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Preface

This publication is the result of a seminar, "Wrecks as Environmental Risks: The Legal Framework", organised by Baltic Area Legal Studies BALEX in co-operation with the Finnish Environment Institute SYKE, in Helsinki, Finland on 29–30 November 2017. The seminar was specifically aimed at bringing together academics, governmental authorities and other interested parties working with shipwrecks in the Baltic Sea on a daily basis, to explore the need for continuous research on the topic and assess the need for concrete actions.

With this publication, which represent some of the presentations at the seminar, we wish to highlight the legal issues linked to sunken potentially environmentally hazardous shipwrecks and related hazardous waste dumped in the sea. The focus is on the rights and obligations of the various parties involved in wreck removal or operations in practice, including owners, salvors, states, and civil servants. The wrecks in focus are particularly those that are not old enough to qualify as historic wrecks (less than 100 years old), but not recent enough to be governed by the Nairobi Convention on Wreck Removal (in force in 2017).

Publishing some of the key contributions made at the seminar was inspired by the interesting discussions we had on requirements, limits and guidance placed by international law, national legislation and the national or local authorities, as well as questions relating to distribution of costs and responsibilities between authorities, flag states, owners and coastal states. We hope that this special volume of *MarIus* dedicated to wrecks will serve to transfer some of those discussions to persons who were not present in Helsinki and at the same time to deepen the arguments and update thoughts on current regulatory problems and proposed solutions in view of the time that has passed since the seminar.

The volume consists of four selected papers covering different aspects of the theme: states' response to wrecks causing environmental risks; remedying liability of owners and salvors; ownership, responsibilities

and liabilities related to sunken state ships; and wreck responsibilities in Canada and selected Northern European jurisdictions. A particular emphasis is placed on the Baltic Sea, not only due to its sensitivity to various forms of pollution, but also since it provides an unusually safe haven for its tens of thousands of shipwrecks. Thanks to, *inter alia*, brackish waters, relatively still waters without strong currents, and the absence of the shipworm, shipwrecks in the Baltic Sea tend to be well preserved, making the whole sea to a veritable underwater maritime museum.

In his paper, *Markku Suksi* discusses how Denmark, Finland and Sweden have implemented the 1969 International Intervention Convention from the point of view of national public law, in particular administrative law, and against the background of the arrangements in the UK. Three more specific questions are addressed: What is the institutional and material scope of the intervention regime in the three Nordic countries? Can criticism be leveled at the Nordic arrangements? What is the range of powers established in the law of the three countries that constitute the content of intervention measures? Special attention is given to the organizational solution in Finland compared to the other two states. At its most extreme, the intervention enforcer of the Danish and Finnish governments may have the right to order severe measures such as aerial bombing of an oil tanker in order to bring about its complete destruction or sinking, while this is not possible under Swedish law.

The paper by *Neil Bellefontaine, Tafsir M. Johansson* et.al. is a comparative study that extracts and compiles relevant practices concerning wreck removal. The article is primarily a synoptic overview of the lessons learned from the Canadian federal wreck-related efforts, arising from the need to manage and refine the legal and operational framework pertaining to wrecks of concern, with a focus on noteworthy developments and best practices gathered from the World Maritime University project titled Wreck Responsibilities in Northern Europe. The countries covered are Germany, Finland, Spain, and Denmark. The questions discussed include: which countries have provided a clear definition of "wreck" and what

capability do the countries and officials have to act in situations ranging from emergency clean-up operations to preventive wreck removal.

In his article, *Henning Jessen* addresses the thorny question of which legal rules potentially apply in relation to the ownership of sunken state ships. The answer to the ownership question is crucial for reflecting further on potential rights and obligations as well as for potential financial liability of states. Both the legal status of the ship and the timing of the sinking affect the legal position. The paper highlights some differing legal approaches to ownership and state sovereignty. What are the rights of a coastal state vis-à-vis the flag state in case of detrimental environmental effects generated by a sunken warship?

The article by *Peter Wetterstein* deals with the obligation to remedy environmental damage caused by wrecks according to international law, EU legislation and national Finnish law. A sunken, grounded or drifting vessel can in many ways cause significant harm to the marine environment: There might be hazardous substances as cargo and bunkers on board, a wreck itself may contain hazardous substances, it may pose a danger or impediment to other navigation, thereby increasing environmental hazards, etc. The concept of "remediation" extends further than to a mere removal or disposal of the pollutants. Remediation embodies an effort to repair or replenish the environment to its previous state, or if this is not feasible, to provide for so-called alternative restoration. Can the wreck owner or salvor incur liability, and if yes, under which circumstances?

We are grateful to the authors who willingly and professionally have undertaken the work to transform their presentations into articles in this publication and thereby agreed to share their expertise with a wider audience. Special thanks are also due to the maritime foundation 'Merenkulun Säätiö' in Finland and to other BALEX sponsors for enabling the seminar and the ensuing publication work to take place. Finally we wish to extend our sincerest thanks and to the Scandinavian Institute of Maritime Law and the editor of the *MarIus* series, Professor Trond Solvang, for publishing the papers.

BALEX (www.balex.fi) is a legal competence cluster, initiated by the University of Turku and Åbo Akademi University, aiming at filling the void in legal research, academic training and events on Baltic Sea issues.

Turku/Åbo and Mariehamn, September 2019,

Henrik Ringbom & Saara Ilvessalo
Editors

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The State's Response to Wrecks Causing Environmental Risks – a Comparison of Roles and Responsibilities of North European "Intervention Enforcers"

Markku Suksi[1]

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1 Introduction

After the *Torrey Canyon* disaster of 18 March 1967, the British Government gave orders for the destruction by aerial bombing of the vessel and its cargo in order, by burning off as much of the oil as possible, to prevent an even greater environmental catastrophe resulting from the spill.[2] The disaster led to the adoption of the 1969 International Convention relating to Intervention on the High Seas in Cases of Oil Pollution Casualties, or the so-called Intervention Convention. Initially, in Britain, governmental activities within the scope of the Convention were undertaken by a salvage committee on behalf of the Secretary of State. However, two other disasters, *Braer* in 1993 and *Sea Empress* in 1996, paved the way for the creation of the office of the Secretary of State's Representative for Maritime Salvage and Intervention (the SOSREP), which is a one-person public authority attached to the Maritime and Coastguard Agency. The SOSREP exercises, on the basis of Ch. 21, Section 137(5) of the Merchant Shipping Act 1995, the powers of the Secretary of State, that is, a Minister of the UK Government.[3]

The SOSREP, a civil servant, takes control at salvage incidents where there is a threat of significant pollution of UK waters and has powers to give statutory directions on the basis of Section 137(2), on behalf of the Secretary of State, to the ship owner, master, pilot, salvor or harbour master. These directions are normally sufficient to eliminate the risk. However, if in the opinion of the Secretary of State (that is, the SOSREP)

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2 Norman Hooke, *Modern Shipping Disasters 1963–1987* (London, New York, Hamburg, Hong Kong: Lloyd's of London Press, 1989, p. 481: "The British Government gave orders that the Torrey Canyon be destroyed by bombing in the hope that all the estimated 40,000 tons of oil still remaining on board would be burnt off."

3 I am greatly indebted to a number of persons for advice and materials, including Mr. Colin de la Rue, Legal Consultant and specialist on maritime law, Mr. Pekka Parkkari, Maritime Safety Advisor, the Finnish Coast Guard, Mr. Mathias Buch, Special Advisor, at the Joint Command of the Danish Armed Forces, Mr. Pekka Piirainen, Co-ordinator for the Survey and Inspection Unit at the Civil Aviation and Maritime Department of the Swedish Transport Authority, and Adjunct Professor, Dr. Henrik Ringbom. Dr. Anna Barlow has kindly performed the language-check. All remaining errors are, of course, the responsibility of the author.

the powers conferred by subsection (2) are, or have proved to be, inadequate for the purpose, the Secretary of State (that is, the SOSREP) may, under subsection (4), take, as respects the ship or its cargo, *any action of any kind whatsoever*, for the purpose of preventing or reducing oil pollution, or the risk of oil pollution. The measures that can be taken include, according to explicit provisions in the Act: any such action as he has power to require to be taken by a direction under the relevant section; operations for the sinking or destruction of the ship, or any part of it, of a kind which is not within the means of any person to whom he can give directions; and operations which involve the taking over of control of the ship.

Depending on the exigencies of the case, the powers of the SOSREP are wide, to say the least, ranging from the giving of directions to the shipowner to the complete destruction of the shipowner's property and the cargo of the ship (normally owned by a third party). For pollution control, the powers extend to the UK Pollution Control Zone, which is 200 miles offshore or the median line with neighbouring states. On the basis of the provisions in the Act, the SOSREP is empowered to make crucial and quick decisions without recourse to higher authority, where such decisions are in the overriding UK public interest.[4] From a Nordic perspective, at first sight this may amount to unfettered discretion, but the powers have a clear statutory basis, in particular the most dramatic powers of the SOSREP, rooted in the *Torrey Canyon* case. It seems clear that the SOSREP is empowered to engage the full force of the state to deal with pollution within the ambit of the Intervention Convention.

A general intervention arrangement of this kind is by no means unknown in other countries. Counterparts to the SOSREP exist in many countries, such as the *Préfet Maritime* in France, a civil servant who exercises authority over the sea in a particular region of France but who at the same time is attached to the military forces.[5] Similarly, in the Baltic

[4] Louise Butcher, 'Shipping: Marine Safety Act 2003'. *Standard Note*, SN/BT/2156. London: Library of the House of Commons, 2010, at http://researchbriefings.parliament.uk/ResearchBriefing/Summary/SN02156 (accessed on 9 Oct. 2017).

[5] As a civil servant, the *Préfet Maritime* reports to the Prime Minister of France, but because the officer is at the same time in charge of military operations in the region,

Sea area, States have set up public authorities for intervention actions to respond to environmental risks caused by wrecks. In Denmark, there is the Joint Command of the Armed Forces/Maritime Assistance Service (MAS), in Finland, there was formerly the Duty Officer at the Finnish Environment Institute (FEI), now replaced by the Border Guard, and in Sweden, there is the Duty Officer of the Swedish Transport Agency (TA). These "intervention enforcers" are the focal point of our inquiry.

The question here is, from the point of view of public law, in particular administrative law,[6] the following: how have these three Nordic states implemented the intervention regime? This general question can be broken down into more specific questions. What is the institutional and material scope of the intervention regime in the three countries and can criticism be levelled at the Nordic arrangements? What is the range of powers established in the law of the three Nordic countries that constitute the content of intervention measures? At its most extreme, this question addresses whether the intervention enforcer of the State has the right to order aerial bombing of an oil tanker in order to bring about its complete destruction or sinking. Given that the FEI in Finland was not generally authorized to exercise any powers of a significant nature concerning the environment (and is in that respect a very "soft" public institution, with the exception that the Duty Officer of the FEI was a civil servant with particular intervention tasks), the question is how the other Nordic states have resolved the organizational placement of the intervention function and how the new organizational solution in Finland with the Border Guard fits into the picture. Methodologically, this article tries to answer these questions by using a comparative law approach, which means that the comparison is mainly of a horizontal nature between the relevant legislation in Denmark, Finland and Sweden against the background of the arrangement in the UK. However, there is also an element of vertical

the *Préfet Maritime* also reports to the chief of the general staff.

6 We will not deal in this article with specific constitutional issues that may arise in relation to the right to property, freedom of movement, etc., but the reader may, while reading the text, come to the conclusion that the intervention enforcement may have constitutional implications, e.g., for the rights of individuals.

comparison here, because the national law is, in part, assessed in light of the relevant international law.

Obviously, the general wish is that it would never become necessary to activate powers intended for intervention enforcement. As has been pointed out, "state intervention has generally been for the purpose of asserting a supervisory role, and has only rarely involved the use of force or other active steps that affect the ship".[7] The matter is, however, not entirely theoretical, because further situations of the kind that led to the establishment of the Intervention Convention have occurred. In May 1978, the British Government decided "to sink the bow section of *Eleni V*, which had broken in two following a collision in the North Sea",[8] by using two tonnes of explosives placed in position by Navy divers.[9] A fire on *Castillo de Bellver* on 6 August 1983 caused the ship to break into two parts off the western coast of South Africa, with the oil drifting towards open sea, after which the stern section exploded. The bow section with an estimated 60,000 tonnes of light crude oil, however, "was towed out to deep water and deliberately sunk (…) with the use of controlled explosive charges".[10] In the United States, a disaster was unfolding off the coast of Oregon on 4 February 1999, threatening a wildlife refuge. US authorities made the decision to complete the destruction of *New Carissa*, a wood chip carrier that had broken into two parts, by launching a torpedo and by other fire by the US Navy that led to the sinking of the bow part of the vessel in deep ocean water some 400 km off the coast, while at least a portion of the bunker oil in the stern part was burnt off on shore by means of napalm rockets.[11] In February 2001, MV *Kristal*, carrying a cargo of sugar molasses, which in itself is not harmful as a pollutant but

7 Colin de la Rue & Charles B Anderson, *Shipping and the Environment*. London: Lloyd's of London 2009, p. 904. For a four-step categorization of increasing intensity of intervention measures, see de la Rue & Anderson 2009, pp. 904–905.

8 de la Rue & Anderson 2009, p. 905.

9 Hooke 1989, p. 146.

10 Hooke 1989, p. 93.

11 de la Rue & Anderson 2009, pp. 66, 905. See also de la Rue & Anderson 2009, p. 1012, for the scuttling of MV *Stanislaw Dubois* off the Dutch coast in 1981 and the barge *Coastal Express* off British Columbia in Canada. Regarding *Stanislaw Dubois*, see also HELCOM Response Manual, Volume 2 ANNEX 3, 1 December 2002, p. 31, at http://

would nonetheless have spread on the rocks of the Spanish coast, was torpedoed by Spanish authorities after having broken in two.[12] There are indications that other situations of a similar kind have also occurred.

Burning off oil might be a relevant measure in some situations, although it can be criticized because toxins and carbon dioxide are released into the atmosphere and in all likelihood also into the water. Sinking in very deep water may cause oil to congeal in the low temperature,[13] although dumping and scuttling is generally prohibited,[14] which means that intentional sinking of vessels should as a rule be avoided.[15]

It appears that none of the Nordic intervention enforcers have so far been placed in a situation where they would have had to activate the full force of the state for the purpose of eliminating a threat of oil-pollution in a manner similar to the *Torrey Canyon* measures. However, incidents of a less serious nature do take place and lead from time to time to the activation of at least some of the mechanisms. The need for a reactive mechanism for intervention enforcement is likely in practice to be diminished by the use of proactive measures by States, such as the creation of the VTS system and the establishment of traffic separation

www.helcom.fi/Lists/Publications/HELCOM%20Manual%20on%20Co-operation%20in%20Response%20to%20Marine%20Pollution%20-%20Volume%202.pdf

12 de la Rue & Anderson 2009, p. 1013.

13 de la Rue & Anderson 2009, p. 1013.

14 See, e.g., the Finnish Act on the Protection of the Sea (1415/1994), which establishes a general prohibition of dumping in Section 7(1) and a prohibition of scuttling in Section 7(2), but permits in Section 7(3) both of these measures in certain emergency situations that threaten, e.g., the life of human beings and the security of vessels. This means that intervention measures may at least in principle end up in conflict with the prohibition of dumping and scuttling.

15 Drastic measures of the kind used in relation to *Torrey Canyon*, *Eleni V*, *Castillo de Bellver*, *New Carissa* and *Kristal* should probably be avoided also with a view to the Helsinki Convention, Annex VII, article 7 on response measures, according to which the Contracting Party shall, when a pollution incident occurs in its response region, make the necessary assessments of the situation and take adequate response action in order to avoid or minimize subsequent pollution effects mainly by using mechanical means to respond to pollution incidents. However, burning off of oil is not ruled out in this context.

lanes.[16] Technological developments may thus reduce the potential for incidents that would trigger the Intervention Convention.

2 Intervention Convention and Domestic Law

The Intervention Convention was adopted on 29 November 1969 and entered into force on 6 May 1975.[17] It was supplemented by the Protocol relating to Intervention on the High Seas in Cases of Marine Pollution by Substances other than Oil,[18] which was adopted in 1973 and entered into force in 1983. The noxious substances listed in the annex to the Protocol have been increased in number by means of subsequent additions to the list.

The second paragraph of the Preamble to the Intervention Convention underlines the gravity of situations that may arise from oil-related disasters by pointing out that measures of an exceptional character might be necessary to protect the environment from catastrophic consequences. This general idea is elaborated upon in Article I, according to which "[p]arties to the Convention may take such measures on the high seas as may be necessary to prevent, mitigate or eliminate grave and imminent danger to their coastline or related interests from pollution or threat of pollution of the sea by oil, following upon a maritime casualty or acts related to such a casualty, which may reasonably be expected to result in major harmful consequences".[19] The provision contains a similar reference to necessary

[16] I thank Mr. Mathias Buch, Special Advisor, at the Joint Command of the Danish Armed Forces, for drawing my attention to the reactive and proactive measures and to the indicated development. Perhaps such measures can be viewed as measures of prevention under Article I(1) of the Intervention Convention.

[17] 970 UNTS-I-14049.

[18] 1313 UNTS-I-21886.

[19] However, under the limitation clause of subsection 2 of the Article, "no measures shall be taken under the present Convention against any warship or other ship owned or

measures to that in the preamble paragraph and connects them in Article I(1) with prevention, mitigation and elimination of grave and imminent danger to coastline or related interests that oil can cause.[20] The use of the term "eliminate" in the provision may perhaps be understood as a reference to the measures taken in conjunction with the *Torrey Canyon* disaster, while the Convention itself is applicable beyond the territorial sea of the coastal state.

The Convention, however, does not contain any specific examples of measures that a State might have to take in such a situation, but only a reference in Article V, subsection 1, to the fact that measures taken by the coastal State in accordance with Article I shall be proportionate to the actual or threatening damage. The implementation of this proportionality principle is specified in subsections 2 and 3 of the Article. The measures shall not go beyond what is reasonably necessary to achieve the end mentioned in Article I and the measures shall cease as soon as that end has been achieved. In addition, in considering whether the measures are proportionate to the damage, account shall be taken of the extent and probability of imminent damage if those measures are not taken, the likelihood of those measures being effective, and the extent of the damage which may be caused by such measures. Therefore, it remains somewhat unclear on the basis of the Convention what it mandates in terms of the use of force. The measures undertaken can be minor, but they could also, if need be, include dramatic actions, such as the elimination of an entire vessel and its cargo. It is left to the State to decide what such measures could contain, both generally and specifically, in an emergency. The measures identified in the UK Merchant Shipping Act, including the

operated by a State and used, for the time being, only on government non-commercial service".

20 In the Swedish government report *Ny lag om åtgärder mot förorening från fartyg*, SOU 2011:82, p. 206, the opinion is presented that the UN Convention on the Law of the Sea contains similar or parallel powers in Article 221 as in the Intervention Convention, but strictly speaking, this is incorrect, because Article 221 merely sustains measures of the coastal state on the basis of the Intervention Convention or customary law and does not create any powers for the State that would be parallel to or separate from the measures of the Intervention Convention.

complete destruction of the vessel and its cargo, seem to invoke the entire range of measures permitted by the Intervention Convention.

It is plain that, on the basis of the Intervention Convention, the State may take necessary action over a broad range of different measures. At the same time, however, the Convention imposes necessity and proportionality conditions so as to limit the State's discretion. In addition, the measures undertaken by the State on the basis of Article V, subsection 2 of the Intervention Convention must not unnecessarily interfere with the rights and interests of the flag State, third States and of any concerned persons, physical or corporate. These stakeholders should normally be informed and consulted under Article III of the Convention, but the coastal State may, in cases of extreme urgency requiring measures to be taken immediately, take measures rendered necessary by the urgency of the situation without prior notification or consultation or without continuing consultations already begun.

All the Nordic countries are dualistic in their relation to international law, which means that in addition to ratification of a treaty, it has to be brought into effect in national law if it is to have legal effect in the national jurisdiction. Denmark ratified the Intervention Convention on 18 December 1970, Finland on 6 September 1976 and Sweden on 8 February 1973. For Denmark, the Convention entered into force on 6 May 1975, for Finland on 5 December 1976 and for Sweden on 6 May 1975. However, the approach to incorporation of the Intervention Convention varies between the three Nordic countries.

In Denmark, the possibility of intervention is mentioned in Sections 42, 42a and 43 of the Act on the Protection of the Marine Environment.[21] The provisions are placed in a chapter of the Act entitled "*Indgreb*". The term used in the chapter heading is thus the same as the Danish term in the ratified Intervention Convention, so the language used in the chapter heading as well as the material provisions established in the provisions (see below) indicate that material incorporation of the Convention takes place by means of these provisions. The text of the intervention convention has been published in Danish in the official journal for legislation

[21] Lov om beskyttelse af havmiljøet, LBK nr 1033 af 04/09/2017.

of Denmark,[22] but it does not appear to be adopted at the level of an Act of Parliament as national legislation. Therefore, incorporation has materially taken place by means of transformation of national law in the above mentioned Act in order to bring about coherence with the international obligation.[23]

In Finland, those parts of the Convention that require formal legislation were approved at that level by an Act of 27 May 1976 on the Approval of Some Provisions in the International Convention relating to Intervention on the High Seas in Cases of Oil Pollution Casualties.[24] The President of Finland resolved on the same day to ratify the Convention. The incorporation of the entire Convention into the legal order of Finland, including those parts of the Convention that do not belong to the area of legislation, was effected by a Decree on the Bringing into Force of the International Convention relating to Intervention on the High Seas in Cases of Oil Pollution Casualties.[25] This means that the text of the Convention, including Article I(1), is in principle part of national law both at the level of an Act of Parliament and a Decree. According to the Government Bill leading to the adoption of the Act on Oil Pollution Response (1673/2009) (the OPR Act), Section 25(1) of the OPR Act and Section 6 of the previous Act on the Prevention of Pollution from Ships (the PPS Act),[26] both of which are now revoked by amendments in 2018

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22 Bekendtgørelse af international konvention af 29. november 1969 om indgriben på det åbne hav i tilfælde af olieforureningsulykker. (BKI nr 66 af 27/06/1975; Gældende; Offentliggørelsesdato: 15-08-1975).

23 On incorporation of treaty law in Denmark, see Henrik Zahle (ed.), *Danmarks riges grundlov*. København: Jurist- og Økonomforbundets Forlag, 1999, pp. 99–100, where it is pointed out that treaties are not normally incorporated as such in the Danish legal order and that ratified treaties cannot be directly used as sources of national law, although national provisions should be given an interpretation which is in harmony with the international commitment. For this reason, it seems the Intervention Convention is not, as such, part of the domestic legal order of Denmark.

24 Act (810/1976). The Act entered into force upon publication in the Statutes of Finland on 6 October 1976, and on the same date, the Act was published in the Finnish Treaty Series (62/1976).

25 Decree 811/1976. The Decree entered into force upon publication in the Statutes of Finland on 6 October 1976, and on the same date, the Decree was published in the Finnish Treaty Series (63/1976) together with the text of the Convention.

26 Government Bill No. 248/2009, p. 108.

to the Rescue Act (379/2011),[27] are based on the Intervention Convention. Therefore, Section 36b of the Rescue Act now contains the domestic material law of intervention, as supplemented by other provisions in the Rescue Act.

In Sweden, the Intervention Convention was approved for the purposes of ratification by the Parliament in 1972,[28] but national rules of a material nature by way of transformation were required in order to establish the provisions of the Convention in the Swedish legal order.[29] Such rules were originally included in the Act (1972:275) on Measures against Water Pollution from Ships. This Act was replaced by the current Act on Measures against Pollution from Ships,[30] wherein Sections 5 and 5a of Chapter 7 on special measures against pollution identify, at the national level, measures that appear to fall within the purview of the Intervention Convention.[31] The more specific identification of actual measures in terms of intervention is found in Chapter 7, Section 4, of the Decree on Measures against Pollution from Ships.[32] The Decree specifies that, for cases identified in Article I(1) of the Intervention Convention and the Protocol thereto, Articles I(2), II, III and V of the Convention must be taken into account when Section 5 of the Act on Measures against Pollution from Ships is being implemented. Hence the Decree directs the implementation of national material law facilitating interventions and links this implementation to the provisions in the Convention.

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27 Räddningslag (379/2011).

28 Government Bill No. 1972:106.

29 On incorporation of treaty law in Sweden, see Joakim Nergelius, *Svensk statsrätt*. Lund: Studentlitteratur, 2014, p. 171 f., where the system is explained against the background of the European Convention on Human Rights, which is probably one of the few treaties incorporated as such, implying for the Intervention Convention that this is not the case.

30 Lag (1980:424) om åtgärder mot förorening från fartyg. The Intervention Convention was published in the series International Agreements of Sweden in SÖ 1973:2 and the Protocol in SÖ 1976:12.

31 Chapter 11 of the Act contains intervention measures for foreign ships concerning interrogation and other pre-trial measures.

32 Förordning (1980:789) om åtgärder mot förorening från fartyg. In addition, there is a Decree on Removal of Wrecks that Prevent Shipping or Fishing (2011:658).

In addition to national law, the European Union has activated itself as a law-maker in the area of intervention, although the EU is not a party to the Intervention Convention. According to Article 19(1) of the Directive 2002/59/EC of the European Parliament and of the Council of 27 June 2002 establishing a Community vessel traffic monitoring and information system and repealing Council Directive 93/75/EEC,[33] which deals with measures relating to incidents or accidents at sea, Member States shall, in the event of incidents or accidents at sea as referred to in Article 17 of the Directive, take all appropriate measures consistent with international law, where necessary to ensure the safety of shipping and of persons and to protect the marine and coastal environment. Article 19 of the Directive is thus apparently an independent exercise by the EU of legislative powers of the European Union, not an implementation measure in relation to the Intervention Convention under Article 218 TFEU.

As a consequence, Member States have a separate duty under EU law to take appropriate measures in relation to an incident, because according to Article 3 of the Directive, the term "relevant international instruments" include, *inter alia*, the International Convention relating to Intervention on the High Seas in Cases of Oil Pollution Casualties, 1969 and its 1973 Protocol relating to Intervention on the High Seas in Cases of Pollution by Substances other than Oil. Therefore, instead of formal incorporation of a treaty in EU law by means of a decision of the Council of Ministers, the Directive appears to utilize a method of material incorporation of a (non-ratified) treaty, perhaps perceived as customary international law binding on the EU, by means of reference in a legislative act. In the former case, the Convention would have received a heightened position in the hierarchy of norms of the EU, one between the primary law and secondary law, but because the latter situation is the case, the provisions concerning appropriate measures remain at the level of secondary law.

[33] Official Journal L 208, 05/08/2002 P. 0010 – 0027.

3 Material Powers of Intervention

3.1 Denmark: Relatively Specific Powers in an Act

In Denmark, the possibility of intervention is mentioned in Sections 42, 42a and 43 of the Act on the Protection of the Marine Environment and placed in a chapter of the Act entitled "*Indgreb*".[34] The term used in the chapter heading is thus the same as the Danish term for intervention in the ratified Intervention Convention (although other forms of intervention than those on the basis of the Intervention Convention are also included in the chapter). On the basis of the Act, it appears that competence to take intervention measures against vessels is divided between the Minister of Defence and the Minister of the Environment and Foodstuffs, in particular as Section 43b of the Act grants to the latter Ministry the normative power to establish more specific rules on the use of Sections 42 and 43 after negotiations with the former Ministry. According to information from the Ministry of Environment and Foodstuffs, no such additional rules for the implementation of the said sections have been issued by the Ministry.[35] This means that the intervention competence is, in reality, entirely a matter for the Ministry of Defence. This has been the case since 2000, when the administrative responsibilities in this area were transferred from the Ministry of Environment and Foodstuffs to the Ministry of Defence,[36] a change necessitated by practical issues, such as

[34] As of 1 May 2003, legislative competence in the area of marine environment of the Faroe Islands is held by the Legislative Assembly of the Faroe Islands on the basis of an agreement between the Danish government and the government of the Faroe Islands of 17 January 2003. According to Section 68(1), the Danish Act on the Protection of the Marine Environment is not applicable in Greenland, unless implemented there pursuant to a Royal Decree, which has taken place by Decree nr 1035 of 22 October 2004, recognizing those exceptions that the specific conditions of Greenland indicate.

[35] E-mail message on 26 October 2017 from Director Anne-Mette Hjortebjerg Lund (on file with the author).

[36] On the administrative agreement between the two ministries on the transfer of responsibilities, in effect from 1 January 2000, see Aftale mellem Miljø- og Energiministeriet og Forsvarsministeriet om forsvarets opgaver og beføjelser på havmiljøområdet som

the lack of sufficient capacity to act and the lack of an around-the-clock emergency function at the Ministry of Environment and Foodstuffs.

Situations foreseen in the Intervention Convention are coveredin Section 43, where subsection 1 grants to the Minister of Defence authority to impose the mild end of the range of measures, such as to forbid the ship to continue its voyage or other activities or to order that the voyage or other activities shall comply with particular instructions, provided that a prohibited spill from the ship has taken place or could take place and the prohibition or order is necessary for preventing or countering pollution that may lead to serious damage to the maritime environment. According to the provision, these are measures that *can* be taken, which leaves a large amount of latitude to the Minister of Defence in deciding whether measures should be taken and, if so, which measures. An implementation manual for action against oil pollution and other harmful pollution in the sea also lists the measures, but with greater specificity, such as emptying the tanks of the ship and bringing the ship afloat from being grounded.[37]

In Section 43, subsection 2, of the Act a more open-ended characterization of measures is given by providing that the Minister of Defence *can* (Dan.: "kan") take measures in addition to those mentioned in subsection 1, if it is necessary to prevent or to counter pollution that may cause serious damage to the marine environment. It appears that this provision makes available to the Minister of Defence the more stringent end of the range of possible measures, but by using the term can, the provision also opens up a field of discretion for the Minister of Defence as to what the exact measures applied might be. Particularly intrusive measures would thus not be delegated to the JCAF, which is perhaps also indicated by the delegation provision, which only makes reference to Sections 1 and 3 of the Decree of the Minister of Defence, not to Section 2.[38]

overført fra Miljø- og Energiministeriet, established on the basis of the Royal Resolution of 11 June 1999.

37 Beredskapsplan for det statslige danske beredskab til bekaempelse af forurening af havet med olie og andre skadelige stoffer – Beredskapsmanual (del II), pp. 102 f.

38 See Section 1, para. 9, of Bekendtgørelse om henlæggelse af opgaver og beføjelser efter lov om beskyttelse af havmiljøet til Forsvarskommandoen, BEK nr 992 af 06/11/2000. A clean-up is at the local level the responsibility of local rescue services.

According to Section 43, subsection 3, of the Act, decisions concerning prohibitions or injunctions on the basis of subsections 1 and 2 must be brought to the attention of the captain of the ship or the owner or user of the ship as soon as possible. Such prohibitions or injunctions can be issued orally, but must as soon as possible thereafter be issued in writing, and must provide information about any conditions imposed for release of the ship. Under Section 51a of the Act on the Protection of the Marine Environment, decisions of this kind can be appealed to the Appeals Board of Maritime Matters within four weeks from the decision. However, the more concrete instructions in the implementation manual, concerning the available measures, suggest an intention that such measures should be used rarely or never. The manual specifically states that it is not expected that exercise of public power should take place in relation to interventions for the protection of the marine environment.[39] The assumption seems to be that instructions by the competent authorities are followed without there being any need to issue formal decisions. The Act nevertheless foresees formal decisions, and if the party subject to the decision fails to comply, a variety of administrative consequences, such as administrative fines, can follow.

3.2 Sweden: Provisions in Act with Implementation Guidance in Decree

The Swedish Transport Agency (or another public authority identified by the Government, which has not occurred, except in the case of the Coast Guard on a temporary basis; see below) is empowered, under Ch. 7, Section 5(1) of the Act (1980:424) on Measures Against Pollution from Ships to issue those prohibitions and obligations that are necessary to prevent or limit pollution in situations where oil or some other harmful substance has been discharged from a ship or if there is reason to believe that this will happen. In addition, it is necessary that Swedish territory, Swedish air-space or other Swedish interests are at risk of suffering

[39] Beredskapsplan for det statslige danske beredskab til bekaempelse af forurening af havet med olie og andre skadelige stoffer – Beredskapsmanual (del II), p. 106.

significant damage. The provision lists the measures that can constitute prohibitions and obligations as follows: the prohibition of departure or continued voyage of the ship; the prohibition of commencement or continuation of loading, unloading, lightering or bunkering; the prohibition of the use of certain equipment; the obligation for the ship to follow a certain course; the obligation for the ship to sail into or depart from a certain port or other site; obligations concerning the steering or operation of the ship; and the obligation to lighter oil or other harmful substances.

Again, these measures are ones that *can* be ordered (Swe.: "kan"), but the explicit list of measures appears to be more limited than in the case of Denmark and Finland. Certainly, this list covers the lighter end of measures and also some more intrusive measures, and it seems that this list is the most specific in comparison with Denmark and Finland. The effect of the enumeration of measures is apparently that the Swedish Transport Agency has to choose the appropriate measure from among the listed options. However, the most serious measures are not at all indicated in Swedish law in the same manner as in Denmark or Finland, because the list indicates that the range of measures is limited to those that do not imply the exercise of physical force in relation to the ship. This would also seem to mean that the enumeration falls short of providing a basis in law for all those measures that are implied by Article I(1) of the 1969 Intervention Convention, including the complete destruction of the ship.[40] For this reason, it might be possible to argue that the transformation into Swedish law of the material provision of the Convention is not complete.

Guidance on the interpretation of Ch. 7, Section 5, of the Act is included in Ch. 7, Section 4, of the Decree (1980:789) on Measures against Pollution from Ships. According to the Decree, Articles I(2), II, III and V of the Convention have to be taken into account when Ch. 7, Section 5, of the Convention is implemented. However, none of these provisions of the Convention specify in any way the measures that can be taken, but have

[40] It was confirmed by Mr. Pekka Piirainen, Co-ordinator for the Survey and Inspection Unit of the Transport Agency, in a telephone interview on 21 November 2017 that the Swedish Transport Agency would not have the power to order, e.g., the complete destruction of the ship.

instead the function of limiting the sphere of action of the coastal State by requiring certain consideration and consultation by the State proposing to undertake measures against a ship. The Decree does not, therefore, provide any additional basis for intervention measures in Sweden.

The relevant legal provisions appear to depart from the understanding that any decision issued on the basis of the powers listed in the relevant provision is issued in writing as an administrative decision. According to Ch. 7, Section 7, decisions according to Ch. 7, Section 5 shall contain information on what measures should be taken by the party to which the decision is issued in order to remedy the situation, and issuances shall also include the time within which the measures are to be effectuated. According to Section 7a, a prohibition of departure of a ship on the basis of, *inter alia*, Section 5, shall stay in force until the required remedial action has taken place and payment has been made or a guarantee issued for the costs of detention of the ship which have been established as falling to the shipowner. In addition, Ch. 7, Section 8, creates the legal basis for the issuance of administrative fines on the basis of Section 5, which provides that a directive or a prohibition joined with an administrative fine can be issued to the captain of the ship or the shipowner. In addition, Ch. 7, Section 9, creates the additional possibility that if the party defaults on a measure ordered on the basis of Section 5 (or if the party cannot be reached without a delay that jeopardizes the aim of the decision), the Transport Agency may execute the measure at the cost of the shipowner. In practice, parties follow all directives and prohibitions, which means that there is normally no need to use administrative force of this kind.[41] However, the addressee of the decision of the Transport Agency is entitled under Ch. 9, Section 2, to lodge appeals against the decisions of the Transport Agency at a general administrative court, with the possibility

[41] As pointed out by Mr. Pekka Piirainen, Co-ordinator for the Survey and Inspection Unit of the Transport Agency, in a telephone interview on 21 November 2017, administrative fines can be used to make potentially defaulting parties to function as the Transport Agency wants, but in practice there is no need to do so, because everybody follows the prohibitions and issuances. In case a prohibition of use of a ship is issued, the Transport Agency recovers all the costs from the shipowner before the prohibition is withdrawn.

of further appeals to the administrative court of appeal, provided that the court grants leave to appeal.

