
Strict liability for marine pollution damage caused by ships: A legal analysis

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How to Cite

Fouad, G., & Toufik, B. (2025). Strict liability for marine pollution damage caused by ships: A legal analysis. *Tax Policy Journal*, 21(2), 100-115. <https://taxpolicyjournal.org/index.php/tpj/article/view/14>

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Submitted: 20 March 2025 | Revised: 07 Jul 2025 | Accepted: 08 Aug 2025

Abstract---Strict liability is considered a fundamental legal mechanism for addressing the economic and environmental damages resulting from marine pollution caused by ships. It obliges shipowners to compensate for damage without the need to prove fault, reflecting the evolution of civil law from the traditional fault-based tort system to a regime centered on damage and causal link, in order to keep pace with industrial risks in maritime navigation. The main issue lies in the extent to which this form of liability is suited to the massive and hard-to-prove nature of marine damages, particularly with the spread of oil spill incidents and hazardous transport, where it is difficult to place the burden of proof on victims amid technical and geographical complexities. This raises questions about its theoretical foundations (the risk-bearing theory and the guarantee theory) and the scope of its exceptions, such as force majeure. The study adopts a comparative legal analytical methodology by examining doctrine and case law (such as *Rylands v. Fletcher* 1868 and *Missouri v. Illinois* 1906), and by analyzing the main international conventions, including the 1969 CLC Convention (Article 3(1)), the 1971 Fund Convention, the 2001 BUNKER Convention, the 1996 HNS Convention (as amended in 2010), and the 1982 UNCLOS (Article 235), alongside national legislation in Tunisia (Law No. 91-88, Article 8), Algeria (Law No. 03-10), as well as the United Kingdom, France, and the United States, in order to identify mechanisms of implementation and related challenges. The importance of the topic lies in strengthening environmental protection of fragile seas, facilitating prompt compensation for affected parties (states and coastal populations), and supporting the sustainable development of the maritime industry. The main objectives include clarifying the nature of strict liability, assessing its suitability for marine pollution, and proposing recommendations to enhance international conventions and national legislation. Key findings showed that strict liability proves to be an effective and ideal legal basis for marine pollution grounded in risk theory, as it applies to lawful hazardous activities without broad exceptions. Second, international conventions and judicial practice have contributed to entrenching it globally, supported by national legislation. Third, strengthening this regime requires international cooperation to activate ratifications, the use of smart monitoring technologies, and a transition to clean energy to ensure the sustainability of maritime navigation without hindering it, thereby achieving compensatory justice that protects future generations.

Keywords---strict liability; marine pollution; ships; compensation; environmental damage; international conventions; risk theory; causal link; maritime navigation; environmental protection.

Introduction

Civil liability, as a general principle, consists of the obligation to compensate for damage resulting from the breach of a prior obligation. It may be tortious, arising from the breach of a legal obligation—such as the discharge of polluting substances into the sea that causes harm—or contractual (1), resulting from the violation of a contractual obligation by the breaching party toward the injured party.

As for the basis of civil liability, it lies in the reason by which the legislator places the burden of compensating the resulting damage on a specific person and determines their responsibility for marine pollution—namely, the shipowner in this study. After extensive debate, legal scholars have established this liability on the basis of damage itself, giving rise to what is known as strict (objective) liability. To what extent, then, is strict liability compatible with the damages caused by marine pollution resulting from ships?

This question will be addressed through two sections: the first is devoted to the concept of strict liability, and the second examines the extent of its suitability for damages arising from marine pollution caused by ships.

Section One: The Concept of Strict Liability

After the failure of the civil liability system based on the fault of the tortfeasor to compensate for damages—especially those resulting from lawful activities—and the difficulty faced by injured parties in obtaining due compensation, legal scholars sought an alternative basis consistent with the requirements of industrial progress and the risks it entails. This led to the emergence of a new civil liability system based on the idea of damage, known as strict (objective) liability (2).

