Criminal Liability of Seafarers and Ship Operators - A Regulatory Perspective on Developments in Environmental Law

Henrik Ringbom*

1 Introduction

Pollution by ships remains a concern for regulators. While existing regulations have successfully contributed to a gradual and significant decline in pollution incidents[1] and of the overall quantities of polluting substances released at sea,[2] they have not eliminated the problem. In addition, new environmental concerns keep emerging which call for new regulatory measures to mitigate the environmental impact of shipping, for example in relation to air emissions or discharges of ballast water causing the introduction of non-native species in marine ecosystems.

Tackling pollution by regulatory means, is mainly done through any of the following three main categories of measures:

1) Prescriptive rules, aimed at preventing pollution by outlining the border between lawful and unlawful conduct, typically either by prohibiting a certain conduct or by means of requirements relating to technical standards. The principal example at international level is the International Convention on the Prevention of Pollution from Ships (Marpol), which covers a range of polluting substances in its six annexes, ranging from oil and chemicals, to discharges of sewage and garbage and air emissions. These rules are very broadly ratified by states[3] and effectively even extend to non-parties through various legal constructions that extend their applicability to (ships flying the flag of) third states.[4]

---

* Professor of Maritime Law, University of Turku, Finland; Professor II, Scandinavian Institute of Maritime Law, Oslo, Norway and Norwegian Centre for the Law of the Sea, UiT Arctic University of Norway, Tromsø. The author previously (1997-2003) worked at the European Commission and was involved in the development of several EU instruments discussed in this article and was the Commission's agent in the *Intertanko* Case (note 44 below). All opinions expressed are personal.

[1] See www.itopf.org/knowledge-resources/data-statistics/statistics/

[2] *Ibid*. Oil tanker accidents account for around 10 per cent of global marine oil pollution. Around 35 per cent comes from regular shipping operations, including oil released during incidents involving all other types of vessel, as well as oil from illegal tank cleaning. See e.g. World Ocean Review 3, Marine Resources, Opportunities and Risks, 2014, p. 37. Also available at https://worldoceanreview.com/en/wor-3/oil-and-gas/oiling-the-oceans/

[3] Marpol's Annexes I (oil) and II (noxious liquid substances in bulk) are ratified by the quasi-totality of the world's flag states (as per 1 December 2019 the numbers were 158 states, representing some 99 per cent of the world's tonnage). Annex VI (ships' air emissions) is of more recent date, but similarly enjoys widespread ratification (96 states representing 97 per cent of the world's tonnage).

[4] Flag states have a duty under UNCLOS Articles 94(5) and 211(1) to give effect to any "generally accepted international rules and standards", independently of their own formal participation in

2) Civil liability rules, aimed at compensating damage caused by pollution, but also at implementing the 'polluter pays principle'. These rules are not as comprehensive as the preventive rules in terms of coverage; the widely accepted rules are limited to oil pollution from ships,[5] and not even they are globally accepted,[6] while the rules for other hazardous and noxious substances are yet to enter into force.[7]

3) Sanctions, aimed at penalizing non-compliance with prescriptive measures, thereby contributing to both punitive and preventive effects. This type of rules are very sparingly regulated at international level. Marpol only includes some general provisions on sanctions, which effectively mean that it is up to each state party to establish its own sanction regime, including setting down the standards for key issues, such as liable person, liability threshold and levels of sanction.[8]

The three categories are separate at a conceptual level. In reality, however, they do not operate in isolation from each other and tend to get increasingly intertwined.[9] New types of environmental concerns and challenges have further broadened the range of tools being considered, e.g. in the form of market-based measures to address shipping's CO_2 footprint.[10]

The focus of this article lies on the third category, which is an important yet relatively neglected aspect of international shipping regulation. Existing pollution

such rules. In addition, Marpol itself, along with several other IMO conventions, include in its Article 5(4) a 'no more favourable treatment clause' providing that port states when implementing the convention, shall not differentiate between parties and non-parties.

[5] The regulation of civil liability for oil pollution is divided between the rules that govern oil pollution from tankers and those of other ships. The former category currently involves three different instruments: the International Convention on Civil Liability for Oil Pollution Damage, 1992 (the "CLC"); the International Convention on the Establishment of a Fund for Compensation for Oil Pollution, 1992 (the "Fund Convention"); and the Supplementary Fund Protocol, 2003. The liability for oil pollution from other ships is regulated by the 2001 International Convention on Civil Liability for Bunker Oil Pollution Damage (the "Bunkers Convention").

[6] As of December 2019, CLC had 140 contracting parties, the Fund Convention had 117, the Supplementary Fund 32 and the Bunkers Convention had 95. The United States does not participate in these regimes, but regulates oil pollution liability by means of national law, through the federal Oil Pollution Act of 1990 (33 U.S.C. 2701-276) as complemented by state laws in most states with a coastline.

[7] International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea, 1996 and the 2010 Protocol thereto. The 2010 Protocol aimed at removing certain key obstacles that prevented States from ratifying the HNS Convention, but had only received 5 ratification until December 2019. The most recent of IMO Conventions entailing an element of civil liability and insurance requirements is the 2007 Nairobi International Convention on the Removal of Wrecks (the WRC) with 48 contracting parties.

[8] Marpol Article 4.

[9] A well-known example in the shipping field is the US OPA 90, which links the potential liability of responsible parties with their compliance with preventive regulations and ties the limits of liability to preventive efforts at the scene. See also M Faure & H Wang, 'Smart Mixes of Civil Liability Regimes for Marine Oil Pollution', in J van Erp et al. (eds.), *Smart Mixes for Transboundary Environmental Harm* (Cambridge University Press, 2019) 302-307.

[10] See e.g. E Røsæg, 'Measures for the Sustainable Shipping of Goods, W Eftestøl-Wilhelmsson *et al* (eds) *Sustainable and Efficient Transport* (Edward Elgar Publishing, 2019)

rules, such as Marpol, lay down in significant detail the prescriptive standards for allowable discharges of oil and many other polluting substances by ships, but includes only very generic references to penalties in case of non-compliance with the standards.[11] It is assumed that states will implement the sanctions that fit their legal system best.[12] In reality this has led to a great disparity between states as to what type of sanctions apply for ship-source pollution offences, who are the parties responsible for them and what are the principles for attributing and calculating the penalties. To some extent, regional bodies like the European Union (EU) have filled the gap, by including its own rules on how its member states are to regulate and implement sanctions against non-compliance with the Marpol rules.[13]

From a maritime industry perspective, criminal liability for pollution offences is commonly regarded as a threat. Criminal sanctions are often perceived as a politically motivated 'knee-jerk' response tool resorted to by governments who need to find easily accessible scapegoats in a politically charged post-accident climate, thereby creating unreasonable risks for both seafarers and ship operators.[14] This article offers a somewhat different perspective, arguing, firstly, that if rightly applied, penalties have an important function to fill in complementing and supporting the existing regulatory framework in shipping, i.e. by reinforcing the preventive and civil liability rules. Secondly, it argues that a further differentiation of measures is necessary within the 'sanctions' category of rules. Sanctions exist in multiple formats and it is far from clear that criminal sanctions always offer the most effective solution to discourage the targeted conduct.

The interaction between the civil liability regime and criminal sanctions is discussed in more detail in section 2, which uses the development of EU Directive 2000/35 as the main example to illustrate the inter-linkages between the two categories of rules. The example illustrates that sanctions remain an important complement to the existing liability rules, at least in terms of policy, and that the need for such a complement in part lies in the design of the international liability rules.

---

[11] Marpol Art 4(1) and (2) provides that "Any violation of the requirements of the present Convention shall be prohibited and sanctions shall be established therefor" by the flag state or another state that has jurisdiction. With respect to the nature of the penalties, the only guidance is that given in Art 4(4), providing that national penalties "shall be adequate in severity to discourage violations of the present Convention and shall be equally severe irrespective of where the violations occur."

[12] See also *Marpol – How to do it*, Manual on the practical implications of ratifying, implementing and enforcing Marpol 73/78, 2013 Edition, International Maritime Organization, London, 2013, in particular at pp. 20—25.

[13] The main example in this respect is Directive 2005/35 on ship-source pollution and on the introduction of penalties for infringements (OJ L 255/11), as amended by Directive 2009/123 (OJ L 280/52).

[14] See e.g. various presentations made at the 8th Cadwallader Annual Memorial Lecture in London in October 2005, 'The Extra-Territorial Jurisdiction in Criminalisation Cases: Sovereign Rights in Legislation and New Risks for the Shipping Industry'. Transcript of the lectures available at available at https://www.shippinglbc.com/wp-content/uploads/2019/03/8_cad.pdf). See in particular the presentation by Mr E Embiricos and the related discussion.

Section 3 addresses different forms of penalties, and hence only operates within the third category above. In particular, criminal penalties are distinguished from other penalties of an administrative nature. It is argued that administrative penalties in many cases may be much more efficient than criminal fines by allowing a broader range of regulatory options and procedures. The main example used to illustrate this point is the topical fuel quality requirements aimed at reducing air pollution from ships which entered into force on a worldwide scale on 1 January 2020.

In the final section it is concluded that the international regulation of ship-source pollution largely fails to appreciate the role and potential of sanctions in the overall regulatory scheme. An exception in this regard is the EU, which has been unusually open about the potential benefits of coordinated sanctions in complementing existing preventive and liability rules. On the other hand, the EU appears stubbornly reluctant to recognize the limitations linked to criminal liability as the exclusive mechanism to pursue that sanction policy. In conclusion, there is ground for maintaining that sanctions represent the most under-developed area of international regulation and more efforts are required in this area. A regulatory regime in which agreed pollution standards may be violated without a real risk of financial consequences, serves nobody's interests and least of all those of the shipping industry itself.