3.3 Finland: Unspecific Powers in an Act

In Finland, Section 36b of the Rescue Act, a general enactment on rescue activities of all kinds, including regular fires in apartment blocks, etc., provides that when a ship causes a situation where a risk of an oil spill or leakage of any other noxious substance is apparent, the Border Guard can order such rescue or other measures directed at the ship and its cargo as are considered necessary to prevent or limit the pollution of water. The powers of the Border Guard are in principle formulated as optional, because it *can* (Fi.: "voi"; Swe.: "kan") order such measures, and not as unconditional in a way which would indicate that the Border Guard would have an obligation to take action. However, the context of Section 36b of the Rescue Act reveals a specific obligation for the Border Guard to take action under Section 32(3) of the Rescue Act, supported by the provision in Section 20 of the Constitution of Finland concerning responsibility for nature.[42]

Section 32(3) states that the public authority leading rescue efforts related to oil and chemical damage must without delay commence measures to prevent or limit damage by taking all necessary measures that do not result in expenses and damages evidently disproportionate to the economic and other values that are threatened. According to the provision, the prevention measures must be carried out so that no unnecessary complication is caused for reinstating nature and the environment in the condition in which it was prior to the accident. The obligation of Finnish authorities to take measures is also indicated by the Government Bill that led to the enactment of the original 1979 Act on the

[42] Section 20 – Responsibility for the environment: "Nature and its biodiversity, the environment and the national heritage are the responsibility of everyone. The public authorities shall endeavour to guarantee for everyone the right to a healthy environment and for everyone the possibility to influence the decisions that concern their own living environment."

Prevention of Pollution from Ships (300/1979) (PPS Act),[43] which appears to proceed from an understanding that, prior to the enactment of the 1979 Act, measures concerning vessels had, with the exception of damages caused by oil, depended on the shipowner or the insurance company. The implication of this is that from 1979 on, there is a legal obligation on the part of the authorities of Finland to react, and Government Bill 18/2018 connects the provision explicitly to the Intervention Convention.[44]

The nature of measures envisioned by the law-maker is, however, not clear on the basis of Government Bill 18/2018, because according to the Bill, the provision in the Rescue Act corresponds, in the main, to the 2009 OPR Act and its provisions on authority to take measures. However, the nature of the measures is not spelled out in that Act, nor in Government Bill 248/2009 concerning the 2009 OPR Act, as according to that Bill, the provision corresponds, in general, to the 1979 PPS Act.[45] This former Act envisioned originally, when being enacted on the basis of Government Bill 228/1978,[46] that such measures, as mentioned in the Bill, include the salvage of the ship, the unloading of the cargo and in extreme cases even the destruction of the vessel and its cargo by blowing it up. It is not clear on the basis of the Government Bill to the 1979 Act what positive consequences for the environment would result from the complete destruction of a wreck,[47] but the examples included in the Government Bill indicate that a broad range of different potential measures should exist. The measures were, however, not explicitly listed in the 1979 Act. What the measures could consist of is, nevertheless, blurred by the fact that it is not Government Bill 248/2009 to the OPR Act nor Government Bill 18/2018, that is, the bill to the current Act, which lists them, but instead the bill to the 1979 PPS Act, which is long since repealed. In any event, the precise powers to undertake measures

43 Hereinafter: the PPS Act. See Government Bill 228/1978, p. 6.

44 Government Bill 18/2018, p. 52.

45 Government Bill 248/2009, pp. 107–108.

46 Government Bill 228/1978, p 6.

47 See Hooke 1989, p. 481, dealing with the *Torrey Canyon* disaster in 18 March 1967, when the destruction of the vessel and its cargo was ordered to prevent an even greater environmental catastrophe.

are not delineated in the current Rescue Act, except that according to Government Bill 18/2018, the supervisory authority can, on the basis of its special knowledge, assess the stability and other aspects of the condition of the vessel, determine whether the measures that are planned cause danger to other traffic and whether it is possible to move the vessel from the site of the accident.[48]

The somewhat unclear situation is nevertheless clarified to an extent by means of Section 36a of the Rescue Act, which outlines the powers of the accident response authority. According to that provision, where necessary for preventing and responding to oil spills or chemical spills from ships, and for limiting the consequences of such spills, the accident response authority shall be entitled to 1) temporarily commandeer any equipment and supplies suitable for accident prevention and response, any necessary communications and transport equipment, machines and tools, as well as premises and space needed for loading, unloading or temporary storage; 2) disembark and move about on another person's property; 3) order earth and water construction measures to be undertaken on another person's property; 4) limit waterborne traffic; and 5) *take other measures necessary* for preventing and responding to oil spills and chemical spills from ships. As can be seen, this list contains many powers that interfere with the rights of individuals.[49] In spite of this listing, the contents of para. 5 should still be understood in the context of the Government Bill to the 1979 PPS Act, because the revoked Act of 1979 was originally enacted to implement the Intervention Convention. The normative situation concerning the range of measures is not satisfactory if at least part of the definition must be retrieved from the *travaux preparatoires* of a law that was repealed a decade ago.

On the basis of Section 36b of the Rescue Act, it is for the Finnish Border Guard to identify the measures to be taken, which in their most lenient form could be to restore the ship to its owner for ordinary use

48 Government Bill 18/2018, p. 51.

49 However, the 2018 amendments to the Rescue Act have not been evaluated in the Constitutional Committee of the Parliament of Finland for their compatibility with, e.g., the right to property in Section 15 of the Constitution of Finland.

and in their most extreme form might lead to the complete destruction of the ship and a total loss for the owner (although the latter is specified in the Government Bill leading to the repealed PPS Act of 1979, not in the current law). Measures between these extremes include emptying possible oil or other containers and tanks that are on board a sunken ship, the isolation of the location of the incident by use of oil restraints on the surface of the water and active cleaning measures for the surface of the water, shores, and even the sea floor (if technically possible),[50] the cleaning of birds as well as the recovery of the ship and the cargo.[51] The measures can in principle be ordered on the basis of an administrative decision or order of the Border Guard, but the Border Guard is expected to negotiate with the Finnish Traffic and Communication Authority and to hear the relevant environmental authority before taking measures, unless the exigencies of the situation indicate otherwise.

In its capacity as a leading agency for rescue operations, the Border Guard coordinates preparations for operations the planning of which shall, on the basis of Section 47(2), include public authorities that are under the duty to give executive assistance to the Border Guard. According to Section 46, para. 13, of the Rescue Act on co-operation in rescue operations, the Finnish Environment Centre, the Traffic and Communications Agency and the Defence Forces participate in the prevention of damage caused by oil spills and chemical discharge from vessels. The manner of their cooperation is detailed in the Rescue Act and in other legislation.

The Border Guard shall, under Section 34(2) of the Rescue Act, appoint the person in charge of the rescue operations concerning oil spills and discharge of chemicals from vessels when such incidents happen in the territorial waters of Finland or on the open sea.[52] It is, however, possible on

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50 Jouko Tuomainen, *Vastuu saastuneesta ympäristöstä*. Helsinki: WSOY Lakitieto, 2001, p. 283.

51 According to Tuomainen 2001, p. 286, immediate prevention and cleaning measures taken by public authorities do not require any additional environment permit.

52 The territorial waters of Finland consist, based on Section 3 of the Act on the Borders of the Finnish Territorial Waters (463/1956), of inner and outer territorial waters. The former are parts of the relevant municipality (and thus belong to the jurisdiction of a

the basis of Section 34(1) of the Rescue Act that the regional Emergency Services Authority (that is, the fire brigade), which is present in each region, ten of which are coastal regions, appoints its own rescue leader to deal with oil spills and clean-up efforts in the inner waters and on the actual coastline. How the exact distribution of authority between the Border Guard and the Emergency Services Authority is managed is not spelled out, and therefore, there appears to exist a territorial delimitation of competence of the Border Guard to the outer waters of Finland, while the Emergency Services Authorities are in charge of the inner waters. This may be confusing from the point of view of the implementation of the Intervention Convention and would probably warrant clarification in the provisions of the Rescue Act.

As explained above, a person in charge of rescue operations has, on the basis of Section 36a, certain explicit powers, but also the power under para. 5 to take other necessary measures to prevent damage from an oil spill or chemical discharge from a vessel and also, according to subsection 2, to appropriate necessary equipment and request the assistance of persons in using such equipment. The person in charge of rescue operations has, according to Section 34(1) of the Rescue Act, the legal liability of a civil servant, which in this case should refer, in particular, to the criminal liability of a civil servant, as outlined in Chapter 40 of the Penal Code (39/1889). On the basis of Section 1.2. of the Order of the Border Guard on the System for Leading Rescue Operations regarding Maritime Rescue and Rescue in relation to Environmental Damage (see section 4.3.2 below),[53] a specific Rescue Commander (RC) exists in each of the two Maritime Rescue Coordination Centres (MRCC). Therefore,

regional Emergency Rescue Service) and the latter are also called the territorial sea. The outer border of the inner territorial waters is constituted by a border-line drawn via base points. These base points are the outermost points of the territory, sometimes on the mainland, but in most cases on islands, islets or rocks. The outer territorial waters or the territorial sea extends itself 12 nautical miles beyond this base-line.

53 Order of 18 December 2018 on "The System for Leading Rescue Operations regarding Maritime Rescue and Rescue in relation to Environmental Damage" (Meripelastustoimen ja avomerialueen ympäristövahingon pelastustoiminnan johtamisjärjestelmä, in force from 1 January 2019 to 31 December 2023; RVL1834849; 04.01.40; RVLDno-2017-2123; RVLPAK C.16).

this RC can be viewed as the person in charge referred to in Section 34(2) of the Rescue Act, but as pointed out above, an RC may be appointed by the regional Emergency Services Authority for the rescue operations in the inner waters, in which case the RC is a civil servant of the Emergency Services Authority. However, we will here only consider the RC of the Border Guard.

On the basis of Section 4(3) of the Act on the Administration of the Border Guard, the Chief of the Border Guard may, however, take up a matter from a subordinate official and make a decision about it, while Section 5(2) places decision-making authority on matters of social and economic importance with the Ministry of the Interior. In addition, Sections 7 and 8 of the Act support decision-making by which matters of a military nature are forwarded to the President of the Republic or, through the President, to the Council of State for a decision. Furthermore, decisions involving armed response with armaments that are more powerful than a staff person's personal weapon are made pursuant to the procedure established in Section 32(2 and 3) of the Act on the Armed Forces (551/2007), which means that the decision should be made by the President or the Council of State. When such a decision is made, the Minister of the Interior and the Chief of the Border Guard have the right to be present and give their opinion about the matter. There is thus support in various provisions for forwarding intervention matters that require military grade action to the political decision-makers of the state, to the Minister of the Interior and even to the entire Council of State. If an incident were to take place, say, around the island of Utö in the northern part of the main basin of the Baltic Sea, it is likely that the decision to use the stronger measures envisioned on the basis of the Intervention Convention would not be made at the MRCC of Turku/Åbo, but at the governmental level, probably by the President in the Council of State.

In principle, administrative decisions should normally be given in written form pursuant to the Administration Act (434/2003), but it appears that under the exceptional circumstances of situations foreseen in the intervention context, oral decisions would also be possible under Section 43 of the Administration Act. Such decisions should, however,

when circumstances permit, be issued in writing. Because the Border Guard is not a civilian authority, but organized in a military manner, it is possible to argue that a decision on intervention measures is not an administrative decision at all, but an order of a military nature which is, under Section 4(1) of the Administration Act, excluded from the application of the provisions in the Act. However, because the impact of such decisions is directed at private parties and their property during times of peace, a decision of the Border Guard about intervention measures should properly be understood as an administrative decision. This is supported by Section 34(4) of the Rescue Act, according to which the leader of the rescue operation shall make an explicit decision about the commencement and termination of the rescue operation, if such a decision is necessary for the clarification of liabilities and powers of the different public authorities and parties. The decision shall be communicated to the relevant public authorities and parties as soon as is possible and, if requested, the decision must be confirmed in writing.

At the same time, it is evident on the basis of Sections 6 to 11 of the Act on the Border Guard that decision-making within the Border Guard is circumscribed by a number of administrative principles, namely objectivity, impartiality, conciliation and proportionality as well as by the principle of least harm, and the principle of using powers only for their established purpose. Also, if there is a range of alternative actions, a border guard must choose the alternative that is best for the fulfilment of constitutional rights and human rights. Thus even if the Administration Act were not applicable, in its decision-making concerning intervention measures the Border Guard would not be operating entirely on the basis of its own discretion as to the range of measures. In a situation where the President and the Council of State would have to make intervention decisions at the more serious end of the range of measures, the Administration Act might again become applicable, unless excluded by the definition of the decision as a military command matter or military order.

In principle, the decisions of the rescue authority are appealable under Section 104(2) of the Rescue Act. With reference to prompt action

that needs to be taken,[54] Section 104(3) provides that even if there is an administrative appeal, which would normally delay the implementation of a decision until a final court decision has been handed down decisions of the rescue authority can be implemented immediately after the decision has been made. Section 36b departs from the position that the relevant parties should be involved in the measures by providing that the Border Guard shall negotiate with the shipowner, the salvor and the representatives of the insurance company, but only if such negotiations can take place without undue delay. The need for quick action in the environmental context would also, on the basis of Section 31(2), para. 4 of the Administration Act, create a legal basis for not hearing the parties.[55]

Section 49(1) of the Rescue Act, dealing with executive assistance to the Border Guard from other public authorities, mentions that upon request and as far as possible, state authorities are obliged to provide executive assistance to the accident response authorities. The Rescue Act does not mention any public authorities from whom such executive assistance could be requested, but the Government Bill mentions that the Finnish Defence Forces have been approached by public authorities when executive assistance has been needed,[56] which seems to indicate the possibility of using the army for implementing measures (see below). However, the provision requires that the Government regulates such instances by a Decree. It is thus not entirely clear on the basis of the provision that the full force of the state could be put behind whatever measures are ordered by the Border Guard,[57] even though the result of

54 Government Bill 228/1978, p. 6, underlines the fact that the measures to be undertaken should be extremely swift.

55 According to the provision, an administrative matter can be decided without hearing the party if the delay caused by the hearing may result in significant damage to the health of human beings, public safety or the environment.

56 Government Bill 18/2018, p. 54.

57 According to the former administrative system within this area in effect until the end of 2018, explained in the Letter of Instruction of the Finnish Environment Institute of 15 December 2006 (SYKE-2002-P-126-044), a request of executive assistance presented by the Duty Officer of the Institute was valid and official even if made by phone and the Institute was be liable for such a request. The Duty Officer should have confirmed the request by a fax message or in some other way, although the validity of the request of executive assistance does not require this. In addition, the Letter makes the point

the actions of the Border Guard could, under Sections 36a and 36b of the Rescue Act, be the removal of the wreck and cargo or the rendering harmless of the wreck or cargo.[58]

A more specific legal basis for engaging the Defence Forces as a provider of executive assistance is, however, found in Section 79 of the Act on the Border Guard (578/2005), which prior to April 2019 ruled out the use of military force in executive assistance to the Border Guard. However, from April 2019 on, that restriction concerning the use of force is repealed, although on the basis of the relevant Government Bill, the context in which the repeal has an impact is not environmental,[59] but general in relation to border security and particularly geared towards responses towards threats at harbours resulting from terrorism. Nonetheless, the general regulation of executive assistance from the Defence Forces to the Border Guard is more permissive than it used to be. According to Section 78(2), a request for executive assistance is decided by the chief of the administrative unit of the Border Guard or a specifically designated border guard who as a minimum would have the rank of lieutenant.

that the Finnish Environment Institute should have covered the expenses caused by a request of executive assistance on the basis of a bill presented by the public authority that has given executive assistance. See also Peter Wetterstein, *Redarens miljöskadeansvar*. Åbo: Åbo Akademis förlag, 2004, p. 327, who concludes that the Act gives the public authorities broad powers to take measures. Tuomainen 2001, p. 276, concludes that the public authorities have been granted fairly broad powers to carry out damage control and other measures and that there exists no uncertainty about the right to act of public authorities. It should be taken into account that at least remotely, there could emerge a conflict with the protection of property under Section 15 of the Constitution. When balanced against Section 20 of the Constitution on responsibility to nature, especially in an emergency situation caused by a sunken ship, such a conflict should not arise.

58 However, it should be stated that prior to the transfer of competence to the Border Guard, the Finnish Environment Institute appears not to have used its powers even once under Section 6 of the PPS Act to make a formal decision concerning measures. It seems that the threat of such measures has the (unintended or perhaps even intended?) side-effect that the responsible party takes voluntary action. Nonetheless, this article treats the matter as if such decisions could be made. A similar arrangement with a public authority furnished with broad discretionary powers is in place in most if not all EU member states.

59 Government Bill 201/2017, pp. 19, 51–52.

It is to be noted that intervention measures on the basis of Sections 36a and 36b are not referred to in Section 105 of the Rescue Act, where the use of administrative force is regulated. It appears that the Border Guard cannot issue administrative fines to shipowners or captains, nor issue an administrative threat that a measure is taken with the risk that the shipowner or the captain will later be required to pay the costs of measures. This is a regrettable omission that may limit the efficiency of the measures that can be ordered.

3.4 European Union: Reminding the Member States of Measures

EU law also has some bearing on the measures that can be taken in case of an oil spill of the kind regulated through the Intervention Convention (although the EU is not a party to the Convention, as explained above). Article 19(1) of the Directive 2002/59/EC of the European Parliament and of the Council of 27 June 2002, establishing a Community vessel traffic monitoring and information system and repealing Council Directive 93/75/EEC,[60] envisions measures from Member States relating to incidents or accidents at sea. According to the provision, Member States shall, in the event of incidents or accidents at sea as referred to in Article 17, take all appropriate measures consistent with international law, where necessary to ensure the safety of shipping and of persons and to protect the marine and coastal environment.

"All appropriate measures" is a very wide definition of the powers that a Member State might use in case of an incident, but Article 17 contains a reference to Annex IV of the Directive, which sets out a non-exhaustive list of measures available to Member States pursuant to Article 19. Appropriate measures include restricting the movement of the ship or directing it to follow a specific course; giving official notice to the master of the

[60] Official Journal L 208, 05/08/2002 P. 0010 – 0027. According to Article 3 of the Directive, the term "relevant international instruments" include, *inter alia*, the International Convention relating to Intervention on the High Seas in Cases of Oil Pollution Casualties, 1969 and its 1973 Protocol relating to Intervention on the High Seas in Cases of Pollution by Substances other than Oil.

ship to put an end to the threat to the environment or maritime safety; sending an evaluation team aboard the ship to assess the degree of risk, helping the master to remedy the situation and keeping the competent coastal station informed thereof; and instructing the master to put in at a place of refuge in the event of imminent peril, or causing the ship to be piloted or towed. It appears that the measures envisioned by the Directive are towards the milder end of the range of possible measures (and in this respect similar to the Swedish provisions), because they do not contain any exceptional measures. At the same time, reference to the term "appropriate" may indicate that proportionality considerations are relevant in choosing the relevant measure in a specific situation. Nevertheless, the listing in the EU Directive is non-exhaustive, which should mean that other measures, too, could be considered, as long as they are in compliance with the relevant international law, that is, with the 1969 Intervention Convention.[61]

4 Institutional Locus of the Intervention Power

4.1 Denmark: Minister of Defence with Delegation to the Joint Command of Armed Forces

The fact that the intervention powers of Section 43 of the Act on the Protection of the Marine Environment are entrusted to the Minister of Defence means that the institutional locus of those powers is the Ministry of Defence, at least in principle. However, the operative tasks are not exercised by the Minister, but have been delegated to the Joint Command of

[61] However, a significant number of EU Member States have not ratified the Intervention Convention, among the land-locked countries even several important maritime nations: Austria, Cyprus, the Czech Republic, Greece, Hungary, Lithuania, Luxembourg, Malta, Romania and Slovakia.

the Armed Forces (JCAF).[62] The main delegating provision is the Decree of the Minister of Defence on the Transfer of Tasks and Competences on the Basis of the Act to the Command of the Armed Forces.[63] Section 1, para. 9, of the Ministerial Decree contains those powers that are identified in Section 43 of the Act, at least those explicitly mentioned in subsection 1. It appears that further measures to implement the intervention regime, that is, the more serious end of the range of measures mentioned in subsection 2, might be reserved to the Minister of Defence and thus require a political decision by the Minister and, by extension, by the Government of Denmark. The carrying out of the tasks of the JCAF is further specified in an internal Directive of the JCAF.

In its capacity as the responsible agency in intervention matters, the JCAF simultaneously functions as the Maritime Assistance Service (MAS) of Denmark. It is situated in Copenhagen and has an around-the-clock capacity to function as the point of contact in order to carry operational responsibility. Amongst its staff, the MAS function of the JCAF has one daily leader, one daily MAS, seven leaders of watch, 14 marine assistants (marine specialists) and two administrative officers.

When an incident takes place, there is an obligation on the part of the captain of the ship, the shipowner, the pilot and other parties concerned to report the incident to the JCAF,[64] and reports can also arrive from public authorities, such as the Coast Guard. Such a report must contain the name

62 Section 1, para. 9, of Bekendtgørelse om henlæggelse af opgaver og beføjelser efter lov om beskyttelse af havmiljøet til Forsvarskommandoen, BEK nr 992 af 06/11/2000.

63 According to Section 11 of the Defence Act (LBK nr 582 af 24/05/2017), the Chief of Defence has, on the basis of more specific provisions of the Minister of Defence, command over the army, the marine and the air force. See also the Ordinance of the Danish Maritime Board on the transfer of certain powers on the basis of the Maritime Act, such as measures in relation to grounding, estoppel, etc., to the then Marine Operative Command, Bekendtgørelse om henlæggelse af visse beføjelser på det maritime område til Søværnets Operative Kommando of 18 May 2006, BEK nr 443 af 18/05/2006. In Greenland, the Arctic Command is the operative agency, but in case of an incident, it notifies the administrative agency, which is the JCAF. For the Faroe Islands, the tasks are the responsibility of the Faroese Government on the basis of the Faroese Act on Maritime Environment (nr 59 of 17 May 2005), but the Faroese Government may request assistance from the JCAF.

64 Bekendtgørelse 2016-06-27 nr. 874 om indberetning i henhold til lov om beskyttelse af havmiljøet

of the ship, its position, the scope of the pollution and an estimation of the quantity. Upon receiving a report of an incident such as a grounding, the MAS estimates the risk of pollution and takes the necessary action, such as the appointment of an On-Scene Commander for the concrete management of the incident.[65] The JCAF/MAS has access to around 30 ships or boats for oil protection tasks and it performs airborne surveillance by regular airplanes contracted for the task, by helicopters and jet planes of the Danish Air Force and by satellite surveillance. Although the F-16 jet planes of the Danish Air Force are from time to time used for oil reconnaissance, it is doubtful whether the JCAS/MAS would have authority to use such planes for elimination operations of the kind that the UK Government ordered in 1967 in relation to the *Torrey Canyon* incident. For such operations, a decision by the Minister of Defence or the Government of Denmark would be required.

4.2 Sweden: Traditional Model of Independent Agency

In Sweden, the Transport Agency is empowered, under Ch. 7, Section 5(1) of the Act (1980:424) on Measures Against Pollution from Ships, to issue such prohibitions and obligations as are necessary to prevent or limit pollution in situations where oil or some other harmful substance has been discharged from a ship or if there is reason to believe that this will occur.[66] The Swedish Transport Agency is an independent agency within the state administration and has, according to the Decree (2008:1300) on the Organization of the Transport Agency, a board and a Director General (Sections 15, 16, 17). This means that the agency is not within the framework of direct political decision-making of the Government

[65] A National On-Scene Commander for international incidents (and a Supreme On-Scene Commander to be in charge of all those National On-Scene Commanders that might be involved in the matter) may be appointed if the incident involves two or several states.

[66] The Transport Agency can also issue further provisions of a general nature, such as the Transport Agency's Provisions and General Advice (TSFS 2010:96) on Measures Against Pollution from Ships, but this particular set of rules and advice does not seem to have any bearing on such situations of intervention dealt with in this article.

of Sweden, including the Ministry of Commerce, although the agency is formally placed under that Ministry. The Transport Agency thus exercises its powers independently and under the constitutional principle of the prohibition of ministerial direction and guidance.[67] According to Section 2(2) of the Decree, oversight by the Transport Agency shall, in accordance with the applicable provisions elsewhere in the law, be exercised, *inter alia*, over civilian maritime activities, in particular as concerns safety at sea. The Transport Agency is, of course, under government control, for instance, in the sense that the Government can, on the basis of Section 5 of the 1980 Act, determine by Decree that some other agency than the Transport Authority shall carry out intervention tasks, but neither the Government nor the Ministry can make decisions on intervention measures, only the Transport Agency or some other public authority designated by Decree.

The Transport Agency, which also functions as the Maritime Assistance Service, is situated in Norrköping. At the Agency, there is a Duty Officer who is in charge around the clock and receives indications of transport-related accidents of any nature, which within the maritime area could include groundings, collisions and other failures that could cause an accident.[68] Such indications would normally arrive at the SOS centre of the Transport Agency from the Joint Rescue Coordination Centre (which manages the Maritime Assistance Service, placed in Gothenburg), from the VTS system, from the Swedish Coast Guard or from shipowners. The Duty Officer contacts the relevant regional branch of the Transport Agency, situated in Stockholm, Gothenburg and Malmö, where an Emergency On-call Engineer is located. The Emergency On-call Engineer is dispatched to the site of the accident and can be assisted by other staff, such as a ship construction engineer. The Emergency On-call Engineer decides on the measures to be taken in consultation with the Duty Officer, issues the necessary documentation with orders

67 On the prohibition, see, e.g., Nergelius 2006, p. 240.

68 The office of the Duty Officer is actually created on the basis of Section 12 of the Decree (2006:942) on Crisis Management Planning and High Alert that was repealed in 2016.

and prohibitions, and has the final say at the practical level.[69] In practice, the parties concerned, in most cases the shipowner, always follow the instructions of the Emergency On-call Engineer. In addition, this officer can issue a so-called SITREP order allowing a ship to leave for repairs at a shipyard in another state.

However, the Coast Guard has authority under Section 3 of the Decree (1980:789) on Measures Against Pollution from Ships to issue decisions on the basis of Ch. 7, Section 5, of the Act on Measures Against Pollution from Ships, if the decision of the Transport Agency cannot be waited for because there is a need for expeditious measures to prevent, limit or combat pollution.[70] Hence the Coast Guard, with an around-the-clock service, has the task of containing the oil spill until the Transport Agency reaches the site. The Coast Guard also has the task of environmental clean-up and equipment such as boats for this task. Therefore, it seems that the measures which can be taken are organizationally divided between the Transport Agency and the Coast Guard so that the primary authority is with the Transport Agency, while the Coast Guard has complementary authority on site until the Transport Agency arrives and takes control of the incident.

4.3 Finland: Shift from a Civilian Authority to the Border Guard

4.3.1 An Historical Note: Independent Public Body with Statutory Powers as Intervention Enforcer

During the previous two decades, until the end of 2018, the intervention powers established in Section 25(1) of the Act on Oil Pollution Response

[69] According to Pekka Piirainen, Co-ordinator for the Survey and Inspection Unit at the Transport Agency (telephone conversation on 21 November 2017), the Transport Agency or its Duty Officer and Emergency On-call Engineer would not have powers to order, e.g., an aerial bombing of a ship in a situation comparable to the *Torrey Canyon* disaster.

[70] If the Coast Guard would have to make decisions on the basis of Ch. 7, Section 5, of the Act, it is necessary under Ch. 9, Section 1, of the Act that such decisions are immediately submitted to the Transport Agency for validation.

(the OPR Act), were accorded to the Finnish Environment Institute (the FEI). In its capacity as the intervention enforcer of Finland, the FEI was able to order the commencement of such rescue or other measures directed at a ship and its cargo as were considered necessary for preventing or limiting the pollution of water. The reason for the placement of powers of intervention enforcement with the FEI seems to go back to the re-organization of the Finnish environmental administration in the mid-1990s, when responsibilities were transferred from the former agency, the Board of Water and Environment, to the FEI, at which point the powers of the environmental administration were generally redistributed. It is probably fair to conclude that the FEI was left by default with oil pollution response tasks, as formalized by an amendment to Section 6 of the 1979 PPS Act, which now lives on as Section 25(1) of the OPR Act.[71] This may mean that the powers were never intentionally placed at the FEI; there are certainly no concrete reasons given in the Government Bill for such placement.

The Finnish Environment Institute is an independent public body in the central government of Finland, operating under the Act on the Finnish Environment Institute (1069/2009) and a Decree (1828/2009) of the same name. According to Section 1(1) of the FEI Act, the FEI is a research and development centre within the field of environmental matters, subordinated to the Ministry of Environment. The FEI supports the choice of objectives and means for sustainable development and for the implementation of environmental policy, but in addition has some tasks related to the use and protection of water resources which are within the scope of authority of the Ministry of Agriculture and Forestry. It also provides expert services for several other public authorities. Under Section 1(3) of the Act, the FEI carries out cross-disciplinary maritime research, is responsible for monitoring the condition of maritime territories and produces expert services within this field, but Section 1(4) makes it pos-

[71] See Government Bill 14/2000, pp. 5, 7, 9, leading up to the amendment of the PPS Act (489/2000). The Government Bill does not seem to contain any consideration of the anomaly that the FEI as a government body for research and development in the area of the environment would, at the same time, have the particular task of being the intervention enforcer in Finland.

sible to also grant other tasks to the FEI. In general, it would be fair to say that the FEI does not have any significant public powers within the field of the environment, but is instead a consultative expert body.

In fulfilling its particular task as the intervention enforcer, the FEI was able to take action directly on the basis of the provision in the OPR Act and was independent in its exercise of public powers as well as liable for the exercise of those powers as established in the rule of law principle in Section 2(3) of the Constitution of Finland. This means that neither the Government of Finland nor the Ministry of Environment could exercise those powers, nor could they interfere in the exercise of those powers by giving orders to the FEI in individual cases.

At the FEI in Helsinki, there was (and still is for other environmental purposes than intervention matters) a Duty Officer on constant stand-by every hour of the day, seven days a week. While the FEI was the implementing agency of Section 25(1) of the OPR Act, the practical decision-making in case of incidents was placed with this civil servant. An alarm system existed by means of which information about an incident was fed to the Duty Officer in a manner that could lead to the recognition of a problem that might require action under Section 25(1) of the OPR Act. When an oil spill was observed at sea, a report was given to the nearest Maritime Rescue Coordination Centre (MRCC/MRSC) via coastal radio, pilot or Coast Guard stations. The MRCC/MRSC then informed the Duty Officer at the FEI with a view to taking action on the matter. The Duty Officer had a number of tasks after an incident because he or she represented the FEI and acted on the FEI's authority until otherwise prescribed. He or she had the right to call for executive assistance from other authorities; to dispatch recovery vessels and equipment; to initiate, co-ordinate and manage recovery efforts and to appoint the leader of the response operation; to acquire other necessary materials or staff as well as to be responsible for providing information about the incident according to international agreements (e.g. HELCOM) and in general; to request international assistance and to initiate the required investigations.

In practice, the principle was that the wishes and requests of the Duty Officer were fulfilled even without formal decision-making on the basis

of Section 25(1) of the OPR Act, but formally, the Duty Officer was in charge of the salvage operations and was directly authorized to activate 14 ships and two airplanes (but not military aircraft). The Duty Officer could also activate the necessary resources for clean-up work on the basis of the OPR Act in order to limit damage caused by oil. Over the years, a number of incidents have taken place, but in practice, the use of the severe end of the range of powers was not needed. This means that it is not really possible to know whether or not the more intrusive end of the range of powers could have been used.

The FEI was able to order the commencement of such rescue or other measures directed at the ship and its cargo as would be considered necessary for preventing or limiting the pollution of water. This would seem to mean that the FEI, in practice the Duty Officer, had to perform an instant risk assessment of whether there was an apparent risk of oil spill or release of a noxious substance. The FEI also appointed, as provided in Section 5, subsections 2 and 4, of the OPR Act, the leader of the oil response. According to Section 10, subsection 1, para. 1, of the OPR Act, the FEI and the leader of the response measures would function as response authorities under the OPR Act as concerns measures against oil and chemical spills from ships. A particular person was thus designated on the basis of the Act for the response function when an incident had taken place.[72]

4.3.2 Intervention Tasks with the Border Guard within the Ministry of the Interior

As of the beginning of 2019, tasks in relation to intervention enforcement were transferred from the FEI to the Border Guard of Finland by means of amendments to the Rescue Act, whereby Section 36b places the responsibility for intervention enforcement with the Border Guard. However, it was already the case, on the basis of Section 27a, that the

[72] As pointed out in Section 10, subsection 2, the person leading the oil response is under criminal liability, and it is also pointed out in the provision that tort liability is regulated under the Damages Act.

Border Guard was generally in charge of rescue operations with respect to oil spills and chemical incidents involving vessels in the territorial waters of Finland and in the Finnish economic zone. The Government Bill leading to the change of host organization for intervention enforcement is not very explicit for the reasons behind the change, but it appears that the personnel transferred from the FEI to the Border Guard can, together with complementary training for personnel of the Border Guard reserved for marine rescue, ensure a better and more cost-efficient service on a 24/7 basis and an operative leadership for pollution prevention work.[73]

Organizationally, the Border Guard has a close relationship with the highest governmental powers of Finland, because on the basis of Section 5(3) of the Act on the Administration of the Border Guard (577/2005), the headquarters of the Border Guard is at the same time a department of the Ministry of the Interior. This means that the Border Guard is organizationally integrated with the highest echelon of government. This is apparent also on the basis of Section 3(1) of the Act: the Border Guard is a public authority that belongs to the central government and is under the direction and supervision of the Ministry of the Interior, where it is led by the Chief of the Border Guard. The Chief of the Border Guard leads, *inter alia*, those sections of the Border Guard that operate in the marine territories. These are the West Finland Coast Guard District (MRCC and at the same time MAS for Finland) located in Turku/Åbo and covering the northern part of the Baltic, the Åland Islands and the Gulf of Bothnia, and the Gulf of Finland Coast Guard District (MRCC) located in Helsinki and covering the Gulf of Finland. These Coast Guard Districts are thus regional units of the Border Guard for the protection of the marine borders of Finland. Under Section 6 of the Act, the Border Guard is internally organized in a military manner, and as pointed out above, intervention measures of such severity that they might lead to the destruction of a vessel and its cargo would most likely be decided by the President and the Council of State, as the Defence Forces would have to be engaged.

[73] Government Bill 18/2018, p. 28.

As described in Government Bill 18/2018,[74] the MRCC receives incident reports and immediately commences a marine rescue operation and an operation to prevent pollution from oil or chemicals, if there is a risk of environmental damage. For the practical implementation of this duty, the Chief of the Border Guard has issued an Order on the basis of Section 3(1) of the Act on the Administration of the Border Guard and on the basis of Section 2(2) of the implementing Decree (651/2005) about the internal organization of, *inter alia*, rescue work regarding oil spills and chemical discharge.[75] The Order takes as its starting point an incident involving oil or other noxious substances, which is reported by the captain of the vessel to the MRCC, the VTS Centre or other similar point of contact.[76] The operative part of the rescue involves the Commander of the MRCC, the Rescue Commander, the chief of sea operations, the site chief at the location of the incident, the coordinator of aerial operations, and rescue units.[77] The headquarters of the Border Guard supports the operative leadership as laid down in advance plans.[78] This means that the MRCC of Turku and the MRCC of Helsinki are in charge of rescue operations

74 Government Bill 18/2018, p. 28.

75 Order of 18 December 2018 on "The System for Leading Rescue Operations regarding Maritime Rescue and Rescue in relation to Environmental Damage" (Meripelastustoimen ja avomerialueen ympäristövahingon pelastustoiminnan johtamisjärjestelmä, in force from 1 January 2019 to 31 December 20233; RVL1834849; 04.01.40; RVLDno-2017-2123; RVLPAK C.16). According to Section 27 a of the Rescue Act, the Marine Rescue Centre functions as the point of contact regarding treaties that deal with the prevention of international environmental damages on the sea and regarding the relevant EU directive, a task allocated under the Order to the MRCC Turku.

76 Section 2.1. of the Order of 18 December 2018.

77 For a visual illustration of the organizational relations concerning environmental rescue operations within the MRCC, see the Order of 18 December 2018, Appendix 1, where it is made clear that an MRCC has three modes of operation, one for maritime rescue, another for other field operations, and a third mode, environmental rescue or environmental operations. Environmental operations are led by a Rescue Commander.

