ports is one of the effective enforcement measures when applied at the regional level. Arctic port States may undertake such action against foreign vessel for non-compliance with the relevant IMO instruments, and for non-compliance with port entry requirements. As illustrated under chapter II, the right of refusal of access to port is derived from general international law.<sup>197</sup> Since port States are competent to regulate access to their ports they may deny access too. As mentioned earlier, one step that could be taken in banning the shipment and usage of HFO in Arctic waters is by refusing/banning vessels from accessing ports.

Refusal access to port is one of the measures contained in PSC schemes such as in the Paris MoU. According to the Paris MoU refusal access is regulated in three different lists. Vessels with the poorest flag performance are listed in the black list, vessels with average flag performance are listed in the grey list, and vessels with high performance are listed in the white list. Accordingly, if the vessel has been detained twice in the past two years, it will be listed in grey list, and if detained a third time then a refusal order shall be issued. In cases where a vessel is flying the flag of a black listed state, and it was detained twice in the last three year, a refusal order shall also be issued.<sup>198</sup> The refusal order may be abolished if the vessel performance improves.

If refusal orders are frequently issued it could result in a permanent ban from accessing all ports of states participating in the MoU.<sup>199</sup> To lift the permanent ban the vessel needs to be re-inspected and show compliance with the relevant instruments.<sup>200</sup> It's also worth noting that the ban could extend to include vessels not in compliance with the ISM code.<sup>201</sup>

Since the right of port States to refuse access to its port is amid at the prevention of marine pollution; therefore it's not an absolute right as it's subject to the obligation of non-discrimination under article 227 of the LOSC.<sup>202</sup> Moreover in cases of permanent refusal a requirement of proportionality between the ban and the objective amid to achieve is also required.<sup>203</sup>

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<sup>197</sup> Chapter II-(2.2).

<sup>198</sup> Henriksen, supra note 8, p.38.

<sup>199</sup> Ibid.

<sup>200</sup> Henriksen, supra note 8, p.39.

<sup>201</sup> Özçayır, supra note 187, p.11.

<sup>202</sup> Henriksen, supra note 8, p.39.

<sup>203</sup> Ibid.

### 5.3 Initiatives for PSC in the Arctic Region

Since the Polar Code is silent on the enforcement mechanisms, compliance with code – like other IMO’s instruments – is merely the duty of flag States, and port States are acquired a role to inspect vessels to ensure that the relevant provisions are complied with. There are no regional arrangements on PSC that has been established yet explicitly for the Arctic region. Thus, Arctic States regional cooperation is essential for the implementation of the Polar Code and for establishing an effective PSC scheme. Such cooperation will facilitate the spread of information regarding vessels operating in Arctic waters, harmonize port States measures to avoid the problem of port of convenience, ensure effective inspection and avoid replicating the same action. There are two initiatives for Arctic States to carry out PSC strategy, either to exercise PSC under one of the existing regional PSC arrangement, or to establish a new PSC scheme explicitly for the Arctic region.<sup>204</sup>

#### 5.3.1 Regional PSC arrangement

Since the Polar Code provisions are made obligatory by incorporation to relevant IMO conventions. The first option for Arctic States to exercise PSC under one of the existing regional PSC arrangement is more convincing than establishing a new PSC. The most opportune approach is to extend the scope of the Paris MoU to encompass the Arctic region.<sup>205</sup> Several reasons support this approach; first, the Paris MoU does not contain any provision that clearly defines its spatial coverage. Second, the performance of the Paris MoU is the most effective and the strictest PSC system between all existing regional arrangements.<sup>206</sup> Third, the Paris MoU has the financial means and its members are keen on improving the maritime safety.<sup>207</sup> Moreover, since adherence to the Paris MoU is open to all “Maritime Authority of European coastal State, and coastal State of the North Atlantic basin from North America to Europe”, and thus it facilitated the adherence of all arctic States to the Paris MoU, with the exception of the US that has an observer status to the Paris MoU.<sup>208</sup> However, The US PSC system is compatible with the Paris MoU and has been cooperating with the Paris MoU since 1986.<sup>209</sup>

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<sup>204</sup> Molenaar, Erik J., *Options for Regional Regulation of Merchant Shipping Outside IMO, with Particular Reference to the Arctic Region*, *Ocean Development & International Law*, 45:3, 2014, p.286.

<sup>205</sup> *Ibid.*

<sup>206</sup> *Ibid.*

<sup>207</sup> Özçayır, *supra* note 187, p.21.

<sup>208</sup> Molenaar, *supra* note 204, p.284. See also, Paris MoU, section 9.2.