2 Criminal liability in relation to civil liability for pollution damage

2.1 General

At first sight civil and criminal liability have little in common. A number of key differences distinguishes the two types of liability from each other, starting from their very objectives: one is aimed at compensating losses while the other one is aimed at penalizing unlawful behaviour. Apart from that, key differences relate to the procedure, the person taking action, the standards for triggering liability, the available remedies etc. For such reasons, civil and criminal liability have traditionally been separated from each other and mixes between the two categories have been avoided.[15] However, a partial erosion of those differences has led to a gradual approximation between the two liability types, not least in the field of environmental protection.[16] Issues such as 'punitive damages',[17] and legal developments aimed at disconnecting criminal liability from the intent of the liable persons,[18] have contributed to eradicating some of the traditional borders

[15] It should be noted though, that in many states it is possible to pursue civil and criminal liability charges in parallel.

[16] See e.g. R. Pereira, *Environmental Criminal Liability and Enforcement in European and International Law* (Brill 2015)

[17] See e.g. M Davies, 'Punitive Damages' in G Handl, K Svendsen (eds) *Managing the Risk of Offshore Oil and Gas Accidents - The International Legal Dimension* (Edward Elgar 2019) 337 and H Koziol & V Wilcox (eds) *Punitive Damages: Common Law and Civil Law Perspectives* (Springer 2009).

[18] See e.g. A Arensberg, 'Are Migratory Birds Extending Environmental Criminal Liability?' 38 *Ecology Law Quarterly* 2011, 427

between civil liability and other forms of environmental penalties. In many states civil claims may be pursued in the context of criminal proceedings.

The focus of this section is the interaction and inter-relationship between civil and criminal liability regimes in ship-source pollution. The case study chosen for studying the matter is the development of EU-wide sanctions for pollution violations at the turn of the Millennium. This process eventually resulted in Directive 2005/35, which is very closely linked to the international (global) rules in two principal ways. Firstly, while the focus of the EU is rules is exclusively on penalties, the substantive (preventive) rules are entirely based on the Marpol discharge standards.[19] Secondly, the history and development of the rules is closely linked to the international civil liability rules and their perceived imperfections. It is the second aspect which is of particular interest below, and the focus is on oil pollution.[20]

2.2 The international regime

The international regime liability for oil pollution caused by tankers exists in its present format since 1992, but its roots that go back to the *Torrey Canyon* incident in 1967. It consists of two layers of compensation: the first is the shipowner's liability (coupled with compulsory insurance); the second is a fund financed by the oil industry, i.e. the receivers of oil in the participating countries, which covers the main part of the globe.[21] The first layer compensates up to its ceiling, which depends on the size of the tanker, but if damage exceeds the shipowner's liability limits, or the shipowner is exempt from liability on some other ground listed in the Convention, the fund steps in to cover losses up to its maximum limit of 203 million 'special drawing rights' (SDR). In 2003 a third layer, the Supplementary Fund, was added as an optional 'top-up' to the IOPC Funds with a maximum compensation limit of SDR 750 million. So far, some 150 cases have been dealt with by the IOPC Funds (including those by its predecessor of 1971), while the Supplementary Fund has not yet been activated.[22]

A number of key features distinguishes the international liability scheme for oil tankers from standard rules of tort liability. For present purposes, the following four elements are the most relevant ones:

1) liability is strict and hence independent of fault committed on behalf of the liable person;
2) liability is limited to a maximum amount that is linked to the size of the ship;

[19] Under its Article 2(2), the Directive only covers Marpol Annexes I (oil) and II (noxious liquid substances in bulk).
[20] If and when the HNS convention (note 7 above) enters into force, the relationship between the directive and the international regime will raise identical issues with respect to violations of the requirements of Marpol Annex II.
[21] Note 6 above.
[22] <www.iopcfunds.org>. For a recent review of the regime's operation in practice, see M Jacobsson, 'The CLC/Fund experience', G Handl, K Svendsen (eds) *Managing the Risk of Offshore Oil and Gas Accidents - The International Legal Dimension* (Edward Elgar Publishing, 2019) 385.

3) liability is channelled to the registered owner of the ship and hence independent of who actually operated the ship at the time of the incident; and
4) the channelling of liability is magnified by the explicit exclusion of a number of other parties from liability under the convention.[23]

Exceptions to all four elements can be made if it is proved that the pollution damage resulted from the owner's or other liable person's "personal act or omission, committed with the intent to cause such damage, or recklessly and with knowledge that such damage would probably result".[24] In that case, the person in question may be liable to the full amount of the damage. However, in practice, this is a very high threshold which has only been broken in a couple of instances following major oil spills in Europe.[25]

Two aspects in particular have been considered to justify this scheme and the estrangement from the 'polluter pays principle' that the above features entail. First, the CLC convention and shipowner's liability is complemented by a compensation fund, with very few defences, which steps in to cover losses that exceed those covered by the shipowner and its insurer.[26] This means that victims of oil pollution incident will not be directly affected by owner's limitation rights or other limitations to the liability of the players behind the accident. Second, it is often emphasized that the main objective of the regime is to secure a swift and simple for victims to be compensated for losses related to pollution from oil tankers. It is accordingly not a corrective instrument aimed at blaming the persons at the origin of the spill or generating preventive effects. Any regime based on requirements on proof of fault and other evidence of involvement, the argument goes, is likely to reduce its availability and user-friendliness for claimants, who normally prefer to have their claims settled swiftly and without the involvement of court procedures.[27]

---

[23] CLC Articles III and V. The parties who are specifically exempted from claims "under this conventions or otherwise" under Article III(4) are: "(a) the servants or agents of the owner or the members of the crew; (b) the pilot or any other person who, without being a member of the crew, performs services for the ship; (c) any charterer (how so ever described, including a bareboat charterer), manager or operator of the ship; (d) any person performing salvage operations with the consent of the owner or on the instructions of a competent public authority; (e) any person taking preventive measures; (f) all servants or agents of persons mentioned in subparagraphs (c), (d) and (e)". Article III(5) adds that nothing in the convention shall prejudice any right of recourse of the owner against third parties, including the ones listed.

[24] CLC Articles III(4), V(2).

[25] The *Erika* in France in 1999 and the *Prestige* in Spain in 2002. Note also the recent decision by IMO's Legal Committee in 2019 to develop further interpretation guidelines on "Unified Interpretation on the test for breaking the owner's right to limit liability under the IMO conventions" aimed at limiting the availability of the exception further (IMO Docs. LEG 106/13 and LEG 106/16, para. 13.4. It is not clear, though, why national courts - if they have not been inclined to follow the very clear wording in a number of (binding) conventions on this matter - would change their approach follow a 'unified interpretation' on the matter.

[26] While this argument may in the future be extended analogously to the HNS Convention, it should be noted that it does not apply to the Bunkers Convention or the WRC, which are based on a single tier of (shipowner's) liability, and therefore do not have a fund to back them up.

[27] See e.g. IOPC Doc. 92FUND/WGR.3/22/1 and C de la Rue & CB Anderson, *Shipping and the Environment* (Informa 2009) 77.

In general, the design of the international oil pollution liability system appears to enjoy broad support among its parties, as is also indicated by its continuous growth in membership.[28] The system's benefits for claimants are normally considered to outweigh its disadvantages and the overwhelming majority of the more than 150 cases compensated by the system have been successfully completed without major complaints or calls for revision. It is the very large (expensive) oil spills that tend to ignite the debate on the fundamental features of the system.[29] In these cases, the available funds may not be sufficient to compensate all victims for their damages, even if their claims are approved in principle. Uncertainty about whether the limit suffices, in turn, slows down the compensation process considerably, as all claims will be pro-rated in the same proportion and no claimant can therefore be compensated in full until the total costs are established. Most importantly, however, major accidents tend to raise strong political reactions in the place were they occur; often raising concerns about the design of the shipowners' liability regime from a fairness and justice perspective. In particular questions are often raised as to whether it is defendable that liability is channelled to one party only (who may not even involved in the operation of the ship) and that almost everybody else involved in the transportation in question are so solidly protected by the regime against financial consequences.

These were exactly the dominant sentiments in the main EU regulatory bodies following the *Erika* accident outside France in December 1999 which, for the first time, got the EU engaged in the regulation of pollution liability in shipping.

2.3 The EU response

The political attention given to maritime liability issues following the *Erika* accident was unprecedented in the EU and beyond. Yet there was no consensus on the way to improve the regulations in this field. At one end of the policy spectrum, certain states and parliamentarians proposed that the international regime should be denounced and a completely new liability regime should be designed within the EU, which would better correspond to the polluter pays principle and provide larger funds for compensation. The majority, however, preferred to stay with the existing international regime, to which all EU member states with a coastline at the time were already parties, and proposed to increase its limits and perhaps some other amendments to it, to be agreed internationally.

In 2000 the European Commission presented a proposal for a supplementary fund (the COPE Fund) to complement the IOPC Funds in compensating particularly expensive spills in EU waters, based on the same principles as the IOPC Funds. More importantly for present purposes, the proposal also included an assessment

[28] See also note 6 above.