78 See Sections 2.1.1. and 3.2. of the Order of 18 December 2018. As pointed out in Section 1.2. of the Order, the outer border of the leadership responsibilities in prevention of environmental damages is the economic zone of Finland, which is not entirely overlapping with the area in which Finland is responsible for maritime rescue. Therefore, according to the Order, it is possible albeit very unlikely that a neighbouring State would lead the prevention of environmental damages after an incident, although the leadership in maritime rescue would be the responsibility of Finland.

within their respective maritime areas and that national crisis response is actually decentralized to the two areas.

The Commander of an MRCC is responsible for ensuring that the MRCC has a functional environmental rescue system for areas of open sea, including the availability of a Rescue Commander, a chief of sea operations and site chief at the location of the incident. The Commander is also responsible for the use of the personnel, equipment and resources of the MRCC and for emergency planning. For this, the MRCC shall have sufficient and qualified personnel in each duty shift, coverage 24/7, and the equipment of the MRCC, such as vessels, shall be in good working order and the personnel shall be trained to use the equipment. The aerial reconnaissance unit can be used in response operations.[79] On the basis of the Order, it is possible to view the Rescue Commander of an MRCC as the person in charge of rescue operations under Section 34(2) of the Rescue Act, although the Commander of the MRCC would appear to have general operational responsibilities within these functions.

5 Conclusions

It is clear that under international law, States have considerable latitude to choose the method by which international treaties such as the Intervention Convention are incorporated into and implemented in national law. This latitude is particularly wide as concerns institutional and administrative solutions. As a consequence, the national traditions of a State are likely to be reflected in the ways in which it organizes the fulfilment of its duties under international law. Thus, the Nordic parties to the Intervention Convention dealt with in this article, Denmark, Finland and Sweden, have identified different measures as being potentially necessary to prevent, mitigate or eliminate grave and imminent danger and placed the relevant powers with different public authorities.

[79] Sections 2.1.2. and 2.1.4. of the Order of 18 December 2018.

In terms of specificity of regulation concerning the powers, it appears that the Swedish law contains the most specific powers, followed by the Danish law, while the Finnish law is least specific. In the case of Finland, the current powers for intervention enforcement are actually best explained in the *travaux preparatoires* to the repealed PPS Act of 1979, which is not a satisfactory situation. Regardless of how specific or unspecific the enforcement powers are, they are in all three states surrounded by a number of general administrative principles that have the purpose of limiting administrative discretion and ruling out capricious exercise of public powers. In the case of the Finnish Border Guard, several administrative principles have been mentioned in the relevant legislation. Enforcement decisions are also specifically appealable in all three states. In order to ensure implementation by captains and shipowners of decisions that the designated public authorities can make in relation to the Intervention Convention, administrative force in the form of fines and the threat of completing a measure at the expense of the shipowner can be used in Denmark and Sweden, while in Finland, the provisions of the Rescue Act do not appear to give the Border Guard the power to use administrative force.

Because of the technique of incorporation of international treaties into domestic law, the Finnish jurisdiction contains in its domestic legal order the provision in Article I(1) of the Intervention Convention according to which the States parties to the Convention may take such measures on the high seas as may be necessary to prevent, mitigate or eliminate grave and imminent danger to their coastline or related interests. This would not seem to be the case in Denmark and Sweden, where the obligations under the Convention have been inserted in material law by way of transformation, without incorporating the text of the entire Convention into the domestic legal order. In Finland, there is thus a double mechanism of legislation in place concerning the Intervention Convention, namely the 1976 incorporation act and the provisions in the 2018 Rescue Act. In theory at least, decision-making on relevant measures in Finland could therefore be based entirely on the incorporation act, although public authorities would normally look for a legal basis in relevant material

legislation, not in an incorporation act. In Sweden, the transformation of Article I(1) of the Convention is arguably somewhat incomplete, because the measures that can be undertaken exclude the strongest measures.

As to governmental organization of where the more severe intervention powers are placed, the Danish arrangement and perhaps the Finnish one, too, appear to be closest to the UK arrangement, while Sweden forms a case of its own with an independent agency tasked with intervention enforcement. However, for Finland, this situation is relatively recent and is a result of a transfer of powers from a Swedish-style independent agency at the central government level to the Border Guard incorporated in the Ministry of the Interior (save for the unclear competence line for inner territorial waters, where the regional Emergency Rescue Services operate). The Transport Agency of Sweden (as was formerly the case with the Finnish Environment Institute and its Duty Officer) exercises independent powers on the basis of the Act, not on behalf of the Minister or the Government, which is the case for the SOSREP in the UK and the Danish Joint Command of the Armed Forces. The position of the Finnish Border Guard can in this respect be viewed as a model that is a hybrid of some kind between the UK – Danish model and the Swedish model. In both Denmark and Finland, the governmental branch of the environment has been losing competence with regard to intervention enforcement, while defence in Denmark and the interior in Finland have been on the receiving side of competence.

It is possible to conclude that Sweden displays a traditional Swedish-Finnish understanding of the exercise of powers of this sort by vesting the powers with an independent agency at the central government level where the Government of the state cannot influence decision-making in individual cases. This is a situation that until recently prevailed also in Finland, but as of 2019, the powers are vested in the Border Guard, which appears to be a more appropriate institutional location for such powers than the FEI. Decision-making at the FEI would thus not become political, and at the same time, political accountability of a minister would normally not become an issue in relation to such independent decision-making where the agency such as the FEI and the individual

civil servant carry the responsibility. What was particular for Finland in this context was that the FEI is not an institution which otherwise would exercise public powers, but is instead a research and development center. In spite of this, the broad powers of intervention enforcement were placed with the FEI, until transferred to the Border Guard and tied more closely to political decision-makers for more radical enforcement measures.

The designation of the decision-maker is relatively specific in the UK, where the powers of the Secretary of State shall also be exercisable by such persons as may be authorized for the purpose by the Secretary of State, but is perhaps somewhat less specific in the Nordic countries. In Finland, the Border Guard is designated as the institutional focal point, but the system departs from a regional decentralization of emergency response to two territorial entities and from the understanding in the Rescue Act that a person is designated, which takes place in an Order of the Border Guard. In Sweden, the designation is perhaps somewhat less specific than in the UK and depends on internal distribution of functions at the public agency and between the Transport Agency and the Coast Guard. In Denmark, the designation is specifically to the Minister of Defence, but dependent on ministerial delegation, which arguably makes the system less specific than the Swedish one. In Sweden (as in the UK), the public authority is a more regular civil service entity, while in Denmark and Finland, the public authority is military or of a military nature (except for inner waters, where the public authority is civilian).

In practice, the intervention enforcers relatively rarely, if at all, use their formal powers, because the parties concerned tend to follow their wishes and instructions even without formal decision-making. Let us nonetheless return to the *Torrey Canyon* scenario in 1969 and try to answer the most extreme question present in our inquiry: does the intervention enforcer of the State have the right to order aerial bombardment of an oil tanker in order to bring about its complete destruction or sinking?

It appears that the only one of the Nordic countries where this is not on the radar is Sweden, where the relevant provision in law is written so as to limit the measures of the Transport Agency to the lower end and the mid-part of the measures that could be envisioned on the basis of

the Intervention Convention. It is therefore be possible to conclude that Sweden has chosen not to use the entire range of measures envisioned under Article I(1) of the Intervention Convention when implementing the Convention in its national law. In Finland, the OPR Act created, until the end of 2018, a duty for the Finnish Defence Forces to assist the intervention enforcer, so it was not entirely unthinkable that the full force of the state could have been put behind an enforcement decision of the Duty Officer of the Finnish Environment Institute, however unlikely this sounds as an option. Under the current law established in the Rescue Act, the Border Guard would probably drive a matter involving the most radical enforcement measures all the way to the highest state organs for decision-making. The greatest likelihood of radical enforcement measures can perhaps be found in Denmark, where the Minister of Defence appears to be in control of the severe end of the range of measures in a manner that could be comparable with the measures of the UK Government in 1967 and – potentially – with the provisions in the current UK Merchant Shipping Act.

Lessons Learned from Canada with a Comparative Analysis on Selected Northern EU Jurisdictions (Project WRENE)

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Abstract

Following the implementation of the Oceans Protection Plan in 2016, the Canadian federal government is in the process of refining the legal and operational framework pertaining to wrecks that are considered to be abandoned and derelict, and are currently referred to as "vessels of concern". The presentation is primarily a synoptic overview of the lessons learned from the Canadian federal wreck-related efforts, with a focus on noteworthy developments and best practices gathered from the World Maritime University project titled Wreck Responsibilities in Northern Europe (hereinafter referred to as WRENE). This paper is primarily based on the results gathered from the aforementioned project that was concluded in 2017 whereby information has been updated in areas to the best of the authors' knowledge.

Acronyms

Abandoned Boats Program	ABP
Canadian Dollars	CAD
Canada Shipping Act 2001	CSA 2001
Canadian Hydrographic Service	CHS
Capitanías Maritimas	Harbour Masters Office
Danish Merchant Shipping Act	DMSA
Directorate General of the Merchant Navy	DGMN
Empresa de Transformacion Agraria SA	TRAGSA
Exclusive Economic Zone	EEZ
Finnish Border Guard	FBG
Finnish Environment Institute	SYKE
Finnish Maritime Administration	FMA
Finnish Military Museum	FMM
Hazardous and Noxious Substance	HNS
International Convention on Salvage, 1989	1989 Salvage Convention
Ley 41/2010 Protection of the Marine Environment Act	PMEA
Maritime Rescue Coordination Centre (Finland)	MRCC
Nautical miles	nm

National Bureau of Antiquities (Finland)	NBA
Navigation Protection Act, 1985	NPA 1985
Oceans Protection Plan	OPP 2016
Protection & Indemnity Club	P&I Club
Recovery of Obsolete Vessels not Used in the Fishing Trade	ROVFT
Salvamento Maritimo (Spain)	SASEMAR
Swedish Agency for Water and Marine Management	SwAM
The 2007 Nairobi International Convention on the Removal of Wrecks	WRC
The new Spanish Shipping Law 14/2014	(Spain) LNM

1 Introduction

"Wrecks, abandoned vessels and derelicts" have been on the Canadian scene since 2011 and in the past year or so, some of the most celebrated vessels such as the *MV Miner*, the *Kathryn Spirit* and the *MV Farley Mowat* have made their way from small online newswires to major national headlines. The issues continue to remain at the epicentre of debate and discussion. With this exposure, followed by governmental debates and discussions, surfaced the question of responsibility for managing these so-called "wrecks", which is also sporadically referred to simply as "derelicts". Responsibilities associated with the management of Canadian wrecks have consistently proven to be a predicament over the last few years and a matter of debate for years among all levels of government. The concerned citizens, provinces, harbours and marinas have expressed concerns that the lackluster involvement of the federal government has not helped address the removal of these wrecks in the much-needed timely fashion resulting in public outcry.

While management of wrecks remains a contentious issue in Canada, a number of countries within the European Union have indeed raised similar concerns on the need for developing alternatives and pathways. A holistic solution is required at the European Union level for dealing with dangerous wrecks that pose an actual or potential threat in European waters. To obtain a more opaque idea on how countries are proceeding with this thorny issue, the Swedish Agency for Water and Marine Management (hereinafter referred to as SwAM) funded the project aptly titled WRENE. WRENE, to that end, is a comparative study that extracts and compiles relevant practices concerning wreck removal. The project began in October 2016 and was completed in December under the supervision of WMU Principal Investigator, Canadian Chair and Professor, Dr. Lawrence Hildebrand. The project is based on the following context (as incorporated in the project Terms of Reference):

> Swedish authorities have identified 31 'dangerous wrecks' within Swedish waters. There is an ongoing process to remove pollutants from these wrecks, and in some cases, the aim is to remove submerged wrecks and free the waters from all potential threats. As policy work progresses in Sweden, SwAM is currently in the process of formulating a functional strategy that can eliminate the threats posed by these dangerous wrecks in support of the Swedish Government's commitment to marine environment protection.

In short, WRENE provides insight into complex issues that originate from regulatory gaps and the absence of an adequate funding system. Complementing the ongoing efforts of SwAM, WRENE provides an overview of national liability regimes, surveys and inventories, environmental impacts, departmental roles and responsibilities, and an end-of-life management framework as well as funding mechanisms implemented by the governments of selected European States.

This article is an attempt to provide an overview on relevant progress and noteworthy developments of Canada and selected member states of the European Union.

2 Management of Wrecks in a Canadian Context[6]

2.1 The Regulatory Framework

2.1.1 Legislative Background / Legal Definition of the Term "Wreck"

Section 153(a) of the Canada Shipping Act, 2001 (hereinafter referred to as CSA 2001) is the only legislative[7] reference to "wreck" whereby the term "derelict" has been conjoined with jetsam, flotsam and lagan.[8] This section also includes wrecked aircrafts that are stranded or in distress in Canadian waters.

> "Wreck includes
> (a) jetsam, flotsam, lagan and derelict and any other thing that was part of or was on a vessel wrecked, stranded or in distress; and
> (b) aircraft wrecked in waters and anything that was part of or was on an aircraft wrecked, stranded or in distress in waters."[9]

2.1.2 Canadian Marine Insurance Law

Marine insurance in Canada is primarily a federal responsibility and is therefore, subject to federal statute.[10] Highlighting the need for unification, the Supreme Court of Canada has strongly voiced this opinion in its decisions in a number of cases[11]. Due to the fact that the Marine

6 The views and opinions expressed in this report are those of the authors and do not reflect the position of any department or agency of the Canadian government.

7 Federal law.

8 *Canada Shipping Act, 2001*, S.C. 2001, c. 26 (CSA 2001), s. 153(a).

9 Ibid., s. 153.

10 Edgar Gold, Aldo Chircop and Hugh Kindred, *Maritime Law* (*Essentials of Canadian Law*), (Ontario: Irwin Law, 2003) at 307.

11 See *Triglav v Terrasses Jewellers Inc.* [1993] 1 S.C.R. 283; *Intermunicipality Realty & Development Corp. v Gore mutual Insurance Co.* [1978] 2 F.C. 691. See generally William Tetley, "Marine Insurance and the Conflict of Laws" (1994) 4 C.I.L.R. 301 at 309.

Insurance Act of 1906 of the UK had been extensively used in most Canadian jurisdictions and acts as a basis of Canadian statutes, the Marine Insurance Act of 1993[12] is modelled after the Act of 1906 with minor changes and modifications.[13] Again, the decision in *Triglav v Terrasses Jewellers Inc*. (1993) played an important role in the development of the Marine Insurance Act of 1993. It is also noteworthy that the UK Marine Insurance Act of 1906 was directly incorporated into a number of provincial statutes, namely, British Columbia, Manitoba, New Brunswick, Nova Scotia and Ontario.[14] With regard to the definition of "marine insurance", the Canadian Marine Insurance Act of 1993 provides as follows:

> 6 (1) A contract of marine insurance is a contract whereby the insurer undertakes to indemnify the insured, in the manner and to the extent agreed in the contract, against
>
> (a) losses that are incidental to a marine adventure or an adventure analogous to a marine adventure, including losses arising from a land or air peril incidental to such an adventure if they are provided for in the contract or by usage of the trade; or
>
> (b) losses that are incidental to the building, repair or launch of a ship.[15]

Salvage is an important part of maritime law. Its definition, derived from therrr customary law originating in the *lex maritima* of Roman law is mostly found in Merchant Shipping legislation in common law jurisdictions. Because of its close connection with the law of marine insurance, there are references to salvage in marine insurance legislation. Prior to the amendment of the CSA 2001, a definition of salvage was provided in s. 452 of the pre-amended Act.[16] While the definition of salvage is absent

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12 The original title was *Federal Marine Insurance Act*, S.C. 1993, c.22.

13 Edgar Gold, *supra* note 10 at 307.

14 Ibid. at 306.

15 *Marine Insurance Act*, S.C. 1993, c. 22, s. 6(1).

16 Leona V. Baxter, "Limitation of Liability, Salvage and General Average Actions – Rights and Remedies Unique to Maritime Tort" (Federal Court of Appeal and Federal Court Education Seminar, Maritime Law, 2014) at 16. The author cites the definition of salvage

in the CSA 2001, it is nevertheless, defined as the rescue operation of any vessel, cargo, freight or any other generic objects of salvage from danger or peril at sea.[17] In cases where the owner of a wreck is identifiable, and the owner continues to show an interest in the property, a salvage operation may proceed pursuant to a formal or informal contract.[18]

Commercial salvage operations are usually carried out under standard form contracts, the most common of them being the Lloyd's Open Form of Salvage Agreement (hereinafter referred to as LOF) which is based on traditional or customary salvage law. Where salvage is conducted without such an instrument, it is often referred to as "pure salvage". Where salvage is carried out under a pre-existing agreement or an agreement is entered into post-casualty; in other words, after the danger element has passed and the service is not provided voluntarily, it is often referred to as "contract salvage" and is not necessarily dependent on the element of success. In the absence of a contract, Canadian salvors may rely on two sources of law i.e., the CSA 2001 and the "common law"[19]. Canada has ratified the International Salvage Convention of 1989 and adheres to the principles established through the case law.[20]

From a financial perspective, salvage has always been considered a risky endeavour owing to the principle of "no cure – no pay". A salvor operating a salvage operation is undoubtedly exposed to the risk of

as found in s. 452 of the pre-amended Act: "When, within Canadian waters or on or near the coasts thereof, any vessel is wrecked, abandoned, stranded or in distress, and services are rendered by any person in assisting the vessel or in saving any wreck, there shall be payable to the salvor by the owner of the vessel or wreck, as the case may be, a reasonable amount of salvage including expenses properly incurred

17 Ibid. at 15.

18 John Reeder (ed.), *Brice on Maritime Law of Salvage*, 5th edition (London: Sweet & Maxwell, 2011) at 39.

19 As observed in *The Blackwall*, 77 U.S. (10 Wall) 1, (1870), Courts in common law cases have the discretion to fix the award based on the following criteria: 1. Time and labor expended by the salvors in rendering the salvage service; 2. Promptitude, skill and energy displayed in rendering the service and saving the property; 3. Value of the property risked or employed by the salvor, and the degree of danger to which this property was exposed; 4. Value of the property salved; and, 5. Degree of danger from which lives and property are rescued.

20 *International Convention on Salvage*, 1989, 28 April 1989, U.K.T.S. 1996 No. 93 [1989 Salvage Convention] (entered into force 14 July 1996; in force in Canada on 14 July 1996).

"failure to salve" the vessel in question and ultimately succumbing to an operational loss. It is understood that if the vessel is salvageable, then Hull and Machinery Insurance covers the salvage award and the cost of repairs. But if there is unlikelihood of recovery or that it could not be preserved without an expenditure far exceeding its value, then it is considered to be a constructive total loss in accordance with section 60 of the Marine Insurance Act of 1906.[21] The same principle is observed in the Canadian Marine Insurance Act of 1993.[22] The Act refers to two types of loss: total loss and partial loss. A total loss may be further dived into "actual total loss" and "constructive total loss".[23] Actual total loss occurs when the property is beyond physical retrieval.[24] Where there is constructive total loss, the insured property is beyond economic retrieval. Section 57(1) stipulates: "[u]nless a marine policy otherwise provides, a loss is a constructive total loss if the subject-matter insured is reasonably

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21 *Marine Insurance* Act, 1906 (U.K.), 6 Edw. VII., c.41, s. 60. See also Howard Bennett, *Law of marine* Insurance, 2nd edition (Northants, Oxford Nniversity Press: Oxford Publications, 2007).

22 *Marine Insurance Act*, S.C. 1993, c. 22. In *Rose v Weeks* [1984], 7 CCLI 287 (FCTD) at 294–95, Justice McNair was of the opinion that: "A constructive total loss exists when the subject-matter insured is not in fact totally lost, but is likely to become so from the improbability of recovery or the impracticability of repair ... The assured must give notice of abandonment to justify constructive total loss recovery. But the notice of abandonment is not conclusive and the underwriters may refuse to accept it. It then becomes necessary to determine under the circumstances whether the abandonment should remain operative. One of these circumstances is whether the destruction or loss of the thing insured appears to be "unavoidable". Notice of abandonment must be justified by the facts as they exist at the time it is given and at the time of action brought. The first and basic test is: Is the recovery of the vessel unlikely? Another necessary test in the case of a vessel not totally destroyed is whether a prudent owner, who is uninsured, would have abandoned the vessel because of the probable likelihood of the cost of repair or restoration exceeding its value". See also William Henry Eldridge, *Marine Policies: A Complete Statement of the Law Concerning Contracts of Marine Insurance* (London: Butterworth & Co., 1924) at 169. The author states: "[t]here is no exact dividing line between *actual* and *constructive* loss – the two classes merge into each other; but it may be said that where the thing insured, after suffering damage caused by a peril insured against, is of measurable value, and available to the parties concerned in the place where it lies, the loss comes under the head of constructive total loss … [footnote omitted]".

23 *Marine Insurance Act*, *Ibid.*

24 Ibid.

abandoned because the actual total loss of the subject-matter appears unavoidable or the preservation of the subject-matter from actual total loss would entail costs exceeding its value when the costs are incurred".[25] If it is declared to be a total loss, the owner is entitled to full indemnification. In this situation, if the ship under "total loss" is identified and deemed to be a wreck, it may be positioned in such a way that the wreck requires to be removed. Salvaging a wreck is normally an expensive activity so the question of "who is responsible of paying for it" becomes highly relevant. Since the assured is to provide a "notice of abandonment"[26], which according to law is referred to as an "offer", the insurer has a choice to accept or reject the notice.

Similar to s. 79(1) of the English Marine Insurance Act of 1906, a provision is incorporated in s. 81(1) of Canadian Marine Insurance Act of 1993. Section 81(1) stipulates:

> On payment by an insurer for a total loss of the whole of the subject-matter insured or, if the subject-matter insured is goods, for any apportionable part of the subject-matter

[25] Ibid.

[26] Howard Bennett, *Law of marine* Insurance, 2nd edition (Northants, Oxford Nniversity Press: Oxford Publications, 2007). Automatic transfer of rights. Instead the abandonment is considered as an offer from the assured to the insurer of the (assureds) remaining rights in the property. The insurer may chose to either accept or decline, and if the insurer accepts, then the transfer occurs upon payment of the measure of indemnity for a total loss. Where the insurer pays for a total loss, he becomes entitled to take over the assured's interest in what may be remaining of the subject matter insured according to s. 79(1) of the Marine Insurance Act of 1906. The same applies when there is a valid abandonment according to s. 63(1). The rules are the same for actual total loss and constructive total loss, but in the situation of a constructive total loss there are procedural requirements for the notice of abandonment of the vessel according to s. 62, otherwise the loss can only be treated as a partial loss. See Francis D. Rose, *Marine Insurance: Law and Practice*, 2nd edition (Great Britain, London: Informa Law, 2012) at 508 § 24.42. The author cites from *Provincial Ins. Co of Canada v Leduc* [1874] LR 6 PC 220, 242, and states. "[s]ir Barnes Peacock said that the effect of the assured's giving notice of abandonment and of the insurer's acceptance is that the parties are mutually estopped from denying each other's rights to recover, respectively, for a total loss and for salvage (even if it exceeds the amount of the loss). In one sense it is sufficient to treat parties' acts as estoppels, since they have existing rights under the insurance contract and the question is not so much the existence but the realisation of those rights …".

> insured, the insurer becomes entitled to assume the interest of the insured in the whole or part of the subject-matter and is subrogated to all the rights and remedies of the insured in respect of that whole or part from the time of the casualty causing the loss.[27]

In Canada, the rules are the same for actual total loss and constructive total loss. Again, similar to the English Marine Insurance Act of 1906, procedural requirements with regard to the notice of abandonment need to be observed in constructive total loss situations pursuant to s. 58(2) and s 58(4). In the case of *Kaltenbach v Mackenzie* (1878), Colton L.J. was of the following opinion:

> When the assured has once elected to treat the loss as a total loss, the underwriter can insist upon his abiding by the election, so as to enable them to take the benefit of any advantage which may arise from the thing insured. Therefore, the object of notice to take the benefit of any advantage, which may arise from the thing, insured. Therefore, the object of notice, which is entirely different from abandonment, is that he may tell the underwriter at once, what he has done, and not keep it secret in his mind, to see if there will be a change of circumstances.[28]

The fear of liabilities attached to the insured property has made hull and machinery underwriters sporadically reject a notice of abandonment. Hence, the liability for wrecks is primarily connected to wreck ownership. The owner is usually covered by liability insurance and indemnified; therefore, the insurer, typically a Protection & Indemnity Club (hereinafter referred to as P&I Club), plays an important role when wrecks tend to become a maritime inconvenience.

When it narrows down to dealing with wrecks, it is important to perceive it from two different angles. While the former deals with disabled vessels, which have been abandoned by the owner and the master, the latter corresponds to wrecks of those disabled vessels, which are termed

[27] *Canadian Marine Insurance Act of 1993*, *supra* note 22.

[28] *Kaltenbach v Mackenzie* [1878] 3 CPD 467, 479–480.

as "end-of-life vessels"[29]. While the "wreck removal" concept is covered by marine insurance; abandoned and derelict vessels, abandoned "end-of-life vessels" or abandoned wrecks remain outside the scope of Club consideration pursuant to the P & I Club Rules. For example, the London P & I Club rule explicitly states that a claim shall not be recoverable if a ship becomes a wreck due to dereliction or neglect.[30] The Gard rules incorporate a policy where recovery from the Association under this Rule is to be conditional upon the member not having transferred his interest in the wreck otherwise than by abandonment.[31] But this relates to "legal abandonment" and not to situations governed by *animus derelinquendi*[32]. The rules are generic for other[33] P & I Clubs, which comprise the International Group of P & I Clubs from different parts of the world. In terms of the Club rules, it is clear that the words "dereliction" and "abandonment" are not tantamount to "permanent abandonment" or

[29] Valentina Rossi, "The Dismantling of End-of-Life Ships: the Hong Kong Convention for the Safe and Environmentally Sound recycling of ships" (2010) 20:1 Italian Yearbook of International Law 275 at 275.

[30] The London P&I Club. Class 5 – P & I Rules 2017–2018, online: <https://www.londonpandi.com/_common/updateable/downloads/documents/class5-pirules2017-2018minusclauses.pdf>, s. 9.18.5.5, . Section 9.18.5.5 stipulates that: "a claim under Rules 9.18.1–9.18.4 shall be covered only in circumstances where an entered Ship becomes a wreck as a result of a fortuitous incident caused by collision, stranding, explosion, fire or similar cause, and no claim shall be recoverable in the event that an entered Ship becomes a wreck due to dereliction or neglect of the Assured". Note that the London Steam-Ship Owners' Mutual Insurance Association Limited, commonly known as the Lonon P&I Club is one of the leading Protection and Indemnity Associations. The Club is based in the UK.

[31] *Gard Rules 2014* (Denmark: Rosendahls, 2014), online: <www.gard.no/ikbViewer/Content/20738744/Rules%202014_web.pdf>, rule 40.

[32] Intention to abandon something permanently. Explained in Part II Chapter 3 of this Dissertation.

[33] American Steamship owners Mutual Protection and Indemnity Association, Inc., Assuranceforeningen Gard Assuranceforeningen Skuld, The Britannia Steam Ship Insurance Association Limited, the Japan Shipowners' Mutual Protection & Indemnity Association, the London Steam-Shipowners' Mutual Insurance Association Limited, the North of England Protecting & Indemnity Association Limited, the Shipowners' Mutual Protection & Indemnity Association (Luxembourg), the Standard Steamshipowners' Protection & Indemnity Association (Bermuda) Limited, the Steamship Mutual Underwriting Association (Bermuda) Limited, the Swedish Club, United Kingdom Mutual Steam Ship Assurance Association (Bermuda) Limited, the West of England Shipowners Mutual Insurance Association (Luxembourg).

"abandoning intention" with "absence of hope in the recovery". From the first angle, and prior to the end of the operational life on the vessel, the vessel that has been abandoned does not fall within the ambit of "salvage" or "recovery" policies of any marine insurance policy since the assured is unknown or the vessel so abandoned has been *res nullius* without the insurer having prior knowledge of the matter. In the case of "constructive abandonment", it is opined that for the ship to be so abandoned does not require any "set form or is sacrosanct" because there may be an abandonment even though no formal order to abandon has been given.[34]

This may be the same when it comes to a derelict whereby the owner of the vessel has not provided any formal notice of abandonment. The award for salvors in respect of derelict has always differed in various judgments. This has been reviewed and firmly established in the case of *The Aquila* (1798) by Sir William Scott who held that there was no specific rule that the salvor of derelict was entitled either to a moiety or any specific part of the value of the derelict.[35] Again, the award of salvage depends upon the particular circumstances of each separate case and upon the various degrees of merit.[36] This is also evident from the judgment in *The Fortuna* (1802) where the salvors were awarded two-fifths of the salved value.[37] However, what is absent in all salvage related judgments is the discussion and focus on a general principle of law and a limitation in the timeframe after the lapse of which the "constructive abandonment" or "dereliction" is concrete and justified, and the lapse of such time simultaneously acts as a bar to the owner against any acts of reclamation. Again, the question of intent to abandon the vessel permanently without hope of recovery is vague, imprecise and shrouded in ambiguity to say the least. This leads to the presumptuous justification as to why the P & I Clubs tend

[34] John Reeder, *supra* note 18 at 275. The author cites from the judgment of *Cossman v West and British America Assurance Company* (1887) 30 App. Cas. 160 at 180 PC: "Derelict" has been defined as a ship at sea, abandoned and deserted by her master and crew that can be contrasted with the notion of "temporary abandonment" that refers to the intention of returning to the vessel.

[35] Ibid. at 277.

[36] *The Blenden-Hall* (1814) 1 Dods. 414 at 416, per Sir William Scott. See also *The Champion* (1863) 3 br. & Lush. 69 at 71, per Dr. Lushington.

[37] *The Fortuna* (1802) 165 E.R. 582 (Sir William Scott); 4 C. Rob. 193.

to refrain from undertaking operational steps to salvage a wreck that is proclaimed derelict. Only then, salvage awards and other issues related to salvage with regard to derelict and abandoned wreck is left with the federal authorities in accordance with the CSA 2001.

2.1.3 The Role and Responsibilities of the Canadian Federal Authorities

2.1.3.1 Receiver of Wreck under the Canada Shipping Act, 2001

A Receiver of Wreck has the authority to recover, dispose or destroy a wreck or authorize its disposition or destruction if the necessary requirements and conditions are satisfied pursuant to the relevant provisions of the CSA 2001. Although the title of the concerned officer is aptly titled "receiver of wreck",[38] the designated officer may act as a receiver of wrecked abandoned vessels and derelicts. However, it should be noted that the "receiver of wreck" has the authority to destroy or dispose of the wreck or abandoned vessel if the value of the vessel or wreck is less than $5,000 and the storage costs are likely to exceed the value of the vessel or wreck. The various relevant provisions are as follows:

> Any person who finds and takes possession of wreck in Canada, or who brings wreck into Canada, the owner of which is not known, shall, as soon as feasible,
>
> (a) report it to a receiver of wreck and provide the information and documents requested; and
>
> (b) take any measures with respect to the wreck that the receiver of wreck directs, including
>
> (i) delivering it to the receiver of wreck within the period specified by the receiver, or
>
> (ii) keeping it in their possession in accordance with the instructions of the receiver.[39]

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[38] *Receiver of* Wrecks, online at Transport Canada's website: <https://www.tc.gc.ca/eng/quebec/marine-wrecks.htm>.

[39] CSA 2001, *supra* note 8, s. 155.

> A receiver of wreck may dispose of or destroy wreck, or authorize its disposition or destruction,
>
> (a) after 90 days following the date that
>
> (b) the wreck was reported under paragraph 155(1)(a); or (b) at any time if, in the receiver's opinion, the value of the wreck is less than $5,000, the storage costs would likely exceed the value of the wreck or the wreck is perishable or poses a threat to public health or safety.[40]
>
> If a person has established a claim to wreck, but has not paid or delivered the salvage award and has not paid the fees and expenses due within 30 days after notice is given by the receiver of wreck, the receiver may dispose of or destroy all or part of the wreck and, if it is disposed of, must pay, from the proceeds of the disposition, the expenses of the disposition and the salvage award, fees and expenses, and release any remaining wreck and pay any proceeds to that person.[41]

2.1.3.2 Canadian Coast Guard

While the Minister of Transport is responsible for overseeing the federal government's transportation regulatory and development department i.e., Transport Canada; the Minister of Fisheries and Oceans is responsible for the Canadian Coast Guard.[42]. Transport Canada is the lead regulatory agency for all ship-source spills and the overall response regime. The Canadian Coast Guard, on the other hand, serves an operational role

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40 Ibid., s. 160.

41 Ibid., s. 161.

42 *History of the Canadian Coast Guard*, online at Transport Canada's website: <http://www.ccg-gcc.gc.ca/eng/CCG/History>. It is clearly stated that: "In 1995, in order to achieve cost savings, the Canadian Coast Guard transferred to the Department of Fisheries and Oceans (DFO) in order to gather the two largest civilian fleets within the federal government under one department. DFO Science vessels and the Fisheries Conservation and Protection Fleet were incorporated with the Coast Guard Fleet. To better serve Canadians, the federal government started investigating the possibility to give CCG more independence by transforming it into a separate agency within DFO". The Coast Guard is empowered by the Minister of Fisheries and Oceans, pursuant to paragraph 180(1)(a) of the Canadian Shipping Act of 2001 to "take the measures that he or she considers necessary to repair, remedy, minimize or prevent pollution" or "direct any person or vessel to take such measures".

in the delivery of maritime law enforcement. In short, the Canadian Coast Guard takes a proactive role in clean-up activities in cases where there has been a discharge from vessels, which also includes discharges from wrecks. The Canadian Coast Guard can recover the cost of their expenses to deal with pollution from the Ship Source Oil Pollution Fund.[43] However, once the pollution and the sources are dealt with, the Coast Guard does not have any further authority to deal with the wreck itself. The important provisions of the CSA 2001 with regard to the roles and responsibilities of the Canadian Coast Guard concerning abandoned vessels are as follows:

> The Minister of Fisheries and Oceans may designate any persons or classes of persons as pollution response officers in respect of discharges or threats of discharges and may limit in any manner that he or she considers appropriate the powers that the officers may exercise under this Part.[44]

> For the purpose of exercising his or her powers under this Part, a pollution response officer may
>
> (a) board any vessel or enter any premises or other place at any reasonable time;
>
> (b) direct any person to provide reasonable assistance or put into operation or cease operating any machinery or equipment;
>
> (c) direct any person to provide any information that the officer may reasonably require in the administration of this Part;
>
> (d) direct any person to produce for inspection, or for the purpose of making copies or taking extracts, any log book or other document;
>
> (e) take photographs and make video recordings and sketches;
>
> (f) use or cause to be used any computer system or data processing system at the place to examine any data contained in, or available to, the system;
>
> (g) reproduce or cause to be reproduced any record from the data in the form of a print-out or other intelligible output;

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43 *Ship-source Oil Pollution Fund*, online: <http://www.sopf.gc.ca/en/home>

44 CSA 2001, *supra* note 8, s. 174(1).1.

> (h) take any document or other thing from the place where the inspection is being carried out for examination or, in the case of a document, copying; and
>
> (i) use or cause to be used any copying equipment in the place where the inspection is being carried out to make copies of any documents.[45]

2.1.3.3 Canadian Coast Guard under the Oceans Act, 1996

If a wreck poses a threat to the environment or if there is a "likelihood of a spill", and if the ship owner is unknown, unwilling or unable, then the Canadian Coast Guard assumes the operational responsibility in accordance with the CSA 2001.[46] It is important to note that the current Canadian regime is structured on the notion that the ship owners are responsible to take the first action. It is the posture or assumption of the Canadian Coast Guard that the ship-owner should, first and foremost, be accountable and responsible in "likelihood of spill or discharge" incidents. Section 180 of the CSA 2001 gives the Minister of Fisheries, Oceans and the Canadian Coast Guard authority to take necessary measures to remedy oil spill from a vessel or oil handling facility.[47] Under paragraph 180(1)(c), the Minister may direct any person or vessel to take measures or to refrain from doing so.[48] Although unimplied, the term "any person" would include local authorities, ports and first responders in this process.[49] Since the Minister may delegate broad and extensive powers to respond to ship-source oil pollution, the theoretical term "any person" can be extended to include any authorities that are able to assist the Canadian Coast Guard in the intervention process.[50] In short, s. 180 of the CSA 2001 explicitly states the power of the Minister of Fisheries of oceans to act as a primary responder and to "take the measures that

45 Ibid., s. 226(3).
46 CSA 2001, *supra* note 8.
47 Ibid.
48 Ibid.
49 Ibid.
50 Ibid.

he or she considers necessary to repair, remedy, minimize or prevent pollution".[51]

Parallel to the CSA 2001, the Canadian Coast Guard is also empowered by the Oceans Act of 1996 to remove the vessel in a number of other cases as stipulated in s 39 of Part III.[52]

> seize any thing by means of or in relation to which the enforcement officer believes, on reasonable grounds, this Act or the regulations have been contravened or that the enforcement officer believes, on reasonable grounds, will provide evidence of a contravention.[53]

> Where the lawful ownership of or entitlement to the seized thing cannot be ascertained within thirty days after its seizure, the thing or any proceeds of its disposition are forfeited to
>
> (a) Her Majesty in right of Canada, if the thing was seized by an enforcement officer employed in the federal public administration; or
>
> (b) Her Majesty in right of a province, if the thing was seized by an enforcement officer employed by the government of that province.[54]

> Where the seized thing is perishable, the enforcement officer may dispose of it or destroy it, and any proceeds of its disposition must be
>
> (a) paid to the lawful owner or person lawfully entitled to possession of the thing, unless proceedings under this Act are commenced within ninety days after its seizure; or
>
> (b) retained by the enforcement officer pending the outcome of the proceedings.[55]

> Any thing that has been forfeited or abandoned under this Act must be dealt with and disposed of as the Minister may direct.[56]

51 Ibid.

52 *Oceans Act, S.C. 1996, c. 31.*

53 Ibid., s. 39.1(d).

54 Ibid., s. 39.3(2).

55 Ibid., s. 39.3(3).

56 Ibid., s. 39.4.

> The lawful owner and any person lawfully entitled to possession of any thing seized, abandoned or forfeited under this Act are jointly and severally liable for all the costs of inspection, seizure, abandonment, forfeiture or disposition incurred by Her Majesty in right of Canada in excess of any proceeds of disposition of the thing that have been forfeited to Her Majesty under this Act.[57]

2.1.3.4 Navigation protection Program under the Navigation Protection Act, 1985

The concerned officer of Transport Canada's Navigation Protection Program may act if navigation is obstructed, impeded, rendered more difficult or dangerous by a wreck or an abandoned vessel pursuant to relevant sections of the Navigation Protection Act of 1985.[58] This has been further confirmed in an interview with federal officers in 2016. The abandoned vessel relevant provisions incorporated in the Navigation Protection Act of 1985 are as follows:

> obstruction means a vessel, or part of one, that is wrecked, sunk, partially sunk, lying ashore or grounded, or any thing, that obstructs or impedes navigation or renders it more difficult or dangerous, but does not include a thing of natural origin unless a person causes the thing of natural origin to obstruct or impede navigation or to render it more difficult or dangerous.[59]

> Unless otherwise ordered by the Minister, the person in charge of the obstruction shall immediately begin its removal and shall carry on the removal diligently to completion.[60]

> [If the person fails to act appropriately]

> The Minister may order the person in charge of an obstruction or potential obstruction in a navigable water – other than a minor water – that is listed in the schedule to secure, remove or destroy it

57 Ibid., s. 39.5.

58 *Navigation Protection Act (R.S.C., 1985, c. N-22)* (NPA 1985).

