Regulating the shipbreaking industry:
A study on European efforts to ensure safe and environmentally sound ship recycling

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Summary

Shipbreaking, also referred to as ship recycling, is a dirty and dangerous industry. Economic motives drive shipowners to export their unwanted vessels to Asia, where they are dismantled under conditions extremely hazardous to human health and the environment. The complexity of the maritime system makes it difficult to implement the legal instruments available to prevent the substandard practices, and many of the stakeholders involved take advantage of this matter in order to avoid their responsibilities.

The European Regulation on ship recycling, based on the Hong Kong Convention that has not yet entered into force, introduces a number of new measures aimed at ensuring safe management of hazardous materials. This paper examines to what extent the regulation can ensure the safe and environmentally sound recycling of ships, based on issues such as ship registration, jurisdiction, applicability and enforcement.
Sammanfattning

Skrotning av skepp, även kallat skeppsåtervinning, är en smutsig och farlig industri. Ekonomiska motiv driver skepsägare att exportera sina icke önskvärda skepp till Asien, där de plockas isär under extremt hälso- och miljöfarliga förutsättningar. Komplexiteten i det sjörättsliga systemet försvårar implementeringen av de juridiska instrument som finns tillgängliga för att förhindra de undermåliga metoderna, och många av de berörda parterna utnyttjar detta faktum för att undkomma ansvar.

Den europeiska förordningen om återvinning av fartyg, som är baserad på den ännu inte ikraftträdda Hong Kong-konventionen, introducerar ett antal nya åtgärder med syfte att säkerställa miljömässig hantering av farliga material. Denna uppsats undersöker i vilken utsträckning förordningen kan säkerställa säker och miljömässigt sund återvinning av fartyg, med utgångspunkt i frågor såsom skeppsregistrering, jurisdiktion, tillämpbarhet och genomdrivande.
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Nu börjar det på riktigt.

The sky is not the limit, it’s my playground.
Abbreviations

COP  Conference of Parties
EFTA  European Free Trade Association
ESM  Environmentally sound management
EU  European Union
FoC  Flag of Convenience
GT  Gross tonnage
HKC  Hong Kong Convention
HSE  Health, Safety and Environment
ICS  International Chamber of Shipping
III  Sub-Committee on Implementation of IMO Instruments
III Code  Code for the Implementation of IMO Instruments
IHM  Inventory of Hazardous Materials
IMO  International Maritime Organization
ILO  International Labour Organisation
ITLOS  International Tribunal for the Law of the Sea
MEPC  The Marine Environment Protection Committee
MSC  Maritime Safety Committee
NGO  Non-Governmental Organisation
OECD  Organisation for Economic Co-operation and Development
Paris MoU  Paris Memorandum of Understanding
PIC  Prior Informed Consent
PSC  Port State Control
SRR  European Ship Recycling Regulation
UN  United Nations
WSR  Waste Shipment Regulation
1 Introduction

1.1 Background

The maritime industry is truly a global business. Shipping accounts for as much as 90% of the world trade and is due to its capacity and efficiency a fundamental part of the global economy.\(^1\) The freight rates of merchant vessels represent 5% of world trade alone, even though it only is a small part of the total seaborne trade value. However, the maritime industry contributes with more than the monetary value. Seaborne trade is indispensable for intercontinental transportation of cargo, including manufactured goods, raw material and food, and without it the world would look utterly different.\(^2\)

The world fleet consists of over 50,000 merchant vessels registered in over 150 nations. It includes a large variety of vessels with different features designed for different types of purposes.\(^3\) As technology is developing, and the market is changing, so is the fleet. The global freight demand is predicted to triple by 2050, with three-quarters of all freight being carried by vessels.\(^4\) In order to meet the demand in a competitive order, as well as to comply with stricter CO2 emission targets, modern vessels have to be more fuel and energy efficient in order to stay competitive.\(^5\) Older vessels, less efficient vessels or simply vessels that for market reasons no longer are profitable will consequently be phased out and eventually dismantled.

During the last 15 years, an average of around 1000 large vessels have been dismantled worldwide annually. The number is strongly affected by fluctuations in the global economy but also by the demand for and prices of

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ferrous scrap, as it is sold off and reused in other industries. Even vessels that have not yet reached the end of their operational life can be dismantled if the timing is right. By scrapping a vessel of its steel and other valuable materials, the owner can make a final profit from what can be seen as either an asset or an expensive liability, depending on the current economic situation. The price is affected by local demand for steel, labour costs and other costs related to the demolition. In effect, this means that shipbreaking yards with low operating costs are able to offer high steel prices.

The shipbreaking industry was historically located in the United States (hereafter “USA”) and Europe, but higher costs related to stricter labour and environmental laws resulted in a relocation of nearly the entire industry to Asian shipbreaking sites with substandard practices. In 2017, approximately 90% of the global volume was recycled in Asia, mainly in India, Bangladesh, Pakistan and Peoples’ Republic of China (hereafter “China”). In these states, with the exception of China, the vessels are grounded on intertidal mudflats during high tides. The workers then access the vessels during low tides and dismantle them manually with torches, without safety equipment. This practice, called beaching, is extremely dangerous for the people involved and is causing heavy environmental pollution. Due to the hazards, export of end-of-life vessels to sub-standard shipbreaking yards is prohibited under a number of international conventions. However, ship owners continue to sell their vessels to such yards by circumventing the applicable legislation. As a consequence, the shipbreaking industry continues to negatively affect the environment, and by that, human health.

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6 Gourdon, K., Ship recycling: An overview, 2019, pp. 11-12.
8 Note that there is a difference between global volume and the number of vessels.
9 Gourdon, K., Ship recycling: An overview, 2019, p. 11.
1.2  Legal overview

For many years, attempts have been made to regulate the recycling of end-of-life vessels and stop substandard practices such as beaching. International agreements have resulted in a number of treaties and other policies that could be applied to the industry. The most prominent one being the 1989 Basel Convention\(^\text{11}\). However, enforcement issues, lack of compliance and interpretation ambiguities impede effectiveness of the provisions.\(^\text{12}\) In combination with the fact that none of the policies were aimed specifically at ship recycling, this eventually brought about the 2009 Hong Kong Convention\(^\text{13}\) for the safe and environmentally sound recycling of ships (HKC).\(^\text{14}\)

The HKC was pursued by a joint working group collaboration between the International Maritime Organization\(^\text{15}\) (IMO), the International Labour Organization (ILO) and Conference of Parties (COP) to the Basel Convention.\(^\text{16}\) It can be seen as a control instrument that consolidates previous attempts of regulation.\(^\text{17}\) The Convention has not yet entered into force but is the groundwork on which the new European Ship Recycling Regulation\(^\text{18}\) 1257/2013 (SRR) is built upon.\(^\text{19}\)

The SRR is a European initiative that aims to facilitate the ratification of the HKC.\(^\text{20}\) Hence, the regulation implements HKC provisions. Additional and

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\(^{13}\) Hong Kong International Convention for the safe and environmentally sound recycling of ships (adopted 19 May 2009) SR/CONF/46.


\(^{15}\) See a description of IMO and its work in Section 3.1.


\(^{20}\) SRR, Article 1; SRR, Preamble Note (5).
more stringent requirements are also included, as authorised by the
convention in article 1(2).\textsuperscript{21} The regulation is currently applied in parts and
will be fully applied by 31 December 2020.\textsuperscript{22}

1.3 Purpose and Research Questions

The aim of this thesis is to critically examine to what extent the available
legislation can ensure safe and environmentally sound ship recycling. This
will be done from a European perspective, with focus on the new European
Ship Recycling Regulation. However, in order to do a proper assessment of
the regulation, it is vital to understand the mechanisms behind the policies
that paved its way. Thus, both other international legislation and non-binding
guidelines will be important for the purpose of the thesis.

The shipbreaking industry is based on a complex structure of shipowners,
cash buyers and shipbreaking yards. The international system offers
flexibility for the involved stakeholders but can also be misused with the
intent of avoiding obligations. As a result, the effectiveness of the policies
can to some extent depend on factors that lie outside of their scope.
Effectiveness is in this context the possibility to successfully enforce a legal
instrument.\textsuperscript{23}

In light of the complexity of the subject, I have prepared three research
questions to fulfil the purpose of the thesis:

1. How does ship registration affect the applicability of the available
legal instruments?
2. Is the scope of the SRR sufficient to meet its intended purpose?
3. What possible impacts can the measures have on standard practice in
the shipbreaking industry?

\textsuperscript{21} European Commission, “Ship Recycling”,
\textsuperscript{22} SRR, Article 32.
\textsuperscript{23} See Chapter 3 for in-depth information about implementation and enforcement.
1.4 Method and Material

This thesis will analyse the current legal situation in the EU with regard to European as well as international legislation. The research will be conducted by using a critical legal dogmatic method. This means that the analysis will be built upon a critical approach to sources such as legislation, case studies and doctrine.