[29] These incidents - and discussions - seem to have occurred with some degree of consistency, the key ones being the spills of the *Torrey Canyon* (1967), the *Amoco Cadiz* (1978), the *Exxon Valdez* (1989), the *Erika* (1999).

of the existing pollution liability regime established by the CLC and Fund Conventions.[30]

In the assessment, the Commission took the view that some features of the international regime in place did not represent an appropriate balance between the responsibilities of various players involved in the shipment of oil and their exposure to liability. In particular, shipowners' almost unbreakable right to limit the liability in accordance with Article V(2) of the CLC, and the protection in Article III(4)of a number of key players from any liability at all,[31] were considered to be counterproductive in not providing sufficient incentives for the parties involved to take the necessary precautions to avoid accidents. In addition, the Commission considered that compensation of environmental damage should be scrutinized with a view to widening the available compensation for damage to the environment *per se*.

Three concrete amendments to the CLC Convention were proposed to achieve a better balance between the responsibilities involved in the transport of oil by sea and the exposure to liability:

1) The liability of the owner shall be unlimited if it is proven that the pollution damage resulted from gross negligence on his part;
2) The prohibition of compensation claims for pollution damage against the charterer, manager and operator of the ship shall be removed from Article III.4(c) of the Liability Convention;
3) Compensation of damage caused to the environment should be reviewed and widened in light of comparable compensation regimes established under EU law.[32]

The first two amendment proposals go to the heart of the CLC. Interestingly, they were not - mainly, at least - justified by a desire to increase the amount of compensation available for victims or even to re-distribute the financial burden of compensation, but by a sense of unfairness caused by the perceived absence of punitive and preventive elements in the existing liability regime. Essentially, the Commission's concern was that the whole regime is built up in a way that allow liability and compensation to be settled without a single question being asked

[30] COM(2000) 802 final. These proposals were brought forward by the Commission and are not therefore necessarily representative of the EU as a whole. However, they did gain some support among the Member States in the Council (see in particular the Council Conclusions on Maritime Safety of 21 December 2000 (reproduced in Council Doc. 14004/00 (Presse 470)), in which the Council called upon all Member States "to consider possible amendments to the applicable rules in order to render parties other than shipowners liable, as well as the introduction of unlimited liability to shipowners in the event of severe or deliberate infringement of their safety obligations". See also the somewhat less precise conclusions adopted by the Council on 6 December 2002, welcoming "the intention of the Commission to present a proposal to ensure that any person who has caused or contributed to a pollution incident through grossly negligent behaviour should be subject to appropriate sanctions" and stressing "the necessity to re-examine international rules … that lead to irresponsibilities and negligence tolerated by certain open registers." (Paras. 13a and 17 of the 'Prestige Conclusions', Council Doc. 15121/02 (Presse 380)).

[31] See at note 24 above.

[32] Commission communication COM(2000) 802 final, December 2000.

about how the incident happened and whether a different type of behaviour could have prevented it.[33]

The Commission further stated that depending on how the process of amending the international conventions will succeed, it will return to these issues, perhaps through a proposal for an alternative EU-based liability and compensation regime.[34]

The proposals led to a significant international debate, both at the IMO's Legal Committee and by the IOPC Funds, in which a working group was established to discuss a potential revision of the system. The Commission, accompanied by all or some EU member states, actively issued documents reiterating its proposals in these fora.[35]

In the end, however, neither process led to any amendment of the fundamental elements of the international compensation regime. The process ended with the adoption of the Supplementary Fund, which in substance essentially mirrors the idea of the COPE Fund mentioned above, but is placed within the administrative framework of the IOPC Funds, which makes it considerably easier to manage and less politically controversial.[36]

With respect to the proposed amendments 1 and 2 above, the message from the debates was essentially that the compensation-oriented and claimant-friendly procedure of the system would be at risk if such fundamental alterations of the structure and nature of the CLC were to be introduced.[37] Instead, the EU concluded that if punitive and corrective elements are to be introduced to the international oil pollution liability system, it had to be done outside the civil liability framework, by means of punitive sanctions. A few years after these discussions, the EU proposed, and eventually adopted, a directive on penal sanctions for ship-source pollution in 2005.

---

[33] *Ibid*. see in particular at p. 56: "For any liability and compensation system to be considered adequate, it needs not only to provide adequate compensation, but should also reflect a fair balance between the responsibilities of the players concerned and their exposure to liability. In addition, a liability system should, where possible, contribute to discouraging the stakeholders from deliberately taking risks which could be devastating for the protection of lives and the environment. ...The Commission considers that the international regime for liability and compensation of oil pollution damage entails a number of shortcomings in this regard. "

[34] Ibid. at p. 61: "If efforts to achieve the appropriate improvements to the international liability and compensation rules fail, the Commission will make a proposal for adopting Community legislation introducing a Europe-wide maritime pollution liability and compensation regime."

[35] See IOPC Fund doc. 92FUND/WGR.3/14/5, paras. 9–19. For a summary of these debates, see e.g. IOPC Fund Doc. 92FUND/A.6/4 and Faure & Wang, note 9 above 299 with further references.

[36] See also H Wang, 'Shifts in Governance in the International Regime pf Marine Oil Pollution Compensation: A Legal History Perspective' in M Faure & A Verheij (eds.) *Shifts in Compensation for Environmental Damage* (Springer 2007) at 207-209.

[37] See e.g. IOPC Fund Doc. 92FUND/A.6/4, paras. 9.1.6-9.1.7. It may be noted that the amendments proposed by the Commission are not very different from the wording that existed in the original version of the CLC Convention from 1969 and applied from 1975 until 1996.

2.4 The EU criminal sanctions directive

EU Directive 2005/35 on ship-source pollution and on the introduction of penalties for infringements was adopted in 2005 and later amended in 2009 by Directive 2009/123 which further strengthened the criminal law framework of the directive, following a judgment by the CJEU that clarified the division of competence between the EU and its member states in criminal matters.[38] The main objective of the Directive is to transpose into European law the discharge standards introduced by the Marpol and to require the EU member states to impose adequate penalties on persons responsible for discharges of polluting substances from ships.

The Directive had a two-fold purpose. First, it sought to fill a 'gap' in EU law by ensuring that violations of the discharge standards in Marpol were covered under EU law and thereby reduce the discrepancies among EU member states regarding the imposition of penalties for unlawful discharges at sea. Secondly, and more importantly for present purposes, the Directive specifically sought to complement the IMO's maritime liability regime by making the person responsible for the unlawful discharge financially liable for the action through penalties. [39] To emphasize the personal nature of the penalty, the Commission's original proposal for the Directive included a provision stating that "fines referred to in this article shall not be insurable",[40] but this provision did not make it into the final version.

The Directive applies to discharges of polluting substances (oil or liquid hazardous substances transported in bulk) from any ship, irrespective of its flag. It has a wide geographical scope, including discharges that have taken place in all coastal zones of a member state and even on the high seas.[41] All discharges in violation of Marpol committed with intent, recklessly or by serious negligence are to be subject to criminal penalties, except in “minor” cases that did not cause deterioration of water. The inclusion of “serious negligence” in this context represents a difference from the wording in Marpol, which includes an exception, under certain circumstances, for violations of its discharge standards which result “from

[38] See note 13 above Originally, Directive 2005/35 was supplemented by Council Framework Decision 2005/667 to strengthen the criminal law framework for the enforcement of the law against ship-source pollution (OJ L 255/164.) However, following a judgment by the CJEU, which related to the division of competences between the Community and the member states in criminal matters (Commission v Council (Case C-440/05) [2007] ECR I-9097) he latter instrument was annulled and later effectively replaced by Directive 2009/123.

[39] According to the Directive’s preamble “neither the international regime for the civil liability and compensation of oil pollution nor that relating to pollution by other hazardous or noxious substances provide sufficient dissuasive effects to discourage the parties involved in the transport of hazardous cargoes by sea from engaging in substandard practices”.

[40] COM(2003) 92 final, Article 6(6). It was explained that this point "is far from self-evident in current maritime insurance practices, where the insurance cover provided to ships through the policies of the mutual Protection and Indemnity Clubs (which provide cover for some 90% of the world's tonnage), may include monetary penalties, including sanctions of penal nature related to pollution offences." See also M Faure, 'Criminal Liability for Oil Pollution Damage: An Economic Analysis', M.G. Faure, H. Lixin & S. Hongjun, *Maritime Pollution Liability and Policy China, Europe and the US* (Kluwer Law International 2010) 178-180. The provision was removed by the Council for reasons that are not well explained in the documents related to the common position adopted on 7 October 2004, [2005] OJ C 25E/03.

[41] Directive 2005/35, Article 3(1).

damage to a ship or its equipment". That exception does not apply, however, "if the owner and master acted either with intent to cause damage, or recklessly and with knowledge that damage would probably result".[42]

The wording of Marpol, in other words, mirrors that of the CLC and other civil liability instruments discussed above,[43] but the EU Directive lowered the threshold from 'recklessness with knowledge' to 'serious negligence'. Another feature of the Directive is the broad range of persons who may be subject to the penalties, which contrasts with the narrow "channelling" of liability in the CLC and HNS Conventions.

These features of the Directive give rise to tensions in relation to the IMO liability conventions. While criminal liability formally lies outside the scope of the latter, several member states' legal systems make a close connection between the criminal and civil liability for the same incident. In any case, moreover, the less rigorous "serious negligence" test applied in the Directive could have the effect, which could be difficult to justify, that persons whose conduct was subject to criminal liability under EU law could still be exempt from liability under the channelling clause, or have a right to limit their liability, under the IMO conventions.