59 Ibid., s. 2.

60 Ibid., s. 15(3).

> in the manner that the Minister considers appropriate if the situation has persisted for more than 24 hours.[61]
>
> The Minister may order any person to secure, remove or destroy a wreck, vessel, part of a vessel or any thing that is cast ashore, stranded or left on any property belonging to Her Majesty in right of Canada and impedes, for more than 24 hours, the use of that property as may be required for the public purposes of Canada.[62]
>
> If any vessel or thing is wrecked, sunk, partially sunk, lying ashore, grounded or abandoned in any navigable water – other than in any minor water – that is listed in the schedule, the Minister may, under the restrictions that he or she considers appropriate, authorize any person to take possession of and remove the vessel, part of the vessel or thing for that person's own benefit, on that person's giving to the registered owner or other owner of the vessel or to the owner of the thing, if known, one month's notice or, if the registered owner or other owner of the vessel or owner of the thing is not known, public notice for the same period in a publication specified by the Minister.[63]

2.1.3.5 Canadian Hydrographic Service

The Canadian Hydrographic Service (hereinafter referred to as CHS) is Canada's authoritative hydrographic office under the science branch at Fisheries and Oceans Canada.[64] With the help of multibeam sonar, CHS conducts relevant surveys in relation to objects on the seafloor, which includes surveys of shipwrecks.[65] In short, the CHS is responsible for charting wrecks that has the potential to cause a danger to navigation

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61 Ibid., s. 16(1).

62 Ibid., s. 16(2).

63 *Ibid*., s. 20.

64 *DFO-Science CHS Strategic Directions and Quality Policy 2018/28*, online at Fisheries and Oceans Canada's official website: <http://www.charts.gc.ca/help-aide/about-apropos/strategic-strategiques-eng.asp>

65 Learn about the Canadian Hydrographic Service's Multibeam Sonar Technology, online at Fisheries and Oceans Canada's official website: < http://www.charts.gc.ca/help-aide/announcements-annonces/2014/2014-11-19-eng.asp?wbdisable=true>

by gathering, managing, transforming and disseminating data and information.

2.1.4 Surveys and Inventories

A combined federal initiative was taken in the year 2014 to quantify the exact numbers of abandoned vessels and derelicts that need to be dealt with in Southern British Columbia and Northern British Columbia.[66] The 2014 Inventory identified 245 vessels of concern comprised of: wrecks, derelict pleasure craft (>26 feet), derelict fishing vessels (>38 feet), derelict commercial vessels (length unknown) and derelict platforms (length unknown) within British Columbia waterways. The vessels so identified in the 2014 inventory are deemed as a threat to navigation or a potential threat to the environment. However given the fact that the inventory contains floating and/or submerged abandoned and derelict vessels that are in good condition, it is not possible to gather information solely on wrecks that are an environmental hazard.

The Global News, i.e., the news and current affairs division of the Global Television Network in Canada published an article titled *Hundred of Shipwrecks Pose Environmental Threat to Canada's Coasts* on 24 January 2016. The article provided significant insights on Canadian sunken wrecks that surfaced during a "16x9 investigation"[67].[68] The investigation confirms that the Government of Canada is yet to develop an inventory of sunken vessels that remain within Canadian waters. So, in order to quantify the numbers, the 16X9 investigation examined "wreck data going back to the beginning of the 20th century", and considered "vessels made of steel or other durable materials" that were engaged in "carrying fuel and

66 *Vessels of Concern Inventory*, TyPlan Planning & Management, (Prepared for Navigation Protection Program of Transport Canada, March 2014) online: <www.islandstrust.bc.ca/media/305508/transportcanadavesselreport.pdf>

67 16×9 was a Canadian investigative newsmagazine television program created by Troy Reeb and Mary Garofalo.

68 *Hundreds of shipwrecks pose environmental threat to Canada's coasts*, online at global News official website: <https://globalnews.ca/news/2465625/hundreds-of-shipwrecks-pose-environmental-threat-to-canadas-coasts/>.

cargo or anything over 100 gross tonnage".[69] The investigation revealed the information that a total of 716 sunken vessels /wrecks currently remain in Canadian waters, and require federal attention because they are considered as "at-risk" vessels/wrecks.[70]

2.1.5 Clean-up Costs

The plinth of the Canadian maritime compensation regime is the "polluter pays principle". So in principle, the onus lies on the owner whereby the costs related to clean-up of wrecks is to be borne by the owner. However, if the owner is unable to pay, and if the insurance runs out, the clean-up expenditures can be funded by industry funds, including the Ship-source Oil Pollution Fund whereby the maximum liability is 165,837,463 Canadian Dollars (hereinafter referred to as CAD). The legislative basis for Ship-source Oil Pollution Fund is Part 6 of the Marine Liability Act titled "liability and compensation for pollution".[71] The claims for "liability and compensation for pollution" are classified into three broad categories:

> 1. Claims governed by the 1992 Civil Liability Convention (CLC) and the 1992 Fund Convention, as supplemented by the Supplementary Fund, being essentially spills originating from oil tankers;
> 2. Claims governed by the 2001 Bunkers Convention;
> 3. All claims for ship-source oil pollution not governed by the first two regimes.[72]

At this juncture it is important to note that in order to qualify for Ship-source Oil Pollution Fund claims, it must be made within the first five years after a ship has sunk in Canadian waters. Given the fact that there exists no data or record to quantify the age of the sunken wrecks identified through the 16x9 investigation – any claims made in relation

69 Ibid.

70 Ibid.

71 *Marine Liability Act, S.C. 2001, c. 6*

72 *Canadian Legislation*, online at Ship-source Oil Pollution Fund's official website: <http://sopf.gc.ca/?page_id=200>

to clean-up cost reimbursement would be inadmissible on the grounds of exceeding the five-year limitation period. In that case the Canadian government would incur all expenditures.

2.1.6 Noteworthy Developments

2.1.6.1 Wreck Removal Legislation through Bill C-64

The federal government of Canada has already endeavoured to resolve the existing gaps and drawbacks of the federal laws by introducing noteworthy bills, e.g., Bill C-695, Bill C-231, these attempts did not fall through. However, on October 31 2017, the Canadian government introduced Bill C-64 titled *An Act respecting wrecks, abandoned, dilapidated or hazardous vessels and salvage operations*.[73] As indicated in the "summary" of Bill C-64, the Act:

> (a) implements the Nairobi International Convention on the Removal of Wrecks, 2007;
>
> (b) requires owners of vessels of 300 gross tonnage and above, and unregistered vessels being towed, to maintain wreck removal insurance or other financial security;
>
> (c) prohibits vessel abandonment unless it is authorized under an Act of Parliament or of the legislature of a province or it is due to a maritime emergency;
>
> (d) prohibits the leaving of a dilapidated vessel in the same place for more than 60 days without authorization;
>
> (e) authorizes the Minister of Transport or the Minister of Fisheries and Oceans to order the removal of a dilapidated vessel left on any federal property;
>
> (f) authorizes the Minister of Fisheries and Oceans to take measures to prevent, mitigate or eliminate hazards posed by vessels or wrecks and to hold the owner liable;
>
> (g) authorizes the Minister of Transport to take measures with respect to abandoned or dilapidated vessels and to hold the owner liable;

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[73] *Bill C-64: An Act respecting wrecks, abandoned, dilapidated or hazardous vessels and salvage operations*, online at Parliament of Canada's official website: <http://www.parl.ca/DocumentViewer/en/42-1/bill/C-64/first-reading>

> (h) establishes an administration and enforcement scheme, including administrative monetary penalties; and
>
> (i) authorizes the Governor in Council to make regulations respecting such matters as excluding certain vessels from the application of the Act, setting fees and establishing requirements for salvage operations, the towing of vessels and the dismantlement or destruction of vessels.[74]

It is important to note that Bill C-64 has received Royal Assent on 28 February 2019 and is, or will soon become, law.

2.1.6.2 Oceans Protection Plan: Clean-up of Existing Wrecks

The Government of Canada has launched a $1.5 billion national Oceans Protection Plan (hereinafter referred to as OPP 2016) that involves working and collaborating with provinces and territories, industry, organizations and a range of other stakeholders to protect the Canadian coasts and waterways in the Pacific, Atlantic and Arctic.[75] It is important to note that within the ambit of the OPP 2016, the Government of Canada has decided to take action to "reduce abandonment of ships, and clean-up existing ship wrecks".[76] Through the OPP 2016, the government intends to, *inter alia*, develop a comprehensive plan related to "removal, including a robust, polluter-pay approach for future vessel clean-up" as well as focus on "prevention" aspects.[77] In other words, the government aims to develop a functional regime to deal with the current number of abandonments in the Pacific and the Atlantic, and simultaneously establish a preventative regime to bar future abandonments through the development of stringent regulations.[78] As explicitly stated in the OPP 2016, the Government of

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74 Ibid.

75 Canada's Oceans Protection Plan (2016) Office of the Prime Minister, online at Transport Canada's website: <https://www.tc.gc.ca/media/documents/communications-eng/oceans-protection-plan.pdf> [OPP 2016].

76 Ibid. at 9.

77 Ibid. at 9.

78 Ibid. at 9.

Canada intends to develop both functional and preventative regimes based on "best international models".[79]

2.1.6.3 Development of an Integrated Funding Mechanism

In 2017, Transport Canada has initiated the Abandoned Boats Program to "provide grants and contribution funding to assist in the removal of "abandoned and/or wrecked small boats" posing a hazard in Canadian waters".[80] The ABP is comprised of two key components namely, a) assessment and removal to fund all removal and disposal operations; and b) education, awareness and research to disseminate knowledge and raise awareness to the public with regard to end-of-life management practices.[81] While the first component can be seen as a unique initiative, the federal authorities have not disclosed the exact source or amount of the funding. Notwithstanding, the ABP program aims to cover funding for a number of stakeholders including, provinces, territories, municipalities and local governments, indigenous groups and communities, private ports and marinas, Canadian port authorities, academic institutions, profit and non-profit organizations.[82] Based on the foregoing aims and objectives, the ABP program is commendable and puts debates associated with the "source of funding" to rest.

79 Ibid. at 9.

80 *Abandoned Boats Program*, online at Transport Canada's: <http://www.tc.gc.ca/eng/abandoned-boats-program.html>

81 Ibid.

82 Ibid.

3 Overview of Wreck Responsibilities in Selected Northern Europe Jurisdictions

3.1 The Federal Republic of Germany[83]

3.1.1 The Regulatory Framework

3.1.1.1 Legislative Background / Legal Definition of the Term "Wreck"

The WRC entered into force internationally on 14 April 2015. The WRC applied for the Federal Republic of Germany as of this date because Germany had already ratified the WRC on 20 June 2013.

In coalition with the Netherlands, Germany had been one of the sponsoring State "drivers" to support the negotiations of the text of the WRC in the IMO Legal Committee. The reason for this pro-active political involvement date back to the early 1990s when two abandoned ("derelict") wrecks had to be removed from the German Exclusive Economic Zone (hereinafter referred to as EEZ) due to their hazardous positions for international shipping (in 1990, the Norwegian platform "*Gamma West*" sank and had be removed in the North Sea; in 1993, the Polish ro-ro ferry "*Jan Heweliusz*" sank and had to be removed in the Baltic Sea). In the absence of a solvent owner, the costs for both wreck removal operations fell on the budget of the German Ministry of Transport and, thus, ultimately, on the German tax payer. Consequently, since 1993, it was a primary political objective of both Germany and a number of other IMO Members to close a gap in international law in case of abandoned wrecks situated in a coastal States' EEZ.

[83] The information provided was gathered by WMU concerned researchers and external consultants in the research phase of Project WRENE in 2016. Therefore, the information provided herewith reflects the Finnish wreck-related state of affairs of 2016.

It is important to note, however, that Germany did not "opt in" pursuant to Art. 3.2 WRC.[84] As a result, under German law, the geographical scope of the WRC is limited to the "*Convention area*" (i.e., the German EEZ, Art. 1.1 WRC). Consequently, there is a strict legal boundary between wreck removal in the German EEZ on the one hand (for which the WRC applies exclusively) and, on the other hand, the regulation of wrecks in the German territorial sea and in German internal waters where German domestic administrative law applies (and thus not the rules and procedures of the WRC).

This also impacts the question of a possible legal definition for the term "*wreck*". There is no available legal definition exclusively applicable under German law. However, the most convincing approach is to adopt the concept of Art. 1.4 WRC in analogy for the German territorial sea and for German internal waters. This conclusion results from the German political influence on the text and the legal substance of the WRC. It would be hard to argue that German law and the legal definition of wrecks in accordance with Art. 1.4 WRC should follow a different approach. Rather, German domestic law simply does not address this issue specifically. Thus, under German law, any question of doubt whether an object is still a "*ship*" (Art. 1.2 WRC) or already a "*wreck*" (Art. 1.4 WRC) – irrespective of its location – would have to be the outcome of a legal analysis of the four sub-paragraphs of Art. 1.4(a) – (d) WRC. In particular, Art. 1.4(d) WRC could potentially cause some legal problems – as the case of the abandoned "ghost ship" "*Lyubow Orlowa*" (drifting in the North Atlantic towards Europe) had evidenced in 2013. So far, however, there has not been any problematic case in Germany on the legal definition of whether an object at sea falls under the legal definition of a "wreck".

[84] *K. Ramming*, Das Wrackbeseitigungsübereinkommen und seine Umsetzung nach deutschem Recht (Recht der Transportwirtschaft 2014) 129.

3.1.1.2 The System of Wreck Removal under German Law (incl. Surveys and Inventories; Roles and Responsibilities)

The implementation of the WRC into domestic German law has been partly carried out by a variety of changes to existing statutes and partly by enacting completely new legislation. Changes to existing status have been accomplished by amendments to the Federal Maritime Responsibilities Act ("Seeaufgabengesetz", in short: "SeeAufgG").[85] These changes implement WRC-related obligations without any reference to questions of liability or insurance (see section 1.3 on liability and insurance).

The modernized system of wreck removal under German law is, unfortunately, characterized by a quite peculiar division of administrative competencies between a number of agencies. This division has traditional reasons and results also from Germany's federal system. It is clearly not advisable for other States to follow the German division of administrative competencies. Rather, it seems a lot more beneficial if those competencies could be "centralized" at a single national competent authority.

3.1.1.2.1 The Role and Responsibilities of the "Federal Maritime and Hydrographic Agency"

First, according to § 1 No. 11 and § 5(2a)(b) of the Federal Maritime Responsibilities Act, the tasks of continuous "*hydrographic surveying and search for wrecks*" fall into the administrative competence of the "*Federal Maritime and Hydrographic Agency*" (Bundesamt für Seeschifffahrt und Hydrographie, in short: "BSH") which is a federal authority under the supervision of the Federal Ministry of Transport. Since 2013, the "BSH" is also the competent authority for issuing liability and insurance issues in relation to wreck removal (to be discussed in section 1.3). The different administrative tasks of the BSH are summarized in highly specialized ordinances.

[85] German Federal Maritime Responsibilities Act ("SeeAufgG") of 24 May 1965, last amended on 17 June 2016 (Federal Law Gazette Vol. I 2016, p. 1489) and 13 October 2016 (Federal Law Gazette Vol. I 2016, p. 2258).

According to its website, the BSH surveys about 200 underwater objects/wrecks per year in the German EEZ, the territorial sea and in internal waters.[86] These surveys relate both to wrecks which have been detected and assessed before regularly but which might have changed their position (due to currents) and to so far undiscovered wrecks. The BSH itself refers to about 40 newly discovered wrecks annually. However, this number could also include other potentially hazardous underwater objects (like containers or parts of a ship), which fall under the wider definition of Art. 1(4) WRC. All known wrecks in the German internal waters, in the territorial sea and within the EEZ have been charted in detail (please see the next page, high resolution pictures are available for download).[87]

A newly introduced Art. 9 lit. e) No. 12 of the Federal Maritime Responsibilities Act also addresses "wrecks" by stating that "*the responsible authority is authorized to collect data with regard to […] the form of a maritime casualty and with regard to the status of a wreck as well as its position at the time of the data collection*." This provision relates to maritime casualties which have occurred after the entry into force of the WRC.

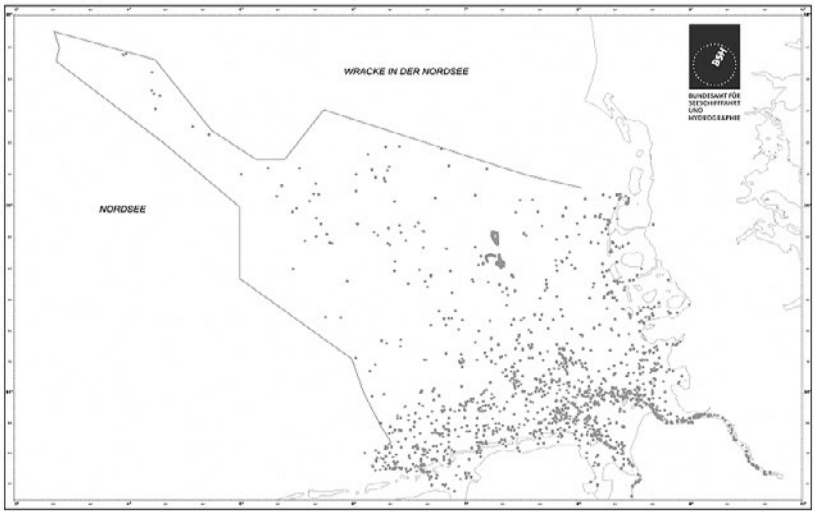
All charted objects have been surveyed in detail by specialized divers. Any known polluting substances would have been either contained or removed by now, there is no example of a still polluting wreck for Germany. If an underwater object does not create any imminent hazards for shipping, it will not be removed but it will be charted and continuously monitored. Consequently, the main purpose of the surveys and inventories is to assess constantly whether any kind of wreck or underwater hazard could possibly constitute a danger for shipping. The applicable criteria for the BSH are practically the same as regulated by Art. 6–9 WRC (for the EEZ). However, because of the strict legal distinction between

86 See http://www.bsh.de/de/Meeresdaten/Seevermessung_und_Wracksuche/Wracksuche/index.jsp

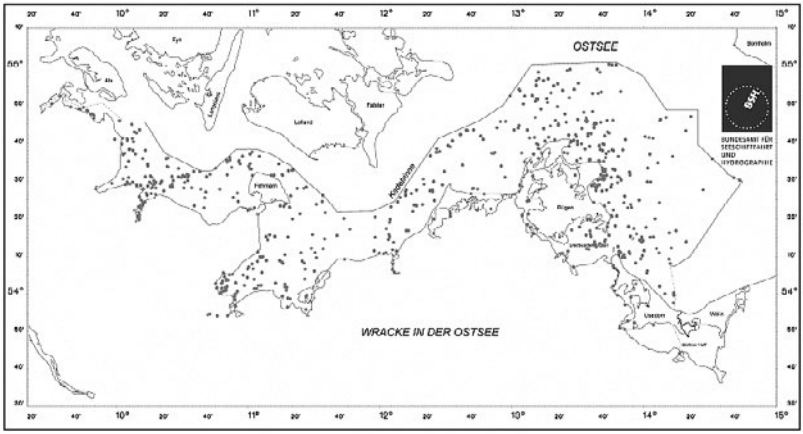
87 For the North Sea: http://www.bsh.de/de/Meeresdaten/Seevermessung_und_Wracksuche/Wracksuche/wp_ns_g.jsp and for the Baltic Sea: http://www.bsh.de/de/Meeresdaten/Seevermessung_und_Wracksuche/Wracksuche/wp_os_g.jsp.

EEZ-related wrecks and wrecks situated within the territorial sea or the internal waters no explicit legal link has been established here.

Map 1: Monitored Wreck Locations in the German EEZ (North Sea) / Source: BSH



Map 2: Monitored Wreck Locations in the German EEZ (Baltic Sea) / Source: BSH



3.1.1.2.2 The Role and Responsibilities of the "Ship Safety Division" of the "BG Verkehr"

The so-called "*German Social Accident Insurance Institution for Commercial Transport, Postal Logistics and Telecommunication*" (in short: "*BG Verkehr*") – which is a statutory corporation under public law – has only one particular role in the system of wreck removal which is to control documentary obligations pursuant to Art. 12 WRC. This institution has four specialized divisions, one of them being the "*Ship Safety Division*". The "*Ship Safety Division*" has a network of specially qualified surveyors at its disposal along the German coast ensuring the German compliance with IMO rules and regulations. It performs state tasks on behalf of the federal government and is, *inter alia*, responsible for any ship under the German flag operating in commercial maritime shipping. Thus it:

- Monitors compliance with national and international rules and regulations concerning technical ship safety, including the International Safety Management Code (ISM Code), the determination of minimum safe manning on seagoing ships, and all legal requirements relating to STCW and the Maritime Labour Convention;
- Monitors compliance with rules and regulations concerning maritime pollution protection, which includes MARPOL, in particular, but now also new obligations, arising under the WRC, i.e., primarily Port State Control of foreign-flagged ships in German ports, in relation to the WRC.

3.1.1.2.3 Emergency Roles and Responsibilities (Depending on the Location of a Maritime Casualty)

Finally, the Federal Navigable Waters Act (Bundeswasserstrassengesetz, in short: "WaStrG") applies in the German territorial sea and in German internal waters (including all inland waterways). Consequently, this national act, specifically §§ 24-33 of the "WaStrG", has traditionally regulated wreck removal operations in the national legal order of Germany – long before the WRC had been negotiated and entered into force.

In case of maritime casualties in the German territorial sea and in German internal waters, resulting in a hazardous obstacle to traffic or shipping, the German maritime authorities may intervene and arrange for the removal of the wreck if it is immediately necessary or in case the responsible party (not exclusively referring to the "owner") cannot be contacted in due time.[88]

In sum, §§ 24-33 "WaStrG" establish the legal basis for all necessary emergency competencies of German maritime authorities.[89] Both the "BSH" and the "BG Verkehr" (as mentioned above) are not the competent authorities here. Rather, the question of identifying the competent German authority for emergency wreck removal operations will always depend on the specific location of a possible wreck or hazard. If a maritime casualty occurs in the German territorial sea, the emergency competencies have been centralized in the "Havariekommando", i.e. the "*Central Command for Maritime Emergencies Joint Institution of the Federal Government and the Coastal States*".[90] However, if a casualty should occur within the internal waters, e.g., on one of the major German rivers, then the "*General Board for the Federal Navigable Waters*" ("*Generaldirektion Wasserstrassen und Schifffahrt*") will be the competent authority, sub-delegating the necessary tasks to one of its seven field offices which have certain geographically-limited areas of competency within Germany.[91] Specialized competencies for Port Authorities (e.g., in case a maritime casualty should occur in a berth within a legally defined port area) are being respected (§ 24(3) WaStrG).

Collaborations between authorities in order to facilitate the work and make it more effective are possible but will be agreed upon on an *ad hoc* basis. For example, a maritime casualty on the Elbe river approach to the port of Hamburg could affect all administrative agencies mentioned above. Depending on the exact location of the maritime casualty, for

88 *A. Friesecke*, Bundeswasserstraβengesetz Kommentar, 6th ed., pp. 656.

89 See generally *K. Ramming*, Das Wrackbeseitigungsübereinkommen und seine Umsetzung nach deutschem Recht (Recht der Transportwirtschaft 2014) 129.

90 See further http://www.havariekommando.de/en/index.html.

91 See https://www.wsv.de/Wir_ueber_uns/Dienststellen/GDWS/Kontakt/.

example the Hamburg Port Authority and/or the responsible field office of the "*General Board for the Federal Navigable Waters*" for the Elbe River might ask the "Havariekommando" for technical expertise or assistance. On the other hand, for geographical reasons, the "Havariekommando" will not play any role if a casualty occurs on the Rhine River.
The established German system for recovering the costs for wreck removal operations itself, however, is traditionally quite protracted and will be discussed in the section on liability and insurance.

3.1.2 National Liability and Insurance Regimes / Funding for Removal of Wrecks

3.1.2.1 Relating to Wreck Removal in Internal Waters and/or the Territorial Sea

In case of public emergency wreck removal operations within the German territorial sea and/or the German internal waters, the competent German maritime authorities will seek to recover the associated costs. Remarkably, and in contrast to the WRC, for the German territorial sea and/or the German internal waters, there are no compulsory insurance obligations and no possibilities for State agencies to bring a claim directly against an insurer.

However, unlike the WRC, the traditional German approach to regulating wreck removal does not channel liability to the ship owner. Rather, § 25 WaStrG provides for more than one party to be potentially liable to account for the costs of wreck removal operations: According to § 25(1) WaStrG an interferer by action (a so-called "*Handlungsstörer*") is a party whose conduct has directly caused the hazard. In a case of a collision between two vessels, this could result in both managers of both collided vessels falling within the legal purview of an "interferer by action".

Additionally, § 25(3) WaStrG establishes strict liability for a tortfeasor ("*Zustandsstörer*") as a party whose property has caused a hazard. This approach is common in all areas of German administrative law were costs have been sustained by the State. The State may base its claim for

recovery on general civil law – according to a legal concept which is known in German law as "*reimbursement of expenses in the absence of express authority*" (§§ 670, 683 of the German Civil Code).[92]

Both alternatives of § 25 WaStrG (in conjunction with German civil law) can potentially apply in case a vessel is sunken or stranded. However, measures to be taken by German maritime authorities have to be directed either at the interferer by action or the strict-liability tortfeasor.[93] In case the interferer by action or the strict-liability tortfeasor is not a ship owner or a (bareboat or time) charterer, *in rem* liability can apply additionally (§ 30(3) - (10) WaStrG) and the German authorities will detain and sell the wreck (potentially including supplies and cargo) in order to recover the wreck removal costs (if it makes commercially sense).[94]

Furthermore, according to § 30(12) WaStrG, a ship owner or charterer who is held personally liable can limit his liability pursuant to §§ 611 to 617 of the German Commercial Code (in conjunction with the corresponding provisions of the LLMC). Limitation of Liability is accomplished by the constitution of a limitation fund.[95]

3.1.2.2 Relating to Wreck Removal in the EEZ Under the Rules of the WRC

Under German law, the liability impacts of the WRC have been primarily implemented by three acts: First, the German Act on Particular Proof of Insurance in Maritime Transport of 4 June 2013 ("SeeVersNachwG").[96] This act is supplemented, secondly, by the German Ordinance on the

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92 The provisions state the following, § 670 German Civil Code "*If the mandatary, for the purpose of performing the mandate, incurs expenses that he may consider to be necessary in the circumstances, then the mandatory is obliged to make reimbursement.*"; § 683 German Civil Code: "*If the assumption of agency corresponds to the interest and the real or presumed will of the principal, then the voluntary agent may demand reimbursement of expenses like a mandatary. […]*".

93 See *A. Friesecke*, Bundeswasserstraßengesetz Kommentar, 6th ed., pp. 469.

94 Ibid., p. 658.

95 Ibid., p. 657.

96 Federal Law Gazette Vol. I 2013, p. 1471; see explicitly: *J.M. Hoffmann/G. Tüngler, S. Kirchner*, Das neue Seeversicherungsnachweisgesetz (Recht der Transportwirtschaft 2013) 264.

Issuance of Liability Certificates of 27 June 2013 ("SeeVersNachwVO"). A short summary of the acts and their legislative impacts is available in English on the (newly established) centralized website of the German Flag State administration.[97]

Third and finally, a new Enforcement of Claims for Wreck Removal Act *("Wrackbeseitigungskostendurchsetzungsgesetz")*[98] defines powers and rights of German maritime authorities with regard to wreck removal operations in accordance with the WRC. The act has only four provisions, which essentially make the rules of German civil law applicable for cost recovery for any EEZ-related operations (i.e. §§ 670, 683 of the German Civil Code, as established already for decades in relation to the territorial sea and internal waters and as discussed above). The general legal supremacy of the WRC, in particular of Art. 10 WRC, remains untouched.

Furthermore, the act clarifies that the "*General Board for the Federal Navigable Waters*" and its sub-divisions are the competent authorities for any kind wreck removal related recovery of costs. Thus, the area of cost recovery is "centralized" as far as possible under German law. The issuer of the Proof of Insurance in Maritime Transport (the "BSH") is not involved in the recovery of costs. For any EEZ-related wreck removal operations the "*General Board for the Federal Navigable Waters*" and its sub-divisions have the additional option to bring their claim(s) directly against an insurer.

As a result, since 14 April 2015, all owners of ships with a gross tonnage of 300 or more which fly the German flag or call at or leave a port in Germany or call at or leave a facility situated in the German territorial sea are under a legal obligation to be insured in accordance with the WRC. The insurance must be verified by a national wreck removal liability certificate, issued by the "BSH" upon application. The original wreck removal liability certificate must be carried on board and presented upon request by surveyors of the Ship Safety Division of the "*BG Verkehr*". It is possible to apply for a German wreck removal liability certificate, if

- The ship flies the German flag;

97 See http://www.deutsche-flagge.de/en/liability/wreck-removal-liability

98 Federal Law Gazette Vol. I 2013, p. 1478.

- The ship is registered in a German register but has changed to a foreign flag which is not a State Party to the Wreck Removal Convention or
- Is neither registered in a shipping register of a State Party nor flying the flag of a State Party.

The period of validity of the German wreck removal liability certificate is in principle the same as that of the insurance in place or other financial security provided; it does however not exceed one year.

3.1.3 National End-of-life Management Considerations

Germany has not yet ratified the Hong Kong Ship Recycling Convention, however, the latest amendments to the Federal Maritime Responsibilities Act have newly (but still quite generally) introduced "*safety requirements and surveys in relation to ship dismantling operations*" (see § 1(4)(d) and § 9(1) SeeaufgG).

Essentially, this is a preparation to take account of Regulation EU/1257/2013 on ship recycling which will introduce and accelerate the necessity of the Inventory of Hazardous Materials (IHM) as a further document required by Port State Control within the EU (for new-built vessels by the end of 2018, and for all existing vessels, by 1 January 2021 at the latest). All other end-of-life considerations have to be in line with the general rules of the Basel Convention.

3.2 Republic of Finland[99]

3.2.1 The Regulatory Framework

3.2.1.1 Legislative Background / Legal Definition of the Term "Wreck"

The term "wreck" is defined in the WRC, which has been recently ratified by Finland. During the writing finalization of this report, Finland was entering the domestic implementation process of the WRC. According to the Implementation Act 859/2016 signed by the President on 14 October 2016, the provisions of the WRC shall be apply as national law. The Convention and required national amendments will enter into force soon after, but at the time of the writing of this report, the governmental decree on the implementation with the exact date had not been issued. The amendments and reference to the WRC were added into a new Chapter 11a of the Finnish Maritime Code (674/1994), which has 8 Articles. This blanket law approach is very typical in Finland. Beside the reference to the WRC, the new Articles concern the role of the Finnish Transport Agency, which is the national authority in matters regarding the WRC.

Other Finnish laws, except the WRC, do not currently define terms such as "wreck" or "sunken ship". Only reference to the terms "wreck" and "sunken vessel" has been made in two separate laws. In addition, reference to "a ship that sinks or runs aground" is made in the Section 25 of the Act on Oil Pollution Response (OPR Act, 1673/2009), which states that:

> **§ 25 Measures concerning the ship and its cargo**
>
> If a ship sinks or runs aground in Finnish waters or in Finland's exclusive economic zone, becomes a party to a collision in said area, or is subject to a leakage or machine malfunction, or otherwise ends up in a state in which the risk of an oil spill or leakage of any other noxious substance is apparent, the Finnish Environment

[99] The information provided was gathered by WMU concerned researchers and external consultants in the research phase of Project WRENE in 2016, and before the WRC was fully incorporated in the Finnish legislation. Thus, the information provided herewith reflects the Finnish wreck-related state of affairs of 2016.

> Institute may order the commencement of such rescue or other measures directed at the ship and its cargo that are considered necessary to preventing or limiting the pollution of water. Before taking such measures, the Finnish Environment Institute must consult the Finnish Transport Safety Agency on the incident. Furthermore, the Finnish Environment Institute must consult the owner of the ship, the rescue company that has received the assignment, and the representatives of the insurers, if such consultations can be conducted without causing an unnecessary delay.
>
> In order to prevent harmful consequences, the master of the ship that caused the water pollution or risk thereof must provide the authorities with any and all assistance required considering the circumstances.

Although not explicit, the term sunken ship/wreck is found in Chapter 3 of the Finnish Antiquities Act (295/1963). Chapter 3 entitled "Finds of Ships and Vessels" states that:

> **§ 20**
>
> The wrecks of ships and other vessel discovered in the sea or in inland waters, which can be considered to be over one hundred years old, or parts thereof, are officially protected. The provisions concerning ancient monuments shall apply, where relevant, to wrecks and parts thereof.
>
> Objects discovered in wrecks … or objects evidently originating from such contexts, shall go to the state without redemption. In other respects the provisions concerning movable ancient objects shall apply where relevant.
>
> The finder of a wreck stipulated in this Section shall immediately report the discovery to [the National Board of Antiquities and Historical Monuments].[100]

Reference to the term "wreck" is made in different parts of the Finnish Maritime Code (FMC) [2]:

[100] *The Antiquities Act* (Finland domestic law, *muinaismuistolaki 295/193*), Retrieved from the World Wide Web; http://www.nba.fi/en/cultural_environment/archaeological_heritage/official_protection/the_antiquities_act

3 Kap: Fartygsinteckning och sjöpanträtt

… 5) bärgarlön, ersättning för avlägsnande av vrak och bidrag till gemensamt haveri …

6 Kap: Fartygs befälhavare

12 a § (30.12.2002/1359) Befälhavarens anmälningsskyldighet

Befälhavaren på ett fartyg skall underrätta fartyg i närheten samt på Finlands vattenområde sjöfartsverket och på andra områden en myndighet, ett organ eller ett system som främjar eller övervakar sjötrafiksäkerheten i området om farlig is eller anhopning av is, ett farligt vrak, vindar av minst 10 Beauforts styrka för vilka ingen stormvarning har utfärdats eller någon annan omedelbar sjöfartsrisk liksom också om säkerhetsanordningar för sjöfarten som fungerar på ett felaktigt eller vilseledande sätt eller som har förskjutits från sin plats eller försvunnit.

