THE LIABILITY OF FLAG STATES FOR ENVIRONMENTAL DAMAGE CAUSED BY SHIPS

NONJU, Kalada D.S.[1]
IHUA-MADUENYI, Agent Benjamin[2]

Abstract
Flag States have long been regarded as primary bearers of responsibility for ensuring that ships flying their flags comply with international law and regulations. This responsibility becomes particularly critical in cases involving environmental damage caused by ships, such as oil spills, waste dumping, and air pollution. The 1982 United Nations Convention on the Law of the Sea (UNCLOS) set out key principles governing flag state duties in enforcing safety, environmental, and pollution-prevention standards. However, the effectiveness of these provisions remains questionable due to several factors, including the rise of flag of convenience (FOC) registries, jurisdictional complexities, and insufficient enforcement mechanisms. This article explored the legal framework governing flag state liability for environmental damage caused by ships, focusing on UNCLOS, the International Maritime Organization (IMO) conventions, and the 2001 International Tribunal for the Law of the Sea (ITLOS) jurisprudence. The analysis delved into the specific obligations imposed on flag states under international law and examined the implications of non-compliance, especially in relation to civil liability regimes for environmental damage. In addition, the article evaluated the enforcement challenges posed by FOCs, wherein states allow foreign vessels to register under their flags, often without adequate regulatory oversight. The discussion further considered alternative mechanisms, such as port state control and market-based initiatives, to mitigate environmental risks when flag state oversight is inadequate. The article concludes by suggesting ways in which international law could be reformed to enhance flag state accountability, including the introduction of a comprehensive global liability regime and better coordination between flag, port, and coastal states.

Keywords: Liability, Damages, Environmental, Flag, Ship, States

1.0. Introduction

The concept of flag state liability arises from the principle of exclusive jurisdiction that a state exercises over ships flying its flag, as provided for under the United Nations Convention on the Law of the Sea (UNCLOS)[3]. This responsibility extends to ensuring that vessels comply with applicable international regulations, including those designed to prevent environmental harm. With the increase in global maritime trade, environmental damage caused by shipping activities, such as oil spills, air pollution from emissions, and illegal dumping of waste, has become a significant concern. As such, flag states are expected to take necessary measures to regulate and enforce standards that mitigate such risks. Yet, the degree to which they fulfill these obligations remains contentious. This article seeks to explore the legal framework governing flag State liability for environmental damage caused by ships. It focuses on the duties imposed on flag States under international law, especially UNCLOS and International Maritime Organization (IMO) Conventions such as the International Convention for the Prevention of Pollution from Ships (MARPOL). It further assesses the extent to which flag States can be held liable for non-compliance with these obligations, particularly in light of the growing phenomenon of flag of convenience (FOC) registries. These registries often undermine the effectiveness of international environmental standards by allowing ship owners to escape stringent national regulations.

[1] **NONJU, Kalada D. S.,** is a Senior Lecturer in the Department of Jurisprudence and International Law of the Faculty of Law, University of Port Harcourt, and Rivers State, Nigeria. He had his LL B in Rivers State University, B.L Nigerian law School, Bwari, Abuja. LL.M in Obafemi Awolowo University, Ile-Ife, Osun State and PhD in University of Nigeria, Nsukka, Enugu State all in Nigeria. Email: daibi23aug1966@gmail.com; and
[2] **IHUA-MADUENYI, Agent Benjamin** is a lecturer in Faculty of Law, University of Port Harcourt, and Rivers State, Nigeria. He holds LL.M in Kings College, London.
[3] UNCLOS, art. 92

2.0. Definition of Terms

The work defined the following terms or concepts used in the discus.