The difference between the Directive and Marpol also gave rise to litigation before the Court of Justice of the European Union (CJEU), in which a number of shipping industry organisations sought to invalidate the Directive on the grounds that the Directive's threshold for triggering sanctions violated Marpol and, thereby, international law of the sea.[44]

The distinction between the two different thresholds of liability in the directive and in Marpol is important in principle. While the 'serious negligence'-threshold can be established on objective grounds, the 'recklessness with knowledge'-threshold requires information of the subjective knowledge of the persons in charge. Nevertheless, for practical purposes the distinction remains a rather subtle one, which courts are likely to interpret either way, irrespective of which of the formulation in place.[45] This is further emphasized by the fact that the threshold in Marpol does not represent an independent exception from sanctions or liability, but is only one out of several criteria under which a master and owner (but not necessarily others) may be exempted from pollution penalties.[46]

In the end, however, the CJEU did not rule on the substance of the matter on purely formal grounds. It considered that it was not in a position to assess the Directive's validity in the light of Marpol and the 1982 UN Convention on the Law of the Sea

[42] MARPOL Regulations I/4(2) and II(3(2).
[43] See at note 24 above.
[44] *Intertanko v Secretary of State for Transport* (C-308/06) [2008] ECR I-4057 (ECLI:EU:C:2008:312).
[45] The presence of diverging practices by national courts when it comes to interpreting this particular clause is also alluded to, but not exemplified, in IMO Doc. LEG 106/13, para. 8, which calls for interpretation guidelines to be developed to achieve greater consistency.
[46] Marpol Regulation Reg I/4(2). See further, H Ringbom, *The EU Maritime Safety Policy and International Law* (Nijhoff 2008) 401–427;

(UNCLOS) and accordingly upheld the validity of Directive 2005/35.[47] As far as is known, the Directive has not resulted in a major increase of penalties imposed on ship operators.[48]

2.5 Assessment

Increased use of criminal law instruments for environmental purposes is part of a regulatory trend that has lasted for some decades already. Criminal law is the strongest corrective instrument available to regulators, and its use not only opens up a range of powerful enforcement options, but also conveys a strong message of social disapproval of the regulated conduct. Over time environmental crimes have gradually gained a more independent status, in that it is increasingly the environmental harm in itself, rather than only the violation of certain administrative rules related to permits etc., that have become criminalized.[49] In addition, an expansion of criminal law follows from the ever-broadening set of preventive requirements in the environmental field, with accompanying obligations for states to implement effective sanctions. Shipping is no exception to this development. The range of issues that are covered by criminal liability has grown significantly and extends well beyond violation of pollution standards.[50]

The fact that the main developments towards increased use of criminal law in a shipping context have taken place in the field of ship-source pollution should not come as a surprise. Apart from the political circumstances that have favoured this development,[51] some features of the global regulatory setting seem to be relevant to explain the development. First, sanctions for pollution violations have traditionally been very lightly regulated at international level which has paved the

---

[47] But see the more detailed elaboration of the matter by Advocate-General J Kokott at [2008] ECR I-4057 (ECLI:EU:C:2007:689). See also D König, 'The EU Directive on Ship-Source Pollution and on the Introduction of Penalties for Infringements: Developments or Breach of International Law' TM Ndiaye & R Wolfrum (eds.), *Law of the Sea, Environmental Law and Settlement of Disputes, Liber Amicorum Judge Thomas A. Mensah* (Nijhoff 2007) 767; L Grellet, Légalité de la directive 2005/35/CE au regard des conventions Montego Bay et Marpol, *Le droit maritime français* 2008, 899; de la Rue & Anderson, note 27 *above,* 1077, 1122; AK-J Tan, 'The EU Ship-Source Pollution Directive and Coastal State Jurisdiction over Ships', *Lloyd's Maritime and Commercial Law Quarterly*, 2010; A Pozdnakova, 'Criminal Sanctions for Ship-Source Pollution' *Journal of International Maritime Law*, Volume 17, Issue 4, July-August 2011. MA Huybrechts, 'Whatever Happened to European Directive 2005/35/EC? Europe's Ambivalent Approach to the Fight Against Marine Pollution and Its Consequences for Seafarers', B Soyer & A Tettenborn (eds.) *Pollution at Sea: Law and Liability*, (Informa 2012); A Logina, *Criminal procedures and sanctions against seafarers after largescale ship-source oil pollution accidents: a human rights perspective* (Ph.D.) World Maritime University, 2016.

[48] See e.g. European Maritime Safety Agency (EMSA) publication: *Addressing Illegal Discharges in the Marine Environment*, 2013.

[49] See e.g. M. Faure, 'The Development of Environmental Criminal Law in the EU and its Member States', 26(2) *RECIEL* 2017 139.

[50] See e.g. Article 4(3) of the 1989 Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, stating that "the Parties consider that illegal traffic in hazardous wastes or other wastes is criminal". In line with this, and based on an EU Regulation No. 1013/2006 on Shipments of Waste, criminal penalties were awarded to shipowners in judgment by The District Court of Rotterdam in the *Seatrade* case on 15 March 2018 (ECLI:NL:RBROT:2018:2108), which serves to illustrate the type of new risks relating to operational commercial decisions that operators of ships may be subject to.

[51] Referred to above in section 2.2.

way for, and arguably even necessitated, national solutions and different preferences in this regard. Second, for many types of pollution violations, including discharges of noxious substances, ballast water and garbage as well as air emissions, there are no civil liability mechanisms in place to encourage and support compliance with the prescriptive standards. Third, even where there are liability rules, their design has not done away with the need for complementary sanctions. The international maritime liability system for pollution damage is strictly focused on compensation and entails few retributive elements compared to a more traditional tort law setting.

In the EU, the increased resort to criminal liability for environmental purposes has been particularly obvious, in light of the relatively recent clarification of the EU's competence in criminal matters.[52] Time-wise, this clarification of competence corresponded with a period of policy calls for further environmental liability for ship operators, in the wake of some important oil tanker accidents in the region. In this sense, pollution from shipping was used as a platform by the EU for advancing the Union's more general involvement in justice and home affairs, including criminal law. The broad political consensus on the need to strengthen maritime liability, paved the way for Directive 2005/35 which in turn led to more generic rules on the use of criminal law for environmental purposes in the EU.[53] Subsequently, the EU's confidence in criminal sanctions appears to have been further strengthened by the adoption of an amendment which clarified the terms in light of recent case law, but also required that criminal penalties (only) must be used for ship-source pollution violation by natural persons.[54]

A very important concern with criminal penalties is that they in practice tend to be implemented through measures that affect the seafarers on board the ship in question. Even if the target of the EU Directive's sanctions are the ship's operators, charterers, classification societies and other corporate entities that are protected under the existing channelling clauses, the reference to potentially liable persons include the seafarers. The EU might well be criticized for not providing additional security for seafarers, e.g. by only including them in the sanction regime only where it was proven that the pollution was intentional on their behalf, while the lower threshold of serious negligence would still apply to other parties.

On the other hand, experience suggests that one reason for criminal action against seafarers is to ensure some immediate link to the commercial entities that are responsible for the actual operation of the ship rather than a desire to impose penalties on the seafarers as such.[55] That practice, which comes close to keeping

[52] See in particular Case C-176/03, *Commission of the European Communities v Council of the European Union*, [2005] ECLI:EU:C:2005:542. For a background, see e.g. F. Comte, 'Criminal Environmental Law and Community Competence', 12(5) *European Environmental Law Review* (2003) 147.

[53] Eventually resulting in Directive 2008/99 on the Protection of the Environment through Criminal Law, [2008] OJ L328/28.

[54] Directive 2009/123, note 13 above, Article 8a.

[55] See also O. Murray, 'Fair Treatment of Seafarers, International Law and Practice' 18(2) *Journal of Maritime International Law* 2012, 150.

seafarers as hostage in a legal dispute with different parties, is clearly unacceptable and has been addressed in various forums.[56]

The history behind the EU pollution sanctions Directive illustrates how closely interlinked civil and criminal liability may be, both when it comes to regulatory choices and perceived risks. Even if the two regimes represent separate legal regimes with no formal connection between them, the drafting history indicates the close proximity between the two in substance, but also the strong inter-relationship between the regional and global rules, and the influence of one on the other, in both directions. While the very reason for the EU rules on sanctions was the perceived imperfections of the global liability regime, it was the threat of unilateral action by the EU that led the IMO to adopt an additional compensatory instrument in the form of the Supplementary Fund.[57]

The example also suggests that the increased resort to criminal law for addressing ship-source pollution may to some extent be 'self-inflicted', through the design of the civil liability regime and its extensive protection of a number of key persons from liability claims. It seems clear that pressure for complementary criminal sanctions - and for keeping seafarers as legal 'hostages' while searching for the persons behind the operation of the ship - would be much weaker if the civil regime was considered to provide a clear link between the conduct of the key persons involved in the operation of the ship in question and their exposure to financial liability.[58]

However, the proposition that sanctions constitute a useful complement to the regulatory landscape in shipping, does not say much about the desired nature or qualities of the sanction. In particular, none of the arguments discussed above suggest that the sanction should necessarily have to be of a criminal nature. The purpose of sanctions is to make sure that the prescriptive rules focusing on conduct and prevention are supported by appropriate enforcement mechanisms and a financial deterrent, but those aims may well be achieved by using other forms of monetary penalties than criminal ones.[59] This is particularly so as the UNCLOS requires sanctions to be limited to financial penalties for most pollution violations.[60] The current EU sanctions regime offers no such leeway with respect

[56] See in particular the Joint IMO/ILO *Ad Hoc* Expert Working Group on Fair Treatment of Seafarers established in 2006 and the work of the Comité Maritime International in this area since 2004, as summarised in <https://comitemaritime.org/work/fair-treatment-of-seafarers/>

[57] See at note 36 above. See also the more recent 'Report from the Commission on liability, compensation and financial security for offshore oil and gas operations pursuant to Article 39 of Directive 2013/30/EU' (COM/2015/0422 final), p. 4: "While criminal liability for offshore safety breaches would not directly affect the remediation of damage caused, it adds a separate layer of deterrence beyond civil and environmental liability, which could improve the protection of the environment and compliance with offshore safety legislation."