In view of the fact that the maritime industry is global by nature, and that shipbreaking thus is an international issue that extends over several jurisdictions, legally binding legislations that give clear directions are limited in numbers. For this reason, a number of non-binding guidelines will be mentioned in order to provide enough information for the analysis. This is a conscious decision, as the legal status of these policies illustrates the difficulties that arise when attempting to regulate the shipbreaking industry.

To supply the reader with examples of the various ambiguities and points of discussion that might arise concerning end-of-life vessels, I have chosen to include three case studies. These real-life examples highlight a number, although naturally not all, of the various concerns that might need to be addressed. Their differences and similarities together create a fair overview and foundation for discussion.

Much has been written about the issues surrounding the shipbreaking industry. Many books, articles and academic papers cover the subject, which creates a good foundation for the research. Hence, doctrine will be the foundation upon which the thesis will be built.

1.5 Definitions

When talking about the maritime industry, and particularly about ship recycling, the word ‘ship’ is in focus. However, the word ‘vessel’ is also widely used as an alternative to ‘ship’. The two words are used
interchangeably in UNCLOS\textsuperscript{24} and can generally be considered legally identical as the concrete meanings of the words varies with context, scopes and purposes of legal instruments. The dictionary definition of a ‘ship’ is quite narrow and can limit the scope when talking about demolition and recycling. I have therefore chosen to primarily use the word ‘vessel’ when writing about a floating entity in this text, since its dictionary definition offers a broader scope.\textsuperscript{25}

Moreover, for the purpose of this thesis I will use the terms ‘ship dismantling’, ‘ship breaking’ and ‘ship recycling’ somewhat interchangeably when writing about the actual practice. As confusing as it might seem, there is value in using different terms when writing about this subject. I cannot with a clear conscience refer to the substandard practices seen in Asia as ‘ship recycling’ and will therefore use the terms ‘ship dismantling’ and ‘ship breaking’ when discussing the scrapping of vessels. This is based on the usage by the Basel Convention, International Labour Organization (ILO), Ministries of Environment and environmental NGOs. Since recycling of vessels is the aim and subject of this thesis, as well as on an international level, the term ‘ship recycling’ will be used when looking forward and when legislation and environmental objectives are being discussed. This is in line with the usage by the International Maritime Organization (IMO) and Ministries of Transport.\textsuperscript{26}

\section*{1.6 Delimitations}

This thesis will primarily address international legislation, including EU law. Domestic law lies outside of the scope and will not be discussed in detail. Further, in order to keep the text coherent and within a reasonable word count, only a few purposefully chosen policies will be discussed.

Moreover, the research will focus on the applicability and subsequent effectiveness of the chosen legislations. Enforcement is a vital part of effectiveness, but since enforcement is conditional to applicability it will only be discussed if and when relevant and not into depth. For the same reason, individual provisions of the chosen legislations will not be studied unless it is needed to fulfil the purpose of the thesis. The details of the provisions, though interesting, are not relevant if the legislation itself is non-applicable.

Given that this thesis focuses on legislation that aims at prohibiting substandard dismantling of vessels rather than dealing with its after effects, the environmental impacts and legal aftermaths on the beaching locations will not be emphasised. The same applies to the humanitarian aspects of the shipbreaking industry. Although important, it lies outside of the scope of this study.

Further, when discussing shipbreaking this thesis will mostly focus on Asia. There are shipbreaking yards located all over the globe, and there is no guarantee that shipbreaking yards in other parts of the world operate in a greener and safer manner. The focus on Asia derives from the fact that they are the largest receiver of end-of-life vessels based on gross tonnage (GT).27

Lastly, the chosen case studies cannot be used to draw definite conclusions on the current legal position on shipbreaking as a whole. However, they provide valuable insights into the practical application, or rather avoidance, of the legal instruments and are useful as an illustrative element in the analysis. Case studies can highlight both weaknesses and strengths of different legislations and are an important tool when assessing their effectiveness. By acknowledging the legal uncertainty and critically study

the cases, I hope to reduce the risk of anecdotal evidence.

1.7 Outline

In Chapter 2, I will be examining the key concepts of ship registration and national sovereignty in order to build a solid foundation for the rest of the thesis to be built upon. This work will continue in Chapter 3, by going through implementation, enforcement and the role of IMO. Based on this, Chapter 4 will identify and present relevant international legislation and pinpoint the areas that apply to the purpose of this thesis. Since HKC and SRR share many of the same provisions, I will not spend too many words on the obligations found in HKC. Instead, these will be analysed in SRR. In Chapter 5, case studies will be examined in order to shine light on how easily ship owners historically have been able to circumvent provisions meant to prohibit substandard shipbreaking. These sections all set the necessary background to follow Chapter 6, where the potential of the SRR as a preventative instrument will be analysed. Lastly, I summarise my conclusions in Chapter 7.
2 Ship registration and flag state jurisdiction

Regulating the shipbreaking industry is a complex task. The available\textsuperscript{28} legislation can be described as a web consisting of international law, non-binding guidelines, domestic statutory law and standardised contracts.\textsuperscript{29} This peculiar structure is in place due to the maritime industry being global and taking place on the ocean. It is thus affected by different jurisdictions and subsequent legislations from around the world, sometimes with several states being able to claim jurisdiction over the same matter.\textsuperscript{30} Which state to assume jurisdiction in a specific case will depend on factors such as physical location and flag registration of a vessel.\textsuperscript{31} The applicable legislation is in turn conditional to involved states’ obligations and compliance towards the international community.\textsuperscript{32}

2.1 Basic concepts of jurisdiction

Ship registration is regulated in the United Nations Convention on the Law of the Sea (UNCLOS)\textsuperscript{33}. Article 91 specifies that a vessel registered in a state and thus flying its flag is considered to have the nationality of that state.\textsuperscript{34} This means that a registered vessel becomes part of the state’s fleet and is thus subject to the rules of that state. With this comes both certain rights and responsibilities, as the flag state jurisdiction and control apply

\textsuperscript{28} I am using the word ”available” in order to highlight the existence of legislation that could regulate the industry if and when applicable. Applicability, however, is not a certainty in the shipbreaking industry.
\textsuperscript{29} Chuah, J. (red.), Research handbook on maritime law and regulation, 2019, p. 116.
\textsuperscript{31} Yang, H., Jurisdiction of the Coastal State over Foreign Merchant Ships in Internal Waters and the Territorial Sea, 2006, pp. 31-33.
\textsuperscript{32} Galley, M., Shipbreaking: Hazards and Liabilities, 2014, p. 48.
\textsuperscript{34} UNCLOS, Article 91(1).
due to state sovereignty over the vessel.\textsuperscript{35} This includes labor laws, environmental regulations and adherence to international treaties that the state has ratified.\textsuperscript{36}

Flag state jurisdiction and control always apply to the vessel in some extent. It is at its maximum when the vessel is sailing the high seas, where no conflicting territorial jurisdiction is in place and it therefore is exclusive.\textsuperscript{37} This originates from the principle that the high seas are open to all nations, and that no state may subject any part of the high seas to its sovereignty.\textsuperscript{38} The principle is codified in both article 87 in UNCLOS and article 2 in the 1958 High Seas Convention\textsuperscript{39}. Further, article 89 in UNCLOS states that such claims of sovereignty are invalid. As a result, flag state jurisdiction fills the jurisdictional vacuum for vessels sailing the high seas.\textsuperscript{40} However, when in the territory of another state, flag state jurisdiction is seen as exterritorial and is thus limited in deference to territorial jurisdiction.\textsuperscript{41} Based on the different maritime zones and their properties, as defined in UNCLOS\textsuperscript{42}, the coastal state jurisdiction increases the closer the vessel gets to shore.\textsuperscript{43}

An ocean-going vessel is due to its transient nature subject to a number of jurisdictions during its operational life, i.e. its flag state’s jurisdiction and international law on the high seas as well as coastal state jurisdiction in

\textsuperscript{36} UNCLOS, Article 92; UNCLOS, Article 94(2)(b).
\textsuperscript{37} Yang, H.,\textit{ Jurisdiction of the Coastal State over Foreign Merchant Ships in Internal Waters and the Territorial Sea}, 2006, p. 27.
\textsuperscript{38} Official Records of the General Assembly, Eleventh Session, Supplement No. 9, UN Doc A/3159, Chapter III, Part II, Article 27 commentary, para 1.
\textsuperscript{41} Yang, H.,\textit{ Jurisdiction of the Coastal State over Foreign Merchant Ships in Internal Waters and the Territorial Sea}, 2006, p. 34.
\textsuperscript{42} UNCLOS defines and regulates the different maritime zones: Internal waters, Territorial sea, the Contiguous zone, the Exclusive economic zone and the Continental Shelf.
coastal waters. The vessel itself does not hold legal rights and obligations, but as a unit consisting of ship, crew and cargo it is an entity linked to its flag state. This is clarified in the International Tribunal for the Law of the Sea (ITLOS) judgement of the Saiga (No.2) case, where nationality of the crew and applicable jurisdiction became subject of discussion regarding the arrest and release of the vessel Saiga. The Tribunal stated that the UNCLOS provisions regarding the duties of a flag state gives sufficient guidance for execution, by not making a difference between nationals and non-nationals of the flag state. This is evidenced by the right to compensation not being placed in relation to nationality of persons suffering loss or damage, but to the nationality of the vessel. Likewise, when deciding on prompt release of an arrested vessel, the nationality of persons involved with the operation of the vessel is not of significance. The Saiga (No.2) case is thus a prime example of how neither a flag state nor an arresting state can bring any singular nationality into play. The vessel remains as a whole unit, placed under flag state jurisdiction and control.