Strict liability ensures compensation for damages resulting from hazardous industrial activities in all fields, particularly maritime navigation, and facilitates the compensation process for victims. The question therefore arises as to the basis of this liability, which has been founded on several theories, notably the risk-bearing theory (first subsection) and the guarantee theory (second subsection).

First Subsection: The Establishment of Strict Liability on the Basis of the Risk-Bearing Theory

Legal doctrine and jurisprudence have regarded the risk-bearing theory—also known as the risk theory—as the legal foundation for establishing strict liability based on damage, without regard to fault. This approach aims to protect victims' rights and ensure their compensation for damage caused by harmful activities leading to pollution, such as maritime navigation, an activity from which society cannot dispense due to its role in development and growth. Accordingly, it is fair that the person responsible should bear the cost of compensation or repair of the damage caused, in return for the benefit derived from this harmful activity.

Schools of legal thought (3) have played an effective role in considering this theory the ideal foundation in the field of industrial activities generating technological risks (4). Under this theory, fault is not taken into account, nor are grounds for exemption from liability such as force majeure, the fault of the victim, or the act of a third party. Thus, according to some scholars—such as Saleilles, Duguit, and other French

jurists (5)—this liability is automatic and not subject to rebuttal, constituting comprehensive strict liability (6).

As for the scope of application of this theory, jurists have differed. Some acknowledge its broad scope, applying it to all activities, hence referring to it as the theory of full risk (7); others argue that it applies only to lawful hazardous activities; while a third view holds that it is limited to insurance for work-related injuries. Nevertheless, regardless of the framework permitting the application of this theory, there is an agreed-upon reality: it is fundamentally based on compensatory justice, justified by the principle that gain entails burden. This principle provides that whoever benefits from exploiting an activity must also bear the burden of compensating for any damage resulting from it, on the basis that benefit entails responsibility, in accordance with the maxim "no harm and no harassment. (8)"

In addition, the principle of justice requires that the person responsible bear the consequences of their harmful activity in return for the benefit obtained, for it is unjust for a person not to bear the damage caused by property from which they benefit, as stated by the French jurist Jossérand (9). Finally, the idea of newly created risk holds that anyone who creates a risk to others through the use of modern means of production or nuclear reactors is obliged to bear the consequences of the resulting damage and compensate those harmed, as they are the beneficiary of such activities. As Professor Ripert argued (10), whoever creates exceptional risks to humanity must bear their consequences.

Although the risk theory has gained wide acceptance in the field of industrial activities generating hazards, some jurists advocate its application also to acts carried out by individuals, institutions, and the state, without regard to fault, since liability is established merely by the occurrence of damage and the causal link between it and the act of the person responsible. Jurists refer to this as full liability. However, this theory has been subject to several criticisms, most notably its inconsistency with the possibility of exempting the custodian from liability if they prove the intervention of an external cause in the incident. Moreover, establishing liability on this basis is said to encourage negligence and lack of due care, as compensation becomes due upon the mere occurrence of damage, regardless of the fault or negligence of the person responsible.

Second Subsection: The Establishment of Strict Liability on the Basis of the Guarantee Theory

The jurist Stark introduced the idea of the guarantee theory with the aim of providing a justification for the existence of strict liability by focusing on the injured party. In his view, other theories that grounded liability from the perspective of the tortfeasor while neglecting the position of the victim are incomplete and partial (11).

Some of these theories concentrate on the conduct of the person responsible and the degree of fault committed, while others focus on the nature of the activity carried out by that person, the benefit derived from it, and their ability to compensate for the resulting damage (12).

It is well established that every individual has the right to act freely; however, such conduct must not cause harm to others or infringe upon their fundamental rights. Otherwise, the individual is obliged to compensate the injured party, since these rights are legally protected and guaranteed. In other words, there is a balance between an individual's freedom of action and the injured party's right to safety from any harm that may result from such conduct.