[58] See also M Faure, note 40 above 161

[59] See further, MG Faure, 'Environmental Crime and Ship-source Pollution Directives - Effective, Proportional and Dissuasive Penalties in the Implementation of the Environmental Crime and Ship- source Pollution Directives: Questions and Challenges', *European Energy and Environmental Law Review* December 2010 256

[60] UNCLOS Article 230 provides that monetary penalties only can be imposed for pollution incidents beyond the territorial sea, and even for incidents within the territorial sea "except in the case of a wilful and serious act of pollution".

to use of other persons as far as natural persons are concerned.[61] On the other hand, the fact that no legal action has been taken against the Nordic states that implement administrative penalties for oil pollution, indicates that this may not be a very crucial matter for the Commission.[62]

3 Criminal liability vs. other types of sanctions

3.1 General

This section addresses the nature of sanctions in some more detail. Is it necessary that sanctions against offenders are criminal or could other types of sanctions serve the same purpose? The proposition is that in many cases, shipping regulation would be better served by sanctions that are 'lighter' than criminal penalties in format and procedure, though not necessarily reduced in monetary value.

More generally, it is becoming increasingly common to use administrative sanctions as a complement or alternative to criminal sanctions, the main reason being the heaviness of the requirement of criminal investigation and procedure.[63] Administrative sanctions are usually justified by either of two rather different considerations. The infringement in question may be so minor that it can be 'decriminalised', both as a matter of principle and for practical reasons. Alternatively, administrative sanctions may be resorted to for reasons of effectiveness in relation to commercial activities, which is the consideration of relevance in the present case. In certain areas of law, criminal penalties have been considered insufficient to discourage violations; the risk of being caught has been too low as has the level of fines actually awarded. In addition, the criminal procedure is considered to be too slow and the proof requirements to limit its usefulness. For such situations, administrative sanctions are considered to offer a flexible procedure, for instance by enabling a strict basis for liability, allowing experts in the field evaluate the scope of the infringement, and the possibility to impose much higher financial sanctions. [64]

This applies in shipping, too, not least in the field of ship-source pollution, where the absence of international guidance on types and levels have prompted a

[61] Directive 2009/123, Article 8a.

[62] Note also that the Finnish administrative sanction regime for oil pollution by ships was at issue in Case C-15/17 *Bosphorus Queen Shipping Ltd Corp. v Rajavartiolaitos* (ECLI:EU:C:2018:557). In this case, however, the potential conflict between the Finnish sanction and EU rules requiring criminal liability was not dicussed.

[63] See e.g. MG Faure and K Svatikova 'Criminal or Administrative Law to Protect the Environment?', 24(2) *Journal of Environmental Law* 2010 253. For an overview of the use of administrative sanctions in the Nordic states, see L Halila & V Lankinen, 'Administrativa sanktionsavgifter i nordisk kontext', *Tidskrift utgiven av Juridiska Föreningen i Finland* 5/2014 305–328.

[64] Since violations of the requirements considered here will normally give rise to monetary penalties, more severe types of criminal sanctions, such as imprisonment or confiscation of property will not be considered here. Similarly, a number of other administrative sanctions available to address non-compliance, such as the detention of the ship, or 'naming and shaming' policies will not be addressed here.

number of states to explore different types of sanctions and in some cases introduced tailor-made sanctions for dealing with violations of ship-source pollution standards.[65]

A topical set of shipping rules for which a workable sanction regime would appear to be particularly relevant are the recent rules for fuel quality requirements which entered into force in the beginning of 2020.[66] These rules, which aim at reducing air emissions by requiring a maximum level of sulphur content in ships' fuels worldwide, provide a very direct and significant economic benefit of non-compliance. It has been estimated that by violating the standards during a single return voyage through the Northern European SECA a ship may save up to 150.000 USD in fuel costs.[67] Yet, existing regulations give very little attention to the consequences of non-compliance.

The remainder of this section will address certain key issues relating to criminal and other types of sanctions as applied in the context of the ships' fuel quality requirements. Certain important differences from other forms of ship-source pollution are highlighted in section 3.2, and the implications of those differences for the legal design of a sanction regime are discussed in section 3.3. When it comes to potential solutions, inspiration is drawn from the existing regulation of administrative sanctions for ship-source pollution offences, including air emissions, in some Nordic states.

3.2 Differences between air emissions and other types of pollution

The relevant international rules do not distinguish air emissions from other types of ship-source pollution when it comes to enforcement and sanctions. Yet, there are a number of factual differences between violations of the fuel requirements

[65] As far as oil pollution from shipping is concerned, see e.g. Chapter 8 of Act 1980:424 on the Prevention of Pollution from Ships (Sweden), Chapter 3 of the Act 2009:1672 on Prevention of Pollution from Ships (Finland) and sections 55-57 of the 2007 Ship Safety and Security Act (Norway). Only the last-mentioned act extended to air emissions, but in 2018 Sweden adopted an administrative sanction to cover violations of the Marpol fuel quality standards. SFS 2018:635 Förordning om ändring i svavelförordningen (2014:509).

[66] Under Marpol Regulation VI/14 it is no longer permitted to use fuel containing more than 0.5 per cent sulphur, unless equivalent methods are in place. More stringent requirements (max 0.1 per cent sulphur) have been in place in 'sulphur emission control areas' (SECAs), including the Baltic Sea. the English Channel and large parts of the North Sea, since 1 January 2015. EU requirements (Directive 2016/802 relating to a reduction in the sulphur content of certain liquid fuels, OJ 2016 L132/58) reiterate Marpol requirements, both within and outside SECAs. In addition, the EU has since 2005 demanded a maximum 0.1 per cent requirement for ships at berth in EU ports (Article 7 of Directive 2016/802). For a comprehensive review of a variety of aspects of the new requirements, see K Lewins, M Loxham, 'Controlling PM by proxy? International regulation of sulphur and PM emissions from shipping', *Lloyd's Maritime and Commercial Law Quarterly*, 2020 (forthcoming).

[67] See e.g. 'Sulphur in Marine Fuels', Policy Paper, Danish Shipowners' Association, August 2016. See also <www.imo.org/en/MediaCentre/HotTopics/Pages/Sulphur-2020.aspx> and, more specifically to the cost implications of the 2020 limits, e.g. <https://stillwaterassociates.com/expected-pricing-and-economic-impacts-of-the-imo-2020-rule/>. In IMO Doc. PPR5/13/2, (submitted by Cook Island and Norway) para. 6, it is estimated that the savings by using HFO rather than compliant 0.5% fuel would be "in the range of 10,000 USD/day for a Panamax vessel".

and other forms of pollution, which have implications on the design of sanctions. If not accommodated, the risk is that the enforcement and - by extension - the implementation of the new rules may turn out to be very inefficient.

As opposed to oil spills, air emissions do not happen as a result of isolated events or incidents of a one-off nature, but are of a continuous operational nature. Compliance with the fuel quality rules, as was already noted, entails significant costs for ship operators. There are accordingly important economic gains to be made by rule avoidance and it is technically relatively easy to switch between compliant and non-compliant fuel. This starting point calls for a robust monitoring and enforcement system, including at sea, and sizeable penalties for identified instances of non-compliance. However, the fuel requirements involve challenges in both areas.

Unlawful emissions are not as easily detected as oil spills. Even an initial indication of non-compliance by the ship (which will be necessary under any type of sanction regime) requires sophisticated equipment and the eventual verification of a violation is a technically complex operation, often requiring specialist expertise and equipment and a considerable amount of time. A more conclusive inspection needs at a minimum to assess the fuel quality through several different sampling points, the different tanks and piping arrangements on the ship, the related documentation and its consistency with the facts on board. In an amendment from 2018, the requirements on fuel usage have been accompanied by a prohibition to *carry* non-compliant fuel on board,[68] which reduces many of the technical challenges to prove non-compliance, but even under this regime the sulphur content of the fuels on board needs to be verified. The continuous character of the violation also means that proof that the rules have been violated at a given moment does not necessarily say much about the extent or duration of the violation.