2.2 Responsibilities of the flag state

The flag state is obliged to fulfil a number of prerequisites. These include but are not limited to: maintaining a ship registry, exercising its jurisdiction, and take necessary measures to ensure safety at sea. These duties are listed in article 94 in UNCLOS, as a number of bullet points that covers a broad spectrum varying from ensuring navigational standards to the prevention of collisions. Naturally, the primary responsibility to follow regulations fall on the ship owners. However, it is the role of the flag state to make sure that

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44 Yang, H., Jurisdiction of the Coastal State over Foreign Merchant Ships in Internal Waters and the Territorial Sea, 2006, pp. 31-33.
46 The M/V 'SAIGA' (No 2), Saint Vincent and the Grenadines v Guinea, Merits, Judgment, ITLOS Case No 2, ICGJ 336, 1st July 1999, ITLOS.
47 ITLOS Saiga (No.2) Case, paragraph 105.
48 Ibid.
49 UNCLOS, Article 94.
these are upheld.\textsuperscript{50} Flag states shall, according to article 217 in UNCLOS regarding enforcement, ensure compliance by vessels flying their flag. The provision imposes a number of obligations on the flag states, aiming at guaranteeing the upholding of international standards by effective enforcement.\textsuperscript{51} This means that flag states shall take appropriate measures to enforce applicable provisions, verify mandatory certificates, investigate violations and enable proceedings in accordance to their law.\textsuperscript{52} Exactly what ‘international standards’ necessitates is unclear. The term is often used interchangeably with ‘generally accepted international rules and standards’, but there is no clear definition at hand. However, a common interpretation among scholars is that ‘international standards’ simply are rules and standards with a high level of state acceptance.\textsuperscript{53}

In light of the mentioned obligations, a flag state can be seen as having dual responsibilities. It acts as both an administrative and an operative party. The administrative components lie in the ship registry and its necessary documentation, while the operative parts involve control, responsibility and accountability for safety at sea.\textsuperscript{54} In practice however, a flag state may have little to no contact with its registered vessels, and thus it is important to notice that the operative aspect mostly is a formal responsibility. The actual practical measures take place in a complex system consisting of various authorities, company structures and classification societies. As a result, it is challenging to ensure compliance from any party involved in the maritime industry.\textsuperscript{55} The complexity of the system provides ample ground for avoiding set standards, both for ship owners and flag states. Parties actively looking to avoid their

\textsuperscript{50} Warner, R, & Stuart, K. (red.), Routledge handbook of maritime regulation and enforcement, 2016, p. 43.
\textsuperscript{51} Yang, H., Jurisdiction of the Coastal State over Foreign Merchant Ships in Internal Waters and the Territorial Sea, 2006, p. 28.
\textsuperscript{52} UNCLOS, article 217.
obligations may find numerous possible ambiguities or loopholes with which to justify their actions.

Moreover, different states have different outlooks on how to conform to their responsibilities, and some states may even lack capacity to fully enforce their jurisdiction over their fleet. These circumstances affect the possibilities to perform in accordance to the stated obligations. Even with the best of will and intentions, lack of means and capacity may cripple a proper implementation. Since failure to meet the objectives, whether purposely or not, can result in accidents and environmental pollution, this is an issue. The bigger the stakeholder, the bigger are the consequences of their actions and/or inactions. As an example, in popular perception, corporations pose a large threat to the environment. However, a company can only own so many vessels, while a state may flag a potentially infinite number. If a state with a large fleet underperforms, the consequences can be dire.

2.3 Flags of convenience or open registries

Historically, the link between state and vessel was clear in the sense that owners sailed their vessels under the flag of their origin. In our globalised economy, this has changed. Nowadays, vessel registration is not necessarily related to the nationality of the owner. On the contrary, it is a well-established practice to register vessels in other states than those of their owners. In 2013, it was reported by the United Nations Conference on Trade and Development that a record high 73% of the world’s GT was flagged in such ways. Reasons for this can be convenience, economic motives or naval protection, to mention a few. To avoid misuse, UNCLOS states that there must exist a ‘genuine link’ between the state and the ship. This requirement was added in the 1950’s as an attempt to halt spurious changes

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59 UNCLOS, Article 91(1).
of flags. However, it has brought about more legal discussions than actual change. The concept ‘genuine link’ is poorly defined, and there are no sanctions to its absence. The convention does not offer any further guidance, and it does not seem to have had any apparent effect on reducing the ‘migration’ of ship registration.

The term ‘Flag of Convenience’ (FoC) was coined in the 1950’s to describe the practice where states grant nationality to vessels without the genuine link present. These FoC states often function as commercial businesses rather than governments, attempting to court as many registrations as possible as a means of revenue. In order to do this, they might offer slacker legislation, lower taxes and even owner anonymity. As flag state jurisdiction applies to the vessel, choosing a flag is essentially an act of choosing which legislation will apply. By choosing to register vessels in FoC states, ship owners can pick and choose legislation that suits their purposes or needs, and ultimately minimize costs and increase profit. With modern technology, reregistering and reflagging can be a simple procedure that can be undertaken in as little as 24 hours, a selling argument some states use in order to advertise their flag.

The use of convenience flags has long been criticised, mostly based on safety, labour and economical aspects. Much has been written about the questionable practices or non-compliance to international standards that are often a hallmark of FoC states, and the opposition against them is strong. It is well-known that vessels flying convenience flags have been involved in

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64 See previous discussion in Section 2.1.
many severe maritime disasters, and that these flags also display higher rates of human losses than traditional registries. Studies by IMO has shown that the casualty rates differ immensely between flag states, with the worst performing flags having casualty rates a 100 times higher than the best. Moreover, when looking specifically at the shipbreaking industry, conveniently flagged vessels are a common sight at shipbreaking yards with substandard practices. Approximately 40% of vessels being scrapped on Asian beaches fly flags of underperforming FoC states.

However, not all FoC states are underperforming. There are other reasons for registering conveniently than avoiding obligations or reducing costs. States that have implemented international standards should not be criticised solely for having a registry open to foreign ship owners. For this reason, the more neutral term ‘open registries’ have been established. It is a more accurate term since all states that allow ship owners to register vessels regardless of nationality by definition are open. Moreover, using different terms helps in making a very important distinction between flag states that conform to international standards, and flag states that do not. The negative connotations that follow the term ‘flags of convenience’ should be saved for the worst performing states, or states that actively avoid their obligations towards the international community.

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68 Ibid.
70 Opinion of the European Economic and Social Committee (EESC) on ‘Shipbreaking and the recycling society’ (Note 171) 3.2.
3 Implementation, enforcement and IMO

Regardless of the legislative area, lack of implementation and enforcement issues are always to some extent prevalent on an international level. In the maritime industry, as shown in the previous chapter, these concerns are constantly in question. Since ship owners can choose to register their vessels in any available open registry, there is strong competition between states to collect the registrations. Consequently, there are economic incentives to circumvent international standards in order to attract ship owners.\(^{72}\) As state sovereignty comes into play, it is challenging to put an end to such practices without international, joint efforts.

3.1 The role of IMO

The International Maritime Organization (IMO) is a specialized agency of the United Nations (UN) that is responsible for creating and maintaining a global regulatory framework for the maritime industry. With regard to safety, security and environmental performance, the role of IMO is to create an effective regulatory framework that can be implemented with a universal and uniform application.\(^{73}\)

IMO follows the structural pattern of a UN specialized agency, with a main Assembly, a Council, five main committees and a number of supportive sub-committees.\(^{74}\) The Assembly consists of the organization’s 174 member states\(^{75}\), and is as the highest governing body responsible for deciding on the work programme and budget. The Council is the Assembly elected executive organ, responsible for supervising the work of the organization as

a whole and performing the functions of the Assembly between sessions. The functions of the five Committees are to consider any matter within the organization’s scope and provide reports and proposals of conventions and other relevant instruments. These are submitted to the Council, which in turn forwards them with commentary and recommendations to the Assembly. The main work of the IMO is thus managed in the Committees. The Marine Environment Protection Committee (MEPC) and the Marine Safety Committee (MSC), two committees with much influence on shipbreaking policy making, are in turn supported by seven specialized Sub-Committees.