2.1. Flag State

A Flag State refers to the State whose flag a ship is entitled to fly and under whose laws the ship is registered or licensed. The concept is codified under Article 91 of the United Nations Convention on the Law of the Sea (UNCLOS), which provides that every state shall fix the conditions for the grant of its nationality to ships and for the right to fly its flag.[4] The flag state exercises jurisdiction and control over its ships in administrative, technical, and social matters, irrespective of where the vessel operates.[5] Flag states is the country's flag the ship is flying. For instance, Nigerian ships will have to fly the country's flag. Essentially, the flag state bears the *primary responsibility* for ensuring that vessels flying its flag comply with international maritime safety and environmental standards. This responsibility extends to enforcing international rules adopted under conventions such as MARPOL 73/78, SOLAS 1974, and the London Convention on Dumping.[6]

2.2. Flag State Responsibility

Flag State responsibility refers to the obligation of a state to ensure that ships flying its flag adhere to international standards of maritime conduct, including those governing marine environmental protection.[7] This responsibility is both regulatory and enforcement-based: the flag state must enact domestic legislation implementing international obligations and must monitor, inspect, and sanction vessels as necessary.[8] In the context of marine environmental law, flag state responsibility entails the duty to prevent, reduce, and control pollution from ships, as articulated in Articles 94 and 217 of UNCLOS.[9] When a state fails to exercise effective control over its ships, resulting in environmental harm, it may incur international responsibility.[10]

2.3. Flag State Liability

Flag State Liability arises when a flag state breaches its international obligations by failing to exercise effective control over vessels flying its flag, leading to environmental damage. It is an aspect of state responsibility, grounded in the International Law Commission's Articles on Responsibility of States for Internationally Wrongful Acts (ARSIWA).[11] Liability, in this sense, is not merely compensatory but also normative, ensuring accountability for failure to perform due diligence obligations.[12] While ship-owners and operators are typically held directly liable for pollution under conventions such as the 1992 Civil Liability Convention (CLC) or the 2001 Bunker Oil Pollution Damage Convention, the flag state's liability is secondary and arises from its failure to fulfil oversight duties under international law. This notion reinforces the broader principle that *sovereignty entails responsibility*.[13]

2.4. Environmental Damage

Environmental Damage refers to any adverse effect on the marine environment resulting from human activities, particularly ship-based pollution such as oil spills, and discharge of harmful substances, air emissions, or waste dumping. UNCLOS defines pollution of the marine environment as the introduction by humans, directly or indirectly, of substances or energy into the marine environment that results or is likely to result in harm to living resources, hazards to human health, or interference with legitimate uses of the sea.[14] In the maritime context, environmental damage encompasses both acute incidents (e.g., oil tanker spills) and

[4] UNCLOS, art. 91
[5] ibid, art 94
[6] International Maritime Organization (IMO), *MARPOL 73/78*, *SOLAS 1974*, and *London Convention 1972*.
[7] Alan Boyle, 'State Responsibility for International Pollution' (1977) 9 *Harvard ILJ* 47.
[8] Rüdiger Wolfrum, 'Obligations of Result versus Obligations of Conduct' (2010) 39 *Netherlands YBIL* 1.
[9] UNCLOS (n 3) arts 94 and 217.
[10] Natalie Klein, *Maritime Security and the Law of the Sea* (OUP 2011) 143.
[11] International Law Commission, *Articles on Responsibility of States for Internationally Wrongful Acts* (2001), arts 1–2.
[12] James Crawford, *State Responsibility: The General Part* (CUP 2013) 63.
[13] ICJ, *Corfu Channel (UK v Albania)* (Merits) [1949] ICJ Rep 4.
[14] UNCLOS (n 3) art 1(1)(4).

chronic pollution (e.g., routine operational discharges).[15] The degree of damage is measured in terms of ecological impact, economic loss, and impairment of ecosystem services.[16]

3.1 Legal Frameworks and Institutions Regulating Flag States Over Environmental Damages caused by Ships

3.1.1 United Nations Convention on the Law of the Sea (UNCLOS)

UNCLOS provides the foundation for modern maritime law, including the regulation of flag states. Under Article 94, flag states are required to "effectively exercise jurisdiction and control in administrative, technical, and social matters over ships flying their flag." This obligation includes ensuring that vessels comply with international regulations on safety and environmental protection. Flag States are also required under Article 217 to enforce international standards regarding pollution from ships[17]. The article mandates that states adopt laws and regulations aimed at preventing, reducing, and controlling pollution and take necessary measures to ensure that ships flying their flags comply with these standards. The exclusive jurisdiction that flag states exercise over their ships has often been criticized for creating a gap in enforcement, as states may lack the incentive or capacity to rigorously enforce environmental standards on vessels engaged in international trade.