In practice, however, a person may suffer harm as a result of another person exercising their ordinary rights lawfully. For this reason, the guarantee theory always focuses on the victim and ensures a minimum level of protection. Any infringement of this right is considered a valid justification for claiming compensation, even in the absence of any fault on the part of the person responsible. Thus, a person who directly causes harm is deemed an absolute guarantor, whether the harm was intentional or unintentional, in accordance with the rule: "The direct actor is liable, even if he did not exceed or intend [to cause harm]. (13)"

Under this theory, the injured party is afforded sufficient protection against any damage resulting from the activity of others through compensation (4). This is because any harm suffered by a person due to another's activity is regarded as an unlawful act giving rise to liability, regardless of whether the activity itself was lawful or unlawful. The basis for liability here lies in the infringement of guaranteed rights and the failure to respect the principle of their protection (15).

It should also be noted that the scope of application of this theory is limited to bodily and material damage, excluding moral or non-pecuniary damage, as fault plays a significant role with respect to material and bodily harm (16).

The function of civil liability, according to proponents of the guarantee theory, is not limited to ensuring the protection of individuals' rights; rather, it also entails imposing a sanction on the person responsible. Thus, the concept of guarantee encompasses all rights, whether or not the person responsible has committed a fault. However, where fault is established, a special form of sanction is required, namely the aggravation of liability (17).

This theory has also been subject to numerous criticisms, foremost among them that it bases liability on the unlawful infringement of individual rights, an approach already adopted by the fault theory, differing only in terminology (18). Others argue that the

guarantee theory leads civil liability back to its classical origins and further blends it with criminal liability, insofar as it acknowledges a dual function of liability: on the one hand, compensation for damage, and on the other, the imposition of a special sanction (19).

In light of the foregoing, another trend emerged advocating a new theory that combines the fault theory and the risk-bearing theory. According to its proponents, this approach allows strict liability based on risk-bearing to operate alongside fault-based liability: the latter applies where fault exists, and where fault is absent, strict liability applies. Nevertheless, each jurist supporting this trend has a different perspective on how the theory should be implemented (20).

Like other theories, this approach has also faced several criticisms. Most notably, adopting it in a restrictive sense would require the existence of specific legal provisions clarifying its scope of application, thereby transforming the principle of risk-bearing from a general principle into exceptional rules. In such a case, the legislator would be departing from the general principle based on fault. Moreover, there is no reliable criterion for distinguishing between harm caused by controlled objects and harm caused by human acts, which undermines the possibility of combining fault with the concept of risk-bearing. Establishing liability for harm caused by dangerous objects on the basis of risk-bearing necessarily excludes the possibility of grounding it on fault (21). The conclusion emphasized by these criticisms is that liability must rest on a single foundation: either fault or risk-bearing, but not both simultaneously.

Section Two: The Extent to Which Strict Liability Is Compatible with Marine Pollution Damage

The extent to which strict liability is compatible with damage caused by marine pollution is reflected in the position of legal doctrine and jurisprudence (first subsection), as well as in the stance of the law toward it (second subsection).

First Subsection: The Position of Legal Doctrine and Jurisprudence on Strict Liability in the Field of Marine Pollution

Legal doctrine has tended toward recognizing absolute liability in order to protect the rights of those harmed by environmental pollution, as it is considered one of the most suitable legal mechanisms for addressing modern environmental damage. Liability arises upon the mere occurrence of damage and culminates in compensation, without the need to prove fault on the part of the operator—fault that is, in most cases (22), impossible to establish, especially when the operator has taken all necessary precautionary measures and complied with environmental laws. This has been one of the reasons supporting the adoption of strict liability, in addition to the severe and far-reaching nature of environmental damage. Accordingly, liability should be

established as soon as a causal link exists between the damage and the activity carried out, even if the activity is lawful, rather than being based on the wrongful conduct of the person responsible (23).