IMO is the main governing body when it comes to maritime regulation since it has mandates to create and maintain the regulatory framework. As a global forum, IMO has the competence to discuss and negotiate on actions to monitor and control the industry. The work has resulted in numerous measures to ensure implementation of international standards, ranging from non-binding guidelines to conventions.

### 3.2 Implementation

With regard to the safety issues and subsequent environmental hazards the maritime industry brings about, as proven by a number of serious accidents, IMO has consistently and regularly for many years taken measures to improve implementation of IMO Instruments. Among these measures was, by the recommendation of the MSC, the establishment of the sub-committee on Flag State Implementation in 1992 to help improve flag

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78 Ibid.
81 See for example the accidents with vessels ‘Exxon Valdez’, ‘Erika’ & ‘Prestige’.
state performance. The sub-committee, now renamed Sub-Committee on Implementation of IMO Instruments (III), is placed under MSC and MEPC. Its function is to identify and address issues surrounding implementation, and to seek measures to improve both flag state and port state performance. In order to harmonise implementation, the sub-committee produced a Code for the Implementation of IMO Instruments (III Code) which was adopted in 2005. Moreover, several non-binding guidelines have been established to help flag states improve their performances, inter alia Resolution A.847(20) on Guidelines to assist Flag states in the implementation of IMO instruments and Resolution A.914(22) on Measures to further strengthen flag state implementation. The aim with the guidelines is to provide guidance to flag states in order to improve compliance and implementation of international standards.

As a means to encourage implementation by enabling states to assess their own performance, Resolution A.912(22) on Self-Assessment of Flag State Performance was adopted in 2001. It was the start of what later came to be the IMO Member Audit Scheme. Starting off as a voluntary operation, developed in conjunction with and based on the III Code, the IMO Member Audit Scheme became mandatory in 2016. The audit scheme analyses how mandatory IMO instruments have been incorporated in domestic law in relation to flag, port and coastal state obligations regarding marine safety. It

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85 Adopted 27 November 1997.
assists states in identifying implementation issues and encourages capacity-building in order to further improve their performance.\textsuperscript{90}

Besides its intended purpose, the act of assisting states with implementation of IMO instruments also indirectly benefits states’ work on fulfilling their obligations under other conventions, such as UNCLOS. IMO Guidelines and the efforts of the III sub-committee thus have a vital impact on the maritime industry as a whole and are not limited to merely assisting implementation of IMO instruments.\textsuperscript{91}

### 3.3 Port State Control

As previously noted, flag states may have little to no contact with their registered vessels, which naturally makes it difficult to control their fleets and enforce legislation. As a consequence of this inability to meet their international obligations, the operation of assessing whether international standards are being met or not has to be performed by other parties. Since these assessments are done by physical inspection of vessels and their documentation, port states are the best suited to take on the task due to port state jurisdiction. The territorial jurisdiction includes both enforcement and prescriptive jurisdiction, which gives port states mandates to enforce safety standards in compliance with national law.\textsuperscript{92}

Port states play a vital part in enforcing international standards. The primary responsibility to inspect vessels and ensure compliance will always rest with the flag state, but port state control (PSC) is the apparatus with the actual means to perform it. As the ability and/or will of flag states to uphold international standards decreases, the significance of PSC in turn increases. It is important to acknowledge this correlation, as it is the very corner stone

\textsuperscript{91} Beckman, Robert, Zhen Sun. The Relationship between UNCLOS and IMO Instruments, 2017, p. 228.
\textsuperscript{92} Musi, Massimiliano (red.), Port, maritime and transport law between legacies of the past and modernization, 2018, pp. 126-127.
upon which the control system is built. PSC was initially considered to be the last option, a safety net when flag states underperformed, but it has developed into playing an essential role in maritime regulation and enforcement.

PSC has different methods to accomplish its purpose of ensuring safety at sea. In particular, the right and ability to detain and ban substandard vessels from sailing are tools that have proven successful. The risk of detention can serve as a deterrent, even if it is common knowledge that authorities cannot keep up with all underperforming or substandard vessels calling at port. Limited recourses and lack of infrastructure make it an impossible task to inspect every vessel, resulting in only approximately 25% of visiting vessels being inspected.

To ensure efficient use of often limited recourses, measures are often, but not always, focused on high-risk vessels. The assessment is based on lists published by the Paris Memorandum of Understanding (Paris MoU), an organization consisting of maritime Administrations. Its aim is to eliminate operations of substandard vessels by harmonising PSC. Globally, there are nine MoUs that each have their own regional agreements, but they collectively work for the same cause. Paris MoU pursues a uniform system which both evaluates flag state performance and eliminates substandard vessels by enforcing a list of relevant legal instruments. In order to streamline PSC, and utilize limited recourses, Paris MoU composes lists

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95 Musi, Massimiliano (red.), Port, maritime and transport law between legacies of the past and modernization, 2018, p. 125.
99 Musi, Massimiliano (red.), Port, maritime and transport law between legacies of the past and modernization, 2018, p. 130.
grading flag states from low-risk to high-risk in a colour code system running from white, to grey, to black.\footnote{Musi, Massimiliano (red.), \textit{Port, maritime and transport law between legacies of the past and modernization}, 2018, pp. 131-132.} The categorising of flags is supposed to work as an incentive for ship owners to register their vessels in states that meet the performance criteria.\footnote{Warner, R, & Stuart, K. (red.), \textit{Routledge handbook of maritime regulation and enforcement}, 2016, p. 49.} Vessels flying the flag of a state on the white list will not be inspected to the same extent as high-risk vessels. Paris MoU also publishes a whiter-than-white list, where vessels registered in qualified states even can be exempted from inspections altogether. The criteria to be included on that list is inclusion on the regular list as well as a documented IMO audit.\footnote{Warner, R, & Stuart, K. (red.), \textit{Routledge handbook of maritime regulation and enforcement}, 2016, p. 52.} Conversely, vessels registered in states on the grey or black lists will enjoy more attention from PSC authorities during their visits in foreign ports.

However, PSC does not ensure marine safety. As evidenced by a number of disastrous accidents, even substandard vessels can pass inspections and continue to endanger the marine environment. A telling example is the ‘Erika’, that was inspected twice in the months before she sank outside of France in 1999. Both inspections took place in Paris MoU member states, and both PSC authorities let her sail with only minor remarks.\footnote{Musi, Massimiliano (red.), \textit{Port, maritime and transport law between legacies of the past and modernization}, 2018, p. 134.} The accidents of Erika and other infamous vessels initiated a large campaign to ensure marine safety in European ports. This led to the adoption of a new European Directive in 2009.\footnote{Ibid.} Directive 2009/16/EC on Port State Control (recast) entered into force in 2011 and is built upon the work and experience of Paris MoU.\footnote{This is mentioned in several notes in the preamble of the Directive 2009/16/EC, for example notes 9, 13, 14 & 15, \footnote{Directive 2009/16/EC, Article 1.} The purpose of the directive is to help drastically reduce substandard shipping by increasing compliance, establishing common criteria and implement a harmonised PSC system based on Paris MoU.\footnote{Directive 2009/16/EC, Article 1.}
Since the adoption of the Directive, the number of inspections performed within the EU has increased to 18,000 annually.\textsuperscript{107} Although the inspection level does not guarantee marine safety, it can reduce the number of substandard vessels sailing on European waters, including end-of-life vessels destined for Asian shipbreaking yards. However, for PSC authorities to act against such vessels it is required that they are informed about the shipowners’ true intentions. Since shipowners often hide the fact that a vessel is about to be dismantled on a beach, authorities have little opportunity for intervening unless finding clear evidence of the plans. It is not uncommon for shipowners involved in beaching operations to forge documents, making it a difficult task to identify and stop the vessels.\textsuperscript{108}

\textsuperscript{107} Musi, Massimiliano (red.), \textit{Port, maritime and transport law between legacies of the past and modernization}, 2018, p. 136.
4 International legislation

The shipbreaking industry is both dangerous and dirty. It is causing severe damages to the environment and human health, especially at Asian shipbreaking locations with substandard practices. But at the same time, the industry is an essential source of income and resources, directly or indirectly, for many of the involved stakeholders, workers and residents of the shipbreaking locations.\(^\text{109}\) The combination of low wages, high value and demand of second-hand materials, as well as less stringent environmental policies open up for a thriving trade of end-of-life vessels.\(^\text{110}\) Although the actual dismantling is a severe hazard, the amount of materials being repurposed and recycled gives, in some respects, the Asian shipbreaking yards and environmental usefulness. Materials and fittings that are unwanted in the West are in Asia resold and repurposed to an extent not seen elsewhere.\(^\text{111}\)

With all this considered, policy makers need to strike a balance between environmental and economic interests when regulating the industry. Both governments and inter-governmental organizations such as IMO work endlessly on creating and maintaining fair regulatory frameworks, and there are a number of legal instruments that apply to the various aspects of shipbreaking. This chapter will look at relevant legislations and examine their role and effectiveness in ensuring safe and environmentally sound ship recycling.