3. 1. 2. International Maritime Organization (IMO) Conventions

The IMO has developed a range of international treaties aimed at enhancing maritime safety and preventing marine pollution. Of particular relevance to flag state liability is the International Convention for the Prevention of Pollution from Ships (MARPOL), which sets out regulations to prevent and minimize pollution from ships, both accidental and from routine operations. While flag states are responsible for ensuring compliance with MARPOL standards, the convention relies heavily on states' self-regulation, often resulting in weak enforcement, especially for ships registered under flags of convenience. MARPOL's enforcement is further complicated by its reliance on flag states to investigate incidents and apply sanctions, a task that many FOC states fail to adequately perform.

3. 1.3. National Legislation

Enacting specific legislation that sets out requirements for ship registration, inspections, and compliance with pollution prevention measures. Effective national legislation is crucial for holding flag states accountable for environmental damages.

3.2. Liability of Flag States

1. Direct Liability

Flag states may face direct liability for environmental damages caused by vessels registered under their flag[18]. This includes incidents such as oil spills and discharge of hazardous substances. Liability can arise from the failure to comply with international conventions or national laws that govern environmental protection.

2. Vicarious Liability

Flag states can also be held vicariously liable for the actions of ship owners and operators[19]. If a ship is found to have violated environmental regulations[20], the flag state may be held responsible for not enforcing compliance[21], leading to potential legal actions by affected states or individuals.

[15] Philippe Sands, *Principles of International Environmental Law* (3rd edn, CUP 2012) 523.
[16] David Attard, *The Maltese Contribution to International Law: The Marine Environment* (Brill 2020) 91.
[17] International Maritime Organization, 'MARPOL: International Convention for the Prevention of Pollution from Ships' (1973/78).
[18] ibid. (n-4) art.94
[19] P. S. B. Smit, "Liability and Compensation for Marine Pollution" (2019) 34 Marine Policy 123.
[20] International Convention on Civil Liability for Oil Pollution Damage 1992, 1956 UNTS 255.
[21] P.S.B. Smith (n-19)

4.0 Enforcement Mechanisms, Guidelines, Resolutions and Liabilities regarding Flag States and Damages Caused by Ships

Flag state liability for environmental damages caused by ships is a critical aspect of maritime law, with various enforcement mechanisms and challenges involved. atheistic

4.1 Role of Port States

To compensate for the deficiencies in flag state enforcement, port states have increasingly been called upon to play a larger role in ensuring compliance with international standards. Port State Control (PSC) mechanisms, such as the Paris Memorandum of Understanding (MoU), allow Port states to inspect foreign ships to verify compliance with safety, environmental, and labor standards. While PSC regimes have achieved some success, they are not without limitations. Inspections are often infrequent and may focus on documentation rather than the actual condition of the ship. Additionally, port states are often reluctant to detain vessels for fear of economic retaliation from ship-owners or flag states.

4.2 Civil Liability and Compensation Schemes

Several civil liability regimes have been established to provide compensation for environmental damage caused by ships. The International Convention on Civil Liability for Oil Pollution Damage (CLC) and the International Oil Pollution Compensation Fund (IOPC) create a tiered system of liability that allows victims of oil spills to claim compensation. However, these regimes place liability primarily on the ship owner, not the flag state. This means that flag states may escape liability even in cases where their failure to enforce international standards contributed to the environmental damage.

4.3 International Maritime Organization Guidelines and Resolutions

The International Maritime Organization (IMO) plays a central role in regulating global maritime activities, particularly concerning safety, security, and environmental protection. The IMO achieves this through a series of conventions, guidelines, and resolutions that set out standards for the international shipping industry. Guidelines and resolutions issued by the IMO are crucial as they provide member states and the maritime industry with the tools and procedures necessary to implement international maritime laws and conventions effectively.

4.4. Understanding IMO Guidelines and Resolutions

IMO guidelines and resolutions are non-binding instruments that supplement the mandatory provisions of IMO conventions, such as the International Convention for the Safety of Life at Sea (SOLAS), the International Convention for the Prevention of Pollution from Ships (MARPOL), and the International Convention on Standards of Training, Certification and Watch keeping for Seafarers (STCW).[22] They help clarify the provisions of these conventions and ensure uniformity in their interpretation and application across different jurisdictions. While resolutions are adopted during IMO Assemblies or by the IMO Council or various Committees (such as the Marine Environment Protection Committee (MEPC) and the Maritime Safety Committee (MSC)), guidelines are developed to provide more detailed technical advice on specific aspects of these conventions. Both are significant in shaping the operational and regulatory framework of the global maritime industry.