In order to protect the marine environment, which is often particularly vulnerable to violation, the person engaging in pollution-producing activities must be held strictly liable in proportion to the benefits derived from such activities. While scholars agree on recognizing strict liability, each approaches it from a different perspective. For example, the jurist Goldie argues that the costs of mitigating environmental damage should be included among the operating costs of such activities, in addition to placing the burden of compensation on society as a whole, since these are social costs; imposing these burdens solely on operators may discourage them from engaging in such projects (24).

The jurist Handl, on the other hand, maintains that the state should bear absolute legal responsibility for damage resulting from hazardous activities, based on the principle of sovereignty and the state's regulatory authority over territory and individuals. The state would thus be directly responsible for all damage, particularly that arising from the activities of private entities that affect the environments of other states, especially since such activities require prior authorization granted by the state. The jurist Dupuy further argues that aggravated liability constitutes one of the most effective bases for compensating unintentional damage resulting from hazardous activities (25).

Judicial practice has likewise embraced strict liability through numerous rulings concerning compensation for environmental pollution damage upon the mere occurrence of harm (26). A notable example is the English judiciary in *Rylands v. Fletcher*, where the facts involved Fletcher, the owner of a mill, who hired a contractor to build a water reservoir on his land near the mill to supply it with water. During excavation, the contractor discovered an abandoned mine shaft with poorly defined tunnels but proceeded to fill the reservoir without sealing the shaft and tunnels. As a result, a large quantity of water leaked into the abandoned mine owned by Rylands, flooding it and causing severe damage. The Court of Exchequer held the mill owner liable despite the absence of fault, a ruling later upheld by the House of Lords (27). This judgment played a pivotal role in establishing a new legal principle that later became a foundation of civil liability, whereby any person operating a hazardous activity that causes damage to others is held liable even in the absence of fault, though exemption from liability remains possible in cases of force majeure.

Similarly, the United States Supreme Court adopted the same approach in the dispute between the State of Missouri and the State of Illinois, which arose from Illinois discharging more than 1,500 tons of sewage and toxic waste daily into a river,

thereby polluting its waters and rendering them unfit for drinking and even for industrial and agricultural use. The Court resolved the dispute by applying the same reasoning adopted in the earlier case (28).

Legal doctrine and jurisprudence have continued to develop the foundations of strict liability for damage affecting the environment in all its forms, seeking to modernize the elements of this liability in a manner consistent with the nature of environmental damage and its compensation, regardless of the underlying basis—whether the principle of gain entails burden, risk-bearing, or other legal doctrines. Accordingly, it may be concluded that both legal scholarship and judicial practice have played an effective role in establishing a special regime of liability for environmental pollution damage, in view of its increasing occurrence and its harmful impact on the environment.

Second Subsection: The Position of the Law on Strict Liability

International law, through international conventions, has adopted strict liability as the basis for compensating damage in the field of marine pollution. This is exemplified by the 1969 International Convention on Civil Liability for Oil Pollution Damage, which renders the shipowner liable for any damage arising from the leakage or discharge of hazardous substances into the sea at the time of the incident, pursuant to Article 3(1). Although this provision generated doctrinal debate regarding the basis of the shipowner's liability (29), the prevailing view has settled on the interpretation that the Convention adopts strict liability based on the risk theory, whereby the owner bears liability for damage even in the absence of fault. Similarly, the 1971 International Fund Convention embraced strict liability of the shipowner at the time pollution occurs, as provided in Article 2(1)(a) of the Convention.

The United Nations Convention on the Law of the Sea (UNCLOS) of 1982 followed this approach in Article 235(1), which provides that states are responsible for fulfilling their international obligations toward the international community concerning the protection and preservation of the marine environment, in accordance with international law (30). However, this provision was formulated in ambiguous terms, leading some states participating in the Third United Nations Conference on the Law of the Sea to propose the explicit adoption of strict liability based on the risk-bearing principle. This proposal was grounded in the difficulty—often the impossibility—of proving fault in cases of marine environmental pollution under the personal fault theory. Consequently, Article 235 was revised so as not to exclude the application of strict liability, even though it does not expressly provide for it (31).