4.1 Key environmental principles

Regardless of scope or intention, environmental policy making necessitates some key concepts to be addressed. There is a number of universal principles that play a significant role within international environmental law, several of


which are recognized in shipbreaking regulation.\textsuperscript{112} These principles are repeatedly implemented in different legal instruments and can thus be seen as the groundworks on which the policy making is based. The principles identified to bear the most relevance and importance in this matter are the principles on proximity, polluter pays and environmentally sound management.\textsuperscript{113} In order to properly examine and understand the functions of the chosen legislations in this chapter, it is important to recognize the functions of the principles:

The proximity principle, in general environmental law referred to as ‘source principle’, upholds the norm that hazardous wastes should be dealt with at its source, i.e. its place of production. This is not to be interpreted as a broad stance against waste export. The Court of Justice has determined that waste exports generally are allowed, and that the principle restricts only exports of materials harmful to the environment.\textsuperscript{114}

The polluter pays principle is based on the view that the one that damages the environment should be the one to pay for rectifying efforts. It aims at prohibiting the transfer of liabilities related to pollution, holding each party accountable for their own damage. No party should be obliged to assume responsibility for pollution they did not in fact produce.\textsuperscript{115}

Environmentally sound management (ESM) is directly related to transboundary movements of wastes and encompasses the above-mentioned principles into one central principle.\textsuperscript{116} It is a management principle aimed at enabling and encouraging sound practices when transferring wastes to and

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\textsuperscript{112} Alam, Shawkat (red.), \textit{Routledge handbook of international environmental law}, Routledge, 2013, p. 43.
\textsuperscript{114} Case C-209/98 Sydhavvens Sten & Gns (2000) ECR I-3743.
\textsuperscript{115} Alam, Shawkat (red.), \textit{Routledge handbook of international environmental law}, Routledge, 2013, p. 50.
\end{flushleft}
from OECD member states.\(^{117}\) ESM influences the entire waste management process, from encouraging minimizing of wastes to enhancing state capacity and performance. A major idea of the principle is the prohibiting of waste export from states that are capable of managing their wastes safely, to states that are less able to do so.\(^{118}\) A key aspect of ESM can thus be said to be state sovereignty, as the importing state has a sovereign right to ban or refuse entry to shipments of hazardous wastes.\(^{119}\)

### 4.2 Basel Convention

When discussing international environmental law, and specifically transatlantic exports of end-of-life vessels as scrap, the 1989 Basel Convention\(^{120}\) comes into play. It is a waste regime with the objective to regulate both trade and management of hazardous wastes, with an aim of reducing its movements and overall effects on human health and the environment.\(^{121}\) The Basel Convention has been implemented into a European Regulation, namely (EC) Regulation No. 1013/2006 on shipments of waste (WSR).\(^{122}\)

The convention as a whole is built upon three principles found in article 4 of the convention: minimization of wastes, the proximity principle and environmentally sound disposal.\(^{123}\) First and foremost, the convention advocates for parties to take responsibility for hazardous wastes that are generated or owned within their own territory.\(^{124}\) Emphasis is put on the


\(^{119}\) Ibid.


\(^{121}\) Basel Convention, preamble.

\(^{122}\) (EC) Regulation No. 1013/2006 on shipments of waste, preamble note 3.


\(^{124}\) Alam, S. and Faruque, A. Legal regulation of the shipbreaking industry in Bangladesh: The international regulatory framework and domestic implementation challenges, 2014, p. 50.
responsibility of parties to minimise movement of hazardous wastes and subsequent displacement of accountability for damage. To ensure this, parties need to take appropriate measures both regarding minimisation of waste generation and sound management of such wastes.\textsuperscript{125}

Environmentally sound management, or ESM, is a cornerstone in the assessment of state obligations under the convention. ESM is in article 2 defined as “taking all practicable steps to ensure that hazardous wastes or other wastes are managed in a manner which will protect human health and the environment against the adverse effects which may result from such wastes”.\textsuperscript{126} States thus have to properly assess the effects of moving wastes, regardless of whether they are the exporters or the importers, and act accordingly to ensure environmentally sound management.\textsuperscript{127} Based on that assessment, movement of wastes can only be allowed if the exporting state lacks the technical capacity and necessary facilities needed for sound disposal, or if the importing state requires the wastes as raw material for recycling or recovery industries.\textsuperscript{128}

Since states have a sovereign right to stop shipments of hazardous wastes from entering their territory, an important prerequisite for exports of wastes are the notification of and consent to proposed movement to states concerned.\textsuperscript{129} States concerned are defined as “Parties which are States of export or import, or transit States, whether or not Parties”\textsuperscript{130}, which means that the exporter needs to inform and get consent from every state affected by the movement of the wastes, regardless of their relation to the Basel Convention. Moreover, each approved movement also has to be accompanied by a document with a detailed description of the contents and

\textsuperscript{125} Langlet, David, *Prior informed consent and hazardous trade: regulating trade in hazardous goods at the intersection of sovereignty, free trade and environmental protection*, 2009, p. 79.
\textsuperscript{126} Basel Convention, Article 2(8).
\textsuperscript{127} Langlet, David, *Prior informed consent and hazardous trade: regulating trade in hazardous goods at the intersection of sovereignty, free trade and environmental protection*, 2009, p. 81.
\textsuperscript{128} Basel Convention, Article 4(9).
\textsuperscript{129} Basel Convention, Article 6(1-2)
\textsuperscript{130} Basel Convention, Article 2(13).
their disposal requirements. The document must be available throughout the entire export process.\textsuperscript{131} This Prior Informed Consent (PIC) procedure allows states to fulfil their ESM obligations under the Basel Convention. In shipping, this stipulation is linked to the IMO Guidelines on Ship Recycling. The non-binding guidelines call for vessels to carry a ‘Green Passport’ with detailed information about the hazardous materials within its construction.\textsuperscript{132}

Transboundary movements that do not conform to the PIC procedure are deemed illegal traffic.\textsuperscript{133} Moreover, although transboundary movements formally might comply with the Basel stipulations, some can still be deemed illegal if they violate the Basel Ban.\textsuperscript{134} The Ban was added in the 1995 Amendment to the Basel Convention\textsuperscript{135}, and prohibits export from OECD nations to non-OECD nations. The amendment has not yet entered into force and cannot be invoked legally.\textsuperscript{136} However, the ban is implemented in the European waste shipment regulation and thus applies to member states of the European Union.\textsuperscript{137}

4.2.1 Vessel or waste?

A major issue with the Basel Convention is the fact that it is not specifically aimed at shipbreaking, causing difficulties in its applicability. However, since the convention covers all transboundary movements of hazardous wastes and their disposal, end-of-life vessels destined for shipbreaking yards can fall within its scope. The exact legal standpoint is unclear, but since

\textsuperscript{132} Ibid.
\textsuperscript{133} Basel Convention, Article 9(1).
\textsuperscript{134} Langlet, David, \textit{Prior informed consent and hazardous trade: regulating trade in hazardous goods at the intersection of sovereignty, free trade and environmental protection}, 2009, p. 84.
\textsuperscript{135} Amendment to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (opened for signature 22 September 1995).
\textsuperscript{136} Alam, S. and Faruque, A. \textit{Legal regulation of the shipbreaking industry in Bangladesh: The international regulatory framework and domestic implementation challenges}, 2014, p. 52.
\textsuperscript{137} (EC) Regulation No. 1013/2006 on shipments of waste, Article 36.
vessels are composed of many of the materials listed as hazardous in the convention, a vessel itself can be classified as hazardous waste. Examples of hazardous materials that can be found in the structure of a vessel are asbestos and heavy metals such as lead and mercury. Nevertheless, the application of the convention to end-of-life vessels has been a subject of debate from the very beginning.