9 Kap: Allmänna stadganden om ansvarsbegränsning (13.10.1995/421)

2 § Fordringar som är föremål för ansvarsbegränsning

… 4) åtgärder för att lyfta, avlägsna, förstöra eller oskadliggöra ett fartyg, inbegripet allt som finns eller har funnits ombord, som har sjunkit, strandat, övergivits eller blivit vrak …[101]

As explained above, Finland has ratified WRC and was in the process of domestic implementation in 2016. Internationally, the WRC entered into force in 2015 and provides the legal basis for States to remove, or have removed, shipwrecks that may threaten the safety of lives, goods and property at sea, as well as the marine environment.[102] Since Finland has adopted the dualist approach (instead of monistic), the provisions of the WRC were implemented into national legislation before the Convention

[101] Finland: *Maritime Code (merilaki 674/1994)*, Retrieved from the World Wide Web; http://faolex.fao.org/cgi-bin/faolex.exe?rec_id=008193&database=faolex&search_type=link&table=result&lang=eng&format_name=@ERALL

[102] *International Convention on the Removal of Wrecks*, 2007, concluded at *Nairobi* (14–18 May 2007), LEG/CONF.16/19.

could be applied. Finland is also Party to the 1989 International Convention on Salvage, which entered domestically into force 12 January 2008. The most important domestic rules have been codified into Chapter 16 of the FMC. Finland has reserved the right under Article 30(1)(d) not to apply the provisions of the Convention, when the property involved is maritime cultural property of prehistoric, archaeological or historic interest and is situated on the seabed.

3.2.1.2 Roles and Responsibilities of Legislative Authorities

Finland does not have a single authority that has the official duty to administer, search or deal with different types of wrecks. Currently, there are several authorities in Finland that deal with one or more aspects of "wreck" as a part of their mandate. However, there are no national mechanisms or frameworks for the systematic search for wrecks. Wrecks have always been the side product of other official tasks, such as underwater surveys that have been carried out by the national authorities or third parties.

The Finnish Environment Institute (hereinafter referred to as SYKE) has been working with wreck related matters for a considerable period of time. It is understood that SYKE and the Ministry of Environment are responsible for the prevention of oil-leakage from wrecks. Furthermore, the Section 8 of the "OPR Act"[103] specifies, that the Finnish Transport Safety Agency, the Finnish Defence Forces (the Navy) and the Finnish Border Guard (hereinafter referred to as FBG[104]) shall participate in the prevention of and response to oil and chemical spills from ships, as provided in more detail in this Act or in other legislation.

Although SYKE is not involved in wreck-searches, they were able to use the data that was collected by the Finnish Maritime Administration (hereinafter referred to as FMA) until 2009 when FMA was shut down.

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[103] Authorities participating in the prevention of and response to oil and chemical spills from ships.

[104] Official homepage of the Finnish Border Guard (Rajavartiolaitos), Retrieved from the World Wide Web; http://www.raja.fi/facts/news_from_the_border_guard/1/0/the_finnish_border_guard_s_new_offshore_patrol_vessel_opv_turva_is_ready_for_duty_54440

When there is a potential threat, or an actual threat of pollution at sea, it must be reported to the Maritime Rescue Coordination Centre (MRCC/MRSC), to the emergency response centre, or to the VTS Centre. These authorities will then forward the report to the duty officer of SYKE, and to the Regional rescue service. In case of an oil spill, the Finnish Navy and Border Guard can provide assistance and clean-up equipment and/or vessels.

The National Bureau of Antiquities (hereinafter referred to as NBA) is interested in shipwrecks that have historical and archaeological values. The NBA preserves, collects, studies and displays shipwrecks. These shipwrecks are the ones presumed to be abandoned and submerged for over 100 years. The Finnish Military Museum (hereinafter referred to as FMM) administers all sunken warships despite their age and nationality. In short, when sunken warships cross the age of 100 years, there are two authorities that govern the situation in co-operation.

While the FBG is responsible for the national border security and surveillance, their new offshore patrol vessel *OPV Turva* has been in operation since 2014, and has the capabilities to survey wrecks and clean-up oil spills. The FBG co-operates with SYKE and other national officials, if it is within their operational mandate. For example, during the summer of 2016, the FBG and SYKE surveyed the World War II era German Destroyer *Z-36,* that was within the Finnish EEZ, and took oil samples.

It is noteworthy that he Finnish territorial sea is 12 nautical miles (hereinafter referred to as nm), and there is a 2nm contiguous zone for custom and fiscal matters. The WRC will also apply on the Finnish EEZ. It should be noted, that the NBA, the FMM and the FBG have adopted internal guidelines that concern wreck finds, but the scope of these guidelines is limited to the protection of shipwrecks and does not extend to environmental concerns.

3.2.1.3 Surveys and Inventories

Since 1987, SYKE has been developing a shipwreck-inventory that may be a potential hazard in Finnish waters.[105] Based on correspondence with concerned Finnish authorities and information gathered from relevant secondary sources, the following table provides an overview of different types of shipwrecks identified within Finnish water:

Table: Different categories of Wrecks within Finnish Waters

Category	Measurement of Oil Contained	Total Numbers	Additional description
Category 0	Contains less than 10 tonnes of oil.	306	"Seven of these have been identified with confidence (by name) and their location has been confirmed. One wreck has not been identified, though its location was known. Twelve have been identified, but their exact location was unknown. Two wrecks have not been located and their existence was reported unclear".
Category 1	Contains more than 100 tonnes of oil with high certainty	22	-
Category 2	Contains more than 100 tonnes of oil with a slightly lower certainty	24	-
Category 3	Contains 10 to 100 tonnes of oil	68	-

Source: 1) Erik Svensson Potential Shipwreck Pollution in the Baltic Sea: Overview of Work in the Baltic Sea States (Swedish Maritime Administration and Lighthouse, Supplement to the report to the Swedish Government: Vrak som miljöhot, 2010); and 2) Powerpoint Presentation by Jorma Rytkönen, FEI, with the contribution of Ida-Maja Hassellöv, Chalmers University, SE; Tarmo Kõuts, Marine Systems Institute of TUT, EE Kari Rinne, Alfons Håkans LtD, FIN (2014). SWERA: Sunken Wreck Environmental Risk Assessment.

[105] Erik Svensson (*Potential Shipwreck Pollution in the Baltic Sea: Overview of Work in the Baltic Sea States*, Swedish Maritime Administration and Lighthouse, Supplement to the report to the Swedish Government: *Vrak som miljöhot*, 2010).

Correspondence with Finnish experts on wreck also reveals that the services provided by FMA, including bathymetric surveys and marine mapping, were incorporated into a state-owned-company called Meritaito Ltd. in 2010. Since 2010 Meritaito has found several wrecks and other anomalies during their surveys. However, there are no known protocols for information sharing between national officials.

The outcomes of the 'fourth meeting of the HELCOM SUBMERGED expert group' were discussed in a "2-day meeting"[106] held in Helsinki.[107] The document entitled "Outcome of SUBMERGED 4-2016" included a short description of the existing Finnish surveys and database concerning wrecks:

> There is no official central register for wrecks in Finnish waters. Finnish Environment Institute has a database of shipwrecks. Core of that register date back to 1970-ies. In addition, Finnish Maritime Administration has made their own survey of sunken ships, usually as a part of the sea bottom surveys for navigational purposes. Later this work has been conducted by Meritaito LtD, A private government owned company specialized on harbour and fairway maintenance and sea bottom surveying. Finland also has an open shipwrecks and wreck discoveries internet database, created in 1999, which covers the Finnish coastal and inland waters. The aim of the service is to gather enthusiast's personal archives and discoveries into one place to be used by all interested in maritime history and marine archaeology. Finland's National Board of Antiquities also maintains an internet service, where you can find information about relics in Mainland Finland, shipwrecks included. Additionally of these data sources there are certain voluntary (hobby divers) diving associations with skilful crew on board who have collected data on wrecks, especially related to WW1 and WW2 warships and submarines.[108]

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106 4th and 5th October 2016.

107 *Outcome of SUBMERGED 4-2016*, Baltic Marine Environment Protection Commissions, Retrieved from the World Wide Web; https://portal.helcom.fi/meetings/SUBMERGED%205-2016-377/MeetingDocuments/2-1%20Outcome%20of%20SUBMERGED%204-2016.pdf

108 Ibid.

It is understood, that SYKE conducts one or two site inventories every year on wrecks that fall within "category 1", i.e. wrecks that contain more than 100 tonnes of oil with high certainty.[109]

It is noteworthy that the NBA maintains an Ancient Relics Register[110] (*Finnish: muinaismuistorekisteri*), which includes all known shipwrecks within the territorial sea, internal waters and lakes.[111] Finnish sport divers have also put up their own register[112], which has information on shipwrecks. Both registers are accessible to the public.

3.2.2 National Liability Regimes

In 2016, the liability regimes concerning clean up from discarded vessel were governed by the Waste Act (646/2011). S. 72 read together with s. 74 provides an understanding of the liability regime concerning clean up:

> **Section 72: Prohibition on littering**
>
> No waste or discarded machine, device, vehicle, vessel or other object may be abandoned in the environment, and no substance may be emitted in a manner which may cause unclean conditions, disfigurement of the landscape, a decline in amenities, risk of injury to humans or animals, or any other comparable hazard or harm (*prohibition on littering*).

> **Section 74 (6.6.2014/410): Supplementary obligation to clean up**
>
> (1) If the person responsible for littering cannot be ascertained or found, or if the person responsible fails to comply with the obligation to clean up, the following are responsible for cleaning up:
>
> 1) the keeper of a public road, private road, railway or harbour in an area where littering has occurred due to the use of the road, railway or harbour; …
>
> (2) If the holder of an area referred to in subsection 1(6) fails to comply with the obligation to clean up, or the holder is not required

[109] Svensson, *supra* note 105.

[110] See http://kulttuuriymparisto.nba.fi

[111] Around 1400+ known wrecks.

[112] See http://www.hylyt.net

> to clean up under the aforementioned paragraph, the local municipality is required to clean up the litter.[113]

Due to the unavailability of official translations of the Environmental Protection Act (527/2014) and the Regulation on Shipping Passages (846/1979), consideration had to be given to the information provided in the official homepage of the 'International Comparative Legal Guides':

> Under Section 9 of the Regulation on Shipping Passages, if a ship sunk in a shipping passage is detrimental or dangerous to shipping, the owner or possessor of the ship must remove it as quickly as possible. Failure to do so may result in the obligation to pay damages. The authorities may take the necessary action to remove the danger at the negligent party's expense.
>
> Section 18 of the Environmental Protection Act forbids the intentional sinking or abandonment of a ship in Finland's territorial sea or its exclusive economic zone. Under Sections 175 and 179, the competent authorities may order the offender to remove the harm caused. The order may be enforced with a penalty fine.[114]

3.2.3 Environmental Impacts of Wrecks

In Finland, there have been a number of cases, which required urgent action to remove oil and other hazardous substance to minimize the environmental aspects. The most notable examples, excluding the M/S Estonia sunk in 1994, are summarized in the following:

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[113] *Waste Act (jätelaki 646/2011; amendments up to 528/2014 included)*, *N.B.* Unofficial translation, legally binding texts are those in Finnish and Swedish Ministry of the Environment, Finland, Retrieved from the World Wide Web; http://www.finlex.fi/en/laki/kaannokset/2011/en20110646.pdf

[114] Finland: *Shipping Law 2016*, Retrieved from the World Wide Web; http://www.iclg.co.uk/practice-areas/shipping-law/shipping-law-2016/finland

Table: Environmental impacts of wrecks as observed in a few cases[115]

Name of the Wreck	Summary
S/S Park Victory	"The cargo ship sank in the Gulf of Finland near Utö on 25 December 1947. Oil leakage from the wreck was detected in August 1994. The volume of bunker fuel inside the wreck was estimated to 600 tonnes. The poor condition of the wreck was an obvious threat to the environment. The Finnish Ministry of the Environment thus authorized SYKE to conduct oil removal from the other tanks of the wreck. The removal operation was carried out during 1994 to 2000. A total of 410 m3 of oil was removed",
M/S Brita Dan	"Furthermore, the freighter M/S Brita Dan sank in 1964 and started to leak oil outside Rauma in June 2003. SYKE removed a total of 20 m^3 relatively light grade fuel oil. Oil removal has also been conducted from a fuel barge that sank during the Second World War and was located in a nature reserve outside Hangö. The oil removal operation was conducted in 2007. About 700 tonnes of diesel and heavy fuel oil was removed".
M/A Jut'n Feldman	"As recent as October 4, 2010, YLE News reported that the oil has been successfully removed from the cargo ship M/A Jut'n Feldman, which sank near Helsinki in 1953 on its way from Hamina to Germany. The wreck is located 45 metres deep. The investigations started in 2008. There was no leakage, though the fact that the oil tanks were located inside the engine room, raised concern about leakage through a ventilation pipe. The tanks contained 4,500 litres of fuel oil. There were also lube oil onboard. In October 2010, the fuel tanks were successfully drained. The news report further mentioned that a number of other wrecks are being investigated".

[115] Svensson, *supra* note 105.

The sunken Wreck Environmental Risk Assessment is considered to be a modernized approach when it comes to potential or actual threat from wreck or sunken ships. As stated in the official homepage of SYKE:

> The new and innovative approach combines the theoretical risk assessment method developed at Chalmers University of Technology, Sweden with an oil removal risk tool by SYKE and Alfons Håkans Ltd. Preparing a joint wreck register will be coordinated by Tallinn Technical University. The novel salvage support tool will further advice technicians and salvage operators to design the safe and economically feasible way to work close to the sunken wreck, and to execute successful operations.[116]

3.2.4 National End-of-life Management Considerations

To the best of our knowledge, there are currently no specific end-of-life vessel management that can assist in dealing with wrecks or sunken vessels. The current initiatives include removal of oil or other hazardous substances from sunken wrecks.

The Recovery of Obsolete Vessels not Used in the Fishing Trade (hereinafter referred to as ROVFT), which is a joint study of COWI A/S (international consulting group based in Denmark) in cooperation with Roy Watkinson Environmental Consulting Limited (RWEC) and LEITAT (based in Spain), has attempted to provide specific information of ship dismantling within the European Union.[117] In terms of Finland, the ROVFT provides the following information:

[116] Official homepage of SYKE (Finnish Environment Institute), Retrieved from the World Wide Web; http://www.syke.fi/projects/swera

[117] Recovery of Obsolete Vessels Not Used in the Fishing Trade (2011), Final Report, European Commission, DG Environment, Retrieved from the World Wide Web; http://ec.europa.eu/environment/waste/ships/pdf/Final_report_ver03_09_12_2011.pdf

Table: Finland: Information on ship dismantling

Country	Dismantling Costs	Specific Information	Information Source
Finland	For boats under 6 metres, the disposal costs are 10€ per metre, plus nominal local transportation costs. The reported Finnish costs are as follows: Truck hire 55€ per hour Disposal cost (boat <6m) 10€ per metre Disposal cost (boat >6m) 150€ per tonne The disposal of metal boats is free of charge.	The Finnish system follows the principle that "the polluter pays" but tempers this by ensuring that the polluter doesn't pay too much (avoiding dumping problems because of high marina charges and high disposal costs). The Finnish system is not yet proven for larger craft, such as large sailing boats among others, but Kuusakoski is confident that these too can be handled with no particular difficulties. In their opinion, no new capital expenditure on infrastructure, fixed or mobile, would be necessary. The costs of scrapping these larger crafts would be greater than for the small boats, with a 12m sailing boat working out at about 124€ per metre.	FINNBOAT – Finnish Marine Industries Federation & Kuusakoski

Source: Recovery of Obsolete Vessels not Used in the Fishing Trade, p. 112

3.2.5 Funding for Wreck Removal

During the research phase in 2016, it is found that no specific budget was allocated by the state with the specific perforce for removal of wrecks. It was also understood that all cases are handled on an individual basis.

3.3 Kingdom of Spain[118]

3.3.1 The Regulatory Framework

3.3.1.1 Legislative Background / Legal Definition of the Term "Wreck"

There are three domestic laws in the Kingdom of Spain (Spain) that cover different aspects of shipwreck. However, there is no explicit definition of shipwreck in any of the 3 domestic laws. There are are:

> a) The new Spanish Shipping Law 14/2014 (*Ley 14/2014, de 24 de julio, de Navegación Marítima*) (hereinafter referred to as LNM);
> b) Ley 41/2010 Protection of the Marine Environment Act (*Ley 4172010, de 29 de diciembre, de protección del medio marino*) (hereinafter referred to as PMEA); and
> c) The Code of Commerce of 1985.[119]

It should be noted that the provisions concerning shipwreck in the 3 laws are mainly liability-based. For example, Article 543 of the Code of Commerce states that, "[i]f the ship or her cargo were to be totally lost due to seizure or shipwreck, all the rights shall be extinguished, both that of the crew to claim any salaries and that of the shipping agent to reimbursement of the advances made". Again, liability in terms of a wreck can be contractual or non-contractual as stipulated in Article 396 of the PMEA;

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[118] The information provided was gathered by WMU concerned researchers and external consultants (Dr. Juan Jose Alvarez Rubio Professor, Universidad del País Vasco, Facultad de Derecho de San Sebastián, Spain; and Katerina Yiannibas Professor, Deusto University, Spain) in the research phase of Project WRENE in 2016. Therefore, the information provided herewith reflects the Finnish wreck-related state of affairs of 2016.

[119] *Code of Commerce*, 1985, Ministerio de Justicia, Retrieved from the World Wide Web; http://www.mjusticia.gob.es/cs/Satellite/Portal/1292426984594?blobheader=application%2Fpdf&blobheadername1=Content-Disposition&blobheadervalue1=attachment%3B+filename%3DCode_of_Comerce_ (Retrieved 6 November 2016)

Article 396

1. a) Claims for death or personal injury, or for loss or damage sustained on things, including damage to port works, waterways, aids to navigation and other property of the maritime or port authorities, which have occurred on board or directly linked to the operation of the vessel or salvage, as well as the damages derived from any of these causes.

b) Claims relating to the damages arising from the delay in the transportation of cargo, passengers and their luggage.

c) Claims related to damages arising from the injury of rights which are not contractual, directly incurred in connection with the operation of the ship or with rescue operations.

d) Claims promoted by a person other than the person responsible, measures taken to prevent or mitigate of which the responsible person may limit his liability and those caused subsequently by such measures, except where they have been adopted by virtue of a contract with the responsible person.

2. The claims set out in paragraph 1, irrespective of the liability, shall be subject to a limitation of liability with respect to independence that the action brought has a contractual or non-contractual nature.[120]

For sunken vessels to be treated as wrecks, the general perception is that: a) it has to be a total loss; and b) it has lost all qualities due to deterioration. The experts mentioned that a close observation of the different articles of these 3 laws indicate that they have carved out different concepts of shipwreck and therefore, there is no autonomous definition that can govern one single wreck situation. Again, the laws in Spain on shipwreck can be termed as circumstantial. Out of the aforementioned three laws, LNM covers certain aspects of wreck removal that related to this report.

The LNM was published in the Official Gazette on 25 July, 2014 and came into force on 25 September the same year. It was contemplated in the preparation of LNM that the definition of "shipwreck" would be

[120] *Ley 4172010, de 29 de diciembre, de protección del medio marino*, Retrieved from the World Wide Web; https://www.boe.es/boe/dias/2014/07/25/pdfs/BOE-A-2014-7877.pdf (Retrieved 7 November 2016)

included as a definition in the 'definition' section. The definition was highly debated, but it was not finally incorporated in the main text.

It is understood that the LNM establishes and regulates the procedures aimed at the removal of shipwrecks and other goods on the seabed. However, the regulations so incorporated in the LNM does not apply in the case of underwater cultural heritage goods situated in the areas contiguous with Spain, in the exclusive economic area and in the continental platform, governed by the 'Convention on the Protection of the Underwater Cultural Heritage of 2 November 2001', and by other treaties signed by Spain, as well as by specific legislation.[121] [122]

The Spanish term for shipwreck or sinking ships is *naufragio*. The usage of the term *naufragio* is observed in the LNM. Although the term *naufragio* or shipwreck is not explicitly defined in the LNM, it is noteworthy that the LNM governs certain legal aspects of shipwrecks. These legal aspects relate to: a) determining the status of the goods concerned; b) determining the right of ownership over shipwrecks; c) determining a quasi strict liability of the shipowner or the owner of the artifact that causes pollution. In addition, the LNM also highlights relevant mandatory insurance requirements in accordance with applicable international conventions, especially International Convention on Civil Liability for Damage Pollution by Oil of 1992 and the International Convention on Civil Liability for Damage; Bunker Oil Pollution from Ships of 2001. Furthermore, the LNM stipulates that shipwrecked or sunken vessels, as well as their remains, equipment and cargo are state public property, inalienable and not subject to limitation periods.

The LNM also stipulates that the state will acquire the property of any vessel or good that is shipwrecked or sunken in inland maritime waters or in Spanish territorial waters. This applies in cases where the shipwreck

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[121] Official homepage of the *International Comparative Legal Guides*, Retrieved from the World Wide Web; http://www.iclg.co.uk/practice-areas/shipping-law/shipping-law-2016/spain (Retrieved 6 November 2016)

[122] Unofficial translation of the *Ley 14/2014, de 24 de julio, de Navegación Marítima*, p. 10, Retrieved from the World Wide Web; http://lsansimon.com/The-Maritime-Shipping-Law/wp-content/uploads/2014/09/Ley-14_2014_de-24-de-julio_de-Navegaci%C3%B3n-Mar%C3%ADtima-EN.pdf (Retrieved 8 November 2016)

or sinking has been in inland maritime waters or in Spanish territorial waters for 3 years. After the lapse of 3 years, except in the case of state vessels and crafts, the shipwreck or sunken vessel shall not be subject to any further limitation periods.

The aftermath of the 1992 *Mar Egeo* (*Aegean Sea* tanker) oil spill has led to the re-emergence of the need for an autonomous and single definition of shipwreck. This has been a matter of debate among concerned authorities of Spain for a considerable period of time. To date, there has been no follow-up on the issue.

3.3.1.2 Roles and Responsibilities of Legislative Authorities

In the context of wreck, it is important to note that although there are autonomous regions in Spain (*Basque, Catalan* and *Galicia*), wreck responsibilities are mainly of national concern. The authorities of the Spanish regions do not intervene or play any role in terms of wreck.

The principal national regulatory authority that deals with wrecks is the Directorate General of the Merchant Navy (*Dirección General de la Marina Mercante*) (hereinafter referred to as DGMM), as part of the Ministry of Public works, Environment and Transport. The DGMM is the civil maritime authority that has responsibility for oil spill response within Spain's territorial waters and the EEZ and the duties extend to dealing with pollution from shipwrecks or sunken vessels. *Salvamento Maritimo* (hereinafter referred to as SASEMAR) was created in 1992 by the Spanish law and is considered to be the operational agency in charge of oil spill prep and response for DGMM. It is relevant to note that the DGMM is responsible for implementation of the National Plan for Salvage and Pollution Control.[123]

If a spill enters or occurs in near-shore waters or impacts the shoreline, overall direction and coordination is provided by the Civil Governor of the province that is affected. The Civil Governor then convenes a technical

[123] Official homepage of the *International Tanker Owners Pollution Federation Limited*, Country Profile: Spain, Retrieved from the World Wide Web; http://www.itopf.com/knowledge-resources/countries-regions/countries/spain/ (Retrieved 8 November 2016)

coordination committee.[124] Shoreline clean-up is mainly provided by municipal councils and coordinated by the Civil Protection Board.[125] If more than one province is affected, the Ministry of the Interior and local government representative assume responsibility. Shoreline response usually involves *Empresa de Transformacion Agraria SA* (hereinafter referred to as TRAGSA), a public company funded by federal and provincial government.[126]

The competent authority for dealing with marine pollution at sea involving Hazardous and Noxious Substance (hereinafter referred to as HNS) is the DGMM.[127] Spain is currently working to improve and progress in preparedness and response to HNS incidents. It is important to note that Spain does not specifically cover HNS in its National Contingency Plan.[128]

The decision whether to remove a wreck is exclusively a decision of the DGMM. But the law also contemplates a 'cabinet of crisis' that is comprised of the DGMM, The Minister of Public Works, the Minister of the interior, the Minister of Defense and the President of the Government (Prime Minister). The decision of wreck removal is a joint decision from the 'cabinet of crisis'.

Although the law stipulates that wrecks should be removed by public administration, the hiring of private contractors to perform wreck removal is not restricted by law. All of this depends on risk-assessments and if hiring private contractors to remove wrecks is considered to cause less damage to the environment, then that is the alternative that is mostly preferred. The experts have highlighted that the Spanish government has previously had success in dealing with wrecks via private contracts.

At this juncture, the *Mar Egeo* case is a noteworthy example. In this case a number of fishermen from the *Basque* country have assisted to minimize the damage. In parallel, there was assistance from the Spanish

124 Ibid.
125 Ibid.
126 Ibid.
127 Ibid.
128 Ibid.

military. However, for the assistance provided by the fishermen, they were awarded 400 000 Euros by the *Basque* government. Within the 40 years, there has been a noticeable radical shift of wreck-responsibilities from public administration to private companies. This is due to lack of government resources and failed attempts to deal with wrecks in the past. The experts are of the opinion that this is an important issue that requires further investigation.

3.3.1.3 Surveys and Inventories

To date, no survey has been conducted by any of the concerned authorities. As such, there are currently no official inventories on shipwrecks or sunken vessels. Again, the experts have indicated that a lot of the wrecks in Spanish waters are foreign vessels and therefore, there is no legal obligation to conduct surveys or inventories of the foreign-flagged vessels that are currently lying on the sea floor as wrecks. The experts also suggest that the *status quo* number of wrecks within Spanish waters is estimated to be less than 10. These are the wrecks that may have that may have oil or other hazardous substances on board. For example, investigations are carried out every year to calculate and revise the amount of oil or noxious substances. The vessels that are checked every year include the *Erika*, the *Urquiola* and the Spanish galleons that have a historical value.

The experts also stated that Spain is divided into 12-15 *Capitanías Maritimas* (hereinafter referred to as Harbour Masters Office). Article 88 of the *La Ley 27/1992 de Puertos del Estado y de la Marina Mercante, B.O.E. núm. 283 del 25 de Noviembre de 1992* has designated these Harbour Master's Office as the new peripheral body of the Maritime Administration,[129] depending on the Ministry of Transport, Communication and Works. These 'Harbour Masters offices' effectively report each maritime incident to the 'Spanish Association for Maritime Law', i.e. a private association, and subsequently publish summary reports on maritime incident in individual volumes. In addition, the information on

[129] *La Ley 27/1992 de Puertos del Estado y de la Marina Mercante, B.O.E. núm. 283 del 25 de Noviembre de 1992*, Retrieved from the World Wide Web; https://www.boe.es/buscar/doc.php?id=BOE-A-1992-26146 (Retrieved 8 November 2016)

wrecks communicated by these offices to the Association is for internal use and not publicly accessible.[130] There is no legal obligation to publicize these documents. However, a lot of these statistics are released at press conferences by the DGMM every semester. It is relevant to note that these statistics are not categorized according to threat-based priority.

Currently, the Spanish government is mainly concerned with shipwrecks that are a part of underwater cultural heritage rather than wrecks that pose a threat to the marine environment. This stems from the government's commitment pursuant to the Convention on the Protection of the Underwater Cultural Heritage, approved on 2 November 2001 that was ratified in the year 2005. These wrecks do not fall within the category of threat. The Spanish galleons are usually mapped and registered into a database.

3.3.2 Environmental Impacts of Wrecks

In the past, a number of wreck-related incidents have demonstrated a negative impact on the environment. A summary of these cases are provided in the following table:

[130] Official homepage of *Asociación Española de Derecho Marítimo*, Retrieved from the World Wide Web; http://www.aedm.es/ (Retrieved 8 November 2016)

Table: Summary of available wreck cases, which demonstrated negative impact on the environment[131] [132]

Vessel Name	Description
MV Urquiola	"On 12th May 1976 the tanker *Urquiola* struck bottom on entering the port of La Coruña and began leaking oil. To avoid the risk of an explosion within the harbour, it was decided that the vessel should return to sea where repairs or offloading could take place. However, the *Urquiola* struck bottom again on its way out of port and then ran hard aground between the two entrance channels with its bow resting in approximately 30m of water … It was estimated that 100,000 tonnes of Arabian Light crude oil was spilt during this incident, most of which burned, and an estimated 25–30,000 tonnes washed ashore. Over 2000 tonnes of dispersant was applied from vessels and helicopters to combat the spread of oil at sea … Shoreline clean-up efforts with limited mechanical support were undertaken. Problems arose with secondary oiling and with mechanical equipment churning oil deeper into the sand on the beaches. The large tidal range in the area caused further complications for shoreline clean-up. Shellfish stocks were significantly affected by the spill, and limited bird and fish impacts were also reported." **N.B.** The experts mentioned that the wreck was removed only once pursuant to a court order during the proceedings of a criminal trial. Wrecks are not usually removed until it is for that specific purpose, which is considered to be an idiosyncrasy. Every wreck case in Spain has gone through the criminal route.

131 Official homepage of the *International Tanker Owners Pollution Federation Limited*, *supra* note 123.

132 Official homepage of *the Guardian*, "Spanish seafood 'poisonous from oil spill", Retrieved from the World Wide Web; https://www.theguardian.com/world/2003/nov/07/spain.waste (Retrieved 8 November 2016)

MV Prestige	1. "During the afternoon of Wednesday 13th November 2002, the tanker Prestige, carrying a cargo of 77,000 tonnes of heavy fuel oil, suffered hull damage in heavy seas off northern Spain. She developed a severe list and drifted towards the coast, and was eventually taken in tow by salvage tugs. The casualty was reportedly denied access to a sheltered, safe haven in either Spain or Portugal and so had to be towed out into the Atlantic … In all, it is estimated that some 63,000 tonnes were lost from the Prestige. Owing to the highly persistent nature of Prestige's cargo, the released oil drifted for extended periods with winds and currents, travelling great distances. Oil first came ashore in Galicia, where the predominantly rocky coastline was heavily contaminated. Remobilisation of stranded oil and fresh strandings of increasingly fragmented weathered oil continued over the ensuing weeks, gradually moving the oil into the Bay of Biscay and affecting the north coast of Spain and the Atlantic coast of France, as far north as Brittany. Some light and intermittent contamination was also experienced on the French and English coasts of the English Channel. Although oil entered Portuguese waters, there was no contamination of the coastline". 2. "A large amount of oil did not reach the beaches but sank to the bed of shallow coastal waters, affecting the habitat of sea bass, octopus, crabs and shrimps, which are valued commercially, and raising concern about a serious risk of contamination by toxic pollutants such as polycyclic aromatic hydrocarbons (PAHs) … Unpublished data collected by the University of La Coruña for fishermen's groups show that mussels, barnacles and sea urchins have a high level of PAHs. Fish and octopuses are also shown to have significant PAH levels". **N.B**. The experts have indicated that removal of the Prestige is not possible due to the position it lies under water. The authorities have faced technical difficulties in the past when trying to remove the wreck.

MV Mar Egeo	"On 3rd December 1992 the Greek OBO carrier (ore/bulk/oil) *Mar Egeo*, laden with 80,000 tonnes of North Sea Brent crude oil, ran aground during heavy weather while approaching the port of La Coruña on the Galician coast, north-west Spain. The vessel broke in two and caught fire which, together with spilled cargo, burned for several days. Dense clouds of black smoke threatened the city of La Coruña, resulting in a temporary mass evacuation. The forward section of *Mar Egeo* sank in shallow water, some 50 metres from the coast. The stern section remained largely intact and was found to contain 6,500 tonnes of remaining cargo and 1,700 tonnes of bunker fuel, which was eventually pumped ashore by salvors". **N.B.** The experts have indicated the *Mar Egeo* case as a success-story. The *Mar Egeo* was previously on the "further inspection" list and has been taken off the list after bunker fuels have been successfully removed from.
MV Erika	"The Maltese tanker ERIKA, carrying some 31,000 tonnes of heavy fuel oil as cargo, broke in two in a severe storm in the Bay of Biscay on 12th December 1999, 60 miles from the coast of Brittany. About 20,000 tonnes of oil were spilled. The bow sank on 12th December and the stern on the following day… The main environmental impact of the spill was on sea birds. Almost 74,000 oiled birds were recorded ashore along the coast of the Bay of Biscay (Spain), of which almost 42,000 were dead".

3.3.3 National Liability Regimes

From a broad perspective, the owners are primarily liable for wrecks in Spanish waters. As such, the current liability regime for wrecks is contractual and non-contractual. If there is no environmental damage, then it is strictly a contractual regime. On the other hand, if there is environmental damage or if third parties are affected, then it will fall within the category of non-contractual regime. There is an overriding general principal that stems from Article 1902 of the Civil Code of Spain. The general principal is that when harm is caused, it should be

indemnified. There are no other domestic laws concerning shipwrecks or sunken vessels. This is due to the fact that the state acquires all vessels including sunken vessels after the lapse of 3 years.

Apart from the aforementioned regimes, the *status quo* Spanish laws make reference to the international regime. These include the International Convention on Civil Liability for Oil Pollution Damage of 1992 (CLC 1992), the Convention on Limitation of Liability for Maritime Claims of 1976 (London Convention 1976) and the 1992 International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage (Fund 92). It is noteworthy that Spain is currently not a party to the Nairobi International Convention on the Removal of Wrecks of 2007 (WRC 2007). If nuclear energy is involved, then the situation will be governed by Convention on Third Party Liability in the Field of Nuclear Energy of 29th July 1960, as amended by the Additional Protocol of 28th January 1964 and by the Protocol of 16th November 1982 (Paris Nuclear Convention and its Protocols). This is the current Spanish conventional framework.

In the case of the *Prestige*, limitation of liability was based on the whole capacity. In this case, Spain paid out to France and Portugal to pre-empt any indemnización (indemnization) cases brought against Spain. Under the relevant conventions there is a limitation of liability for the ship owners, but not for the state involved if any of the damage-responsibility can be attributed to the state.

3.3.4 Funding for Wreck Removal

It should be noted that if the government of Spain intends to deal with a certain shipwreck with HNS and in cases where the owner is not identifiable, regardless of whether there is a national flag or not, the Spanish government would rely on the CLC 1992. This is one of the ways to cover expenses for mitigating environmental damage caused by shipwrecks that are abandoned. In short, the government has developed a funding system for dealing with wrecks that have no identifiable owner. Currently, the fund-money is still inadequate and insufficient. Again, if it is outside the

scope of the CLC 1992, then there are chances that the removal of the *res nullius* will be covered by public funding/tax-payers money.

From a broad perspective, there are two existing regimes. The former relates to cases where there is a potential or actual threat to the environment, and the latter is where there is an absence of such threats. In cases where there exists a threat, the cost of wreck removal would be a part of the government's "environmental-expenses/costs". In the case of the *Prestige*, the investigation and academic studies related to environmental damage was a part of the government's "environmental-expenses/costs". This is also a conventional regime where the government can limit the liability of costs. In cases where there is an absence of environmental damage, the cost goes to whoever files the lawsuit, whether it is the owner or a third party or the state. It is also relevant to mention that, the owner or the third party has to get an authorization from the Spanish government to remove the wreck and a fee must be paid to that extent. All of this is done without prejudice to third party claims on the wreck. In practice however, private individuals do not attempt to remove the wreck. In most cases the wrecks are removed by the DGMM.