<sup>209</sup> *Ibid.* “The US PSC is also stricter than the existing PSC arrangements, which lead vessels with poor flag performance to avoid anchoring at US ports and anchor elsewhere, where PSC can be avoided”.

There are several challenges if Arctic States are to exercise PSC under the Paris MoU. At first to amend the spatial coverage of the Paris MOU, it's necessary to obtain a prior agreement between the 27 States participating in the Paris MoU.<sup>210</sup> In order for the Paris MoU to encompass the entire intra-arctic shipping; the Russian Federation will be required to pronounce that all its Pacific ports are subject to the Paris MoU, similar to Canada's decision in 2009.<sup>211</sup> Moreover, in order to control all trans-arctic shipping, especially from vessels departing from the Asian Pacific region, Arctic States shall make extensive use of the existing ports at the north pacific.<sup>212</sup>

Furthermore, both Paris and Tokyo MoUs should be involved. In this regard, cooperation between Arctic port States and both the Paris and Tokyo MoUs is essential to make the best use of PSC. Such cooperation can insure that vessels departing to Arctic waters from States participating in these MoU are being inspected before departure. Similar to the coordination between the EU and the Paris MoU, Arctic port States shall coordinate with both the Paris and Tokyo MoUs to establish means of exchanging information and constantly monitoring the PSC.<sup>213</sup> And thus, Arctic port States can ensure that vessels departing to Arctic water from states participating in these MoUs, have gone through PSC and that all related information about the vessel is received prior navigating in Arctic waters. This will also facilitate monitoring vessels traversing via the Northwest Passage and Northern Sea Route, since port States are not competent to exercise PSC unless vessels are voluntarily in port.

### **5.3.2 Arctic Region MoU**

The second option for Arctic States is to develop an Arctic MoU. Arctic States have several bases under the international law of sea for regional cooperation. One approach is through part IX of the LOSC 'Enclosed or Semi-Enclosed Seas'. Part IX consists of two articles 122 and 123, the former defines the term 'enclosed or semi-enclosed sea', while the latter provides the base for regional cooperation. Article 123 encourages costal States bordering enclosed or semi-enclosed seas, to cooperate on regional basis for the protection and preservation of the marine environment by implementing the relevant conventions

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<sup>210</sup> Ibid, p.285.

<sup>211</sup> Ibid.

<sup>212</sup> Ibid, p.286.

<sup>213</sup> Özçayır, supra note 187, p.23.

such as MARPOL and Article 218 of UNCLOS.<sup>214</sup> It's controversial whether the Arctic Ocean falls within the definition of enclosed or semi enclosed sea.<sup>215</sup> If the Arctic Ocean qualify as enclosed or semi enclosed sea arctic costal States are encouraged to cooperate to establish a MoU to enhance and harmonize the exercise PSJ.

Even if the Arctic Ocean does not qualify as enclosed or semi enclosed sea, arctic States could still cooperate in establishing a PSC MoU, under the sphere of: Merchant shipping or the protection of the Marine environment.<sup>216</sup> In this context the Arctic council can play a crucial role in establishing an Arctic MoU. The Arctic Council function as a high level forum for enhancing cooperation between arctic States in issues related to sustainable development and the protection of environment.<sup>217</sup> The Council has been active in the sphere of merchant shipping and the protection of the marine environment.<sup>218</sup> In 2006 the Arctic Council expressed its interest to enhance the cooperation among Arctic States in relation to maritime safety.<sup>219</sup> Moreover, in 2009 the Council requested the IMO to accomplish the Polar Code.<sup>220</sup> Similar to the legally binding agreements that has been negotiated under the auspices of the Arctic Council such as: 'the search and rescue (SAR) agreement' and 'the agreement on cooperation on marine oil pollution, preparedness and response in the Arctic', an Arctic MoU can also be negotiated under the auspices of the Arctic council.

The Arctic MoU must include the five Arctic Ocean coastal States as participants. To coordinate the cooperation and the exercise of PSJ between the Arctic States participating in such MoU, a secretariat must be established in one of the Arctic States. Such MoU like other existing MoU will have to set out uniform procedures for inspecting, investigating and prosecuting vessel for non-compliance.

Determining whether a foreign vessel committed illegal discharges is hard, especially in large and remote sea areas. Therefore, it's important for Arctic port States to be able to

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<sup>214</sup> Bang, supra note 12, p.130.

<sup>215</sup> Molenaar, Erik j., Current and Prospective Roles of the Arctic Council System within the Context of the Law of the Sea, *The International Journal of Marine and Coastal Law* 27 (2012), p.56.