Likewise, the 2001 International Convention on Civil Liability for Bunker Oil Pollution Damage adopted strict liability based on the risk-bearing theory for the protection of victims. Under this Convention, liability arises upon the establishment of a causal

link between the damage and the incident, and the person responsible may escape liability only by proving the interruption of that causal link.

Article 7(1) of the 1996 International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea, as amended by the 2010 Protocol, establishes liability for pollution solely on the basis of damage. In other words, it adopts strict liability, particularly that justified by the risk-bearing principle, which operates when two essential elements are present: the activity carried out involves inherent danger and, at the same time, constitutes a source of benefit to the person engaging in it and responsible for the damage if it occurs. Accordingly, if a hazardous activity causes harm to others, the person responsible must bear its consequences (32).

When these conditions are applied to the maritime transport of hazardous substances, it becomes evident that such transport causes serious damage due to the nature of the substances carried, while at the same time generating profit and economic benefit for the person responsible for transporting them, making it a highly lucrative source of income for those operating in this field (33).

What is notable about this Convention, as well as other conventions concerning the transport of harmful substances, is that they seek to establish a comprehensive regime of liability and compensation for resulting damage and to emphasize absolute liability on the part of those responsible for transporting hazardous substances and the harm they may cause (34). This is further reinforced by the 1962 Convention on the Liability of Operators of Nuclear Ships (35), as well as the 1971 International Convention on Civil Liability in the Field of Maritime Carriage of Nuclear Material.

Regional agreements have also contributed to laying the foundations of strict liability, particularly through bilateral treaties relating to nuclear activities. Among these is the bilateral agreement between the United States of America (36) and several other states concerning the American nuclear ship *Savannah*, whereby the United States acknowledged its absolute liability for all damage caused by the ship while it was present in the ports of the contracting states, for the purpose of compensation, even though the ship was operated by a private company (37).

Reference may also be made to the 1970 agreement between Germany and Liberia concerning the use of Liberian ports by the German ship *N.S. Otto Hahn*, under which Germany undertook to guarantee that the private operator of the ship would compensate for all resulting damage, and to substitute itself for the ship operator in compensating nuclear damage, up to a limit not exceeding 400 million German marks (38).

In addition, mention should be made of the 1977 London Convention on Civil Liability for Oil Pollution Damage (39) resulting from the exploration and exploitation of seabed mineral resources, as well as the 1978 Kuwait Regional Convention for Cooperation on the Protection of the Marine Environment from Pollution (40), which adopted a special regional regime of liability and compensation for marine pollution damage. This is alongside the well-known Lugano Convention of 1993, which is among the most detailed conventions concerning liability and compensation for environmental damage, as it aimed to develop liability rules, ensure adequate compensation for victims of damage resulting from environmentally hazardous activities, and provide preventive mechanisms.

Overall, these conventions collectively emphasize the support for and establishment of strict liability based on the risk-bearing theory.

National law has likewise recognized this form of liability. The Tunisian legislature adopted it in Article 8 of Law No. 91 of 1988 concerning the establishment of a National Agency for Environmental Protection, whereby strict liability applies to all acts causing pollution of natural reserves (41), committed by any legal person, whether public or private, as well as by any natural person. Algerian law has also embraced this approach through Article 93(2) of Law No. 83/03 on environmental protection, and reaffirmed it in Law No. 03/10 on environmental protection within the framework of sustainable development, particularly Article 3(7), which establishes the "polluter pays" principle, fundamentally based on the risk theory. In the field of marine oil pollution, this is reflected in several legal instruments, including Order No. 72/17 of 07/06/1972 approving the international convention on civil liability for oil pollution damage (42), as well as Order No. 76-80 concerning the Maritime Code, as amended and supplemented (43), notably in Article 117.