3.3.5 National End-of-life Management Considerations

The experts indicate that there is a big legal vacuum in this area. While there exists strong waste management regulations for automotive vehicles, batteries, mobile phones, electro domestic appliances, there are currently no regulations to deal with end-of-life vessels or wrecks. It is also relevant to note that, under Spanish law if a vessel is ceases to possess all qualities of a "vessel" and is unnavigable, it loses its legal status as a vessel or a ship under Spanish law. Subsequently, they are treated as movable goods. The classification of a vessel depends on its usefulness and this legal fiction does not apply in the cases of aircrafts or automotive vehicles. If the unnavigable vessel is reconstructed, it will regain its status as a vessel and will be removed from the category of movable goods. In practice, wrecks are usually dismantled and the parts are sold and may have a good value in the second-hand market. Again, it mainly depends on the type

of vessel and whether reusable parts are recoverable. In Spain, end-of-life vehicle treatment facilities[133] are licensed to manage the wastes from boat scrapping activities, carrying it out onsite or at ports facilities.[134]

3.4 The Kingdom of Denmark[135]

3.4.1 The Regulatory Framework

3.4.1.1 Legislative Background / Legal Definition of the Term "Wreck"

The WRC entered into force into the Danish Merchant Shipping Act, søloven, (hereby refered to as DMSA) on the 14th of April 2015.[136] The scope of the WRC applies to Danish territorial waters in addition to the Danish EEZ. This is due to the fact that a significant number of wrecks identified are located in the Danish territorial waters.[137]

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133 *See* Recovery of Obsolete Vessels Not Used in the Fishing Trade (2011), where it is mentioned that "[t]he recycling facility, *Desguaces Petrallo*, has been in business since 1994. Their every-day activity is dismantling of fishing vessels. Apart from fishing vessels, they have also dismantled other types of vessels such as small merchant vessels (around 50m) or recreational boats (fibreglass catamarans). This latter is however not the main activity and is only carried out from time to time. Dismantling is carried out in a dry dock and involves a lot of manual work. Fibreglass is disposed of to landfill or taken to waste management companies. *Desguaces LEMA* is a company specialized in industrial dismantling, hazardous and non-hazardous waste management and metal valuation. They are authorised for waste management by the *Galician* Government".

134 Recovery of Obsolete Vessels Not Used in the Fishing Trade (2011), Final Report, European Commission, DG Environment, Retrieved from the World Wide Web; http://ec.europa.eu/environment/waste/ships/pdf/Final_report_ver03_09_12_2011.pdf (Retrieved 8 November 2016)

135 The information provided was gathered by WMU concerned researchers and external consultants in the research phase of Project WRENE in 2016. Therefore, the information provided herewith reflects the Danish wreck-related state of affairs of 2016.

136 *LBK nr 75 af 17/01/2014 Gældende Søloven, Erhvervs- og Vækstministeriet, Offentliggørelsesdato*: 25-01-2014, Retrieved from the World Wide Web; https://www.retsinformation.dk/forms/r0710.aspx?id=161129&exp=1 (Retrieved 8 November 2016)

137 Official Website of the Danish Maritime Authority, Nyheder, Danmark sætter vragfjernelseskonventionen i kraft, 28/04/2014, Retrieved from the World Wide Web; http://www.soefartsstyrelsen.dk/Presse/Nyheder/Sider/Danmark-sætter-vragfjernelseskonventionen-i-kraft.aspx (Retrieved 8 November 2016).

The vessels referred to in the DMSA are Danish ships registered in Denmark and those that are authorised to fly the Danish flag. Section 1 of Part 1 of the DMSA states that in order for a ship to be considered as Danish and fly the Danish flag, the owner of the ship shall be Danish. This is the case for a Danish national, a Danish state institution or municipality, a legal person as defined pursuant to relevant Danish law or a registered company, foundation or association in Denmark (DMSA, Part 1, Section 1). However, when it comes to wreck removal, it seems that foreign ships have also been included.[138]

The term wreck has been incorporated with a broad scope in the Danish legislation due to the WRC in relation to the definition of "wreck" and the situations where a wreck needs to be removed. Therefore, wreck, according to the Danish legislation is not only a sunken or stranded ship or parts of it, but also includes the lost and drifting objects of the ship as well as drifting ships, if there is a risk that the drifting ship will eventually transform into a wreck.[139]

If a wreck is deemed to pose a threat to the coastal state's interests, the Danish authorities may require the owner to neutralize the wreck, and if the owner is unable to do so or in cases of special urgency, the authorities may proceed to defuse the wreck at the owner's expense. The registered owner is responsible for the costs for neutralization of the wreck on an objective basis within the limitation of liability rules. As such, a wreck can be removed when it poses a danger to navigation, if is an obstacle to traffic or if there is a danger that the wreck may harm the environment or the coastal areas. The word "harm" also includes negative impacts of a wreck on coastal communities, affected individuals (including fisheries), economic interests (including tourism), coastal population health and offshore and subsea installations.[140]

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138 Retsinformation, *Forslag til Lov om ændring af søloven, lov om skibes besætning, lov om tillæg til strandingslov af 10. april 1895 og forskellige andre love samt ophævelse af lov om registreringsafgift for fritidsfartøjer*, 24/10/2012, Retrieved from the World Wide Web; https://www.retsinformation.dk/Forms/R0710.aspx?id=143656 (Retrieved 8 November 2016).

139 Ibid.

140 Ibid.

3.4.1.2 Preventative Measures and Compulsory Insurance

The current Danish legislative framework regulates[141] matters related to the prevention of wrecks and small abandoned vessels <20 gross tonnage through: 1) Part 8(a) of the Merchant Shipping Act, cf. act no. 1384 of 23 December 2012[142]; and 2) Order no. 27 of 20 January 2015[143]. In accordance with part 8(a) of the DMSA, the Danish Maritime Authority (DMA) has issued order no. 27, which contains, inter alia, provisions on the issue of wreck removal certificates. It is important to stress that Act no. 1384 now incorporates annual fees for registered ships in the following manner:

Section 15a. Owners of ships registered in the Danish Shipping Register and in the Boat Register shall pay an annual fee for each ship registered.

> Subsection 2. For ships with a gross tonnage below 20, the annual fee shall amount to DKK 800.
>
> Subsection 3. For ships with a gross tonnage between 20 and 500, the annual fee shall amount to DKK 1,600.
>
> Subsection 4. For ships with a gross tonnage of or above 500, the annual fee shall amount to DKK 2,400.
>
> Subsection 5. For ships that have only a gross register tonnage measurement, the fee shall be determined pursuant to subsections 2-4 on the basis of the ship's gross register tonnage.

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141 In line with the WRC.

142 Act amending the merchant shipping act (søloven), the act on additions to the act on wreckage of 10 April 1895 (lov om tillæg til strandingsloven af 10. april 1895), the act on the manning of ships (lov om skibes besætning), and various other acts and repealing the act on a registration fee for recreational craft (lov om registreringsafgift for fritidsfartøjer), Act no. 1384 of 23 December 2012 issued by the Danish Maritime Authority, translation provided online: <http://www.dma.dk/Vaekst/Rammevilkaar/Legislation/Acts/Act%20amending%20the%20merchant%20shipping%20act,%20the%20act%20on%20additions%20to%20the%20act%20on%20wreckage%20of%2010%20April%201895%20and%20other%20acts.pdf> (Act no. 1384).

143 Order no. 27 on insurance or other guarantee to cover the owner's liability in connection with wreck removal (Denmark), issued by the Danish Maritime Authority, translation provided online: <http://www.dma.dk/Vaekst/Rammevilkaar/Legislation/Orders/Order%20on%20insurance%20or%20other%20guarantee%20to%20cover%20the%20owner's%20liability%20in%20connection%20with%20wreck%20removal,%20etc.pdf>

> Subsection 6. For ships that have neither a gross tonnage nor a gross register tonnage, the fee shall amount to DKK 800.
>
> Subsection 7. Subsections 1-6 shall not apply to ships registered in Greenland, owned by persons domiciled in Greenland or by companies or the like domiciled in Greenland.
>
> Subsection 8. Subsections 1-6 shall not apply to ships that, pursuant to section 24, have been registered in a foreign ship register on the basis of a bareboat charter agreement and temporarily fly another flag of nationality than the Danish one.
>
> Subsection 9. Ships that have by the Danish Ship Preservation Trust been declared worthy of preservation through the issue of a declaration of preservation worthiness shall be exempted from paying annual fees pursuant to this section.

It is also important to note that Denmark has made a remarkable effort in determining a compulsory insurance system for vessels <300 gross tonnage whereas other EU member States, e.g., UK, the Federal Republic of Germany (Germany), are yet to establish any such requirements. The important provisions with regard to compulsory insurance has been incorporated in Act no. 1384 in the following manner:

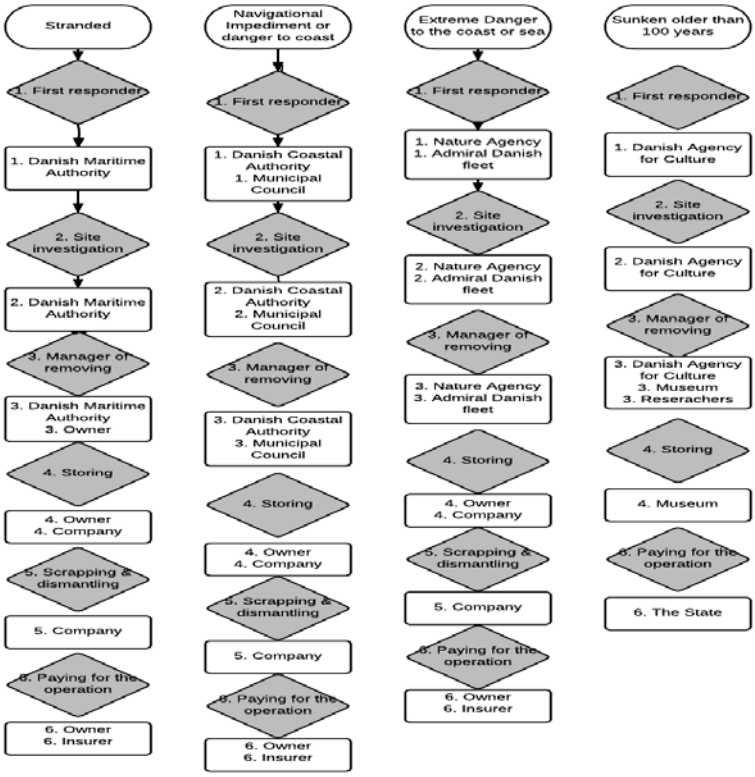
> Section 168. The registered owner of a ship flying the Danish flag with a gross tonnage of or above 20 shall have approved insurance or any other guarantee covering the owner's liability pursuant to this part and a certificate if the ship has a gross tonnage of or above 300, cf. section 170, in order to engage in trade. The insurance sum may be limited to the liability limit stipulated in section 175.
>
> Subsection 2. Anyone towing a ship, a wreck or any other object in the Danish territory shall, irrespective of the size of that under tow, be obliged to have that under tow insured.
>
> Subsection 3. Insurance for a ship with a gross tonnage of or above 300 shall, in order to be approved, meet the following requirements:
>
> 1) The insurance shall not cease in other ways than
>
> a) the expiry of the period of validity, cf. section 169; or
>
> b) at the earliest at the expiry of three months from the date on which notice of its termination has been given to the Danish Maritime Authority by the insurer.

> 2) Any claim for costs may be made directly against the insurer. The insurer shall, in such cases, invoke the same defences as those that the registered owner would have been entitled to if the claim had been made against the owner. However, the insurer cannot invoke the bankruptcy, winding-up or termination of the registered owner.
>
> Subsection 4. Insurance of a ship with a gross tonnage of or above 20, but below 300 as well as insurance pursuant to subsection 2 shall meet the requirements mentioned in subsection 3(i)(b) and (ii).
>
> Subsection 5. The Danish Maritime Authority shall lay down detailed regulations on insurance and guarantee, including what requirements shall be met by the insurance and the insurer in order for the insurance to be approved [emphasis added].

3.4.1.3 Roles and Responsibilities of Legislative Authorities

A number of government/legislative authorities are involved in functional initiatives concerning wrecks. The type of actors involved are dependent on the situation, for example, if the wreck is found to be stranded it is the Danish Maritime Authority that is deemed to incur responsible. However, if there is a danger to the coast or a navigational impediment situation then the Danish Coastal Authority and Municipal Council might take over. In extreme situations, such as in cases where there is severe danger to the coast or sea, the nature Agency and Admiral Danish Fleet will take over. When the wreck is older than 100 years, the Danish Agency for Culture is in charge. The Danish system is criticised for unclear roles and responsibilities. A flow chart illustrating the roles and responsibilities of concerned authorities has been provided below:

Diagram: Wreck related roles and responsibilities of Danish authorities



3.4.1.4 Surveys and Inventories

In 2005, the County Administrative Board of Västra Götaland (Sweden) conducted an inventory. The focus was on "potentially polluting shipwrecks" from World War II in the region of Skagerrak, i.e., an area between Sweden, Denmark and Norway. It is noteworthy that the Danish inventory was conducted between Skagen and Hanstholm.

The aforementioned efforts by the County Administrative Board of Västra Götaland contributed with useful information in relation to wrecks that contained potentially polluting oil or chemical weapons.

Before this assessment, Denmark had little information on the World War II wrecks that were in these areas.

The inventory aimed to give the exact location of the wrecks. In many cases, this was not possible, and the map developed pursuant to the objective of the inventory did not illustrate the exact positions of these so-called "potentially polluting shipwrecks". However, the overall outcome showed that there are many wrecks that probably pose a threat to the marine environment and this calls for further investigations and risk assessments. The consensus was that more knowledge was needed on the current conditions of the wrecks, the hazardous loads, amount of diesel, etc.[144]

Subsequently, in 2010, the Swedish Maritime Administration made an effort to compile information with regard to what has been done in eight Baltic Sea states concerning studies, inventories, strategies or policy on potential pollution from old and ownerless shipwrecks in the Baltic Sea. The study reveals that the government of Denmark is yet to conduct potential pollution risks, on-site investigations, and oil removal from old shipwrecks. To that end, the Swedish Maritime Administration compiled all available information from Denmark concerning the number of shipwrecks likely to contain oil and/or other hazardous substances in the sea of Skagerrak.[145] Prior to 2000, 90% of shipwrecks recorded by the DMSA only included information about the clearance depth above the wreck, the best known position and water depth at the position. The reason for this was that the deep part of the North Sea, Skagerrak, Kattegat, and the Baltic Sea were not considered Danish responsibility before the 1960's. Hence the lack of information of World War II wrecks in this area.[146]

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144 Lindström, Patrik, Forum Skagerrak II, VRAK I SKAGERRAK, Sammanfattning av kunskaperna kring miljöriskerna med läckande vrak i Skagerrak, 2006, Retrieved from the World Wide Web; http://projektwebbar.lansstyrelsen.se/havmoterland/SiteCollectionDocuments/Publikationer/forum-skagerrak/Vrak-i-skagerrak.pdf

145 Ibid.

146 Ibid.

3.4.2 Funding Mechanisms for Remediation Program

There are currently no national remediation programs in place, and as such, no financial systems developed for covering the costs for the treatment of end-of-life boats. The same is the case in relation to remediation of potentially polluting wrecks. The funding sources used so far include government funding, funding provided by responsible authorities, and funding allocated from Danish taxpayers. Through implementing of the WRC in Danish territorial waters, the insurance companies may cover the costs for newer wrecks, if the vessel is of 20 gross tonnage or above. If the vessel is smaller, it remains as the expense of the owner, that is, if the owner can be identified. There is also a possibility to apply for EU funding, but in such a case the requirement would be to set up a research project and involve academia and other institutions and countries.

4. Concluding Remarks

While Canadian law has provided a clear definition of "wreck" and the essential features that may enable authorities to identify a wreck; the WRENE report indicates that European Union countries, e.g., Finland and Spain, lack an explicit definition. The researchers are of the opinion that these countries represent the prevailing situation of other countries within the European Union, and as such, a clear and concise definition is a dire need. Denmark, however, has established a WRC-based definition, which can serve as a model for other countries. The compulsory insurance aspect will most certainly play an effective role in reducing wrecks as a part of preventative measures.

The roles and responsibilities of government officials of jurisdictions examined also mirror a fragmented approach since different officials are required to act in different situations. While clean-up operations may be conducted when there is an actual threat/emergency; officials are not bestowed with the authority to remove a wreck. Again, removal of wreck

is deemed as an operation that requires a survey beforehand to identify the number of wrecks that need to be lifted and disposed. While Sweden and Finland have quantified the number dangerous wrecks that must be as treated a priority, other countries have not made the effort to do so and wrecks in those jurisdictions are dealt on an emergency basis, for example, when there is an actual spill – only then officials are authorised to intervene. Intervention in remediating environmental threats have been successful in many occasions, both in the European Union and Canadian national levels, however the current patchy framework is in need of revision. This requires a review of the existing government funding mechanisms. The researchers are of the opinion that there needs to be a robust funding in place, whether based on the WRC or other innovative processes, for removal and disposal purposes.

Wreck-removal related procedures, especially wrecks that are post World War II, remain at the epicentre of debate and discussion. This requires collaborative engagement at the international level. While the WRC provides important tools for dealing with wrecks, this problem cannot be solved with a "one-size-fit-for-all" solution and requires governments to consider international noteworthy developments and tailor-fit them into the national system so that the desired outcomes can be achieved. To that end, more information is required before concrete measures can be undertaken. Dangerous wrecks need to be handled cautiously and disposed of in a sustainable manner. Governments must remain vigilant, focused and committed to ensuring that efforts remain constant and constructive so as to protect the precious areas within national jurisdiction.

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Sunken Warships: Perspectives on Ownership, Continued Sovereign State Immunity and State Responsibility

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Abstract

This paper first addresses the question which legal rules potentially apply in relation to the ownership of sunken State ships. The answer to the ownership question is crucial for reflecting further on potential rights and obligations as well as for potential financial liability of States. The perspectives of flag States and coastal States might differ significantly in this regard. Both the legal status of a sunken ship itself (public or private) and the exact point of time when the vessel sank often complicate the legal analysis. The analysis primarily concentrates on sunken warships and their potential detrimental effects to the marine environment. In particular, sunken State ships originating from war hostilities that took place many decades (if not centuries) ago might still cause significant environmental concern to affected coastal States in the 21st century. The paper highlights some differing legal approaches on ownership and State sovereignty, as evidenced by State practice. In particular, when it comes to sunken warships and State vessels, the paper favours the legal view that currently no compelling contractual or customary public international law exists in relation to the question of ownership and continuing State sovereignty of those wrecks. Rather, public international law leaves this question open to be addressed by national Courts at the domestic level. However, for reasons further explained in the paper, coastal States will encounter significant legal obstacles should they seek financial compensation from the (former) flag State of wrecked war ships for any potential long-term negative effects to the marine environment.

1 Introduction

As part of a recurring annual event, between 11 to 25 May 2018, the "*Standing NATO Mine Countermeasures Group 1*", composed of several warships from fifteen different countries, carried out a joint multinational drill in the Baltic Sea: The main objective of the drill was to spot, map out and destroy sea mines that had been laid many decades before, in both World War I and II.[2] In the 21st century, this recurring drill evidences that there is still a significant threat of unexploded ordnance throughout the Baltic Sea region, potentially affecting seabed communications lines, international shipping routes, and fishing areas. A comparable threat to the marine environment is also generated by increasingly corroding and leaking wrecks of former warships (or other State vessels) which have been sunk many decades ago: According to estimates, a total tonnage of 15 million gross tons (GT) has alone been sunk in World War I. Furthermore, the allied forces lost about 21 million GT in World War II. These numbers would increase significantly if the tonnage losses of Germany, Japan and other nations at sea would be added further.[3] In addition, the numbers could include private vessels which had been seized by governments prior to their sinking. For example, at the time of this writing, the U.S. Coast Guard reportedly conducted a new underwater assessment in relation to a sunken oil tanker off the U.S. coast. The tanker had been torpedoed during World War II by a German submarine (U-boat). The aim of the U.S. Coast Guard operation was to assess the structural condition of the wrecked tanker and its potential to cause negative environmental impacts.[4]

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2 Standing NATO MCM Group 1 concludes participation in OPEN SPIRIT 2018, available at <https://mc.nato.int/media-centre/news/2018/standing-nato-mcm-group-1-concludes-participation-in-open-spirit-2018.aspx>.

3 L. Gelberg "Rechtsprobleme der Bergung auf Hoher See" (1971) 15 *German Yearbook of International Law (GYIL)*, 429–447.

4 "*Coast Guard to conduct underwater assessment of tanker Coimbra*", available at <https://content.govdelivery.com/accounts/USDHSCG/bulletins/1f70783>.

Some further practical examples of "warship wrecks of concern" shall focus more on the legal problems associated with their ownership and legal status: In 1939, as an action of last resort, the crew of the German battleship "*Graf Spee*" intentionally sunk the vessel on the high seas off the West Coast of Latin America. As a result of later legal developments,[5] the exact location of the wrecked battleship fell into the 12 nautical miles territorial sea of Uruguay. In the 1990s, a private investor from Uruguay attempted (ultimately unsuccessful) to lift the warship wreck aiming to utilize it as a museum ship in the future. The investor had acquired an official licence to lift the ship from the government of Uruguay. However, the government of the Federal Republic of Germany issued a diplomatic protest against the legal validity of the lifting license, claiming to be the lawful owner of the "*Graf Spee*" (via State succession).[6]

To give a contrasting example, a few months after the end of World War II, Norway had officially confiscated German property located within the Norwegian territory.[7] That decision also affected the German warship "*Blücher*" which had been sunk in the Oslo fjord on 9 April 1940. The Norwegian government had sold the wreck to a private investor.[8] After discovering that the remaining heavy fuel oil onboard significantly impeded the intended salvage operation, the investor did not proceed with lifting the vessel. Nevertheless, opposing views as to the ownership of the "*Blücher*" became apparent: Norway, as the coastal State argued that it had taken legal possession of the wreck whereas the (successor of the former) flag State Germany argued that this was in violation of continuing exclusive flag State sovereign authority.[9] This paper will highlight that

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5 In particular, by the entry into force of the Convention on the Territorial Sea and the Contiguous Zone, Geneva, 29 April 1958, *United Nations, Treaty Series*, vol. 516, 205.

6 A. Berg, "The Graf Spee", in R. Bernhardt (ed), *Encyclopedia of Public International Law*, vol. II, Amsterdam 1995, 611.

7 Lov om fiendegods, No. 4, of 22 March 1946, printed in: Norges Lover 1682-1948, 2229.

8 For further details see J.A. Bischoff "Kriegsschiffwracks – Welches Recht gilt für Fragen des Eigentums, der Beseitigung und der Haftung?" (2006) 66 *Zeitschrift für ausländisches öffentliches Recht und Völkerrecht (ZaöRV)* 455–490.

9 For the Norwegian legal view, see for example, a judgment of the Norwegian Supreme Court of 21 March 1970, Norsk Retstidende 135, 346.

these opposing views represent a repeating pattern of behaviour between former flag States and coastal States.

The first practical examples indicate that cases of sunken warship wrecks have the potential to raise a number of contentious legal questions. Even in the 21st century, it may still be of interest who lawfully owns such a warship wreck (or its cargo) and who might lawfully exercise rights in relation to the wreck. Additional legal questions might include issues of how to lawfully preserve underwater cultural heritage and how to protect "maritime graves" from unauthorized third-party looting.[10] The 2001 UNESCO Convention on the Protection of the Underwater Cultural Heritage addresses the former question via a legally-binding framework and its increasing ratification status of now close to 50 nations is encouraging.[11] However, other questions not specifically covered by the UNESCO Convention shall be at the centre of the discussion here. Over the decades, a corroding hull of a warship wreck itself (or objects contained in it, like bunker or dangerous cargo) could pose a danger to the safety of shipping or to the marine environment. Who may take action and who might be responsible for any negative consequences originating from such a wreck? These questions are inextricably linked to the question of ownership which will be addressed after first clarifying the legal term "warship wreck".

2 What is a Warship Wreck?

Quite obviously, any kind of "wreck" will always have preceding stages of its life cycle which will be the construction and operational phases. Thus, a ship wreck will always have been a ship (or vessel) before it

[10] See M. Williams, "War Graves" and Salvage: Murky Waters?" (2000) 5 *International Maritime Law*, 152–158.

[11] UNESCO Convention on the Protection of the Underwater Cultural Heritage of 2 November 2001, (2002) 41 *ILM* 40, the convention text and ratification status is available at <http://www.unesco.org/new/en/culture/themes/underwater-cultural-heritage/2001-convention/>.

became a wreck.[12] The function and category of a vessel is one of the first questions when it comes to delineating legal obligations of flag States and potential rights of other States (port States or coastal States). From a legal point of view, taking into account established principles of State sovereignty, it is an enormous difference whether a ship is a State vessel or a privately-operated vessel. In the first situation, the vessel officially represents that State and is thus covered by privileges of State sovereignty and sovereign equality among States (including the principle "*par in parem non habet iurisdictionem*").[13] One legal consequence is that the rules of port States and coastal States continue to apply but may not be enforced upon foreign State vessels. In contrast, privately-operated vessels are definitely not covered by those diplomatic rights and privileges. Ultimately, this different legal approach could also apply to wrecks of State vessels, in particular to warship wrecks. The sovereign rights and privileges of State vessels could, however, continue to exist once a former vessel has been "transformed" to a wreck.

Undoubtedly, warships (but also ships of the coast guard or a States' customs authorities) represent a special category of a State vessel. The view could get more blurred, however, if a private shipping company and its vessels are nationalized by their home State and/or are being utilized for

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12 Whether to apply the term "*ship*" or "*vessel*" and how to distinguish them is of no further importance for this paper. It seems that the term "*ship*" encompasses" the term "*vessel*". Nevertheless, exemplary reference is made, e.g., to some national legislation. The Canadian Federal Courts Act 1981 states in section 2(1) that "*ship*" "*means any vessel or craft designed, used or capable of being used solely or partly for navigation, without regard to method or lack of propulsion, and includes (a) a ship in the process of construction from the time that it is capable of floating, and (b) a ship that has been stranded, wrecked or sunk and any part of a ship that has broken up.*" The Australian Admiralty Act 1988, section 3(1) states that: "*ship means a vessel of any kind used or constructed for use in navigation by water, however it is propelled or moved, and includes: (a) a barge, lighter or other floating vessel; (b) a hovercraft; (c) an offshore industry mobile unit; and (d) a vessel that has sunk or is stranded and the remains of such a vessel; but does not include: (e) a seaplane; (f) an inland waterways vessel; or (g) a vessel under construction that has not been launched.*"; the Singapore High Court Admiralty Jurisdiction Act, chapter 123, section 2 simply states that: "*ship" includes any description of vessel used in navigation*".

13 L. Migliorino, "The Recovery of Sunken Warships in International Law", in B. Vukas (ed), *Essays on the New Law of the Sea*, vol. I, Zagreb 1985, 244–251.

trading purposes by a State. Centuries ago, this differentiation was almost impossible to establish since almost all ships served dual public-private purposes.[14] This situation has only changed since the beginning of the 20th century. Nevertheless, even today, the question might be quite tricky to answer: For example, is an oil tanker which is operated by IRISL (the Islamic Republic of Iran Shipping Lines) an Iranian State vessel? If this question would be answered in the affirmative, established procedures of Port State Control (PSC) might be more difficult to implement as compared to other private vessels. Thus, at least generally, the function and purpose of the vessel plays a vital role in the legal assessment, indicating that a commercially-operated vessel is not a State vessel even if the operator can be attributed to a State entity.

Modern treaty law confirms the legal view that a State-run vessel which operates for private purposes should not enjoy diplomatic privileges and immunities. For example, the UNESCO Convention on the Protection of the Underwater Cultural Heritage provides some general legal guidance – which could also apply if a State vessel becomes a wreck: Art. 1 No. 8 of the UNESCO Convention defines State vessels as "*vessels [...] that were owned or operated by a State and used, at the time of sinking, only for government non-commercial purposes that are identified as such […]*".[15] At least for the framework of the UNESCO Convention on the Protection of the Underwater Cultural Heritage, this seems to indicate that a vessel must have served non-commercial purposes to fall under the definition of a "State vessel". The same approach could apply if such a vessel is wrecked. It should be noted, however, that according to the UNESCO Convention, it does not apply to warships (see Art. 2.8) and the scope of application is also limited to wrecks which have been underwater for a minimum of 100 years (Art. 1 lit. a)).

The UNESCO Convention on the Protection of the Underwater Cultural Heritage serves to implement Art. 149 and 303 of the United

[14] D. Bederman, "Rethinking the Legal Status of Sunken Warships", (2000) 31 *Ocean Development & International Law (ODIL)*, 97–125.

[15] See also B. Cheng, "State Ships and State Aircraft" (1958) 11 *Current Legal Problems*, 225–257; G. C. Rodriguez Iglesias, "State Ships", in R. Bernhardt (ed), *Encyclopedia of Public International Law*, vol. IV, Amsterdam 1995, 638.

Nations Convention on the Law of the Sea (UNCLOS).[16] UNCLOS defines the legal term "warship" in Art. 29 specifically. The constitution of the seas also highlights the operation of State vessels for non-commercial purposes in Art. 31 and 32 UNCLOS. Art. 29 UNCLOS clarifies that "*warship" means a ship belonging to the armed forces of a State bearing the external marks distinguishing such ships of its nationality, under the command of an officer duly commissioned by the government of the State and whose name appears in the appropriate service list or its equivalent, and manned by a crew which is under regular armed forces discipline*." Furthermore, according to Art. 32 UNCLOS "*nothing in this Convention affects the immunities of warships and other government ships operated for non-commercial purposes*". Art. 29-32 UNCLOS have been extensively construed by the International Tribunal for the Law of the Sea (ITLOS) in the "*Ara Libertad*" case.[17] In addition, Art. 236 UNCLOS confirms the principle of sovereign immunity, resulting in exemptions for State vessels regarding all UNCLOS rules on the protection and preservation of the marine environment.[18]

One simple approach could thus be to deduce the legal definition of a warship wreck entirely from the established (narrow) definition of the operating warship and to apply the same legal rules to the warship wreck. However, this view could be challenged by a strict functional approach: One could take the position that a wreck has irretrievably lost all of its former functions as a ship. This could also have a legal impact on the continued existence of diplomatic privileges and immunities. For example, the 2007 Nairobi Wreck Removal Convention (WRC)

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16 United Nations Convention on the Law of the Sea (adopted 10 December 1982, entered into force 16 November 1994), *United Nations Treaty Series*, vol. 1833, 3.

17 The "ARA Libertad" (Argentina v. Ghana), Provisional Measures, Order of 15 December 2012, ITLOS Reports 2012, p. 332.

18 Art. 236 UNCLOS states that: "*The provisions of this Convention regarding the protection and preservation of the marine environment do not apply to any warship, naval auxiliary, other vessels or aircraft owned or operated by a State and used, for the time being, only on government non-commercial service. However, each State shall ensure, by the adoption of appropriate measures not impairing operations or operational capabilities of such vessels or aircraft owned or operated by it, that such vessels or aircraft act in a manner consistent, so far as is reasonable and practicable, with this Convention.*"

of the International Maritime Organization (IMO) seems to confirm this legal distinction between ship and wreck: Art. 1 No. 4 of the WRC defines the legal term "*wreck*" ("*following upon a maritime casualty*") to mean: "*(a) a sunken or stranded ship; or (b) any part of a sunken or stranded ship, including any object that is or has been on board such a ship; or (c) any object that is lost at sea from a ship and that is stranded, sunken or adrift at sea; or (d) a ship that is about, or may reasonably be expected, to sink or to strand, where effective measures to assist the ship or any property in danger are not already being taken*". Art. 4.2 of the WRC confirms, however, the usual non-applicability to warships or other ships owned or operated by a State and used, for the time being, only on Government non-commercial service. Above all, the rules of the WRC are only applicable to any wreck removal operations after the entry into force (14 April 2015). In any case, the WRC is inapplicable to any warship wrecks and environmental impacts caused by those warship wrecks as discussed in this paper. In sum, the question whether diplomatic rights and privileges continue to apply to warship wrecks remains contentious. The discussion shall resume after analysing the applicable principles of warship wreck ownership.

3 Who Owns a Warship Wreck?

There is no international treaty or convention which regulates the question of public ownership of warship wrecks. Both the UNESCO Convention on the Protection of the Underwater Cultural Heritage as well as the two International Salvage Conventions of 1910 and 1989 are not applicable to warships. UNCLOS does not address the issue at all but, at least, Art. 303.3 UNCLOS indicates in relation to archaeological and historical objects found at sea that "*nothing in this article affects the rights of identifiable owners, the law of salvage or other rules of admiralty, […]*". As a result, it is generally possible that ownership rights may persist

over a very long time and ownership does not end merely by a vessel sinking to the seafloor. Nevertheless, customary international law and the diverse views of national property laws are the only resorts to identify potential further details. Most nations – but not all – tend to apply a very strict domestic approach on the possibility of a loss of public ownership. For example, the public property law of the United States demands an explicit act to dispose of public property.[19] This view is derived from Art. 4 Sec. 3 Cl. 2 of the United States Constitution, according to which only "*[…] Congress shall have Power to dispose of and make all needful Rules and Regulations respecting the Territory or other Property belonging to the United States.*"[20]

The identification of any potential customary international law is governed by the existence of long-standing State practice and *opinio iuris*, i.e., the two legal requirements as inferred from the traditional interpretation of Art. 38.1 lit. b) of the Statute of the International Court of Justice (ICJ). There is some limited practice available on how States perceive whether they have lost (or acquired) property over a wrecked warship. In this context, it is quite remarkable that flag States of wrecked warships consistently argue to still being the exclusive owner of those former vessels and that no loss of ownership can occur as a result of such a vessel sinking and becoming a wreck. Furthermore, flag States have consistently denied that coastal States can acquire any ownership rights merely by a warship wreck being located on the continental shelf or somewhere within the territorial sea of the coastal State. However, one has to be careful with the specific wording here because a lot of the relevant diplomatic communiqués have been exchanged long before UNCLOS entered into force in 1994. For example, in 1979, in the case of the Japanese warship "*Awamaru*" Japan argued towards China that

[19] See United States v. Steinmetz, 973 F.2d 212(222) (3d Cir.1992); United States of California, 332 U.S. 19, 67 S.Ct. 1658, 91 L.Ed. 1889 (1947).

[20] See also further examples as stated by A. P. Rubin, "Sunken Soviet Submarine and Central Intelligence – Laws of Property and the Agency", (1975) 69 *American Journal of International Law* (AJIL), 855–858; J.A. Bischoff "Kriegsschiffwracks – Welches Recht gilt für Fragen des Eigentums, der Beseitigung und der Haftung?" (2006) 66 *Zeitschrift für ausländisches öffentliches Recht und Völkerrecht (ZaöRV)* 455–490.

it cannot be concluded "*that the ship [...] becomes the property of the coastal state to which the territorial sea belongs*".[21] In 1987, the United States also argued towards France along these lines in the case of the "*CSS Alabama*" which had been sunk in 1864 at the battle of Cherbourg. Originally, France had argued to be owner of the wreck due to the fact that the wreck was located in the French 12 nautical miles territorial sea. The US Department of State argued that the location of the wreck: "*[...] in no way extinguishes the ownership rights of the United States*" and France later accepted this legal position.[22]

There are also some examples of coastal States and former flag States entering into specific bilateral agreements on how to proceed with the wreck and how to apportion any rights. Ideally, these bilateral agreements result in a mutually acceptable solution, for example, granting certain rights in relation to the cargo to the coastal State whereas the ownership of the former flag State over the wreck is officially confirmed. This approach has been chosen both in the case of the "*CSS Alabama*" (France and the United States) and as well in the case of the "*HMS Birkenhead*" (South Africa and the United Kingdom).[23] In the latter case, the flag State United Kingdom clarified once more "*that the Crown maintains rights and interests of the Royal Navy which have sunk, wherever they may be and without time limit*".[24] In 1998, an informal ad hoc working group, the so-called "*Major Maritime Powers*"[25] also expressed in a legally non-binding document that a coastal State does not acquire any wreck-related

[21] See S. Oda/H. Owada, "Annual Review of Japanese Practice in International Law" (1986) 29 *Japanese Annual Review of International Law*, 74–115.

[22] See A. Roach, "Current Developments – France Concedes United States Has Title to CSS Alabama", (1991) 85 *American Journal of International Law* (AJIL), 381–382.