<sup>216</sup> Ibid p.593

<sup>217</sup> Declaration on the Establishment of the Arctic Council, Sept. 19, 1996, 35 ILM 1387.

<sup>218</sup> Molenaar, supra note 215, p.563

<sup>219</sup> Arctic Council, The Salekhard Declaration: the 5<sup>th</sup> Ministerial Meeting of the Arctic Council 7-8, 2006, available at <https://oaarchive.arctic-council.org/handle/11374/90>.

<sup>220</sup> Arctic Council, The Tromsø Declaration: the 6<sup>th</sup> Ministerial Meeting of the Arctic Council 4, 2009, available at <https://oaarchive.arctic-council.org/handle/11374/91>.

receive accurate information regarding any illegal discharges by foreign vessels in Arctic waters. Once a Port State is certain and has solid evidence that the vessel committed illegal discharges, the State may start the legal proceedings.<sup>221</sup> In this context better cooperation and investigatory methods are needed to obtain accurate evidence. One way to enhance such cooperation could be achieved by concluding an agreement on sharing information between the Arctic MoU and different regional MoUs as discussed under the last section.

Another effective way is by concluding an agreement with the international criminal police organization (INTERPOL).<sup>222</sup> The INTERPOL has been involved in many environmental crimes since 1992, such as illegal discharges of oil by vessels.<sup>223</sup> In 2012 the INTERPOL established the Environmental Compliance and Enforcement Committee (ECEC) to assist the INTERPOL in the field of environmental crime enforcement.<sup>224</sup> One of the working groups under the ECEC is the pollution crimes working group, which has been involved into a number of “projects to combat the transport, trade and disposal of wastes and hazardous substances”.<sup>225</sup> Such cooperation can assist Arctic States in detecting such violations and provide them with accurate information and solid evidence regarding illegal discharges by foreign vessels.<sup>226</sup>

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<sup>221</sup> Bang, supra note 12, p.130.

<sup>222</sup> Ibid.

<sup>223</sup> Ibid. see also <http://www.interpol.int/Crime-areas/Environmental-crime/Environmental-Compliance-and-Enforcement-Committee/Pollution-Crime-Working-Group> accessed 10/9/2016.

<sup>224</sup> Ibid.

<sup>225</sup> Ibid.

<sup>226</sup> Bang, supra note 12, p.129.

## **6. Chapter VI – Arctic Port State Residual Jurisdiction**

### **6.1 Introduction**

Customary international law and the LOSC implicitly acknowledge port State residual jurisdiction, as neither restricts its competence to prescribe stricter requirements on foreign vessels as port entry conditions. However, when Arctic port States adhere to regulatory convention such as SOLAS and MARPOL, one might assume that it may impose limitations to the port State jurisdiction. In this context, port State residual jurisdiction is the competence to prescribe stricter regulations and standards than those agreed upon at the international level. The aim here is to explore whether adherence to regulatory convention could impose limitations on Arctic port States competence to prescribe stricter regulations and standards than those agreed at the international level.

### **6.2 Residual jurisdiction under IMO instruments**

IMO regulatory conventions such as SOLAS, MARPOL and the Polar Code are aimed at protecting the marine environment and insuring maritime safety. They contain technical and jurisdictional provisions. The question is whether these technical and jurisdictional provisions should be regarded as minimum or maximum requirements.<sup>227</sup>

Most of the obligations embodied within regulatory instruments are aimed at flag States.<sup>228</sup> Flag States must comply with these obligations once they become a party to these conventions. Thereby, they set only minimum requirements on flag States to conform with. Coastal States have the competence to adopt rules and standards as long as they are consistent with the level of “generally accepted”.<sup>229</sup> Such rules and standards may not exceed the level of generally accepted; the reasoning behind this is to create a level of regulation uniformity for international navigation. However, the LOSC reserve the right of coastal States to prescribe their own discharge standards that may exceed the level of ‘generally accepted’ in the territorial sea. It provides that coastal States enjoy sovereign

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<sup>227</sup> Molenaar, Erik J., *Residual Jurisdiction under IMO Conventions in: Competing Norms in the Law of Marine Environmental Protection*, Edited by: Henrik Ringbom, *International Environmental Law & Policy Series*, Kluwer Law International, 1997, p.203