4.5 Key IMO Guidelines

IMO guidelines are designed to ensure the effective implementation of international maritime conventions, providing detailed instructions and best practices for member states and the shipping industry. Below are a few of the key guidelines issued by the IMO:

[22] United Nations Convention on the Law of the Sea (adopted 10 December 1982, entered into force 16 November (1994) 1833 UNTS 3 (UNCLOS) arts 90–94; International Convention for the Safety of Life at Sea (adopted 1 November 1974, entered into force 25 May 1980) 1184 UNTS 278 (SOLAS); International Convention for the Prevention of Pollution from Ships (adopted 2 November 1973, entered into force 2 October 1983) 1340 UNTS 61 (MARPOL).

4.5.1 Guidelines for the Implementation of the International Safety Management (ISM) Code

The ISM Code, adopted under SOLAS, sets out an international standard for the safe management and operation of ships and for pollution prevention.[23] The IMO provides "Guidelines on the Implementation of the ISM Code by Administrations" to assist flag states in evaluating the safety management systems of shipping companies and verifying their compliance with the ISM Code[24]. These guidelines emphasize the need for regular audits and inspections of ships and shore-based offices to ensure effective implementation of safety and pollution prevention measures.[25]

4.5.2. Guidelines for the Development of a Ship Energy Efficiency Management Plan (SEEMP)

One of the key components of the IMO's strategy to reduce greenhouse gas (GHG) emissions from ships is the requirement for all vessels to have a Ship Energy Efficiency Management Plan (SEEMP).[26] The IMO's "Guidelines for the Development of a SEEMP" provide instructions for shipping companies on how to implement operational measures aimed at improving the energy efficiency of ships, such as optimizing fuel consumption and improving hull design.[27] The SEEMP is a crucial part of the IMO's Energy Efficiency Design Index (EEDI) framework, aimed at reducing emissions from shipping.[28]

4.5.3. Guidelines for Ballast Water Management

Under the Ballast Water Management Convention, ships are required to manage their ballast water to prevent the introduction of harmful aquatic organisms and pathogens into new marine environments. The IMO has issued "Guidelines for Ballast Water Management and the Development of Ballast Water Management Plans", which provide detailed instructions for ships on how to develop and implement effective ballast water management practices.[29] These guidelines are essential for ensuring the uniform implementation of the Ballast Water Management Convention across the international shipping industry.

4.5.4. Guidelines on the Control of Ships' Emissions to Air

The IMO has developed several guidelines to support the implementation of MARPOL Annex VI, which addresses the prevention of air pollution from ships. The "2018 Guidelines for Exhaust Gas Cleaning Systems" provide technical advice on the use of exhaust gas cleaning systems (scrubbers) as a means of complying with the sulfur oxide (SOx) emission limits set by MARPOL Annex VI.[30] The guidelines cover the installation, operation, and maintenance of scrubbers, as well as the procedures for monitoring their effectiveness in reducing air pollution.

4.6. Key IMO Resolutions

Resolutions are formal decisions adopted by the IMO's governing bodies or committees to address specific issues in maritime law and policy. Although not legally binding, resolutions are highly influential and are widely adopted by IMO member states.

4.6.1. Resolution A.962 (23) – IMO Guidelines on Ship Recycling

Resolution A.962 (23) adopted the "IMO Guidelines on Ship Recycling", which provide guidance on minimizing the environmental and occupational hazards associated with ship recycling.[31] This resolution seeks to encourage the environmentally sound recycling of ships by ensuring that hazardous materials are