British legislation likewise recognizes this principle through the Merchant Shipping Act of 1971, which establishes the absolute liability of the shipowner for all resulting damage, including the destruction of animal and plant species leading to their extinction, in addition to liability for cleanup measures. The same approach is found in New Zealand legislation of 1965 concerning oil pollution of navigable sea waters, as well as in French law, which established the liability of oil tanker owners under Law No. 77 of 1977 on civil liability for marine oil pollution damage, and Law No. 94-478 of 1994 on civil liability and insurance of shipowners for oil pollution damage (44). The United States legislature has similarly adopted strict liability as the basis for shipowner liability in combating marine pollution through the Oil Pollution Act of 1990.

Conclusion

In light of the foregoing, it may be concluded that liability for marine pollution damage caused by ships is a form of strict liability. It constitutes a necessary legal

mechanism for addressing the economic and environmental challenges arising from pollution, as it achieves prompt justice for victims by obliging shipowners to provide compensation without the need to prove fault. At the same time, it enhances compliance with precautionary measures and protects fragile marine ecosystems, thereby ensuring the safety of the seas and preserving them for future generations, safeguarding both human and natural interests. Nevertheless, strengthening this protection must proceed in parallel with ensuring the sustainability of the maritime industry, which requires international cooperation to activate relevant conventions and to develop innovative solutions, such as the use of smart monitoring technologies and incentives for the adoption of clean energy.

Through a systematic analysis of strict liability in the context of marine pollution caused by ships, the following findings emerge:

1. **Entrenchment of strict liability as an effective mechanism:** Strict liability represents the optimal legal regime for compensating economic and environmental damage, as it obliges shipowners to cover damage without proof of fault, relying solely on the existence of damage and a causal link, and drawing upon the theories of risk-bearing and guarantee.
2. **Support from conventions and doctrine:** International conventions (such as CLC 1969, Fund 1971, Bunker 2001, HNS 1996, and UNCLOS 1982) and judicial practice (*Rylands v. Fletcher*, *Missouri v. Illinois*) have confirmed its suitability for lawful hazardous activities, supported by national legislation in Tunisia, Algeria, and other states.
3. **Achieving a balance between protection and sustainability:** Strict liability facilitates rapid compensation for victims, strengthens preventive measures, and protects fragile marine ecosystems, while preserving human and environmental rights, provided it is linked to the sustainability of the maritime industry.

Based on these findings, the following measures are proposed to enhance effectiveness:

1. **Strengthening international cooperation:** Accelerating the ratification of unimplemented international conventions and establishing joint coordination mechanisms among coastal states to monitor cross-border maritime activities.
2. **Developing national legislation:** Amending domestic laws (such as Tunisian Law No. 91-88 and Algerian Law No. 03-10) to introduce higher compensation caps, mandatory insurance for shipowners, and deterrent sanctions for violators.
3. **Technological and preventive innovation:** Adopting smart monitoring technologies (such as remote sensing and artificial intelligence to detect spills), and encouraging the use of clean fuels and environmentally friendly ships through tax incentives and financial support.

4. **Enhancing research and awareness:** Conducting periodic field studies on the impacts of pollution, implementing training programs for maritime navigation professionals, and involving civil society in monitoring and compensation processes.

These findings and recommendations achieve sustainable compensatory justice, protecting the seas for future generations without hindering the maritime economy.

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- [18] Iyad Abdel Jabbar Malouki, *Liability for Things and Its Application to Legal Persons in Particular (A Comparative Study)*, 1st ed., Dar Al-Thaqafa, Jordan, 2009, p. 173.
- [19] Mohamed Taher Qassem, previous reference, p. 185.
- [20] Younes Dhanoun Al-Mohammadi, *Civil Liability Arising from the Planting of Mines*, Dar Al-Hamed for Publishing and Distribution, 1st ed., Amman, 2003, p. 209.
- a. The jurist Demogue stated that liability based on fault arises when fault exists, and in its absence arises where damage results from an inherently dangerous thing such as electricity or automobiles, with partial compensation borne by the tortfeasor and the remainder by the injured party; if the damage is not caused by a dangerous thing, compensation is shared equally. Jurist René Savatier held that risk-bearing and fault are unequal principles, as fault is an original basis while risk-bearing is a subsidiary one. Professor Josserand considered that liability based on risk-bearing applies where damage arises from things, while liability based on fault applies where damage arises from human acts.