<sup>228</sup> *Ibid.*

<sup>229</sup> *Ibid.*

rights within their territorial sea and they enjoy unrestricted competence to adopt laws and regulations for the prevention, reduction and control of marine pollution generated by foreign vessels.<sup>230</sup> Furthermore, Article 234 provides that coastal States in ice-covered areas enjoy unrestricted competence to prescribe rules and standards for the prevention of marine pollution from vessels as long as they are non-discriminatory and give due regard to navigation. Both Canada and the Russian Federation make use of this article and have adopted stricter rules and standards in their EEZs which exceeded the level of GAIRS. Therefore, these regulatory conventions in general could be regarded as establishing maximum standards for coastal States. But when it comes to coastal States environmental and safety interests, if the coastal States make use of the relevant article of the LOSC articles 211(4) and 234, they can prescribe standards that exceed the standards under MARPOL.<sup>231</sup>

Another emerging legal issue is whether Arctic States have the right to adopt stricter regulation than the Polar Code for the protection of marine environment. Since the Polar Code's environmental prevention measures are incorporated in MARPOL as amendments to its Annexes, when a conflict arises between the LOSC and MARPOL, the LOSC will in most cases prevail since MARPOL gives primacy to the LOSC.<sup>232</sup> Thus, Arctic States in ice coverage areas may prescribe stricter regulations than the Polar Code in accordance to articles 211(4) and 234 of the LOSC.

If the IMO instruments are regarded as maximum for Arctic port States, it would indicate that by adherence to such conventions Arctic port States have restricted their residual jurisdiction.<sup>233</sup> It has been argued that this view is supported by the obligation on port State when inspecting vessels in ports, that the inspection should be limited to certificate check, unless a clear evidence of violations exists. And thus it could imply that port States are restricted to exercise residual jurisdiction.<sup>234</sup> However, this Statement cannot be used to assist the restriction of Arctic port State residual jurisdiction, since the check on certifications relates only to the technical standards within these conventions.<sup>235</sup> This is also supported by the unrestricted sovereignty under articles 25(2) and 211(3) of

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<sup>230</sup> LOSC, art.211(4).

<sup>231</sup> Molenaar, *supra* note 227, p.204.

<sup>232</sup> MARPOL, art.9(2).

<sup>233</sup> Molenaar, *supra* note 227, p.203.

<sup>234</sup> *Ibid*, p.205.

<sup>235</sup> *Ibid*.



the LOSC, which provide that port States are competent to prescribe certain conditions for foreign vessels to access their ports.<sup>236</sup> State practice also indicates that adherence to regulatory convention do not restrict their residual jurisdiction, one example is The US OPA which requires vessels anchoring at the US ports to have a double hull requirement, at the time the act was adopted, MARPOL did not contain a double-hull standard.

Additionally, some of the IMO's conventions contain provisions which confirm that its provisions do not affect the port State residual jurisdiction.<sup>237</sup> Further, the absence of any limitation on port State jurisdiction within the regulatory conventions indicates that its residual jurisdiction is unaffected and nothing can prevent port States from adopting stricter regulation than the level of 'generally accepted'.<sup>238</sup>

To conclude, the LOSC does not deal with port State residual jurisdiction, but focus more on the balance of opposing interests. Regulatory conventions do not represent a package deal such as the LOSC that balances opposing interests. By adherence to such regulatory convention flag States have committed themselves to a set of minimum standards while it constitutes a maximum for coastal States but not for port States.<sup>239</sup> Thereby, Arctic port States can decide whether to introduce stricter rules or not. This is also supported by the fact that these conventions are subject to further amendments. Even when States adherences to a package deal convention, they enjoy the right to opt out from any future amendments. Thereby, the competence to opt out could be regarded as a confirmation to the State's residual jurisdiction.<sup>240</sup>

### **6.3 Limitation on port States residual jurisdiction:**

The competence of port States to unilaterally adopt stricter standards is constrained by principles of international law such as 'non-discrimination, national treatment, good faith and abuse of rights'.<sup>241</sup> These principles sets out the accepted boundaries of port States prescriptive jurisdiction.<sup>242</sup>

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<sup>236</sup> Ibid, p.204.

<sup>237</sup> Molenaar, supra note 204, p.285.

<sup>238</sup> Ibid; See also Ringbom, supra note 84, p.222-223; Johnson, Lindy, Coastal State Regulation of International Shipping, Oceana Publications, 2004, p.43-44.

<sup>239</sup> Molenaar, supra note 227, p.203.

<sup>240</sup> Ibid, p.206.

<sup>241</sup> Ibid.

<sup>242</sup> Marten, supra note 6, p.14.