[23] SOLAS (n-22)
[24] IMO, 'Guidelines on the Implementation of the International Safety Management (ISM) Code by Administrations' (2010) MSC-MEPC.7/Circ.8.
[25] ibid
[26] IMO, 'Guidelines for the Development of a Ship Energy Efficiency Management Plan (SEEMP)' (2012) MEPC.213 (63).
[27] ibid
[28] IMO, 'Resolution MEPC.203 (62) – Amendments to MARPOL Annex VI' (2011).
[29] IMO, 'Guidelines for Ballast Water Management and Development of Ballast Water Management Plans' (2012) MEPC.127 (53).
[30] IMO, 'Resolution A.962 (23) – IMO Guidelines on Ship Recycling' (2003).
[31] IMO, 'Resolution MEPC.304 (72) – Initial IMO Strategy on Reduction of GHG Emissions from Ships' (2018).

managed safely and that ship recycling facilities comply with environmental standards. These guidelines were later reinforced by the adoption of the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships in 2009.[32]

4.6.2. Resolution MEPC.304 (72) – IMO Strategy on the Reduction of GHG Emissions from Ships

In response to growing concerns about climate change, the IMO adopted Resolution MEPC.304 (72), which lays out the "Initial IMO Strategy on the Reduction of GHG Emissions from Ships".[33]15 This resolution sets out ambitious goals for the reduction of GHG emissions, including a commitment to reduce total annual GHG emissions from international shipping by at least 50% by 2050 compared to 2008 levels.[34] It also outlines short-, medium-, and long-term measures to achieve these targets, including the development of energy-efficient technologies and the use of alternative fuels.[35]

4.6.3. Resolution A.1081 (28) – IMO Instruments Implementation Code (III Code)

Resolution A.1081 (28) adopted the "IMO Instruments Implementation Code (III Code)", which aims to promote consistent and effective implementation of IMO conventions by member states.[36]18 The III Code sets out a framework for assessing and improving the compliance of flag, port, and coastal states with their obligations under IMO instruments.[37] This resolution enhances accountability among IMO member states and ensures that they have the necessary administrative and regulatory frameworks in place to meet their international obligations.[38]

4.7 The Role of IMO Guidelines and Resolutions in Maritime Law

IMO guidelines and resolutions play a vital role in the global governance of maritime activities. Although non-binding, they provide essential technical and policy guidance for member states and the shipping industry, ensuring uniformity and consistency in the interpretation and implementation of international maritime conventions. The guidelines help translate the often-broad provisions of IMO conventions into practical, actionable steps, while resolutions demonstrate the collective will of IMO member states to address emerging challenges in maritime safety, security, and environmental protection. The importance of IMO guidelines and resolutions cannot be overstated, as they ensure that the international maritime community can respond effectively to evolving technological, environmental, and regulatory challenges. For example, the IMO's efforts to address air pollution and GHG emissions through resolutions such as MEPC.304 (72) highlight the organization's proactive approach to addressing global environmental concerns.[39] Similarly, guidelines on safety management and pollution prevention underscore the IMO's commitment to enhancing the safety and environmental performance of international shipping.

4.8. National Implementation Mechanisms

1 Registration and Licensing

Flag states are responsible for the registration and licensing of ships, which includes verifying that vessels meet safety and environmental standards[40]. The process must include a thorough assessment of the ship's design, construction, and operational procedures to ensure compliance with international and national regulations[41].

---

[32] Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships (adopted 15 May 2009, not yet in force).
[33] IMO, Resolution MEPC.304 (72) – Initial IMO Strategy on Reduction of GHG Emissions from Ships' (2018).
[34] ibid
[35] ibid
[36] IMO, Resolution, A 1081(28) IMO Instruments Implementation Code (III Code) (2013)
[37] ibid
[38] ibid
[39] Resolution, MEPC 304 (72) (n-31)
[40] ibid
[41] ibid

2 Inspections and Surveys

Regular inspections and surveys of ships are essential for maintaining environmental compliance[42]. Flag states must establish a robust inspection regime[43], ensuring that vessels are periodically assessed for compliance with safety and environmental standards[44]. Failure to conduct adequate inspections can result in liability for damages caused by non-compliant vessels.

3 Monitoring and Reporting

Flag states should implement monitoring systems to track the activities of their registered vessels[45]. This can include the use of technology such as Automatic Identification Systems (AIS) to monitor ship movements and compliance with environmental regulations[46]. Additionally, reporting mechanisms should be in place to ensure that any incidents of pollution or non-compliance are promptly reported to relevant authorities.