Even if proof of the (objective) violation is available, a standard criminal procedure also requires proof of (subjective) culpability of the persons concerned. Identifying the person that should be the subject of the penalty is in itself a challenge. Many persons are involved in the decisions relating to fuel usage on a ship and the ones who carry out the operations in practice are not necessarily the ones that order them or benefit from them. This follows from normal hierarchical structures between ship operator and crew members, but also from contractual practices, e.g. in the sense that the responsibility for fuel purchase in a time charter-party usually lies with the charterer rather than owner of the vessel, while the owner is more likely to be targeted for the sanction.[69]

The level of culpability required for constituting an infringement is left to national rules, but typically some degree of negligence is required for being subject to a

[68] IMO Resolution MEPC.305(73), Annex. Under the to Marpol Regulation VI/14(1) the carriage of non-compliant fuel oil for combustion purposes for propulsion or operation on board a ship is prohibited as from 1 March 2020, unless the ship has an exhaust gas cleaning system fitted. The amended paragraph 14(1) simply states: "The sulphur content of fuel oil used or carried for use on board a ship shall not exceed 0.50% m/m."
[69] See e.g. NYPE 93 time-charterparty form, clauses 7 and 9.

penalty.[70] Proving negligence is similarly complex when it comes to fuel quality requirements. High sulphur contents in the fuel may be due to many different reasons. Documentary evidence is normally not available to demonstrate culpability while proof that compliant fuel has been purchased is normally easy to present.[71]

Moreover, the principles for characterizing the violation and addressing the size of penalties for environmental infractions are commonly based on the environmental harm or the level of danger for humans or the environment of the infringement, which is not suitable for air emission violations. The environmental and health risks and threats in this case lie in the *collective* effects of non-compliance, rather than in an individual infringement. The absence of significant environmental damage in the individual case of infringement also means that other liability mechanisms, such as civil liability, is not available for use as a complementary deterrent.

Linking penalties for infringing the fuel quality requirements to the financial gains linked to the violation, rather than its environmental harm, in turn, raises other difficult questions on the design of the penalty. Should the penalty should be based on proven or estimated violations and, if the latter, what should the criteria be for estimating the scope of the violation (duration of latest voyage, engine size, area to be covered and factor by which the gains of a particular violation should be multiplied to reach the right level of deterrence etc.)? At any rate, it seems clear that any penalties awarded for violations of the fuel quality standards need to be at least potentially very high, up to millions of US dollars, which also places limits on how far the procedure for awarding the penalties can be simplified and delegated to other authorities than the judicial ones.

Finally, the design of an effective penalty system is complicated by the fact that Marpol Annex VI accepts a couple of key exceptions to the sulphur in fuel requirements. Firstly, Regulation 18(2) accepts exemptions if compliant fuel is not available. This is probably a smaller concern in practice in view of the stringent conditions that Marpol attaches to the applicability of this exception.[72] The more important exception is that the rules continue to permit exhaust gas cleaning

---

[70] See e.g. H Ringbom, 'Enforcement of the Sulphur in Fuel Requirements: Same, Same but Different', *SIMPLY (Yearbook of the Scandinavian Institute of Maritime Law)* 2016, 74-77 and D Topali & N Psaraftis, 'The enforcement of the global sulfur cap in maritime transport', 4 Maritime Business Review, No 2, 2019 212-213. See also <https://shipandbunker.com/news/world/913755-feature-are-authorities-ready-to-enforce-imo2020>, where the Chair of the Trident Alliance (note 79 below), Mr Roger Strevens observes that "information on the approach to enforcement, including details on ... the penalties for non-compliance are, with few exceptions, hard to find".

[71] See study prepared by the Swedish Transport Agency, Transportstyrelsen, *'Rapport: Tillsyn och efterlevnad av de skärpta reglerna för svavelhalt i marint bränsle'*, Slutrapport, Dnr TSS 2013-2085, juni 2014, at 50.

[72] Marpol Regulation VI/18(2). See also the template for a 'Fuel Oil Non-Availability Report' adopted for the purpose in the 2019 Guidelines on consistent implementation of 0.50% sulphur limit under MARPOL Annex VI (Resolution MEPC.320(74) Appendix 1). Para 3.1 of the Report further clarifies that "a fuel oil non-availability report is not an exemption.... it is the responsibility of the Party of the destination port, through its competent authority, to scrutinize the information provided and take action, as appropriate."

systems, or 'scrubbers', which opens up a set of new potential loopholes in terms of how the scrubber is actually used and what exceptions there may be for breakdown etc.[73]

The absence of dedicated sanctions for air emissions standards is visible in practice too. Sulphur in fuel requirements have been in force in 'sulphur emission control areas' (SECAs) since the beginning of 2015 in certain parts of the world.[74] During the five years of experience with the SECA rules, very few sanctions have been imposed on ships for failure to comply with the rules in the North Sea-Baltic Sea region.[75] This is not because compliance has been impeccable, even if it is true that poor implementation of the fuel quality requirements in SECAs does not appear to have been a major concern in the first two years of their operation.[76] More likely explanations for the relative lack of enforcement are that non-compliances are not detected at all, in particular at sea, and that the legal framework governing enforcement is not effective for dealing with this type of pollution, even if detected and confirmed.[77]

3.3 Legal design

For the reasons outlined above, penalties for infringing the fuel quality requirements should be separated from those that apply to other forms of ship-source pollution. The absence of any guidance or criteria for this in the governing international or European regulations contribute to the risk that rules are not complied with. Governments [78] and industry representatives [79] alike, have emphasized that a strict policy for enforcement is necessary to ensure that non-compliance is not encouraged and that operators that do comply with the new rules are not placed in an economically disadvantageous position.

A dedicated sanction regime for violations of the fuel quality requirements accordingly seems justified. In particular, a dedicated form of (monetary) penalty needs to be able to establish a (likely) violation rapidly. A number of international

---

[73] Marpol Regulation VI/4. See also <www.imo.org/en/MediaCentre/HotTopics/Pages/Sulphur-2020.aspx>

[74] The existing SECAs cover The Baltic Sea, The North Sea and the English Channel, the North American and the Caribbean Sea SECAs.

[75] See Ringbom note 70 above, at 76-77, identifying only one German case of criminal fines and five Norwegian administrative sanctions for air emission violations since the entry into force of the SECA requirements.

[76] See e.g. the various reports of at-sea monitoring as presented at http://compmon.eu/reports. According to the Danish Maritime Authority's action plan on efficient enforcement of regulations on ships' sulphur emissions from 2016, preliminary inspection data indicated a compliance rate of 94% in the SECA, while remote sensing measurements in Danish waters indicated a compliance rate of 2%. Statistics on non-compliance recorded by European port state control is available at <https://portal.emsa.europa.eu/web/thetis-eu/compliance>.

[77] See e.g. Swedish Study referred to in note 71 above.

[78] At regional level, the European Commission has established a *European Sustainable Shipping Forum (ESSF)* to enable dialogue between Member States and brings together governments and maritime industry to discuss practical issues that could be encountered during the implementation of the Sulphur Directive. More information about ESSF can be found at: http://ec.europa.eu/transparency/regexpert/index.cfm.

[79] See e.g. www.tridentalliance.org

legal obligations prevent port states from unduly delaying ships,[80] and the detention of the ship is an enforcement measure designed for different purposes.[81] In terms of practical effectiveness, it would be useful if the sanction regime could establish the maximum penalty for the potential infringement in question at a very early stage.[82] This would allow for the imposition of a financial security which, in turn, would permit the suspected ship to sail while once the first inspections have been completed, leaving more time for more detailed laboratory and other analyses without losing the influence over the ship once departed.

Based on the differences identified above, it seems that an effective sanction for air emissions violations needs to be placed on a potentially broad range of persons, including legal persons, at least some of which should be easily identifiable to the investigating authorities. The eventual target of the penalty should be the (legal) person who profits from the violation, but the identification of that person should not be a prerequisite for issuing the penalty.[83] Similarly, while the burden of proving the violation should lie with the authorities, there should be no need for them to identify intent or subjective culpability on behalf of any of the parties. It may not need to be strict liability, but at least some degree of presumption of fault would appear to be necessary to overcome the difficulties linked to proving intent or negligence in this matter. In this area, too, existing examples illustrate how the standard of care requirement may be adjusted by various forms of presumptions and burden of proof standards.[84]

The level of the penalty should be linked to the financial gains, rather than environmental harm, but should be sufficiently multiplied to achieve deterrent effect in view of the relatively low risk of being caught at sea. The principle that underlie the calculation of fines should be transparent and easy to apply and the

[80] See in particular UNCLOS Article 226 on the duty not to cause delays to ships and Article 292 on the settlement of disputes relating to the prompt release of vessels and crews.

[81] The detention of a ship, as provided for in various IMO conventions, is an administrative measure aimed at obliging the ship to address non-compliances relating to its safety and environmental conditions before proceeding to sea, not as a penalty in itself (see also UNCLOS Article 219, to the same effect). It does not provide a remedy for keeping a ship beyond the time at which it carries only compliant fuels on board and, thence, is in full compliance with the requirements.

[82] An example of this kind of scheme, originally proposed by the Finnish Shipowners' Association for the SECA context, is available at <https://compmon.eu/reports>. The calculation of the penalty is based on the engine size of the ship, the level of violation and the number of days the ship has been in the SECA.

[83] In this respect, Chapter 3, Section 1(2) of the Finnish Act 2009:1672 on Prevention of Pollution from Ships (note 65 above) is interesting as it makes the ship's owner liable to pay the sanction, unless the owner can identify a more appropriate person: "[t]he fee shall be imposed on a natural or legal person who is the owner at the time of the offence. The fee cannot be imposed on the owner if he or she can prove that a manager, operator or bareboat charterer has been operating the ship in the owner's stead".