The definition of a vessel as waste under the Basel convention does not contradict an opposing definition under other legal instruments. The issue lies in identifying the point of transition. Many stakeholders refuse to define vessels as waste as long as they sail under their own power. With that in mind, one interpretation can be that a vessel becomes waste when it no longer is a seaworthy unit falling under flag state jurisdiction, in other words, when it no longer is considered a ‘ship’. Since declassification occurs when a vessel is at a physical total loss, that interpretation leaves vessels outside of the scope of the convention until the dismantling has begun. This is neither a realistic, nor a desirable approach. Another interpretation is thus a shift of status derived from owner intentions. However, it is nearly impossible to determine when a decision of dismantling was made. With non-compliance to PIC procedures and sudden changes in ownership, regulators struggle to identify vessels destined for shipbreaking yards. As such, the legal position continues to be open for discussion.

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139 See Basel Convention, Annex VIII, List A.
4.2.2 Other issues

When interpreting the Basel convention in light of ship recycling, it is clear that many practical issues stand in the way for efficient implementation and enforcement of the stipulations. Some issues are legal, where the convention itself lacks applicability or fails to give adequate definitions and directives. Other arise from the fact that stakeholders actively are trying to avoid obligations.144

The legal difficulties are not necessarily indicative of a weak regulation, but rather a symptom of the Basel convention not being fully compatible with the complexity of the shipbreaking industry.145 The practice of avoiding obligations is an industry problem. Efforts are frequently made to allocate responsibility elsewhere, for example by reflagging and selling vessels to avoid liability for the hazardous materials imbedded in their structures. Due to flag state jurisdiction and sovereignty, ship owners looking to avoid their obligations can by changing flag with ease cherry-pick the way regulations are likely to be implemented and enforced.146 Change of flag and owner also affects the possibilities to identify the exporting state, which in turn affects the possibilities to enforce the convention.147 Given the wide range of viewpoints and base of assessments, the impact of the convention shifts whenever vessels are moved from one jurisdiction to another. Be that by reflagging or by actual physical movement

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146 See previous discussion in chapter 2.
4.3 Hong Kong Convention

In contrast to the Basel Convention, the Hong Kong Convention (HKC) is targeting the shipbreaking industry directly. Its aim is to ensure that vessels do not pose any unnecessary risk to human health and safety or to the environment.\(^{148}\) It was developed in an attempt to establish a legally binding instrument based on previous efforts of policy making, including existing guidelines and conventions.\(^{149}\) It is a form of a framework convention, that unlike other conventions is not complemented by independent treaties to impose detailed regulatory measures on specific issues. Instead, modifications to and specifications of both governance and procedural rules can be found in annexes to the main convention.\(^{150}\)

The HKC was adopted by the IMO on the 19th of May 2009. This was the result of five years of discussions and deliberations in the joint working group collaboration between the IMO, ILO and the COP to the Basel Convention.\(^{151}\) The aim was to cooperate and coordinate efforts to ensure safe and environmentally sound ship recycling. Although adopted over 10 years ago, the convention is yet to enter into force. The reason for this is the large-scale stipulations stated as a prerequisite.

Article 17 of the HKC lists three conditions that have to be met in order for the convention to enter into force:

1. not less than 15 States have either signed it without reservation as to ratification, acceptance or approval, or have deposited the requisite

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\(^{151}\) Gourdon, K., Ship recycling: An overview, 2019, p. 28.
instrument of ratification, acceptance, approval or accession in accordance with Article 16;

2. the combined merchant fleets of the States mentioned in paragraph 1.1 constitute not less than 40 per cent of the gross tonnage of the world’s merchant shipping; and

3. the combined maximum annual ship recycling volume of the States mentioned in paragraph 1.1 during the preceding 10 years constitutes not less than 3 per cent of the gross tonnage of the combined merchant shipping of the same States.

As of today, none of the three given stipulations have been reached, making the outlook bleak. So far, only six states have ratified the convention, and their combined merchant fleet amounts to 21.23% of the world’s.\textsuperscript{152} Especially noteworthy is the failure to reach the volume stipulated by the third point. Out of the 3% required, only 0.04% has so far been achieved.\textsuperscript{153} When these stipulations are met, the HKC will still be two years away from entering into force since a 24-month long grace period is included in the agreement.\textsuperscript{154} Thus, this project that began more than 15 years ago is still far away from becoming legally binding and a part of the legal framework regulating the shipbreaking industry.

\subsection*{4.3.1 Scope of the HKC}

The HKC applies to both vessels and ship recycling facilities belonging to the signing states, in the sense of ship registration and operation.\textsuperscript{155} The convention covers vessels spanning from typical ships to various floating non-fixed structures, and no exclusions are made for vessels that have been stripped of equipment or that are under towage.\textsuperscript{156} This serves to lessen to

\begin{itemize}
\item \textsuperscript{152} Gourdon, K., \textit{Ship recycling: An overview}, 2019, pp. 28-29.
\item \textsuperscript{153} Ibid.
\item \textsuperscript{154} Hong Kong Convention, Article 17(1).
\item \textsuperscript{155} Hong Kong Convention, Article 3(1).
\item \textsuperscript{156} Hong Kong Convention, Article 2(7).
\end{itemize}
the ambiguity between vessel and waste, a common bone of contention when regulating ship recycling.

However, exceptions from the convention are found in article 3. These include vessels smaller than 500GT\textsuperscript{157}, vessels that have only ever been operated in waters belonging to the sovereignty or jurisdiction of their flag state, and military vessels and non-commercial government owned ship. Although excluded, the contracting states shall ensure that the disposal of these vessels are carried out in a manner consistent with the convention’s stipulations so far as is reasonable and practicable.\textsuperscript{158}

The vessels not covered by the HKC is naturally still subject to the Basel Convention. Basel applies to all vessels, which creates an overlap of legislation. The HKC cannot alter the scope of other treaties, any exemptions thus have to be agreed under the Basel Convention itself.\textsuperscript{159}

In its entirety, the HKC is an addition to, not a replacement for, existing legislation. This can be read from article 15(2), where it is stated that “Nothing in this Convention shall prejudice the rights and obligations of Parties under other relevant and applicable international agreements”. Since the wording does not offer clear guidance, interpretation has to be made. In Article 30(2) of the Vienna Convention on the Law of Treaties 1969 it is stated that “When a treaty specifies that it is subject to, or that it is not to be considered as incompatible with, an earlier or later treaty, the provisions of that other treaty prevail”. According to this interpretation, any conflict between Basel and the HKC would resolve in favour of Basel.\textsuperscript{160}

\textsuperscript{157} As defined in Hong Kong Convention, Article 2(8): “Gross tonnage” means the gross tonnage (GT) calculated in accordance with the tonnage measurement regulations contained in Annex I to the International Convention on Tonnage Measurement of Ships, 1969, or any successor convention.

\textsuperscript{158} Hong Kong Convention, Article 3(2) and 3(3).


\textsuperscript{160} Ibid.
4.3.2 Overview of the HKC

The HKC is in many ways an innovative and progressive convention, having a cradle to grave approach by regulating the entire life of a vessel. The HKC stipulates requirements for the design and construction of vessels, which opens up to the elimination of hazardous materials in shipbreaking altogether.\footnote{Bhattacharjee, S. *Trade, Law and Development From Basel to Hong Kong: International Environmental Regulation of Ship-Recycling Takes One Step Forward and Two Steps Back*, 2009, p. 221.} Further, the HKC follows the vessel throughout its life and sets up requirements regarding operation, maintenance and finally recycling.\footnote{Ibid.} Much is similar to the Basel convention, but there are a number of improvements in the form of obligations that are specific for HKC. These include, inter alia, the introduction of a mandatory Inventory of Hazardous Materials\footnote{HIM and the previously mentioned ‘Green Passport’ are virtually the same thing.} (IHM), an obligation to use Authorised ship recycling facilities and the duty of state parties to share information with IMO.\footnote{Galley, M., *Shipbreaking: Hazards and Liabilities*, 2014, pp. 166-167.}

The paramount issue with the HKC is the fact that it has yet to enter into force. As with any legal instrument, the effectiveness of its provisions cannot be assessed without application. Application is a prerequisite of analysis, and with no preceding judgements any speculations on its effect would be entirely theoretical. Hence, ratification and implementation are the sticking points that need to be addressed. However, by comparing the HKC to Basel, one can find numerous weaknesses that might become issues when the convention enters into force. Such weaknesses are lack of a clear PIC procedure, no mention of illegal traffic, little recognition of environmental principles and exemptions of a large number of vessels.\footnote{Argüello Moncayo, G. *International law on ship recycling and its interface with EU law*, 2016, p. 307.}
5  Case studies

As suggested, the mentioned international law and legislation do not always offer suitable solutions when faced with the complexity of shipping. Due to the special conditions surrounding the shipbreaking industry, it can be difficult for states to bring ship owners to justice.\textsuperscript{166} As a consequence of this non-enforcement, vessels keep being dismantled on shores in spite of the provisions aimed at preventing the practice.