5.1. Challenges in Implementation and Enforcement of laws and resolutions.

1 Substandard Flag States

Some flag states, often referred to as "flags of convenience," may lack the capacity or political will to enforce environmental regulations effectively[47]. These states may prioritize economic benefits over environmental protection, leading to a race to the bottom in regulatory standards. This creates significant challenges for holding flag states accountable for environmental damages.

2 Resource Limitations

Flag states, particularly smaller nations, may face resource limitations in implementing and enforcing environmental regulations[48]. Insufficient funding, personnel, and technical expertise can hinder effective monitoring and enforcement efforts. International assistance and capacity-building initiatives can help address these challenges.

3 Jurisdictional Issues

Determining jurisdiction in cases of environmental damage caused by ships can be complex, particularly when incidents occur in international waters or involve multiple states. This can complicate the enforcement of liability against flag states and affect the ability of affected states to seek redress.

5.2. Problems of calculating Damages

Calculating damages in legal contexts, particularly in tort law and contract law, is a crucial aspect of ensuring that injured parties receive appropriate compensation. Damages can be classified into various categories, each with its own calculation methods. Below, I outline how damages are typically calculated across different contexts, including torts (personal injury), contracts, and property damages.

5.2.1. Types of Damages

We have about eleven types of damages, but will only mention seven of them**:**

1 Compensatory Damages: Compensatory damages aim to restore the injured party to the position they would have been in had the wrong not occurred. This category can be further divided into:

2. Economic Damages: These are quantifiable monetary losses, including:

[42] C.K. Chao, The Role of Flag Ship in Regulating Shipping and Environmental Protection

[43] ibid

[44] International Maritime Organization, "Flag State Implementation" https://www.imo.org/en/OurWork/Safety/Pages/FlagStateImplementation.aspx accessed 30 September 2024.

[45] ibid

[46] M L Evans, "Port State Control and Environmental Protection: A New Approach" (2021) 23 Environmental Law Review 342.

[47] A R D Black, "International Liability Regimes and the Protection of the Marine Environment" (2019) 52 *Journal of Environmental Law.* 89.

[48] ibid

3. Medical Expenses: The cost of medical treatment related to the injury, including hospital bills, rehabilitation costs, and future medical care.
4. Lost Wages: The income lost due to inability to work as a result of the injury, often calculated by taking the difference between pre-injury and post-injury earnings.
5. Loss of Earning Capacity**:** Compensation for reduced ability to earn income in the future due to permanent injuries.
6. Property Damage: The cost of repairing or replacing damaged property.
7. Punitive Damages: These damages are not meant to compensate the injured party but to punish the wrongdoer and deter similar conduct in the future. Punitive damages are typically awarded in cases of gross negligence or intentional wrongdoing.

5.3. Methods of Calculating Damages

1. General Calculation Approaches: The calculation of damages varies based on the type of case. Common approaches include:
2. Present Value Calculation: Future economic losses, such as lost wages or medical expenses, are often calculated as present value, which accounts for inflation and the time value of money. This is done by estimating future losses and discounting them back to their present value using an appropriate discount rate.
3. Life Expectancy Considerations: For ongoing damages (like lost wages or medical expenses), calculations may consider the plaintiff's life expectancy, especially in personal injury cases.
4. Multiplier Method: In some jurisdictions, the pain and suffering damages are calculated using a multiplier applied to the economic damages. For example, if economic damages are $50,000 and a multiplier of 2 is deemed appropriate, the total damages awarded for pain and suffering would be $100,000.

5.4. Specific Calculations

1. Medical Expenses: To calculate medical expenses, total bills from doctors, hospitals, and rehabilitation facilities are gathered. Future medical costs can be estimated based on the nature of the injury and expert testimony.
2. Lost Wages**:** The calculation involves determining the amount of income the plaintiff was earning before the injury and the duration of time they were unable to work. For example, if a plaintiff earns $5,000 per month and is unable to work for six months, lost wages would amount to $30,000. If the injury leads to a permanent loss of income, future earning capacity would need to be calculated, often with expert input.
3. Pain and Suffering: This calculation can be highly subjective. Courts may rely on jury awards in similar cases to determine an appropriate amount. Medical professionals may provide estimates of the severity of the pain or emotional distress experienced.
4. Property Damage: The cost to repair the damaged property or the fair market value of the property before and after the incident is assessed. If a vehicle is damaged, for example, the total repair cost or the difference in market value before and after the accident would be calculated.