[84] For an example somewhat reducing the absoluteness of the otherwise strict liability, see Chapter 3, Section 3 of the Finnish Act 2009:1672 on Prevention of Pollution from Ships (note 65 above): "[t]he competent authority may waive the imposition of an oil discharge fee or reduce the amount of the fee if the party liable for payment shows that the imposition of the fee would be manifestly unfair due to an emergency or accident ... or due to some other comparable reason."

more those principles could be harmonized between several countries, the better.[85]

On the other hand, 'effective' sanctions may invoke other legal problems. The backside of a speedy and efficient procedure for imposing a prospective air emission fine is that the legal security of the liable persons may be compromised. In view of the punitive character and the economic importance of the penalty for fuel requirements, it is particularly important that the rights of the person on whom the fee is imposed are ensured. Some provisions aimed at ensuring the right of a due process exist in UNCLOS,[86] but the more detailed requirements in this respect emanate from human rights law.[87]

In the European human rights system it has been established that even sanctions that fall short of being labelled as criminal sanctions may fall under Article 6 of the European Convention on Human Rights (ECHR). The European Court of Human Rights (ECtHR) has confirmed that administrative sanctions of a punitive nature may come within the scope of "charged with a criminal offence" under Article 6 of the ECHR on the rights to a fair trial and has developed specific criteria for establishing for administrative penalties in this regard.[88] A sanction aimed at penalizing violation of the sulphur in fuel requirements is likely to qualify under those criteria in view of the emphasis the ECtHR has placed on the 'punitive and deterrent' effect of the sanction as well as the level of the fine.[89] This places important obligations on states to ensure a certain minimum protection of the rights of the accused, whether natural or legal persons.[90]

For example, ECHR Article 6(2) provides that "[e]veryone charged with a criminal offence shall be presumed innocent until proved guilty according to law". The observance of this fundamental principle of criminal law may be questioned when it comes to sanctions based on objective considerations alone. For strict liability sanctions it suffices that the ship is proven to be in violation of the requirement;

---

[85] See note 82 above.

[86] Article 230(3) provides that "[i]n the conduct of proceedings in respect of such violations committed by a foreign vessel which may result in the imposition of penalties, recognized rights of the accused shall be observed."

[87] See also Logina, note 47 above.

[88] The so-called Engel criteria from a case in 1976 are a) the classification of the offence according to domestic law, b) the nature of the offence and c) the nature and gravity of the penalty. See Case *Engel,* 1976, A. 22

[89] See e.g. Cases *Öztürk,* 1984, A. 73, para 53 and *Janosevic v Sweden*, 2002, Reports 2002-VII, para. 68.

[90] Paragraph 3 of the article provides:
"Everyone charged with a criminal offence has the following minimum rights:
to be informed promptly, in a language which he understands and in detail, of the nature and cause of the accusation against him;
to have adequate time and facilities for the preparation of his defence;
to defend himself in person or through legal assistance of his own choosing or, if he has not sufficient means to pay for legal assistance, to be given it free when the interests of justice so require;
to examine or have examined witnesses against him and to obtain the attendance and examination of witnesses on his behalf under the same conditions as witnesses against him;
to have the free assistance of an interpreter if he cannot understand or speak the language used in court."

there is no obligation to prove the guilt or other blameworthiness of a particular liable party. However, the ECtHR's case law includes certain exceptions to the presumption of innocence and a certain degree of discretion for the states to regulate this matter at national level,[91] but the extent to which that flexibility extends to administrative sanctions of the type discussed here is still open.[92]

Other issues relate to procedural matters, such as the right to be heard, appeals or institutional issues. Typically, the introduction of an administrative penalty would not completely replace criminal sanctions in the field. Decriminalising the offence completely may not be desirable as it would do away with the availability of other deterrent forms of criminal penalties, such as confiscation, which would send a wrong message about the severity of the violation. The application of parallel penalties, on the other hand, raises potential problems related to 'double jeopardy', according to which nobody should be sentenced more than once for the same crime (*ne bis in idem*).[93]

Finally, with respect to international law of the sea, it is sometimes maintained that international law places limitations on how sanctions may be designed, in the sense that the sanctions could only extend to violations that have taken place in the coastal waters of the state concerned.[94] This is a misconception for several reasons. First, since the material rules in question represent widely accepted international standards laid down in Marpol, [95] it seems clear that the extraterritorial reach of port state jurisdiction of UNCLOS Article 218(1) may be relied on to extend the reach of the prescriptive jurisdiction beyond the port state's national coastal waters. Indeed, Marpol itself suggests that they should be governed by the normal rules on ship-source pollution in UNCLOS, rather than by the convention's somewhat cryptic provisions on 'pollution from or through the atmosphere'. [96] Second, even in the absence of that basis, port states have significant jurisdiction under international law to place and enforce requirements for ships voluntarily in their ports. Provided the rules are well-known and

[91] The imposition of charges or fees without prior proof of guilt has been accepted in cases of taxes and custom charges. E.g. *Janosevic v Sweden*, 2002, Reports 2002-VII, paras. 94-110.

[92] See the Finnish example in note 84 above and the somewhat broader exception in Chapter 8, section 4 of the Swedish Prevention of Pollution from Ships Act.

[93] For an interesting solution to address such issues, see the Finnish Act 2009:1672 on Prevention of Pollution from Ships. Here, the criminal and administrative sanctions apply in parallel: when the enforcement authority is confronted with a case of non-compliance, it should ensure that the investigation for *both* the administrative and criminal sanctions is commenced, but criminal penalties are given explicit precedence. Chapter 3 section 4(1) of the Act secures this by providing that the administrative penalty "cannot be imposed on a person who has received a legally valid (criminal) sanction for the oil discharge incident in question." See also Government Bill HE 77/2005, pp. 8-9.

[94] See JJ Fanø 'Enforcement of the 2020 sulphur limit for marine fuels: Restrictions and possibilities for port States to impose fines under UNCLOS', 28 *RECIEL* 2019 278-279 with references.

[95] See note 3 above.

[96] Marpol Regulation VI/11(6) specifically ties the Annex to the jurisdictional regime for ship-source pollution rather than to that for atmospheric pollution: "[t]he international law concerning the prevention, reduction or control of pollution of the marine environment from ships, including that law relating to enforcement and safeguards, in force at the time of application or interpretation of this Annex, applies, mutatis mutandis, to the rules and standards set forth in this Annex." See also Fanø note 94 above, arriving at the same conclusion (that UNCLOS article 218 applies to air emissions) by interpreting the term 'discharge'.

reasonable, it may validly be argued that ships, by entering the port, accept to be subjected to the port state's enforcement measures to secure the implementation of the fuel quality requirements.[97] Thirdly, while UNCLOS apportions prescriptive and enforcement jurisdiction for states over ships in various sea areas, it does not regulate the level of sanctions to be imposed for the violation or the basis on which the sanction is calculated,[98] nor does Marpol.[99] A penalty based on a hypothetical estimate on how far the ship may have travelled with non-compliant fuel in its tanks, irrespective of the sea areas concerned, does not therefore violate UNCLOS or Marpol, as long as at least part of the violation takes place in an area over which the enforcing state has (prescriptive and enforcement) jurisdiction.[100]

3.4 Assessment

The sulphur in fuel requirements in Marpol Annex VI have been labelled the most economically significant (costly) rule that the IMO has ever adopted.[101] Yet, the international legal framework does not promote the establishment of an effective sanction regime for violation of the rules or thereby countering the significant incentives that for non-compliance with these particular requirements. On the other hand, international law does not place any particular limitations on the establishment of an efficient sanction regime either.

From the point of view of Marpol or UNCLOS, it is not relevant whether the sanction in question is of criminal or administrative nature, and it is easy to agree

[97] For more details, see e.g. the study made by the present author in the context of the CompMon project: 'The Legal Framework for Monitoring and Enforcing Compliance with the Sulphur in Marine Fuel Requirements of Marpol Annex VI, Draft Report Prepared by Åbo Akademi University, Co-financed by the Finnish Ministry of Transport and Communications and the European Union's Connecting Europe Facility (2014-EU-TM-0546-S), available at <http://compmon.eu/reports>. Case law confirming the right of port states to issue sanctions for violations of local air emissions rules that extend beyond the Marpol requirements include the Swedish Case No. M 8471-03, Svea Court of Appeal, Environmental Court of Appeal (Miljööverdomstolen), Judgment of 24 May 2006; CJEU Case C-537/11, *Manzi v Capitaneria Di Porto di Genova ('the MSC Orchestra')* ECLI:EU:C:2014:19.

[98] See also p. 2 of the dissenting opinion of ITLOS Judge Anderson in the *Monte Confurco* Case (ITLOS Case No. 6, 2000), relating to the prompt release of a fishing vessel and the reasonableness of the requested security: "[t]he Convention does not limit the size of fines, although it does exclude generally imprisonment for fisheries offences. It is for the legislators and the courts of States Parties to lay down fines for illegal fishing. Where there is persistent non-observance of the law, deterrent fines serve a legitimate purpose." See also para. 7 of his dissenting opinion in the *Volga* Case (Case No. 11, 2002).

[99] MARPOL article 4(4) only requires that penalties "shall be adequate in severity to discourage violations of the present Convention and shall be equally severe irrespective of where the violations occur." In an IMO guide for states parties implementing the provision it has been considered "reasonable to provide for a range with a minimum and maximum level, with the exact amount of the fine being dependent on the severity of the offence."

[100] See also IMO Doc. PPR5/13/2 (note 67 above), para. 7, arguing in favour of the 'carriage ban' referred to in note 68 above: "Such a ban will ... make it easier for port State authorities to detect and sanction the carriage of non-compliant fuel oil, even if such fuel oil has not been used for combustion purposed in their jurisdiction."