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- [26] Yasser Farouk Al-Minyawi, *Civil Liability Arising from Environmental Pollution*, previous reference, p. 378.
- [27] The new legal principle established by the judgment in *Rylands v. Fletcher* provides that: "A person who brings onto his land, for his own purposes, something likely to cause harm if it escapes must keep it at his peril, and if he fails to do so, he is liable for all the damage that is the natural consequence of its escape; he is exempt from liability only if he can prove that the escape occurred due to force majeure." See: Yasser Farouk Al-Minyawi, *Civil Liability Arising from Environmental Pollution*, same reference, p. 379.
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- [34] Article 7 of the 1996 Convention on the Carriage of Hazardous Substances, as amended by the 2010 Protocol.
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Energy Agency of the United Nations, addressing activities related to the use of nuclear energy in the operation of ships within the marine environment.

- [36] Among the bilateral treaties concluded concerning the nuclear ship *Savannah* are:
- The agreement concluded in Rome between the United States of America and the Italian Government in 1964 on the use of Italian ports by the nuclear ship *Savannah*.
 - The exchange of notes between the United States and Italy in Rome in 1965 concerning liability during the operation of the ship.
 - The executive agreement concluded between the United States and the Netherlands in The Hague in 1963 concerning arrangements for the ship's visit to the Netherlands.
 - The exchange of notes between the United States and Ireland in Dublin in 1964 concerning general liability for damage arising from the ship *Savannah*. See: Salah Hashem, *International Responsibility for Infringement of the Safety of the Marine Environment*, previous reference, p. 372.
- [37] See Article 1 of the agreement concluded between the United States and the Netherlands in 1963, as well as Article 3 of the 1964 agreement between the United States and Italy, and Articles 1 and 4 of the agreement concluded between the United States and Ireland in 1964. See: Mohsen Afkarin, *The General Theory of International Responsibility for Harmful Consequences of Acts Not Prohibited by International Law, with Special Reference to Environmental Applications*, Dar Al-Nahda Al-Arabia, Cairo, Egypt, 2007, pp. 371-372.
- [38] See Article 16 of the agreement concluded between Germany and Liberia concerning the German ship *N.S. Otto Hahn*. See: Salah Hashem, previous reference, p. 400.
- [39] Article 3(1) of the Convention of 1 May 1977: "Except as provided in paragraphs 3, 4 and 5 of this Article, the operator of the installation at the time of an incident shall be liable for any pollution damage resulting from the incident. When the incident consists of a series of occurrences, liability for pollution damage arising out of each occurrence shall attach to the operator of the installation at the time of that occurrence."
- [40] Website: <http://iea.uoregon.edu/pages/MarineMammals/engine/Documents/O-2185-2193.htm>
- a. See Article 13 of the 1978 Kuwait Regional Convention.
- [41] Law No. 91 of 02/08/1988 concerning the establishment of a National Agency for Environmental Protection, *Official Gazette of the Republic of Tunisia*, No. 52, p. 1088, as amended by Law No. 115 of 30/11/1992.
- [42] The Brussels Convention signed on 29/11/1969, ratified by Algeria in 1972; see Article 3(1) thereof, *Official Gazette* No. 53 of 04/07/1972, p. 813.

- [43] Order No. 76-80 of 23/10/1976 containing the *Maritime Code*, *Official Gazette* No. 29 of 10/04/1977, as amended by Law No. 10-04 of 15/08/2010, *Official Gazette* No. 46 of 18/08/2010.
- [44] Michel Prieur, *Environmental Law*, 4th ed., France, Dalloz, 2001, pp. 872-873.