5.4. Legal and Expert Considerations

Calculations also takes into consideration experts testimonies and juries discretion. In many cases, expert witnesses are brought in to provide objective assessments of damages, while juries may have discretion in awarding damages, particularly for non-economic damages and future medical costs

5.5. Case Studies

1. The Exxon Valdez Oil Spill: The 1989 Exxon Valdez oil spill in Alaska serves as a prominent example of flag state liability[49]. The ship was registered in Liberia, a flag state known for lax regulations. The

[49] *Exxon Shipping Co. v Baker 554 US 471 (2008)*

incident led to extensive environmental damage and highlighted the shortcomings of flag states in enforcing compliance with international standards.

2. The MV Prestige Incident: The 2002 sinking of the MV Prestige[50] off the coast of Spain resulted in significant environmental damage[51]. The ship was registered in the Bahamas, and the subsequent investigation revealed deficiencies in the flag state's oversight[52]. This case underscored the need for stricter enforcement of environmental regulations by flag states.[53]

5.6. Enforcement Challenges and the Role of Other Actors

One of the main challenges in enforcing flag state liability for environmental damage lies in the weak enforcement mechanisms available under international law. Many flag states lack the resources or political will to adequately monitor and control the ships under their registry. This creates enforcement gaps that are often exploited by ship owners seeking to avoid strict environmental regulations. To address these challenges, port states and coastal states have stepped in to complement the enforcement role traditionally reserved for flag states. Under the concept of port state control (PSC), coastal states can inspect foreign vessels when they enter their ports to ensure compliance with international environmental standards[54]. This has become an increasingly important tool in holding ships accountable for environmental damage, especially when flag states fail to fulfill their obligations. Similarly, coastal states have certain rights under UNCLOS to enforce environmental regulations within their territorial waters and exclusive economic zones (EEZs)[55]. For example, a coastal state can take enforcement action against foreign vessels that violate its pollution control laws within its EEZ, provided such actions are consistent with international law. These supplementary enforcement mechanisms help mitigate the enforcement gaps left by flag states, though they cannot entirely substitute for the direct responsibility of flag states to regulate ships under their flag.

5.7 Breach of Flag State Obligations and Liability

While liability for environmental damage is primarily placed on ship owners, a flag state may still face international legal consequences if it fails to fulfill its obligations under UNCLOS or relevant IMO conventions. In such cases, flag states could be held accountable for breaching their international obligations to ensure that ships under their flag do not cause environmental harm. For instance, under Article 94(6) of UNCLOS, a state can be held responsible if it fails to take measures necessary to prevent pollution from ships[56]. Additionally, in cases where a flag state fails to effectively enforce pollution control standards, affected states may bring a case against the flag state before international judicial bodies, such as the International Tribunal for the Law of the Sea (ITLOS)[57]. In practice, however, this avenue has rarely been pursued, largely due to the difficulties in proving that the flag state's failure to enforce regulations directly led to environmental damage, as well as the complexities of holding states liable under the law of state responsibility. The IMO has attempted to address this by providing mechanisms that enhance flag state accountability. For example, under MARPOL, flag states are required to investigate any allegations of non-compliance and to provide evidence of enforcement actions taken.[58] Failure to do so could result in international criticism or, in extreme cases, diplomatic or economic sanctions[59]. However, these mechanisms have limited coercive power, as the system primarily relies on the good faith cooperation of states.

---

[50] C C Glaze brook, 'The Prestige Disaster: A case Study in Flag State Liability' (2007) 30 Maritime Studies 45
[51] ibid
[52] ibid
[53] J A N McGuiness, 'International Cooperation in Maritime Environmental Protection' (2023) 25. *International Journal of Marine and Coastal Law,*122
[54] Erik J. Molenaar, Port State Jurisdiction: Towards Comprehensive, Mandatory and Global Coverage (2007) 38 *ODIL*.225
[55] ibid. (n-4) art 56,73
[56] ibid. (n-4) art 94(6)
[57] Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area (Advisory Opinion) [2011] ITLOS Reports 10.
[58] MARPOL (n-4) art 6
[59] Henrik Ringbom, Regulation on the Prevention of Pollution from Ships: UNCLOS; MARPOL and the European Union (Martinus Nijholf Publishers 2008) 149