[101] See e.g. <https://shipinsight.com/guides/sox-emissions>

that the formal label of the sanction is not what matters.[102] However, Marpol, like the EU rules on fuel requirements, do require that the sanctions regime in place is effective and dissuasive.[103] This requirement is not met if the procedure is too heavy to result in sanctions in cases of non-compliance, if the sanction targets the wrong person, or if the financial level of the sanction is insufficient to match the incentives that exist for to violating the rules. Judging by the five years of experience with the SECA standards, there is a considerable risk that existing sanctions fail to live up with these requirements. The prohibition to carry heavy grades of fuels on board makes it easier to verify if a violation has taken place, but does not remove the need to address the modalities of sanctions with regard to non-complying ships.

4 Concluding remarks

The international maritime community has shown remarkably little interest for developing rules for sanctions to support the existing substantive requirements. This is in sharp contrast to the attention given to establishing preventive rules in almost any area where shipping has an environmental impact. Liability rules, which could at least in theory compensate for this absence, currently apply only to oil pollution, and even here, the rules are not designed to produce preventive or deterrent effects. In the absence of international coordination, it is natural that the regime governing sanctions develops through initiatives by individual states or regions.

This chapter has discussed two regulatory trends relating to sanctions that seem to be particularly relevant for the moment, even if somewhat disparate: the move towards sanctions in general, and criminal sanctions in particular, to strengthen preventive and retributive effects of existing rules; and the search for other sanctions than criminal ones for achieving those effects. Both trends are discussed on the basis of topical examples from the international regulation of shipping.

With respect to the first trend, the reasons behind an increasing resort to criminal sanctions for ship-source pollution violations seem to be two-fold. At a general level, there has been a trend in the past few decades towards acceptance of environmental harm as criminal behaviour and associated legal changes. This trend has been particularly noticeable in the EU, where the confidence in criminal sanctions appears to by particularly strong following a hard-fought competence victory by the EU against its member states clarifying that Union has competence to regulate key aspects of criminal penalties. In the more specific field of ship-

[102] Note, however, the limitation to monetary penalties in UNCLOS Article 230 referred to in note 60 above and the specific criminal enforcement jurisdiction over ships in the territorial sea as laid out in Article 27.

[103] See note 99 above. The corresponding EU requirement is only marginally more specific, as Article 11(2) of Directive 2016/802 provides that "[t]he penalties determined must be effective, proportionate and dissuasive and may include fines calculated in such a way as to ensure that the fines at least deprive those responsible of the economic benefits derived from their infringement and that those fines gradually increase for repeated infringements."

source pollution, the reasons for the receptiveness of criminal sanctions are largely to be found within the existing international regulatory framework itself.

The review in section 2 justifies some more general conclusions on the topic. First, the rules on criminal sanctions for ship-source pollution are closely linked to well-defined, and usually pre-existing, international rules outlining the limits between legal and illegal conduct in significant detail. The controversy that sanctions in this field has given rise to thus exclusively relates to the sanction regime as such, not the underlying prescriptive obligations.

Second, in view of the existing general legal framework for ship-source pollution, it is entirely legitimate - and to some extent even required - to complement the prescriptive rules with specific rules on sanctions. Marpol indeed obligates every party to establish effective sanctions to give effect to its rules and in view of the limited guidance given on the details of those sanctions, states are given a very broad discretion as regards the type and level of sanctions chosen for the purpose.

Third, criminal sanctions complement the existing liability rules for oil pollution from tankers, which are based on a strict channelling of the liability to a single party who may or may not be involved in the operations of the ship. The range of liable persons is somewhat broader in the case of pollution from other ships, but there, the available compensation is significantly more limited in view of the link made to the general regime for limitation of liability for maritime claims (LLMC) and the absence of a compensation fund to support claims beyond that limit. For other forms of pollution, the need for complementary tools is even more obvious. In the absence of international liability rules, the basis of liability, the persons concerned etc. entirely depends on national rules, but liability will nevertheless normally be subject to a general right for the shipowner and others to limit its liability to a (comparatively low) amount on the basis of the LLMC regime. Once the HNS Convention enters into force, liability for pollution by substances covered therein would be comparable to that of oil pollution by tankers.

Fourth, the criticism against the international liability rules that have led to the establishment of complementary sanctions has not - primarily at least - centred around money. The proposed changes to the international regime discussed here would not necessarily affect the available compensation to victims or otherwise improve the position of claimants. Instead, the concerns relate to values, such as fairness, justice and deterrence, and an absence of alternative effective means of penalizing those who are assumed to have caused the accident.

Fifth, the justifiability of the criminal sanction as a complement to the regulatory regime lies in the sanction element, rather than in its criminal nature. In fact, the review above illustrates that criminal sanctions may even be inefficient from a regulatory point of view to address some of the issues at hand, not least in view of various international obligations that states have to ensure a due process and abstain from causing undue delays to ships.

Finally, it is submitted that executing the criminal sanctions by actions directed at the seafarers on board the polluting ship is not only unfortunate and often unfair,

but is also unnecessary. Criminal sanctions by no means presupposes that seafarers are targeted. Even if corporate criminal liability may be problematic in some jurisdictions, it is not excluded that individuals in charge of the companies in question may be the target of the penalties. It may be difficult to completely exclude seafarers from liability for pollution incident, e.g. in cases of intentional actions, but in most cases it must be assumed that the seafarers will be acting based on instructions from the operating company and that decisions with respect ships' quality etc. represent a company policy rather than independent decisions by the individuals on board. In order to reduce the temptation of affected governments to use seafarers as a 'hostage' for eventually reaching the operating company, a higher threshold for penalizing seafarers could be justified. A stricter threshold of culpability for seafarers, e.g. limited to wilful acts intended at causing pollution, would probably serve to lower the risk for seafarers to be held hostages in pollution cases. While such a limitation would be legally feasible under the Marpol sanctions regime, the current EU pollution sanctions regime would have to be amended for the purpose.[104]

The second, more recent trend, discussed in section 3, relates to the nature of the penalties and in particular the increasing use of other type of penalties than criminal ones for addressing ship-source pollution violations.

The trend towards a broader range of sanctions is to be welcomed. As has been illustrated through the example of the Marpol fuel quality requirements, other types of sanctions may sometimes be more effective than criminal ones and they are usually more flexible in terms of adapting them to their particular purpose and needs. A number of particularities place special demands on the design of the penalty system for air emissions which cannot efficiently be handled by normal criminal law procedures. In this particular example, features which are generally alien to criminal penalties, such as a strict liability, a broad range of potentially liable persons and a speedy procedure, would seem to be preconditions for the effective enforcement of the rules.

However, as was also illustrated in the air emissions case, it is the individual features of the penalty scheme, rather than its formal label as criminal administrative or something else, that matter when it comes to determining its eventual effectiveness. The fact that EU law on pollution sanctions currently rules out the application of non-criminal sanctions on natural persons is an anomaly that should be corrected. That particular limitation does not extend to violations of the fuel quality requirements or other air emissions violations, but serves to rule out a series of administrative penalties against oil pollution discharges that are in use in the Nordic countries. A formal amendment to allow for equally effective sanctions of a non-criminal nature would provide clarity in this field for member states and would also suggest a certain level of maturity by the EU in managing its competence in the field of criminal law in an effective manner.

In conclusion, while the developments in the field of pollution sanctions discussed in this chapter generally are to be welcomed as helpful complements to the

[104] See at note 54 above.

regulatory framework, certain anomalies still exist, which can hopefully addressed soon. In particular, focus needs to shift away from the label of the sanctions in favour of highlighting their purpose and effectiveness. Whether they are criminal or administrative or something else plays little role if they cannot be effectively used for their purpose. Current EU rules effectively rule out non-criminal sanctions for pollution of oil and chemicals by ships, which is unhelpful.[105] The enforcement of the global fuel quality requirements gives rise to even more serious concerns. The requirements are different from any other type of ship-source pollution, and there are massive economic incentives linked to non-compliance. Yet, hardly any attention has been given to the question of how ships in violation of the rules should be dealt with. A revision of the sanction rules of Annex VI seems to be justified and necessary. Finally, sanctions should be even clearer in conveying the message that their aim is to target the commercial operators of ships rather than individual seafarers.

Effective sanctions serve the interest of everybody, and most of all of the industry itself. It is to be hoped that international regulators will gradually acknowledge the important contribution that sanctions can and do have, not only to promote compliance with the rest of the regulatory framework in shipping and to penalize those who do not comply, but also for contributing to a culture - and perception - of accountability in shipping. As long as the impression persists that the existing system of pollution liability is aimed at a swift and anonymous collection of funds, while protecting those behind the pollution against the consequences, calls for its revision will continue. Sanctions may play an important role in improving accountability in shipping, but that presupposes that the sanctions are rightly targeted, effective and just. Both case studies examined in this chapter indicate that work remains with respect to all three elements.

[105] For some recent signs of an emerging acceptance of the benefits of a mix of criminal and administrative penalties, see e.g. Council Doc. 12801/19 of 4 October 2019, available at <https://data.consilium.europa.eu/doc/document/ST-12801-2019-INIT/en/pdf>. See also COM(2018)10 final on EU actions to improve environmental compliance and governance, p. 2: calling for enforcement measures to "draw on administrative, criminal and civil law to stop, deter, sanction and obtain redress for non-compliant conduct and encourage compliance."