For the purpose of understanding the complexity surrounding the ship breaking industry, and the enforcement difficulties it entails, I will present a couple of cases that have gained public attention. I believe they highlight the core issues and provide the necessary basis for analysis.

5.1  Norway/Blue Lady

Blue Lady is an infamous vessel in shipbreaking. Having spent most of its operational life as a Norwegian owned transatlantic cruise ship named ‘Norway’, the vessel was left dead in the water of the US coast following a boiler room explosion in 2003, after which she was towed to Germany for repairs. The vessel is estimated to have contained approximately 1200 tons of asbestos\textsuperscript{167}, and the cost of partial decontamination was quoted at EUR 17 million.\textsuperscript{168} At this point, the owner instead decided to tow the vessel to Malaysia in 2005, once more claiming the purpose of repairs. The value of the vessel was at this time written down, and after retracting insurance claims it was placed at a scrap value of only USD 12.3 million.\textsuperscript{169} In Malaysia, no

\textsuperscript{169} Galley, M., Shipbreaking: Hazards and Liabilities, 2014, p. 137.
repairs were undertaken. Instead, the vessel was given its new name and potential scrap buyers were invited to view her.170

The Blue Lade had caught the attention of the NGO Shipbreaking Platform, that began investigating the case as possible illegal export under the Basel Convention. They sent a request for Germany’s compliance with applicable legislation, including article 9 of the Basel Convention and its equivalent in article 16 in the WSR, to the Senator of Building, Environment and Transportation of Bremen.171

During the following year, the vessel was sold several times to different owners and was towed from state to state, including Malaysia, Bangladesh and United Arab Emirates.172 The Bangladeshi government refused her entry into their waters.173 The vessel then moved towards India and the famous shipbreaking site Alang in May 2006. This move was anticipated by the Indian Platform on Shipbreaking, that had filed an Intervention Application with the Indian Supreme Court to stop the vessel from entering its territory.174 The basis for the Intervention Application was a 2003 direction, where the Indian Supreme Court took a stance for environmentally sound ship recycling, stating that 'the ship breaking operation cannot be permitted to be continued without strictly adhering to all precautionary principles'.175

At arrival outside of India, the Blue Lady was denied entrance. This was the start of a lengthy domestic legal battle, where economic interests took center stage.176 The vessel was eventually granted permission to anchor at a port near Alang, given humanitarian concerns due to the Monsoon season. However,

171 Ibid.
173 Ibid.
within just a few weeks the vessel moved on again and was unlawfully beached in Alang. On 6 September 2007, the Indian Supreme Court granted permission to dismantle the Blue Lady, a decision in contradiction to their previous 2003 directive.\textsuperscript{177}

The case of the Blue Lady embodies the lengthy measures shipowners take in order to avoid their obligations under the Basel convention. By moving from different states claiming ‘repairs’, changing owners several times, and finally declaring humanitarian concerns in order to anchor the vessel outside of Alang, the Blue Lady is a prime example of how stakeholders in the shipbreaking industry act.

5.2 Le Clémenceau

The case of the French Aircraft carrier Le Clémenceau from 2003 is a telling example of how an end-of-life vessel can be seen as either a liability or an asset depending on the economical motives behind the dismantling. The perceived value can vary drastically, depending on the inclination to and will to uphold certain standards and achieve various environmental goals.\textsuperscript{178} In this case, Le Clémenceau contained high levels of hazardous materials, primarily asbestos. It is estimated that the vessel contained 130 tons of asbestos, a staggering figure stemming from its military purpose and the time of its construction.\textsuperscript{179} In order to dispose the vessel in a safe way, it needed to be decontaminated prior to dismantling, a costly procedure.

At first, France proposed the vessel to be sunk as is. Either as a military target, or as an artificial reef. The levels of contaminants however made the vessel unsuitable for such action, and France eventually decided on a public sale of the vessel with pre-cleaning as well as European dismantling as

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conditions for the sale to be made final. The first buyer attempted to bypass this condition but failed. The vessel was then discovered en route to a breaking ground in Turkey, where it was to be dismantled without prior decontamination. As this was a breach of contract, France repossessed the vessel and began the search for a new buyer.

After many attempts to rid themselves of the vessel, including a failed bid to export it to China as ‘war material’ although it had been stripped of weapons, the vessel was destined for India after a superficial precleaning. After long legal battles in both Indian and French courts, France eventually decided to finance recycling at an English shipbreaking yard in 2009.

The prevailing theme of this case is a dissonance between environmental concerns and economical motives. The French government wanted a cheap disposal of the vessel, while potential buyers wanted to maximize profit. Although not officially declared, this is implied by France’s actions, particularly the proposal of sinking as a first alternative. This can hardly be interpreted as anything but an attempt to avoid costs related to decontamination and demolition. As previously mentioned, there are a number of options available in the event of disposal of a vessel. In contrast to abandoning and/or sinking, recycling is the greenest one due to repurposing of materials and possibly safe disposals of hazardous wastes. However, prior decontamination might well render this economically challenging. As shown in this case, side stepping legislation is a common phenomenon that can be very lucrative.

Due to the fact that Le Clémenceau was a state-owned vessel, it got the public’s attention and subsequently underwent an unusual amount of scrutiny. Being in the public eye affected both the handling and the outcome

\[181\] Ibid.
of the case, as the clearly defined ownership and flag offered a definite party to hold accountable.

5.3 Exxon Valdez

In the public mind, one of the most infamous vessels in regard to environmental hazards will forever be the Exxon Valdez. Built in 1986, the single hull oil tanker became world news when it hit a reef outside of Alaska in 1989. The grounding resulted in a spill of nearly 11 million gallons of crude oil, one of the biggest ecological disasters in maritime history.\textsuperscript{183} The accident resulted in a number of legislative actions, including the establishment of the IMO sub-committee on Flag State Implementation.\textsuperscript{184}

The end of Exxon Valdez’s operational life was in no way exemplary either. Its way to the shipbreaking yard was in many ways a repeat performance of that of the Blue Lady.\textsuperscript{185} Before its arrival at the shipbreaking location Alang in India in 2012, it underwent a number of owner changes, and was eventually renamed ‘Oriental Nicety’. When arriving at Alang, the vessel was not flying any flag as the last registration, in Sierra Leone, had expired.\textsuperscript{186} The vessel anchored outside of Alang without clear permission, and offered itself up for inspection. Although it did not meet Basel requirements, several authorities reported the vessel to be free of hazardous materials. However, no IHM was presented to the Court.\textsuperscript{187}

Despite the vessel’s infamy and several breaches of standard practice, i.e. the lack of flag, IHM and permission to anchor, the owners managed to circumvent efforts from NGOs to prevent the dismantling in India. This was

\textsuperscript{184} See previous discussion in section 3.2.
\textsuperscript{185} See section 5.1.
\textsuperscript{186} Galley, M., Shipbreaking: Hazards and Liabilities, 2014, p. 156.
\textsuperscript{187} Ibid.
made possible by the previous 6 September 2007 order on the Blue Lady from the Indian Supreme Court.\textsuperscript{188} The Supreme Court had in its order recommended that a comprehensive Code on procedures for allowing entrance, beaching and dismantling of vessels be created, a work still not completed at the time for Exxon Valdez’s arrival in 2012. As such, the Blue Lady ruling worked as a preceding case. After a speedy process, Exxon Valdez was dismantled in the same year as its arrival.\textsuperscript{189}

\textsuperscript{188} Galley, M., \textit{Shipbreaking: Hazards and Liabilities}, 2014, p. 156.
\textsuperscript{189} Ibid.
6 European Ship Recycling Regulation

To those looking to improve the global shipbreaking industry and its environmental and humanitarian impacts, the European Ship recycling Regulation (SRR) is a welcome addition. When looking at the numbers, Europe is a substantial contributor of end-of-life vessels. In 2017, 181 European owned vessels were scrapped on Asian beaches. They represented 40% of the total GT globally. Looking at units, these 181 vessels in turn represented 70% of all European vessels being dismantled that year. Although ‘European’, only 18 of these vessels had a European flag when they hit the Asian beaches. Further, 24 vessels had been reflagged from a European flag to a FoC only a short period before their dismantling. These numbers, although dry and technical in nature, paint a telling picture of the actual situation on Asian beaches.

The HKC initiative was an ambitious attempt to regulate the dirty and dangerous shipbreaking industry. By consolidating a number of legislations and non-binding guidelines into a single agreement, ship owners are given both clarity and predictability concerning their end-of-life vessels. However, the convention has not entered into force and can thus be seen as stuck in limbo. As a means to speed up the ratification of the HKC, the European Union decided to implement the provisions into their own initiative. The SRR is based on the HKC but is considered to be more stringent as it contains additional provisions concerning 1. Health, Safety and Environmental (HSE) requirements, 2. downstream waste management, 3. control mechanisms, and 4. Additional substances added to the HKC Inventory of Hazardous Material (IHM).