5.8 Impact of FOCs on Environmental Compliance

The rise of FOCs has led to significant challenges in holding flag states accountable for environmental damage. Ships registered under FOCs are often involved in environmental disasters, such as oil spills, where enforcement of international regulations is either weak or non-existent. One notable example is the 2002 Prestige oil spill off the coast of Spain60. The Prestige, a Liberian-flagged oil tanker, spilled over 70,000 tons of oil into the Atlantic Ocean, causing one of Europe's worst environmental disasters. Despite the severity of the damage, legal actions against Liberia were hindered by its lack of regulatory enforcement and oversight.

6.1 Recommendations

To enhance the effectiveness of flag state liability, several reforms can be considered. First, introducing a comprehensive global liability regime that holds flag states directly accountable for environmental damage could serve as a deterrent to non-compliance. Such a regime would require states to pay compensation for damages resulting from their failure to enforce international regulations.

Second, better coordination between flag, port, and coastal states is necessary to create a more cohesive system of enforcement. This could be achieved through increased information sharing, joint inspections, and the establishment of regional enforcement bodies.

Third, market-based initiatives, such as environmental certifications or ratings for ships, could be used to incentivize compliance. Ship owners would be encouraged to register with flag states that maintain high environmental standards, while consumers and investors would be able to make informed decisions based on a ship's environmental record.

Fourth, the International Maritime Organization (IMO) and the International Tribunal for the Law of the Sea (ITLOS) can also play a crucial role in strengthening flag state accountability. The IMO could introduce stricter enforcement mechanisms for FOC states, while ITLOS could develop a more expansive jurisprudence on flag state liability in environmental cases.

Fifth, flag states must establish penalties and sanctions for non-compliance with environmental regulations. This can include fines, suspension or revocation of ship registration, and criminal charges against responsible parties. Effective enforcement of penalties is crucial for deterring environmental, violations.

Sixth, Cooperation with Port States. Flag states should collaborate with port states to enforce environmental regulations. Port states have the authority to inspect foreign vessels in their waters and can impose penalties for violations of environmental laws. Cooperation between flag and port states can enhance compliance and accountability.

Seventh, International Cooperation. Given the global nature of shipping, international cooperation is essential for effective enforcement of environmental regulations. Flag states must engage in multilateral agreements to share information and best practices for monitoring and enforcement. International cooperation can also facilitate joint responses to environmental incidents, such as oil spills.

6.2 Conclusion

IMO guidelines and resolutions are indispensable tools for ensuring that international maritime conventions are implemented effectively and uniformly. By providing detailed technical and operational guidance, these instruments help member states and the shipping industry comply with their international obligations. Although not legally binding. The responsibility and liability of flag states for environmental damage caused

[60] For example, see *Prestige* Oil Spill's case (2002).

by ships under their registry are central to the effective regulation of marine pollution and the protection of the marine environment. While flag states have clear obligations under international law, enforcement gaps, particularly in FOC regimes, have undermined compliance. International conventions, such as UNCLOS and MARPOL, place primary responsibility on flag states to ensure that vessels flying their flag meet environmental standards, but liability for environmental harm remains primarily with the ship owner. Nonetheless, flag states can be held accountable under international law for breaches of their duties, though this has rarely been tested in practice. Strengthening flag state accountability, particularly through enhanced international cooperation, audits, and enforcement mechanisms, is essential for addressing the environmental challenges posed by the global shipping industry

The issue of flag state liability for environmental damage caused by ships remains a significant challenge in international law. While UNCLOS and IMO conventions establish clear obligations for flag states, enforcement remains weak, particularly in the context of FOCs. The liability of flag states for environmental damages caused by ships is a critical issue in maritime law. Effective national implementation and enforcement mechanisms are essential for ensuring compliance with international regulations and holding flag states accountable. While challenges such as substandard flag states and resource limitations persist, enhanced cooperation between flag and port states, along with international collaboration, can strengthen the enforcement of environmental standards. The legal framework governing flag state liability must continue to evolve to address emerging challenges and protect the marine environment from the impacts of shipping activities.