[23] J.A. Bischoff "Kriegsschiffwracks – Welches Recht gilt für Fragen des Eigentums, der Beseitigung und der Haftung?" (2006) 66 *Zeitschrift für ausländisches öffentliches Recht und Völkerrecht (ZaöRV)* 455–490 (465).

[24] "Foreign and Commonwealth Office Press Release", in: (1989) 60 *British Yearbook of International Law*, 671 et seq.

[25] The informal MMP are composed of the United States, the Russian Federation, the United Kingdom, France and Germany; see also S. Dromgoole, "Reflections on the position of the major maritime powers with respect to the UNESCO Convention on the Protection of the Underwater Cultural Heritage 2001" (2013) 38 *Marine Policy*, 116–123.

property rights "*by reason of its being located on or embedded in land or the seabed over which it exercises sovereignty or jurisdiction*".[26] This statement only confirmed an identical view that the United States Navy had already adopted some years before.[27] In addition, the International Law Commission (ILC) had also concluded that rights of the coastal State on the continental shelf "*do not cover objects such as wrecked ships and their cargoes (including bullion) lying on the seabed or covered by the bed of the subsoil.*"[28]

As a result, there is a strong indication in public international law that neither the location of a wreck nor a long passage of time after the vessel has sunk will result in a transfer of ownership.[29] Rather, explicit acts, like an involuntary capture or a voluntary agreement are necessary. For example, in 1905, Japan insisted on its ownership of the (former) Russian warship "*Admiral Nakhimov*" (later disputed by the former Soviet Union). This was, however, due to the fact that, prior to its sinking, Japanese navy soldiers had captured and entered the vessel and had also exchanged the Russian flag to the Japanese flag.[30] Thus, Japan had explicitly acquired ownership of the foreign warship by capture prior to its sinking. The informal MPP have stated in 1998 that ownership to warships or warplanes "*is only lost by capture during battle (before sinking), by international agreement, or by any express act of abandonment, gift or sale by the Sovereign in accordance with relevant principles of international law governing the abandonment of Property*".[31]

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[26] MMP Joint Statement of 15 October 1998, included by Hermsdörfer, "Zum Eigentum Deutschlands an seinen in den Weltkriegen gesunkenen Kriegsschiffen und den abgestürzten Militärflugzeugen", in: *Festschrift für Dieter Fleck, Krisensicherung und humanitärer Schutz* (Berlin 2004), 267 et seq.

[27] Commander's Handbook on the Law of Naval Operations, NWP 1-14M, 1995, No. 2.1.2.2.

[28] UN GA/OR, 7th session, Suppl. No. 9 (A/3159), 42, (1956) Vol. II, *Yearbook of the International Law Commission (YILC)*, 298.

[29] MMP Joint Statement of 15 October 1998 (see footnote 26).

[30] J.A. Bischoff "Kriegsschiffwracks – Welches Recht gilt für Fragen des Eigentums, der Beseitigung und der Haftung?" (2006) 66 *Zeitschrift für ausländisches öffentliches Recht und Völkerrecht (ZaöRV)* 455–490 (465).

[31] MMP Joint Statement of 15 October 1998 (see footnote 26).

In accordance with this position, some United States Courts insist on a formal act of the flag State which explicitly evidences a relinquishment or abandonment of the State vessel or any other kind of agreement in relation to the ship. As a consequence, there are examples of private salvage operations which – subsequently – have been held to be illegal because of a lacking explicit abandonment or agreement of the flag State.[32] The passage of centuries was held to be irrelevant. There is, however, also contradicting United States case law available which generally confirms the possibility of an implicit abandonment.[33] Examples include the utilization of (former) State vessels in navy target practice.[34] Thus, it seems that the differentiation between explicit and implicit abandonment must always be examined in relation to the specific circumstances. A continuous State practice and *opinio iuris* seems to be impossible to identify in this area. This is also evidenced by the rejection of an official proposal – during the UNCLOS III negotiations – to add a third paragraph to Art. 98 UNCLOS in this regard: In 1978, the Soviet Union was seeking to qualify the duty to render assistance at sea by including the remark that "*a flag State and the owner of a ship or aircraft do not forfeit their rights to a ship or aircraft sunk at the sea or to equipment and property on board*."[35] However, this proposal was discarded as it failed to gain enough diplomatic support by other nations.

One could still question whether an act of war could potentially lead to a change of ownership of a warship. A Singapore Court, however, has confirmed that an emergency abandonment by the crew, resulting from an enemy torpedo hit, does not amount to an implicit dereliction of the

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32 *SeaHunt, Inc. v. Shipwrecked Vessel*, 221 F.3d 634 (642) (4th Cir.2000).

33 See some examples listed by D. Bederman, "Rethinking the Legal Status of Sunken Warships", (2000) 31 *Ocean Development & International Law (ODIL)*, 97–125 (101).

34 See *Baltimore, Crisfield & Onancock Line v. U.S.*, 140 F.2d 230 (234) (4th Cir.1944): "*It is said in argument that the government never abandoned this vessel, 33 U.S.C.A. § 409, because it never took any positive action to that end by sending itself written notice or some similar act. To have done this would have been an act of mere futility*"; see also *State of Florida v. Massachusetts Company*, 95 So.2d 902 (903) (Supreme Court of Florida 1957).

35 Informal Suggestion by the USSR – C.2/Informal Meeting/39/Rev. 1, of 1 September 1978.

warship: "*[…] when the U 859 was torpedoed by the British submarine there was no abandonment by the commander and the crew of the U 859 to make it res derelicta as the commander and crew did not form or had the intention to abandon the submarine*".[36] It is even doubtful whether an intentional sinking by the crew – like in the case of the "*Graf Spee*" as mentioned at the beginning of this paper – could be categorized as an implicit abandonment of the ship because the sole motivation for an intentional sinking during times of war is to prevent enemy forces to take over the vessel and its potential military secrets.

In sum, several intermediate conclusions can be drawn: The stakes are very high to argue persuasively that a former flag State has lost ownership of a warship merely due to the fact that the vessel has sunk, being transformed into a wreck and not being operational anymore. Some legal scholars even argue that any loss of rights to a State vessel can only result from an explicit act of abandonment of the former flag State.[37] The area of implicit abandonment, however, is truly fuzzy and mandates a case-by-case approach, depending on the specific facts. National Courts have very few international legal instruments available to guide their reasoning. Art. 303.3 UNCLOS only confirms that ownership rights may persist over very long passages of time and other international legal instruments are often both inapplicable and lacking specific rules on the subject matter. As a result, national courts will automatically resort to domestic civil law approaches as applicable to questions of property dereliction and abandonment, be it as established by case law or by codified civil law rules (if those are available at all).[38] Some countries, like the United States, do even have explicit codified domestic law instruments, in the form of an "*Abandoned Shipwreck Act*".[39] In any case, flag States of former warships

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[36] Singapore High Court, Simon ./. Taylor and Another, (1980) 56 *International Law Reports*, 40.

[37] A. P. Rubin, "Sunken Soviet Submarine and Central Intelligence – Laws of Property and the Agency", (1975) 69 *American Journal of International Law (AJIL)*, 855–858.

[38] For example, the German Civil Code states in section 959 (Abandonment of Ownership) that "*a movable thing becomes ownerless if the owner, in the intention of waiving ownership, gives up the possession of the thing.*")

[39] 43 U.S.C., Ch. 39, § 2101.

have consistently and expressly argued that their exclusive ownership rights continue in relation to wrecked State vessels or warships. It is, however, possible (and also advisable) to enter into bilateral agreements to clarify the legal situation and to apportion further rights to other entities, in particular to affected coastal States.

4 Does a Warship Wreck Continue to Enjoy Sovereign State Immunity?

As indicated before, there is no international treaty or convention which would cover or even regulate the question whether warship wrecks continue to benefit from sovereign immunity rights and privileges in the same way as the operational warship did. One could tentatively infer from the warship exclusion of Art. 4.2 of the 2007 Nairobi Wreck Removal Convention (WRC) that States accept a continuation of that kind. On the other hand, all other IMO conventions contain similarly-worded exclusions. Thus, under the rules of the WRC, the drafters did most probably not intend to establish any specific confirmation of consecutive State sovereignty.

Over time, States have exchanged various diplomatic communiqués on this matter and it can hardly surprise that former flag States argue in favour of exclusive flag State jurisdiction and sovereign immunity to continue to apply for warship wrecks.[40] They maintain the view that, even after sinking, such vessels have a legal status which distinguishes them from other wrecks.[41] *Migliorino* lists a number of historic examples in which coastal States have been seeking official authorization or specific

[40] For example, the Soviet Union argued towards Japan that "*In accordance with international law a sunken warship is completely immune from the jurisdiction of any State other than the flag State*", see S. Oda/H. Owada, "Annual Review of Japanese Practice in International Law" (1986) 29 *Japanese Annual Review of International Law*, 74–115.

[41] S. Dromgoole, "Reflections on the position of the major maritime powers with respect to the UNESCO Convention on the Protection of the Underwater Cultural Heritage

approval from the former flag State for any wreck-related activities and they also respected associated rejections of the former flag States.[42] The "*Major Maritime Powers*" have taken the view that "*International Law recognizes, that State vessels and aircraft, and their associated artefacts, whether or not sunken, are entitled to sovereign immunity […and that] the flag State is entitled to use all lawful means to prevent unauthorised disturbance of the wreck.*"[43] In practice, this has at times resulted in bilateral and technical cooperation between former flag States and coastal States to prevent unauthorized disturbance of third parties and to safeguard the interests of the flag State.[44]

National courts, on the other hand, have taken more differentiated legal views. It must be highlighted, once more, that national courts have no other choice but to apply domestic law in this regard which could potentially result in a fragmented approach. The *Fourth Circuit Court of Appeals* has confirmed that *"[…] the U.S. only abandons its sovereignty over, [...] sunken U.S. warships by affirmative act*".[45] However, in the absence of such an affirmative act, some other United States' Courts seem to be open to reject sovereign immunity rights for (foreign) wrecks that are more than 100 years old.[46] Obviously, the passage of time plays a much more important role here as compared to the ownership-related discussion. From a legal and functional point of view, this truly makes sense: Sovereign immunity rights and privileges are inextricably linked to the exercise of government-like functions. Even if a wreck cannot operate anymore on the water surface, one could argue that some "new" wrecks still exercise official functions on behalf of the State owner. For example, there might still be classified military secrets (documents,

2001" (2013) 38 *Marine Policy*, 116–123 (119) refers to a variety of formal statements published in the US Federal Register in 2004.

42 L. Migliorino, "The Recovery of Sunken Warships in International Law", in B. Vukas (ed), *Essays on the New Law of the Sea*, vol. I, Zagreb 1985, 244–251.

43 MMP Joint Statement of 15 October 1998 (see footnote 26).

44 For examples see M. Williams, "War Graves" and Salvage: Murky Waters?" (2000) 5 *International Maritime Law*, 152–158 (154).

45 SeaHunt, Inc. v. Shipwrecked Vessel, 221 F.3d 634 (641) (4th Cir.2000).

46 D. Bederman, "Rethinking the Legal Status of Sunken Warships", (2000) 31 *Ocean Development & International Law (ODIL)*, 97–125 (101).

charts, instruments or substances) in the wreck (or represented by it) and the wreck might still serve as a long-term confidential containment in that regard. Some warship wrecks are also maritime graves, thus, they safeguard the interest to preserve the post-mortal dignity of the sailors.[47] However, it is also possible that private vessels fulfil such a function as well.

In any case, the legal analysis gets more and more difficult if a warship wreck or wrecked State vessel starts to break apart after centuries. The owning State would most probably not be able to conduct any official acts ("*acta iure imperii*") in relation to the crumbling object and it would definitely seem odd to entitle dissolved parts of a warship wreck with "scattered" sovereign immunity rights. Nevertheless, where should the international community ultimately draw the legal line between continued existence of sovereign immunities and the end of those diplomatic privileges for an underwater object? And what about the legitimate interests of an affected coastal State? One of the legal consequences of continued sovereign immunity rights of the former flag State is that the coastal State must generally tolerate a long-term sovereign "exclave" within its own area of sovereign authority, even mandating the coastal State to actively protect that "exclave" against illegal activities of third parties.[48] However, over the passage of time, a wreck could start to create a danger or even a threat to the marine environment, for example, as a result of a corroding hull and bunker continuously leaking from the wreck. This would mark the line where any violation of sovereign immunity rights – even if they continue to apply – may be justified because the interests of the coastal State to protect the marine environment now outweigh the sovereign immunity interests of the former flag State. Thus, ultimately, scientific underwater assessments of the current structural status of a warship wreck could have an important impact on whether

47 See M. Williams, "War Graves" and Salvage: Murky Waters?" (2000) 5 *International Maritime Law*, 152–158.

48 Some nations have issued specific laws in this regard, for example, the United Kingdom has passed the "*Protection of Military Remains Act 1986*" and a "*Protection of Wrecks Act 1973*", see M. Williams, "War Graves" and Salvage: Murky Waters?" (2000) 5 *International Maritime Law*, 152–158 (155).

sovereign State immunity rights still generate any practical effects – even if they continue to formally exist.

5 Is There a Legal Link between Warship Wrecks and State Responsibility?

In case of a negative environmental impact caused by a foreign warship wreck, affected coastal States – in their own vital interests – will seek take action to prevent or reduce any potential harm to the marine environment. However, some nations might lack the financial and technical capacities and the personal expertise to conduct those operations. An example of (partially) successful technical countermeasures taken by a coastal State is the case of the German warship wreck of the "*Blücher*" which had been sunk in the Oslo fjord in 1940: In 1994, the Norwegian government decided to remove as much oil as possible from the wreck and drilled holes in 133 fuel tanks.[49] About 1.000 tons of oil was removed; however, 47 fuel bunkers were unreachable and still contained oil.[50] This example can serve as evidence that operations to completely lift and remove old warship wrecks are often very difficult – if not impossible – to implement. In particular, the corroded wreck might break apart during removal attempts and any remaining oil could ultimately leak into the marine environment. Thus, affected coastal States will mostly concentrate on monitoring and assessment activities. They might also seek to limit the negative impacts to the marine environment by attempting to remove any remaining bunker oil or other dangerous substances from the wreck.

Quite evidently, these activities – even mere monitoring of wrecks – create a long-term financial burden to the coastal State. For this reason, the coastal State might have a political interest to involve the former flag State of the wreck. Ultimately, some coastal States might even intend to

[49] For details see <https://en.wikipedia.org/wiki/German_cruiser_Blücher>.

[50] Ibid.

hold the former flag State liable, seeking financial compensation for any environmental mitigation activities in relation to the warship wreck. After all, in most situations, the former flag State of a warship will claim to still be the lawful owner of the wreck. Does sovereign State immunity generate any "protective" legal effects in this regard?

State responsibility represents a vast sub-area of public international law. In the context of this paper, it is not possible to discuss all detailed elements of State Responsibility which have been analysed by the International Law Commission (ILC) over decades (since 1956). The arduous work has resulted in the "*2001 Articles on the Responsibility of States for Internationally Wrongful Acts*".[51] Generally, the term "responsibility" has a primary meaning which relates to accountability. Accountability means to acknowledge the obligation to answer for an act done and to repair or otherwise make restitution for any injury that the act may have caused.[52] In case of a breach of a legal rule causing damage to another party, responsibility entails a legal obligation incumbent on the perpetrator of the breach to make full reparation to the victim for the damage. In this context, 'liability' represents one aspect of responsibility and a consequence of responsibility in case the person responsible breaches an obligation that is incumbent upon it and, in doing so, causes damage to another.

The ILC has endeavoured to clarify the concept of responsibility: "*… the term 'responsibility' should be used only in connection with internationally wrongful acts…*": Article 1 of the ILC Articles reads that "*every international wrongful act of State entails the international responsibility*

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[51] See: "*Draft Articles on Responsibility of States for Internationally Wrongful Acts, with commentaries*", adopted by the International Law Commission at its fifty-third session, Report of the International Law Commission on the work of its fifty-third session, 23 April – 1 June and 2 July – 10 August 2001 (A/56/10, reproduced in Yearbook of the International Law Commission 2001, vol. II(2). For further details see J. Crawford, *State Responsibility: The General Part*, Cambridge University Press (Cambridge 2013); J. Crawford, A. Pellet and S. Olleson (eds.), *The Law of International Responsibility*, Oxford University Press (Oxford 2010); R. Provost (ed), *State Responsibility in International Law*, Aldershot (Ashgate 2002); I. Brownlie, *System of the Law of Nations, State Responsibility, Part I*, Oxford University Press (Oxford 1983).

[52] *Black's Law Dictionary* 10th ed. (West Group, 2014), 1312.

of that State." Article 2 of the ILC Articles defines the elements of an internationally wrongful act: "*There is an internationally wrongful act of a State when conduct consisting of an action or omission: (a) is attributable to the State under international law; and (b) constitutes a breach of an international obligation of the State*." In the context of the topic of this paper, "international wrongfulness" could thus mean the pollution of the marine environment – generated by the warship wreck of another State – affecting an area which is under the sovereign control of a coastal State. Attribution is easily established by the flag and, arguably, by the former flag State officially claiming to still be the owner of the wreck.

From a legal point of view, it gets more complicated, however, if the coastal State would argue that the flag State has breached an international obligation, in accordance with Art. 2 lit. b) of the ILC Articles. Of course, already since the "*Trail Smelter Arbitration*", the existence of international environmental obligations has been confirmed to mean that "*under the principles of international law (...) no State has the right to use or permit the use of its territory in such a manner as to cause injury by fumes in or to the territory of another or the properties or persons therein, when the case is of serious consequence and the injury is established by clear and convincing evidence*."[53] Two factual elements, however, will then generate effects to evaluate whether the flag State has breached an international obligation: First, the exact time when the warship sank. Second, the specific circumstances under which the warship sank. A good example might be a random German warship (or State vessel) which has been sunk by torpedoes or bombardment during navy hostilities at the end of World War II, in 1945. The German warship wreck is now laying in the territorial sea/on the continental shelf of another State in the Baltic Sea. The German warship wreck consistently pollutes the marine environment in an area which is under the sovereign authority of the other coastal State. 70 years later, underwater assessments of the affected coastal State reveal that the marine pollution intensifies significantly, due to new leaks and salt-water induced corrosion of the hull of the wreck. Is this a case for State responsibility and, ultimately, financial liability?

[53] Trail Smelter Arbitration, RIAA III, 1905 (1965).

In the scenario as described above, several legal thoughts would argue against the existence of an international wrongful act by the former flag State. First, to apply the concept of State Responsibility – as successfully defined between 1956 and 2001 – to this situation would essentially result in a long-term retroactive application of legal effects that did not even remotely exist at the time when the potentially wrongful act had been committed. Second, the warship has been sunk in times of war. War is generally subject to a separate legal regime which defines the scope of belligerent rights and which generally suspends most treaties in force between the belligerents on the outbreak of war.[54] Third, even if the first two legal arguments would be rejected, Art. 236 UNCLOS would still explicitly exempt warships from the duty to protect and preserve the marine environment. In contrast, Art. 31 UNCLOS (Responsibility of the flag State for damage caused by a warship or other government ship operated for non-commercial purposes) has a limited scope and only relates to the flag State bearing "*international responsibility for any loss or damage to the coastal State resulting from the non-compliance by a warship or other government ship operated for non-commercial purposes with the laws and regulations of the coastal State concerning passage through the territorial sea or with the provisions of this Convention or other rules of international law.*" Finally, at least for German warship wrecks, this specific flag State would most probably refer to the volume of financial reparations paid between 1953 and 1990 and, particularly, Germany would argue that all reparation claims have finally been settled as part of the so-called "Two-Plus-Four-Agreement" of 1990 which also serves to fulfil Peace Treaty functions in relation to World War II.[55]

[54] See further Lord McNair and A. D. Watts, The Legal Effects of War, 4th ed., Cambridge University Press (Cambridge 1966).

[55] Treaty on the Final Settlement with Respect to Germany, available at <https://www.cvce.eu/en/obj/treaty_on_the_final_settlement_with_respect_to_germany_moscow_12_september_1990-en-5db0b251-c5bf-4f5a-b5d0-2047f829c19a.html>.

6 Conclusion

In many parts of the world, increasingly corroding and leaking wrecks of former warships (or other State vessels) which have been sunk many decades ago represent a noxious marine "heritage" of mankind. Unfortunately, the special legal status of those warship wrecks makes the environmental challenges created by those underwater objects even more complicated: In general, sunken warship wrecks or wrecked State vessels will still be owned by the former flag State and will still benefit from the principle of sovereign State immunity. This follows from the long-standing public international law principle of "*par in parem non habet iurisdictionem*" and flag States will still seek to exercise sovereign jurisdiction over their sunken warship wrecks as long as possible. However, sovereign immunity of flag States is not without time limits. The legal effects of sovereign State immunity can be restricted in the waters of coastal States, in particular, if those coastal States simply apply their national property laws unilaterally. In addition, if a wreck slowly breaks apart, the former flag State is more and more impeded to conduct any official acts ("*acta iure imperii*") in relation to the wreck and sovereign immunity rights ultimately seize to exist over the passage of time.

Under public international law, however, financial compensation rights of coastal States are not enforceable in relation to the significant detrimental environmental effects generated by former warships. The result of this compressed legal evaluation may seem utterly unsatisfactory to some coastal States. It does, however, not imply that the coastal State may not take action in relation to the wreck. Even the MMP confirmed in 1998 that *"[…] these rules do not affect the rights of a territorial sovereign to engage in legitimate operations, such as removal of navigational obstructions, preventions of damage to the marine environment, or other actions not prohibited by international law, ordinarily following notice to and cooperation with the State owning the vessel [...]*".[56] Taken to the limit, the removal of a former warship wreck might even take the form of a

[56] MMP Joint Statement of 15 October 1998 (see footnote 26).

reprisal, e.g., if former flag States refuse to communicate properly with the coastal State. However, under public international law, visible and persuasive references to an appropriate allocation of associated costs or even to potential compensation rights do not exist. Ideally, the coastal State and the former flag State would have to negotiate bilaterally on this politically sensitive issue and this option does not outlaw to apply amicably the concept of mutual cost sharing – on a voluntary basis and to the benefit of all.

Remedying Environmental Damage from Wrecks – the Liability of Owners and Salvors

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1 Introduction

This article deals with the obligation to remedy environmental damage caused by wrecks. A sunken, grounded or drifting vessel can in many ways cause significant harm to the marine environment: Hazardous substances (e.g. chemicals and oil) as cargo and bunkers on board may pollute waters and coastlines, a wreck itself may contain hazardous substances (such as asbestos, oil sludge, paints and PVC) and it may ”litter” the environment,[2] a wreck may pose a danger or impediment to other navigation, thereby increasing environmental hazards, etc.[3]

Focus is on wrecks that are not ”historic wrecks”, i.e. wrecks that are younger than 100 years since their sinking or grounding.[4] Also wrecks covered by the Nairobi International Convention on the Removal of Wrecks, 2007 (which entered into force on 14 April 2015) fall under the study. However, since this Convention mainly regulates the obligation to pay for the costs of wreck *removal* and only to a limited extent contains rules relevant to environmental impairment liability, its significance in the present context is restricted.[5]

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2 A wreck (and its cargo) may also become ”waste” or ”hazardous waste”. See T. Aarnio ”Scrapping of Wrecks and Waste Problems” in H. Rak and P. Wetterstein (eds) *Shipwrecks in International and National Law – Focus on Wreck Removal and Pollution Prevention* (Institute of Maritime and Commercial Law, Åbo Akademi University, 2007) 231–238.

3 On environmental risks and hazards caused by wrecks, see e.g. H. Rak ”Liability for Pollution from Shipwrecks” in Rak and Wetterstein, note 2 at 55–57. According to estimates made by the Finnish Environment Centre, thera are over 1 000 shipwrecks lying in the territorial sea and the EEZ of Finland. About 20 of these wrecks have been classified as acute environmental threats. See *Hufvudstadsbladet* 2 April 2019, 4.

4 On historic wrecks, see e.g. J. Aminoff ”Historic Wrecks and Salvage under Finnish Law – Recent Developments” in Rak and Wetterstein, note 2 at 115–129, C.B. Anderson ”The Law of Historic Shipwrecks in the United States” in ibid., 101–114, and P. Wetterstein ”Fru Maria och bärgningsrätten. Konflikt mellan privata och allmänna intressen” in *Festskrift till Lars Gorton* (Juristförlaget i Lund, 2007) 637–54.

5 The compensation to be paid under the Wreck Removal Convention is primarily focusing on the removal of the wreck, thereby minimising the risk of causing environmental damage as pollutive substances escape the shipwreck. Under Article 10 there is strict liability of the registered owner for the costs of locating, marking and removing wrecks. However, the registered owner of the wreck is exonerated from his

There is no clearly defined or largely accepted concept of ”wreck”.[6] For example, the Finnish legislation concerning removal of wrecks contains such terms as ”sunken”, ”grounded” or ”abandoned” vessel, but a ”wreck” is not explicitly mentioned. In general, a ”wreck” seems to cover a vessel (often stranded or sunken with cargo on board) that is not possible or difficult to salvage, especially if it has been lying for longer periods in deep water. Here we meet a *relative* concept that is ”steered” by applicable legal norms.[7]

As was said, this article deals with the obligation to remedy damage caused to the marine environment. The concept of “remediation” extends further than to a mere *removal* or *disposal* of oil and other pollutants.[8] Remediation embodies an effort to repair or replenish the environment to its previous state, or if this is not feasible, to provide for so-called alternative restoration. The definition of “remedial measures” in Article 2.11 of the Environmental Liability Directive 2004/35/EC[9] (ELD) with regard to the prevention and remedying of environmental damage may serve as an example:

liability if and to the extent the costs arising from the liability under Article 10 are in conflict with compensation through the civil liability conventions (1992 CLC, 2001 Bunker Convention and 2010 HNS Convention, provided that the relevant convention is applicable and in force). For more on the Wreck Removal Convention, see, inter alia, J. Schelin ”Convention on Wreck Removal – The Rules that No One Wanted?” in Rak and Wetterstein, note 2 at 35–41, L. Zhu and M.Z. Zhang ”Liability for oil pollution from shipwrecks – a brief summary” (2016) 22 *Journal of International Maritime Law* 24–32, and S.F. Gahlen ”The Wreck Removal Convention in Force” (2015) 21 *Journal of International Maritime Law* 97–114. It may be added that the Convention has been implemented in the Finnish Maritime Code (1994/674) Chapter 11a.

6 However, the Nairobi Convention provides a rather extensive definition of ”wreck” in Article 1.4. A ”wreck” following upon a maritime casualty, means: (a) a sunken or stranded ship; or (b) any part of a sunken or stranded ship, including any object that is or has been on board such a ship; or (c) any object that is lost at sea from a ship and that is stranded, sunken or adrift at sea; or (d) a ship that is about, or may reasonably be expected, to sink or to strand, where effective measures to assist the ship or any property in danger are not already being taken.

7 See P. Wetterstein *Redarens miljöskadeansvar* (Åbo Akademis förlag, 2004) 323–334.

8 Cf. Case C-188/07 *Commune de Mesquer v Total France SA, Total International Ltd.*

9 Directive 2004/35/EC of the European Parliament and of the Council of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage, which became fully binding on 30 April 2007.

> "'remedial measures' means any action, or combination of actions, including mitigating or interim measures to restore, rehabilitate or replace damaged natural resources and/or impaired services, or to provide an equivalent alternative to those resources or services as foreseen in Annex II."

There is no international regulatory regime in place for *specifically* dealing with remedying responsibilities and the allocation of liability in relation to environmental damage caused by wrecks. Therefore, interest turns to civil liability conventions, EU law and national legal rules.

2 Liability of owners of wrecks

2.1 Civil liability conventions

Under the 1992 CLC[10] there is strict but limited liability[11] of the registered *owner*[12] of a sea-going vessel and seaborne craft of any type whatsoever constructed or adapted for the carriage of *persistent* oil[13] as bulk cargo,

[10] Protocol of 1992 to Amend the 1969 International Convention on Civil Liability for Oil Pollution Damage.

[11] Liability is limited to a minimum amount of 4,510,000 SDR (Special Drawing Rights), which increases thereafter in accordance with the ship's tonnage to a maximum amount of 89,770,000 SDR. For more details on limitation of liability, see e.g. B.W.B. Reynolds and M.N. Tsimplis *Shipowners' Limitation of Liability* (Kluwer Law International, 2012) 311–333, M. Jacobsson *Miljöfarliga sjötransporter – internationella skadeståndsregler* (Jure AB, 2015) 40–59, and Wetterstein, note 7 at 316–320. *Exceptions* to liability are acts of war, an exceptional and irresistible natural phenomenon, and damage caused wholly by a third party acting with intent to cause damage or by the fault or negligence of any government or other authority responsible for the maintenance of lights or other navigational aids in the exercise of that function. See e.g. Wetterstein, note 7 at 77–81.

[12] If the vessel is not registered, liability falls on the person who owns the vessel. Thus, there is no requirement that the shipowner be actively engaged in the vessel's operation in order to be subject to liability.

[13] Persistent hydrocarbon mineral oils are e.g. crude oil, fuel oil, heavy diesel oil and lubricating oil (Article I.5). Transportation of *non-persistent* oil and other substances (gases, gasolines, kerosenes, distillates, chemicals, etc.) is thus not covered under the CLC.

which causes pollution damage in a contracting state or within its economic zone (or within an area corresponding to such a zone up to 200 nautical miles from the coastline). In respect of a vessel capable of carrying both oil and other cargoes (so-called combination carriers or oil/bulk/ore ships), the convention applies only when the vessel is carrying persistent oil as bulk cargo and to a voyage following such carriage, unless it is shown that the vessel has no residue on board from the carriage of persistent oil in bulk. Thus, *bunker* spills from a laden tanker or from a tanker on a subsequent voyage with oil residue from a transport on board, also come within the Convention regime.[14] The CLC contains provisions on compulsory insurance and direct action.[15] Furthermore, the CLC liability system is "backed up" by the Fund Conventions.[16]

Thus, an owner of a *wreck*, fulfilling the criteria of a vessel covered by the CLC and causing pollution damage,[17] incurs liability in accordance with the provisions of the Convention. However, it may turn out to be difficult to find such an owner, especially if the wreck has been lying in the water for a long period. Often pollution damage occurs when

[14] Once a vessel comes within the rules, it is not necessary for the spilled persistent oil to have been part of the cargo. See T. Falkanger, H.J. Bull and L. Brautaset *Scandinavian maritime law. The Norwegian perspective* (Universitetsforlaget AS, 2011) 209.

[15] See Article VII. Regarding insurance cover for wreck removal liability and for oil pollution liability, see e.g. H.S. Lund "Shipwrecks in National and International Law – Insurance Issues and Direct Action" in Rak and Wetterstein, note 2 at 203–222.

[16] Protocol of 1992 to Amend the 1971 International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, and Protocol of 2003 to the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 1992. These Funds make available for compensation a total amount of 750 million SDR. Such compensation is paid when a) no liability for the damage arises under the CLC, b) the liable owner is financially incapable of meeting his obligations in full and any financial security that may be provided under Article VII of the CLC does not cover or is insufficient to satisfy the claims for compensation for the damage, and c) the damage exceeds the owner's limited liability under the CLC or other relevant international convention. For more details, see e.g. Wetterstein, note 7 at 474–481, and M. Jacobsson "The CLC/Fund experience" in G. Handl and K. Svendsen (eds) *Managing the Risk of Offshore Oil and Gas Accidents. The International Legal Dimension* (Edward Elgar publishing, 2019) 385–404.

[17] See the definition of "incident" in Article 1.8.

corrosion releases oil into the sea. Furthermore, there are *time limits* for presenting claims.[18]

There are identical or similar liability provisions in the 2001 Bunker Convention.[19] However, this convention is applicable to "any seagoing vessel and seaborne craft, of any type whatsoever",[20] and the liable person for bunker spills[21] is the "shipowner", who is defined as "the owner, including the registered owner, bare boat charterer, manager and operator of the ship".[22] Thus, regarding bunker spills also from wrecks, there are more liable persons than just the owner (cf. "redare" in Nordic law[23]). Where more than one person is liable, their liability is joint and several.[24]

As regards compensable damage, there are corresponding rules in both conventions. "Pollution damage" is defined in the 1992 CLC (Article I.6, cf. Article 1.9 of the Bunker Convention) as:[25]

> "(a) loss or damage caused outside the ship by contamination resulting from the escape or discharge of oil from the ship, wherever such escape or discharge may occur, *provided that compensation*

18 See Article VIII.

19 International Convention on Civil Liability for Bunker Oil Pollution Damage. The Bunker Convention expressly excludes pollution damage as defined in the CLC, "whether or not compensation is payable in respect of it under that Convention" (Article 4.1). The Bunker Convention thus governs mainly dry cargo vessels and vessels that transport HNS-cargo (see infra).

20 Article 1.1. The intention has been to include every type of floating craft with bunker oil on board. See J. Hoftvedt "Bunkersoljekonvensjonen: En sammenligning med sjøloven § 208" (2002) Nr. 289 *MarIus* 19.

21 Bunker oil is defined as "any hydrocarbon mineral oil, including lubricating oil, used or intended to be used for the operation or propulsion of the ship, and any residues of such oil" (Article 1.5).

22 Article 1.3. The registered owner of a ship having a gross tonnage greater than 1 000 is required to maintain insurance or other financial security to cover the liability for pollution damage. See Article 7.

23 On "redare", see Wetterstein, note 7 at 31–50.

24 On the "shipowner's" liability, see Wetterstein, note 7 at 116. According to Article 6, nothing in the Bunker Convention shall affect the right of the shipowner to limit liability under "any applicable national or international regime, such as the Convention on Limitation of Liability for Maritime Claims, 1976, as amended". For more details on the Bunker Convention, see e.g. Jacobsson note 11 at 149–165.

25 This definition is by reference included in the 1992 Fund Convention (supra note 16 at Article 1.2).

> *for impairment of the environment* other than loss of profit from such impairment *shall be limited to costs of reasonable measures of reinstatement actually undertaken or to be undertaken*;
>
> (b) the costs of preventive measures and further loss or damage caused by preventive measures."[26]

In addition to personal injuries,[27] property damage and economic losses,[28] damage to the environment *per se*,[29] that is, the "unowned" environment (natural habitats, species of flora and fauna, air, water and soil, etc.),[30] is thus covered by the definition – although the coverage is rather restricted. The definition of "pollution damage" addresses mainly property damage and economic losses, that is, the focus is more on the protection of *private* (individual) rights than of *public* rights.[31]

Compensation for *damage to the environment* (other than loss of profit) is expressly limited to "costs of reasonable measures of reinstatement actually undertaken or to be undertaken".[32] Such compensation shall be based on *actual* costs of restoration,[33] speculative costs are not

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[26] Italics added. The conventions apply to damage and costs caused by preventive measures, wherever they are taken, designed to prevent or mitigate such damage through pollution, which owing to the incident constitutes a threat to a contracting state or its economic zone. On preventive measures and recoverable costs, see Wetterstein, note 7 at 208–223.

[27] Such injuries are relatively rare in the oil pollution context. Cf. the wording of "pollution damage" above.

[28] On compensating pure economic loss under the CLC, see Wetterstein, note 7 at 135–155.

[29] Also the concept of "pure environmental damage" is used.

[30] On this, see P. Wetterstein "Pure environmental damage" in G. Handl and K. Svendsen (eds) *Managing the Risk of Offshore Oil and Gas Accidents. The International Legal Dimension* (Edward Elgar publishing 2019) 305–336, and idem "A Proprietary or Possessory Interest: A *Conditio Sine Qua Non* for Claiming Damages for Environmental Impairment?" in P. Wetterstein (ed.) *Harm to the Environment. The Right to Compensation and the Assessment of Damages* (Oxford University Press, 1997) 30–32, 46–54.

[31] See the reference in note 30.

[32] The main purpose of this specification was to promote a uniform interpretation of the oil pollution damage concept. See Wetterstein, note 7 at 178.

[33] Conceptually "restoration" is similar to "remediation". These measures are taken after the clean-up has been completed. Claims for the costs of restoration/remediation often involve many technical considerations relating to such matters as the type of oil spilt, the climate and other environmental factors. See C. de la Rue and C.B. Anderson

compensated. In addition, the undertaken (or planned[34]) measures must be *reasonable*, considering especially the extent of the environmental damage and the expected positive effect of the measures.[35]

It should be emphasised, however, that the definition of "pollution damage" is insufficient in cases where restoration of the environment to its previous state *is not possible* or where it would appear to be *unreasonably costly*. The CLC and the Bunker Convention seem not to have accepted the idea of so-called alternative restoration, that is, they do not oblige the shipowner to acquire "equivalent resources and habitat"[36] when restoration of the environment is not possible (cf. "complementary" remediation under the EU Directive 2004/35, see infra 2.2).[37] Nor do they require the shipowner to compensate for environmental values that are lost during the period of the restoration (*interim losses*, cf. "compensatory" remediation under the EU Directive 2004/35), which can be very time-consuming.