### **6.3.1 Non-discrimination and national treatment**

The principle of non-discrimination has been incorporated in both the LOSC and international trade law.<sup>243</sup> The principle restrains port States including those in the Arctic region from imposing rules and standards directed to a certain flag State.<sup>244</sup>

The principle of national treatment prevents Arctic port States from exercising unnecessary jurisdiction towards foreign vessels. And thus vessels flying the flags of Arctic port State have to comply also with the same regulation as foreign vessels.<sup>245</sup>

### **6.3.2 Good faith and abuse of rights**

The principles of good faith and abuse of rights are general principles of international law. The former is difficult to view as a limitation on port States jurisdiction in comparison to the latter.<sup>246</sup> Both principles are incorporated in the LOSC under article 300. Article 300 provides that States shall fulfil their obligations in good faith, and when exercising their rights it shall not constitute an abuse of right. The principle of good faith provides that States shall comply with their obligations and when applying the legal provisions they must not abuse the purpose and the intention behind it.<sup>247</sup>

The principle of abuse of rights is relevant in the context of port State jurisdiction where the interest of the State does not justify its action and leads to unreasonable exercise of jurisdiction that constitutes damage or prejudice towards another State.<sup>248</sup> In this context, Molenaar notes that “the notion of abuse of rights is best evaluated in light of the balancing of conflicting rights”.<sup>249</sup> The principle is also relevant when Arctic port States are exercising extraterritorial jurisdiction in accordance to article 218 of the LOSC with respect to violations which occurs before entering to port. Therefore, the exercise of such jurisdiction must be applied with caution in order not to cause an abuse of right.<sup>250</sup>

## **6.4 Regional port State residual jurisdiction**

When an Arctic port State decides to unilaterally adopt stricter standards, it does not necessarily guarantee better effectiveness. On the contrary, unless the stricter standards are

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<sup>243</sup> LOSC articles 25(3), 26(2), 42(2), 227 and 234.

<sup>244</sup> See LOSC article 227; see also Marten, *supra* note 6, p.14.

<sup>245</sup> Molenaar, *supra* note 227, p.208.

<sup>246</sup> Bevan Marten, *supra* note 6, p.15.

<sup>247</sup> Bevan Marten, *supra* note 6, p.14, see also VCLT, arts 26 and 31(1).

<sup>248</sup> Ringbom, *supra* note 84, Pp.226-227.

<sup>249</sup> Molenaar, *supra* note 227, p.210.

<sup>250</sup> *Ibid*, p.210; Bruke, W.T, The developing order of the oceans, Proceedings of the Law of the Sea Institute 18<sup>th</sup> annual conference, San Francisco, 1984, p.669.

adopted by a powerful economic state that has the power to enforce its will on foreign vessels, it could lead to economic implications and the creation of port of inconvenience. Therefore it's necessary to balance all the interest involved such as the economic and political factors, and the interest of the international community.<sup>251</sup> On the other hand regional approaches have proven to be more effective and help in creating a level of uniformity on shipping regulations. The question here is, whether Arctic port States residual jurisdiction could be exercised on regional bases.

Article 211(3) confirms such right and provides that port States can go into regional arrangements to establish “particular requirements” as port entry condition. Such requirement may exceed the level of “generally accepted” the only obligation is that they “shall give due publicity” and to inform the competent international organization. Moreover, many IMO conventions contains regional approaches such as SOLAS and MARPOL which depends to an extent on PSC MoU in verifying compliance with the provision embodied within. Furthermore, Arctic port States are also obligated by the principle of “no more favorable treatment”, thus even when vessels are flying flags of States which are not parties to the relevant conventions such as MARPOL or SOLAS, they are not exempt from inspection. Therefore, since these conventions apply to non-parties it should be regarded as an exercise of collective residual port State jurisdiction.<sup>252</sup>

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<sup>251</sup> Molenaar, *supra* note 227, p.207.

<sup>252</sup> *Ibid*, p.212.

## 7. Chapter VII – Conclusion and Final Remarks

In comparison to other regions of the world, the Arctic is experiencing an exaggerated climate change. Arctic shipping tempts to increase more in the near future. The remoteness of the Arctic region, the harsh yet sensitive environment and the lack of infrastructure poses great challenges on Arctic States. Further, it highlighted the emerging need of a comprehensive regulatory framework to ensure that adequate vessel safety standards and environmental protections are in place. The current international legal framework of the law of the sea governing the Arctic region, presented within the content of this thesis addresses some of these challenges, yet it lacks many aspects which are deemed necessary for the protection of marine environment. Even a mandatory Polar Code that places stricter standards on vessels structural standards and stricter discharge standards is insufficient. The code doesn't deal with many problems such as: the discharge of ballast water, it allows vessels to use and carry HFO in Arctic waters, and doesn't deal with black carbon emissions generated from vessels. Further, the Code is also silent on enforcement mechanisms.