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190 The term ‘European’ is in this context referring to vessels whose owners hail from member states of the EU or the European Free Trade Association (EFTA).
192 Ibid.
193 See previous discussion in Section 4.3.
194 SRR, Preamble Note 5.
195 Gourdon, K., Ship recycling: An overview, 2019, p. 29.
Until the HKC enters into force, the SRR will be the legal instrument leading the shipbreaking industry into a more sustainable future. Being based on the HKC, implementation of the SRR indirectly advocates for its provisions both within and outside of the EU.\footnote{Ignacio Alcaide, J., Rodríguez-Díaz, E. and Piniella, F. European policies on ship recycling: A stakeholder survey, 2017, p. 263.} Given the stricter requirements of the European initiative, any state falling under its regulation will have no obvious reason not to ratify the HKC when the SRR is fully applied by the end of 2020.

### 6.1 Brief overview of the SRR

Since the SRR is based on the HKC, it too is constructed with a cradle to grave approach. It can be explained as a comprehensive regulation that certificates and monitors hazardous materials in vessels throughout their lifetime, from construction to demolition.\footnote{Ibid.} A central component of such an approach is the Inventory of Hazardous Materials (IHM). Formerly referred to as a ‘Green Passport’ in IMO instruments, the IHM was made mandatory in the HKC.\footnote{See section 4.3.2.} The SRR stipulates that each vessel shall have on board an IHM, and that it should provide evidence that the vessel complies with rules on use of hazardous materials.\footnote{SRR, Article 5.} The IHM is thus clearly connected to PSC in the sense that vessels must be able to prove compliance upon request. In both the HKC and SRR, the vessel must carry its IHM during its entire operational life, and update it during maintenance, repairs and surveys. When properly maintained, the IHM will be able to function as a valuable source of information when recycling the vessel.\footnote{Caddell, Richard & Thomas, D. R. (red.), Shipping, law and the marine environment in the 21st century: emerging challenges for the law of the sea: legal implications and liabilities, 2013, p. 232.}
Other measures initiated by the HKC, but introduced in the SRR, with the aim to regulate the industry in a more coherent and effective way are periodical surveys, certification processes and the establishment of clearly defined competent authorities with obligations to report on state performance to the IMO. Since many of the measures are dependent on PSC, competent authorities are the cornerstone of the effectiveness of the regulation. Much of the responsibility to ensure clear and effective enforcement is placed on the member states. This is emphasised in article 11 of the SRR on port state control, where it is stated that a vessel may be ‘warned, detained, dismissed or excluded from the ports or offshore terminals under the jurisdiction of a member state’ in the event that it fails to submit relevant documents. Member state obligations to effectively enforce the SRR are found in article 22, noticeable without clear directives from the policy makers on how these should be designed.

When a vessel after its operational life is going to a ship recycling facility, the SRR requires the ship owners to notify the administration, and in return obtain a ‘Ready for recycling certificate’. Moreover, a ship recycling plan must be developed prior to recycling, and it must be approved by a competent authority. The ship recycling facility must in turn also be authorised by a competent authority and be included in the so-called ‘European List’ of approved facilities. The authorisation of ship recycling facilities initiated by the HKC is a key element in ensuring environmentally sound ship recycling, as the assessment of facilities’ abilities to perform in an environmentally sound manner is removed from the exporting state. Instead, the SRR is the instrument that establishes control and management measures in order to ensure that operational requirements are met at the ship

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202 SRR, Article 11(3).
203 SRR, Article 6.
204 SRR, Article 7.
205 SRR, Article 13(1); SRR, Article 14.
recycling locations.\textsuperscript{207} This standardisation of ship recycling opens up for recycling outside of the OECD when facilities act in a safe and environmentally sound manner.\textsuperscript{208}

The SRR applies to all vessels flying the flag of a member state, and to some extent also to vessels flying the flag of a third country calling at port or anchorage of a member state.\textsuperscript{209} As with the HKC, the scope of the SRR has exemptions in form of state-owned vessels, ‘inland vessels’ and vessels less than 500GT.\textsuperscript{210} The stipulations that apply to third country flags are requirements to carry and properly maintain an IHM when in European territory.\textsuperscript{211} This extraterritorial effect to the SRR pushes the implementation of a provision originally found in the HKC on all vessels that visit a member state, regardless of whether their flag states have ratified the HKC or not.\textsuperscript{212}

6.2 Weaknesses of the SRR

When looking at the new measures implemented in the SRR, a number of practical difficulties arise. As the functions are built upon member state performance, and specifically PSC, the very effectiveness of the regulation is reliant on each member state. If the PSC of a state lacks recourses, capacity or well-trained officials, the entire purpose of having more stringent stipulations falls. With no uniform quality level of PSC within the EU, there is a risk of the provisions becoming only paperwork formalities.\textsuperscript{213}

Moreover, the SRR departs from a number of environmental principles found in the Basel Convention and in international environmental law in general. Many responsibilities have been shifted from the actual polluter to the

\textsuperscript{208} Ibid.
\textsuperscript{209} SRR, Article 2(1).
\textsuperscript{210} SRR, Article 2(2).
\textsuperscript{211} SRR, Article 12.
\textsuperscript{212} Ignacio Alcaide, J., Rodríguez-Díaz, E. and Piniella, F. \textit{European policies on ship recycling: A stakeholder survey}, 2017, p. 268.
\textsuperscript{213} Ibid.
recycling state, which goes against the principles of proximity, polluter pays and environmentally sound management. From an environmental perspective, this is a step back and could ultimately lead to the SRR failing to meet its intended purpose.

Lastly, the SRR lacks financial instruments as an incentive for stakeholders to comply with their stipulated obligations. This is unfortunate, as it is economic aspects that often drive ship owners to dismantle their vessels at substandard shipbreaking yards in the first place. The SRR acknowledges such a financial incentive, but only states that the Commission shall submit a report of the feasibility of a financial instrument. As a result, the SRR places the responsibility to uphold safe and environmentally sound ship recycling on the member states, instead of placing it on the actual polluters: the stakeholders of the industry.

215 SRR, Article 29.
7 Conclusions

A recurring topic throughout this thesis has been the complexity of the shipbreaking industry, and the numerous difficulties it entails. The very cornerstones of maritime regulation are sovereignty and jurisdiction, which creates a peculiar legal structure as the basic premise for policy making. With this in mind, every applicable legislation must be viewed in light of its actual enforcement possibilities when assessing its effectiveness. It is clear that these possibilities are conditional to factors that lie out of reach from the provisions of the legislations, such as proper implementation and compliance.

With regard to what has been written in this paper, there are many aspects to consider when analyzing to what extent the SRR can ensure environmentally sound ship recycling. My initial analysis is that the regulation itself is progressive and innovative as an instrument solely looking to regulate dismantling of vessels, but not necessarily as an instrument ensuring environmentally sound management. This is evidenced by the lack of implementation of key environmental principles in the regulation. As ESM is a fundamental part of transboundary movements of hazardous wastes, it is a strange approach to shift this responsibility from the polluter to the ship recycling facility.

Moreover, to fulfil the purpose of this thesis, I prepared three research questions in order to approach the subject in a structured way.

Firstly, I wanted to examine how ship registration affect applicability of available legal instruments. When assessing the effectiveness of a legislation, it is important to make a clear distinction between applicability and enforcement. For enforcement to be relevant, the legal instrument has to be applicable in the first place. Moreover, it has to be legally binding. Ship registration thus affects applicability on the most basic level, as the vessel is subject to flag state jurisdiction and its subsequent legislation. Shipowners
can easily circumvent the regulation and avoid their obligations by reflagging their vessel.

Secondly, I wanted to examine if the scope of the regulation was sufficient enough to meet its intended purpose. The very short answer to that question is yes. Since the SRR aims at preventing substandard practices, the scope is well thought out in regard to the exempted vessels.

Lastly, I wanted to examine the impact of the measures on standard practice. This is a complex question, that has no clear answer. As the measures only will apply to vessels falling within the scope of the regulation, vessels flagged in a third country will be excluded from its provisions. However, member states can ensure some compliance from such vessels by the requirement of IHM. The provision can work as an incentive to comply with the more stringent measures, hopefully making change in the industry as a whole. Nevertheless, that requires the presence of a well-functioning PSC with capacity to enforce the regulation. That much depends on political will and influence, as states interpret and enforce legislation as they wish within their own territory.

With all this considered, my conclusion is that the European Ship Recycling Regulation has the capacity to make a real change and push stakeholders towards safe and environmentally sound ship recycling. However, as with every legal instrument attempting to regulate the maritime industry, the full potential of the regulation is impeded by the very structure of the legal system itself.
Table of Cases


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