Both the CLC and the Bunker Convention have entered into force and most EU Member States have ratified them and implemented their

Shipping and the Environment: Law and Practice (London: Informa, 2009) 478–480, 487.

34 Also pre-payment of restoration costs can be made. See Wetterstein, note 30 at 315.

35 On the criteria for awarding compensation, see Wetterstein, note 7 at 178–186.

36 Regarding these concepts and the alternative restoration, see B. Sandvik *Miljöskadeansvar* (Åbo Akademis förlag, 2002) 390.

37 Jacobsson, note 16 at 403 states that damage to the environment per se, that is, ecological damage, and other damage of a non-economic nature do not qualify for compensation under the 1992 Conventions. However, it can be noted that in the International Oil Pollution Compensation (IOPC) Fund's Claims Manual, October 2016 Edition, 39 is stated: "In view of the fact that it is virtually impossible to bring a damaged site back to the same ecological state that would have existed had the oil spill not occurred, the aim of any reasonable measures of reinstatement should be to re-establish a biological community in which the organisms characteristic of that community at the time of the incident are present and are functioning normally. Reinstatement measures taken at *some distance from, but still within the general vicinity of, the damaged area may be acceptable, so long as it can be demonstrated that they would actually enhance the recovery of the damaged components of the environment* (my italics). This link between the measures and the damaged components is essential for consistency with the definition of pollution damage in the 1992 Conventions". This writing seems to entail a restricted possibility of alternative restoration, but a real improvement requires a re-drafting of the pollution damage concept in the CLC Convention. Cf. the discussion in Wetterstein note 30 (2019) at 325–336.

rules into national law.[38] However, there is one more civil liability convention that in the future is of relevance also to owners of wrecks, the International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea, 2010 (HNS Convention).

The 2010 HNS Convention has not yet entered into force. Like the CLC, the HNS Convention imposes strict but limited liability[39] on the registered owner of a vessel, but the latter convention applies to "any sea-going vessel and seaborne craft, of any type whatsoever" (Article 1.1) carrying HNS substances (in the main, such substances are chemicals, oil, LNG and LPG).[40] Thus the HNS Convention covers oil transports *not* falling under the CLC (e.g. transports of non-persistent oil), but as that convention only applies to loss or damage caused by contamination, the HNS Convention covers also loss or damage caused by *fires and explosions* of carried HNS substances. However, it does not cover pollution damage resulting from bunker emissions.[41]

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38 See H. Ringbom "Elefanten i glashuset? Om EU:s roll i regleringen av sjöfart" in *Det 25. nordiske sjørettsseminar* (Sjørettsfondet AS, 2013) Nr. 417 *MarIus* 48, and Jacobsson note 16 at 385–386.

39 The limitation amounts vary between 10 million and 100 million SDR depending on the tonnage of the vessel (Article 9). There are special limits of liability for damage caused by packaged HNS, a combination of packaged and bulk HNS and where it cannot be determined whether packaged or bulk HNS were responsible for the damage (Article 9.1(b)). In addition, there is a second tier providing for compensation up to 115 million SDR, which is to be made available through the HNS Fund. The HNS Fund, which provides compensation up to 250 million SDR, is to cover most situations under which the shipowner is exempted from liability or unable to pay. See Reynolds and Tsimplis, note 11 at 357–361, 374–378.

40 The substances covered are defined by reference to existing lists of hazardous substances in IMO Conventions and Codes, designed to ensure maritime safety and prevention of pollution (Article 1.5). As these lists and codes are amended, the HNS Convention will be tacitly amended as well. Currently there are more than 6,500 HNS substances. It is interesting to note that the HNS Convention covers the dangerous and polluting goods included in the same IMO Codes to which the EU Directive 2004/35/EC (*infra*) refers, e.g. the IMDG Code, the IBC Code, the IGC Code, the Code of Safe Practice for Solid Bulk Cargoes (BC Code) and Annexes I–III of MARPOL (1973/78). On the codes, see M. Nesterowicz "The application of the Environmental Liability Directive to damage caused by pollution from ships" (2007) 1 *LMCLQ* 109.

41 For more details on the HNS Convention, see Jacobsson note 11 at 167–206.

The HNS Convention defines "damage" as including loss of life or personal injury, loss of or damage to property *outside* the ship carrying HNS substances, loss or damage by contamination of the environment, and the costs of preventive measures as well as further loss or damage caused by them. The definition makes it clear that claims for compensation for damage to the marine environment are admissible, but they are *restricted*, as under the CLC and the Bunker Convention, to "costs of reasonable measures of reinstatement actually undertaken or to be undertaken" (Article 1.6).

Thus, owners of wrecks covered by the civil liability conventions mentioned above may be open to – even extensive – claims for costs of restoring the environment. Furthermore, the EU Directive 2004/35 needs to be noted in the present context.

2.2 EU Directive 2004/35

As regards the obligation to *remedy* environmental damage, of significant relevance for owners of wrecks is the earlier mentioned EU Directive 2004/35 (ELD). All EU Member States are bound by the ELD,[42] which has accepted a *more extensive* approach to remedying environmental damage than the civil liability conventions.

The objective of the ELD is "to establish a common framework for the prevention and remedying of environmental damage at a reasonable cost to society" (recital (3)).[43] The ELD covers environmental damage and

[42] The EU Member States were given time until 30 April 2007 to bring into force the legislation necessary to comply with the Directive (Article 19.1). Its implementation by all Member States was completed by June 2010. A major reason for the slow transposition process is the necessary co-existence of the environmental liability regime established by the ELD with pre-existing liability rules, sometimes overlapping the scope of the ELD. On the legislative history of the ELD see e.g. K. De Smedt "The Environmental Liability Directive: the directive that nobody wanted – Part I" (2015) 23 *Environmental Liability* 167–170.

[43] This objective should be implemented through the furtherance of the "polluter pays" principle and in line with the principle of sustainable development. See recitals (2) and (18).

the imminent threat of such damage[44] caused by any of the occupational activities[45] listed in Annex III, which contains references to EU legislation. These activities include, inter alia, waste management operations, manufacture, use, storage, processing, filling, release into the environment and onsite transport of dangerous substances as defined in Article 2(2) of Council Directive 67/548/EEC (repealed by Regulation 2008/1272 EC), and *transport by sea* of dangerous or polluting goods as defined in Council Directive 93/75/EEC (with later amendments).[46] Thus the ELD is of relevance also for shipping activities, including occurrences of wrecks. If there is an emission or incident causing "environmental damage", the provisions of the ELD (as transposed into EU Member State law) may be applicable. Directive 2013/30/EU[47] expands the applicability of the ELD to cover marine waters of Member States as defined under the Marine Framework Directive 2008/56 EC.[48] Thus, wrecks in waters of Member States (including their EEZs and continental shelves)[49] are covered.

The *operator*[50] (cf. "owner" and "shipowner" under the civil liability conventions) of the activities listed in Annex III shall bear the costs for the preventive and remedial actions taken pursuant to the ELD. He will

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44 According to Article 2.9, "imminent threat of damage" means "a sufficient likelihood that environmental damage will occur in the near future."

45 In the ELD "occupational activity" means "any activity carried out in the course of an economic activity, a business or an undertaking, irrespectively of its private or public, profit or non-profit character" (Article 2.7).

46 Regarding the activities listed in Annex III, see P. Wetterstein "The EU Directive 2004/35 on Environmental Liability and Its Impact on Shipping" in J. Tuomisto (ed) *Sopimus, Vastuu, Velvoite. Juhlajulkaisu Ari Saarnilehto 1947 -21/11 -2007* (Turun yliopisto, oikeustieteellinen tiedekunta, 2007), 442–443.

47 Directive 2013/30/EU of the European Parliament and of the Council on safety of offshore oil and gas operations and amending Directive 2004/35/EC.

48 See Article 38 of Directive 2013/30/EU.

49 See the definition of "marine waters" in Article 3.1 of Directive 2008/56/EC.

50 In Article 2.6 "operator" is defined as "any natural or legal, private or public person who operates or controls the occupational activity or, where *this is provided for in national legislation*, to whom decisive economic power over the technical functioning of such an activity has been delegated, including the holder of a permit or authorisation for such an activity or the person registering or notifying such an activity" (italics added).

be strictly liable[51] with some exceptions.[52] Occupational activities other than those mentioned in Annex III are subject to a *fault-based* regime (Article 3.1(b)).[53] However, such liability covers only damage and an imminent threat of damage to "protected species and natural habitats" (not water and land damage, see infra). This restriction of fault liability is effective also in relation to damage caused by shipping activities not mentioned in Annex III.

The ELD has adopted the principle of compensating pure environmental damage ("damage to the environment *per se*").[54] The environmental liability under the ELD is *exclusively* a liability vis-à-vis the public, that is, it aims to protect public rights. It makes it possible for competent authorities to require that the preventive actions and remedial measures[55] are taken the by the operator[56] and, if needed, to take these measures themselves,[57] and then recover all costs from the operator.[58] The ELD does *not* apply to cases of personal injury, damage to private property or to any economic loss and does not affect any right regarding these types of damage. Thus, unlike the civil liability conventions, it does not grant

51 Article 8.1.

52 See Articles 4.1 and 8.3.

53 A number of Member States, e.g. Denmark, Finland, Latvia, Lithuania and Sweden, included further activities not mentioned in Annex III in the scope of strict liability. See Report from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions Under Article 14(2) of Directive 2004/35/CE on environmental liability with regard to the prevention and remedying of environmental damage, COM(2010) 581 final, 4.

54 See the reference in note 30.

55 According to recital (24): "Competent authorities should be in charge of specific tasks entailing appropriate administrative discretion, namely the duty to assess the significance of the damage and to determine which remedial measures should be taken". See also Article 11.2. On the role and obligations of the authorities, see e.g. Nesterowicz, note 40 at 113, 115–117.

56 For the liability mechanism to be effective, there needs to be one or more identifiable polluters, the damage should be concrete and quantifiable, and a causal link should be established between the damage and the identified polluter(s). See recital (13). However, causation issues (and allocation of costs between multiple tortfeasors) was intentionally omitted from the scope of the ELD. See De Smedt, note 42 at 173, 175.

57 The subsidiarity responsibility of competent authorities in the Member States to take remedial measures when operators fail to do so has been left to the Member States.

58 See ELD Articles 5–6.

private victims any right of compensation. This is a significant limitation of the Directive's scope.

"Environmental damage" in the ELD covers a) *damage to protected species and natural habitats* (biodiversity),[59] which is any damage that has significant adverse effects on reaching or maintaining the favourable conservation status[60] of such habitats or species,[61] b) *water damage*, which is any damage that significantly adversely affects the ecological, chemical and/or quantitative status and/or ecological potential, as defined in Directive 2000/60/EC, of the waters concerned,[62] and c) *land damage*, which is any land contamination that creates a significant risk of human health being adversely affected as a result of the direct or indirect introduction, in, on or under land, of substances, preparations, organisms or microorganisms.[63] "Damage" itself is being defined as "a measurable adverse change in a natural resource or measurable impairment of a natural resource service which may occur directly or indirectly."[64]

"Preventive measures" and "remedial measures" should be undertaken either by the operator or by competent authorities. The former notion is rather "traditional", that is, it comprises all measures taken in response to an event, act or omission that has created an imminent threat of environmental damage, with a view to preventing or minimizing that

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59 "Protected species and natural habitats" is explained in Article 2.3. Reference is made to the Wild Birds Directive 2009/147/EC (codified version of Directive 79/409/EEC) and the Habitats Directive 92/43/EEC.

60 For the concept of "conservation status", see Article 2.4.

61 The significance of such adverse effects is to be assessed with reference to the baseline condition, considering the criteria set out in Annex I to the ELD. "'Baseline condition' means the condition at the time of the damage of the natural resources and services that would have existed had the environmental damage not occurred, estimated on the basis of the best information available" (Article 2.14).

62 With the exception of adverse effects covered by Article 4.7 of Directive 2000/60/EC.

63 See Article 2.1.

64 Article 2.2. "Natural resource" means protected species and natural habitats, water, and land (Article 2.12) and according to Article 2.13, "'services' and 'natural resource services' mean the functions performed by a natural resource for the benefit of another natural resource or the public". As regards "impairment of a natural resource service", cf. Wetterstein (1997) note 30 at 48–50 with references.

damage.[65] The latter term of "remedial measures" is of greater interest in the present context. The definition is *cited* under 1. above.

Remedying of environmental damage to *protected species and natural habitats* and *water*, is achieved through the restoration of the environment to its baseline condition. Restoring the damaged natural resources is the best method of preserving the environment. Situations giving rise to claims for restoration might be exemplified by the discharge of harmful substances into watercourses and sea areas causing damage to fish and other wildlife. When possible, restoration can be made on the site where the resources were damaged. Restoration measures needed after such an incident might include restocking the waters with young fish, replanting new flora and cleaning the water and banks.[66]

Remediation is divided into "primary remediation", "complementary remediation" and "compensatory remediation". These concepts are defined in Annex II as follows:

> "(a) 'Primary' remediation is any remedial measure which returns the damaged natural resources and/or impaired services to, or towards, baseline condition;
>
> (b) 'Complementary' remediation is any remedial measure taken in relation to natural resources and/or services to compensate for the fact that primary remediation does not result in *fully restoring* (my italics) the damaged natural resources and/or services;
>
> (c) 'Compensatory' remediation is any action taken to compensate for *interim losses* (my italics) of natural resources and/or services that occur from the date of damage occurring until primary remediation has achieved its full effect."

As can be seen from these definitions, the ELD aims at *fully* restoring/compensating damage caused to natural resources and/or services. It

[65] See Article 2.10.

[66] However, there are also problems involved in restoring and replacing natural resources: the determination of the baseline to which resources are to be restored, the often huge expenses involved, the time it takes for the ecosystem to resemble superficially its original condition (if at all possible) and so on. See Wetterstein, note 7 at 170–195 with references.

emphasizes the need for *in natura* restoration. When primary remediation does not result in fully restoring the environment, complementary remediation will be undertaken. The purpose of the latter remediation is to "provide a *similar level of natural resources and/or services, including, as appropriate, at an alternative site* (italics added), as would have been provided if the damaged site had been returned to its baseline condition".

If possible and appropriate, the alternative site should be geographically linked to the damaged site, taking into account the interests of the affected population.[67] Complementary remediation can be used when the environment is so badly damaged that it cannot be restored in the particular location, or if complete restoration would take a very long period of time. As an example, if the damaged environment provides an essential ecological service, such as serving as a breeding ground or a habitat for a species requiring protection or a resting place for migratory birds or animals, then the environmentally useful remedy would be to create an equivalent environment ("replacement habitat") nearby. This could involve the acquisition and modification of a specific area of land or sea.[68]

In addition to these explicit provisions on alternative restoration, compensatory remediation needs to be undertaken to compensate for the *interim loss* of natural resources and/or services pending recovery.[69] This compensation "consists of additional improvements to protected natural habitats and species or water at either the damaged site or at an

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67 Annex II, 1.1.2.

68 See L. de La Fayette "The Concept of Environmental Damage in International Liability Regimes" in M. Bowman and A. Boyle (eds) *Environmental Damage in International and Comparative Law. Problems of Definition and Valuation* (Oxford University Press, 2002), 187.

69 According to Annex II, 1(d), "interim losses" means "losses which result from the fact that the damaged natural resources and/or services are not able to perform their ecological functions or provide services to other natural resources or to the public until the primary or complementary measures have taken effect". H. Aiking, E.H P Brans and E. Ozdemiroglu "Industrial risk and natural resources: the EU Environmental Liability Directive as a watershed?" (2010) 18 *Environmental Liability* 7 mention as an example, that if a spill of chemicals results in significant damage to a number of acres of wetland and natural recovery is the most appropriate option here, then during the recovery period some wetland services will be lost or impaired.

alternative site". However, it does not provide financial compensation to members of the public.[70]

Regarding the complex issue of the *identification* of complementary and compensatory remedial measures,[71] it should be noted that when determining the scale of these remedial measures, the use of *resource-to-resource equivalence* approaches will have to be considered first.[72] If it is not possible to use these equivalence approaches, *alternative valuation* techniques will have to be used. The competent authority may prescribe the method, for example, *monetary valuation*, to determine the extent of the necessary complementary and compensatory remedial measures.[73]

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70 Annex II, 1.1.3.

71 The EU Commission mentions in its report COM(2010) 581 final, 5 that the competent authorities judged that the most difficult issues were the complex technical requirements linked to the *economic* evaluation of damaged natural resources/services and environmental remediation *methods*. See also notes 72–73.

72 These equivalence approaches are described in Annex II, 1.2.2 as follows: "Under these approaches, actions that provide natural resources and/or services of the *same type, quality and quantity* as those damaged shall be considered first. Where this is not possible, then alternative natural resources and/or services shall be provided. For example, a reduction in quality could be offset by an increase in the quantity of remedial measures" (italics added). For more information and details see e.g. E. Waris "Ennallistaminen korjaamalla – ympäristövastuudirektiivin mukainen uuden sukupolven ennallistamisvastuu" in T. Määttä (ed) *Ympäristöpolitiikan ja –oikeuden vuosikirja* (Joensuu: University of Eastern Finland, 2008) 11–76, P. Wetterstein "Ekonomiskt ansvar enligt EG:s miljöskadedirektiv" (2007) *Tidskrift utgiven av Juridiska Föreningen i Finland* 468–480 with references and Aiking, Brans and Ozdemiroglu, note 69 at 4–5.

73 Further, according to Annex II, 1.2.3, "[i]f valuation of the lost resources and/or services is practicable, but valuation of the replacement natural resources and/or services cannot be performed within a reasonable time-frame or at a reasonable cost, then the competent authority may choose remedial measures whose *cost is equivalent* to the estimated monetary value of the lost natural resources and/or services" (italics added). For more details see references in note 72. It should be noted that to help implement Annex II, the EU Commission sponsored research on economic evaluation methodologies that can be used. The REMEDE Project (Resource Equivalency Methods for Assessing Environmental Damage in the EU) has produced a toolkit for the benefit of Member States in choosing the most appropriate remediation measures as outlined in Annex II of the ELD. The goal of REMEDE is to develop, test and disseminate methods appropriate for determining the scale of complementary and compensatory remedial measures necessary to adequately offset environmental damage. Case studies are used as examples. The project draws from both U.S. experience, in terms of methodological developments and implementation issues encountered, and experience of the EU

With regard to the choice of the remedial options when applying the ELD,[74] I will cover the topic through references only.[75]

Finally, it should be noted that the ELD contains in Article 4.2 and in Annex IV exceptions for environmental damage (or the imminent threat thereof) arising from an incident in respect of which liability or compensation falls within the scope of, inter alia, the 1992 CLC, the 2001 Bunker Convention and the 2010 HNS Convention. The Conventions should be in force in the Member State concerned.[76] Thus, this exception restricts the effects of the ELD regarding pollution damage caused by shipping and will do it even more when the HNS Convention enters into force and is implemented into national law. Nevertheless, *all* pollution

Member States. For more details on the REMEDE Project see website accessed 22 March 2017 at http://www.envliability.eu/. Regarding case studies, see also Aiking, Brans and Ozdemiroglu, note 69 at 7–10 and J. Fejes, S. Cole and L. Hasselström "The REMEDE Project: A useful framework for assessing non-market damages from oil spills?" *CERE (Centre for Environmental and Resource Economics)* Working Paper 2011:5, who suggest a transparent and consistent framework for assessing non-market costs of oil spills in the Baltic Sea based on the REMEDE project.

74 The guidelines in Annex II have been introduced to ensure, inter alia, that the liable operator is not confronted with disproportionately costly remediation measures. Only reasonable remediation measures are to be taken, thereby considering, e.g. the costs of implementing the various remediation options, the likelihood of success of the various options and the extent to which each option prevents future damage and avoids collateral damage as a result of implementing the option. Aiking, Brans and Ozdemiroglu, note 69 at 6.

75 See Annex II, 1.3 and further Wetterstein, note 72 at 468–80. The ELD appears to have been influenced by the legislation in the US, especially the Oil Pollution Act (OPA) of 1990. For an overview of the valuation problems and methods regarding US law see R. Force "Damages recoverable for injury or destruction of natural resources caused by pollution" (2010) Second Quarter *Benedict's Maritime Bulletin* 71–80, and for more details see e.g. C.A. Jones, T.D. Tomasi and S.W. Fluke "Public and private claims in natural resource damage assessments" (1996) 20 *The Harvard Environmental Law Review* 111–163, C.A. Jones and L.M. Dipinto "The role of ecosystem services in USA natural resource liability litigation" (2018) 29 *Ecosystem Services* 333–351 and R.J. Kopp and V. Kerry Smith (eds) *Valuing Natural Assets: The Economics of Natural Resource Damage Assessment* (New York: Resources for the Future, 1993) Part 2.

76 The EU legislator excluded *wholly* the application of the ELD to any aspect of damage covered by these Conventions. See Nesterowicz, note 40 at 108, 118, and Reynolds and Tsimplis, note 11 at 353.

damage caused by vessels – and wrecks – will not be covered by the civil liability conventions.[77]

2.3 National law

In addition to the international civil liability conventions and EU law, there are also national legal rules concerning *remediation* of environmental damage of some relevance to vessels, including wrecks. As an example, I will here shortly mention the Finnish Environmental Damage Act, EDA (*Ympäristövahinkolaki,* 737/1994).

The EDA is the *general law* concerning environmental impairment liability. The applicability of the EDA is determined by the description of the damaging activity and the types of compensable damage. According to § 1 of the EDA, compensation shall be payable for damage to the environment[78] caused by 1) pollution of water, air, or land; or 2) noise, vibration, radiation, light, heating, or smell: or 3) other comparable disturbance.[79]

The EDA is applicable only to pollution from *a specific area*. The notion of specific area is somewhat vague. However, it seems that what is primarily meant here is activity harmful to the environment – even if very short in duration – performed on a specific place on land or water,[80] and thus the EDA does not, as a rule, cover pollution from *moving* means of transport, such as vessels.[81] However, an owner of a grounded or sunken wreck may, for example, take part in removal or salvage operations (see infra 3.) that cause harm to the environment and thereby fulfil the criteria of "pollution from a specific area".

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77 See P. Wetterstein "Environmental liability in the offshore sector with special focus on conflict of laws" (part I) (2014) 20 *Journal of International Maritime Law* 45–46.

78 However, the concept of "environment" is not defined. During the preparation of the EDA it was considered not possible to do so. See P. Wetterstein "Environmental Damage in the Legal Systems of the Nordic Countries and Germany" in M. Bowman and A. Boyle, note 68 at 232.

79 Regarding these requisites, see the extensive analysis by Sandvik, note 36 at 123–174.

80 Government Bill 1992:165 (Bill submitted by the Finnish Government to Parliament for an Environmental Damage Compensation Act), 19.

81 But the maintenance of traffic areas, such as fairways and ports, is covered (§ 1 para. 2).

In addition to compensation for personal injury and property damage,[82] the EDA covers pure economic loss,[83] provided that it is not insignificant (§ 5 para. 1).[84] More interestingly, § 6 of the EDA authorises the *authorities*[85] to claim reasonable (by reference to the disturbance or the risk of disturbance and the benefit of the restoration measures)[86] costs from the person(s) liable for measures undertaken to *restore*[87] the environment[88] – in addition to a private person whose individual rights have been infringed.[89] Under public and administrative laws the authorities often have a duty to take measures to protect and restore the environment.[90] The provision of the EDA helps to clarify the question of the responsibility to pay for these measures.

According to EDA § 7, strict liability is laid upon the *operator*, that is, the person who carries out the activity that causes the environmental

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82 Compensation for personal injury and property damage is payable according to Chap. 5 of the Finnish Tort Act (*Vahingonkorvauslaki*, 412/1974). In this respect, the EDA does not introduce any changes.

83 Cf. note 28.

84 Damage caused by a criminal act is always compensated.

85 The term "authorities" covers both state and municipal authorities performing environmental protection.

86 On the question of reasonableness, see Wetterstein, note 7 at 193–194 with references. Furthermore, the rules on "limits of tolerance" may also restrict the right to restoration costs. According to EDA § 4 damage to the environment is recoverable only if it is not reasonable to tolerate the disturbance taking into account, among other things, the local circumstances, the situation as a whole that led to the disturbance, and how common this kind of disturbance is in comparable circumstances. The obligation to tolerate disturbances is not applicable to personal injury or more significant property damage. Neither does it affect damage caused by criminal or intentional behaviour. On the "limits of tolerance", see Wetterstein, note 7 at 85–90.

87 On restoration under the EDA, see Wetterstein, note 78 at 234–241.

88 See note 78.

89 On the private person's right to claim restoration costs, see e.g. Wetterstein, note 7 at 186–193.

90 See M. Suksi "Government Action Against Wrecks – A Finnish Perspective in Light of International Law" in H. Ringbom (ed.) *Regulatory Gaps in Baltic Sea Governance. Selected Issues* (Springer, 2018) 117–146. See also Ympäristövaliokunnan mietintö 3/2009 vp, Hallituksen esitys ympäristölle aiheutuvien vahinkojen korjaamista koskevaksi lainsäädännöksi, 2–3. Regarding coersive salvage measures ordered by state authoriries under Nordic law, see comments by E. Selvig in *Nordiske Domme i Sjøfartsanliggender* (Nordisk Skibsrederforening, 2014) Ixix-Ixxi.

damage. Furthermore, persons comparable with an operator (taking into consideration control, financial arrangements, etc.) also have strict liability, for instance, a parent company could be held liable for the activities of its subsidiary.[91] If the environmental damage is caused by two or more persons, they will be jointly and severally liable.[92] Consequently, the liability rules of the EDA could be of relevance also to owners of wrecks when they act as "operators" and cause damage to the environment.

However, as regards restoration measures, the EDA contains no provisions accepting the idea that *interim loss* of natural resources and/or services pending recovery (cf. the ELD supra 2.2) should be compensated. Neither has such compensation been awarded in court practice. Furthermore, it is questionable whether *alternative restoration* (cf. the ELD supra 2.2) may be approved and awarded under the Act.[93]

3 Liability of salvors

Liability questions relating to salvors are relevant when considering the protection of the marine environment. An incompetent or careless salvor may cause damage to the environment in many ways: for example, a salvor may cause oil pollution when colliding with the vessel in danger

[91] See Government Bill 1992:165, 26–7. Regarding the liable person, see the Supreme Court's decisions KKO 1999:124, KKO 2001:61, KKO 2011:62 and KKO 2012:29. Also the transferee of an activity is liable if he knew or should have known about the damage or disturbance (or the risk of it) at the time of the transfer.

[92] However, a person whose apparent contribution to the damage is small cannot be held responsible for damage caused by others (§ 8). It will remain for the courts to decide what counts as "small".

[93] Sandvik, note 36 at 394 and Wetterstein, note 7 at 182–195, especially 194, are in favor of such an application of the EDA. However, it is to be noted that the ELD has been implemented into Finnish law mainly by the adoption of the Act on Remediation of Certain Environmental Damages (383/2009). Based on this Act, the Government has issued a Decree on the Remediation of Certain Environmental Damages (713/2009) that includes provisions on necessary measures related to the remediation of significant damage to protected species, natural habitats and waters.

or as a result of running it aground during towage to safety, or an explosion leaking out hazardous gases or chemicals may occur during the performance of the salvage operations. The risk of incurring liability, which in the case of damage to the environment could be extensive, has both a *positive* and a *negative* effect on the salvor's activities. The risk of extensive liability encourages a salvor to do his work carefully and use his best skills.[94] On the other hand, the risk may also discourage salvors from taking on risky salvage operations. Obviously, these considerations are valid also when attempting to salvage wrecks.

The 1989 Salvage Convention provides in Article 8.1 that the salvor shall owe a duty to the owner of the vessel or other property in danger:

(a) to carry out the salvage operations with due care;[95]

(b) in performing the duty specified in subparagraph (a), to exercise due care to prevent or minimize damage to the environment; […]

The duties specified above are owed to the owner of the vessel or other property in danger. The fact that there is an express duty to the parties mentioned in Article 8.1 does not mean that the salvor does not owe duties to *third party claimants* under general law or statutory provisions.[96] As a general rule, salvors, when performing salvage operations, will bear full responsibility for the competent and skilful performance of their duties.[97]

The questions concerning environmental impairment liability are, of course, dependent on the applicable rules of law. The rules relating to these issues vary considerably in different jurisdictions. However, as

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[94] It should be added that a negligent salvor may also be deprived of the whole or part of the salvage remuneration due. See the International Convention on Salvage, 1989, Articles 14.5 and 18. For an overview of remuneration and compensation issues when protecting the environment, see P. Wetterstein "Salvage and the Environment" (1999) 5 *Environmental Liability* 123–133.

[95] On the standard of care in English law, see e.g. G.Brice "Salvorial Negligence in English and American Law" (1998) 22 *Tulane Maritime Law Journal* 572–583, and S. Girvin and T. Stephens "Liability of Salvors" in R. Thomas (ed.) *Liability Regimes in Contemporary Maritime Law* (Taylor & Francis Ltd, 2007) 82–84.

[96] See also G. Brice, Maritime Law of Salvage, London 1993, 305, and A. Bishop "The Liability of Salvors for Pollution" in Thomas, note 95 at 99–100.

[97] See e.g. the *Tojo Maru* case, note 112.

regards the obligation to *remedy* environmental damage, the civil liability conventions and EU law mentioned above are, in addition to owners of wrecks, also relevant to salvors.

Although the CLC Convention may be applicable, for example, when a salvor causes pollution damage during transport of persistent oil from a tanker in distress, from a practical point of view more interest is focused on the convention's provisions *protecting* salvors from liability when performing salvage operations. The CLC does not totally exclude salvors from liability claims, but a salvor causing oil pollution damage may refer to the provisions on *channeling* of liability. The liability is channeled to the registered owner of the vessel and no claim for compensation for pollution damage under the convention or otherwise may be made against "any person performing salvage operations with the consent of the owner or on the instructions of a competent public authority". Furthermore, "any person taking preventive measures" is protected from such claims.[98]

These rules are important to the salvor for, although subject to the terms of his contract he remains responsible to the shipowner under normal legal principles,[99] he is protected from claims from third parties which could otherwise be brought in a variety of jurisdictions.[100] However, these provisions do not prejudice the owner's right of recourse against third parties.[101]

There are identical channeling provisions in the HNS Convention.[102] However, as was said, the liable person under the Bunker Convention is the "shipowner", who is defined as "the owner, including the registered

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98 Article III.4. This provision was written into the convention in order to promote prompt action by salvors and clean-up teams. The servants or agents of persons mentioned above are also protected. However, all these persons lose the benefit of the channeling provision if the damage resulted "from their personal act or omission, committed with the intent to cause such damage, or recklessly and with knowledge that such damage would probably result". Regarding this provision, see Wetterstein, note 7 at 288–296.

99 On the relationship between salvage and contracts for wreck removal and for oil pollution prevention and clean-up, see R.F. Olsen "LOF, SCOPIC, and Wreck Removal" in Rak and Wetterstein, note 2 at 189–200.

100 Bishop, note 96 at 100.

101 Article III.5. Consequently, there could be need for different "hold harmless" arrangements.

102 See Article 7.

owner, bare boat charterer, manager and operator of the ship."[103] But there are no channeling provisions protecting persons performing salvage operations (or persons taking preventive measures). Consequently, salvors are more open to liability claims under the Bunker Convention[104] than when performing salvage operations covered by the CLC and HNS Conventions. However, there may be *national* rules protecting the salvors[105] and they may also have a right to limit their liability in accordance with general rules on limitation of liability.[106]

As already mentioned, the Directive (2004/35/EC) covers environmental damage and imminent threat of such damage caused by any of the occupational activities listed in Annex III. These activities include, inter alia, sea transport of dangerous or polluting goods and of waste.[107] Thus the ELD may have relevance for persons who "operate or control"[108] the salvage activity,[109] for example, when they remove and transport hazardous and noxious goods/substances or waste from a vessel in danger. If there is an accident causing "environmental damage" (supra 2.2) the salvors may be liable for the costs of preventive and remedial actions taken pursuant to the ELD.

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[103] Article 1.3.

[104] The Bunker Convention expressly excludes pollution damage as defined in the CLC, "whether or not compensation is payable in respect of it under that Convention (Article 4.1.). The Bunker Convention thus governs mainly dry cargo vessels and vessels that transport HNS-cargo.

[105] For example, see the Finnish Maritime Code 1994/674 Chapter 10 a § 16 para. 1. It should be noted that the Bunker Convention left open the option for States to grant immunity from suits to salvors (and also others). See also the Resolution on Protection for Persons Taking Measures to Prevent or Minimize the Effects of Oil Pollution which was adopted at the Diplomatic Conference that adopted the Bunker Convention (IMO Doc. LEG/CONF.12/18). For a survey of the responder immunity provisions in the legislation of the United States and the United Kingdom, see H. Liu "Salvors' provision of environmental services: remuneration, liability and responder immunity" (2018) 24 *Journal of International Maritime Law* 295–300.

[106] See note 111.

[107] Regarding the activities listed in Annex III, see note 46.

[108] On the wording "operates or controls", see e.g. Statens offentliga utredningar (SOU) 2006:39. Ett utvidgat miljöansvar. Delbetänkande av Miljöansvarsutredningen (2006) 102–108.

[109] Regarding "occupational activity" in the ELD, see note 45.

The ELD has approved alternative restoration and has also accepted that interim losses of natural resources and/or services pending recovery should be compensated. Consequently, also salvors could be subject to more extensive remedying liability under the ELD than under the CLC, Bunker and HNS Conventions, where the authorities, when claiming costs for restoration of the environment, are bound by the rather restricted writing of "pollution damage" mentioned before (supra 2.1). Although the main part of losses and damage caused by harmful substances carried by sea are/will be covered by these conventions, and thus excluded from the Directive,[110] there still remains room for the application of the ELD.[111]

The Finnish EDA (supra 2.3) may also be of relevance when considering the salvor's potential liability. As was said, according to § 1 of the Act, compensation shall be payable for damage to the environment caused by 1) pollution of water, air, or land; or 2) noise, vibration, radiation, light, heating, or smell; or 3) other comparable disturbance. The EDA is applicable only to pollution from *a specific area*. Such activity may be performed also by salvors, for example, when pulling free a grounded vessel or removing its cargo. Also repairing activities may result in liability for salvors.[112]

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110 See supra 2.2.

111 However, the effects of the extensive remedying liability under the ELD are mitigated by the rules on limitation of liability. The Convention on Limitation of Liability for Maritime Claims, 1996/1976 (LLMC Convention) mentions explicitly salvors as persons entitled to limit liability (Article 1). "Salvor" is defined as "any person rendering services in direct connexion with salvage operations". Thus the text does not make any distinction between professional salvors and other salvors, for example, a cargo vessel en route. The financial limits of liability will be calculated in accordance with Article 6. On the LLMC Convention, see the commentaries by Reynolds and Tsimplis, note 11 at 27–110, and Wetterstein, note 7 at 253–288.

112 Cf. *The Tojo Maru*, (1971) 1 Lloyd's Rep. 341 (C.A.; H.L.) where a diver working for a salvage company negligently fired a bolt gun into the plating of the *Tojo Maru* causing an explosion and extensive damage to the vessel.

4 Conclusions

Focus in this paper has been on remedying obligations. Both an owner of a wreck and a salvor may incur such liability, provided that their activities fulfil the conditions for applying the civil liability conventions. The concept of "pollution damage" contained in these conventions determines the extent of their restoration obligations. However, the channeling provisions of the CLC and HNS Conventions significantly restrict claims against salvors.

The ELD, which comprises both complementary and compensatory remedying obligations, may also be applicable when removing/salvaging a grounded or sunken vessel. However, the effect of these obligations is limited because of the exception of the civil liability conventions in Annex IV.

Finally, national legal rules, as the Finnish EDA, contain varying restoration obligations for owners and salvors of wrecks, further complicating the legal situation. Thus, we find (at least) three *differing* obligations regarding remedying environmental damage: 1) under the civil liability conventions, 2) according to the ELD and 3) in accordance with national law.

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