Infrastructures are essential for the protection of the marine environment and maritime safety. With the exception of certain maritime areas of Norway and Russia in particular the Barents Sea, the Arctic region lacks important infrastructure such as: “ports, harbors, PRF, places of refuge and emergency response capabilities and waste management”. And thus, it highlighted the pressing need of Arctic States regional cooperation to face these challenges. In the context of waste management, adequate PRF are needed to meet the needs of ships, PRF are incentives for vessels to comply with the Polar Code and in preventing illegal discharges at sea. Further, States are bound by what they consent to and since Arctic States are parties to MARPOL, they are obliged to provide such facilities in ports.<sup>253</sup>

The effective implementation of Articles 211(3) and 218 of the LOSC are essential if Arctic States are to enhance and strengthen PSJ. Arctic port States shall make use of article 211(3), which has broader prescriptive and enforcement powers to solve some of the shortcomings of the Polar Code. Furthermore, the effective application of jurisdiction

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<sup>253</sup> MARPOL, Annex I, regulation 38; Annex II, regulation 18; Annex IV, regulation 12; Annex V, regulation 7; and Annex VI, regulation 17.

pursuant to article 218 could greatly benefit the implementation of the Polar Code and relevant IMO instruments once they gain the status of GAIRS.

The role of PSC is essential for ensuring compliance with the relevant IMO instruments, as substandard vessels continue to sail under flag of convenience, placing maritime safety and the marine environment into jeopardy. Arctic port States must cooperate on regional basis to carry out a PSC strategy to enhance the enforcement of these rules and standards. PSC tools of inspection and detention could greatly benefit in reducing the number of substandard vessels operating in Arctic waters and create uniformity of regulations between Arctic port States. The Arctic Council was, and is still active in the sphere of arctic shipping. The Council addresses many of the challenges facing Arctic States, and has been a forum of negotiating common matters between Arctic States, and thus it offers a platform for a regional cooperation in establishing an Arctic MoU on PSC.

Since adherence to regulatory convention do not affect Arctic port States residual jurisdiction as illustrated under chapter VI. Arctic port States shall make an extensive use of their residual jurisdiction to adopt stricter regional standards, as conditions for port entry and as conditions for port departure to face the shortcomings of the Polar Code. Arctic port States however, shall not unilaterally adopt stricter regulations unless they assess the expected benefits and the expected loses. Benefits such as ensuring maritime safety and the protection of the Arctic marine environment, and expected loses such as ports becoming less convenient and being avoided by vessels. Therefore, Regional approaches for exercising port States residual jurisdiction are not only more effective, but also a safer alternative to avoid the creations of ports of inconvenience.

## **BIBLIOGRAPHY**

### **Books**

- Andersson, Karin ... [et al.], *Shipping and the Environment: Improving Environmental Performance in Marine Transportation*, Springer, 2016.
- Birnie, Patricia; Boyle, Alan & Redgwell, Catherine; *International Law and the Environment*, Third Edition, Oxford University Press, 2009.
- Churchill, Robin R. and Lowe Alan V., *The Law of The Sea*, Manchester University Press, Manchester, 1999.
- Hornby, A.S, *Oxford Advanced Learner's Dictionary*, 7<sup>th</sup> Edition, Oxford University Press, 2005.
- Johnson, Lindy, *Coastal State Regulation of International Shipping*, Oceana Publications, 2004.
- MacEwen, William A. and Lewis, A. H., *Encyclopedia of Nautical Knowledge*, Cambridge, MD: Cornell Maritime Press, 1985.
- Marten, Bevan, *Port State Jurisdiction and the Regulation of International Merchant Shipping*, Springer Publishing, 2014.
- Molenaar, Erik J., *Coastal State Jurisdiction over Vessel-Source Pollution*, Kluwer Law International, 1998.
- Ringbom, Henrik, *The EU Maritime Safety Policy and international Law*, Martinus Nijhoff Publishers, 2008.
- Schachter, Oscar, *International Law in Theory and Practice*, M. Nijhoff Publishers, 1991.
- Tan, Alan Khee-Jin, *Vessel-Source Marine Pollution, The Law and Politics of International Regulation*, Cambridge: Cambridge University Press, 2006.

### **Chapters in Books**

- Churchill, Robin, *The 1982 United Nations Convention on the Law of the Sea in: The Oxford Handbook of the Law of the Sea*, Edited by: Donald R. Rothwell ... [et al.] Oxford University Press, 2014.
- Molenaar, Erik J., *Port and Coastal States in: The Oxford Handbook of the Law of the Sea*, Edited by: Donald R. Rothwell ... [et al.] Oxford University Press, 2014.
- Molenaar, Erik J., *Residual Jurisdiction under IMO Conventions in: Competing Norms in the Law of Marine Environmental Protection*, Edited by: Henrik Ringbom, *International Environmental Law & Policy Series*, Kluwer Law International, 1997.

- Rayfuse, Rosemary, The Role of Port States in: Routledge Handbook of Maritime Regulation and Enforcement, Edited by Robin Warner & Stuart Kaye, Taylor & Francis, 2016.

## Articles

- Bai, Jiayu, The IMO Polar Code: The Emerging Rules of Arctic Shipping Governance, The International Journal of Marine and Coastal Law 30, 2015.
- Bang, Ho-Sam, Recommendations for Policies on Port State Control and Port State Jurisdiction, Journal of Maritime Law & Commerce, Vol. 44, No. 1, January, 2013.
- Bodansky, Daniel, Protecting the Marine Environment from Vessel- Source Pollution: UNCLOS III and Beyond, Ecology Law Quarterly, Volume 18 | Issue 4, 1991.
- Condino, David A. Ship generated waste in the Arctic Marine Environment: Marine Pollution, MARPOL and the Polar code, US Coast Guard, 2016.  
[https://www.wilsoncenter.org/sites/default/files/marine\\_pollution\\_marpol\\_and\\_the\\_polar\\_code.pdf](https://www.wilsoncenter.org/sites/default/files/marine_pollution_marpol_and_the_polar_code.pdf)
- Derraik, J.G.B., The Pollution of the Marine Environment by Plastic Debris: a review, Marine Pollution Bulletin 44, 2002.
- Henriksen, Tore, Norway and Arctic Marine shipping, Fram Centre Report Series No. 2, 2015.
- Jensen, Øystein, The IMO Guidelines for Ships Operating in Arctic Ice-covered Waters, From Voluntary to Mandatory Tool for Navigation safety and Environmental Protection, FNI Report 2/2007.
- Jensen, Øystein, The International Code for Ships Operating in Polar Waters: Finalization, Adoption and Law of the Sea Implications, Arctic Review on Law and Politics, Vol. 7, No. 1, 2016.
- Keselj, Tatjana, Port State Jurisdiction in Respect of Pollution from Ships: The 1982 United Nations Convention on the Law of the Sea and the Memoranda of Understanding, Ocean Development & International Law, 1999.
- Kiehne G., Investigation, Detention and Release of Ships under the Paris Memorandum of Understanding on Port State Control: A View from Practice, the International Journal of Marine and Coastal Law, 1996.
- Lowe, Alan V., The Right of Entry into Maritime Ports in International Law', San Diego Law Review (14) 597, 622, 1977.

- McDorman, Ted, Port State Enforcement: A comment on Article 218 of the 1982 Law of the Sea Convention, *Journal of Maritime Law and Commerce* vol.28(2), 1997.
- McDorman, Ted L., Regional Port State Control Agreements: Some Issues of International Law, *Ocean and Coastal Law Journal*, 2000.
- Molenaar, Erik J., Arctic Fisheries Conservation and Management: Initial Steps of Reform of the International Legal Framework, *Yearbook of Polar Law*, March 2009.
- Molenaar, Erik J., Arctic Marine Shipping: Overview of the International Legal Framework, Gaps, and Options, *Journal of Transnational Law & Policy*, 18(2), 2009.
- Molenaar, Erik J., Current and Prospective Roles of the Arctic Council System within the Context of the Law of the Sea, *The International Journal of Marine and Coastal Law* 27, 2012.
- Molenaar, Erik J., Port State Jurisdiction: Toward Comprehensive, Mandatory and Global Coverage, *Ocean development & International Law*, Taylor & Francis, 2007.
- Molenaar, Erik J., Options for Regional Regulation of Merchant Shipping Outside IMO, with Particular Reference to the Arctic Region, *Ocean Development & International Law* 45:3, 2014.
- Molenaar, Erik J., Residual Jurisdiction under IMO Conventions, *Competing Norms in the Law of Marine Environmental Protection*, International Environmental Law & Policy Series, Kluwer Law International, 1997.
- Obbard, R.W., ... [et al.] Global warming releases microplastic legacy frozen in Arctic Sea ice, *Earth's Future* 2, 315–320, 2014. doi:10.1002/2014EF000240
- Rajadurai, A., Regulation of Shipping: The Vital Role of Port State Control, *Maritime Law Association of Australia and New Zealand Journal* 83, 2004.
- Ryngaert, Cedric and Ringbom, Henrik Introduction: Port State Jurisdiction: Challenges and Potential, *The International Journal of Marine and Coastal Law* 31 (2016).
- Winther, M. ... [et al.], "Emission inventories for ships in the Arctic based on satellite-sampled AIS data", 91:1, 2014.
- Özçayır, Z. Oya, The Impact of Caspian Oil and Gas Development on Turkey and Challenges Facing the Turkish Straits, (paper presented at Istanbul, 9 November 2001). Available at: [http://denizhukuku.bilgi.edu.tr/doc/oya\\_ozcayir\\_article.doc](http://denizhukuku.bilgi.edu.tr/doc/oya_ozcayir_article.doc)



## **Conventions & Declarations**

### **Conventions**

- Convention on the International Maritime Organization, Geneva 6 March 1948.
- The International Code for Ships Operating in Polar Waters (Polar Code) 2014.
- The International Convention for the Prevention of Pollution from Ships (MARPOL) 1973, as modified by the Protocol of 1978.
- The International Convention for the Safety of Life at Sea (SOLAS) 1974.
- The International Convention on Maritime Search and Rescue (1979).
- The International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (1978).
- The International Regulations for Preventing Collisions at Sea (1972).
- The Paris Memorandum of Understanding on Port State Control (1982).
- The Statute of the International Court of Justice (1945).
- The United Nations Law of the Sea Convention (LOSC), 10 December 1982.
- The Vienna Convention on the Law of Treaties (VCLT), 23 May 1969.

### **Declarations**

- Arctic Council, The Salekhard Declaration: the 5<sup>th</sup> Ministerial Meeting of the Arctic Council 7-8, 2006, available at <https://oaarchive.arctic-council.org/handle/11374/90>
- Arctic Council, The Tromsø Declaration: the 6<sup>th</sup> Ministerial Meeting of the Arctic Council 4, 2009, available at <https://oaarchive.arctic-council.org/handle/11374/91>
- The Ilulissat Declaration, Arctic Ocean Conference, May 28, 2008.
- The Ottawa Declaration on the Establishment of the Arctic Council, Sept. 19, 1996.

### **Resolutions, Acts and Documents**

- ATCM XXVIII, Decision VIII (2005); MEPC Res.189(60), Amendments to MARPOL Annex I, Reg.43, adopted 26 March 2010.
- IMO, Polar Code, (Safety related provisions), IMO Resolution MSC. 385(94).
- IMO, Polar Code, (Environment related provisions), IMO Resolution MEPC. 264(68).
- The US 1990 Oil Pollution Act (OPA).
- United States, Draft Articles on the Protection of the Marine Environment and the Prevention of Marine Pollution, UN Doc A/AC.138/SC.III/L.40 (July 13,1973).

## Case law

- (Nicaragua v. United States), 1986, I.C.J Rep. 12,111 (June 27).

## Reports

- Arctic Climate Impact Assessment (ACIA) report on Impacts of a warming Arctic, Cambridge university press, 2007.
- Arctic Marine Shipping Assessment 2009 Report, Arctic Council (PAME), available at <http://www.pame.is/index.php/projects/arctic-marine-shipping/amsa/amsa-2009-report>.
- The Intergovernmental Panel on Climate Changes (IPCC) Fifth Assessment Synthesis Report, available at <http://ipcc.ch/report/ar5/syr/>.
- United Nations Conference on Trade and Development, the *Review of Maritime Transport 2015*, UNCTAD/RMT/2015.
- Det Norske Veritas, Heavy Fuel in the Arctic (Phase 1) available at <https://oaarchive.arctic-council.org/handle/11374/1059>.

## Webpages

- Environmental Compliance and Enforcement Committee available at: <http://www.interpol.int/Crime-areas/Environmental-crime/Environmental-Compliance-and-Enforcement-Committee/Pollution-Crime-Working-Group>.
- IMO Membership: <http://www.imo.org/en/About/Membership/Pages/Default.aspx>.
- LOSC ratifications list available at: [http://www.un.org/depts/los/reference\\_files/chronological\\_lists\\_of\\_ratifications.html](http://www.un.org/depts/los/reference_files/chronological_lists_of_ratifications.html).
- National Oceanic and Atmospheric Administration (NOAA), office of response and restoration, A Final Farewell to Oil Tankers with Single Hulls. Available at: <http://response.restoration.noaa.gov/about/media/final-farewell-oil-tankers-single-hulls.html>.